North County Solid Waste Collection Services Project

DRAFT ENVIRONMENTAL IMPACT REPORT

SCH# 2022020271
July 2024

Prepared by:

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Department of Public Works
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DRAFT

Environmental Impact Report

North County Solid Waste Collection Services Project

STATE CLEARINGHOUSE NO. 2022020271

JULY 2024

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
AQMP	Air Quality Management Plan
AVAP	Antelope Valley Area Plan
AVAQMD	Antelope Valley Air Quality Management District
BenMAP	Benefits Mapping and Analysis Program
Board	Los Angeles County Board of Supervisors
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CEQA Guidelines	Guidelines for Implementation of the California Environmental Quality Act
CIWM	California Integrated Waste Management
CIWMB	California Integrated Waste Management Board
CO	carbon monoxide
County	County of Los Angeles
County Code	Los Angeles County Code
CSE	Countywide Siting Element
DPM	diesel particulate matter
du	dwelling unit
EIR	Environmental Impact Report
EMSW	Engineered Municipal Solid Waste
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
HAP	hazardous air pollutant
HD MRF	high-diversion Material Recovery Facility
HIA	health impact assessment
IQ	intelligence quotient
IS	Initial Study
LTS	Less than Significant
MDAB	Mojave Desert Air Basin
ML	Military Land (land use designation)
NAAQS	National Ambient Air Quality Standards
ND	Negative Declaration
NI	No Impact
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_x	oxides of nitrogen
O_3	ozone

Acronym/Abbreviation	Definition
Ordinance	Mandatory Organic Waste Disposal Reduction Ordinance
OS	Open Space land use designation
P	Public/Semi Public land use designation
PM	particulate matter
PM_{10}	coarse particulate matter; particulate matter 10 microns or less in diameter
$PM_{2.5}$	fine particulate matter; particulate matter 2.5 microns or less in diameter
ppb	parts per billion
ppm	parts per million
Project or proposed Project	North County Solid Waste Collection Services Project
PS	Potentially Significant
Public Works	Department of Public Works
R	Residential land use designation
RACT SIP	Reasonably Available Control Technology – State Implementation Plan
RL	Rural Land (land use designation)
RTP	Regional Transportation Plan
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SCVAP	Santa Clarita Valley Area Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO_2	sulfur dioxide
State	State of California
SU	Significant and Unavoidable
Summary Plan	Integrated Waste Management Summary Plan
SWIS	Solid Waste Information System
TAC	toxic air contaminant
TIGER	Topologically Integrated Geographic Encoding and Referencing
VMT	vehicle miles traveled
VOC	volatile organic compound
W	Watershed land use designation

ES Executive Summary

This chapter provides a summary of the Draft Environmental Impact Report (Draft EIR) for the proposed North County Solid Waste Collection Services Project ("Project" or "proposed Project"). Included in this summary are areas of known controversy and issues to be resolved, a summary of Project alternatives, a summary of all Project impacts, and a statement of the ultimate level of significance after feasible mitigation measures, if any, are applied.

ES.1 Document Purpose

This Draft EIR has been prepared by the County of Los Angeles (County) through the Department of Public Works (Public Works) to inform decision makers, public agencies, and members of the public of the potential significant environmental effects resulting from implementation of the proposed Project. The County is the lead agency for the proposed Project, pursuant to the California Environmental Quality Act (CEQA). This Draft EIR has been prepared in compliance with CEQA (California Public Resources Code, section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) (California Code of Regulations, title 14, section 15000 et seq.) published by the Natural Resources Agency of the State of California (State).

The purpose of this Draft EIR is to focus the discussion on those potential effects on the environment resulting from implementation of the proposed Project, which the lead agency has determined may be significant.

ES.2 Project Location

The Project area encompasses approximately 1,419 square miles and comprises unincorporated communities in northern Los Angeles County, generally located north of the Angeles National Forest. The Project area is divided into four proposed solid waste collection service areas: (1) Acton/Agua Dulce; (2) Antelope Valley Central; (3) Antelope Valley East; and (4) Antelope Valley West. Each service area contains multiple unincorporated communities.

ES.3 Project Description

The proposed Project would implement organic waste collection and diversion services and expand recycling services in the Project area. If the Project is approved, Public Works would issue a revised[1] solicitation for waste haulers to provide services to the four proposed solid waste collection service areas. The solicitation would require selected waste hauler(s) to collect non-organic recyclables, organic waste (including manure), and refuse for all residential and commercial customers. The hauler(s) would transport the respective categories of collected waste to a disposal site, transfer/processing facility, organic waste processing facility, or end user, as applicable. The solicitation would also include illegal dumping pickup services within the public right-of-way and bulky item pickup upon request.

[1] In early 2022, Public Works issued an Invitation for Bids but based on feedback from the affected communities, the Project was put on hold to reconsider the scope of work and potential environmental impacts.

ES.4 Project Objectives

Project objectives facilitate analysis of reasonable alternatives to the proposed Project. Reasonable alternatives must be analyzed in accordance with section 15126.6 of the CEQA Guidelines.

The underlying purpose of the Project is to improve quality of life for residents in the unincorporated north County areas and prevent recyclables and organic waste from ending up in landfills by requiring source-separated collection in the Project area, in accordance with State laws and regulations. The Project's specific objectives consist of:

- **Improved Services.** Establish new solid waste collection system(s) in the unincorporated north County areas to reduce illegal dumping, improve customer service, offer a consistent level of service, and carefully manage rates.
- **State Law Compliance.** Facilitate the County's compliance with State laws and regulations relating to solid waste collection and diversion.

ES.5 Summary of Environmental Impacts

Table ES-1, Summary of Environmental Impacts, provides an overview of the impact analysis and a summary of environmental impacts resulting from implementation of the Project, pursuant to CEQA Guidelines, section 15123, subdivision (b)(1). For a more detailed discussion of Project impacts, please see Chapter 3, Environmental Analysis, of this Draft EIR and the Initial Study included in Appendix A, Scoping Report.

To assist the reader, the following acronyms are used in Table ES-1:

NI = No Impact
LTS = Less than Significant
PS = Potentially Significant
SU = Significant and Unavoidable

Table ES-1. Summary of Environmental Impacts

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.1 Air Quality			
3.1-1. The proposed Project would conflict with or obstruct implementation of an applicable air quality plan.	PS	No feasible mitigation measures are available.	SU
3.1-2. The proposed Project would result in a cumulatively considerable net increase of criteria pollutants for which the Project region is non-attainment under applicable federal or State ambient air quality standards.	PS	No feasible mitigation measures are available.	SU
3.1-3. The proposed Project would expose sensitive receptors to substantial pollutant concentrations.	PS	No feasible mitigation measures are available.	SU
3.1-4. The proposed Project would contribute to a significant cumulative impact related to air quality management plan consistency and criteria air pollutant emissions.	PS	No feasible mitigation measures are available.	SU
3.1-5. The proposed Project would contribute to a significant cumulative impact related to exposure of sensitive receptors to substantial pollutant concentrations.	PS	No feasible mitigation measures are available.	SU
3.2 Utilities and Service Systems			
3.2-1. The proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	LTS	Not applicable.	LTS
3.2-2. The proposed Project would contribute to a significant cumulative impact regarding statewide capacity for organic waste processing.	PS	No feasible mitigation measures are available.	SU

ES.6 Comments Received in Response to the Notice of Preparation

The Notice of Preparation (NOP) for this Draft EIR was released on February 2, 2023, and the public comment period closed on March 3, 2023. A total of 16 written comment letters were received, as shown in Table ES-2. Additionally, verbal comments were received during an online scoping meeting held on February 16, 2023. Several comments that were received for prior iterations of the Project were re-submitted. The purpose of the NOP is to solicit input from public agencies and the public on the scope of the EIR analysis. Opinions on the merits of the Project are noted but are not considered relevant for the purposes of defining the scope of the analysis. All of the NOP comment letters received are included in Appendix A.

Table ES-2. Comments Received in Response to the NOP

Commenter	Date
Acton Town Council	March 25, 2022
Acton Town Council	July 8, 2022
Native American Heritage Commission	February 1, 2023
Olesya Konovalova	February 2, 2023
Antelope Valley Air Quality Management District	February 7, 2023
Various Commenters (Scoping Meeting)	February 16, 2023
Jacqueline Ayer, Acton Town Council	February 22, 2023
Melanie Grijalva	February 22, 2023
Judith Fuentes	February 23, 2023
Dan Duncan	February 26, 2023
Judith Fuentes	February 26, 2023
Acton Town Council	February 28, 2023
Acton Town Council	March 1, 2023
South Coast Air Quality Management District	March 1, 2023
Acton Town Council	March 2, 2023
Agua Dulce Town Council	March 2, 2023

ES.7 Areas of Controversy/Issues to Be Resolved

Section 15123, subdivision (b)(2) of the CEQA Guidelines requires that areas of controversy known to the lead agency be stated in the summary prepared as part of the EIR, and section 15123, subdivision (b)(3) of the CEQA Guidelines requires that an EIR identify issues to be resolved. Known areas of controversy include concerns regarding air emissions and fugitive dust resulting from increased truck traffic, as well as the need for increased road maintenance. Additional concerns were expressed regarding the availability of existing composting facilities to serve the proposed Project and the environmental impacts of any future facilities to be built in the Project area.

ES.8 Summary of Project Alternatives

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to the Project should occur. As stated in this section of the CEQA Guidelines, alternatives must focus on those that are potentially feasible and that may attain most of the basic objectives of the Project. Each alternative should be capable of avoiding or substantially lessening any significant effects of the Project. The rationale for selecting the alternatives to be evaluated and a discussion of the No Project Alternative are also required, per section 15126.6.

Alternatives Evaluated

This EIR includes an evaluation of the following alternatives:

- **Alternative 1:** No Project Alternative
- **Alternative 2:** Alternating Residential Recycling Week Alternative
- **Alternative 3:** Commingling Alternative
- **Alternative 4:** Cart Rollout Alternative
- **Alternative 5:** Split-Body Truck Alternative

ES.9 Environmentally Superior Alternative

Table ES-3, Comparison of Impacts of the Alternatives, provides a summary of the alternatives' impact analysis considered in the EIR, identifies the areas of potential environmental effects per CEQA, and ranks each alternative as better, the same, or worse than the proposed Project with respect to each issue area.

Table ES-3. Comparison of Impacts of the Alternatives

Topic	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Alternating Residential Recycling Week Alternative	Alternative 3: Commingling Alternative	Alternative 4: Cart Rollout Alternative	Alternative 5: Split-Body Truck Alternative
Environmental Impacts Comparison						
Key Impact Areas Evaluated in the Draft EIR						
Air Quality	SU	NI ▼	SU ▲	SU ▼	SU ▼	SU ▲
Utilities and Service Systems	SU	NI ▼	SU =	SU ▲	SU =	SU =
Less-than-Significant Impacts						
Aesthetics	LTS	NI ▼	LTS ▼	LTS ▼	LTS =	LTS =
Energy	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS ▲
Geology and Soils	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS =
Greenhouse Gas Emissions	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS ▲
Hazards/Hazardous Materials	LTS	NI ▼	LTS =	LTS =	LTS =	LTS =
Hydrology/Water Quality	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS =
Noise	LTS	NI ▼	LTS ▼	LTS ▼	LTS =	LTS ▼
Population/Housing	LTS	NI ▼	LTS ▲	LTS ▼	LTS =	LTS ▲
Transportation	LTS	NI ▼	LTS =	LTS ▼	LTS =	LTS =
Comparison of Ability to Meet Objectives						
Improved Services	Achieves objective	Would not achieve objective	Achieves objective	Achieves objective	Achieves objective to a lesser degree	Achieves objective
State Law Compliance	Achieves objective	Would not achieve objective	Achieves objective	Achieves objective to a lesser degree	Achieves objective	Achieves objective

Notes:
▲ Alternative is likely to result in greater impacts to issue when compared to proposed Project.
= Alternative is likely to result in similar impacts to issue when compared to proposed Project.
▼ Alternative is likely to result in reduced impacts to issue when compared to proposed Project.
NI = No impact
LTS = Less-than-significant impact
SU = Significant and unavoidable impact

As indicated in Table ES-3, Alternative 1, the No Project Alternative, would result in the fewest environmental impacts. However, Alternative 1 would fail to comply with regulations adopted by the State for the protection of the environment, including Senate Bill (SB) 1383. The purpose of SB 1383 is to reduce emissions of short-lived climate pollutants, which is a key component of statewide efforts to reduce greenhouse gas (GHG) emissions. While Alternative 1 would reduce local and basin-wide air quality emissions, this would come at the expense of statewide and global efforts to reduce GHG emissions. As such, Alternative 1 would have larger-scale environmental consequences and, therefore, is not the environmentally superior alternative.

Amongst the remaining alternatives (Alternatives 2 through 5), Alternative 3 and Alternative 4 are the only alternatives that could reduce the Project's significant air quality impact. As demonstrated in Chapter 6, Alternatives, of this Draft EIR, the reductions in emissions that would be achieved by Alternative 3 would be nominal, and impacts would remain significant and unavoidable. Given that Alternative 4 would eliminate heavy-duty truck travel on private unpaved roads and given that some customers would likely haul their carts/dumpsters to the nearest public right-of-way as part of an existing vehicle trip, Alternative 4 is anticipated to have the greatest reduction in air emissions when compared to the Project. Unlike Alternative 1, Alternative 4 would still achieve compliance with SB 1383 and would thus contribute to statewide GHG emission reductions efforts. For these reasons, Alternative 4 is the environmentally superior alternative, as it would accomplish the environmental objectives of SB 1383 while limiting local and regional air quality impacts to the extent practicable.

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1 Introduction and Scope of the EIR

1.1 Purpose and Intended Use of this EIR

This Draft Environmental Impact Report (Draft EIR) has been prepared by the County of Los Angeles (County) through the Department of Public Works (Public Works) to inform decision makers, public agencies, and members of the public regarding the potential significant environmental effects resulting from implementation of the North County Solid Waste Collection Services Project ("Project" or "proposed Project"). The County is the lead agency for the proposed Project, pursuant to the California Environmental Quality Act (CEQA). This Draft EIR has been prepared in compliance with CEQA (California Public Resources Code, section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) (California Code of Regulations [CCR], title 14, section 15000 et seq.) published by the Natural Resources Agency of the State of California (State).

As described in CEQA Guidelines, section 15121, subdivision (a), an EIR is an informational document that assesses the reasonably foreseeable environmental effects of a project and identifies potentially feasible mitigation measures and project alternatives that could reduce or avoid adverse environmental impacts.

1.2 Project Overview

Project Location

The Project area encompasses approximately 1,419 square miles and comprises the unincorporated communities within northern Los Angeles County, generally located north of the Angeles National Forest. The Project area is divided into four proposed solid waste collection service areas: (1) Acton/Agua Dulce; (2) Antelope Valley Central; (3) Antelope Valley East; and (4) Antelope Valley West. Each service area contains multiple unincorporated communities.

Project Description

The proposed Project would implement organic waste collection and diversion services and expand recycling services in the Project area. If the Project is approved, Public Works would issue a revised[1] solicitation for waste haulers to provide services to the four proposed solid waste collection service areas. The solicitation would require selected waste hauler(s) to collect non-organic recyclables, organic waste (including manure), and refuse for all residential and commercial customers. The hauler(s) would transport the respective categories of collected waste to a disposal site, transfer/processing facility, organic waste processing facility, or end user, as applicable. The solicitation would also include illegal dumping pickup services within the public right-of-way and bulky item pickup upon request.

1.3 Scope of the EIR

This Draft EIR evaluates the direct and reasonably foreseeable indirect environmental impacts of the proposed Project. In doing so, the Draft EIR establishes the existing environmental resources or conditions within the Project

[1] In early 2022, Public Works issued an Invitation for Bids but based on feedback from the affected communities, the Project was put on hold to reconsider the scope of work and potential environmental impacts.

area, analyzes potential impacts on those resources due to implementation of the proposed Project, and assesses whether feasible mitigation measures are available to reduce significant impacts. Where Project-specific information is available, this Draft EIR quantifies and/or evaluates Project impacts at a level of detail commensurate with information available at the time the analysis was conducted.

Based on a review of the proposed Project elements, the results of the Environmental Checklist or Initial Study (IS) prepared for the Project (see Appendix A, Scoping Report), and comments received during the Notice of Preparation (NOP) public review period (see Appendix A for a copy of the NOP and comments received), Public Works determined that the topics of air quality and utilities and service systems (only related to solid waste) should be addressed in detail in this Draft EIR. Other topics have been adequately addressed in Appendix A and their conclusions are summarized in Chapter 4, Effects Not Found to Be Significant, of this Draft EIR.

The topic of air quality is presented in Section 3.1 in Chapter 3, Environmental Analysis, of this Draft EIR. The topic of utilities and service systems is presented in Section 3.2 in Chapter 3 of this Draft EIR.

The topics of aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and wildfire are not addressed in Chapter 3 because impacts in these areas would be less than significant or the Project would result in no impact based on the analysis contained in the IS prepared for the Project (see Appendix A). With respect to impacts in these areas, Appendix A satisfies the requirements of CEQA Guidelines, section 15128, which provides that "[a]n EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study." More information is provided in Chapter 4 regarding the impacts addressed in the IS.

Other CEQA considerations are discussed in Chapter 5 of this Draft EIR. As part of this analysis, the chapter identifies any significant and unavoidable environmental impacts in accordance with CEQA Guidelines, section 15126.2, subdivision (b), significant irreversible environmental impacts in accordance with CEQA Guidelines, section 15126.2, subdivision (d), and growth-inducing impacts in accordance with CEQA Guidelines, section 15126.2, subdivision (e) that could result from implementation of the proposed Project.

The Alternatives chapter of this Draft EIR (Chapter 6, Alternatives) was prepared in accordance with section 15126.6 of the CEQA Guidelines. CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modifications or alternatives are not required where significant environmental impacts would not occur.

1.4 CEQA Process

CEQA Review History

In February 2022, Public Works released an Initial Study/Negative Declaration (IS/ND) for the proposed Project, titled the "Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts IS/ND." The IS/ND was circulated for 30 days of public review from February 11, 2022, to March 12, 2022. In response to the February 2022 IS/ND, members of the public raised concerns regarding potential fugitive dust impacts resulting from the proposed increase in waste collection trucks traveling on unpaved roads. To address these concerns, Public Works revised the Project description such that collection trucks would not generally travel

on privately owned and maintained unpaved roads, unless permissions were obtained from property owners and unless property owners agreed to treat the unpaved roads with dust suppressants. If such conditions were not met, customers along private unpaved roadways would need to haul their waste containers to an agreed upon location along the public right-of-way. The revised Project was analyzed in a recirculated IS/ND, which was circulated for a 30-day public review period from June 10, 2022, to July 9, 2022. In the June 2022 IS/ND, the Project name was revised to the "Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts and/or Residential Franchise Program." No significant environmental impacts were identified in the June 2022 IS/ND.

Subsequent to circulation of the June 2022 IS/ND, Public Works received numerous comments expressing concerns about the feasibility of the revised Project. Specifically, property owners expressed concerns about the cost and logistics of treating private unpaved roads with dust suppressants, as well as the infeasibility of hauling their waste to the nearest public right-of-way. Based upon these comments and concerns, Public Works has revised the Project description again, such that the Project would include waste service along private unpaved roads even if such roads have not been treated with dust suppressants. Because Public Works does not have authority to control the maintenance of private roads, treatment with dust suppressants on private unpaved roads cannot be included as part of the Project or as mitigation for the Project. The proposed Project, as revised, would entail additional waste collection vehicles traveling along unpaved roads and may thereby result in potentially significant air quality impacts.

Section 15073.5, subdivision (d) of the CEQA Guidelines states:

> If during the negative declaration process there is substantial evidence in light of the whole record, before the lead agency that the project, as revised, may have a significant effect on the environment which cannot be mitigated or avoided, the lead agency shall prepare a draft EIR and certify a final EIR prior to approving the project. It shall circulate the draft EIR for consultation and review pursuant to sections 15086 and 15087, and advise reviewers in writing that a proposed negative declaration had previously been circulated for the project.

Accordingly, Public Works has prepared this Draft EIR for the proposed Project, which has been renamed as the "North County Solid Waste Collection Services Project." While some changes to the Project description have occurred since the June 2022 IS/ND, the key parameters of the Project remain unchanged. Nevertheless, the previous ND is no longer valid because Public Works has determined that air quality impacts may be potentially significant. An updated IS checklist was released for review with the NOP for this Draft EIR on February 2, 2023, as further described below. The IS and NOP for the Project are included within Appendix A to this document. Since release of the IS, Public Works has also determined that impacts to solid waste capacity may be potentially significant, and therefore this topic is also discussed in depth in this Draft EIR.

Notice of Preparation

In accordance with CEQA Guidelines, section 15082, Public Works circulated an IS and NOP for public and agency review from February 2, 2023, to March 3, 2023 (see Appendix A). The purpose of the NOP is to provide notification that an EIR for the proposed Project is to be prepared and to solicit guidance on the scope and content of the document. A summary of the comments received on the IS and NOP is included in the Executive Summary.

Draft EIR and Public Review

This Draft EIR is being circulated for public review and comment pursuant to CEQA Guidelines, section 15105, which requires a public review period of at least 45 days. The timeframe of the public review period is identified in the Notice of Availability for this Draft EIR.

Public Works encourages all comments on the Draft EIR to be submitted in writing. All comments or questions regarding the Draft EIR should be addressed to:

> County of Los Angeles
> Department of Public Works
> Attention: Krystle K. Jafari, P.E.
> P.O. Box 1460
> Alhambra, California 91802-1460
> email: NoCoSolidWasteEIR@pw.lacounty.gov

Final EIR

Upon completion of the Draft EIR public review period, a Final EIR will be prepared that will include written responses to all significant environmental issues raised in comments received during the public review period. The Final EIR will address any revisions to the Draft EIR made in response to Public Works staff, agency, or public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed Project. Before the County can approve the Project, its decision-making body, the Los Angeles County Board of Supervisors (Board), must first certify that the EIR has been completed in compliance with CEQA, that the Board has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the County. The Board is also required to adopt Findings of Fact, along with a Statement of Overriding Considerations for significant and unavoidable impacts where no feasible mitigation measures or alternatives are available to reduce the severity of such significant unavoidable impacts (see CEQA Guidelines, sections 15091 and 15093).

EIR Adequacy

The level of detail contained throughout this EIR is consistent with section 15151 of the CEQA Guidelines, which states the following:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

CEQA Guidelines, section 15204 adds that:

> [T]he adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project.

1.5 Lead, Responsible, and Trustee Agencies

Lead Agency

In accordance with CEQA Guidelines, sections 15050 and 15367, the County is the "lead agency" for the Project. The lead agency is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." The lead agency is also responsible for determining the scope of the environmental analysis, preparing the EIR, and responding to comments received on the Draft EIR. Prior to making a decision to approve a project, the lead agency's decision-making body is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the lead agency's independent judgment.

Responsible Agencies

Responsible agencies are State, regional, and local public agencies, other than the lead agency, that have some discretionary authority to carry out or approve a project, or that are required to approve a portion of a project or permit for which a lead agency is preparing or has prepared an EIR (CEQA Guidelines, section 15096). There are no responsible agencies for the Project.

Trustee Agencies

Trustee agencies are designated public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether or not the agencies have authority to approve or implement the project (CEQA Guidelines, section 15386). There are no trustee agencies for the Project.

1.6 Use of Previously Prepared Environmental Documentation

This Draft EIR relies in part on data, environmental evaluations, and other components of plans prepared by the County for the Project area. These documents are listed below and used as source documents for this Draft EIR. These County documents are available for review on the County's website at https://planning.lacounty.gov/, except where noted otherwise:

- Los Angeles County 2035 General Plan
- Los Angeles County Code (available at https://library.municode.com/ca/los_angeles_county)
- 2012 Santa Clarita Valley Area Plan
- 2015 Antelope Valley Area Plan

1.7 Organization of the Draft EIR

The Draft EIR is organized in the following chapters: Executive Summary, Introduction and Scope of the EIR, Project Description, Environmental Analysis (including the Air Quality and Utilities and Service Systems sections), Effects Not Found to Be Significant, Other CEQA Considerations, Alternatives, and EIR Preparers. The Draft EIR also includes the following appendices: Appendix A, Scoping Report, and Appendix B, Air Quality Data.

Chapter ES, Executive Summary—Provides an overview of areas of known controversy and issues to be resolved and identifies Project alternatives. This chapter also summarizes the elements of the proposed Project and the environmental impacts that could result from implementation of the Project.

Chapter 1, Introduction and Scope of the EIR—Provides an introduction and overview of the EIR process and describes the intended use of this Draft EIR.

Chapter 2, Project Description—Provides a detailed description of the proposed Project, including its location, background information, and Project objectives.

Chapter 3, Environmental Analysis—Included in this chapter are the Air Quality technical section and Utilities and Service Systems technical section that evaluate Project impacts. The sections describe the baseline environmental setting and provide an assessment of potential Project impacts. The sections are divided into five subsections: Introduction, Environmental Setting, Regulatory Setting, Methodology and Thresholds of Significance, and Impacts Analysis (Project-specific and cumulative).

Chapter 4, Effects Not Found to Be Significant—Provides a summary of the environmental topics that were previously found to not be significant and are therefore not discussed in detail in this Draft EIR.

Chapter 5, Other CEQA Considerations—Provides information required by CEQA, including a summary of significant environmental impacts, significant and unavoidable environmental impacts, significant irreversible changes to the environment, and potential secondary impacts resulting from growth inducement.

Chapter 6, Alternatives—Describes and compares alternatives to the proposed Project.

Chapter 7, EIR Preparers—Lists report authors who provided technical assistance in the preparation and review of the EIR.

Appendices—Includes various documents and data that support the analysis presented in the Draft EIR.

2 Project Description

This chapter provides a description of the proposed Project. Pursuant to section 15124 of the CEQA Guidelines, this chapter describes the location, objectives, and characteristics of the proposed Project, followed by a list of the required approvals for the Project, and a statement describing the intended uses of this Draft EIR.

2.1 Introduction

Public Works is proposing the formation and operation of four new solid waste collection service areas for the unincorporated areas of (1) Acton/Agua Dulce; (2) Antelope Valley Central; (3) Antelope Valley East; and (4) Antelope Valley West. Under the proposed contracts with the solid waste hauler(s) that would service these areas, the selected hauler(s) would provide source-separated collection of three waste streams (refuse, recyclables, and organic waste including manure) for all residential and commercial customers. The selected waste hauler(s) would also provide illegal dumping pickup within the public right-of-way and bulky item pickup. This Project would support the County's compliance with statewide targets set forth in Senate Bill (SB) 1383 pertaining to diversion of organic waste from landfills.

2.2 Project Location

The Project area encompasses approximately 1,419 square miles and comprises unincorporated communities in northern Los Angeles County, generally located north of the Angeles National Forest. The Project area is divided into four proposed solid waste collection service areas: (1) Acton/Agua Dulce; (2) Antelope Valley Central; (3) Antelope Valley East; and (4) Antelope Valley West. Each service area contains multiple unincorporated communities. The Project area is outlined in Figure 2-1, Project Area, which also delineates the four proposed service areas.

2.3 Environmental Setting

The majority of the communities in the Project area falls within the Antelope Valley Area Plan (AVAP) (County of Los Angeles 2015a). The AVAP guides long-term development and conservation throughout the Antelope Valley region via area-specific goals and policies, land use regulations, and zoning designations. Although geographically adjacent to the AVAP area, the rural residential community of Agua Dulce falls within the Santa Clarita Valley Area Plan (SCVAP) (County of Los Angeles 2012). Many communities within the Project area are also subject to Community Standards District regulations, which are unique to each community and designed to supplement Area Plans.

The Project area is largely designated as Rural Land (RL) and zoned A-2-2 (Heavy Agricultural). The RL designation restricts development from between 1 dwelling unit (du) per acre to 1 du per 20 acres (expressed as RL-1, RL-2. RL-5, RL-10, and RL-20) (County of Los Angeles 2015b, 2022). Other land use designations in the Project area include various types of Open Space (OS) (including Parks & Recreation, National Forest, and Conservation OS), Watershed (W), Residential (R) (primarily low to very-low density), Military Land (ML), and Public/Semi Public (P). Also included are a few scattered areas of Industrial, Mixed-Use, Manufacturing, and Rural Commercial land uses (County of Los Angeles 2015b, 2022). In association with the largely rural nature of the Project area, the area is characterized by a network of privately owned and maintained roads, as described in title 15 of the Los Angeles County Code (County Code).

Portions of the Project area are also within or adjacent to Significant Ecological Areas, which are officially designated areas within Los Angeles County recognized as supporting irreplaceable biological resources, such as habitat linkages, Joshua tree woodlands, the Santa Clara River watershed, and desert scrub habitat. Key land use goals and strategies for the Project area, as expressed in the land use plans described above, include maintaining its rural and secluded nature by:

- Restricting land uses that would result in the installation of urban infrastructure (e.g., curbs, gutters, sidewalks, street lighting, and traffic signals)
- Restricting new sources of artificial light and noise
- Preserving views of ridgelines and natural areas
- Protecting natural environments and diverse ecological habitats
- Protecting the agricultural, historical, and equestrian character of the region (County of Los Angeles 2015b)

2.4 Project Purpose

In 2016, the State Legislature passed SB 1383, California's Short-Lived Climate Pollutant Reduction Strategy, to reduce methane and other greenhouse gas (GHG) emissions statewide. The bill aims to achieve two targets by 2025: (1) 75% reduction of statewide organic waste disposal from 2014 levels and (2) recovering 20% or more of edible food waste for human consumption (CalRecycle 2022). To meet these goals, SB 1383 requires all local jurisdictions to provide source-separated organic waste[1] collection and diversion services to all residents and businesses. SB 1383 will further support California's efforts to achieve the statewide 75% recycling goal by 2020, established in Assembly Bill (AB) 341.[2]

In November 2021, the Los Angeles County Board of Supervisors (Board) adopted the Mandatory Organic Waste Disposal Reduction Ordinance (Ordinance) (County Code, chapter 20.91). The Ordinance requires all businesses and residents in unincorporated County areas to subscribe to organic waste collection services such that organic waste is diverted from landfills. However, organic waste collection and diversion services are not currently available in the proposed Project area. Most residents and businesses in the Project area combine organic waste, non-organic recyclables,[3] and other types of refuse,[4] all of which is collected by a waste hauler for transport and disposal at the landfill. As a result, landfills are unnecessarily burdened due to the unavailability of recycling services, and organic waste decomposing in landfills releases methane, a powerful GHG, into the atmosphere, as well as air pollutants such as fine particulate matter (CalRecycle 2022).

This Project would implement organic waste collection and diversion services and expand recycling services in the Project area. If the Project is approved, Public Works would issue a revised[5] solicitation for waste hauler(s) to provide services to the four proposed solid waste collection service areas. The solicitation would require selected

1 "Organic waste" is defined according to California Code of Regulations (CCR), title 14, section 18982, subdivision (a)(46), and means "solid wastes containing material originated from living organisms and their metabolic waste products including, but not limited to, food, green material, landscape and pruning waste, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges."

2 The State has not yet met this target. In 2020, the statewide recycling rate was 42%.

3 "Non-organic recyclables" are defined as "non-putrescible and non-hazardous recyclable wastes, including, but not limited to, bottles, cans, metals, plastics, and glass" [CCR, section 18982, subdivision (a)(43)]. These materials will be referred to herein as "recyclables."

4 "Refuse" is defined as solid waste that consists of neither organic waste nor non-organic recyclables.

5 In early 2022, Public Works issued an Invitation for Bids but based on feedback from the affected communities, the Project was put on hold to reconsider the scope of work and potential environmental impacts.

waste hauler(s) to collect non-organic recyclables, organic waste (including manure), and refuse for all residential and commercial customers. The hauler(s) would transport the respective categories of collected waste to a disposal facility, transfer/processing facility, organic waste processing facility, or end user, as applicable. The solicitation would also include illegal dumping pickup services within the public right-of-way and bulky item pickup upon request.

The required approvals for the Project include the following:

- **Direct Public Works to Release Solicitation for Solid Waste Collection Services.** Public Works will seek Board approval to solicit proposals to provide solid waste collection services. Private waste hauling companies will submit proposals, including their schedule of rates and charges, and Public Works will select the contractor(s) based, among other things, on the price proposal and work plan for contract services.
- **Award Franchise Contracts for Solid Waste Collection Services.** Public Works will seek Board approval to award franchise contracts for solid waste collection services for the proposed service areas. The franchise contracts will include automated collection, disposal, and management of accounts receiving refuse, recyclable, and organic waste collection services, as well as the cleanup, collection, transportation, disposal, and management of illegal dumping on all public rights-of-way.

2.5 Project Objectives

Section 15124, subdivision (b) of the CEQA Guidelines states that the project description of an EIR shall contain "a statement of the objectives sought by the proposed project, including the underlying purpose of the project." The underlying purpose of this Project is to improve quality of life for residents in the unincorporated north County areas and prevent recyclables and organic waste from ending up in landfills by requiring source-separated collection in the Project area in accordance with State laws and regulations. The Project's specific objectives consist of:

- **Improved Services.** Establish new solid waste collection system(s) in the unincorporated north County areas to reduce illegal dumping, improve customer service, offer a consistent level of service, and carefully manage rates.
- **State Law Compliance.** Facilitate the County's compliance with State laws and regulations relating to solid waste collection and diversion.

Background

In most other unincorporated areas of the County, Public Works administers solid waste collection contracts for residential and commercial properties. Waste collection services provided through such contracts include refuse, recycling, and organic waste collection, as well as the removal of bulky items and illegal dumping. By implementing the proposed Project, residents and businesses in the Project area would have access to solid waste collection services provided through waste hauler(s) contracted by the County.

Improved Services

As stated above, part of the Project's underlying purpose is to improve quality of life for residents throughout the Project area. This would be accomplished in part by reducing the amount of illegal dumping in the affected communities. The Project area is sparsely populated and mostly rural, consisting of high deserts, mountains, and canyons. As such, there are many isolated locations where refuse and construction debris are illegally disposed of

to avoid landfill fees. Offenders frequently illegally dump debris in the public right-of-way and/or on private property. These practices unfairly burden private property owners, who must then clean up the illegally dumped refuse or debris and remove it from their property.

The Project would provide assistance with illegal dumping cleanup by contracting with the selected waste hauler(s) for the removal of illegal dumping from the public right-of-way. Currently, illegal dumping in the public right-of-way within the Project area is removed by Public Works' Road Maintenance Division on a weekly basis, which impedes the performance of road work such as repairing potholes. Under the proposed new system, the waste hauler(s) would assign crews each weekday to remove illegal dumping. The Project would allow road crews to repair roads while ensuring that illegally dumped items in the public right-of-way are removed by the contracted waste hauler(s).

The Project would also improve customer service by providing a method for customers to resolve complaints that they are not able to resolve directly with the waste hauler(s). The County, through a Contract Administrator, would oversee the contracts with the waste hauler(s) to ensure that services are provided at a consistent level, help resolve disputes between customers and the waste hauler(s) in a fair and timely manner, and oversee compliance with State waste diversion mandates.

The Project would carefully manage rates by limiting rate adjustments, as stipulated in the proposed hauler contracts. Currently, waste haulers in the area may increase their fees at any time. Under the proposed system, fee increases would require County approval. Additionally, all customers would be charged the same rate for equivalent services. Fees are expected to increase no more than once a year with prior written notice.

State Law Compliance

The proposed Project would also enable the County to comply with State law and waste diversion mandates while accommodating the needs of the affected residents and communities. The Project aims to meet the requirements set forth by the following State laws regarding solid waste diversion:

- ***AB 939 (1989)***—Requires diversion of 50% of all solid waste by January 1, 2000, through source reduction, recycling, and composting activities.
- ***AB 341 (2011)***—Establishes a statewide mandatory commercial recycling program.
- ***SB 1383 (2016)***—Requires statewide efforts to reduce emissions of short-lived climate pollutants by reducing organic waste disposal by 75% and recovering 20% of edible food waste for human consumption by 2025.
- ***AB 827 (2019)***—Requires businesses subject to mandatory commercial recycling to make recycling and/or organic recycling bins available to customers.

2.6 Project Construction

The proposed Project does not require or result in any construction-related work activities.

2.7 Project Operation

The proposed Project consists of executing contracts with selected waste hauler(s) to establish new solid waste collection services for the proposed service areas in the unincorporated territory of the County. In each of the four service areas, the selected waste hauler(s) would provide source-separated collection of three waste streams

(refuse, recyclables, and organic waste including manure) for commercial and residential properties, as well as illegal dumping removal from the public right-of-way, bulky item pickup upon request, and enhanced customer service.

The Project area includes approximately 3,740 commercial and 23,030 residential properties. At present, approximately 19,485 single-family residential properties in the Project area obtain solid waste collection cart service on an individual basis through an open market system, and approximately 4,058 residential and commercial properties in the Project area receive solid waste collection dumpster service through an existing nonexclusive commercial franchise administered by Public Works. Of the 19,485 cart customers, approximately 74.5%, or 14,516 properties, receive only refuse collection service; 24%, or 4,676 properties, receive refuse, recyclables, and green waste collection; and 1.5%, or 293 properties, receive refuse and recyclables collection. The nonexclusive commercial franchise customers all receive refuse and recycling services.[6]

Collection Trucks Operating in Project Area

Based on information provided by waste haulers currently servicing the Project area, a total of approximately 104 collection trucks[7] are deployed in the Project area on a weekly basis to provide solid waste collection services to commercial and residential customers. The number of trucks in operation each day is summarized in Table 2-1 below.

Table 2-1. Daily Collection Trucks Currently Operating in Project Area

Collection Truck Type	Monday	Tuesday	Wednesday	Thursday	Friday	Weekly Total
Cart Service	5	14	6	7	7	39
Dumpster Service	10	11	10	9	10	50
Bulky Item Pickup	3	3	3	3	3	15
Total	**18**	**28**	**19**	**19**	**20**	**104**

Source: The data in this table were provided by Public Works in 2023 based on information provided by contracted solid waste haulers servicing the Project area.

Under current conditions, an average of 21 trucks service the Project area each day, including approximately 8 trucks providing cart service, 10 trucks providing dumpster service, and 3 trucks providing bulky item pickup. If the proposed Project is approved, average daily waste collection services in the Project area would be provided by a total of 28 trucks: 8 trucks to collect refuse, 8 trucks to collect organic waste,[8] 4 trucks to collect recyclables, 4 trucks for bulky items, and 4 trucks to remove illegal dumping. The amount of waste generated in the Project area is not expected to increase as a result of this Project; the total number of regular collection (refuse, organic waste, and recyclables) trucks is anticipated to increase by 2 trucks. The additional 2 trucks are necessary due to minor inefficiencies created by transitioning to a source-separated waste collection system. The waste hauler(s) would also provide removal of illegal dumping in the public right-of-way and bulky item pickup, which requires the operation of an additional 5 trucks each day from existing conditions. As such, the proposed Project would result in an average daily total of 28 collection trucks operating in the Project area, which is an increase of 7 trucks daily.

6 The data in this paragraph were provided by Public Works in 2023 and are based on information provided to Public Works by contracted solid waste haulers servicing the Project area.

7 The term "collection truck" will be used throughout this EIR to refer to the trucks used to collect refuse, organic waste, and/or recyclables, as well as bulky items and illegal dumping. (Collection trucks are also known as garbage trucks.)

8 Food waste and green waste would be combined in one waste container.

Future Year Scenario

The proposed Project would result in a change in how solid waste collection is handled in the Project area, persisting through the end of the proposed solid waste collection contract term(s) (which are currently undefined). The Project is intended to serve the Project area and its growth throughout the years and, therefore, Project operations may change accordingly to accommodate future needs. Public Works has selected the year 2045 as a "future year" scenario in order to illustrate how Project operations, and associated environmental impacts, may change over an approximately 20-year horizon.

Given the anticipated number of trucks needed upon Project implementation (estimated to be the year 2025), and the number of properties in the Project area, it is approximated that one regular collection truck would be required per 1,177 properties. In the future year scenario, the number of regular collection trucks would be anticipated to increase commensurate with population growth. The number of bulky item pickup and illegal dumping removal trucks would remain constant throughout the life of the proposed solid waste collection contract(s). It is assumed that population growth in the Project area would be consistent with historical trends, and that the number of properties requiring solid waste collection services would increase proportionally with population growth. According to U.S. Census data, the Project area population grew approximately 12% from 2000 through 2020 (U.S. Census Bureau 2020; County of Los Angeles 2014). This 20-year, 12% growth rate was applied to the existing total number of properties in the Project area. The number of regular collection trucks was then scaled up proportionally based on the anticipated increase in number of properties. The results of this exercise are summarized in Table 2-2.

Table 2-2. Comparison of Collection Trucks Required for Year 2025 vs. Year 2045

Year	Number of Properties Served[1]	Average Daily Regular Collection Trucks	Daily Bulky Item Pickup Trucks	Daily Illegal Dumping Removal Trucks	Total Daily Collection Trucks
2025	23,543	20	4	4	28
2045	29,982	26	4	4	34

Notes: Numbers are rounded to the nearest whole number.

1. The number of properties served in 2025 is based on the existing number of properties currently receiving solid waste collection services. The number of properties served in 2045 accounts for the addition of existing properties that currently do not receive solid waste collection services, since these properties may choose to receive service at a future time and/or may be developed in the future. The 12% growth rate was then applied to this total number of existing properties (including those that currently do not receive solid waste collection services) in order to account for potential development of existing properties and the potential addition of new residential and/or commercial development, commensurate with population growth in the Project area.

Daily Collection Service

The proposed Project would offer source-separated collection of refuse, recyclables, and organic waste to all residential and commercial properties, in accordance with the requirements set forth in SB 1383. At present, refuse-only cart service and dumpster service is provided by a single visit to each property per week. For cart customers receiving refuse, recyclables, and organic waste collection, service is currently provided by three visits to each property per week. Dumpster service customers receiving refuse and recycling collection are currently serviced by two visits each week. To provide the additional services that are currently not available to most customers in the Project area, it is reasonably foreseeable that the proposed Project would result in an increase in the number of visits by collection trucks required to service each property. Cart customers and most dumpster customers would typically receive refuse, recyclables, and organic waste collection on the same day each week, generally requiring a total of three truck visits to each property to provide service (resulting in a net increase of two

collection truck visits per week for a typical residential property in the Project area). Some dumpster customers would receive service more than once per week, and a small number of dumpster customers would receive service on Saturday. Bulky item trucks would travel to properties on an as-needed basis, and illegal dumping trucks would circulate the Project area to collect illegal dumping within the public right-of-way.

Additional Vehicle Travel

In addition to collection trucks circulating the Project area as described above, a route supervisor would circulate each service area in a light-duty vehicle. Additionally, three County-employed Contract Monitors would circulate the Project area approximately 4 days per week (generally on Mondays through Thursdays) to monitor the waste hauler(s) trucks and services for quality and compliance, investigate complaints, and report illegal dumping within the public right-of-way. The number of route supervisors and Contract Monitors would remain consistent throughout the life of the proposed solid waste collection contract(s). Accordingly, implementation of the proposed Project would result in the operation of the following in the Project area on a daily basis: 28–34 collection trucks (heavy-duty trucks, including front-loader, side-loader, rear-loader, and flat-bed trucks), a total of 4 route supervisors (traveling in light-duty trucks), and a total of 3 Public Works Contract Monitors (traveling in light-duty trucks).

This analysis also considers the additional employees that would be required to operate the new collection trucks. Regular collection trucks are operated by one person. Bulky item and illegal dumping trucks are operated by two people. Since there would be a daily average increase of two regular collection trucks and five bulky item and illegal dumping trucks, the Project would require an additional 12 employees to operate the increased number of trucks under the 2025 scenario and an additional 13 employees under the 2045 scenario. Including the route supervisors and County-employed Contract Monitors, total employment generated by the Project would be 19 new employees under the 2025 scenario and 20 new employees in the 2045 scenario. As further discussed in Chapter 4, Effects Not Found to Be Significant, of this Draft EIR, the potential for these new employees to increase commuter vehicle trips in the Project area would be less than the County's screening criteria of 110 daily vehicle trips, pursuant to the County's Transportation Impact Analysis Guidelines. Thus, vehicle miles traveled impacts associated with the proposed Project would be less than significant, requiring no further analysis.

Routes and Travel Distances

Roadside waste collection would be provided along all road rights-of-way. Each collection truck would begin its route at the provider's service yard and would then travel along a pre-determined route to provide roadside collection services to its customers.[9] Each collection truck is expected to travel to the appropriate resource recovery or waste disposal facility once per day but may require two trips per day depending on the route. Under the proposed Project, the routes for refuse collection that are driven from customer to customer are anticipated to remain generally the same as existing conditions. Through the life of the Project, route length for refuse collection is anticipated to remain generally consistent. New routes for the collection of recyclables and organic waste to be created under the Project would also remain consistent. Since the routes for the collection of recyclables and organic waste do not exist today and the waste hauler(s) have not yet been selected, the location of future service yards and/or other facilities cannot be determined at this time.

Waste hauler staff would travel from their personal residence to an office location or service yard each day. Each collection truck is presumed to travel an average of 200 miles per day of service. This presumes that each truck would begin at a service yard, travel between customer locations along a designated route, travel to a resource

[9] The specific manner by which the selected waste hauler(s) may carry out collection activities is not known at this time.

recovery or waste disposal facility once or twice per day, and then return to the service yard. The presumption of a 200-mile trip per workday per collection truck is considered a conservative estimate, considering a waste hauler currently serving the area in 2023 indicated each of their collection trucks travels approximately 100 miles daily. This conservative trip length presumption is reflected in the air quality analysis in this document. The location(s) of service yards and other facilities that would be used by the selected waste hauler(s) are currently unknown and highly speculative at this time, and any new or expanded yards or facilities would require separate CEQA review. As such, the specific distances that collection trucks would travel to/from service yards and to/from resource recovery or waste disposal facilities, as well as the specific routes to/from these locations, are also currently unknown and cannot be known at this time.

The waste hauler's four field supervisors would travel from their service yard, throughout their service area, and return to their service yard 5 days a week. It is anticipated that each supervisor would drive an average of 100 miles per day per vehicle. The three County Contract Monitors would travel from their office, travel through their designated service area, and return to the office 4 days a week. It is anticipated that each Contract Monitor would drive an average of 100 miles per day per vehicle.

Paved and Unpaved Road Presumptions

The Project area is characterized by a roadway network in which many of the roads are unpaved. The vast majority—approximately 94%—of unpaved roads are privately owned and maintained and are therefore outside of the County's control. Implementation of the proposed Project would result in increased collection truck travel on the roadway network in the Project area, including collection truck travel on unpaved roads. Table 2-3 shows characteristics of the roadway network in the Project area. On unpaved roads, collection trucks would be required to travel at a speed not to exceed 15 miles per hour. Truck weights are anticipated to be 51,000 pounds when full or 33,000 pounds when empty.

Table 2-3. Road Types in the Project Area

Road Type	Total Distance (Miles)	Percentage of Total
County-Maintained Paved Roads	990	25.08%
County-Maintained Unpaved Roads	154	3.90%
Private Paved Roads	218	5.52%
Private Unpaved Roads	2,585	65.49%
Total	**3,947**	**100%**

Source: The data in this table were provided by Public Works in 2022, with revisions in 2023, based on information from the Survey Mapping and Property Management Division. Specifically, road data were sourced from the U.S. Census Bureau's geographic spatial road data (Topologically Integrated Geographic Encoding and Referencing, or "TIGER" system data). These data were updated by Public Works staff through visual inspection using 2020 orthogonal imagery from the Los Angeles Regional Imagery Acquisition Consortium (Public Works' Survey Mapping and Property Management Division 2022).

As shown in Table 2-3, approximately 6% of unpaved roads in the Project area are maintained by the County through Public Works' Road Maintenance Division. Road Maintenance Division performs periodic maintenance on County-maintained unpaved roads, including but not limited to grading and the application of road-stabilizing agents on an as-needed basis. Additionally, Road Maintenance Division has established a new program for the Project area that involves treating one-third of County-maintained unpaved roads with a road-stabilizing agent each year. The locations of this treatment are rotated such that County-maintained roads in the Project area generally receive this treatment approximately once every 3 years. This program is intended to maintain the integrity of unpaved roads, thus reducing the need for other maintenance activities (e.g., grading) and leading to overall reductions in

maintenance costs. Road Maintenance Division intends to continue this program into the foreseeable future; however, ongoing continuation of the program is subject to potential fluctuations in available budget (Public Works' Road Maintenance Division 2024).

2.8 Benefits

The proposed Project would reduce GHG emissions, provide mandated solid waste diversion services that are not currently available to all customers in the Project area, improve the removal of illegal dumping in the public right-of-way, provide County oversight of customer service, and generate funding to support the ongoing effort to combat illegal dumping on private property. Additionally, the proposed Project would benefit the local economy by creating jobs at the local level.

2.9 Intended Uses of this EIR

This environmental document addresses the direct and indirect environmental effects of establishing new solid waste collection services in the Project area. This EIR will be used by the County, as the lead agency under CEQA, in making decisions with regard to the proposed Project described above and the related approvals required for the Project, which are listed below.

The proposed Project would require the following discretionary approvals from the County:

- **Direct Public Works to Release Solicitation for Solid Waste Collection Services.** Public Works will seek Board approval to solicit proposals to provide solid waste collection services. Private waste hauling companies will submit proposals, including their proposed schedule of rates and charges, and Public Works will select the contractor(s) based, among other things, on the price proposal and work plan for contract services.
- **Award Franchise Contracts for Solid Waste Collection Services.** Public Works will seek Board approval to award franchise contracts for solid waste collection services for the proposed service areas. The franchise contracts will include automated collection, disposal, and management of accounts receiving refuse, recyclable, and organic waste collection services, as well as the cleanup, collection, transportation, disposal, and management of illegal dumping on all public rights-of-way.

2.10 References

CalRecycle (California Department of Resources Recycling and Recovery). 2022. "California's Short-Lived Climate Pollutant Reduction Strategy." Accessed January 7, 2022. https://www.calrecycle.ca.gov/organics/slcp.

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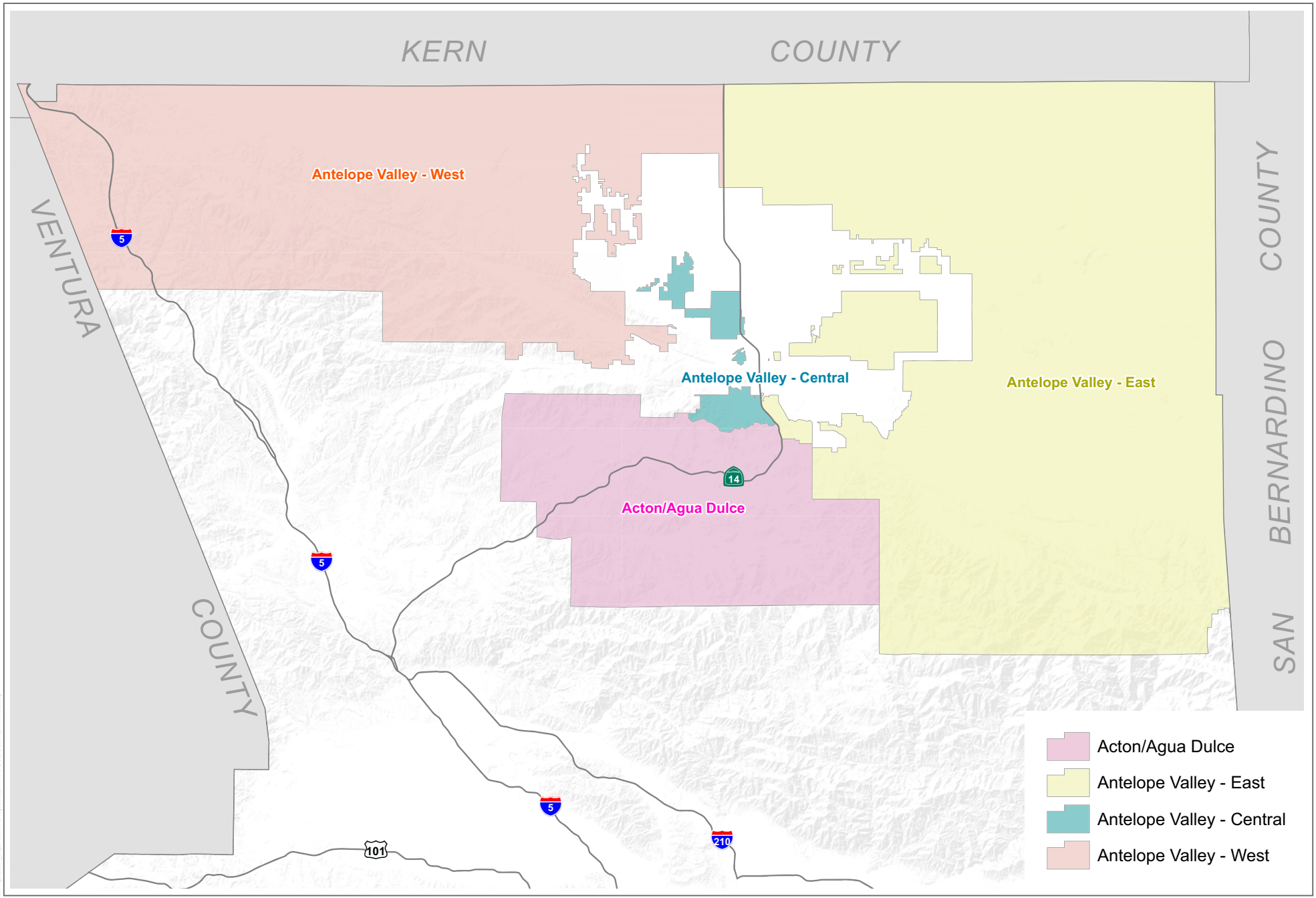
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SOURCE: Los Angeles County Department of Public Works 2023

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Miles

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FIGURE 2-1
Project Area
North County Solid Waste Collection Services Project

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3 Environmental Analysis

Scope of the EIR Analysis

This chapter of the Draft EIR describes the environmental and regulatory setting, impacts, and mitigation measures for the following technical sections included within Chapter 3:

- 3.1 Air Quality
- 3.2 Utilities and Service Systems

The topics of aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and wildfire are not addressed in Chapter 3 because impacts in these areas would be less than significant or the Project would result in no impact based on the analysis contained in the Initial Study (IS) prepared for the proposed Project (see Appendix A, Scoping Report). With respect to impacts in these areas, Appendix A satisfies the requirements of CEQA Guidelines, section 15128, which provides that "[a]n EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study." More information is provided in Chapter 4, Effects Not Found to Be Significant, regarding the impacts addressed in the IS.

Implementation of the proposed Project must be consistent with the Los Angeles County 2035 General Plan goals and policies, and all applicable regulations, such as the County Code. Therefore, such policies and standards are not identified as mitigation, and compliance with relevant goals/policies and federal, State, or County requirements are instead described within the impact analysis.

Environmental Setting

According to section 15125, subdivision (a), of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project as they exist at the time when the Notice of Preparation (NOP) is published. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. Therefore, the baseline conditions for this Draft EIR, unless noted otherwise, are based on conditions that existed in February 2023, when the NOP was published and circulated. The CEQA Guidelines recognize that the data for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate in certain circumstances when doing so results in a more accurate or conservative environmental analysis.

Section Format

Sections 3.1 and 3.2 begin with a description of the Project's **environmental setting** and **regulatory setting** as it pertains to air quality and utilities and service systems, respectively.

The environmental setting identifies the existing conditions present in the Project area. The regulatory setting provides a summary of applicable federal, State, and local regulations, plans, policies, and laws that are relevant

to the issue area. The regulatory setting description is followed by a discussion of **methodology and thresholds of significance** used in the impact analysis. Next, **Project-level impacts** are discussed, followed by an analysis of the **cumulative impacts** of the Project. The impact portion includes an impact statement, prefaced by a number for ease of identification, followed by an analysis of that impact and a determination of whether the impact would be significant (that is, exceeding the applicable threshold) or less than significant (that is, below the applicable threshold). If a significant impact is identified, **mitigation measures** are recommended, if available, to reduce the severity of the impact.

In determining the level of significance of environmental impacts associated with the proposed Project, the analysis in this Draft EIR assumes that the proposed Project would comply with relevant federal and State laws and regulations, relevant County General Plan policies, County ordinances, and other adopted County documents and policies, unless otherwise noted. Therefore, such mandatory policies, ordinances, and standards are not identified as mitigation measures, but rather are discussed as part of the regulatory setting governing the proposed Project.

Project-Level Impacts

A discussion of potential impacts of the proposed Project is presented in paragraph form. The direct and indirect impacts associated with implementation of the Project are evaluated and compared to the threshold of significance for the particular impact. The analysis discusses any applicable local, State, and federal laws, regulations, and standards that would reduce impacts and assumes that the Project would comply with applicable requirements. The impact analysis concludes with a determination of the impact's significance in **bold type** (e.g., **less-than-significant impact**, **potentially significant impact**).

Cumulative Impacts

According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, section 15355). CEQA requires that cumulative impacts be discussed when a "project's incremental effect is cumulatively considerable" (CEQA Guidelines, section 15130, subdivision (a)). In some instances, a project-specific impact may be considered less than significant but the project's contribution may be considered potentially significant (cumulatively considerable) in combination with other development within the surrounding area. Or, in some instances, a potentially significant impact could result on a project level but would not result in a cumulatively considerable impact.

An analysis of cumulative impacts follows the evaluation of Project-level impacts in Sections 3.1 and 3.2. The cumulative impacts analyze the extent to which the Project would contribute to cumulative impacts as defined by CEQA, and whether that contribution would be considerable. An introductory statement that defines the cumulative analysis methodology and the cumulative context is at the beginning of the discussion.

Mitigation Measures

Following each impact analysis is a discussion of applicable mitigation measures, if any, identified to reduce the significance of a potentially significant impact.

CEQA Guidelines, section 15370, defines mitigation as avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree of magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the

impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments.

Terminology Used in the EIR

This Draft EIR uses the following terminology to describe environmental effects of the proposed Project:

- **Thresholds of Significance:** A set of criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Thresholds of significance used in this Draft EIR include those set forth in CEQA Guidelines, section 15065 (Mandatory Findings of Significance) and those derived from questions set forth in Appendix G to the CEQA Guidelines; criteria based on regulatory standards of local, State, and federal agencies; and criteria based on goals and policies identified in other applicable planning documents. In fashioning criteria based on these sources, Public Works staff and the Draft EIR preparers have also relied on their own professional judgment and experience in some instances. In determining the level of significance, the analysis assumes that the proposed Project would comply with relevant federal, State, and local regulations and ordinances.
- **Less-than-Significant Impact:** A Project impact is considered less than significant when it does not reach the threshold of significance, indicating that there would be no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- **Significant or Potentially Significant Impact:** An impact is considered significant or potentially significant if it would result or may result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of Project effects in the context of specified significance criteria. When available, potentially feasible mitigation measures and/or Project alternatives are identified to reduce these effects to the environment.
- **Significant and Unavoidable Impact:** An impact is considered significant and unavoidable if it results in a substantial adverse change in the physical conditions of the environment and there are no potentially feasible mitigation measures available to reduce these effects to less than significant.

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3.1 Air Quality

3.1.1 Introduction

This section describes the existing air quality conditions of the proposed Project area and vicinity, identifies associated regulatory requirements, and evaluates potential impacts of the Project with respect to consistency with air quality plans, emission of criteria air pollutants, and exposure to pollutant concentrations.

Comments received in response to the NOP included concerns related to fugitive dust impacts, additional dust that would be generated by any extra road maintenance activities that may be needed based on increased heavy-duty truck travel, and potential health effects related to dust. A copy of the NOP and comments received is included in Appendix A, Scoping Report.

Information contained in this section is based on data from the Antelope Valley Air Quality Management District (AVAQMD), South Coast Air Quality Management District (SCAQMD), California Air Resources Board (CARB), and the U.S. Environmental Protection Agency (EPA). Appendix B, Air Quality Data, shows the air quality calculations conducted for the Project. Other sources consulted are listed in Section 3.1.6, References.

3.1.2 Environmental Setting

The primary factors that determine air quality are the locations of air pollutant sources and the amount of pollutants emitted. Meteorological and topographical conditions, however, are also important. Factors such as wind speed and direction, air temperature gradients and sunlight, and precipitation and humidity interact with physical landscape features to determine the movement and dispersal of air pollutants.

The metropolitan portions of the County are generally within the South Coast Air Basin (SCAB), and the desert portions of the County lie within the Mojave Desert Air Basin (MDAB). Figure 3.1-1, Air Basins, shows the boundaries of the MDAB and the SCAB with respect to the Project area. As shown, a majority of the Project area is within the MDAB, except for portions of the Project area at its westernmost and southernmost extents. Areas within the MDAB are subject to the rules and regulations of the AVAQMD, and areas within the SCAB are subject to the rules and regulations of the SCAQMD.[1] Additionally, the Project area as a whole is subject to the California Ambient Air Quality Standards (CAAQS) adopted by CARB and the National Ambient Air Quality Standards (NAAQS) adopted by EPA. Existing conditions of the SCAB and the MDAB are summarized below.

Mojave Desert Air Basin

The entire MDAB covers more than 20,000 square miles. The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes.[2] Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and

[1] Specifically, the SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the SCAB and the Riverside County portions of the Salton Sea Air Basin and the MDAB. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The AVAQMD has jurisdiction over the northern, desert portion of Los Angeles County and covers a western portion of the MDAB. This region includes the incorporated cities of Lancaster and Palmdale, Air Force Plant 42, and the southern portion of Edwards Air Force Base. The Kern County-Los Angeles County boundary forms the northern boundary of the AVAQMD; the San Bernardino-Los Angeles County boundary forms the eastern boundary of the AVAQMD.

[2] The description of the MDAB climate and topography is based on the AVAQMD 2016 CEQA and Federal Conformity Guidelines (AVAQMD 2016).

southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and Central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada mountains in the north by the Tehachapi Pass (3,800-foot elevation). Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 feet).

During the summer, the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The MDAB averages between 3 and 7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least 3 months having maximum average temperatures over 100.4°F (MDAQMD 2008).

The MDAB is downwind of the Los Angeles basin, and to a lesser extent, is downwind of the San Joaquin Valley. Prevailing winds transport ozone and ozone precursors from both regions into and through the MDAB during the summer ozone season. These transport couplings have been officially recognized by CARB. Local emissions contribute to exceedances of both the national and State ambient air quality standards for ozone, but photochemical ozone modeling conducted by the SCAQMD and CARB indicates that the MDAB would be in attainment of both standards without the influence of this transported air pollution from upwind regions (MDAQMD 2023).

South Coast Air Basin

The SCAB is a 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB's air pollution problems are a consequence of the combination of emissions from the nation's second-largest urban area, meteorological conditions that hinder dispersion of those emissions, and mountainous terrain surrounding the SCAB that traps pollutants as they are pushed inland with the sea breeze (SCAQMD 2017). Meteorological and topographical factors that affect air quality in the SCAB are described below.[3]

The SCAB is characterized as having a Mediterranean climate (typified as semiarid with mild winters, warm summers, and moderate rainfall). The general region lies in the semi-permanent high-pressure zone of the eastern Pacific; as a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in the SCAB. The average annual temperature varies little throughout the SCAB, averaging 75°F. However, with a less-pronounced oceanic influence, the eastern inland portions of the SCAB show greater variability in annual minimum and maximum temperatures. All portions of the SCAB have recorded temperatures over 100°F in recent years.

[3] The discussion of meteorological and topographical conditions of the SCAB is based on information provided in the Final 2022 Air Quality Management Plan (SCAQMD 2022).

Meteorology

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain primary pollutants (mainly reactive hydrocarbons and oxides of nitrogen [NO_x][4]) react to form secondary pollutants (primarily oxidants). Because this process is time-dependent, secondary pollutants can be formed many miles downwind of the emission sources. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O_3) and a substantial portion of fine particulate matter ($PM_{2.5}$; particulate matter 2.5 microns or less in diameter). High concentrations of O_3 are normally recorded during the late spring, summer, and early autumn months when more intense sunlight drives enhanced photochemical reactions. Because of the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants are emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion—a layer of warm, dry air overlaying cool, moist marine air—is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet above mean sea level, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet above mean sea level, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours.

Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of O_3 observed during summer months in the SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The SCAB and MDAB have a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

As with other regions within the SCAB and MDAB, the County is susceptible to air inversions, which trap a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources. Elevated concentrations of coarse particulate matter (PM_{10}; particulate matter 10 microns or less in diameter) and $PM_{2.5}$ can occur in the SCAB and MDAB throughout the year, but they occur most frequently in fall and winter. Although there are some changes in emissions by day of the week and by season, the observed variations in pollutant concentrations are primarily the result of seasonal differences in weather conditions.

[4] NO_x is a general term pertaining to compounds of nitric oxide, nitrogen dioxide, and other oxides of nitrogen.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.[5]

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).[6] The O_3 that EPA and CARB regulate as a criteria air pollutant is produced close to the ground level where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013).

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in, thereby causing shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies on the effects of O_3 on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work

5 The descriptions of the criteria air pollutants and associated health effects are based on EPA's "Criteria Air Pollutants" (EPA 2023a), as well as CARB's "Glossary" (CARB 2023a).

6 The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2023b).

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2023c).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. Automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2023d).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been

reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 part per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. Older people and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2023e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (PM) (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. PM pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. PM can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of PM. Coarse particulate matter (PM_{10}) consists of PM that is 10 microns or less in diameter, which is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) consists of PM that is 2.5 microns or less in diameter, which is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as SO_x, NO_x, and VOCs.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project.

Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2024a).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that PM in outdoor air pollution causes lung cancer (CARB 2024a).

Lead. Lead in the atmosphere occurs as PM. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment and reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer (CARB 2023f).

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, sewage treatment plants, and stagnant runoff from clogged water basins. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of anthropogenic and bio-pedogenic hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate ambient air quality standards for VOCs as a group.

Non-criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and State agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples of TACs include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills and oil and gas facilities. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70 the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2023g). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including more than 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2023g). CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) (California Code of Regulations [CCR], title 17, section 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines, including trucks, buses, and cars, and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a Diesel Risk Reduction Plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2023g). Those most vulnerable to non-cancer health effects are children, whose lungs are still developing, and older people, who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance or a quality of life impact, rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as "odor fatigue," a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; microclimate; relative humidity; temperature; topography; and the sensitivity of receptors.

Valley Fever. Coccidioidomycosis, more commonly known as "valley fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air-pollution-sensitive people live or spend considerable amounts of time are known as "sensitive receptors." Land uses where air-pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005).

The AVAQMD identifies residences, daycare centers, playgrounds, and medical facilities as sensitive receptors for the purposes of identifying air quality impacts (AVAQMD 2016). The SCAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

Road Stabilization Program

As discussed in Chapter 2, Project Description, of this Draft EIR, Road Maintenance Division has established a new program for the Project area that involves treating one-third of County-maintained unpaved roads with a road-stabilizing agent each year ("road stabilization program"). The locations of the treatment are rotated, such that County-maintained roads in the Project area generally receive this treatment approximately once every 3 years. This program is intended to maintain the integrity of unpaved roads, thus reducing the need for other maintenance activities (e.g., grading) and leading to overall reductions in the cost of maintaining unpaved roads (Public Works' Road Maintenance Division, pers. comm., 2024). Road-stabilizing agents also act as dust suppressants; as such, this program results in some benefits associated with reduced dust from vehicular travel on unpaved County-maintained roadways.

3.1.3 Regulatory Setting

Federal Regulations

Federal Clean Air Act

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving State attainment plans; setting motor vehicle emissions standards; issuing stationary source emissions standards and permits; and establishing acid rain control measures, O_3 protection measures, and enforcement provisions. NAAQS are established for criteria pollutants under the Clean Air Act, which are O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare State Implementation Plans that demonstrate how those areas will attain the NAAQS within mandated timeframes.

Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required EPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. Hazardous air pollutants (HAPs) include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

State Regulations

California Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established the CAAQS, which are generally more restrictive than the NAAQS. As stated previously, an ambient air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below the relevant CAAQS before a geographical area can attain the corresponding CAAQS. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

California air districts have based their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Because an ambient air quality standard is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the ambient air quality standard, this means that the thresholds established by air districts are also protective of human health. The NAAQS and CAAQS are presented in Table 3.1-1 below.

Table 3.1-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
Nitrogen dioxide (NO_2)[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
Carbon monoxide (CO)	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
Sulfur dioxide (SO_2)[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
Course particulate matter (PM_{10})[i]	24 hours	50 µg/m³	150 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m³	—	
Fine particulate matter ($PM_{2.5}$)[i]	24 hours	—	35 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m³	9.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day Average	1.5 µg/m³	—	—
	Calendar Quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24 hours	25 µg/m³	—	—

Table 3.1-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
Visibility-reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2016; EPA 2024.
Notes: ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; PST = Pacific Standard Time.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, and suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles—are values that are not to be exceeded. All others are not to be equaled or exceeded. California Ambient Air Quality Standards are listed in the Table of Standards in the California Code of Regulations, title 17, section 70200.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the primary and secondary National Ambient Air Quality Standards for O_3 were lowered from 0.075 ppm to 0.070 ppm.

[g] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12.0 µg/m³ to 9.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as toxic air contaminants (TACs) with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the State. The SCAQMD and AVAQMD monitor local ambient air quality in the Project area and vicinity. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level;

therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data are presented in Table 3.1-2. The Lancaster monitoring station, located at 43301 Division Street, Lancaster, California, is the air quality monitoring station most central to the Project area. The data collected at this station are considered representative of the air quality experienced in the Project area. Data from the Victorville monitoring station, located at 14306 Park Avenue, Victorville, California (the next closest station), are shown for SO_2 because the Lancaster monitoring station does not collect data on SO_2 pollutant concentrations. The SO_2 readings from the Victorville monitoring station are considered representative of the Project area. The number of days exceeding the ambient air quality standards is also shown in Table 3.1-2.

Table 3.1-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2020	2021	2022	2020	2021	2022
Ozone (O_3)[a]									
Maximum 1-hour concentration	ppm	California	0.09	0.099	0.086	0.098	4	0	3
Maximum 8-hour concentration	ppm	California	0.070	0.084	0.080	0.083	8	4	36
		National	0.070	0.083	0.079	0.082	8	3	33
Nitrogen Dioxide (NO_2)[a]									
Maximum 1-hour concentration	ppm	California	0.18	0.051	0.046	0.043	0	0	0
		National	0.100	0.0515	0.0461	0.0436	0	0	0
Annual concentration	ppm	California	0.030	8	8	8	—	—	—
		National	0.053	8	8	8	—	—	—
Carbon Monoxide (CO)[a]									
Maximum 1-hour concentration	ppm	California	20	1.6	1.4	1.5	0	0	0
		National	35	1.6	1.4	1.5	0	0	0
Maximum 8-hour concentration	ppm	California	9.0	1.1	1.1	0.6	0	0	0
		National	9	1.1	1.1	0.6	0	0	0
Sulfur Dioxide (SO_2)[b]									
Maximum 1-hour concentration	ppm	National	0.075	0.003	0.003	0.002	0	0	0
Maximum 24-hour concentration	ppm	National	0.14	0.002	0.003	0.001	0	0	0
Annual concentration	ppm	National	0.030	0.001	0.002	0.001	—	—	—

Table 3.1-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2020	2021	2022	2020	2021	2022
Coarse Particulate Matter (PM_{10})[a,c]									
Maximum 24-hour concentration	µg/m³	California	50	ND	ND	ND	ND	ND	ND
		National	150	192.3	411.2	76.2	1.1 (1)	1 (1)	0 (0)
Annual concentration	µg/m³	California	20	ND	ND	ND	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a,c]									
Maximum 24-hour concentration	µg/m³	National	35	74.7	35.7	15.1	9 (9)	1 (1)	0 (0)
Annual concentration	µg/m³	California	12	9.3	8.1	7.5	—	—	—
		National	12.0	9.2	8.1	ND	—	—	—

Sources: CARB 2024b; EPA 2023b.
Notes: ppm = parts per million by volume; — = not available; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value.
Data taken from CARB iADAM (http://www.arb.ca.gov/adam; CARB 2024b) and EPA AirData (http://www.epa.gov/airdata/; EPA 2023b) represent the highest concentrations experienced over a given year.
Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour O_3, annual PM_{10}, or 24-hour SO_2, nor is there a California 24-hour standard for $PM_{2.5}$.

[a] Lancaster Monitoring Station data, located at 43301 Division Street, Lancaster, California.
[b] Victorville Monitoring Station data, located at 14306 Park Avenue, Victorville, California.
[c] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than the NAAQS. Table 3.1-3 depicts the current attainment status of the Los Angeles County portion of the SCAB and MDAB with respect to the NAAQS and CAAQS.

Table 3.1-3. Mojave Desert and South Coast Air Basin Attainment Classifications

Pollutant	Designation/Classification[a]			
	Mojave Desert Air Basin		South Coast Air Basin	
	National Standards	State Standards	National Standards	State Standards
Ozone (O_3), 1-hour	No federal standard	**Nonattainment**	No national standard	**Nonattainment**
Ozone (O_3), 8-hour	**Severe nonattainment**[b]	**Nonattainment**	**Extreme nonattainment**	**Nonattainment**
Nitrogen dioxide (NO_2)	Unclassifiable/ attainment	Attainment	Attainment/ maintenance	Attainment
Carbon monoxide (CO)	Unclassifiable/ attainment	Attainment	Attainment/ maintenance	Attainment
Sulfur dioxide (SO_2)	Unclassifiable/ attainment	Attainment	Unclassifiable/ attainment	Attainment
Coarse particulate matter (PM_{10})	Unclassifiable/ attainment	**Nonattainment**	Attainment/ maintenance	**Nonattainment**
Fine particulate matter ($PM_{2.5}$)	Unclassifiable/ attainment	Attainment	**Serious nonattainment**	**Nonattainment**
Lead	Unclassifiable/ attainment	Attainment	Unclassifiable/ attainment	Attainment
Hydrogen sulfide	No federal standard	Unclassified	No national standard	Unclassified
Sulfates	No federal standard	Attainment	No national standard	Attainment
Visibility-reducing particles	No federal standard	Unclassified	No national standard	Unclassified
Vinyl chloride	No federal standard	No designation	No national standard	Unclassified

Sources: EPA 2023c (national); CARB 2022 (State).
Notes: Bold text = not in attainment; attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

[a] Designations/classifications in **bold** type indicate nonattainment.

[b] The West Mojave Desert portion of the MDAB, where the Project is located, is designated severe nonattainment. The Kern County portion of the MDAB is designated moderate nonattainment, and the remaining areas of the MDAB are designated unclassifiable/attainment.

In summary, the MDAB is designated as a nonattainment area for national and State O_3 standards and State PM_{10} standards, and unclassifiable/attainment for all other criteria air pollutants. The SCAB is designated as a nonattainment area for national and State O_3 standards and national and State $PM_{2.5}$ standards. The SCAB is designated as a nonattainment area for State PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. The Los Angeles County portion of the SCAB is designated as an attainment area for national and State CO standards, national and State NO_2 standards, national and State lead standards, and national and State SO_2 standards.

Despite the current nonattainment status, air quality in the MDAB and the SCAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly a result of lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission-reduction strategies by the AVAQMD and SCAQMD.

Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under AB 1807. The California TAC list identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the State list includes the (federal) HAPs. In 1987, the legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several airborne toxic control measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (CCR, title 13, section 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (CCR, title 13, section 2025).

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Local Regulations

Antelope Valley Air Quality Management District

The AVAQMD, which was established by the State legislature, separated the Antelope Valley and northern Los Angeles County from the SCAQMD. The Salton Sea Air Basin and MDAB were previously included in a single large basin called the Southeast Desert Air Basin. On May 30, 1996, CARB replaced the Southeast Desert Air Basin with the Salton Sea Air Basin and MDAB. In July 1997, the Antelope Valley area of MDAB was separated from the SCAQMD and incorporated into a new air district under the jurisdiction of the newly formed AVAQMD.

The AVAQMD is the regional agency responsible for the regulation and enforcement of federal, State, and local air pollution control regulations in the Antelope Valley region of the MDAB. The AVAQMD operates monitoring stations in the Antelope Valley, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The AVAQMD has a variety of air quality management and attainment plans that include control measures and strategies to be implemented to attain the CAAQS and NAAQS in the Antelope Valley. The AVAQMD then implements

these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

AVAQMD air quality management and attainment plans include the following:

- 2004 State and Federal Ozone Attainment Plan
- 2006 8-hour Ozone Reasonably Available Control Technology – State Implementation Plan (RACT SIP) Analysis
- 2008 Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Nonattainment Area)
- 2014 Supplement to the 8-hour Ozone RACT SIP Analysis
- 2015 8-hour RACT SIP Analysis
- 2016 Federal 75 ppb Ozone Attainment Plan
- 2020 70 ppb Ozone Evaluation: RACT SIP Analysis
- 2023 70 ppb Ozone Plan

Applicable Rules and Regulations

Emissions generated by the Project within the AVAQMD jurisdiction would be subject to AVAQMD rules and regulations, which may include the following:

AVAQMD Rule 403 – Fugitive Dust. This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible PM from crossing any property line. AVAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

AVAQMD Rule 431.2 – Sulfur Content of Liquid Fuels. The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose both of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the AVAQMD. The rule also affects diesel fuel supplied for mobile source applications.

South Coast Air Quality Management District

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, State, and local air pollution control regulations within the SCAB, which generally includes the metropolitan area of Los Angeles County. A small portion of the Project area, along the interstate 5 corridor, is within SCAQMD's jurisdiction. SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain the CAAQS and NAAQS in the SCAB. SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The 2022 AQMP was adopted on December 2, 2022, and was developed to address the 2015 national ozone standard. The 2022 AQMP provides the regional path toward improving air quality and meeting federal standards for air pollutants. The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g.,

zero emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other Clean Air Act measures to achieve the 2015 federal ozone standard (SCAQMD 2022).

Applicable Rules and Regulations

Emissions generated by the Project within SCAQMD jurisdiction would be subject to SCAQMD rules and regulations. The SCAQMD rules that may apply to the Project include but may not be limited to the following:

SCAQMD Rule 403 – Fugitive Dust. This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible PM from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

SCAG adopted Connect SoCal, the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), on September 3, 2020. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, planning strategies, and the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The SCAQMD 2022 AQMP applies the SCAG growth forecast in the 2020 RTP/SCS.

The next iteration of the SCAG's RTP/SCS, the Connect SoCal 2024–2050 RTP/SCS (Connect SoCal 2024), was adopted on April 4, 2024. Connect SoCal 2024 builds from the policy directions established in Connect SoCal 2020 and more recent policy directions from SCAG's Regional Council to reflect additional issues including racial equity, resilience and conservation, climate change, next generation infrastructure, and the economy (SCAG 2024). The Connect SoCal 2024 goals fall into four core categories: mobility, communities, environment, and economy.

Los Angeles County 2035 General Plan

The Air Quality Element (Chapter 8) of the Los Angeles County 2035 General Plan guides the goals and policies that would improve air quality and reduce greenhouse gas emissions in the County (County of Los Angeles 2015a). The Air Quality Element was amended as part of the Los Angeles County 2045 Climate Action Plan (County of Los Angeles 2024). The air quality goals and policies most applicable to the Project are listed below. Several goals and policies from the General Plan Land Use Element (Chapter 6) and Economic Development Element (Chapter 14) that relate to air quality are also included below.

Goal AQ 1: Protection from exposure to harmful air pollutants.

Policy AQ 1.1: Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

Policy AQ 1.2: Encourage the use of low or no volatile organic compound (VOC) emitting materials.

Policy AQ 1.4: Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.

Goal AQ 2: The reduction of air pollution and mobile source emissions through coordinated land use, transportation and air quality planning.

Policy AQ 2.1: Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.

Policy AQ 2.2: Coordinate with local, regional, state, and federal agencies to develop and implement community and regional air quality plans and programs.

Policy AQ 2.4: Coordinate with different agencies to minimize fugitive dust from different sources, activities, and uses.

Goal LU 9: Land use patterns and community infrastructure that promote health and wellness.

Policy LU 9.4**:** Encourage patterns of development that protect the health of sensitive receptors.

Goal ED 2: Land use practices and regulations that foster economic development and growth.

Policy ED 2.8: Incentivize as much as feasible, environmentally sustainable practices and high standards of development in the communities that bear disproportionate pollution and health impacts.

Antelope Valley Area Plan

The air quality goals and policies most applicable to the Project from the Antelope Valley Area Plan (County of Los Angeles 2015b) are listed below:

Goal COS 9: Improved air quality in the Antelope Valley.

Policy COS 9.1: Implement land use patterns that reduce the number of vehicle trips, reducing potential air pollution, as directed in the policies of the Land Use Element.

Policy COS 9.2: Develop multi-modal transportation systems that offer alternatives to automobile travel to reduce the number of vehicle trips, including regional transportation, local transit, bicycle routes, trails, and pedestrian networks, as directed in the policies of the Mobility Element.

Policy COS 9.4: Promote recycling and composting throughout the Antelope Valley to reduce air quality impacts from waste disposal activities and landfill operations.

Policy COS 9.5: Encourage the use of alternative fuel vehicles throughout the Antelope Valley.

Policy COS 9.6: Educate Antelope Valley industries about new, less polluting equipment, and promote incentives for industries to use such equipment.

Policy COS 9.7: Encourage reforestation and the planting of trees to sequester greenhouse gas emissions.

Policy COS 9.8: Coordinate with the Antelope Valley Air Quality Management District and other local, regional, State, and federal agencies to develop and implement regional air quality policies and programs.

Santa Clarita Valley Area Plan

The air quality goals and policies most applicable to the Project from the Santa Clarita Valley Area Plan (County of Los Angeles 2012) are listed below:

Goal CO-7: Clean air to protect human health and support healthy ecosystems.

Policy CO-7.1.1: Through the mixed land use patterns and multi-modal circulation policies set forth in the Land Use and Circulation Elements, limit air pollution from transportation sources.

Policy CO-7.1.2: Support the use of alternative fuel vehicles.

Policy CO-7.1.3: Support alternative travel modes and new technologies, including infrastructure to support alternative fuel vehicles, as they become commercially available.

Policy CO-7.3.1: Coordinate with local, regional, State, and federal agencies to develop and implement regional air quality policies and programs.

3.1.4 Methodology and Thresholds of Significance

Methods of Analysis

Construction

As discussed in Chapter 2, the proposed Project would establish new solid waste collection services in the Project area. This would not require or result in any construction-related work activities.

Operation

The proposed Project involves the operation of additional collection trucks, new Contract Monitors and route supervisors in light-duty trucks, and all associated new worker commutes throughout the life of the proposed solid waste collection contract(s). This analysis evaluates the mobile source emissions associated with this vehicular activity under two operational years (2025 and 2045). Operational year 2025 is intended to represent the first potential year of Project operations. The end of the proposed solid waste collection contract(s) is currently unknown.

As such, in order to estimate potential impacts into the future, Public Works selected the year 2045 as a "future year" scenario in order to illustrate how Project operations, and associated environmental impacts, may change over an approximately 20-year horizon. Most air pollutant emissions associated with the proposed Project are anticipated to occur within the MDAB and under the jurisdiction of the AVAQMD. However, to provide a conservative analysis of the proposed Project, total Project emissions are compared to both the AVAQMD's and the SCAQMD's emission thresholds.

Mobile Sources

The proposed Project would generate criteria air pollutant emissions from primarily mobile sources (vehicular traffic) as a result of the employee passenger vehicles (workers) and truck traffic associated with the implementation of the proposed Project. Table 3.1-4 shows the vehicle trip assumptions for each vehicle type associated with the proposed Project. These assumptions are further explained in the paragraph below.

Table 3.1-4. Vehicle Trip Assumptions

Vehicle Type	Number of Vehicles	Daily Distance Traveled (miles)
2025		
Existing Collection Trucks	21	100*
New Collection Trucks	7	200
Contract Monitors and Route Supervisors	7	100
Employee Commuter Vehicles	19	44
2045		
Existing Collection Trucks	26	100*
New Collection Trucks	8	200
Contract Monitors and Route Supervisors	7	100
Employee Commuter Vehicles	20	44

Notes: See Chapter 2, Project Description, and Appendix B for details.

* The distance for existing collection trucks of 100 miles represents the anticipated potential net increase in mileage traveled per truck per day. (The distance traveled by the existing collection trucks is approximately 100 miles per day under existing conditions. In order to account for potential increases in route length from a source-separated waste collection system and to account for a wider radius of potential resource recovery/waste disposal locations that may be accessed as a result of the Project, existing collection trucks are assumed to travel an additional 100 miles per day under the Project, for a total of 200 miles per day.)

As shown in Table 3.1-4, the average daily trips would be 28 collection truck trips per day in 2025, and 34 collection truck trips per day in 2045. The Project would be associated with a net increase in mileage from the existing trucks and those that would exist in the future without the Project,[7] as well as use of the additional collection trucks required by the Project. Both operational scenarios (2025 and 2045) would also include 7 daily vehicle trips associated with the Contract Monitors and route supervisors and up to 19 daily passenger vehicle trips associated with employee commute trips in 2025 (increasing to 20 employee commute trips by 2045). All vehicle trips were assumed to occur on a daily basis, 5 days per week. The commuter trips were assumed to be 44 miles each, which is the default for commercial work trips for the Project region in the California Emissions Estimator Model (CalEEMod). Each new collection truck is conservatively assumed to travel an average of 200 miles per day of service as discussed in Chapter 2, Section 2.7, Project Operation. This assumes that each collection truck would

[7] Expanded mileage for existing trucks is included in the air quality modeling to conservatively account for potential increases in route length from transitioning to a source-separated waste collection system and to account for a wider radius of potential resource recovery/waste disposal locations that may be accessed as a result of the Project.

begin at a service yard, travel between customer locations along a designated route, travel to a nearby resource recovery or waste disposal facility one to two times, and then return to the service yard. The expanded use of the existing trucks is anticipated to be 100 miles on average. Contract Monitors and route supervisors are assumed to travel an average of 100 miles per day.

For the analysis of dust generation resulting from Project-related travel on unpaved roads, a geographical information systems analysis was conducted by Public Works for the roadway network in the Project area in order to establish an estimate for the mileage that would be traveled on unpaved roads by Project vehicles. The collection trucks are assumed to travel 60% of their daily 200 miles on local roadways for solid waste collection (a portion of which is assumed to be on unpaved roads) and 40% of their daily 200 miles on travel to/from resource recovery or waste disposal facility location(s) (which is assumed to occur on paved roads). All travel for Contract Monitors and route supervisors would occur on local roadways in each service area because those vehicles would circulate the solid waste collection routes and would not need to travel to/from resource recovery or waste disposal facility location(s). As such, Contract Monitor and route supervisor vehicles are assumed to travel on a mixture of unpaved and paved roads, consistent with the solid waste collection routes. Based on Table 2-3, Road Types in the Project Area (see Chapter 2), approximately 69% of collection route travel would occur on unpaved roads. This mix of unpaved and paved roads has been assumed for collection routes and for the routes traveled by Contract Monitors and route supervisors. Worker commuter vehicles and collection truck travel to/from resource recovery or waste disposal facility location(s) is assumed to occur on paved roads.

For travel on unpaved roads, an average vehicle speed of 15 miles per hour has been assumed, based upon typical speeds of collection trucks and accounting for speed reductions for travel on unpaved roads. For travel on paved roads, it is assumed that vehicles would generally observe the posted speed limit.

As described above in Section 3.1.2, Environmental Setting, Road Maintenance Division operates a road stabilization program in the Project area. This program involves treating County-maintained roads in the Project area with a road-stabilizing agent on a rotating basis, such that each road receives treatment approximately once every 3 years. As also described above, road-stabilizing agents reduce dust produced by vehicle traffic on unpaved roads. However, because the purpose of the program is road stabilization and maintenance (as opposed to dust suppression), the road-stabilizing agents are being applied at frequencies that are effective for road maintenance. Use of road-stabilizing agents for effective dust suppression may require more frequent application than a 3-year interval, depending on the agent being used (USDA Forest Service 1999). Specifically, Public Works currently uses magnesium chloride for this purpose and expects to use magnesium chloride into the future. Magnesium chloride generally requires seasonal application for effective dust suppression (USDA Forest Service 1999). Additionally, the ongoing continuation of the program is subject to potential fluctuations in budget. For these reasons, continuous use of road-stabilizing agents on County-maintained unpaved roads is not guaranteed (Public Works' Road Maintenance Division, pers. comm., 2024). Therefore, for the purpose of analyzing worst-case conditions, the air quality analysis does not take credit for potential reductions in dust emissions that may occur in association with the road stabilization program.

Off-road Equipment

Off-road equipment emissions were estimated using CalEEMod. To capture criteria air pollutant emissions from road repair activities due to increased heavy-duty truck travel as a result of the Project, one grader, one loader or backhoe, and one rubber-tired dozer are assumed to operate in the Project area periodically throughout each year of Project operations. This assumption would capture minor repair work that may be necessary as a direct or indirect result of the Project. For the maximum daily operational criteria air pollutant emissions (shown in Table 3.1-7,

below), these activities are assumed to occur for 8 hours, simultaneously with waste collection activities. For the estimated maximum annual operational criteria air pollutant emissions shown in Table 3.1-8, these maintenance activities are assumed to occur 8 hours per day, 10 times per year. The potential need for road maintenance or repair resulting from the Project, the frequency of such activities, the duration of such activities, and the equipment required for such activities are unknown and highly speculative. However, this analysis reflects a reasonable worst-case scenario for potential maintenance events that is based upon Public Works' professional judgment and experience.

Thresholds of Significance

The significance criteria used to evaluate the Project impacts to air quality are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to air quality would occur if the Project would:

- Conflict with or obstruct implementation of the applicable air quality plan
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard
- Expose sensitive receptors to substantial pollutant concentrations
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

As evaluated in the Initial Study (Appendix A), the Project would have less-than-significant impacts pertaining to odors and other emissions that may adversely affect a substantial number of people. As described therein, collection trucks can result in temporary sources of odors, due to diesel emissions from diesel-fueled trucks and/or odors emanating from the collection bins of the trucks. However, such sources of odors would occur briefly and temporarily at a given receptor location. The Project does not propose any point sources of odors, and odors from collection trucks would not be considered significant. Impacts have been determined to be less than significant, and this topic is not discussed further in this section.

Appendix G of the CEQA Guidelines (CCR, title 14, section 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether a project would have a significant impact on air quality.

Air Pollution Control District Significance Thresholds

The proposed Project would result in emissions of criteria air pollutants for which CARB and EPA have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Projects that emit these pollutants have the potential to cause, or contribute to, violations of these standards. Both the AVAQMD and the SCAQMD have established quantitative emission-based thresholds for projects evaluated pursuant to CEQA that are discussed below.

The AVAQMD CEQA Air Quality Significance Thresholds set forth quantitative emission significance thresholds for criteria air pollutants, which, if exceeded, would indicate the potential for a project to contribute to violations of the NAAQS or CAAQS. Table 3.1-5 lists the AVAQMD Air Quality Significance Thresholds (AVAQMD 2016).

Table 3.1-5. Antelope Valley Air Quality Management District Thresholds of Significance

Criteria Pollutant	Daily Threshold (pounds per day)[a]	Annual Threshold (tons per year)
Volatile organic compounds (VOCs)	137	25
Oxides of nitrogen (NO_x)	137	25
Carbon monoxide (CO)	548	100
Oxides of sulfur (SO_x)	137	25
Particulate matter (PM_{10})	82	15
Particulate matter ($PM_{2.5}$)	65	12

Source: AVAQMD 2016.
Notes: PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
[a] The AVAQMD daily thresholds are generally applicable to multi-phased projects with phases shorter than 1 year and, therefore, are primarily used for emissions from construction-related activities. The annual thresholds are generally for projects with emissions that would occur for longer than 1 year and, thus, are generally applied to project-generated operational activities.

The SCAQMD CEQA Air Quality Significance Thresholds, as revised in March 2023, set forth quantitative emission significance thresholds for criteria air pollutants, which, if exceeded, would indicate the potential for a project to contribute to violations of the NAAQS or CAAQS. Table 3.1-6 lists the SCAQMD Air Quality Significance Thresholds (SCAQMD 2023).

Table 3.1-6. South Coast Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	**Construction (Pounds per Day)**	**Operation (Pounds per Day)**
Volatile organic compounds (VOCs)	75	55
Oxides of nitrogen (NO_x)	100	55
Carbon monoxide (CO)	550	550
Oxides of sulfur (SO_x)	150	150
Particulate matter (PM_{10})	150	150
Particulate matter ($PM_{2.5}$)	55	55
Lead[a]	3	3
TACs and Odor Thresholds		
Toxic air contaminants (TACs)[b]	Maximum incremental cancer risk ≥10 in 1 million Cancer Burden >0.5 excess cancer cases (in areas ≥1 in 1 million) Chronic and acute hazard index ≥1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

Source: SCAQMD 2023.
Notes: PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
[a] The phaseout of leaded gasoline started in 1976. Because gasoline no longer contains lead, the Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
[b] TACs include carcinogens and non-carcinogens.

The proposed Project would result in a cumulatively considerable net increase for O_3, which is a nonattainment pollutant, if the Project's construction or operational emissions would exceed the AVAQMD or SCAQMD's VOC or NO_x thresholds shown in Table 3.1-5 and Table 3.1-6, respectively. These emission-based thresholds for

O_3 precursors are intended to serve as a surrogate for an O_3 significance threshold (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly, and the effects of an individual project's emissions of O_3 precursors (i.e., VOCs and NO_x) on O_3 levels in ambient air cannot be determined through air quality models or other quantitative methods.

3.1.5 Impacts Analysis

Project Impacts

Impact 3.1-1 The proposed Project would conflict with or obstruct implementation of an applicable air quality plan.

As previously discussed, the Project area is located mostly within the MDAB with small portions of the Project area located within the SCAB. Areas within the SCAB are subject to the rules and regulations imposed by the SCAQMD and areas within the MDAB are subject to the rules and regulations imposed by the AVAQMD. The AVAQMD, which was established by the State legislature, separated the Antelope Valley and northern Los Angeles County from the SCAQMD. The AVAQMD and the SCAQMD are the regional agencies responsible for the regulation and enforcement of federal, State, and local air pollution control regulations in the Antelope Valley region of the MDAB and the SCAB, respectfully.

The evaluations of the proposed Project's potential to conflict with the applicable SCAQMD and AVAQMD plans are provided separately below.

Antelope Valley Air Quality Management and Attainment Plans

The purpose of a consistency finding with regard to the air quality management and attainment plans is to determine if a project is consistent with the assumptions and objectives of the air quality management and attainment plans and if it would interfere with the region's ability to comply with federal and State air quality standards. The AVAQMD has established criteria for determining consistency with the currently applicable air quality management and attainment plans in their CEQA and Federal Conformity Guidelines (AVAQMD 2016). Per the guidelines, a project is deemed to conform with applicable attainment or maintenance plans, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, General Plan amendments, and similar land use plan changes that do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold (AVAQMD 2016).

The AVAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, and employment by industry) developed by SCAG for its 2020–2045 RTP/SCS (SCAG 2020). AVAQMD used this document, which includes land use assumptions from General Plans for cities and counties in the MDAB, to develop the emissions inventory in its air quality management and attainment plans. The SCAG RTP/SCS and associated regional growth forecast are generally consistent with the local plans; therefore, the AVAQMD's air quality management and attainment plans are generally consistent with local government plans.

The proposed Project would not require a General Plan amendment or zoning designation change within the Project area. Additionally, as the Project does not include new commercial space or residences, no increases to population or housing are anticipated as part of the Project. The Project would result in a small increase in employment in the Project area (19 employees in 2025 and 20 employees by 2045). However, this net increase in employees represents a negligible increase in employment compared to the SCAG forecast for the unincorporated portion of

Los Angeles County, which forecasts an increase in employment of 50,900 jobs between 2020 and 2040. As such, because the proposed Project is not anticipated to result in growth that would conflict with projections, it would not conflict with or exceed the assumptions in the AVAQMD's air quality management and attainment plans.

South Coast Air Quality Management Plan

The SCAQMD has established criteria for determining consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD CEQA Air Quality Handbook. These criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.
- **Consistency Criterion No. 2:** Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion, Project-generated criteria air pollutant emissions have been estimated and analyzed for significance and are addressed under Impact 3.1-2, below. Detailed results of this analysis are included in Appendix B. As presented below under Impact 3.1-2, the proposed Project would generate criteria air pollutant emissions that exceed the SCAQMD's thresholds, and the Project would therefore conflict with Criterion No. 1.

The second criterion regarding the potential of the proposed Project to exceed the assumptions in the AQMP or increments based on the year of Project buildout and phase is primarily assessed by determining consistency between the proposed Project's land use designations and its potential to generate population growth. As discussed previously, the proposed Project would not require a General Plan amendment or zoning designation change within the Project area. Additionally, as the proposed Project does not include new commercial space or residences, no increases to population or housing are anticipated as part of the proposed Project. The Project would result in a small increase in employment in the Project area (19 employees in 2025 and 20 employees by 2045). However, this net increase in employees represents a negligible increase in employment compared to the SCAG forecast for the unincorporated portion of Los Angeles County, which forecasts an increase in employment of 50,900 jobs between 2020 and 2040. Accordingly, the Project is consistent with the SCAG RTP/SCS forecasts used in development of the SCAQMD's AQMP.

In summary, based on the considerations presented above, the Project would not conflict with, or obstruct implementation of, air quality plans established by the AVAQMD. However, the Project would potentially conflict with, or obstruct implementation of, SCAQMD's AQMP. Impacts are thus considered **potentially significant**.

Impact 3.1-2 The proposed Project would result in a cumulatively considerable net increase of criteria pollutants for which the Project region is non-attainment under applicable federal or State ambient air quality standards.

The Project would result in emissions of criteria air pollutants from mobile and area sources, which may cause exceedances of NAAQS and CAAQS or contribute to existing nonattainment of NAAQS and CAAQS. The following discussion identifies potential short-term construction and long-term operational impacts that would result from implementation of the Project.

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the AVAQMD and SCAQMD both develop and implement plans for future attainment of

NAAQS and CAAQS. Although the area of the SCAB where the Project is located is currently designated a nonattainment area for federal and State O_3 standards and federal and State PM_{10} standards, the SCAB has experienced a substantial reduction in maximum 8-hour concentrations of O_3 over the past 30 years, as well as reductions in PM_{10} over time, as described in the respective SCAQMD O_3 and PM_{10} attainment plans. CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the NAAQS and CAAQS. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

Short-Term Construction Impacts

As discussed in Chapter 2, the proposed Project would establish new solid waste collection services in the Project area. This would not require or result in any construction-related work activities.

Operational Emissions

Table 3.1-7 presents the maximum daily emissions associated with operation of the Project in 2025 and 2045. The values shown are the maximum emissions results from the spreadsheet model for mobile emissions sources. Complete details of the emissions calculations are provided in Appendix B.

Table 3.1-7. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2025	0.77	13.82	14.06	0.01	915.21	92.98
2045	0.43	10.67	9.15	0.11	1,015.35	103.27
AVAQMD Threshold	*137*	*137*	*548*	*137*	*82*	*65*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District.
See Appendix B for complete results.

As shown in Table 3.1-7, maximum daily operational emissions of VOC, NO_x, CO, and SO_x generated by the proposed Project would not exceed the AVAQMD's or the SCAQMD's daily significance thresholds. However, the proposed Project would exceed both the AVAQMD's and the SCAQMD's daily significance thresholds for PM_{10} and $PM_{2.5}$.

Table 3.1-8 presents the maximum annual emissions associated with the operation of the proposed Project in 2025 and 2045. Complete details of the emissions calculations are provided in Appendix B.

Table 3.1-8. Estimated Maximum Annual Operational Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
2025	0.04	1.36	0.86	0.02	115.12	11.68

Table 3.1-8. Estimated Maximum Annual Operational Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
2045	0.02	1.18	0.41	0.01	127.71	12.99
AVAQMD Threshold	*25*	*25*	*100*	*25*	*15*	*12*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Threshold Exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District; N/A = not applicable.
See Appendix B for complete results.

As shown in Table 3.1-8, maximum annual operational emissions of VOC, NO_x, CO, and SO_x generated by the proposed Project would not exceed the AVAQMD's annual significance thresholds. However, the Project would exceed the ACAQMD's annual threshold for PM_{10} and $PM_{2.5}$ of 15 tons and 12 tons per year, respectively. Therefore, impacts would be potentially significant. Notably, there are no annual operational criteria air pollutant thresholds established by the SCAQMD. The Project's exceedance of PM_{10} and $PM_{2.5}$ is almost entirely attributable to fugitive dust emissions from vehicular travel on unpaved roads in the Project area.

By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development (such as the cumulative emissions from various sources of air pollutants and their precursors within the MDAB and SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities), and the AVAQMD and SCAQMD develop and implement plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulative contribution on air quality. If a project's emissions would exceed the applied significance thresholds, it would have a cumulative contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003). As demonstrated in the analysis above, the Project would exceed both AVAQMD and SCAQMD thresholds, and impacts related to a net increase in criteria air pollutants would thus be considered potentially significant.

Health Effects

Potential health effects of criteria air pollutants that would be generated by the Project are discussed below.

VOCs and NO_x. VOCs and NO_x are precursors to O_3. The Project area is designated as nonattainment for O_3. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of reactive organic gases and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 CAAQS/NAAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Because VOC and NO_x emissions associated with Project operation would not exceed the AVAQMD and

SCAQMD thresholds, they would not significantly contribute to regional O_3 concentrations and the associated health effects.

NO_x and NO_2. Health effects associated with NO_x and NO_2 (which is a constituent of NO_x) include lung irritation and enhanced allergic responses (CARB 2023c). Because the Project would not exceed the AVAQMD or SCAQMD NO_x thresholds, the Project would not contribute to significant health effects associated with NO_x and NO_2.

CO. CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots is discussed in response to Threshold 3.1-3, below, and is determined to be a less-than-significant impact. Furthermore, the existing CO concentrations in the area are well below the NAAQS and CAAQS standards. The Project's CO emissions would not contribute to significant health effects associated with CO.

PM_{10} and $PM_{2.5}$. Health effects associated with PM_{10} and $PM_{2.5}$ include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2023f). Operation of the Project would exceed the AVAQMD and the SCAQMD thresholds for PM_{10} and $PM_{2.5}$. Therefore, the Project has the potential to contribute a substantial amount of PM over the course of Project operations, which could result in significant health effects associated with PM_{10} and $PM_{2.5}$.

Currently, the AVAQMD, the SCAQMD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate mass emission estimates for criteria air pollutants to specific health effects. In addition, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days.

The California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision) (issued on December 24, 2018) addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences, and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further" (Italics original).

Currently, SCAQMD, AVAQMD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the Project to specific health effects. In addition, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days.

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both SJVAPCD and SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in California. The key, relevant points from the SCAQMD and SJVAPCD briefs are summarized herein for informational purposes. The focus of this discussion is on O_3, its precursor pollutants, and PM, because both the AVAQMD and SCAQMD are in currently in nonattainment for O_3 and PM_{10}. SCAQMD is also in nonattainment for $PM_{2.5}$, and both O_3 and PM can be formed from other particles in the air, which is discussed in detail below.

In requiring a health impact type of analysis for criteria air pollutants, it is important to understand how O_3 and PM are formed, dispersed, and regulated. The formation of O_3 and PM in the atmosphere, as secondary pollutants,[8] involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources. The O_3 reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO_2 is photochemically reformed from nitric oxide. In this way, O_3 is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O_3 (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O_3 concentrations to which downwind populations may be exposed (NRC 2005). Once formed, O_3 can be transported long distances by wind and, due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008). Because of the complexity of O_3 formation, a specific tonnage amount of VOCs or NO_X emitted in a particular area does not equate to a particular concentration of O_3 in that area (SJVAPCD 2015).

PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015). This is especially true for individual projects, where project-generated criteria air pollutant emissions are not derived from a single "point source," but from construction equipment and mobile sources (passenger cars and trucks) driving to, from, and around a project site or area.

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the mass quantity of emissions associated with an individual project. For example, health effects from O_3 are correlated with increases in the ambient level of O_3 in the air a person breathes (SCAQMD 2015). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels over an entire region (SCAQMD 2015). The lack of link between the tonnage of precursor pollutants and the concentration of O_3 and PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects; rather, it is the concentration of resulting O_3 and PM that causes these effects (SJVAPCD 2015). The ambient air quality standards, which are statutorily required to be set by EPA at levels that are requisite to protect the public health, are established as concentrations of O_3 and $PM_{2.5}$ based on duration of exposure and not as tonnages of their precursor pollutants (EPA 2023c). Because the ambient air quality standards are focused on achieving a particular concentration region-wide, the tools and plans for attaining the ambient air quality standards are regional in nature. For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the ambient air quality standards, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O_3 or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it "would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have" (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional

[8] Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

pollutants are not uniform either temporally or geographically throughout an air basin, but are constantly fluctuating based upon meteorology and other environmental factors. SJVAPCD noted that the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that, "Running the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved" (SJVAPCD 2015).

SCAQMD and SJVAPCD have indicated that it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the available models are equipped to model the impact of all emission sources in an air basin on attainment and would likely not yield valid information or a measurable increase in O_3 and PM concentrations sufficient to accurately quantify O_3- and PM-related health impacts for an individual project.

Nonetheless, following the Supreme Court's Friant Ranch decision, some EIRs that were published prior to guidance issued by the air districts included quantitative evaluations of health effects associated with criteria air pollutants. These quantitative evaluations are referred to as "health impact assessments" (HIAs). There are five publicly available HIAs that have been reviewed and summarized herein. For criteria air pollutant emissions that exceeded applicable air district thresholds, these HIAs quantitatively analyzed potential project-generated health effects using a combination of a regional photochemical grid model[9] and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition).[10] These HIAs generally presented results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from a project's estimated increase in concentrations of O_3 and PM.[11] The five publicly available HIAs reviewed have concluded that the evaluated project's health effects represent a small increase in incidences and a very small percentage of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error.

As explained in the SJVAPCD brief and noted previously, running the photochemical grid model used for predicting O_3 attainment with the emissions solely from an individual project like the Friant Ranch project (or the proposed Project evaluated herein) is not likely to yield valid information given the relative scale involved. The five examples reviewed above support the SJVAPCD's brief contention that consistent, reliable, and meaningful results may not be provided by the available evaluation methods. Accordingly, additional work in the industry and, more importantly,

9 The first step in the publicly available health impact assessments (HIAs) included running a regional photochemical grid model, such as the Community Multiscale Air Quality model or the Comprehensive Air Quality Model, with extensions to estimate the increase in concentrations of O_3 and $PM_{2.5}$ as a result of project-generated emissions of criteria and precursor pollutants. Air districts, such as the SCAQMD, use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2023d).

10 After estimating the increase in concentrations of O_3 and $PM_{2.5}$, the second step in the five examples includes use of BenMAP or BenMAP–Community Edition to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2023e). The health impact function in BenMAP–Community Edition incorporates four key sources of data: (1) modeled or monitored air quality changes, (2) population, (3) baseline incidence rates, and (4) an effect estimate. All of the five example HIAs focused on O_3 and $PM_{2.5}$.

11 The following CEQA documents included a quantitative HIA to address Friant Ranch: (1) California State University Dominguez Hills 2018 Campus Master Plan EIR (CSUDH 2019), (2) March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA 2019), (3) Mineta San Jose Airport Amendment to the Airport Master Plan EIR (City of San Jose 2019), (4) City of Inglewood Basketball and Entertainment Center Project EIR (City of Inglewood 2019), and (5) San Diego State University Mission Valley Campus Master Plan EIR (SDSU 2019).

air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public.

In summary, because the Project would exceed the AVAQMD and SCAQMD thresholds for PM_{10} and $PM_{2.5}$, the potential health effects associated with criteria air pollutants are considered potentially significant. As discussed above, there are currently no modeling tools available that would provide reliable and meaningful information regarding quantified health effects attributable to the Project's criteria air pollutant emissions.

In summary, the Project would result in a cumulatively considerable net increase of PM_{10} and $PM_{2.5}$ and would contribute to health effects associated with these air pollutants. Impacts would thus be considered **potentially significant**.

Impact 3.1-3 The proposed Project would expose sensitive receptors to substantial pollutant concentrations.

Criteria Air Pollutant Emissions and Associated Pollutant Concentrations

As discussed above in Impact 3.1-2, because operation of the Project could result in exceedances of the AVAQMD and SCAQMD significance thresholds for PM_{10} and $PM_{2.5}$, the Project would potentially result in health effects associated with those pollutants. Operation of the Project would not exceed the AVAQMD and SCAQMD thresholds for VOCs, NO_x, CO, or SO_x, and the AVAQMD and SCAQMD thresholds are based on levels that the MDAB and SCAB can accommodate without affecting the attainment date for the NAAQS and CAAQS, which are established to protect public health and welfare. Therefore, because the Project would not exceed the AVAQMD and SCAQMD thresholds, the Project is not anticipated to result in substantial health effects associated with VOCs, NO_x, CO, or SO_x.

There are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days. As discussed above under Impact 3.1-2, methods available to quantitatively evaluate health effects may not be appropriate to apply to emissions associated with an individual project and cannot be estimated with a high level of accuracy. While specific health effects cannot be feasibly determined or predicted, because operation of the Project could result in exceedances of AVAQMD and SCAQMD significance thresholds for PM_{10} and $PM_{2.5}$, potential health effects associated with these criteria air pollutants are considered potentially significant.

Carbon Monoxide

Exposure to high concentrations of CO can result in dizziness, fatigue, chest pain, headaches, and impairment of central nervous system functions. Mobile-source impacts, including those related to CO, occur essentially on two scales of motion. Regionally, proposed Project-related travel would add to regional trip generation within the local airshed and the MDAB and the SCAB. Although the MDAB and the SCAB are currently an attainment area for CO, there is a potential for the formation of microscale CO "hotspots" to occur immediately around points of congested traffic. Hotspots can form if congested traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and/or is operating on roadways that are already crowded with non-project-related traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the Project area is steadily decreasing.

CO concentrations at congested intersections are not anticipated to not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day at a given intersection. The proposed Project is anticipated to generate an average of 20 daily trips commuter trips and 41 daily trips from in-service vehicles (34 collection trucks, 3 Contract Monitors, and 4 supervisors) in 2045. These trips would be dispersed throughout the Project area with minimal overlap. Additionally, while intersection volumes are not available for every intersection within the Project area, implementation of the proposed Project would result in a minimal regional increase in vehicle trips and vehicle miles traveled. Accordingly, it is not anticipated that the proposed Project would result in a new congested intersection or that it would substantially exacerbate conditions at existing congested intersections. Additionally, the proposed Project would not result in an increase of intersection volumes to more than 100,000 vehicles per day at any given intersection in the Project area because the Project would contribute approximately 61 vehicle trips per day (by 2045) to the roadway network across an approximately 1,419-square-mile area. Therefore, a CO hotspot is not anticipated to occur, and potential Project-generated impacts associated with CO hotspots would be less than significant.

Toxic Air Contaminants

In addition to impacts from criteria pollutants, impacts may include emissions of pollutants identified by the State and federal government as TACs or HAPs. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The State has formally identified more than 200 substances as TACs, including the federal HAPs, and is adopting appropriate control measures for sources of these TACs.

The following air toxic control measures are required by State law to reduce DPM emissions (DPMs are considered TACs):

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-Road Diesel Vehicles (CCR, title 13, section 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing), off-road, diesel-fueled vehicles.
- All commercial diesel vehicles are subject to the CCR, title 13, section 2485, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading is required to be limited to 5 minutes; electric auxiliary power units should be used whenever possible.

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 30-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The greatest potential for TAC emissions from the proposed Project would be DPM emissions from diesel-fueled collection trucks. DPM emissions can result in health impacts to sensitive receptors. Based on information provided by Public Works, approximately 27% of the collection vehicle fleet would be diesel. (The remainder would be powered by natural gas or would be electric.) As such, only about a third of the waste collection vehicles required for Project implementation would result in DPM emissions. Furthermore, heavy-duty diesel trucks (including collection trucks) are subject to a CARB Airborne Toxics Control Measure for in-use heavy-duty diesel trucks to reduce DPM emissions, which would limit the potential DPM effects of the proposed Project. Furthermore, as shown in Appendix B, exhaust PM_{10} (representative of DPM) would be a small fraction of the total PM_{10} emitted by the Project and, on its own, would not exceed the AVAQMD or SCAQMD thresholds on a daily basis or on an annual basis. Furthermore, operation of the proposed Project would not result in any non-

permitted direct emissions (e.g., those from a point source such as diesel generators). Therefore, impacts related to TACs would be less than significant.

Valley Fever

Valley fever is an illness caused by inhalation of the spores of the *Coccidioides immitis* fungus. The fungal spores are generally found in the upper 30 centimeters (12 inches) of the soil horizon, especially in undisturbed soils. The spores become airborne when uncultivated soil is disturbed by natural or anthropogenic means (winds, grading, mining, farming, and recreational activities) (Lauer et al. 2020; ESA 2018). The proposed Project would not involve new ground disturbance. Rather, collection trucks and other Project vehicles would travel along previously graded unpaved and paved roads. As such, Project activities are unlikely to occur in source areas for the *Coccidioides immitis* fungus.

Valley fever is generally a concern at large construction sites involving grading and earth moving. For example, State laws have been established to promote valley fever prevention and awareness for construction workers in certain counties (Fresno, Kern, Kings, Madera, Merced, Monterey, San Joaquin, San Luis Obispo, Santa Barbara, Tulare, and Ventura Counties).[12] The California counties considered highly endemic for valley fever include Kern (306.2 identified cases per 100,000 people in 2021), Kings (108.3 identified cases per 100,000 people in 2021), Tulare (65.8 identified cases per 100,000 people in 2021), San Luis Obispo (61.0 identified cases per 100,000 people in 2021), Fresno (39.8 identified cases per 100,000 people in 2021), Merced (28.3 identified cases per 100,000 people in 2021), and Monterey (27.0 identified cases per 100,000 people in 2021), which accounted for 52.1% of the reported cases statewide in 2021. Within Los Angeles County, 14.2 cases were identified per 100,000 people in 2021 (CDPH 2022). The California Department of Public Health also reports that people are at higher risk of getting valley fever if they participate in outdoor activities that involve close contact with dirt or dust; live or work near areas where dirt and soil are stirred up, such as construction or excavation sites; and/or work in jobs where dirt and soil are stirred up or disturbed, including construction, farming, military work, and archaeology (CDPH 2022). While anyone who lives or works in areas where valley fever is present could be exposed, there are certain factors and activities that may increase risk, and the Project would not involve such activities. According to the Centers for Disease Control and Prevention, risk for infection can increase for people in very dusty settings, but even then the risk is low (CDC 2022).

Control of fugitive dust emissions is considered a primary tool to reduce potential exposure to the spores if they are present in the soils being disturbed. Collection trucks would observe slow speeds, particularly along unpaved roads and within residential neighborhoods. Fugitive dust emissions increase in a linear fashion as vehicle speed increases. Thus, vehicle speed is a key determinant in the amount of dust that is produced, and the use of low speeds on unpaved roads would limit dust generation to the extent practicable (EPA 2006). These practices of the Project would control fugitive dust, thereby reducing potential exposure to valley fever spores in the event they are present. Because dust emissions would be generated along established roadways that undergo frequent disturbance from the passage of vehicles, the Project is not anticipated to lead to significant valley fever issues relative to existing conditions.

The total number of collection trucks on a typical road in the Project area would generally increase by approximately two trucks per week as a result of the Project. The passage of two additional collection trucks along an unpaved road per week would not present a substantial change in traffic conditions relative to existing conditions in the Project area. Furthermore, such roads are highly disturbed under current conditions, as they are used for the

[12] See AB 203 and section 6709 of the Labor Code.

passage of vehicles and have already undergone grading associated with initial establishment of the road. Impacts related to valley fever would thus be considered less than significant.

In summary, while the Project's impacts related to CO hotspots, TACs, and valley fever would be considered less than significant, potential health effects to sensitive receptors associated with the Project's PM_{10} and $PM_{2.5}$ emissions are considered potentially significant. As such, the Project's impacts related to exposure of sensitive receptors to pollutant concentrations is considered **potentially significant**.

Mitigation Measures

The Project would result in potentially significant impacts related to conflicts with an applicable air quality plan, a net increase of criteria pollutants for which the Project region is nonattainment under an applicable federal or State ambient air quality standard, and exposure of sensitive receptors to substantial pollutant concentrations. CEQA requires that Public Works impose all feasible mitigation measures to reduce these impacts, per CEQA Guidelines sections 15091 and 15093. The Project's potentially significant impacts result from an exceedance of SCAQMD and AVAQMD daily and/or annual criteria pollutant thresholds for PM_{10} and $PM_{2.5}$. Almost all of the Project's PM_{10} and $PM_{2.5}$ emissions are a result of fugitive dust emissions from vehicular travel on unpaved roads in the Project area. Therefore, several fugitive dust mitigation strategies were considered, which are discussed below. All of these strategies were evaluated by Public Works and subsequently rejected as infeasible.

Dust Suppressants

Of the roadway mileage in the Project area, approximately 70% is unpaved. Fugitive dust from heavy-duty collection truck travel along unpaved roads is the primary contributor to the Project's significant PM emissions. Application of dust suppressants on unpaved roads reduces dust generation from vehicle traffic by approximately 85%, relative to the amount of dust that is generated in the absence of such treatments (WGA 2006). Public Works explored several methodologies for applying dust suppressants in the Project area:

- **Treatment of All Unpaved Roads with Dust Suppressants.** Treatment of unpaved roads in the Project area with dust suppressants would substantially reduce the Project's fugitive dust PM emissions. However, the County controls only 6% of the unpaved road mileage in the Project area. The County has no authority to perform work on the remaining 94% of unpaved roads in the Project area that are privately owned and maintained. As such, the County cannot conduct maintenance activities (including application of dust suppressants) on most of the unpaved roads in the Project area. Therefore, mitigation involving application of dust suppressants on all unpaved roads that would be used by Project vehicles is infeasible for Public Works to implement. For this reason, mitigation involving application of dust suppressants on all unpaved roads that would be used by Project vehicles has been rejected by Public Works as infeasible.
- **Treatment of County-Maintained Roads with Dust Suppressants.** As discussed above, the County controls approximately 6% of the Project area's unpaved road mileage. Under current conditions, Public Works' Road Maintenance Division operates a road stabilization program, involving treatment of County-maintained unpaved roads in the Project area with a road-stabilizing agent. Such agents have a dust-suppressing effect on unpaved roadways. However, because the purpose of the program is road stabilization and maintenance (as opposed to dust suppression), the road-stabilizing agents are being applied at frequencies that are effective for road maintenance. Use of road-stabilizing agents for effective dust suppression may require more frequent application than a 3-year interval, depending on the agent being used (USDA Forest Service 1999). Specifically, Public Works currently uses magnesium chloride for this purpose and expects to use magnesium chloride into the future. Magnesium chloride generally requires

seasonal application for effective dust suppression (USDA Forest Service 1999). Additionally, ongoing operation of the program is subject to potential fluctuations in budget. For these reasons, continuous use of road-stabilizing agents on County-maintained unpaved roads is not guaranteed. The current program was put in place to reduce maintenance costs for unpaved roads in the Project area, and the current treatment schedule was established based upon available budget. As such, additional budget for expanding this program is not available. Furthermore, while Public Works intends to continue this program into the foreseeable future, future continuation of the program cannot be guaranteed. Changes in available funding from year to year could lead to either temporary or permanent discontinuation of the program. Sufficient funds are not available for expanding the program and/or guaranteeing the use of road-stabilizing agents throughout the life of the Project (Public Works' Road Maintenance Division, pers. comm., 2024).

It is noted that treating 6% of unpaved roads in the Project area (even at a frequency that would be more effective for dust suppression) would not avoid or even substantially reduce the Project's PM emissions. On average, dust suppressants result in an approximately 85% reduction in fugitive dust emissions. While dust on County-maintained roads would thus be reduced substantially, this would represent a small fraction of the unpaved roadways traveled by Project vehicles, and reductions in fugitive dust would be minimal relative to the total fugitive dust emissions of the Project. Specifically, application of dust suppressants on all County-maintained roads at proper frequencies would result in an approximately 5% reduction in the Project's fugitive dust emissions. Pursuant to section 15126.4, subdivision (a)(4)(B) of the CEQA Guidelines, a mitigation measure must be roughly proportional to the impacts of the project. In this case, mitigation involving dust suppression on County-maintained roads would result in a minimal to negligible reduction in emissions.

Public Works has thus rejected expansion of the road stabilization program as infeasible mitigation for the Project due to fiscal impediments and lack of effectiveness for reducing the Project's emissions. While some marginal benefits may be afforded by the existing road stabilization program in terms of reducing the Project's fugitive dust emissions, such benefits may be sporadic and cannot be guaranteed throughout the life of the Project.

- **Educational Campaign for Use of Dust Suppressants.** As discussed above, a majority of unpaved road mileage in the Project area is privately owned. Because Public Works does not have control over these roads, Public Works cannot conduct road maintenance, including application of dust suppressants, on these roads. However, Public Works evaluated the potential for launching an educational campaign to encourage private property owners to treat their roads with dust suppressants. This concept was presented in the Initial Study for the Project (see Appendix A). This campaign could involve direct mailings, inclusion of information in newsletters and on Public Works' website, and/or social media posts to encourage use of dust suppressants. However, encouraging the use of dust suppressants would not be an enforceable mitigation measure under CEQA. It is unknown and speculative how many private property owners would ultimately treat their roads with dust suppressants; as such, this measure would not result in any measurable environmental benefits. Additionally, the effectiveness of dust suppression is dependent on the type of dust suppression material, the manner in which it is applied, and the frequency of application. Encouraging thousands of property owners to use dust suppressants would likely result in a wide variety of outcomes for each of these variables. It is also anticipated that many property owners would decide against applying dust suppression due to cost and/or logistical challenges of coordinating with numerous property owners along a given road. During the scoping period, the community raised concerns regarding the potential for Public Works to encourage use of dust suppressants on private roads. Concerns raised by community members included costs, lack of County control over what type of chemicals may be used by

private property owners, and potential environmental effects of dust suppressants. For these reasons, mitigation involving an educational campaign for use of dust suppressants was rejected as infeasible.

Mitigation involving application of dust suppressants on all unpaved roads within the Project area has been rejected as infeasible due to unenforceability, and mitigation involving application of dust suppressants on County-maintained roads has been rejected as infeasible due to fiscal impediments and lack of effectiveness for reducing the Project's emissions. Public Works nevertheless evaluated different types of dust suppression as part of its feasibility assessment and in response to community concerns regarding potential environmental effects of dust suppressants. Public Works also considered the increased water demands that would result in the Project area in association with dust suppressant use. A summary of these considerations is included below for informational purposes. Because use of dust suppression would not be implemented as part of the Project, environmental impact determinations are not made.

- Magnesium Chloride. Magnesium chloride is a commonly used dust suppressant, is used by Public Works in the Project area for road stabilization, and is expected to be used for this purpose in the future. Magnesium chloride is a non-toxic, permeable soil stabilizing agent, and applications can be scheduled to avoid the rainy seasons, thus preventing runoff of the dust suppressant. However, during the scoping period, community members raised concerns regarding the use of dust suppressants, including water quality effects for surface and groundwater, effects to human health, and effects to biological resources. While these effects may not rise to a level of significance under CEQA, negative environmental effects of dust suppressants, including magnesium chloride, have been documented by various agencies, including EPA (EPA 2004). EPA reports that magnesium chloride may not be suitable for agricultural use, and it has been associated with stunted vegetation growth in forestlands and the browning or degradation of trees along roadways (Addo et al. 2004; CDOT 1999). Colorado State University reports that wildlife can be attracted to salted roads, which can result in traffic hazards to both animals and motorists (magnesium chloride is used to "salt" roads in many areas throughout the country for deicing purposes) (Addo et al. 2004). Conversely, it is noted that magnesium chloride is not a hazardous substance as defined by the California Health and Safety Code. Other agencies have determined that magnesium chloride is highly unlikely to cause or contribute to significant environmental damage beyond areas directly adjacent to roadways. Specifically, in a study on the environmental safety and acceptability of magnesium chloride deicers, the Colorado Department of Transportation found that application of magnesium chloride deicer would be highly unlikely to cause or contribute to environmental damage at distances greater than 20 yards from roadways. Even very close to the roadway, the potential of magnesium chloride deicer to cause environmental damage was determined to be much smaller than that of other factors related to road use and maintenance, including pollution of highway surfaces by vehicles (CDOT 1999).
- Organic Dust Suppressants. There are a variety of organic products available for use in dust suppression, including molasses, lignin sulfonate, tall (pine) oil, and vegetable derivatives (EPA 2004). Community members in the Project area raised the concept of using molasses as a safer, more natural alternative to magnesium chloride. Molasses contains fewer toxic compounds compared to many other available dust suppressant materials. Natural products, such as molasses, are likely to biodegrade and thus have fewer toxic effects. However, multiple applications, particularly after heavy rains, are required when using molasses as a dust suppressant because of its water-soluble nature. EPA also notes that organic suppressants can sometimes contain surfactants or foaming agents that can cause negative environmental effects. Additionally, organic non-petroleum products typically contain high biological oxygen demand and can deplete the oxygen supply of adjacent water bodies if leaching or spillage occurs (EPA 2004).

- **Other Dust Suppression Technologies.** In addition to magnesium chloride and organic dust suppressants, there are several other suppressants and technologies used to abate dust. These include, but are not limited to, synthetic polymers, electrochemical products, clay additives, and mulch and fiber mixtures. Mulch suppressants can be formulated with non-hazardous wood fiber or paper pulp, and clay additives require less frequent application than most other dust suppressants. Conversely, some electrochemical products contain petroleum. While some of these suppressants may offer some environmental benefits, they have also been proven to have limitations (EPA 2004).

Overall, magnesium chloride, organic dust suppressants such as molasses, and other dust suppression technologies were found to have various environmental benefits as well as potential negative effects, as summarized above.

The application of dust suppressants would also require periodic water use, as unpaved roads are typically treated with water prior to application of the soil stabilizer. Common application rates cited for road watering range from approximately 2,000 gallons to 4,700 gallons per mile of road (Blue Line Road Products 2019; Midwest Industrial Supply 2016). Each time dust suppressants are applied to County-maintained unpaved roads, approximately 300,000 gallons to 724,000 gallons of water would be used.[13] If dust suppressants were applied to all unpaved roads in the Project area, approximately 5.5 million gallons to 12.9 million gallons of water would be used each time dust suppressants are applied to the roadway network.[14] For context, an average household in the United States uses approximately 109,500 gallons of water per year (EPA 2023f). As such, water use associated with each application of dust suppressants on County-maintained unpaved roads in the Project area would roughly equate to the amount of water used annually by 3–7 households, while each application of dust suppressants to all unpaved roads in the Project area would roughly equate to the amount of water used annually by 50–118 households. While this level of water use may not be considered significant for the purposes of CEQA (particularly for watering County-maintained unpaved roads only), water consumption associated with frequent dust suppressant application has nevertheless been considered by Public Works as a secondary environmental impact of dust suppressant use.

Public Works has ultimately rejected as infeasible the use of dust suppressants as mitigation for this Project due to impediments related to cost and enforceability. The secondary environmental impacts related to use of dust suppressants as mitigation for the Project would thus be avoided.

Road Watering

Water can be used for dust suppression, and its effectiveness is equivalent to the dust suppressants discussed above. However, it must be applied more frequently, with applications generally needing to occur once water evaporates from the application surface. Unpaved roads in the Project area are anticipated to require watering one to two times on each solid waste collection day in order to effectively reduce the dust produced by collection trucks. Common application rates cited for road watering range from approximately 2,000 gallons to 4,700 gallons per mile of road (Blue Line Road Products 2019; Midwest Industrial Supply 2016). As such, water consumption for road watering is estimated to be approximately 5.5 million gallons to 12.9 million gallons per week for the life of the

[13] As shown in Table 2-3, the Project area has approximately 154 miles of unpaved County-maintained roads. Water required for dust suppression application on this roadway network would thus be expected to range from approximately 300,000 gallons of water (assuming 2,000 gallons per mile) to 724,000 gallons (assuming 4,700 gallons per mile).

[14] As shown in Table 2-3, the Project area has approximately 2,740 miles of unpaved roads. Water required for dust suppression application on this roadway network would thus be expected to range from approximately 5.5 million gallons of water (assuming 2,000 gallons per mile) to 12.9 million gallons (assuming 4,700 gallons per mile).

Project.[15] A water truck designed for on-road use typically accommodates 2,000 gallons to 6,000 gallons of water per truck (Custom Truck One Source 2024; BigRentz 2023). Assuming the upper range of water truck capacity, the Project would require approximately 900 to 2,000 water trucks circulating the Project area per week (equating to 180 to 400 water trucks per collection day) for the life of the Project. Use of this quantity of water and water trucks on a daily basis in the Project area would render the Project economically infeasible. Additionally, use of water trucks may have effects related to water supply, given the ongoing use of approximately 5 to 12 million gallons of water per week for the life of the Project (which is similar to the weekly water use associated with approximately 2,400 to 5,700 households [EPA 2023f]).

Furthermore, it is noted that community members in the Project area have expressed concerns regarding increased truck pass-bys on roadways. Requiring water trucks to circulate the Project area on each collection day would substantially increase the number of trucks that would circulate the Project area. Use of water trucks would also lead to increases in noise impacts due to additional truck travel and traffic nuisances related to slow-moving trucks traveling on unpaved roads throughout the Project area.

For these reasons, mitigation involving application of water on unpaved roads has been rejected by Public Works as infeasible.

Asphalt Paving of Unpaved Roads

As shown in Table 2-3, the Project area has approximately 2,740 miles of unpaved roads. Costs cited for road paving generally range from approximately $400,000 to $1 million per roadway mile (HomeGuide 2023; RoadBotics 2024). Assuming that most of the existing unpaved road mileage would need to be paved in order to substantially reduce dust from Project-related vehicles, the total cost for this effort would range from $1 billion (assuming $400,000 per mile) to $2.7 billion (assuming $1 million per mile). Paving only County-maintained unpaved roads would range in cost from $62 million to $154 million. The financial burden of road paving would make the Project economically infeasible. Furthermore, as stated previously, Public Works does not have the legal authority to pave or require that private roads, which are the vast majority of unpaved roads in the Project area, be paved as a part of the Project. Additionally, as also discussed above, reducing dust on only County-maintained unpaved roads has a minimal effect on the Project's PM emissions, due to the small portion of the unpaved roadway network that is composed of County-maintained unpaved roads. Furthermore, it is noted that paving unpaved roads would result in additional, albeit temporary, environmental impacts related to construction activities associated with paving. For these reasons, mitigation involving paving of unpaved roads has been rejected by Public Works as infeasible. It is noted, however, that while road paving is not feasible as part of this Project, Public Works may have current or future road maintenance efforts in the County that could include paving County-maintained roads in the Project area at a future time. However, such efforts are currently unknown and would not be included as part of this Project, for the reasons described above.

In summary, several mitigation strategies were considered for the Project, all of which have been rejected as infeasible due to economic, legal, and/or logistical constraints, or lack of enforceability. Some of these strategies would also have secondary environmental impacts and/or would not result in an appreciable reduction in the Project's PM emissions. As such, there are no feasible mitigation measures available to effectively reduce PM

[15] As shown in Table 2-3, the Project area has approximately 2,740 miles of unpaved roads. Assuming that most of this mileage would be utilized on a weekly basis by Project-related vehicles and that only one water truck pass would occur per mile, weekly watering would range from approximately 5.5 million gallons of water (assuming 2,000 gallons per mile) to 12.9 million gallons (assuming 4,700 gallons per mile).

emissions resulting from the Project's vehicular travel on unpaved roads. Thus, impacts related to air quality would be **significant and unavoidable**.

Cumulative Impacts

As discussed previously, air pollution is largely a cumulative impact, and the cumulative study area used to assess potential cumulative air quality impacts consists of the MDAB and SCAB. The nonattainment status of regional pollutants within the MDAB and SCAB is a result of past and present development, and the AVAQMD and SCAQMD develop and implement plans for future attainment of ambient air quality standards. As stated under Impact 3.1-1, these plans are partially based on projections from regional and local growth forecasts, including General Plans.

Impact 3.1-4 The proposed Project would contribute to a significant cumulative impact related to air quality management plan consistency and criteria air pollutant emissions.

Based on the considerations outlined above, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Individual projects that do not generate emissions that exceed the AVAQMD's and SCAQMD's daily and annual thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the MDAB or SCAB are in nonattainment and, therefore, would not be considered to have a significant, adverse air quality impact.

The areas of the MDAB and SCAB in which the Project is located are nonattainment areas for O_3 and PM_{10} under the NAAQS and/or CAAQS. The poor air quality in the MDAB and SCAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOC and NO_x for O_3) potentially contribute to poor air quality.

As indicated in Table 3.1-7 and Table 3.1-8, Project operations would result in exceedances of regional AVAQMD and SCAQMD thresholds for emissions of PM_{10} and $PM_{2.5}$. Therefore, the Project would result in a **potentially significant** cumulative impact related to criteria air pollutant emissions and potential to conflict with an air quality management plan.

Impact 3.1-5 The proposed Project would contribute to a significant cumulative impact related to exposure of sensitive receptors to substantial pollutant concentrations.

Operation of the Project would not expose sensitive receptors to substantial pollutant concentrations, including concentrations of CO emissions, TACs, and spores of the *Coccidioides immitis* fungus (which can result in valley fever). However, because the Project could also result in exceedances of AVAQMD and SCAQMD significance thresholds for PM_{10} and $PM_{2.5}$, the potential health effects associated with those criteria air pollutants are considered significant. The SCAB is in nonattainment for $PM_{2.5}$, and both the SCAB and MDAB are in nonattainment for PM_{10}. The nonattainment status indicates that existing activities in these air basins are producing cumulatively considerable emissions of PM_{10} and $PM_{2.5}$. Future development as contemplated in regional growth forecasts and local General Plans, including construction activities and additional vehicle trips throughout both air basins, would continue to contribute PM_{10} and $PM_{2.5}$ emissions to the SCAB and MDAB. Because the Project would exceed established thresholds for these pollutants, it is considered to have a **potentially significant** cumulative impact to health effects related to PM_{10} and $PM_{2.5}$. As discussed above under Impact 3.1-2, the specific health effects that could be associated with this impact cannot be feasibly determined or predicted.

Mitigation Measures

As discussed previously, there are no feasible mitigation measures available to Public Works to implement that would result in a reduction of fugitive dust PM_{10} and $PM_{2.5}$ emissions. Therefore, cumulative air quality impacts would remain **significant and unavoidable**.

3.1.6 References

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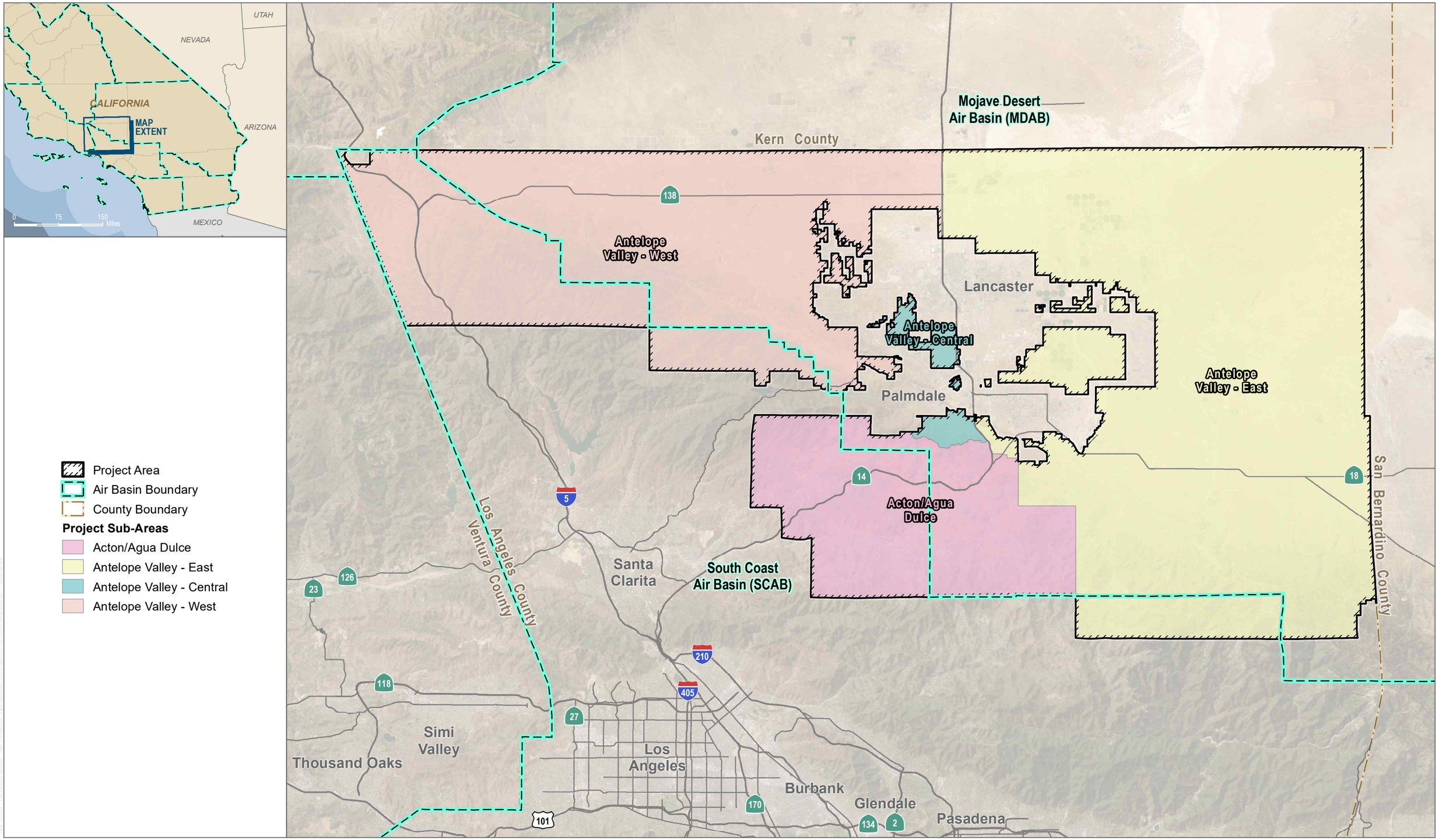
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SOURCE: Esri and Digital Globe, OpenStreetMap, California Air Resources Board

0 3 6 Miles

FIGURE 3.1-1

Air Basins

North County Solid Waste Collection Services Project

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3.2 Utilities and Service Systems

3.2.1 Introduction

This section describes the existing utilities and service system conditions of the Project area and vicinity, identifies associated regulatory requirements, and evaluates potential impacts of the proposed Project with respect to the generation of solid waste.

Comments received in response to the NOP included concerns about existing and future capacity of solid waste facilities, particularly composting facilities. A copy of the NOP and comments received is included in Appendix A, Scoping Report.

Information contained in this section is based on data from the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Information System (SWIS) Facility/Site Data Exports (CalRecycle 2023a) and SWIS Facility Site Definitions (CalRecycle 2023b), the County's Regional Organic Waste Capacity Assessment 2022 Report (County of Los Angeles 2022a), the Countywide Integrated Waste Management Plan 2021 Annual Report (County of Los Angeles 2022b), the Countywide Disposal Rate and Assessment of Disposal Capacity 2022 Report (County of Los Angeles 2023), and the Zero Waste Plan (County of Los Angeles 2022c). Other sources consulted are listed in Section 3.2.6, References.

This section analyzes the potential for impacts related to solid waste facilities. As discussed in Chapter 4, Effects Found Not to Be Significant, other utilities and service systems issue areas were evaluated in the Initial Study (Appendix A) and were determined to be not significant. For a detailed discussion of other utilities and service system issue areas not addressed herein, please refer to Chapter 4 and the Initial Study included within Appendix A to this Draft EIR.

3.2.2 Environmental Setting

Waste Collection Services

As discussed in Chapter 2, Project Description, most single-family residential properties within the Project area currently obtain solid waste collection cart service on an individual basis through an open market system. Multifamily residential and commercial properties receive solid waste collection dumpster service through a nonexclusive commercial franchise administered by Public Works. Under the residential open market system in effect in the Project area, most cart customers (74.5%) generally only obtain refuse collection, 24% receive recyclables and green waste collection along with regular refuse service, and 1.5% receive refuse and recyclables collection. The nonexclusive commercial franchise customers all receive both refuse and recycling services. Under current conditions, an average of 21 waste collection trucks service the Project area each day, including approximately 8 trucks providing cart service, 10 trucks providing dumpster service, and 3 trucks providing bulky item pickup.

Solid Waste Facility Categories

Statewide, CalRecycle is responsible for regulating the disposal, handling, and processing of all solid waste generated in California. CalRecycle acts as an enforcement agency in the approval and regulation of solid waste

facilities, sites, and operations.[1] Local agencies or private companies own and operate solid waste facilities, and solid waste is typically hauled to these facilities by private or public haulers.

There are several types of solid waste facilities in the Project region. CalRecycle's SWIS organizes facilities using the following general categories: Disposal, Composting, Transfer/Processing, Engineered Municipal Solid Waste (EMSW) Conversion, Transformation, and In-Vessel Digestion facilities (CalRecycle 2023b). These facility types are defined below.

Disposal. The Disposal category encompasses facilities that involve the final deposition of solid wastes (California Public Resources Code, section 40192 et seq.). The Disposal category includes solid waste disposal sites, solid waste landfills, and facilities for the disposal of construction and industrial waste (inert debris engineered fill operations, industrial waste codisposal facilities, asbestos-containing waste disposal sites, nonhazardous ash disposal/monofil facilities, and inert waste disposal sites). The unincorporated County disposed of 943,780 tons of solid waste in 2021 at landfills (CalRecycle 2021a).

Composting. The Composting category includes facilities that handle compostable materials. Activities include agricultural material composting operations, biosolids composting, chipping and grinding facilities/operations, composting facilities (both mixed[2] and other[3]), green material composting facilities and operations, research composting operations, and vegetative food material composting facilities.

Transfer/Processing. The Transfer/Processing category includes "facilities utilized to receive solid wastes; temporarily store, separate, convert, or otherwise process the materials in the solid wastes; or to transfer the solid wastes directly from smaller to larger vehicles for transport, and those facilities utilized for transformation" (California Public Resources Code, section 40200). Approximately 68% of solid waste disposed of by the unincorporated County was sent to disposal via Transfer/Processing facilities rather than directly to Disposal facilities (CalRecycle 2021b).

Engineered Municipal Solid Waste Conversion. The EMSW Conversion category includes facilities where solid waste is converted into energy or other products through a process that meets requirements detailed in California Public Resources Code, section 40131.2. The waste to be converted must be beneficial and effective in that it replaces or supplements the use of fossil fuels. According to CalRecycle, the unincorporated County did not send any waste to EMSW Conversion facilities in 2021 or 2022 (CalRecycle 2021a).

Transformation. The Transformation category includes facilities that have a primary function to convert, combust, or otherwise process solid waste by incineration, pyrolysis, distillation, or biological conversion other than composting (California Public Resources Code, section 40201). According to CalRecycle, the unincorporated County disposed of 1,311 tons of waste in 2021 and 1,300 tons of waste in 2022 at Transformation facilities (CalRecycle 2021a). According to the 2021 Countywide Integrated Waste Management Plan, residual ash produced in the

1 According to CalRecycle, solid waste "sites," "facilities," and "operations" are separate activity classifications. Sites refer to physical locations in use, intended for use, or have been used, for solid waste handling and/or disposal. Facilities refer to the physical facility used for solid waste activities. Operations refer to the actual operation and functioning of solid waste sites or facilities. For clarity, this Draft EIR uses the term "solid waste facilities" to encompass all three of these activity classifications (CalRecycle 2023b).

2 "Mixed" composting facilities compost material that is part of the municipal solid waste stream and is mixed with or contains non-organic waste, processed industrial materials, mixed demolition or mixed construction debris, or plastics (CalRecycle 2023b).

3 "Other" composting facilities are facilities that are operated for the purpose of producing compost from vegetative food material, food material, biosolids, and/or mixed waste in addition to or in lieu of green material (CalRecycle 2023b).

County is turned into ashcrete and used as road base or other beneficial uses, which is a form of transformation (County of Los Angeles 2022b).

In-Vessel Digestion. The In-Vessel Digestion category applies to facilities that receive and process solid waste by means of an in-vessel digestor. This process transforms organic materials into beneficial products through controlled decomposition in a sealed container or structure. This anaerobic digestion process is within the statutory definition of composting, and therefore the capacity of In-Vessel Digestion facilities is considered when determining the overall available capacity of facilities to handle organic waste.

Regional Solid Waste Facilities

In order to generate a list of solid waste facilities that may serve the Project, a SWIS database search was conducted for active and planned facilities within the Project area and within an 80-mile radius[4] of the Project area. Facilities were further narrowed down by excluding facilities intended to handle construction debris, hazardous waste, and other non-municipal waste streams. Additionally, because the unincorporated County sent no waste to EMSW Conversion facilities and only 0.1% of total disposed waste to Transformation facilities in 2021 and 2022, those facility categories were not included. In-Vessel Digestion facilities were combined with Composting facilities because both facility categories handle and process organic waste. The number of active and planned solid waste facilities, sorted based on the categories defined above, are listed in Table 3.2-1.

Table 3.2-1. Regional Solid Waste Facilities

Facility Categories	Facilities Within the Project Area and an 80-mile Radius		Total
	Active	Planned	
Disposal Facilities	44	0	44
Transfer/Processing Facilities	301	8	309
Composting and In-Vessel Digestion Facilities	106	11	117
Total	**451**	**19**	**470**

Source: CalRecycle 2023a (data compiled by Dudek, 2023).

There are 44 active Disposal facilities within the Project area and an 80-mile radius of the Project area. There are currently no planned Disposal facilities within this area.

There are 301 active and 8 planned Transfer/Processing facilities within the Project area and an 80-mile radius of the Project area (CalRecycle 2023a).

There are 102 Composting facilities and 4 In-Vessel Digestion facilities within the Project area and an 80-mile radius of the Project area. As displayed in Table 3.2-1, this is a total of 106 active facilities capable of processing organic waste from municipal waste streams. There are also 10 planned Composting facilities and 1 planned In-Vessel Digestion facility within this area. (CalRecycle 2023a).

[4] As discussed in Chapter 2, each collection truck is presumed to travel an average of 200 miles per day of service. It is estimated that 40% of these miles are for travel to facilities. Therefore, an 80-mile radius surrounding the Project area is assumed to reasonably encompass all facilities that may serve the proposed Project.

Capacities and Throughput of Regional Waste Facilities

An evaluation of data provided by the CalRecycle SWIS Facility/Site Data Exports reveals that the 44 active Disposal facilities within the Project area and the 80-mile radius have a combined remaining capacity of 1,237,571,588 cubic yards and a maximum permitted throughput of 146,511 tons per day. The 301 active Transfer/Processing facilities have a maximum permitted throughput of 144,424 tons per day. In addition, the 8 planned Transfer/Processing facilities will have a combined maximum permitted throughput of 1,177 tons per day. The 106 active Composting and In-Vessel Digestion facilities have a combined maximum permitted throughput of 126,119 tons per day. The 11 planned Composting and In-Vessel Digestion facilities will have a combined maximum permitted throughput of 2,759 tons per day. These calculations are displayed in Table 3.2-2.

Table 3.2-2. Capacities and Throughput of Regional Waste Facilities

Facility Categories	Available Capacity (cubic yards)		Maximum Permitted Throughput (tons per day)		
	Active	Planned	Active	Planned	Total
Disposal Facilities	1,237,571,588	0	146,511	0	146,511
Transfer/Processing Facilities	N/A	N/A	144,424	1,177	145,601
Composting and In-Vessel Digestion Facilities	N/A	N/A	126,119	2,759	128,878

Source: CalRecycle 2023a (data compiled by Dudek, 2023).
Notes: N/A = not applicable.
Totals provided in the table are estimates based on information provided by CalRecycle. While there are some available data for the capacities of Transfer/Processing, Composting, and In-Vessel Digestion facilities, for the context of this Project, throughput provides a more accurate and relevant calculation as it refers to the rate at which waste is processed or transferred through the facility. Throughput estimates provided in the table are not exact because facilities use different units of measurement. Units given "per year" were divided by 365, units given "per month" were divided by 30, and units given "per week" were divided by 7 to determine units per day. For Composting and In-Vessel Digestion facilities, units given in cubic yards were converted to tons using a conversion factor of 1,400 pounds (or 0.7 tons) per cubic yard, based on the conversion factor for "Compost, MSW" (municipal solid waste) provided by CalRecycle (CalRecycle 1991).

3.2.3 Regulatory Setting

Federal Regulations

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (Code of Federal Regulations, title 40, part 268, subpart D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs that include federal landfill criteria. The federal regulations address the location, operation, design, and closure of landfills, as well as groundwater monitoring requirements.

State Regulations

California Code of Regulations, Titles 14 and 27

Title 14 (Natural Resources, Division 7) and Title 27 (Environmental Protection, Division 2 [Solid Waste]) of the California Code of Regulations govern the handling and disposal of solid waste and operation of landfills, transfer stations, and recycling facilities.

Assembly Bills 939 and 341: Solid Waste Reduction

The California Integrated Waste Management (CIWM) Act of 1989 (AB 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of a desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995 and 50% by 2000 and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to CalRecycle a source reduction and recycling element to demonstrate how the jurisdiction will meet the diversion goals. Other elements of AB 939 include encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions under CIWM Board (CIWMB) regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment from landfill operations and other solid waste facilities.

In 2011, AB 341 was passed, making a legislative declaration that it is the policy goal of the State that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. AB 341 requires that local agencies adopt strategies that will enable 75% diversion of all solid waste by 2020. This bill requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multifamily apartments with five or more units are also required to form a recycling program.

Assembly Bill 1327: California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327, which was established in 1991, required CalRecycle to develop a model ordinance for the use of recyclable materials in development projects. Local agencies were then required to adopt the model ordinance, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

Senate Bill 1374: Construction and Demolition Waste Reduction

SB 1374 requires that the annual reports submitted by local jurisdictions to CIWMB include a summary of the progress made in the diversion of construction and demolition waste materials. In addition, SB 1374 requires the CIWMB to adopt a model ordinance suitable for adoption by any local agency that required 50% to 75% diversion of construction and demolition waste materials from landfills. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWMB's model by default.

Assembly Bill 1826: Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826 Chesbro (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. (Organic waste is defined as food waste, green waste, landscape, and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.) This law also requires local jurisdictions across the State to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. This law phases in the mandatory diversion of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector is required to recycle organic waste.

Senate Bill 1383: Short-Lived Climate Pollutants – Organic Waste Methane Emissions Reduction

SB 1383 requires all businesses, residents, and multifamily properties to separate organic materials (such as plant debris, food waste, food soiled papers, and untreated wood waste) and recyclable materials from refuse, and either subscribe to the required collection services or self-haul to an appropriate facility for diversion. The law mandates that every jurisdiction provide organic waste collection services to all residents and businesses. Organic waste includes food, green material, landscape and pruning waste, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges. Jurisdictions can select from a variety of organic waste collection services to match their unique communities and local infrastructure, while producing clean streams of organic feedstock that can be recycled into high-quality, marketable, recycled products, including compost, renewable natural gas, electricity, and paper. Jurisdictions must educate all residents and businesses about collection requirements, including what materials to put in curbside bins. Education to residents and businesses may vary by jurisdiction and educational content may be provided electronically, through hard copy materials, or through direct outreach (CalRecycle 2024a).

Local Regulations

County Integrated Waste Management Plan

In compliance with AB 939, the County has implemented an Integrated Waste Management Plan that contains the solid waste reduction planning documents for the County and the incorporated cities within the County plus the Integrated Waste Management Summary Plan (Summary Plan) and Countywide Siting Element (CSE). Public Works is responsible for preparing the Summary Plan and the CSE. The Summary Plan, approved by CalRecycle on June 23, 1999, describes the steps to be taken by local agencies, acting independently and in concert, to achieve the State-mandated diversion rates. The revised CSE, approved by CalRecycle on November 21, 2023, identifies how the County and cities would meet their long-term disposal capacity needs over a 15-year planning period to safely handle solid waste that cannot be reduced, recycled, or composted.

Public Works also prepares an annual report to summarize the changes that have taken place since the approval of the existing Summary Plan and the revised CSE. The annual reports include assessments of the County's disposal capacity needs, provide detailed updates on the remaining permitted in-County disposal capacity, and include the County's strategy for maintaining adequate disposal capacity. If the County does not have at least 15 years of disposal capacity, the CSE must be revised, and the County must describe a strategy for obtaining 15 years of disposal capacity.

According to the Countywide Disposal Rate and Assessment of Disposal Capacity 2022 Report, assuming that the County meets the targets of SB 1383 and utilizes out-of-County landfills, a shortfall in disposal capacity is not expected to occur throughout the 15-year planning period (2022 through 2037) (County of Los Angeles 2023).

Los Angeles County Regional Organic Waste Capacity Assessment Report

SB 1383 and the implementing Short-Lived Climate Pollutants: Organic Waste Reduction Regulation require counties and jurisdictions located within each county to estimate their own organic waste disposal volumes, identify existing organic waste processing capacity that is verifiably available to them, and estimate the amount of new or expanded organic waste processing capacity needed. In accordance with these requirements, Public Works must collect these data from jurisdictions (including the unincorporated County) and submit it to CalRecycle on a specified schedule (i.e., August 1, 2022, 2024, 2029, and 2034). If data provided by jurisdictions show a shortfall in available capacity, the jurisdiction must prepare an implementation schedule outlining how it will obtain the needed capacity and submit this plan to CalRecycle. To assist jurisdictions in meeting the implementation schedule requirements, Public Works prepared a Regional Organic Waste Capacity Assessment Report in 2022 (County of Los Angeles 2022a). The report provides a resource to jurisdictions within the County by identifying organic waste processing capacity that may be available to handle the waste generated by residents and businesses within Los Angeles County jurisdictions. According to the report, sufficient organic waste processing capacity is available to meet and/or exceed the needs of the entire County (both incorporated and unincorporated areas). This assessment will be conducted again in future years.

Los Angeles County Zero Waste Plan

The Los Angeles County Zero Waste Plan is a waste management planning document that lays out the general framework for programs and policies the County can implement to reduce reliance on landfills for disposal, maximize the reuse of natural resources, and recover materials to beneficial uses. The plan was initially adopted by the Board of Supervisors in October 2014 as the Roadmap to a Sustainable Waste Management Future. Since then, it has been updated to include significant developments impacting waste management such as restrictions on the exporting of recyclables and organic waste diversion mandates, among others, and is now referred to as the Zero Waste Plan. The plan promotes a sustainable waste management system focused on a circular economy. The Zero Waste Plan includes strategies and supporting initiatives to reduce waste and divert material from landfills and establishes the following targets: to divert 80% of the County's waste from landfill disposal by 2025, 90% of waste by 2035, and 95% of waste by 2045 (County of Los Angeles 2022c).

Los Angeles County 2035 General Plan

The General Plan Public Services and Facilities Element (County of Los Angeles 2015a) establishes goals and policies for effective service and facilities planning and maintenance. Goals and policies pertaining to solid waste include the following:

Goal PS/F 5: Adequate disposal capacity and minimal waste and pollution.

> Policy PS/F 5.1: Maintain an efficient, safe and responsive waste management system that reduces waste while protecting the health and safety of the public.

Policy PS/F 5.2: Ensure adequate disposal capacity by providing for environmentally sound and technically feasible development of solid waste management facilities, such as landfills and transfer/processing facilities.

Policy PS/F 5.3: Discourage incompatible land uses near or adjacent to solid waste disposal facilities identified in the Countywide Integrated Waste Management Plan.

Policy PS/F 5.4: Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste to energy facilities.

Policy PS/F 5.5: Reduce the County's waste stream by minimizing waste generation and enhancing diversion.

Policy PS/F 5.6: Encourage the use and procurement of recyclable and biodegradable materials.

Policy PS/F 5.7: Encourage the recycling of construction and demolition debris generated by public and private projects.

Policy PS/F 5.8: Ensure adequate and regular waste and recycling collection services.

Policy PS/F 5.9: Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.

Antelope Valley Area Plan

The Antelope Valley Area Plan (County of Los Angeles 2015b) establishes goals and policies relevant to solid waste disposal and processing, including:

Goal COS 9: Improved air quality in the Antelope Valley.

Policy COS 9.4: Promote recycling and composting throughout the Antelope Valley to reduce air quality impacts from waste disposal activities and landfill operations.

Goal COS 10: Diverse energy systems to utilize existing renewable or waste resources to meet future energy demands.

Policy COS 10.6: Encourage the development of Conversion Technologies such as anaerobic digestion and gasification for converting post recycled residual waste into renewable fuels and energy.

Santa Clarita Valley Area Plan

The Santa Clarita Valley Area Plan (County of Los Angeles 2012) establishes goals and policies relevant to solid waste facilities, including:

Goal CO-1: A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.

Policy CO-1.3.2: Promote reducing, reusing, and recycling in all Land Use designations and cycles of development.

Goal CO-8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

Policy CO-8.4.2: Adopt mandatory residential recycling programs for all residential units, including single-family and multi-family dwellings.

Policy CO-8.4.3: Allow and encourage composting of green waste, where appropriate.

3.2.4 Methodology and Thresholds of Significance

Methods of Analysis

The analysis in this section evaluates the potential for implementation of the proposed Project to exceed the available capacities of solid waste facilities in the region. As previously discussed, a SWIS database search was conducted for active and planned solid waste facilities within 80 miles of the Project area (including the Project area itself). The list of facilities was further narrowed down by only including facilities that would foreseeably handle municipal solid waste. The number of solid waste facilities considered for analysis is summarized in Table 3.2-1.

For the purposes of this analysis, the amount of solid waste generated and disposed of in the Project area is estimated based on available data for the larger unincorporated County. According to U.S. Census data, the 2020 population of the Project area was 78,347 people (U.S. Census Bureau 2020). The Project area population accounts for less than 8% of the total unincorporated County population, which was 1,036,375 people in 2020 (SCAG 2021). According to CalRecycle, in 2021 the unincorporated County disposed of 943,780 tons of solid waste at landfills (CalRecycle 2021a). It can be reasonably assumed that the Project area accounted for 8% of this solid waste, equating to 75,502 tons per year of disposed waste.

For the purpose of long-term disposal capacity planning, the Countywide Disposal Rate and Assessment of Disposal Capacity 2022 Report assumed a countywide diversion rate of 65% (County of Los Angeles 2023). Based on the estimated 75,502 tons of waste disposed of by the Project area in 2021 and the countywide diversion rate, it is estimated that the Project area generated a total of 215,720 tons of solid waste, 140,218 tons of which are assumed to have been diverted away from Disposal facilities.

For the analysis, these solid waste estimates are compared to the available capacities and maximum permitted throughputs of solid waste facilities presented in Table 3.2-2. It should be noted that for Transfer/Processing facilities, Composting facilities, and In-Vessel Digestion facilities, throughput (rather than capacity) is a more accurate and relevant metric for determining the capability of regional facilities to handle and process solid waste from the Project. Remaining capacity is only relevant for Disposal facilities because these facilities involve the final deposition of solid wastes that are not otherwise transferred, processed, or converted into other resources. Therefore, any references to the "capacity" of Transfer/Processing, Composting, and In-Vessel Digestion facilities henceforth refers to the ability of these facilities to handle solid waste from the Project, rather than the physical amount of solid waste that can be temporarily contained at these facilities.

Thresholds of Significance

The significance criteria used to evaluate the Project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the Project would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects
- Not have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years
- Result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals
- Not comply with federal, State, and local management and reduction statutes and regulations related to solid waste

Areas of No Impact

As evaluated in the Initial Study (Appendix A) and Chapter 4, the Project would have no impact with respect to the first three criteria and the last criterion listed above. These include the relocation or construction of new or expanded utility infrastructure, water supply, wastewater capacity, and compliance with solid waste statutes and regulations. Because no impact would occur for these categories, these topics are not discussed further in this section.

3.2.5 Impacts Analysis

Project Impacts

Impact 3.2-1 The proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

The proposed Project would collect solid waste generated by residences and commercial properties. The Project itself would not increase the amount of solid waste that is produced; rather, it would change how solid waste is collected and disposed. The Project would have a beneficial impact to solid waste reduction goals and to the capacity of local Disposal facilities because collection trucks would collect recyclables and organic waste from all customers in the Project area, allowing for the diversion of materials that would generally go to a landfill in the absence of the proposed Project. Therefore, it is reasonably assumed that there is adequate capacity at Disposal facilities to serve the proposed Project throughout its lifetime. Additionally, the Countywide Disposal Rate and Assessment of Disposal Capacity 2022 Report determined that there is sufficient disposal capacity for 15 years if the County meets the targets of SB 1383 and if out-of-County landfills are used. The report also analyzed a "Status Quo" scenario which determined that if SB 1383 targets are not met, there would be an anticipated shortfall in

capacity (County of Los Angeles 2023). This Project supports the local implementation of SB 1383 and is therefore vital to ensuring that the County continues to have adequate long-term disposal capacity.

The Project's increased diversion of recyclables and organic waste from landfills would result in increased deliveries to Transfer/Processing facilities, Composting facilities, and In-Vessel Digestion facilities.

According to CalRecycle SWIS data, there are 301 active and 8 planned Transfer/Processing facilities that would potentially serve the Project area. These facilities have a combined maximum permitted throughput of 145,601 tons per day. The Project area is estimated to generate 215,720 tons of solid waste per year, equating to approximately 591 tons of solid waste per day. Assuming that all of this waste is delivered to Transfer/Processing facilities, waste from the Project area would account for approximately 0.4% of daily permitted throughput in the Project region. Not all waste may go to Transfer/Processing facilities, so this percentage may be lower in practice (approximately 68% of solid waste disposed of by the unincorporated County was sent to disposal via Transfer/Processing facilities rather than directly to Disposal facilities [CalRecycle 2021b]). It can thus be presumed that Transfer/Processing facilities in the Project region would be able to accommodate increases in deliveries attributable to the Project.

There are 106 active and 11 planned Composting and In-Vessel Digestion facilities that would potentially serve the Project area. These facilities have a combined maximum permitted throughput of 128,878 tons per day. According to the CalRecycle 2021 Waste Characterization Study, approximately 28% of waste disposed of in California was organic material (CalRecycle 2022). Assuming that all organic waste from the Project area would be diverted to Composting and In-Vessel Digestion facilities, the Project would divert 60,402 tons per year (165 tons per day) of organic waste.[5] This would account for approximately 0.1% of the daily maximum permitted throughput, which is a negligible amount relative to the capacity of Composting and In-Vessel Digestion facilities in the Project region.

The Project's estimated contribution to the throughput of Transfer/Processing facilities and Composting and In-Vessel Digestion facilities is summarized in Table 3.2-3, below.

Table 3.2-3. Project Contribution to Throughput of Regional Waste Facilities

Facility Categories	Throughput (tons per day)		
	Total Maximum Permitted (Active and Planned Facilities)	Estimated Project Contribution	Percent Project Contribution
Transfer/Processing Facilities	145,601	591	0.4%
Composting and In-Vessel Digestion Facilities	128,878	165	0.1%

Source: U.S. Census Bureau 2020; SCAG 2021; CalRecycle 2023a; County of Los Angeles 2023 (data compiled by Dudek, 2023).
Note: Disposal facilities are not included in this table because the Project is anticipated to increase diversion of materials that would generally go to a landfill in the absence of the proposed Project. Therefore, demands for landfill capacity would decrease, and it is reasonably assumed that there is adequate capacity at Disposal facilities to serve the proposed Project throughout its lifetime.

As previously discussed, Public Works conducted a Regional Organic Waste Capacity Assessment in 2022, which determined that sufficient organic waste processing capacity is available to meet, and even exceed, the needs of the entire County (County of Los Angeles 2022a). As stated in the assessment report, reducing the amount of organic waste disposed in landfills is a collaborative effort, and the County plans to continue to assess the organic

[5] Twenty-eight percent of 215,720 tons (total solid waste generated by the Project area) is 60,402 tons.

waste processing capacity throughout the Southern California region. This assessment will be conducted periodically and the results will be made available to jurisdictions within the County to assist them in identifying organic waste processing facilities that may be available to handle the waste generated by residents and businesses within their jurisdiction. Therefore, jurisdictions within the County (including the unincorporated County) are required to demonstrate availability of organic waste processing capacity into the future. Similar reporting requirements are in place for landfill capacity, and as such, jurisdictions within the County (including the unincorporated County) would be required to update and demonstrate availability of both landfill capacity and organic waste processing capacity into the future.

In conclusion, while the proposed Project is anticipated to increase diversion of solid waste to Transfer/Processing facilities, Composting facilities, and In-Vessel Digestion facilities, available data show that there is adequate capacity to support the increased diversion rates. Impacts would be **less than significant**.

Mitigation Measures

None required.

Cumulative Impacts

Impact 3.2-2 The proposed Project would contribute to a significant cumulative impact regarding statewide capacity for organic waste processing.

Cumulative impacts from the proposed Project are analyzed relative to projections of future organic waste capacity provided by CalRecycle. The geographic scope for consideration of cumulative solid waste generation impacts is defined as the entire State of California. The proposed Project is intended to implement SB 1383, which is a statewide regulation implementing California's Short-Lived Climate Pollutant Reduction Strategy. In order to meet methane emissions reduction targets under SB 1383, individual jurisdictions are required to conduct organic waste capacity planning analyses and results are sent to CalRecycle to be considered in tandem with other jurisdictions' efforts to determine whether statewide targets are met.

The proposed Project, combined with past, present, and reasonably foreseeable future implementation of SB 1383 efforts in California, would result in an increased need for facilities that process organic waste. According to CalRecycle, the State needs approximately 50 to 100 new or expanded facilities to annually process the additional organic waste that will be collected from residents and commercial businesses with successful implementation of SB 1383 (CalRecycle 2024b). As such, CalRecycle has identified a statewide deficiency of organic waste processing facilities, and this is considered a preexisting significant cumulative impact, which would continue to occur with or without the Project. By implementing SB 1383, the Project would contribute to this impact.

As discussed under Impact 3.2-1, CalRecycle data show that regional Transfer/Processing, Composting, and In-Vessel Digestion facilities within the Project area and an 80-mile radius of the Project area would have available capacity to serve additional diversion of recyclables and organic waste that would occur with implementation of the proposed Project. The County's 2022 Regional Organic Waste Capacity Assessment also determined that there is adequate organic waste processing capacity to meet the needs of the County. However, in conjunction with the anticipated implementation of SB 1383 in other jurisdictions, it is possible that the capacity of organic waste processing facilities statewide would be exceeded. Therefore, cumulative impacts to statewide capacity for organic waste processing would be considered **potentially significant**.

As SB 1383 implementation continues, new and expanded infrastructure would be required throughout the State to meet the increasing supply of organic waste. CalRecycle requires individual jurisdictions to demonstrate organic waste processing capacity in annual reports, and, if there is a shortfall in available capacity, the jurisdiction must prepare an implementation plan outlining how it will obtain the needed capacity and submit the plan to CalRecycle. Therefore, as jurisdictions continue to implement SB 1383 and expand organic waste collection and diversion efforts, new and expanded infrastructure must be built to accommodate an increase in organic waste processing needs, the development of which may result in physical impacts to the environment. However, the scope, location, and development scenarios for any such infrastructure is highly speculative at this time. New or expanded facilities would be required to undergo State and local permitting and approval processes (including CEQA review). Furthermore, on a long-term, regional scale, the need for new or expanded organic waste processing facilities would be balanced over time by reduced demands on landfills and an associated reduction in future needs for new or expanded landfills. Therefore, it is assumed that this significant cumulative impact is a temporary condition anticipated to be resolved once SB 1383 implementation has been achieved statewide.

Mitigation Measures

There are no feasible mitigation measures available to Public Works that would reduce this significant cumulative impact. The existing significant cumulative impact pertains to a statewide shortage in organic waste processing facilities, to which the proposed Project would contribute due to the increased diversion of organic waste from landfills. As previously discussed, individual jurisdictions (including the unincorporated County) are required to demonstrate that they have sufficient capacity to process the organic waste that is generated by residents and businesses within their jurisdiction. In an effort to assist jurisdictions with these requirements, the County performed a Regional Organic Waste Capacity Assessment in 2022 (County of Los Angeles 2022a). As SB 1383 implementation continues statewide, individual jurisdictions throughout the State will similarly be responsible for demonstrating organic waste processing capacity. Public Works does not have control over the actions of other jurisdictions in the State, all of which contribute to the significant cumulative impact. Public Works has thus taken all action within its power to provide and demonstrate available organic waste processing capacity for the County, and no feasible mitigation measures are available. Therefore, this is considered a **significant and unavoidable** cumulative impact.

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4 Effects Not Found to Be Significant

In February 2023, an Initial Study (IS) for the proposed Project was released for public review with the Notice of Preparation (NOP) for this Draft EIR. The IS and NOP are included in Appendix A, Scoping Report, to this document. The IS evaluated the potential for the proposed Project to cause environmental impacts in accordance with Appendix G of the CEQA Guidelines. The IS determined that the proposed Project would result in no potentially significant impacts to all Appendix G topics except for air quality. Section 15128 of the CEQA Guidelines requires that an EIR briefly describe potential environmental effects that were determined not to be significant in the IS prepared for a project and therefore are not discussed in detail in an EIR. Since release of the IS, Public Works has also determined that impacts to solid waste capacity may be potentially significant, and therefore this topic is also discussed in depth in this Draft EIR. The environmental issues discussed in the following subsections are not considered significant for the Project, and the reasons for these less-than-significant impact or no impact determinations are summarized herein with references from the IS. For a detailed discussion of the below issue areas, please refer to the IS included in Appendix A to this Draft EIR. While some Project details may have changed since preparation of the IS, the key parameters of the Project remain unchanged, and previous analyses regarding the below issue areas remain relevant to the proposed Project. In some instances, additional detail is provided in the analysis below, in response to comments received on the NOP. These additional details are intended to clarify the reasoning for the less-than-significant or no impact determinations, and do not result in any revisions to the IS conclusions.

4.1 Aesthetics

The passage of additional collection trucks, Contract Monitor vehicles, and route supervisor vehicles along roadways in the Project area would not have the potential to compromise scenic vistas, as such vehicles are mobile and would not create permanent view obstructions. The passage of these vehicles would be consistent with the existing, intended use of roadways for the passage of vehicles. Any incremental increases in dust production resulting from Project-related vehicles would be temporary and intermittent and would not occur on a daily basis within a given location or neighborhood. Impacts to scenic vistas and the substantial degradation of visual character or quality and/or conflict with policies governing scenic quality would be less than significant.

The Project area includes one State-designated scenic highway, State Route 2, which is part of the Angeles Crest Scenic Byway within the County. Collection trucks, Contract Monitor vehicles, and route supervisor vehicles traveling along State Route 2 would not create permanent view obstructions. Similarly, any Project-related travel on locally designated scenic drives would not obstruct or otherwise impair views. The proposed Project would therefore have no impact to scenic resources within a State scenic highway or within a locally designated scenic drive.

Furthermore, the proposed Project would not include development that creates a new source of light or glare. Additional lighting resulting from new collection trucks introduced to the area would be minimal and intermittent in nature, such that daytime views are not adversely impacted, and no impact would occur.

4.2 Agriculture and Forestry Resources

The Project area contains some areas designated as Prime Farmland or Unique Farmland by the California Department of Conservation Farmland Mapping and Monitoring Program associated with existing farming

operations. However, the Project consists of changes to solid waste collection operations that would not convert any existing farmland to non-agriculture uses. The Project area is not located within forest land, timberland, or a Timberland Production zone and the Project would not conflict with existing agricultural or forest land zoning, as the Project would not involve any land use or zoning changes. According to the Department of Conservation's Williamson Act Contract Land Map, the Project area does not contain land that is enrolled in a Williamson Act Contract. The proposed Project would not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, there would be no impacts related to agricultural and forestry resources.

4.3 Biological Resources

The proposed Project does not include construction or tree removal and would not result in any physical development or new ground disturbance. Waste collection activities would occur along roadways that are already established and used by other motor vehicles. As discussed in Section 4.6, Geology and Soils, below, there is the possibility that over time, the Project could potentially contribute to a minor incremental increase in road maintenance and repair throughout the Project area. Such activities would occur along roadways that have already been graded, are highly disturbed, and are already subject to periodic or as-needed maintenance activities. Further, road maintenance currently occurs throughout the Project area and would continue to occur, with or without the Project. As such, there would be no impact to special-status species, wetlands, riparian habitat, or other sensitive natural communities, nor would the Project conflict with any local policies or ordinances protecting biological resources. For these same reasons, no interference with the movement of native resident, migratory fish, or wildlife species, or with established native resident or migratory wildlife corridors, or with native wildlife nursery sites would occur.

Portions of the Project area are within or adjacent to Significant Ecological Areas, which are officially designated areas within the County recognized as supporting irreplaceable biological resources; however, no Project activities are expected to have any significant adverse effect on such resources and the Project does not meet the definition of a "development" (as defined in the Significant Ecological Areas Ordinance) that would be subject to additional regulations. The Project area is also not within any of the regional conservation plans designated by the State. Therefore, implementation of the proposed Project would not conflict with the provisions of an adopted and applicable habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat plan as none apply to the Project. No impacts would occur as a result of the proposed Project.

4.4 Cultural Resources

While the Project area may encompass historical resources, the proposed Project would not result in any physical changes that could cause a substantial adverse change in the significance of any historical resource. Additional vehicle travel as a result of the Project would be consistent with the existing, intended use of roadways for the passage of vehicles. As discussed in Section 4.6, below, there is the possibility that over time, the Project could potentially contribute to a minor incremental increase in road maintenance and repair throughout the Project area. Such activities would occur along roadways that have already been graded, are highly disturbed, and are already subject to periodic or as-needed maintenance activities. Further, road maintenance currently occurs throughout the Project area and would continue to occur, with or without the Project. No physical destruction, relocation, or alteration of any historical resource or its immediate surroundings is proposed and no construction activities would occur such that impacts to any existing historical resources could result. Likewise, because no construction or demolition is proposed and all Project activities would occur above ground and on roadways, the proposed Project would not result in a substantial adverse change in the significance of an archaeological resource, nor would the

Project conduct excavation that could unearth or disturb any human remains. As such, the Project would not result in any impacts to cultural resources.

4.5 Energy

The purpose of the proposed Project is to contribute to the implementation of statewide greenhouse gas (GHG) emissions reduction strategies. While the proposed Project would consume energy, it is also an important component of the County's efforts to comply with and implement statewide requirements for GHG reductions (particularly SB 1383). Therefore, energy use associated with the Project would not be considered wasteful, inefficient, or unnecessary and impacts would be less than significant.

The Project would be consistent with applicable standards, regulations, plans, and policies in place to reduce energy consumption. For example, it is anticipated that worker vehicles would meet the applicable standards of AB 1493 (emission standards for vehicles manufactured in 2009 or later) and would consume less energy as fuel efficiency standards are increased. Moreover, approval of the proposed Project would not change these energy regulations and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant.

4.6 Geology and Soils

The Project would not introduce new habitable structures nor would it change the existing land uses of the service areas. With no introduction of new people or housing and no changes to the existing geological environment of the area, the proposed Project would have no impact related to risk of loss, injury, or death from strong seismic ground shaking, seismic-related ground failure, or landslides. Implementation of the proposed Project would not increase the probability or exacerbate the potential for such events. Furthermore, changes to existing waste collection practices in the Project area would not increase the existing risk of landslides, lateral spreading, subsidence, liquefaction, collapse, or damage from expansive soils.

The addition of new vehicles traveling along roads (particularly unpaved/dirt roads) could potentially result in some soil erosion. Roads themselves are sources of accelerated erosion and sedimentation, and driving over roads may contribute incrementally to road-related erosion. Sediment from roads reaches streams through mass soil movement and surface erosion. Downstream sedimentation results from improper road location, inadequate road drainage, lack of energy dissipators (e.g., riprap) at culvert outlets, road use during wet weather, and poor culvert alignment. Climate, geology, road age, construction practices, and storm history all influence the degree of these effects (USDA Forest Service 2004). Stormwater runoff flowing onto and across roads is thus the primary driver for erosion on roads, not vehicle traffic. The proposed Project would not involve new road construction and would not, therefore, substantially contribute to road-related erosion effects in the Project area.

Soil loss and erosion potential on roads are greatly affected by the presence of slope grades, soil composition and gradation, and weather patterns. Areas with steeper slopes typically experience higher rates of erosion and soil loss than level slopes due to the higher flow velocity at which the stormwater runoff will travel. The soil erodibility factor (K), or K-value, of the Universal Soil Loss Equation and Revised Universal Soil Loss Equation, was used to assess the Project area's vulnerability to erosion. The K-value is a measure of the susceptibility of soil particles to detach and transport by rainfall and runoff. K-values range from 0.05 to 0.65, and other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by surface water flows (USDA 1997). Soil erodibility and the associated K-value ranges are presented in Table 4-1 below.

Table 4-1. Soil Erodibility and K-Values

K-Value Range	Soil Erodibility
0.05–0.15	Low
0.25–0.45	Moderate
0.45–0.65	High

Source: USDA 2001.

The Acton/Agua Dulce service area and the southern, mountainous areas of the Antelope Valley East and Antelope Valley West service areas are generally underlain by mixed silt loam, sandy loam, and gravelly loam. The estimated average K-value of silt loam soils generally ranges from 0.25 to 0.45, which indicates these soils have a moderate erosion potential, and the estimated average K-value of sandy loam and gravelly loam is 0.05 to 0.15, which indicates these soils have a low erosion potential (USDA 1970, 1987, 1997, 2001).

The gently sloping, desert floor areas of the Antelope Valley West, Antelope Valley Central, and Antelope Valley East service areas generally include finer grained soils than the mountainous areas, including silty clay loam, fine sand to silty clay loam, and loamy fine sand, but also include coarser-grained loamy sand and gravelly loamy sand, especially in the southern portion of Antelope Valley West. Similar to the mountainous areas, the soils have a low to moderate erosion potential (K-values of 0.05 to 0.45), but in general would be more erodible than the mountainous portions of the Project area due to the silty, finer-grained nature of the soils (USDA 1970, 2001). Overall, the Project area as a whole is characterized by soils with low to moderate erosion potential.

No new roads would be constructed as part of the Project. Under current conditions, an average of 21 trucks service the Project area each day. If the proposed Project is approved, average daily waste collection services in the Project area would be provided by a total of 28 trucks. The total number of regular collection (refuse, organic waste, and recyclables) trucks on a typical road in the Project area would generally increase by approximately two trucks per week as a result of the Project.

Because Project vehicles would use existing roads and because the erosion potential of soils in the Project area is generally not high (i.e., is low to moderate), the amount of increased erosion as a result of approximately two additional trucks per week on a typical road would be incidental. Soil erosion from this increase in truck trips would be relatively minor compared to the typical erosion potential from ground-disturbing construction activities, including new road construction. Overall, the Project would not lead to a new, significant impact related to erosion and associated siltation of downstream water bodies.

Community members expressed concerns that the passage of additional heavy-duty trucks along roads in the Project area (particularly unpaved roads) would increase instances of potholes, ruts, washboarding, and other roadway wear, and that community members would face increasing difficulties in driving over such roads and maintaining their private roads. As described above, the environmental impacts associated with erosion pertain to sedimentation and siltation of runoff and water bodies. Roadway wear itself is not an impact to the environment, and all roads require periodic maintenance. Public Works conducts regular road maintenance on County-maintained roads, while private roadways are generally maintained by property owners and would be expected to continue to be maintained. As described above, the erosion effects of the Project would be incidental, and road maintenance would continue to be required in the Project area, with or without the Project. Nevertheless, there is the possibility that, over time, the Project could potentially contribute to a minor incremental increase in road maintenance throughout the Project area. The environmental effects of such road maintenance could include air quality impacts, hydrology/water quality impacts, and noise impacts. In order to conservatively address the potential

for fugitive dust from increased road maintenance events, the air quality modeling detailed in Section 3.1, Air Quality, of this Draft EIR assumes that additional road maintenance events would occur as a result of the Project. Specifically, one grader, one loader or backhoe, and one rubber-tired dozer are assumed to operate in the Project area periodically throughout each year of Project operations. For the maximum daily operational criteria air pollutant emissions, these activities are assumed to occur for 8 hours, simultaneously with waste collection activities. For the estimated maximum annual operational criteria air pollutant emissions, these maintenance activities are assumed to occur 8 hours per day, 10 times per year. Please refer to Section 3.1 for a detailed discussion of these impacts. Potential effects related to hydrology/water quality and noise are addressed in their respective subsections below.

The proposed Project would not generate wastewater or involve the use of septic tanks or alternative wastewater disposal systems. As such, there would be no impact under this criterion.

Furthermore, the proposed Project would not destroy any unique paleontological resources or geologic features because no construction or demolition activities are proposed. As such, there would be no impact from the proposed Project on paleontological resources or geologic features.

4.7 Greenhouse Gases

The proposed Project is an important aspect of the County's compliance with SB 1383 and the State's associated organic waste reduction mandates. The proposed Project is also an important component in achieving GHG reductions at the State and local levels. As presented in an EIR prepared by CalRecycle for its Short-Lived Climate Pollutants: Organic Waste Reductions Regulation, a portion of the proposed Project's GHG emissions are anticipated to be offset by the benefits of increased organic waste diversion and associated reductions in methane emissions. The analysis in the CalRecycle EIR concludes that the GHG reductions achieved through implementation of proposed organic waste reduction regulations would be "substantially greater than additional travel-generated emissions, so a net reduction in overall GHG emissions would be reasonably anticipated" (CalRecycle 2019). For the reasons described herein and as further detailed in Appendix A, Project impacts related to the generation of GHG emissions, either directly or indirectly, are considered less than significant.

The Project would also be consistent with applicable GHG emission reduction plans, policies, or regulations, including the County's 2045 Climate Action Plan (County of Los Angeles 2024), CARB Scoping Plan (CARB 2022), Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy (SCAG 2024), SB 32, and Executive Order S-3-05.

4.8 Hazards and Hazardous Materials

The Project would not be expected to lead to changes or increases in incidents of improper disposal of hazardous materials relative to existing conditions. In fact, requirements to sort refuse, recyclables, and organic waste could increase awareness of best practices for the proper disposal of solid waste. Furthermore, any hazardous materials would continue to be subject to applicable handling and disposal requirements. As such, impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant.

As a standard practice, the proposed contracts would require the waste hauler(s) to agree to certain public health and safety requirements, including enclosing waste to prevent dropping, spilling, or blowing of materials from collection trucks; immediate cleanup of any such occurrences; and prevention of oil, hydraulic fluid, paint, or other potentially hazardous liquids leaking from vehicles. All materials would be transported, used, and handled in

accordance with all federal, State, and local laws regulating the management and use of hazardous materials. For these reasons, the proposed Project is not anticipated to release hazardous materials into the environment, including in or around existing or proposed schools, that would pose a significant hazard to human health or the environment, and impacts resulting from the Project would be less than significant.

The proposed Project would not involve any activities that could potentially disturb or release hazardous materials at cleanup sites, school investigation sites, and military evaluation sites identified by the Department of Toxic Substances Control in the Project area. If waste haulers are required to travel through or to serve any hazardous materials sites, drivers would obey any restrictions in place, such as site access restrictions implemented by the Department of Toxic Substances Control. As such, the proposed Project would not create any significant hazards to the public or environment related to hazardous materials sites; no impact would occur.

Waste collection activities would take place within existing and future residential and commercial locations and would not result in situating new residents or workers near airports such that there would be a safety hazard or excessive noise. As such, there would be no impact related to airport hazards. Furthermore, while the number of solid waste collection trucks would increase in the Project area, these vehicles would not affect use of the streets such that emergency response or evacuations would be impeded. Thus, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan; no impact would occur.

The Project area contains areas designated by the California Department of Forestry and Fire Protection as Very High Fire Hazard Severity Zones, some of which are also within a State Responsibility Area. As part of the proposed contracts, the waste hauler(s) would be required to follow all applicable laws and regulations, including those pertaining to fire safety. Solid waste collection trucks would be subject to routine inspection and maintenance, and drivers would be trained on handling hot loads (i.e., truckloads of waste that catch fire). These practices would reduce the risk of loss, injury, or death from wildfire hazards. For these reasons, the proposed Project is not anticipated to expose people or structures to a significant risk of loss, injury, or death involving wildland fires; impacts would be less than significant.

4.9 Hydrology and Water Quality

The proposed waste hauler contracts would require the waste hauler(s) to prevent waste from escaping from collection trucks during collection and transportation, and to immediately clean up all litter, spills, and leaks. Compliance with these contract requirements would ensure that incidental spills and leaks would not result in substantial degradation of water quality or an increase in polluted discharge. The Project would not involve any form of development that would require connection to water services, nor would the Project introduce any new impervious surfaces that could interfere with groundwater recharge. Therefore, the proposed Project would result in no impacts to surface water or groundwater supply or quality, nor would the Project conflict or obstruct a water quality control plan or sustainable groundwater management plan.

The proposed Project would potentially result in small, incidental amounts of soil erosion, or localized changes in drainage patterns, from an increase in collection trucks traveling on roadways within the Project area. As previously discussed in Section 4.6, no new roads would be constructed as part of the Project. The total number of regular collection (refuse, organic waste, and recyclables) trucks on a typical road would generally increase by two trucks per week as a result of the Project. Because Project vehicles would use existing roads and because the erosion potential of soils in the service areas is generally not high (i.e., is low to moderate), the amount of increased erosion as a result of approximately two additional trucks would be incidental. The amount of soil erosion from this increase

in truck trips would be relatively minor compared to the typical erosion potential from ground-disturbing construction activities, including new road construction. Overall, the Project would not lead to a new, significant impact related to erosion and associated siltation of downstream water bodies.

Community members expressed concerns that additional heavy-duty trucks along roads in the Project area (particularly unpaved roads) would increase instances of potholes, ruts, washboarding, and other roadway wear, potentially leading to hydrology impacts related to changes in drainage. However, changes in drainage patterns of adjacent and nearby gullies, creeks, and other water bodies would not occur as potholes, ruts, and washboarding would result in highly localized alterations of stormwater runoff, which would be confined to the roadway. The minor undulations in roadway topography due to washboarding and ruts would slightly alter stormwater runoff patterns within the roadway; however, those minor alterations of stormwater runoff would not combine to change drainage patterns beyond the roadway. In addition, the Project would not introduce any new impervious surfaces that could result in an increase in stormwater runoff, and in turn result in flooding on or off site, off-site erosive scour, or exceedance of the capacity of an existing or planned stormwater drainage system. As a result, the addition of approximately two truck trips per week on a given roadway would not substantially alter the drainage pattern of the roadway areas in a manner that would result in significant hydrology-related impacts.

As also discussed in Section 4.6, there is the possibility that, over time, the Project could potentially contribute to a minor incremental increase in road maintenance throughout the Project area. In the short term, road maintenance could incrementally increase the potential for erosion of sediments disturbed during maintenance. However, as described in Section 4.6, the erosion effects would be incidental, and road maintenance would continue to be required in the Project area, with or without the Project. In the long term, road maintenance would be beneficial, as road maintenance enhances the drainage features by removing washboarding, ruts, and gullies; repairing damaged drainage features, such as drainage swales, culverts, and energy dissipators (e.g., riprap); and constructing new drainage control features (e.g., swales, culverts) in areas lacking proper drainage control. As a result, any minor incremental increases in road maintenance associated with the Project would result in beneficial long-term impacts related to stormwater hydrology.

Collection trucks are also not anticipated to operate during floods or other weather events that would risk release of pollutants due to Project inundation.

4.10 Land Use and Planning

The proposed Project does not include construction and would not involve the development of features that would physically divide an established community (e.g., a highway, aboveground infrastructure, or an easement through an established neighborhood). Further, the proposed Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, including the County Code, Antelope Valley Area Plan, Santa Clarita Valley Area Plan, and Los Angeles County 2035 General Plan (refer to Appendix A for details). As such, the Project would have no impacts regarding land use or planning.

4.11 Mineral Resources

The Project would not involve any new development that could affect availability of mineral resources or mineral resource recovery sites and therefore would not result in the loss of availability of any known mineral resource that would be of value to the region, residents of the State, or locally important mineral resource recovery sites delineated on a local General Plan, Specific Plan, or other land use plan.

4.12 Noise

The proposed Project does not include any construction-related work activities; thus, there would be no noise impacts related to Project construction. Traffic noise levels on an average daily basis would not increase noticeably as a result of the proposed Project and the associated increase in collection trucks. Because the proposed Project would result in estimated traffic noise increases of less than 3 decibels, traffic noise would be below applicable thresholds (see Appendix A for details).

Individual truck pass-bys and solid waste collection pickups would be clearly perceptible at noise-sensitive receivers, including residences. Additionally, as discussed in Section 4.6, there is the possibility that over time, the Project could potentially contribute to a minor incremental increase in road maintenance throughout the Project area. Any maintenance activities associated with the Project occurring near or adjacent to noise-sensitive receivers would be perceptible at those receivers. However, noise events from collection truck pass-bys, solid waste pickups, and/or road maintenance would be temporary and intermittent and would also be limited in volume by County Code requirements. Noise increases associated with the Project would not occur on a daily basis for individual sensitive receptors. The County's thresholds for traffic noise impacts would not be exceeded, and traffic noise levels on an average daily basis would not increase noticeably. Operational noise associated with the proposed Project would thus be less than significant.

Because vibration diminishes rapidly with distance, the amount of vibration from collection trucks that would be experienced at an actual structure would be minimal, since structures within the Project area are typically set back from roadways by sidewalks, driveways, and/or landscaped areas. Thus, potential impacts from the proposed Project related to groundborne vibration would be less than significant.

Waste collection activities would take place within existing and future residential and commercial areas and would not result in situating new residents or workers near airports such that there would be a safety hazard or excessive noise. For these reasons, there would be no impact related to airport noise.

4.13 Population and Housing

The Project would directly result in the employment of 12 new waste hauler employees under the 2025 scenario and 13 new waste hauler employees under the 2045 scenario, 4 route supervisors, and 3 new Contract Monitors. This would constitute a negligible increase in terms of employment and population growth within the Project area. Compared to the existing labor force of the Project area and surrounding areas, an increase of 19 new employees under the 2025 scenario and 20 new employees under the 2045 scenario would not constitute a substantial increase in employment growth. The Project does not propose changes in land use or the construction of any new homes or businesses, or extension of roads or other infrastructure that would induce population growth. The proposed Project is intended to serve the current population within the service area and anticipated future growth. With consideration of the above, the proposed Project would result in less-than-significant impacts related to population growth and no impacts regarding the displacement of existing housing or people.

4.14 Public Services

The proposed Project would not result in the provision of or need for any new or physically altered fire protection, police protection, school, park, or other public facilities. In addition, the Project would not result in a change in land uses,

and waste collection activities would take place along roadways. Waste hauler(s) would be required to comply with all applicable fire prevention, response, and reporting requirements, which would minimize fire-related risks. This would decrease the Project's contribution to wildfire risks and any associated needs for additional fire protection services within the Project area. Additionally, the proposed Project would not induce population growth that would require the provision of other public services. For these reasons, no impacts to public services would occur.

4.15 Recreation

The proposed Project does not include any development and would not result population growth that would increase the use of, or need for, parks or recreational facilities. No new or expanded recreational facilities would be included as part of the Project. Accordingly, no impacts to recreation would occur.

4.16 Transportation

While the proposed Project would add additional vehicle and trucks trips to the service area, the Project would not alter the existing roadway network nor hinder the County's ability to emphasize a diversity of transportation modes or choices. The Project would not include site improvements that would interfere with existing public transit, bicycle, or pedestrian facilities, or impede the construction of new or the expansion of such existing facilities in the future. Bicyclist and pedestrian safety would be maintained at existing levels in the area as there would be no changes to the existing pedestrian or bicycle circulation system. Therefore, the proposed Project would not conflict with adopted policies, plans, or programs addressing the circulation system.

CEQA Guidelines, section 15064.3, subdivision (b) focuses on vehicle miles traveled (VMT) for determining the significance of transportation impacts. Consistent with the Governor's Office of Planning and Research Technical Advisory, the County's Transportation Impact Analysis Guidelines contain screening criteria to determine if a project generates a significant impact on VMT. One of these screening criteria is whether a development project generates 110 or less net daily vehicle trips. It should be noted that section 15064.3, subdivision (a) of the CEQA Guidelines states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks, and not heavy (or service) trucks. The Project would result in the employment of 3 Contract Monitors, 4 route supervisors, and an additional 12 employees (under the 2025 scenario) or 13 employees (under the 2045 scenario) per day to operate collection trucks. Including the route supervisors and County-employed Contract Monitors, total employment generated by the Project would be 19 new employees under the 2025 scenario and 20 new employees in the 2045 scenario. The potential for these new employees to increase commuter vehicle trips in the Project area would be less than the screening criteria of 110 daily vehicle trips. As such, VMT impacts are presumed to be less than significant.

The Initial Study (Appendix A) set forth Project Design Feature PDF-TR-1, which required carpooling and/or use of alternative modes of transportation to reduce Project VMT to below the screening criteria, thus ensuring less-than-significant impacts. However, due to changes in the Project Description between the time of the Initial Study and the time of this EIR, PDF-TR-1 is no longer necessary and will not be included as part of the Project. Nevertheless, Public Works would still encourage the selected waste hauler(s) to promote employee ridesharing and/or use of alternative modes of transportation, such as transit, walking, or bicycling.

Collection trucks would be required to follow all traffic laws and would use safety precautions, such as flashing lights, to warn passing vehicles. Any passing vehicles would also be required to adhere to traffic laws concerning

safe passing practices. Impacts would be less than significant. Additionally, collection trucks would travel on streets and along routes already used routinely by vehicles; therefore, the proposed Project would result in less-than-significant impacts to emergency access.

4.17 Tribal Cultural Resources

While the Project area may encompass tribal cultural resources, the proposed Project would not result in any physical changes that could cause a substantial adverse change in the significance of any tribal cultural resource. The collection trucks would travel along designated roadways, consistent with existing or future traffic patterns, and no construction activities are proposed by the Project. As discussed in Section 4.6, above, there is the possibility that over time, the Project could potentially contribute to a minor incremental increase in road maintenance and repair throughout the Project area. Such activities would occur along roadways that have already been graded, are highly disturbed, and are already subject to periodic or as-needed maintenance activities. Further, road maintenance currently occurs throughout the Project area and would continue to occur, with or without the Project. For these reasons, no impacts to any existing tribal cultural resources would result.

On August 31, 2021, notification of the proposed Project was sent via certified mail to California Native American tribal representatives that are traditionally or culturally affiliated with the geographic area. Public Works received responses via email from two tribes, both of which stated that they do not have concerns with implementation of the proposed Project. Therefore, no concerns regarding potential effects to tribal cultural resources have been identified by California Native American tribes or by the County as part of the AB 52 notification and consultation process. For those reasons, no impacts would occur and no further analysis is required.

4.18 Utilities and Service Systems

The proposed Project does not include any construction or new development that would increase the demand for water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications services. There are no proposed Project activities that would result in a significant increase in water usage or discharge of wastewater for Project operation. The proposed Project would not create new sources of runoff water with the potential to exceed the capacity of existing infrastructure. For these reasons, the Project would not entail the relocation or construction of new or expanded water, wastewater treatment, or storm drainage facilities.

Concerns have been raised by community members regarding the potential for collection trucks to damage underground, shallow water infrastructure. It should be noted that the Project is not anticipated to result in any change in the weight of collection trucks. The proposed Project would only cause a minor increase in the total number of collection trucks circling the Project area. While increased truck pass-bys on Project area roads may increase the chance of localized damage to underground water infrastructure, this damage would not be considered an environmental impact as defined by CEQA. Rather, CEQA is concerned with the significant environmental effects that may occur as a result of the need for construction of utilities and services systems. In this case, potential environmental effects may be air quality, erosion, and/or noise impacts resulting from repairs to the underground water infrastructure. As described in Section 4.6, road maintenance events (which may include potential repairs to underground infrastructure) are conservatively included within the air quality model detailed in Section 3.1. In the short term, maintenance activities could incrementally increase the potential for erosion of sediments disturbed during maintenance. However, as described in Section 4.6, the erosion effects would be incidental, and road and utility maintenance would continue to be required in the Project area, with or without the Project. Noise related to road maintenance is addressed above in Section 4.12, Noise. As described therein, maintenance activities

associated with the Project occurring near or adjacent to noise-sensitive receivers would be perceptible at those receivers. However, such events would be temporary and intermittent and would be subject to applicable County Code requirements for noise control.

The proposed Project would increase natural gas and electricity usage in the Project area. The natural gas and electricity estimated to be consumed by new vehicles and collection trucks associated with the Project would be minor relative to existing and future projected supplies and/or demands in the region. As such, new or expanded energy facilities are not anticipated to be needed.

4.19 Wildfire

The Project area contains areas designated as Very High Fire Hazard Severity Zones by the California Department of Forestry and Fire Protection, mostly located in the Acton/Agua Dulce service area. The proposed Project would increase vehicle traffic on roadways within or near these Very High Fire Hazard Severity Zones, thereby exposing drivers to potential wildfire hazards, or exacerbating wildfire hazards if Project vehicles suffer mechanical or equipment failures that could ignite the vehicle and surrounding vegetation. However, waste hauler(s) would be required to comply with all applicable fire prevention, response, and reporting requirements, which would minimize fire-related risks. Additionally, collection trucks would pick up illegally dumped waste such as debris piles that could act as fuel sources for wildfires, which may result in a beneficial impact. The proposed Project does not include any new development or installation of associated infrastructure. The proposed Project would not conflict with the County's emergency plan or any disaster routes. The waste hauler contracts would require waste haulers to provide the County with maps of their collection routes and schedules, and the County would have the right to request changes to accommodate emergency evacuation plans or routes. Therefore, no impacts would occur.

4.20 References

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5 Other CEQA Considerations

5.1 Introduction

Section 15126 of the CEQA Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Draft EIR must also identify the following: (1) significant environmental effects of the proposed Project, (2) significant environmental effects that cannot be avoided if the proposed Project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed Project, (4) growth-inducing impacts of the proposed Project, and (5) alternatives to the proposed Project (evaluated in Chapter 6, Alternatives).

5.2 Significant Environmental Effects

The Executive Summary and Chapter 3, Environmental Analysis, which includes Section 3.1, Air Quality, and Section 3.2, Utilities and Services Systems, of this Draft EIR provide a comprehensive overview of the proposed Project's significant environmental effects.

5.3 Significant and Unavoidable Environmental Impacts

Section 15126.2, subdivision (b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed Project are discussed in detail in Chapter 3 of this Draft EIR.

As discussed in Section 3.1, Air Quality, vehicular travel on unpaved roads from the Project would result in a cumulatively considerable net increase of coarse particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$), which would contribute to health effects associated with these air pollutants and potentially conflict with regional air quality management plans. Several mitigation strategies were considered for the Project, all of which have been rejected as infeasible (for more detail, refer to the discussion in Section 3.1). As such, there are no feasible mitigation measures available that would effectively reduce particulate matter emissions from fugitive dust resulting from the Project's vehicular travel on unpaved roads. Thus, impacts related to air quality would be significant and unavoidable.

As discussed in Section 3.2, Utilities and Service Systems, it was also determined that the proposed Project would result in a considerable contribution to an existing significant cumulative impact regarding the need for organic waste processing capacity statewide. There are no feasible mitigation measures to reduce this impact, but it is noted that as SB 1383 implementation continues, new and expanded infrastructure would be built throughout the State to support the organic waste processing needs of the Project in conjunction with other jurisdictions. The scope, location, and development scenarios for any such infrastructure is highly speculative at this time. New or expanded facilities would be required to undergo State and local permitting and approval processes (including CEQA review). Furthermore, on a long-term, regional scale, the need for new or expanded organic waste facilities would be balanced over time by reduced demands on landfills and an associated reduction in future needs for new or expanded landfills. Therefore, it is assumed that this significant cumulative impact is a temporary condition anticipated to be resolved in the future.

5.4 Significant Irreversible Environmental Impacts

EIRs for certain kinds of projects, as set forth in CEQA Guidelines section 15127, must discuss any significant irreversible environmental change that would be caused by a proposed project, as described in section 15126.2, subdivision (d) of the CEQA Guidelines. These projects include those involving (1) the adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency; (2) the adoption by a Local Agency Formation Commission of a resolution making determinations; or (3) the parallel preparation of an environmental impact statement under the federal National Environmental Policy Act.

Generally, a project would result in significant irreversible changes if:

- The primary and secondary impacts would generally commit future generations to similar uses (such as highway improvement that provides access to a previously inaccessible area) (CEQA Guidelines, section 15126.2, subdivision (d)).
- The project would involve a large commitment of nonrenewable resources (CEQA Guidelines, section 15126.2, subdivision (d)).
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project (CEQA Guidelines, section 15126.2, subdivision (d)).
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy) (CEQA Guidelines, section 15126.2, subdivision (d)).

The proposed Project would not result in any land use changes that would commit future generations to similar uses. While the Project would require the consumption of nonrenewable resources (such as natural gas and petroleum) associated with the operation of motor vehicles, the amount would not be considered a "large commitment" as the Project involves no development and would only result in a change in the way municipal solid waste is collected. The Project would be consistent with applicable standards, regulations, plans, and policies in place to reduce energy consumption. It is anticipated that worker vehicles would meet the applicable standards of AB 1493 (standards for vehicles manufactured in 2009 or later), and as a result would likely consume less energy as fuel efficiency standards are increased and vehicles are replaced. The proposed Project would also support compliance with, and implementation of, SB 1383 which requires all jurisdictions in the State to provide organic waste collection services to all residents and businesses and to divert these organic materials from landfills.

For projects described in CEQA Guidelines section 15127 and section 15126.2, subdivision (d), a discussion of the potential for irreversible environmental damage caused by environmental accidents associated with a project is also required. While the proposed Project may result in the incidental transport of hazardous materials during Project operation, as described in the Initial Study (Appendix A, Scoping Report), all such activities are highly regulated and compliance with applicable local, State, and federal laws related to the use, storage, and transport of hazardous materials would significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage. The Project would not be expected to lead to changes or increases in incidents of improper disposal of hazardous materials relative to existing conditions. In fact, requirements to sort refuse, recyclables, and organic waste could increase awareness of best practices for the proper disposal of solid waste. New vehicles for the Project would use fuels such as gasoline, natural gas, or diesel, as well as other potentially hazardous materials necessary for vehicle operation and maintenance that could result in spills or leaks of hazardous materials. As part of standard practices, waste hauler(s) would follow public health and safety requirements, including enclosing waste to prevent dropping, spilling, or blowing of materials from collection trucks; immediate cleanup of any such occurrences; and prevention of oil, hydraulic fluid, paint, or other liquid leaking from

vehicles. Vehicles would be required to carry petroleum-absorbent agents and/or other appropriate cleaning agents that would allow for immediate coverage, treatment, and removal of liquid materials from the ground. All materials would be transported, used, and handled in accordance with all federal, State, and local laws regulating the management and use of hazardous materials. Therefore, the Project is not anticipated to result in irreversible damage associated with environmental accidents.

5.5 Growth-Inducing Impacts

As required by section 15126.2, subdivision (I) of the CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, an EIR must discuss the characteristics of a project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, the stimulation of economic activity within the region, or the establishment of policies or other precedents that directly or indirectly encourage additional growth. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered a significant impact if it can be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

Elimination of Obstacles to Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect, though not necessarily a significant one. A physical obstacle to growth typically involves the lack of public infrastructure (i.e., water, wastewater infrastructure, and roadway access). The proposed Project would not extend physical infrastructure but would result in expanded solid waste collection services for residents and businesses. However, most residents and businesses in the Project area already receive solid waste collection services. Even if there were a lack of solid waste collection services in the Project area, this would not be considered a significant obstacle to growth because residents are able to contract directly with waste hauler(s) or can self-haul waste to a landfill or other facility. Therefore, there would be no elimination of obstacles to growth that could be considered growth-inducing.

Economic Effects

The proposed Project would affect the local economy by involving the direct employment of approximately 19 new employees under the 2025 scenario and 20 new employees under the 2045 scenario. Compared to the existing labor force of the Project area and surrounding areas, an increase of 19 to 20 new employees would not constitute a substantial increase in employment growth. Increased employment can result in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that determine the type and magnitude of environmental impacts of this additional economic activity. As described in Chapter 2, Project Description, employees would generally be mobile throughout the workday, traveling along collection routes throughout the Project area. However, employees may begin each workday at an office location or service yard. The location(s) of service yards and other facilities that would be used by the selected waste hauler(s) are currently unknown and highly speculative at this time, and any new or expanded yards or facilities would require separate CEQA review. The Project's employment growth falls well within projections provided by the County and the Southern California Association of Governments (see Chapter 4, Effects Not Found to Be Significant). Given the relatively minor employment growth and the existing labor market within and surrounding the Project area that could fill available jobs, growth of housing and related infrastructure due to this new employment would not be anticipated.

Impacts of Induced Growth

The growth induced directly and indirectly by the proposed Project would not contribute significantly to environmental impacts in the region or statewide. As discussed above, a project could indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on required public infrastructure or constructing a new road into an undeveloped area. The proposed Project would not involve any such removal of obstacles to growth. As previously discussed, most residents and businesses in the Project area already receive solid waste collection services, and a change in how this waste is collected (as proposed by the Project) would not induce growth. The Project would also not result in a substantial increase in employment growth.

In summary, the proposed Project would not induce growth; therefore, growth-inducing effects are considered less than significant.

5.6 Other Considerations

CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic changes are connected to physical environmental effects. A social or economic change related to a physical change may be considered in determining whether the physical change is significant (CEQA Guidelines, section 15382). The guidance for assessing economic and social effects is set forth in section 15131, subdivision (a) of the CEQA Guidelines:

> Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on physical changes.

The Project's direct and indirect physical environmental effects, such as increases in air pollutant emissions, are all addressed in Chapter 3 of this Draft EIR and in the Initial Study (see Appendix A). Public Works has not identified any chain of cause and effect by which any economic or social changes resulting from the Project would foreseeably result in additional physical consequences beyond those addressed in Chapter 3.

6 Alternatives

6.1 Introduction

Pursuant to the CEQA Guidelines, EIRs are required to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines, section 15126.6, subdivision (a)). This alternatives analysis is prepared in support of CEQA's goals to foster informed decision-making and public participation (CEQA Guidelines, section 15126.6, subdivision (a)). An EIR is not required to evaluate the environmental impacts of alternatives at the same level of detail as a proposed project, but it must include enough information to allow meaningful evaluation, analysis, and comparison with a proposed project.

The alternatives analysis is required even if the alternatives "would impede to some degree the attainment of the project objectives or would be more costly" (CEQA Guidelines, section 15126.6, subdivision (b)). An EIR must evaluate "only those alternatives necessary to permit a reasoned choice" (CEQA Guidelines, section 15126.6, subdivision (f)) and does not need to consider "every conceivable alternative" to a project (CEQA Guidelines, section 15126.6, subdivision (a)). The alternatives evaluated should be "potentially feasible" (CEQA Guidelines, section 15126.6, subdivision (a)), but inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision makers for a given project who must make the necessary findings addressing the feasibility of alternatives for avoiding or substantially reducing a project's significant environmental effects (California Public Resources Code, section 21081; see also CEQA Guidelines, section 15091).

This chapter describes the Project alternatives selected for analysis, evaluates the environmental impacts associated with them, and compares the impacts with those of the Project. This chapter also identifies those alternatives considered by Public Works but not carried forward for detailed analysis and explains the basis for the decision.

In conformity with CEQA, the purpose of this analysis is to focus on alternatives that are potentially feasible and that would avoid or substantially lessen any of the significant effects of the Project. The analysis in Chapter 3, Environmental Analysis, of this Draft EIR finds that the proposed Project would result in significant and unavoidable impacts in the categories of air quality and utilities and service systems. The alternatives analysis also considers, to a lesser extent, those impacts of the proposed Project that were determined to be less than significant.

6.2 Project Objectives

As stated above, the range of potential alternatives to the proposed Project shall include those that could feasibly accomplish most of the basic objectives of the Project.

As stated in Chapter 2, Project Description, the underlying purpose of the Project is to improve quality of life for residents in the unincorporated north County areas and prevent recyclables and organic waste from ending up in

landfills by requiring source-separated collection in the Project area, in accordance with State laws and regulations. The Project's specific objectives consist of:

- **Improved Services.** Establish new solid waste collection system(s) in the unincorporated north County areas to reduce illegal dumping, improve customer service, offer a consistent level of service, and carefully manage rates.
- **State Law Compliance.** Facilitate the County's compliance with State laws and regulations relating to solid waste collection and diversion.

6.3 Summary of Alternatives

Development of Project Alternatives

In developing the alternatives evaluated in this Draft EIR, the Draft EIR preparers worked with Public Works staff to explore various modifications to the proposed Project that could potentially reduce environmental effects while responding to the Project objectives. This effort focused first on reducing the Project's significant and unavoidable impacts, which are related to air quality and cumulative utilities and service systems impacts. Less-than-significant impacts considered in the selection of alternatives include impacts related to aesthetics, energy, geology and soils, greenhouse gas (GHG) emissions, hazards and hazardous materials, hydrology and water quality, noise, population and housing (namely, employment growth), and transportation. Other concerns raised by the community during the scoping period include increased wear on roadways due to additional heavy-duty truck travel and traffic nuisances caused by increased solid waste pickups and the passage of increased numbers of heavy-duty collection vehicles on roadways. The alternatives selected for analysis do not reduce all of the concerns mentioned above but have been selected for their potential to reduce the Project's significant and unavoidable impacts.

Alternatives Considered but Rejected as Infeasible

Section 15126.6, subdivision (c) of the CEQA Guidelines requires EIRs to identify any alternatives that were considered by the lead agency but were rejected as infeasible for detailed study, and briefly explain the reasons underlying the lead agency's determination. Furthermore, section 15126.6, subdivision (f)(1) states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire or control or otherwise have access to the alternative site. No one of these factors establishes a fixed limit on the scope of reasonable alternatives." A description of each alternative that was rejected and the rationale for rejection is provided below.

Alternative Project Locations

An alternative location could entail implementation of the proposed solid waste services in a different region of the County. The Project's significant and unavoidable air quality impact is largely caused by the operation of heavy-duty solid waste collection trucks on unpaved roads within the Project area. Relocating the Project to an area with fully paved roads would reduce and potentially avoid this impact. An alternative location would not avoid or reduce the Project's significant and unavoidable cumulative utilities and service systems impact as this cumulative impact is statewide in nature.

Alternative Project locations would not achieve any of the Project objectives. Project objectives include provision of new solid waste collection services in the unincorporated north County areas to ensure compliance with State and

local laws for solid waste collection and diversion. If the Project were implemented elsewhere within the County or region, the unincorporated north County would remain out of compliance with State and local laws for solid waste collection and diversion, including SB 1383 and the County's Mandatory Organic Waste Disposal Reduction Ordinance. Project objectives also include improved services that are unique to the Project area. For example, as described in Section 2.5 of this EIR, there are locations in the Project area where refuse and construction debris are illegally disposed of to avoid landfill fees. The Project would provide assistance with illegal dumping cleanup in the public right-of-way in the Project area.

In most other unincorporated areas of the County, Public Works already administers solid waste collection contracts for residential and commercial properties. The Project area is one of the last unincorporated areas in the County where County-administered residential contracts have not been established. Implementing the Project would ensure that both residents and businesses in the Project area have access to solid waste collection services provided through waste hauler(s) contracted by the County, which would involve additional controls and regulations over rate increases.

While alternative Project locations may avoid or reduce the Project's significant and unavoidable air quality impact, this alternative has been rejected due to failure to meet Project objectives. Additionally, as noted above, Public Works already administers solid waste contracts in most other unincorporated areas of the County, and the Project area is one of the last unincorporated areas where County-administered residential contracts have not been established. As such, there are no alternative locations available where the Project could be implemented. Therefore, this alternative has also been rejected due to infeasibility.

Alternative Resource Recovery/Disposal Facility Locations

As described in Chapter 2 of this Draft EIR, collection trucks are anticipated to travel approximately 200 miles per day under the proposed Project. As described in Section 3.2 of this Draft EIR, this equates to an 80-mile radius around the Project area in which trucks could drop off solid waste for resource recovery and/or disposal. As also explained in Chapter 2, the location(s) of facilities that would be used by the selected waste hauler(s) are currently unknown and highly speculative at this time. As such, use of facilities within the Project area and/or within an 80-mile radius around the Project area is considered a reasonable worst-case assumption for daily collection truck travel. Nevertheless, collection truck travel (and the associated air quality impacts) could be reduced if the distance to resource recovery and/or disposal facilities were decreased (i.e., less than 80 miles from the Project area).

This alternative has been rejected due to inability to avoid significant environmental impacts. The Project's significant and unavoidable air quality impact is attributable to increased collection truck travel on unpaved roads. Travel on unpaved roads is associated with the local collection routes (and not travel between the routes and resource recovery and/or disposal facilities). As such, reducing the distance from the routes to the resource recovery and/or disposal facilities would not substantially change collection truck travel along unpaved roads, and air quality impacts would remain significant and unavoidable under this alternative.

Self-Hauling for Recycling and Organic Waste

During the scoping period, the community made several suggestions for potential Project alternatives. One of these suggestions was to utilize centralized waste drop-off facilities. Under this alternative, residential properties would receive refuse collection only. Local residents would be required to self-haul recycling and organic waste to local recycling centers and community composting centers, or residents could compost at home for organic waste disposal. Several existing recycling and composting centers are located within the vicinity of the Project area (Google

Maps 2024a, 2024b). Businesses would still receive refuse, recycling, and organic waste collection consistent with the Project, and the same bulky item pickup and illegal dumping collections that are proposed for the Project would be implemented.

SB 1383 requires every jurisdiction to provide organic waste collection services to all residents and businesses (CalRecycle 2024). SB 1383 does not prohibit residents from self-hauling their waste (California Code of Regulations [CCR], title 14, section 18984.9), and the County Code also allows for self-hauling (County Code, section 20.91.040). Jurisdictions are nevertheless required to provide organic waste collection services via three options (three-container organic waste collection services, two-container organic waste collection services, and/or unsegregated single-container collection services) (CCR, title 14, section 18984). Requiring residents to self-haul organic waste in lieu of providing organic waste collection services is not an available option for compliance under SB 1383, and requiring residents to self-haul recyclables would not be supportive of compliance with AB 341 or local waste diversion targets. AB 341 establishes a statewide waste diversion goal of 75% and requires that local agencies adopt strategies that will enable 75% diversion of all solid waste by 2020. The County has established more stringent targets in its Zero Waste Plan, including 80% diversion from landfills by 2025 (County of Los Angeles 2022). Currently, the County's waste diversion rate is 65% (County of Los Angeles 2023). Requiring all residents to self-haul organic waste and recyclables would be infeasible for Public Works to effectively enforce. Based on this lack of enforceability, it is anticipated that some residents would self-haul recyclables and organic waste, while others would mix these wastes with refuse for collection, which would undermine the environmental benefits of SB 1383 implementation as well as the State and County waste diversion goals. Additionally, this alternative would not achieve the objective of improved customer service to the same degree as the Project. Requiring residents to haul their own recyclables and organic waste may present difficulties for citizens who are not able to transport their own solid waste.

If all residents were to successfully self-haul recyclables and organic waste, this alternative would reduce the mileage traveled by heavy-duty solid waste collection trucks because a portion of the Project area's solid waste would be hauled by residents and recycling and organic waste pickups would not be conducted for residential properties. This alternative may also reduce or potentially avoid the Project's cumulatively significant utilities and service systems impact because backyard composting and/or local composting centers would reduce or eliminate contributions to commercial organic waste processing facilities. However, as noted above, successful enforcement of self-haul throughout the Project area for all residents would be infeasible. In the absence of the Project, residents who are not able or willing to self-haul recyclables and organic waste would be expected to place recyclables and organic waste in bins designated for refuse. This alternative would thus reduce waste diversion in the Project area, undermining the underlying purpose of the Project. Additionally, this would also undermine any potential reductions in collection truck travel because placing recyclables and organic waste into refuse bins would not result in reductions in the quantity of solid waste that needs to be picked up. Because it is unknown how many residents would successfully and regularly adopt the practice of self-haul for recyclables and organic waste, this alternative cannot be presumed to avoid the Project's significant and unavoidable air quality impact related to collection truck travel.

Voluntary self-hauling of recyclables and/or organic waste to community recycling centers and composting sites is allowable and incentivized under existing conditions, and it is anticipated that any existing self-hauling activities would continue in the Project area, similar to existing conditions, with or without the Project. However, as noted above, enforcing all residents to self-haul recyclables and organic waste is not feasible and is not consistent with solid waste regulations.

For the reasons described above, this alternative has been rejected due to regulatory limitations, infeasibility, and inability to avoid the Project's significant air quality impact.

Home-Based Composting

This alternative would be identical to the Project with the exception of residential organic waste collection services. Residential properties would not receive curbside organic waste collection services, and residents would be required to compost organic waste at home or to haul their waste to an existing community garden or other existing operation accepting or utilizing such waste in the Project area or vicinity.

SB 1383 requires every jurisdiction to provide organic waste collection services to all residents and businesses (CalRecycle 2024). While SB 1383 does not prohibit residents from backyard composting or self-hauling their organic waste (CCR, title 14, section 18984.9), jurisdictions are nevertheless required to provide organic waste collection services via three options (three-container organic waste collection services, two-container organic waste collection services, and/or unsegregated single-container collection services) (CCR, title 14, section 18984). Requiring residents to compost at their properties or to self-haul organic waste in lieu of providing organic waste collection services is not an available option for compliance under SB 1383. Additionally, in non-commercial backyard composting, meat and dairy products cannot be added to the compost. Commercial compost facilities are able to accommodate products such as meat and dairy along with other organic waste (LASAN 2024). As such, requiring at-home composting in lieu of organic waste collection would reduce the amount of organic waste that is able to be diverted in the Project area, thus reducing the extent to which the County contributes to SB 1383 goals and policies and the associated environmental benefits. As with self-hauling of organic waste and/or recyclables, this alternative would also be infeasible for the County to effectively enforce, which would undermine the goals of SB 1383 as well as local and State waste diversion targets. Additionally, this alternative would not achieve the objective of improved customer service to the same degree as the Project. Requiring residents to haul or compost their organic waste may present difficulties for citizens who are not able to transport their own organic waste or who are not able or willing to compost on their properties.

If all residents were to successfully engage in backyard composting or to self-haul their organic waste, this alternative would reduce the mileage traveled by heavy-duty solid waste collection trucks because a portion of the Project area's solid waste would be hauled or composted by residents and organic waste pickups would not be conducted for residential properties. This alternative may also reduce or potentially avoid the Project's cumulatively significant utilities and service systems impact because use of backyard composting and/or local community composting would reduce or eliminate contributions to commercial organic waste processing facilities. However, as noted above, successful enforcement of backyard composting or self-hauling throughout the Project area for all residents would be infeasible. In the absence of the Project, residents who are not able or willing to backyard compost or self-haul organic waste would likely place organic waste in bins designated for refuse. This alternative would thus reduce waste diversion in the Project area, undermining the underlying purpose of the Project. Additionally, this would also undermine any potential reductions in collection truck travel because placing organic waste into refuse bins would not result in reductions in the quantity of solid waste that needs to be picked up. Because it is unknown how many residents would successfully and regularly adopt the practice of backyard composting and/or self-haul for organic waste, this alternative cannot be presumed to avoid the Project's significant and unavoidable air quality impact related to collection truck travel.

For the reasons described above, this alternative has been rejected due to infeasibility, regulatory limitations, and inability to avoid the Project's significant air quality impact.

Other Alternatives Rejected as Infeasible

Commenters raised a variety of other alternative concepts, including pickup of organic waste and/or recyclables on an on-call basis, having the route supervisors and/or Contract Monitors ride along with collection truck drivers, and an alternative with an incentive to reduce waste. These concepts have been evaluated by Public Works and are discussed further below.

The concept of collecting organic waste and recyclables on an on-call basis has been rejected from further consideration. In accordance with the County's Health and Safety Code, garbage or putrescible material shall not be kept for more than 7 days; therefore, collecting organic waste on an on-call basis could potentially be in violation of County Code. Under this alternative, waste collection vehicles would circulate the Project area in an irregular, as-needed fashion. Efficiencies garnered by collection vehicles traveling along weekly routes from property to property would be lost. Collection vehicles may travel different routes each day and may travel longer distances between pickups. Some days may have reduced numbers of collection vehicles circulating the Project area when compared to the Project, while other days may have more vehicles and/or vehicles may need to travel farther. Because it is unknown how many collection trucks would be required on a daily basis and/or how far trucks would travel, this alternative cannot be presumed to avoid the Project's significant and unavoidable air quality impact related to collection truck travel and may in fact worsen impacts. As such, this alternative has been rejected due to its impracticability, its inability to avoid the Project's significant air quality impact, and its potential for violating the County's Health and Safety Code.

Having the route supervisors and/or Contract Monitors ride along with collection truck drivers to reduce total Project-related vehicles has also been rejected from further consideration. Under the proposed Project, Contract Monitor and route supervisor trips would occur in light-duty trucks, which produce less dust when compared to heavy-duty collection trucks. While some benefits may be realized, this alternative would not avoid the Project's significant air quality impact, which is largely attributable to collection truck travel on unpaved roads. Additionally, the efficacy of Contract Monitors and route supervisors relates to their ability to travel throughout the service areas, monitoring multiple collection trucks and routes per day. This alternative has been rejected due to its inability to avoid the Project's significant air quality impact.

Regarding incentives to reduce waste, such efforts could reduce the overall quantity of solid waste produced in the Project area, thus potentially reducing the number of collection trucks needed to serve the area as a whole. However, incentivizing community members to reduce waste would not be enforceable. As such, the reductions that would be achieved through this alternative are unknown and speculative and, therefore, cannot be quantified into measurable reductions in the number of collection trucks that would be used on a daily basis. Furthermore, solid waste reduction techniques are already employed at the State and local level to encourage reductions in solid waste generation. Examples include the California Beverage Container Recycling Program, State laws to reduce packaging materials, Public Works' Smart Gardening Program, Public Works' Waste Tire Recycling Program, and Public Works' Smart Business Recycling Program. These programs, laws, and initiatives seek to reduce waste and/or encourage reuse through educational materials, incentives, and programs administrated by government entities or non-profit organizations. The State has an established goal of diverting 75% of solid waste from landfills (SB 1383, AB 341). As such, programs and incentives for reducing and/or reusing solid waste are anticipated to continue to be supported and promulgated at the State and local levels, regardless of Project implementation. This alternative has been rejected due to its inability to avoid the Project's significant air quality impact.

Project Alternatives Selected for Analysis

This section provides an evaluation of the environmental effects of each alternative relative to the environmental effects of the proposed Project. The environmental analysis for the selected alternatives focuses on the impact areas that are discussed in detail in this Draft EIR (air quality and utilities and service systems), and a brief discussion is provided with respect to impacts determined to be less than significant, only where an alternative may have slight differences in impacts. Impact categories for which the Project would have no impact are not discussed, as none of the alternatives carried forward for detailed analysis would result in increased impacts relative to these categories.

The environmental impact conclusions for each alternative are listed in the alternatives summary matrix provided at the end of this discussion.

The alternatives to be analyzed in comparison to the proposed Project include:

- **Alternative 1:** No Project Alternative
- **Alternative 2:** Alternating Residential Recycling Week Alternative
- **Alternative 3:** Commingling Alternative
- **Alternative 4:** Cart Rollout Alternative
- **Alternative 5:** Split-Body Truck Alternative

6.3.1 Alternative 1: No Project Alternative

Description

Section 15126.6, subdivision (e) of the CEQA Guidelines requires that an EIR evaluate the specific alternative of "no project" along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. As specified in section 15126.6, subdivision (e)(3)(A) of the CEQA Guidelines, the no project alternative for an ongoing operation consists of the circumstance under which the existing operation continues into the future. The projected impacts of the proposed plan or alternative plans are compared to the impacts that would occur under the existing plan. Accordingly, the No Project Alternative presumes the proposed Project would not proceed, and the current solid waste collection systems would remain in the Project area. Residential customers would continue to contract individually with the waste hauler of their choice, and such waste haulers would not necessarily provide recyclable pickups or organic waste pickups. Commercial customers would continue to receive solid waste collection service through the existing nonexclusive commercial franchise administered by Public Works. Consistent with existing conditions, waste haulers would not assist with cleanup of illegal dumping and fees may increase at any time. Under the No Project Alternative, it is anticipated that the State would find the County to be in violation of SB 1383, and the County would be fined up to $10,000 per day for the lifetime of the No Project Alternative.

Ability to Meet Project Objectives

Alternative 1 would not achieve any of the Project objectives. This alternative would not establish new solid waste collection system(s) in the unincorporated north County areas. It would not reduce illegal dumping, improve customer service, offer a consistent level of service, or carefully manage rates in the Project area. Additionally, this alternative would not facilitate compliance with applicable State laws and regulations relating to solid waste collection and diversion.

Comparison of the Environmental Effects of Alternative 1 to the Proposed Project

Alternative 1 would avoid all the Project's impacts, including its significant and unavoidable impacts in the categories of air quality and utilities and service systems. Specifically, current solid waste service levels would be maintained such that no additional collection truck travel would be added to the Project area, thus avoiding the Project's significant and unavoidable air quality impact. Organic waste would continue to be disposed of in landfills; as such, Alternative 1 would not contribute to statewide demands for organic waste processing facilities. Project impacts determined to be less than significant, such as noise from the additional collection trucks and the visual effects of increased dust, would also be avoided by Alternative 1.

Conversely, certain environmental benefits that would be achieved by the Project would not be realized under Alternative 1. Specifically, diversion of organic wastes from landfills reduces emissions of short-lived climate pollutants, which are key contributors to climate change. Diversion of organic wastes from landfills has been identified as a critical component of the State's climate change legislation. Organic waste in landfills emits 20% of the State's methane, which is 84 times more potent than carbon dioxide (Sonoma County 2024). Reducing the amount of organic waste disposed of in landfills prevents increases in the atmospheric release of fugitive methane emissions associated with the anaerobic breakdown of organic waste. CalRecycle has developed and adopted a regulatory approach, the Short-Lived Climate Pollutants: Organic Waste Reductions Regulation, requiring jurisdictions and other regulated entities to implement a suite of programs to achieve SB 1383's statewide mandates. One of the provisions of this regulation involves collection of organic waste, with a focus on mandatory source-separated collection of organic waste.

The County recently adopted an ordinance requiring all businesses and residents in County unincorporated communities to subscribe to organic waste collection services, in compliance with this requirement. However, source-separated organic waste collection and diversion services are not readily available in the Project area under current conditions. As such, under Alternative 1, the County would not achieve implementation and compliance with SB 1383 and the State's associated organic waste reduction mandates. Alternative 1 would not contribute to this larger-scale environmental initiative.

6.3.2 Alternative 2: Alternating Residential Recycling Week Alternative

Description

This alternative presumes that refuse and organic waste would be collected every week, and recyclables would be collected every other week, at residential properties. This alternative would establish "recycling weeks" and "non-recycling weeks" for residential customers, and all residential properties throughout the Project area would have the same recycling week and non-recycling week, such that residential recycling trucks would only circulate the Project area on a biweekly basis. Commercial services would be identical to the proposed Project, as would services related to bulky items and illegal dumping pickup.

This alternative would reduce the total number of collection trucks circulating the Project area during non-recycling weeks. This alternative would also be expected to reduce truck pass-bys and solid waste pickups experienced by a typical residential property during the non-recycling week. Conversely, during recycling weeks, the number of daily collection trucks circulating the Project area would increase because the volume of recyclables collected during recycling weeks would double and each recycling collection truck would be expected to fill twice as fast. More

specifically, Public Works estimates that 4 additional collection trucks would be required on a daily basis during recycling weeks, such that a total of 32 collection trucks would circulate the Project area on a daily basis during recycling weeks. In the future year scenario (2045), this would increase to 39 daily collection trucks, based on population growth estimates and associated increases in demands for solid waste collection services. For comparison, the Project would be associated with 28 daily collection trucks under 2025 conditions and 34 daily collection trucks under 2045 conditions. In balance, total annual roadway mileage driven by collection trucks would be comparable to that of the proposed Project, with certain weeks having more roadway mileage than the Project and certain weeks having reduced roadway mileage compared to the Project.

Ability to Meet Project Objectives

Alternative 2 would meet all of the Project objectives to the same degree as the Project. This alternative would still establish new solid waste collection system(s) in the unincorporated north County areas. This alternative would still reduce illegal dumping, improve customer service, offer a consistent level of service, and carefully manage rates in the Project area. Additionally, this alternative would still facilitate compliance with applicable State laws and regulations relating to solid waste collection and diversion. Establishing alternating recycling weeks for residential customers would not compromise achievement of any of these objectives; rather, it simply represents a different method of providing the same services as the proposed Project.

Comparison of the Environmental Effects of Alternative 2 to the Proposed Project

Air Quality

Air quality impacts would increase during recycling weeks and decrease during non-recycling weeks. Air quality analysis prepared pursuant to CEQA examines the worst-case scenario for emissions on a daily basis and compares those emissions to applicable thresholds. As such, air quality impacts would increase under Alternative 2 as compared to the Project because additional collection trucks would circulate the Project area each day during recycling week. The results of air quality modeling for Alternative 2 are shown in Table 6-1 and are compared to the Project's emissions and applicable thresholds. Table 6-1 only shows the results of daily emissions modeling. Annual emissions would be the same or similar between Alternative 2 and the proposed Project because the total annual roadway mileage driven by collection trucks would be comparable to that of the proposed Project.

Table 6-1. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Alternative 2

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Alternative 2						
2025	0.80	16.48	14.25	0.15	1,053.92	107.04
2045	0.56	12.15	9.69	0.13	1,227.88	124.86
Proposed Project						
2025	0.77	13.82	14.06	0.01	915.21	92.98
2045	0.43	10.67	9.15	0.11	1,015.35	103.27
AVAQMD Threshold	*137*	*137*	*548*	*137*	*82*	*65*
Threshold Exceeded?	No	No	No	No	Yes	Yes

Table 6-1. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Alternative 2

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	Yes	Yes

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District.
See Appendix B, Air Quality Data, for complete results.

Based on the results presented in Table 6-1, air quality impacts would remain significant and unavoidable under Alternative 2 and would increase compared to the proposed Project.

Utilities and Service Systems

Alternative 2 represents a different methodology for collection of recyclables and would not change the total amount of refuse that is disposed of or the total amount of recycling and organic waste that is diverted relative to the Project. As such, effects to disposal facilities and composting facilities would remain the same as those of the Project. However, the throughput of recyclables to transfer/processing facilities would change under Alternative 2. Alternative 2 would create an inconsistent stream of recyclables delivered to transfer/processing facilities. Every other week, the amount of recyclables delivered to transfer/processing facilities would increase under Alternative 2. Nevertheless, as demonstrated in Section 3.2, the maximum permitted daily throughput of existing and planned transfer/processing facilities that could serve the Project area is well above the average daily solid waste generation of the Project area. Specifically, the Project area's daily solid waste generation accounts for approximately 0.1% of daily permitted throughput of transfer/processing facilities in the Project region. Even if the daily solid waste generation in the Project area were to double, daily solid waste generation would still be 0.3% of the maximum permitted daily throughput of existing and planned transfer/processing facilities in the Project region. As such, impacts would remain less than significant at the Project level. Cumulative-level impacts would remain significant and unavoidable for the same reasons as those set forth for the Project.

Other Environmental Topical Areas

Under the proposed Project, a typical residential property would generally experience a total of three solid waste collection pickups per week on collection day (one for refuse, one for recycling, and one for organic waste). Under Alternative 2, the number of solid waste pickups would reduce to two pickups during non-recycling weeks and would remain at three pickups during recycling weeks. As such, while the total number of trucks circulating the Project area would increase on a biweekly basis, a typical individual resident may experience an overall reduction in the number of solid waste pickup events at their property. This reduction in pickup events would lessen noise impacts at typical residential properties. With regards to the community concerns for traffic nuisances attributable to solid waste pickups, such nuisances would slightly decrease under Alternative 2 because fewer collection trucks would be present on a typical residential street during non-recycling weeks. Overall, effects related to noise, aesthetics, and certain aspects of transportation (namely, traffic nuisances) would be reduced but not avoided by Alternative 2. As such, impacts in these categories would remain less than significant.

Impacts that are based on the Project's annual activities, including GHG emissions and energy consumption, would remain the same between the proposed Project and Alternative 2 because total annual roadway miles traveled by collection trucks would be generally equivalent. As such, annual GHG emissions and energy consumption would be the same or similar for the Project and Alternative 2. Because total mileage traveled would remain generally the same, roadway wear, erosion and sedimentation effects, and any associated maintenance activities would also remain generally the same between the Project and Alternative 2. Effects related to hazards and hazardous materials would remain generally the same between the Project and Alternative 2 because the same types and quantities of waste would be hauled.

The number of new employees required for Alternative 2 would slightly increase relative to the proposed Project because additional collection truck operators would be needed for recycling weeks. The total number of net new employees required for Alternative 2 is estimated to be 23 employees during recycling weeks under the 2025 scenario and 25 employees during recycling weeks under the 2045 scenario. For comparison, the Project would be associated with 19 new employees under the 2025 scenario and 20 new employees in the 2045 scenario. The increased employment for Alternative 2 would increase commuter vehicle trips in the Project area on recycling weeks. However, consistent with the proposed Project, such trips would remain less than the County's screening criteria of 110 daily vehicle trips, pursuant to the County's Transportation Impact Analysis Guidelines. As such, daily commuter vehicle trips would increase under Alternative 2 but would remain below a level of significance related to transportation vehicle miles traveled (VMT) impacts under CEQA. Employment growth would be slightly expanded under Alternative 2; however, consistent with the proposed Project, the additional employment would remain minimal and would not be substantial relative to employment growth projections in the Project area. Population and housing impacts would remain less than significant.

In conclusion, some environmental benefits would be realized through Alternative 2. Specifically, individual residents would experience fewer noise events associated with solid waste pickups and collection truck pass-bys. Similarly, instances of traffic nuisances may be reduced from the vantage point of individual residents, which would reduce effects in the category of transportation. Conversely, commuter vehicle trips would increase in the Project area on recycling weeks, which would increase transportation-related VMT impacts. In balance, transportation impacts would be considered similar to those of the Project. Impacts in other environmental categories would remain largely the same as those of the Project.

6.3.3 Alternative 3: Commingling Alternative

Description

This alternative would limit the number of collection trucks that service each property, as further described below, and would require that all debris be sent to a Material Recovery Facility (MRF) that qualifies as a high-diversion organic waste processing facility pursuant to SB 1383 (hereafter referred to as an HD MRF). At the HD MRF, as much organic waste as possible would be removed and diverted to an organic waste processing facility. This alternative is divided into two potential options for collection systems:

- **Single-Truck Commingling Option.** Under this option, all commercial customers would receive one dumpster and all residential customers would receive one cart. One collection truck would service each customer. Customers would be instructed to combine refuse, recyclables, and organic waste into the single cart or dumpster.

- **Two-Truck Commingling Option.** Under this option, all commercial customers and residential customers would have a minimum of two waste containers and be serviced by two collection trucks. The first container would be for wet materials (refuse and organic waste) and the second container would be for dry materials (recyclable debris).

Similar to Alternative 2, this alternative represents a different method of providing the same services as the proposed Project. Alternative 3 would not change the total amount of solid waste that is collected in the Project area and subsequently disposed of or diverted. However, commingling may afford additional efficiencies in collection that would not be realized by the Project. As stated in Chapter 2, Section 2.7 of this Draft EIR, implementing a three-cart system is anticipated to result in the need for two additional collection trucks per day based on inefficiencies that are expected to be created by collecting waste in three separate streams. The analysis for Alternative 3 assumes that the increased efficiencies, compared to the Project, would result in a reduction in two daily collection trucks when compared to the Project. Actual efficiencies may be slightly less or slightly greater; however, a reduction in two daily collection trucks relative to the Project is considered reasonable. Service levels related to bulky item pickup and illegal dumping removal would remain the same as the Project. As such, collection truck counts anticipated for Alternative 3 would be 26 daily collection trucks under the 2025 scenario and 31 daily collection trucks under the 2045 scenario. For comparison, the Project would be associated with 28 daily collection trucks under 2025 conditions and 34 daily collection trucks under 2045 conditions.

Ability to Meet Project Objectives

Alternative 3 would meet the Project objectives but not to the same degree as the Project. This alternative would still establish new solid waste collection system(s) in the unincorporated north County areas. It would still reduce illegal dumping, improve customer service, offer a consistent level of service, and carefully manage rates in the Project area. Additionally, this alternative would still facilitate compliance with applicable State laws and regulations relating to solid waste collection and diversion. However, this objective may be achieved to a lesser degree by Alternative 3 because SB 1383 encourages source-separated collection of organic wastes (CalRecycle 2019).

Comparison of the Environmental Effects of Alternative 3 to the Proposed Project

Air Quality

Air quality impacts would decrease for Alternative 3 relative to the Project due to the expected reduction in the number of collection trucks circulating the area when compared to the Project. The results of air quality modeling for Alternative 3 are shown in Table 6-2 and Table 6-3 and are compared to the Project's emissions and applicable thresholds.

Table 6-2. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Alternative 3

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Alternative 3						
2025	0.74	13.21	13.29	0.11	819.15	83.16
2045	0.42	10.17	8.02	0.01	972.91	98.89

Table 6-2. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Alternative 3

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Proposed Project						
2025	0.77	13.82	14.06	0.01	915.21	92.98
2045	0.43	10.67	9.15	0.11	1,015.35	103.27
AVAQMD Threshold	*137*	*137*	*548*	*137*	*82*	*65*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District.
See Appendix B, Air Quality Data, for complete results.

Table 6-3. Estimated Maximum Annual Operation Criteria Air Pollutant Emissions – Alternative 3

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
Alternative 3						
2025	0.04	1.21	0.78	0.01	103.04	10.47
2045	0.02	1.11	0.38	0.01	122.35	12.44
Proposed Project						
2025	0.04	1.36	0.86	0.02	115.12	11.68
2045	0.02	1.18	0.41	0.01	127.71	12.99
AVAQMD Threshold	*25*	*25*	*100*	*25*	*15*	*12*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Threshold Exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District; N/A = not applicable.
See Appendix B, Air Quality Data, for complete results.

Based on the results presented in Table 6-2 and in Table 6-3, air quality impacts would remain significant and unavoidable under Alternative 3 but would be reduced compared to the proposed Project.

Utilities and Service Systems

Alternative 3 represents a different methodology for solid waste collection and would not substantially change the total amount of refuse that is disposed of or the total amount of recycling and organic waste that is diverted relative to the Project. As such, effects to disposal facilities and composting facilities would be similar to those of the Project. However, the presence of HD MRFs in the County, Project area, and/or region that would be available for use by waste hauler(s) serving the Project area is currently unknown and speculative. While several of these facility types

are under development in the Southern California region, it is currently unknown and speculative as to whether such facilities would comply with SB 1383 requirements for high-diversion organic waste processing and/or whether such facilities would be available for use by the waste hauler(s) selected to serve the Project area. As such, available HD MRF capacity for Alternative 3 is unknown and cannot be studied in detail. Therefore, Project-level impacts would be considered significant and unavoidable, which would be considered an increase in impacts relative to the Project. As with the proposed Project, cumulative-level impacts would remain significant and unavoidable because the total amount of organic waste requiring processing would still increase relative to existing conditions under Alternative 3. Alternative 3 would thus still contribute to the statewide shortage of organic waste processing facilities.

Other Environmental Topical Areas

Under the proposed Project, a typical property would generally experience a total of three solid waste pickups per week on collection day (one for refuse, one for recycling, and one for organic waste). Under Alternative 3, the number of solid waste pickups would generally range from one to two pickups per week on collection day. As such, a typical individual resident or business would experience an overall reduction in the number of solid waste pickup events at their property. This reduction in pickup events would lessen noise impacts and aesthetic impacts attributable to waste collection pickups and truck pass-bys. Additionally, with regards to community concerns for traffic nuisances attributable to waste collection pickups, such nuisances would decrease under Alternative 3 because fewer collection trucks would be present on a typical residential or commercial street. Overall, effects related to aesthetics, noise, and certain aspects of transportation (namely, traffic nuisances) would be reduced by Alternative 3. However, since the total number of collection trucks circulating the Project area would still increase relative to existing conditions, impacts in these categories would not be entirely eliminated and thus would remain less than significant.

Impacts that are based on the Project's annual activities, including GHG emissions and energy consumption, would be reduced between the proposed Project and Alternative 3 because fewer collection trucks would be required. As such, annual GHG emissions and energy consumption would be reduced, as would roadway wear, erosion and sedimentation effects, and any associated maintenance activities. Effects related to hazards and hazardous materials would remain generally the same between the Project and Alternative 3 because the same types and quantities of waste would be hauled.

The number of new employees required for Alternative 3 would slightly decrease relative to the proposed Project. The total number of net new employees required for Alternative 3 would be 17 employees under both the 2025 and 2045 scenarios. For comparison, the Project would be associated with 19 new employees per day under the 2025 scenario and 20 new employees per day in the 2045 scenario. The decreased employment for Alternative 3 would decrease commuter vehicle trips in the Project area. Employment growth would be slightly reduced under Alternative 3. Population and housing impacts, as well as transportation-related VMT impacts, would be reduced and would remain less than significant.

6.3.4 Alternative 4: Cart Rollout Alternative

Description

Many residential properties within the Project area are accessible only by privately owned and maintained roads. This alternative would require all customers along private roads to bring their carts and dumpsters to the nearest County-maintained road for collection service every week. The waste hauler would only provide solid waste pickup

at designated locations along County roads and would not enter onto private roads. The number of collection trucks circulating the Project area on a daily basis would remain the same between the Project and Alternative 4.

The cart rollout concept was presented to the community in a prior iteration of the Project Description, published in June 2022 as part of the Recirculated Initial Study/Negative Declaration for the Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Vally West Garbage Disposal Districts and/or Residential Franchise Program (Public Works 2022). Numerous concerns were raised by the community in response, including safety concerns associated with waste containers proliferating at intersections, concerns related to the distances that some citizens may need to haul their carts/dumpsters, and concerns for citizens who are unable to haul their waste. Nevertheless, for the purposes of this Draft EIR, this alternative has been carried forward for detailed evaluation because it has the potential to reduce the Project's significant and unavoidable air quality impact pertaining to dust emissions. As shown in Chapter 2, Table 2-3, Road Types in the Project Area, of this Draft EIR, approximately 70% of road mileage in the Project area is privately owned and a majority of these roads are unpaved. Eliminating the need for collection trucks to travel across private unpaved roads would substantially reduce the daily mileage of truck travel on unpaved roads, which would result in a substantial reduction in dust emissions, as further discussed below.

Ability to Meet Project Objectives

Alternative 4 would meet all of the Project objectives but not to the same degree as the Project. This alternative would still establish new solid waste collection system(s) in the unincorporated north County areas. It would still reduce illegal dumping, offer a consistent level of service, and carefully manage rates in the Project area. However, this alternative would not achieve the objective of improved customer service to the same degree as the Project. As discussed above, requiring customers on private roads to haul carts and dumpsters to the nearest public right-of-way would present various challenges and encumbrances to customers, including the need for some customers to haul their carts/dumpsters over long distances; safety concerns, nuisances, and visual blight that could be caused by numerous carts/dumpsters being placed at intersections; and difficulties that may be faced by citizens who are unable to haul their waste to the nearest County-maintained road. This alternative would still facilitate compliance with applicable State laws and regulations relating to solid waste collection and diversion.

Comparison of the Environmental Effects of Alternative 4 to the Proposed Project

Air Quality

Air quality impacts would decrease for Alternative 4 relative to the Project due to the expected reduction in heavy-duty truck travel over unpaved roads. This analysis assumes that carts/dumpsters would be taken on foot to the nearest public right-of-way or transported in personal vehicles as part of existing trips (e.g., commuter trips or errands). The results of air quality modeling for Alternative 4 are shown in Table 6-4 and Table 6-5 and are compared to the Project's emissions and applicable thresholds.

Table 6-4. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Alternative 4

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Alternative 4						
2025	0.76	14.50	13.63	0.13	65.54	9.70

Table 6-4. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Alternative 4

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2045	0.43	10.67	9.15	0.11	75.20	11.03
AVAQMD Threshold	*137*	*137*	*548*	*137*	*82*	*65*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
Proposed Project						
2025	0.77	13.82	14.06	0.01	915.21	92.98
2045	0.43	10.67	9.15	0.11	1,015.35	103.27
AVAQMD Threshold	*137*	*137*	*548*	*137*	*82*	*65*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District.
See Appendix B, Air Quality Data, for complete results.

Table 6-5. Estimated Maximum Annual Operation Criteria Air Pollutant Emissions – Alternative 4

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
Alternative 4						
2025	0.04	1.39	0.82	0.02	8.28	1.21
2045	0.02	1.18	0.40	0.01	9.53	1.41
AVAQMD Threshold	*25*	*25*	*100*	*25*	*15*	*12*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
SCAQMD Threshold	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Threshold Exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Proposed Project						
2025	0.04	1.36	0.86	0.02	115.12	11.68
2045	0.02	1.18	0.41	0.01	127.71	12.99
AVAQMD Threshold	*25*	*25*	*100*	*25*	*15*	*12*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Threshold Exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District; N/A = not applicable.
See Appendix B, Air Quality Data, for complete results.

Based on the results presented in Table 6-4 and in Table 6-5, air quality impacts would be less than significant for Alternative 4 and would thus be reduced relative to the proposed Project. It is noted, however, that Alternative 4 may lead to an unknown increase in personal vehicle trips on unpaved roads as some customers may haul their carts or dumpsters to the nearest public right-of-way using their personal vehicles. If additional personal vehicle trips were to result that are not part of existing trips, emissions would be greater than what is shown in Table 6-4 and Table 6-5, which could potentially lead to an exceedance of the AVAQMD significance thresholds depending on the number and/or length of new trips. Given that the PM_{10} emissions are close to the daily AVAQMD threshold, it is likely that impacts would be significant and unavoidable, assuming that even a small percentage of residents use their personal vehicles to haul carts/dumpsters as new vehicle trips. Nevertheless, impacts would still be reduced relative to the Project because heavy-duty truck travel on private unpaved roads would be eliminated and at least a portion of personal vehicle trips would likely occur as part of an existing trip.

Utilities and Service Systems

Alternative 4 represents a different methodology for collection of solid waste and would not change the total amount of refuse that is disposed of or the total amount of recycling and organic waste that is diverted relative to the Project. As such, effects to disposal facilities, composting facilities, and transfer/processing facilities would remain the same as those of the Project. Project-level impacts would remain less than significant and cumulative-level impacts would remain significant and unavoidable for the same reasons as those set forth for the Project.

Other Environmental Topical Areas

Alternative 4 would reduce noise, aesthetic, and transportation impacts along private roadways throughout the Project area. Under Alternative 4, solid waste collection trucks would not drive along private roads. As such, individuals residing and/or working along private roads would not generally be exposed to noise from solid waste collection trucks. Additionally, ephemeral aesthetic impacts from collection trucks (e.g., dust plumes, presence of heavy-duty trucks on rural roadways) would not occur on private roads. Traffic nuisances caused by solid waste collection pickups would not be experienced on private roads. As noted above under “Air Quality,” Alternative 4 may lead to an unknown increase in personal vehicle trips on unpaved roads as some customers may haul their carts or dumpsters to the nearest public right-of-way using their personal vehicles. Such trips would be expected to occur using passenger vehicles or light-duty trucks, which would still produce dust plumes and noise, albeit less than what would be produced by heavy-duty collection trucks.

Individuals who live and/or work near the confluence of public and private roadways may be exposed to increased noise, aesthetic effects, and traffic-related nuisances because these locations may have a proliferation of carts/dumpsters requiring pickup. Collection trucks may spend more time at these locations than they would for a typical pickup event, given the increased number of carts and/or dumpsters required to be emptied at a single location. Additionally, the proliferation of carts/dumpsters at select roadside locations may present traffic safety concerns. Overall, effects related to noise, aesthetics, and certain aspects of transportation (namely, traffic nuisances) would be reduced at some locations and increased at others when compared to the Project. In balance, impacts would remain less than significant and would be considered similar to those of the Project.

Roadway wear, erosion and sedimentation effects, and any associated maintenance activities would be reduced under Alternative 4 because heavy-duty truck travel along unpaved roads would be reduced. Effects related to hazards and hazardous materials would remain generally the same between the Project and Alternative 4 because the same types and quantities of waste would be hauled. Effects related to GHG emissions and energy consumption may be reduced relative to the Project due to the potential for roadway miles traveled to decrease.

The number of new employees required for Alternative 4 would be expected to remain largely the same relative to the Project because the same number of collection trucks would be in circulation. As such, employment growth and associated commuter trips and transportation-related VMT impacts would be the same as the Project and would thus remain less than significant.

6.3.5 Alternative 5: Split-Body Truck Alternative

Description

For customers receiving cart service, instead of three standard, single-commodity collection trucks (refuse, recyclables, and organic waste), there would be two collection trucks. One standard, single-commodity collection truck would collect refuse and one split-body truck would collect both recycling and organic waste. The use of split-body trucks for collection of recyclables and organic waste would reduce the number of collection trucks that would serve each cart customer. Cart customers are generally residential properties; as such, Alternative 5 would generally reduce truck pass-bys and pickup events for residential areas. Split-body trucks would not be able to service dumpster customers because dumpsters cannot be loaded into separate compartments. As such, waste collection would be established in the same manner as the proposed Project for customers receiving dumpster service.

Split-body trucks vary in design, including some that are side-loaders and others that are rear-loaders. All split-body trucks have a heavier tare weight due to the additional structural components and hydraulics that they require. Side-loader split-body trucks have a 1-ton-heavier tare weight than single-commodity trucks, while split-body rear-loaders tare at 3.5 tons heavier than a single-commodity truck (Recology, pers. comm., 2023; Waste Management, pers. comm., 2023). Moreover, split-body trucks have reduced payload capacity due to their heavier tare weights, resulting in a higher number of collection trucks needed to collect the same amount of waste when compared to standard, single-commodity collection trucks (Recology, pers. comm., 2023). Additionally, one compartment of split-body trucks typically fills faster than the other compartment due to differences in the volume and compaction rates of different types of waste (Recology, pers. comm., 2023). For split-body trucks used to collect recyclables and organic waste, the organic waste compartment of the truck is anticipated to fill before the recyclables portion. Once one compartment is filled, the truck would need to travel from the service area to a transfer station or disposal facility to empty both compartments before resuming collection, which would decrease the number of customers each truck services in a day.

Additional inefficiencies may also be caused by the unpredictable and inconsistent nature of the amount of each waste type that haulers collect from week to week. If the amount of one or more types of solid waste generated in a given week is higher than anticipated, split-body trucks have reduced ability to accommodate the disproportionate need compared to single-commodity collection trucks. For example, haulers are expected to collect more organic waste during months when many property owners remove brush and other organic waste for fire clearance. Excess organic waste and/or recyclables may also be collected during holiday seasons due to increased gatherings and celebrations. In these instances, split-body trucks may need to travel farther on a given collection day and/or additional trucks may need to be put into circulation to cover the additional demands. In addition, split-body trucks cannot easily collect oversized commodities such as cardboard appliance boxes. Use of split-body trucks may also lead to higher rates of fleet turnover and truck purchases. If one side of a truck becomes worn, the entirety of the truck requires replacement. Recyclables such as aluminum and glass result in quicker wearing when compared to organic waste. As such, trucks may be replaced when the organic waste collection side of the truck is still in operating condition but the recyclables side has reached the end of its service life.

Based on the various inefficiencies described above, Alternative 5 is assumed to require circulation of more collection trucks on a daily basis when compared to the Project, with each truck traveling a greater distance each day, to service the same number of customers in the proposed service areas. More specifically, based on the inefficiencies described above, Public Works determined that the use of split-body trucks for all cart customers in the Project area would increase the number of trucks required to collect organic waste and recyclables by a factor of 1.5. This would result in an increase of approximately three collection trucks circulating the Project area per day, when compared to the Project. As such, collection truck counts anticipated for Alternative 5 would be 31 daily collection trucks under the 2025 scenario and 37 daily collection trucks under the 2045 scenario. For comparison, the Project would be associated with 28 daily collection trucks under 2025 conditions and 34 daily collection trucks under 2045 conditions.

Despite the inefficiencies that are anticipated to result from use of split-body trucks, environmental benefits have also been documented in association with use of split-body trucks. These benefits include lower fuel usage, fewer air emissions, and reduced traffic and safety impacts on community streets. However, such benefits are tied to the use of fewer trucks, which would not be realized in the Project area (EPA 1999; Waste Management, pers. comm., 2023). As part of the evaluation of this alternative, Public Works interviewed jurisdictions and solid waste management companies with knowledge in the use of split-body trucks, including the City of Visalia, Waste Management, and Recology. The City of Visalia reported that split-body trucks had been used in its jurisdiction in the past. Their use was discontinued several years ago. Reasons cited for discontinuation included higher costs to maintain and purchase split-body trucks, issues with truck reliability, and reduced efficiencies relative to single-commodity trucks. Specific reasons cited for the reduced efficiency included increased road miles traveled, fewer customers served per truck, issues involving one commodity filling up faster than the other, and issues encountered with the trucks during inclement weather (City of Visalia, pers. comm., 2024). Representatives from Waste Management reported that split-body trucks are not typically used in their service area for a variety of reasons, including uneven weight distribution of the trucks and the potential for associated safety risks; reduced flexibility, efficiency, and capacity relative to single-commodity collection trucks; the need for more collection trucks when split-body trucks are used; and the potential for contamination between compartments, among other reasons (Waste Management, pers. comm., 2023). Recology uses split-body trucks in portions of its service area, and representatives from Recology cited a variety of pros and cons to using split-body trucks. Pros cited by Recology included fewer collection trucks and drivers in areas where split-body trucks are in use, and cons included cost, weight differences between chambers within each truck, and issues accepting oversized recyclables (Recology, pers. comm., 2023). It is noted that based on information from Waste Management, the need for fewer trucks and drivers when using a split-body system is largely tied to the profile of the service area, and such reductions would not be realized in the Project area (Waste Management, pers. comm., 2023).

Ability to Meet Project Objectives

Alternative 5 would meet all of the Project objectives to the same degree as the Project. This alternative would still establish new solid waste collection system(s) in the unincorporated north County areas. It would still reduce illegal dumping, improve customer service, offer a consistent level of service, and carefully manage rates in the Project area. This alternative may result in some nuisances for customers wishing to recycle large-scale objects, such as large cardboard boxes. This alternative is also anticipated to result in increased costs for customers. Conversely, this alternative would result in fewer truck pass-bys and pickups for a typical residential cart customer when compared to the Project. When these different considerations are balanced, this alternative is considered to meet the objective for improved customer service to generally the same degree as the Project. Alternative 5 would still facilitate compliance with applicable State laws and regulations relating to solid waste collection and diversion.

Comparison of the Environmental Effects of Alternative 5 to the Proposed Project

Air Quality

Air quality impacts would increase for Alternative 5 relative to the Project due to the expected increase in the number of collection trucks circulating the area when compared to the Project and the heavier weights of split-body trucks. The results of air quality modeling for Alternative 5 are shown in Table 6-6 and Table 6-7 and are compared to the Project's emissions.

Table 6-6. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Alternative 5

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Alternative 5						
2025	0.79	15.86	14.09	0.14	1,013.20	102.70
2045	0.45	12.32	9.51	0.13	1,179.50	120.00
Proposed Project						
2025	0.77	13.82	14.06	0.01	915.21	92.98
2045	0.43	10.67	9.15	0.11	1,015.35	103.27
AVAQMD Threshold	*137*	*137*	*548*	*137*	*82*	*65*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District.
See Appendix B, Air Quality Data, for complete results.

Table 6-7. Estimated Maximum Annual Operation Criteria Air Pollutant Emissions – Alternative 5

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
Alternative 5						
2025	0.04	1.58	0.86	0.02	127.40	12.95
2045	0.02	1.40	0.44	0.02	148.34	15.10
AVAQMD Threshold	*25*	*25*	*100*	*25*	*15*	*12*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**Yes**	**Yes**
SCAQMD Threshold	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Threshold Exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Proposed Project						
2025	0.04	1.36	0.86	0.02	115.12	11.68
2045	0.02	1.18	0.41	0.01	127.71	12.99
AVAQMD Threshold	*25*	*25*	*100*	*25*	*15*	*12*

Table 6-7. Estimated Maximum Annual Operation Criteria Air Pollutant Emissions – Alternative 5

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
Threshold Exceeded?	No	No	No	No	Yes	Yes
SCAQMD Threshold	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Threshold Exceeded?	N/A	N/A	N/A	N/A	N/A	N/A

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; AVAQMD = Antelope Valley Air Quality Management District; SCAQMD = South Coast Air Quality Management District; N/A = not applicable.
See Appendix B, Air Quality Data, for complete results.

Based on the results presented in Table 6-6 and in Table 6-7, air quality impacts would remain significant and unavoidable under Alternative 5 and would increase compared to the proposed Project.

Utilities and Service Systems

Alternative 5 represents a different methodology for collection of solid waste and would not change the total amount of refuse that is disposed of or the total amount of recycling and organic waste that is diverted relative to the Project. As such, effects to disposal facilities, composting facilities, and transfer/processing facilities would remain the same as those of the Project. As such, Project-level impacts would remain less than significant and cumulative-level impacts would remain significant and unavoidable for the same reasons as those set forth for the Project.

Other Environmental Topical Areas

Under the proposed Project, a typical property would generally experience a total of three solid waste collection pickups per week on collection day (one for refuse, one for recycling, and one for organic waste). Under Alternative 5, the number of solid waste pickups would be reduced to two solid waste collection pickups per week on collection day for cart customers. Cart customers are generally residential properties; as such, Alternative 5 would generally reduce solid waste pickup events in residential areas. This reduction in pickup events would lessen noise impacts and traffic nuisances attributable to solid waste pickups.

While the total number of trucks circulating the Project area would increase under Alternative 5, some residential roadways may experience a decrease in truck pass-bys while others may experience an increase in truck pass-bys, depending on collection route configuration and the number of properties located on a given roadway. Reductions in trucks pass-bys would reduce noise, the aesthetic effects of heavy-duty trucks (e.g., dust plumes, presence of trucks on rural roadways), and traffic nuisances attributable to heavy-duty truck travel, while increases in truck pass-bys would generally increase these effects.

Impacts that are based on the Project's annual activities, including GHG emissions and energy consumption, would increase between the proposed Project and Alternative 5 because more collection trucks would be required each week. As such, annual GHG emissions and energy consumption would increase relative to the Project but would remain less than significant. The Initial Study prepared for the Project studied a higher volume of daily collection trucks when compared to both the Project and Alternative 5, and impacts were still demonstrated to be less than significant (see Appendix A, Scoping Report). As such, even though GHG emissions and energy consumption would increase for Alternative 5, impacts would remain less than significant.

Split-body trucks are heavier and their use may therefore increase roadway wear relative to the Project, as well as associated erosion and sedimentation effects and road maintenance activities. Conversely, roads receiving a reduction in truck pass-bys could experience a slight decrease in roadway wear based on the overall reduction in the number of heavy-duty trucks passing over the road on a weekly basis. While impacts may increase in some areas and decrease in others, in balance, impacts would be similar to those of the Project and would thus remain less than significant. Effects related to hazards and hazardous materials would remain generally the same between the Project and Alternative 5 because the same types and quantities of waste would be hauled.

The number of new employees required for Alternative 5 would increase relative to the proposed Project. Additional staff would be required to operate the additional collection trucks required under Alternative 5. Typical split-body trucks are fully automated and require one staff to operate each truck. The total number of net new employees required for Alternative 5 is estimated to be 22 employees during under the 2025 scenario and 23 employees under the 2045 scenario. For comparison, the Project would be associated with 19 new employees per day under the 2025 scenario and 20 new employees per day in the 2045 scenario. The increased employment for Alternative 5 would increase commuter vehicle trips in the Project area on recycling weeks. However, consistent with the proposed Project, such trips would remain less than the County's screening criteria of 110 daily vehicle trips, pursuant to the County's Transportation Impact Analysis Guidelines. As such, daily commuter vehicle trips would increase under Alternative 5 but would remain below a level of significance related to transportation VMT impacts as defined under CEQA. Employment growth would be slightly expanded under Alternative 5 as well; however, consistent with the proposed Project, the additional employment would be minor and would not be substantial relative to employment growth projections in the Project area. Population and housing impacts would thus remain less than significant.

In conclusion, some environmental benefits would be realized through Alternative 5. Specifically, individual residents would experience fewer noise events and traffic nuisances associated with solid waste pickups. However, some roadways may experience increased collection truck travel. Given that solid waste pickups are generally noisier than trucks' contributions to roadway noise, Alternative 5 is considered to have reduced noise impacts. With regards to aesthetics, the presence of heavy-duty trucks would increase on some roadways and decrease on others; impacts are thus considered similar to those of the Project. Commuter vehicle trips would increase, which would increase transportation-related VMT impacts. Conversely, reductions in solid waste pickups would reduce traffic nuisances. In balance, transportation impacts would be considered similar to those of the Project.

6.4 Summary Matrix

A matrix displaying the major characteristics and significant environmental effects of each alternative is provided in Table 6-8 to summarize the comparison with the proposed Project.

Table 6-8. Alternatives Summary Matrix

Topic	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Alternating Residential Recycling Week Alternative	Alternative 3: Commingling Alternative	Alternative 4: Cart Rollout Alternative	Alternative 5: Split-Body Truck Alternative
Environmental Impacts Comparison						
Key Impact Areas Evaluated in the Draft EIR						
Air Quality	SU	NI ▼	SU ▲	SU ▼	SU ▼	SU ▲
Utilities and Service Systems	SU	NI ▼	SU =	SU ▲	SU =	SU =
Less-than-Significant Impacts						
Aesthetics	LTS	NI ▼	LTS ▼	LTS ▼	LTS =	LTS =
Energy	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS ▲
Geology and Soils	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS =
Greenhouse Gas Emissions	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS ▲
Hazards/Hazardous Materials	LTS	NI ▼	LTS =	LTS =	LTS =	LTS =
Hydrology/Water Quality	LTS	NI ▼	LTS =	LTS ▼	LTS ▼	LTS =
Noise	LTS	NI ▼	LTS ▼	LTS ▼	LTS =	LTS ▼
Population/Housing	LTS	NI ▼	LTS ▲	LTS ▼	LTS =	LTS ▲
Transportation	LTS	NI ▼	LTS =	LTS ▼	LTS =	LTS =
Comparison of Key Features						
Daily Collection Trucks (2025)	28	21	32	26	28	31
Daily Collection Trucks (2045)	34	26	39	31	34	37
Comparison of Ability to Meet Objectives						
Improved Services	Achieves objective	Would not achieve objective	Achieves objective	Achieves objective	Achieves objective to a lesser degree	Achieves objective

Table 6-8. Alternatives Summary Matrix

Topic	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Alternating Residential Recycling Week Alternative	Alternative 3: Commingling Alternative	Alternative 4: Cart Rollout Alternative	Alternative 5: Split-Body Truck Alternative
State Law Compliance	Achieves objective	Would not achieve objective	Achieves objective	Achieves objective to a lesser degree	Achieves objective	Achieves objective

Notes:
▲ Alternative is likely to result in greater impacts to issue when compared to proposed Project.
= Alternative is likely to result in similar impacts to issue when compared to proposed Project.
▼ Alternative is likely to result in reduced impacts to issue when compared to proposed Project.
NI = No impact
LTS = Less-than-significant impact
SU = Significant and unavoidable impact

6.5 Environmentally Superior Alternative

As indicated in Table 6-8, Alternative 1, the No Project Alternative, would result in the fewest environmental impacts. However, Alternative 1 would fail to comply with regulations adopted by the State for the protection of the environment, including SB 1383. The purpose of SB 1383 is to reduce emissions of short-lived climate pollutants, which is a key component of statewide efforts to reduce GHG emissions. While Alternative 1 would reduce local and basin-wide air quality emissions, this would come at the expense of statewide and global efforts to reduce GHG emissions. As such, Alternative 1 would have larger-scale environmental consequences and, therefore, is not the environmentally superior alternative.

Among the remaining alternatives (Alternatives 2 through 5), Alternative 3 and Alternative 4 are the only alternatives that could reduce the Project's significant air quality impact. As demonstrated above, the reductions in emissions that would be achieved by Alternative 3 would be nominal, and impacts would remain significant and unavoidable. For Alternative 4, impacts would be less than significant assuming that all customers would take carts/dumpsters on foot to the nearest public right-of-way or would transport them in personal vehicles as part of existing trips (e.g., commuter trips or errands). However, it is unlikely that *all* customers would haul their carts/dumpsters on foot or as part of an existing vehicle trip. Assuming that Alternative 4 would result in at least some additional trips in personal vehicles, Alternative 4 would still be expected to result in significant and unavoidable air quality impacts. Nevertheless, given that Alternative 4 would eliminate heavy-duty truck travel on private unpaved roads and given that at least a portion of personal vehicle trips would likely occur as part of an existing trip, Alternative 4 is anticipated to have the greatest reduction in air emissions when compared to the Project. Unlike Alternative 1, Alternative 4 would still achieve compliance with SB 1383 and would thus contribute to statewide GHG emission reductions efforts. For these reasons, Alternative 4 is the environmentally superior alternative as it would accomplish the environmental objectives of SB 1383 while limiting local and regional air quality impacts to the extent practicable.

6.6 References

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Appendix A
Scoping Report

SCOPING REPORT

Document Circulated:	Notice of Preparation of an Environmental Impact Report and Initial Study
Project:	North County Solid Waste Collection Services Project (SCH No. 2022020271)
Lead Agency:	County of Los Angeles Department of Public Works
Document Review Period:	February 2, 2023 through March 3, 2023
Scoping Meeting Date:	February 16, 2023
Attachments:	A - State Clearinghouse and County Clerk Posting
	B - Public Works Website Posting
	C - Initial Study
	D - NOP Comment Letters
	E - Scoping Meeting Attendees
	F - IS/ND and Recirculated IS/ND Comment Letters
	F1 - IS/ND Comment Letters
	F2 - Recirculated IS/ND Comment Letters

The County of Los Angeles Department of Public Works (Public Works) issued a Notice of Preparation (NOP) to prepare an Environmental Impact Report (EIR) along with an Initial Study for the proposed North County Solid Waste Collection Services Project (proposed Project). Issuance of the NOP began the scoping process for proposed Project. Scoping is the agency and public participation process used to assist lead agencies in determining the potential environmental issues and alternatives to be analyzed in an EIR for a project. This Scoping Report describes the scoping process undertaken by Public Works and provides attachments pertaining to the scoping process.

Notice of Preparation

Section 15082 of the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) requires lead agencies to send an NOP to the State Clearinghouse and to each responsible and trustee agency stating that an EIR will be prepared. The issuance of the NOP begins the scoping period, during which responses to the NOP may be sent to the lead agency providing specific detail about the scope and content of the EIR. In accordance with CEQA Guidelines section 15082, an NOP was prepared by Public Works, filed with the State Clearinghouse, and posted at the County Clerk. The NOP was also distributed to various agencies, agency representatives, organizations, local Town Councils, waste haulers, and interested individuals. The NOP was circulated along with an Initial Study discussing the potential effects of the Project.

The attachments to this report include the NOP with a stamp from the County Clerk (verifying that the NOP was posted at the County Clerk), a copy of the State Clearinghouse's online posting of the NOP and Initial Study, a copy of Public Works' website posting of the NOP and Initial Study, and a copy of the Initial Study.

Scoping Meeting

An online scoping meeting for the proposed Project was held via Zoom on February 16, 2023. A recording of the scoping meeting was made available on the Public Works website at:

https://pw.lacounty.gov/epd/communitymeetings/pastmeetings.cfm#collapse56

The purpose of this meeting was to share information regarding the proposed Project and environmental review process and to receive comments regarding the scope and content of the environmental analysis to be addressed in the EIR.

Approximately 19 people (not including meeting hosts and panelists) attended the scoping meeting. The sign-in sheet from the meeting is included as an attachment to this report. A summary of the proposed Project and the CEQA process was presented at the meeting. Attendees spoke with representatives from Public Works and the consulting firm preparing this EIR (Dudek) to ask questions about the Project and the environmental process and to provide comments on the scope and content of the EIR.

Comment Letters

During the scoping process, approximately 17 written comment letters were received from agencies, organizations, and individuals. Additionally, a verbal comment was received during the scoping meeting requesting that all comments on the prior Initial Study/Negative Declaration (IS/ND) and Recirculated IS/ND for the Project be incorporated in the record. Comment letters in response to the NOP, the IS/ND, and the Recirculated IS/ND are included as attachments to this report.

Comments and concerns related to environmental issues are summarized below. (Note that this is not an exhaustive list of all comments received; rather, this list is representative of the key themes found in many of the letters. For the full text of the comment letters received, see the attachments to this report.)

Air Quality/Greenhouse Gas Emissions. Concerns were expressed regarding air emissions, pollution, and fugitive dust resulting from increased truck traffic. There were also concerns about truck traffic resulting in the need for increased road maintenance and grading, which would further contribute to adverse effects regarding fugitive dust, and the potential to spread *Coccidioide*s fungal spores resulting in cases of Valley Fever. Concerns were also expressed regarding the Project's potential to increase greenhouse gas emissions from increased truck travel.

Biological Resources. Concerns were expressed regarding nesting bird impacts from increased truck activity and potential impacts to biological resources resulting from the use (or encouragement of use) of dust suppressants.

Energy. Concerns were expressed regarding fuel consumption from truck activity.

Geology and Soils. Concerns were expressed regarding the potential for additional truck traffic, grading, and road maintenance resulting in soil erosion.

Hazards and Hazardous Materials. Concerns were expressed regarding potential hazardous effects of dust suppressants, including toxicity to humans during and after application. Concerns were also expressed regarding the breeding of pathogens and other hazards resulting from composting.

Hydrology and Water Quality. Concerns were expressed regarding the potential for additional grading and road maintenance activities to increase soil erosion, alter existing drainage patterns, result in increased runoff, or impede/redirect flood flows. Concerns were also expressed regarding the use (or encouragement of use) of dust suppressants and the subsequent effects on surface and groundwater quality.

Noise. Concerns were expressed regarding noise and vibration impacts from increased truck traffic.

Public Services and Utilities. Concerns were expressed regarding the ability for existing landfills and organic waste processing facilities to adequately serve the community. Concerns were also expressed regarding the potential need for additional facilities to be built, resulting in adverse environmental effects. Concerns were expressed regarding heavy truck traffic damaging underground water infrastructure.

Transportation. Concerns were expressed regarding an increase in vehicle miles traveled (VMT) from the Project.

Wildlife. Concerns were expressed regarding the possibility for composting piles to spontaneously combust.

Alternatives. A number of commenters included suggestions for alternatives to the proposed Project. These suggestions are summarized in the list below:

- Option to opt out of organic waste collection
- Continuation of Open Market system
- Alternative with an incentive to reduce waste
- The use of split-body trucks
- The use of multi-compartment trucks that accommodate all of the different waste streams
- Alternating weeks for pick-up (e.g. recyclables and non-organic solid waste pick-up every other week, weekly pick-up of organic waste)
- Combination of split-body trucks with alternating week pick-up schedules
- Centralized waste drop-off facilities
- The use of co-mingled trucks (all waste streams go into one truck with no pre-sorting)
- Inspectors ride along with collection trucks
- Pick-up of waste on an on-call basis

Cumulative Impacts. Concerns were expressed regarding the Project's contribution to cumulative impacts related to the need for new waste facilities.

Miscellaneous Comments. A number of comments were received that do not pertain to environmental issues or to the scope and content of the EIR. However, these comments are summarized herein for informational and disclosure purposes.

- Comments regarding the cost to taxpayers.
- Comments regarding the payment of collection services as part of property taxes.
- Comments regarding the length of the contract term.
- Comments regarding vacant landowners paying for services.
- Comments regarding illegal dumping.
- Overall opposition to the Project and its design.

Attachment A

State Clearinghouse and County Clerk Posting

Public Works
LOS ANGELES COUNTY

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

Date:	February 2, 2023
To:	California Office of Planning and Research, Responsible and Trustee Agencies, and Interested Parties
Subject:	Notice of Preparation and Scoping Meeting for a Draft Environmental Impact Report
Project:	North County Solid Waste Collection Services Project, State Clearinghouse No. 2022020271 *(formerly known as the "Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts and/or Residential Franchise Program")*
Lead Agency:	County of Los Angeles Department of Public Works
Review Period:	February 2, 2023 through March 3, 2023

The County of Los Angeles, through the Department of Public Works, is the Lead Agency for the North County Solid Waste Collection Services Project (Project) and will prepare an Environmental Impact Report (EIR) for the proposed Project, pursuant to the California Environmental Quality Act (CEQA). The Project description, location, and probable environmental effects are discussed below.

Public Works is soliciting input from interested parties and agencies as to the scope and content of the environmental information to be evaluated in the proposed Project EIR. In accordance with CEQA, agencies are requested to review the Project Description in this Notice of Preparation (NOP) and provide their comments on environmental issues related to the statutory responsibilities of the agency. The EIR will be used by the Los Angeles County Board of Supervisors when considering approval of the proposed Project, as well as any related discretionary actions.

SUBMITTAL OF WRITTEN COMMENTS

In accordance with section 15082 of the State CEQA Guidelines, this NOP is being circulated for a 30-day comment period, starting February 2, 2023, and ending March 3, 2023. Interested parties must submit their comments in writing by **March 3, 2023**. Comments must be submitted via postal or electronic mail to the following address:

Department of Public Works
Attention: Krystle K. Jafari, P.E.
P.O. Box 1460
Alhambra, CA 91802-1460
e-mail: NoCoSolidWasteEIR@pw.lacounty.gov

SCOPING MEETING

Public Works will hold an online scoping meeting for the proposed Project EIR to receive comments on the scope and content of the EIR. The scoping meeting will include a brief presentation providing an overview of the proposed Project and the CEQA process. The scoping meeting will be held as follows:

Date:	Thursday February 16, 2023
Time:	6 p.m.
Location:	Register online for the ZOOM meeting using the following link. (Note: registration can be completed prior to or during the meeting, and each attendee is encouraged to complete their own registration.) https://pwlacounty.zoom.us/webinar/register/WN_WqgGuK1EQDCmTqpHwwtEZw
	The meeting can also be accessed via telephone by dialing: 1 213 338 8477
	Webinar ID: 881 5077 8022

RECEIVED
FEB 02 2023
LOS ANGELES, COUNTY CLERK

Information regarding the scoping meeting, including the ZOOM meeting registration link and telephone call-in information, is also available on the Project website: pw.lacounty.gov/epd/NorthCountySolidWasteCollectionsvcs/CEQA.cfm.

PROJECT LOCATION

The Project area is divided into four proposed service areas: Acton/Agua Dulce, Antelope Valley East, Antelope Valley West, and Quartz Hill (Figure 1). Pursuant to section 21092.6 of the State CEQA Statute, the Project area includes properties that are on lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5, including voluntary cleanup sites, school investigation sites, properties with leaking underground storage tank cleanups, and military evaluation sites, among others. However, the proposed Project, which involves changes to existing solid waste collection practices, would not adversely affect or disturb any such hazardous waste sites or facilities.

PROPOSED PROJECT

The proposed Project consists of executing new contracts with solid waste haulers to establish either residential and commercial franchises or garbage disposal districts for the Acton/Agua Dulce and Antelope Valley areas in the unincorporated territory of the County of Los Angeles. Selected waste haulers would provide refuse, recyclables, and organic waste hauling services to commercial and residential properties, as well as bulky item pickup. If the necessary voter approval is not achieved to establish garbage disposal districts, residential and commercial franchises would be established instead.

PROJECT BACKGROUND

In February 2022, Public Works released an Initial Study/Negative Declaration (IS/ND) for the proposed Project, titled the "Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts IS/ND." The IS/ND was circulated for 30 days of public review from February 11, 2022, to March 12, 2022. In response to the February 2022 IS/ND, members of the public raised concerns regarding potential fugitive dust impacts resulting from the increase in waste collection trucks traveling on unpaved roads. To address these concerns, Public Works revised the Project description such that collection trucks would not generally travel on privately-owned and maintained unpaved roads, unless permissions were obtained from property owners and unless property owners agreed to treat the unpaved roads with dust suppressants. If such conditions were not met, customers along private, unpaved roadways would need to haul their waste containers to an agreed upon location along the public right-of-way. The revised Project was analyzed in a recirculated IS/ND, which was circulated for a 30-day public review period from June 10, 2022, to July 9, 2022. In the June 2022 IS/ND, the Project name was revised to the "Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts and/or Residential Franchise Program." No significant environmental impacts were identified in the June 2022 IS/ND.

Subsequent to circulation of the June 2022 IS/ND, Public Works received numerous comments expressing concerns about the feasibility of the revised Project. Specifically, property owners expressed concerns about the cost and logistics of treating private unpaved roads with dust suppressants, as well as the infeasibility of hauling their waste to the nearest public right-of-way. Based upon these comments and concerns, Public Works is revising the Project description again, such that the Project would include waste service along private unpaved roads even if such roads have not been treated with dust suppressants. Because Public Works does not have authority to control the maintenance of private roads, treatment with dust suppressants on private unpaved roads cannot be included as part of the Project. The proposed Project, as revised, would entail additional waste collection vehicles traveling along unpaved roads and may thereby result in potentially significant air quality impacts.

Section 15073.5(d) of the State CEQA Guidelines states: "If during the negative declaration process there is substantial evidence in light of the whole record, before the lead agency that the project, as revised, may have a significant effect on the environment which cannot be mitigated or avoided, the lead agency shall prepare a draft EIR and certify a final EIR prior to approving the project. It shall circulate the draft EIR for consultation and review pursuant to Sections 15086 and 15087, and advise reviewers in writing that a proposed negative declaration had previously been circulated for the project." Accordingly, Public Works is preparing a Draft EIR for the proposed Project, which has been renamed as the "North County Solid Waste Collection Services Project." While some changes to the Project description have occurred since the June 2022 IS/ND, the key parameters of the Project remain unchanged. Nevertheless, the previous ND is no longer valid because Public Works has determined that air quality impacts may be potentially significant; therefore, the June 2022 IS/ND has been revised to remove references to an ND. The IS checklist is being released for review with this NOP to indicate the reasons for determining that other effects, besides air quality, would not be significant or potentially significant.

PROBABLE ENVIRONMENTAL EFFECTS

The purpose of this EIR will be to disclose the environmental impacts of the proposed Project. As described above under "Project Background," the proposed Project is anticipated to result in potentially significant impacts on air quality. The proposed Project's effects in the category of air quality, including cumulative impacts, will be addressed in detail in the EIR.

The June 2022 IS/ND has been revised to remove references to an ND, and the IS checklist is being released for public review with this NOP to justify the reasoning for why impacts in all environmental categories except air quality would fall below a level of significance. As such, the following topics are not required to be discussed in the EIR: aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.

The EIR will include a discussion of alternatives to the proposed Project and the potential environmental impacts of such alternatives. Other topics to be covered include growth-inducing impacts and significant irreversible environmental changes.

DOCUMENT AVAILABILITY

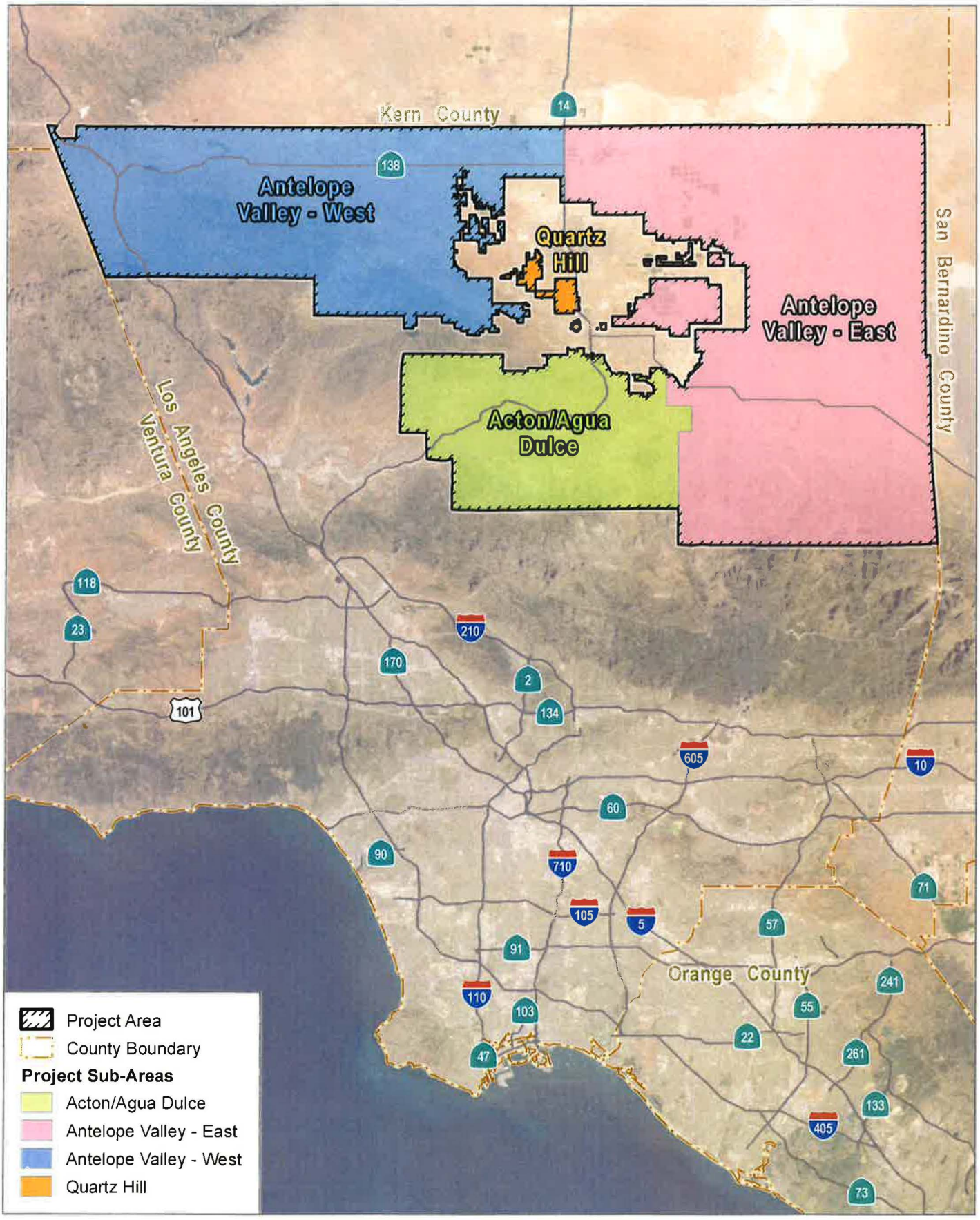
This NOP and the Initial Study for the proposed Project can be viewed online at pw.lacounty.gov/epd/NorthCountySolidWasteCollectionsvcs/CEQA.cfm. Future Project documents, including the Draft EIR and Final EIR, will also be made available at this website. Copies of the NOP and IS are also available at the following Public Library and County office locations:

- Public Works Environmental Programs Division, Annex 3rd Floor, 900 S Fremont Avenue, Alhambra, CA 91803
- Acton Agua Dulce Library, 33792 Crown Valley Road, Acton, CA 93510
- Lake Los Angeles Library, 16921 East Avenue O #A, Palmdale, CA 93591
- Littlerock Library, 35119 80th Street E, Littlerock, CA 93543
- Quartz Hill Library, 5040 W Avenue M-2, Quartz Hill, CA 93536

Questions regarding this notice should be directed to Ms. Krystle K. Jafari, P.E., Associate Civil Engineer, (626) 458-3916 or NoCoSolidWasteEIR@pw.lacounty.gov, Monday through Thursday, between 8:00 a.m. and 5:00 p.m.

Si necesita asistencia con la traducción a Español, por favor comuniquese con el representante del departamento de Obras Públicas del Condado de Los Angeles, Sr. Art Correa (626) 458-3948.

ADA and Title VI Accommodations: Individuals requiring reasonable accommodations, interpretation services, and materials in other languages or in an alternate format may contact the department coordinator at (626) 458-7901. Individuals with hearing or speech impairment may use California Relay Service 711.



SOURCE: Esri and Digital Globe, OpenStreetMap

DUDEK 0 5 10 Miles

FIGURE 1
Project Area
North County Solid Waste Collection Services Project

Dean C. Logan
Los Angeles County Registrar / Recorder
12400 Imperial Highway, Norwalk, CA
(800)201-8999

BUSINESS FILINGS REGISTRATION

NORWALK DEPARTMENT HEADQUARTER

Cashier: I. CORREA

20230202125000 4

Thursday, February 2, 2023 10:19 AM

Item(s)

Fee	Qty	Total
NoP - County Posting Fee 2023025056	1	$0.00

Total **$0.00**

Total Documents: 1

Customer payment(s):

North County Solid Waste Collection Services Project

Summary

SCH Number	2022020271
Lead Agency	Los Angeles County Department of Public Works (DPW)
Document Title	North County Solid Waste Collection Services Project
Document Type	NOP - Notice of Preparation of a Draft EIR
Received	2/1/2023
Present Land Use	Land Use Designation: primarily Rural Land (RL) / Zoning: primarily A-2-2 (Heavy Agricultural)
Document Description	The proposed Project consists of executing new contracts with solid waste haulers to establish either residential and commercial franchises or garbage disposal districts for the Acton/Agua Dulce and Antelope Valley areas in the unincorporated territory of the County of Los Angeles. Selected waste haulers would provide refuse, recyclables, and organic waste hauling services to commercial and residential properties, as well as bulky item pickup. If the necessary voter approval is not achieved to establish garbage disposal districts, residential and commercial franchises would be established instead.

Contact Information

Name	Krystle K. Jafari, P.E.
Agency Name	County of Los Angeles Department of Public Works
Job Title	Associate Civil Engineer
Contact Types	Lead/Public Agency
Address	P.O. Box 1460 Alhambra, CA 91802
Phone	(626) 458-3916
Email	kjafari@dpw.lacounty.gov

Location

Cities	Acton, Agua Dulce, unincorporated Antelope Valley

Counties	Los Angeles
Regions	Citywide, Countywide, Unincorporated
Cross Streets	numerous
Zip	numerous
Parcel #	numerous
State Highways	14, 138, 2, 18
Railways	Metrolink; Union Pacific
Airports	Agua Dulce, William J. Fox, Palm
Schools	numerous
Waterways	numerous

Notice of Completion

State Review Period Start	2/2/2023
State Review Period End	3/3/2023
State Reviewing Agencies	California Air Resources Board (ARB), California Department of Fish and Wildlife, South Coast Region 5 (CDFW), California Department of Forestry and Fire Protection (CAL FIRE), California Department of Parks and Recreation, California Department of Resources Recycling and Recovery, California Department of Transportation, District 7 (DOT), California Department of Transportation, Division of Aeronautics (DOT), California Department of Transportation, Division of Transportation Planning (DOT), California Department of Water Resources (DWR), California Governor's Office of Emergency Services (OES), California Highway Patrol (CHP), California Native American Heritage Commission (NAHC), California Natural Resources Agency, California Public Utilities Commission (CPUC), California Regional Water Quality Control Board, Los Angeles Region 4 (RWQCB), California Santa Monica Mountains Conservancy (SMMC), California State Lands Commission (SLC), Department of Toxic Substances Control, Office of Historic Preservation, San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC), State Water Resources Control Board, Division of Drinking Water, State Water Resources Control Board, Division of Water Quality, State Water Resources Control Board, Division of Water Rights
Development Types	Other (provision of solid waste collection services)
Local Actions	district formation/contract approvals
Project Issues	Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Cumulative Effects, Drainage/Absorption, Flood Plain/Flooding, Geology/Soils, Growth Inducement, Hazards & Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, Schools/Universities, Sewer Capacity, Solid Waste, Transportation, Vegetation, Wetland/Riparian, Wildfire
Local Review Period Start	2/2/2023
Local Review Period End	3/3/2023

Attachments

Draft Environmental Document [Draft IS, NOI_NOA_Public notices, OPR Summary Form, Appx,]	IS_North County Solid Waste Collection Services Project PDF 2523 K NOP_North County Solid Waste Collection Services Project PDF 1047 K OPR Summary Form_North County Solid Waste Collection Services Project PDF 1125 K
Notice of Completion [NOC] Transmittal form	NOC_North County Solid Waste Collection Services Project PDF 457 K

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Attachment B

Public Works Website Posting

California Environmental Quality Act Documents

Link	Document
Click Here	Scoping meeting information
Click Here	Initial Study
Click Here	Notice of Preparation
Click Here	Draft EIR (Coming Soon)
Click Here	Final EIR (Coming Soon)

Attachment C

Initial Study

Initial Study

North County Solid Waste Collection Services Project

STATE CLEARINGHOUSE NO. 2022020271

FEBRUARY 2023

Prepared for:

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
900 South Fremont Avenue
Alhambra, California 91803

Prepared by:

DUDEK

38 North Marengo Avenue
Pasadena, California 91101

Printed on 30% post-consumer recycled material.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ADT	average daily traffic
AQMP	Air Quality Management Plan
ATCM	air toxic control measure
AVAP	Antelope Valley Area Plan
AVAQMD	Antelope Valley Air Quality Management District
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
CARB	California Air Resources Board
CCAP	Community Climate Action Plan
CEQA	California Environmental Quality Act
CH_4	methane
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Los Angeles
CSD	Community Standards District
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
du	dwelling unit
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FMMP	Farmland Mapping and Monitoring Program
GDD	Garbage Disposal District
GHG	greenhouse gas
GWP	global warming potential
HAP	hazardous air pollutant
I	Interstate
in/sec	inches per second
IS	Initial Study
LAFCO	Local Agency Formation Commission
LOS	level of service
MDAB	Mojave Desert Air Basin
MT	metric ton
N_2O	nitrous oxide

Acronym/Abbreviation	Definition
NAAQS	National Ambient Air Quality Standards
ND	Negative Declaration
NO_2	nitrogen dioxide
NOx	oxides of nitrogen
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
PDF	Project Design Feature
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
Public Works	Department of Public Works
RACT	Reasonably Available Control Technology
RF	Residential Franchise
RTP	Regional Transportation Plan
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SCVAP	Santa Clarita Valley Area Plan
SEA	Significant Ecological Area
SIP	State Implementation Plan
SOx	sulfur oxides
SR	State Route
SRA	State Responsibility Area
TAC	toxic air contaminant
VdB	vibration decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound

Preface

In February 2022, the County of Los Angeles (County) Department of Public Works (Public Works) released an Initial Study/Negative Declaration (IS/ND) for the proposed Project, titled the "Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts IS/ND," as well as a Notice of Intent (NOI) to adopt the ND. The IS/ND was circulated for 30 days of public review from February 11, 2022 to March 12, 2022.

In response to the February 2022 IS/ND, members of the public raised concerns regarding potential fugitive dust impacts resulting from the increase in waste collection trucks traveling on unpaved roads. To address these concerns, Public Works revised and clarified the Project description such that collection trucks would not generally travel on privately-owned and maintained unpaved roads unless permissions were obtained from property owners and unless property owners agreed to treat the unpaved roads with dust suppressants. If such conditions were not met, customers along private, unpaved roadways would need to haul their waste containers to an agreed upon location along the public right-of-way. The revised Project was analyzed in a recirculated IS/ND, which was circulated for a 30-day public review period from June 10, 2022, to July 9, 2022. In the June 2022 IS/ND, the Project name was revised to the "Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts and/or Residential Franchise Program." No significant environmental impacts were identified in the June 2022 IS/ND.

Subsequent to circulation of the June 2022 IS/ND, Public Works received numerous comments expressing concerns about the feasibility of the revised Project. Specifically, property owners expressed concerns about the cost and logistics of treating private unpaved roads with dust suppressants, as well as the infeasibility of hauling their waste to the nearest public right-of-way. Based upon these comments and concerns, Public Works is revising the Project description again, such that the Project would include waste service along private unpaved roads even if such roads have not been treated with dust suppressants. Because Public Works does not have authority to control the maintenance of private roads, treatment with dust suppressants on private unpaved roads cannot be included as part of the Project. This IS checklist reflects these changes to the Project description and analyzes and discloses the potential environmental impacts of the proposed Project.

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1 Introduction

1.1 Project Overview

The County of Los Angeles (County) Department of Public Works (Public Works) is proposing the formation and operation of either four new Garbage Disposal Districts (GDDs) or Residential Franchises (RFs) for the unincorporated County communities within Acton, Agua Dulce, and Antelope Valley (Project). Under the GDD/RF contracts, selected solid waste hauler(s) would provide source-separated collection of refuse, recyclables, and organic waste for all residential and commercial customers. The selected waste hauler(s) would also provide manure collection and bulky items pickup upon request, as well as illegal dumping pickup. The proposed Project supports the County's compliance with statewide targets set forth in Senate Bill (SB) 1383 pertaining to diversion of organic waste from landfills.

Single-family residential properties within the proposed Project area currently obtain solid waste collection service on an individual basis in an open market system, whereas multi-family residential and commercial properties receive solid waste collection service through a nonexclusive commercial franchise administered by Public Works. In contrast, other unincorporated areas of Los Angeles County are generally served by existing GDDs or RFs administered by Public Works. Under the residential open market system in effect in the Project area, single-family residential customers generally obtain only refuse collection and do not contract for recycling services or organic waste collection and diversion services. For multi-family residential properties with five or more units and commercial properties served under the County's commercial franchise system, the property owners may select from a list of approved waste haulers for refuse collection, as well as recycling services and bulky item pickup, which are services included in the fee for refuse collection. By implementing the proposed Project, solid waste collection in the Project area would be provided through the GDD/RF programs.

1.2 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) applies to proposed projects initiated by, funded by, or requiring discretionary approval(s) from state or local government agencies. The proposed Project constitutes a project as defined by section 21065 of the Public Resources Code, and the County is the CEQA lead agency.

An Initial Study (IS) was prepared in accordance with the State CEQA Guidelines (Cal. Code of Regs., tit. 14, § 15000 et seq.) to determine whether an Environmental Impact Report, a Negative Declaration, or a Mitigated Negative Declaration should be prepared to evaluate the potential environmental effects of the proposed Project. The IS also satisfies the County's obligations under CEQA to solicit input from other agencies that may provide approvals, permits, and/or funding for the proposed Project.

Based on the nature and scope of the proposed Project and the evaluation set forth by the IS environmental checklist (contained herein), the County, as the lead agency, concluded that an Environmental Impact Report (EIR) would be required to address in detail the potentially significant air quality impacts. This IS demonstrates that, based on information available in the record before the County, the proposed Project would not have any significant adverse impact on the environment related to the topics of aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. Accordingly, Public Works will prepare an EIR with further analysis of air quality impacts from the proposed Project.

This IS consists of four sections. Section 1 provides an overview of the proposed Project. Section 2 provides the Project description, location, and environmental setting. Section 3 consists of the CEQA Initial Study checklist, which provides an assessment of the Project's potential environmental impacts. Section 4 provides a list of the lead agency staff and consultants involved in preparing the environmental review for the proposed Project.

2 Project Description

2.1 Project Location

The Project area encompasses approximately 1,422 square miles and is comprised of the unincorporated communities within northern Los Angeles County (County), generally located north of the Angeles National Forest or along the northern boundaries of the Angeles National Forest. The Project area is divided into four proposed service areas: (1) Acton/Agua Dulce; (2) Quartz Hill; (3) Antelope Valley East; and (4) Antelope Valley West. Each service area contains multiple unincorporated communities. The Project area is outlined in Figure 2-1, which also delineates the four proposed service areas.

The proposed Project will provide waste hauling services to residential, rural, and commercial customers throughout the four service areas. The Project area has approximately 800 commercial and 43,000 residential properties that need solid waste management services. As further described in Section 2.5, the number of customers in the Project area is anticipated to increase, per regional growth projections, over the terms of the proposed GDD/RF contract(s).

2.2 Environmental Setting

A majority of the communities served by the proposed Project would be within the planning area of the Antelope Valley Area Plan (AVAP) (County of Los Angeles 2015a). The AVAP guides long-term development and conservation throughout the Antelope Valley region via area-specific goals and policies, land use regulations, and zoning designations (County of Los Angeles 2022). Although geographically adjacent to the AVAP area, the rural residential community of Agua Dulce falls within the Santa Clarita Valley Area Plan (SCVAP). Many communities within the Project area are also subject to Community Standards District (CSD) regulations, which are unique to each community and designed to supplement Area Plans.

The Project area is largely designated as Rural Land (RL) and zoned A-2-2 (Heavy Agricultural). The RL designation restricts development from between 1 dwelling unit (du) per acre to 1 du per 20 acres (expressed as RL-1, RL-2. RL-5, RL-10, and RL-20) (County of Los Angeles 2021, 2015a). Other land use designations in the Project area include various types of Open Space (OS) (including Parks & Recreation, National Forest, and Conservation OS), Watershed (W), Residential (R) (primarily low to very-low density), Military Land (ML), and Public/Semi Public (P). Also included are a few scattered areas of Industrial, Mixed-Use, Manufacturing, and Rural Commercial land uses (County of Los Angeles 2015a, 2022). In association with the largely rural nature of the Project area, the area is characterized by a network of privately-owned and maintained roads, as described in Title 15 of the Los Angeles County Code (County Code).

Portions of the Project area are also within or adjacent to Significant Ecological Areas (SEAs), which are officially designated areas within Los Angeles County recognized as supporting irreplaceable biological resources, such as habitat linkages, Joshua Tree woodlands, the Santa Clara River watershed, and desert scrub habitat. Key land use goals and strategies for the Project area, as expressed in the land use plans described above, include maintaining its rural and secluded nature by:

- Restricting land uses that would result in the installation of urban infrastructure (e.g., curbs, gutters, sidewalks, street lighting, and traffic signals);
- Restricting new sources of artificial light and noise;
- Preserving views of ridgelines and natural areas;

- Protecting natural environments and diverse ecological habitats, and;
- Protecting the agricultural, historical, and equestrian character of the region (County of Los Angeles 2015a).

2.3 Project Background and Purpose

As described in Section 1.1, organic waste[1] collection and diversion services are not generally available in the Project area. Residents and businesses are generally expected to combine organic waste and non-organic waste in the same container(s) for a waste hauler to collect and transport to a landfill. When organic waste is buried in a landfill and decomposes, it releases methane, a powerful greenhouse gas (GHG) that pollutes the air and contributes to climate change.

Similarly, single-family residential properties in the Project area do not currently receive recycling services. Single-family residential customers are generally expected to combine non-organic recyclables[2] with other types of refuse, all of which is collected by a waste hauler for disposal at the landfill. As such, landfills are unnecessarily burdened as a result of the unavailability of recycling services.

In 2016, the State Legislature passed Senate Bill (SB) 1383, California's Short-Lived Climate Pollutant Reduction Strategy, to reduce methane and other GHG emissions statewide. The bill aims to achieve two targets by 2025: (1) 75% reduction of statewide organics waste disposal from 2014 levels and (2) 20% or greater recovery (for human consumption) of edible food currently disposed of in California (CalRecycle 2022). In order to meet these goals, SB 1383 requires all local jurisdictions to provide mandatory source-separated organic waste collection and diversion services to all businesses, schools, multi-family complexes, and single-family home residents. SB 1383 will further support California's efforts to achieve the statewide 75% recycling goal by 2020 established in AB 341. The State has not yet met this target. In 2019, statewide recycling rates were 37%.

In November 2021, the County Board of Supervisors adopted the Mandatory Organic Waste Disposal Reduction Ordinance (Ordinance) (L.A. County Code, ch. 20.91), in accordance with SB 1383. The Ordinance requires all businesses and residents in County unincorporated areas to subscribe to organic waste collection services, such that organic waste is diverted from landfills. However, as described above, such services are not generally available in the Project area. Public Works' proposed pathway to implement mandatory organic waste collection and diversion services and expand recycling services in the Project area is described below.

- **Initial Invitation for Waste Hauling Bids.** In early 2022, Public Works issued Invitation for Bids but based on feedback from the affected communities, the Project was put on hold to reconsider the scope of work and potential environmental impacts.
- **Revised Invitation for Waste Hauling Bids.** Public Works will issue a revised Invitation for Bids/Request for Proposals for waste haulers in the Project area to service the proposed GDDs or RFs. The Invitation for Bids/Request for Proposals will include a requirement for selected waste hauler(s) to provide source-separated collection of nonorganic recyclables, organic waste, and nonorganic waste for customers in the four service areas via a three-container system. The hauler(s) will then transport the respective

[1] "Organic waste" has the meaning set forth in Title 14, section 18982(a)(46), of the California Code of Regulations and means solid waste that contains material that originates from living organisms and their metabolic waste products, including, but not limited to, food, food soiled paper, green material, landscape and pruning waste, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges, whether source-separated or mixed in with other solid wastes.

[2] "Non-organic recyclables" means discarded, non-hazardous materials, not including organic waste, that are capable of being recycled, as that term is defined in Title 14, section 18815.2(a)(43), of the California Code of Regulations. "Non-Organic Recyclables" include, but are not limited to, bottles, cans, metals, plastics, and glass.

categories of collected refuse to a disposal site, a transfer/processing facility, an organic waste processing facility, or an end user, as applicable. The Invitation for Bids/Request for Proposals will also include manure collection, bulky items pickup, and illegal dumping pickup services upon request.

- **Establishment of GDDs or RFs.** While Public Works is in the process of issuing, reviewing, and awarding waste hauling bids, it will also initiate the special district formation process to establish GDDs in the Project area. Each of the four service areas outlined in Figure 2-1 would form its own GDD if approved by the voters and the Board of Supervisors. The County Board of Supervisors may initiate the formation process by resolution. Successful formation requires approval by the Local Agency Formation Commission (LAFCO) and a majority vote by registered voters within the proposed service area in favor of forming a GDD. RFs would be created if GDDs are unsuccessful in the formation process.

The proposed Project that is discussed and analyzed in this document consists of the establishment of the GDDs or RFs and the solid waste hauling contracts to serve those areas. The purpose of the proposed Project is to ensure that the County's Mandatory Organic Waste Disposal Reduction Ordinance is being implemented in compliance with SB 1383 and to promote and enable recycling in the Project area, consistent with AB 341. The purpose of this environmental document is to analyze the environmental effects of the potential establishment of GDDs or RFs in the Project area, as well as the contracts with waste hauler(s) that are expected to be established to serve those GDDs or RFs.

Based upon the Invitation for Bids/Request for Proposals that will be issued by Public Works, certain activities in the Project area are reasonably foreseeable as a result of the establishment of the GDDs or RFs and the associated waste hauling contracts. It is reasonably foreseeable that the requirement for haulers to collect and dispose of organic waste from all customers and to begin collecting and disposing of recyclables for single-family residential customers would result in additional collection trucks[3] circulating in the Project area. It is also foreseeable that the addition of collection trucks to the Project area will lead to an increase of employment in the Project area, since more collection truck drivers would be needed to provide these added services. These reasonably foreseeable activities of the GDDs or RFs and associated contracts are analyzed for their potential environmental impacts in this document. However, the specific manner in which an individual waste hauler may respond to the Initiation for Bids/Request for Proposals is considered highly speculative at this time and, therefore, is not analyzed in this document. For example, waste haulers responding to the Invitation for Bids/Request for Proposals may propose new or expanded service yards in order to serve the Project area. Other facilities may also be proposed, such as transfer stations and/or organic waste processing facilities. However, such future facilities and infrastructure is considered highly speculative and outside the scope of the currently proposed Project.

The respondents to the Invitation for Bids/Request for Proposals are currently unknown, the specifics of their proposals are currently unknown, and the waste hauler(s) that will ultimately be selected are currently unknown. Some respondents may have existing, permitted facilities in the Project area, while others may not. Construction of facilities are not required as part of this Project. Furthermore, the Project area is vast and variable in terms of the environmental setting and existing conditions. Predictions about the location(s), size, construction or operational scenarios, and associated environmental impact of any future potential facilities or physical infrastructure is highly speculative. CEQA Guidelines Section 15145 states that "if, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact." In this case, Public Works find impacts associated with potential future facilities or infrastructure

[3] The term "collection truck" will be used in this document to refer to the trucks used to collect refuse, organic waste, and/or recyclables. (Collection trucks are also known as garbage trucks.)

that may (or may not) be needed by waste haulers to serve the proposed GDDs or RFs to be too speculative for evaluation, for the reasons set forth above. As such, Public Works has not evaluated the impacts of such future, unknown facilities in this document.

As stated in the Invitation for Bids/Request for Proposals, any potential new or expanded facilities that waste haulers may propose in order to service the Project area would be required to undergo local approval, entitlement, and permitting processes, which includes CEQA review. The Invitation for Bids/Request for Proposals will also specify that the cost of such facilities and any associated permitting processes (including CEQA review) would be paid for by the waste hauling company that is proposing such facilities.

The proposed Project is focused on the County's decision to establish GDDs or RFs and to create contracts to serve the new GDDs or RFs. If approved, the Project would not authorize or program the development of solid waste–related facilities and/or infrastructure. The manner in which the contract specifications are carried out by the selected waste hauler(s) are unknown and speculative and cannot possibly be known until the waste hauler(s) are selected and the GDDs or RFs are established. Because a CEQA finding is needed for the County's decision to create GDDs/RFs and the associated contracts, this document is necessary in order to proceed with the process of proposing GDDs/RFs and selecting waste hauler(s) to serve those areas under the County's specifications. This process is in turn being driven by the state requirements described above and the County's need to comply with and implement those requirements.

2.4 Project Construction

The proposed Project would involve changes to existing waste collection practices in the Project area and does not require or result in any construction-related work activities.

2.5 Project Operation

The proposed Project consists of executing new contracts with solid waste haulers to establish either GDDs or RFs for the Acton/Agua Dulce and Antelope Valley areas in the unincorporated territory of the County of Los Angeles. Selected waste haulers would provide refuse, recyclables, and organic waste hauling services to commercial and residential properties, as well as bulky item pickup and enhanced customer service.

As a result of the proposed implementation of the GDD/RF contracts, it is reasonably foreseeable that the number of collection trucks circulating the Project area (consisting of four service areas) would increase relative to existing conditions. At present, most of the Project area is assumed to be served by two types of collection trucks: one front-loader for dumpsters and one side-loader for refuse carts, as well as a route supervisor who circulates the Project area in a light-duty vehicle. Under proposed conditions, the Project area would be served by five types of collection trucks: trucks collecting refuse, trucks collecting recyclables, trucks collecting organic waste, trucks collecting bulky items, and trucks collecting illegal dumping. Rural, equestrian areas would also be served by a sixth type of truck that would collect manure. Additionally, under the proposed GDD/RF contracts, Public Works would have three field monitors circulating the Project area during solid waste collection days. The field monitors would drive throughout the Project area the entire workday to monitor waste haulers' trucks and service levels for compliance, to investigate complaints, and to report illegal dumping. As such, implementation of the proposed contracts would result in the addition of up to four types of collection trucks throughout the Project area (assumed to be heavy-duty trucks) and a total of three Public Works field monitors (assumed to be light-duty trucks).

The proposed GDD/RF contracts are anticipated to be in place in 2023, and the contract(s) are anticipated to extend up to twenty-five (25) years, or through the year 2048. In the urban, unincorporated areas in Los Angeles County, current contracts extend up to 11 years. Longer contract durations are proposed to get the best possible rates for customers by making the contract appealing to multiple waste hauling companies and to ensure a competitive bidding process.

Anticipated Increase in Collection Trucks in the Project Area

Due to the size of the Project area and number of customers, additional trucks and vehicles would be circulating throughout the Project area on a given day. To analyze the potential environmental effects of these added truck trips, assumptions regarding the number of new trips that would result from Project implementation are provided below.

- One collection truck is anticipated to serve approximately 300 residential customers.
- One collection truck is anticipated to serve approximately 70 commercial customers.
- Under the proposed Project, each residential customer is anticipated to receive service from two additional trucks (one for recyclables and one for organic waste). Residential customers in equestrian areas may receive service from a third additional truck, if desired, for manure collection. The number of customers who would request manure service is currently unknown and speculative. For the purposes of this analysis, one quarter of residential customers are assumed to request manure service. As such, the total of net new trucks serving residential customers would be approximately 2.25 trucks.[4]
- Under the proposed Project, each commercial customer is anticipated to receive service from one additional truck for organic waste. (As stated in Section 1.1, commercial customers are assumed to receive recycling services under current conditions.) As such, commercial customers would be served by one net new truck.
- Under the proposed Project, trucks for collecting bulky items and illegal dumping would be added to the Project area. It is assumed that one net new truck would circulate the Project area as a whole on a daily basis (5 days per week) to provide this service. (This assumption is based on current service levels that are provided in a similarly sized area in the County.)

Table 2-1. Proposed Increase in Collection Trucks in the Project Area (per Week)

	2023 Conditions [1]	2035 Conditions [2]	2048 Conditions
Residential [3]			
Number of Customers	43,198 customers	55,121 customers	71,602 customers
Number of Additional Trucks	324 trucks	413 trucks	537 trucks
Commercial [4]			
Number of Customers[5]	1,038 customers	1,461 customers	2,108 customers
Number of Additional Trucks	15 trucks	21 trucks	30 trucks
Total Additional Trucks	**339 trucks**	**434 trucks**	**567 trucks**

Source: County of Los Angeles 2015b
Notes:
1 Year 2023 would be the first year that the proposed Project would be implemented, as discussed above.

4 This assumption may be conservative, since multi-family residential customers receive refuse service and recycling service under existing conditions, as described in Section 1.1. (However, as noted in Section 2.2, multi-family residential uses are not a predominant land use in the Project area.)

[2] Year 2035 is selected as the midpoint of the GDD/RF contract(s) and represents the midway point in regional growth during Project operations.
[3] Future projected growth in residential customers is based on housing unit growth factors for the unincorporated Antelope Valley and Santa Clarita Valley for 2020–2035, as shown in the Antelope Valley Area Plan EIR, which is based upon Southern California Association of Governments (SCAG) projections.
[4] Future projected growth in commercial customers is based on employment growth factors for the unincorporated Antelope Valley and Santa Clarita Valley for 2020–2035, as shown in the Antelope Valley Area Plan EIR, which is based upon SCAG projections.
[5] The total number of commercial customers has been multiplied by 1.25 in order to account for a fraction of customers that may require service on multiple days per week.

In addition to the collection trucks that would circulate the Project area, Public Works would also introduce three Field Monitors and two new office employees as part of the proposed Project. The Field Monitors would travel in light-duty trucks, and three Field Monitor vehicles are assumed to circulate the Project area per week, throughout the life of the Project.

Daily Increase in Collection Trucks

Assuming that the solid waste collection service is provided 5 days per week, and an approximately equal number of customers are served per day, Table 2-2 presents the anticipated daily increase in collection trucks anticipated per day in the Project area. One daily truck has been added to represent the additional truck associated with the bulky items pickup/illegal dumping service.

Table 2-2. Proposed Increase in Collection Trucks in the Project Area (per Day)

	2023 Conditions	2035 Conditions [1]	2048 Conditions
Total Additional Trucks per Day	69 trucks	88 trucks	114 trucks

Note:
[1] Year 2035 was selected as the midpoint of the GDD/RF contract(s) and represents the midway point in regional growth during Project operations.

In addition to the collection trucks that would circulate the Project area, Public Works would also introduce three Field Monitors and two new office employees as part of the proposed Project. The Field Monitors would travel in light-duty trucks, and three Field Monitors are assumed to circulate the Project area per waste collection day, throughout the life of the Project. The additional employees that are expected to be required to operate the new collection trucks are also considered in this analysis. The analysis assumes that one employee would be required to operate each truck. As such, approximately 69 additional truck drivers are anticipated at the start of the GDD/RF contracts, and approximately 114 additional truck drivers are anticipated at the conclusion of the contracts in 2048. In order to address the potential for these new employees to increase commuter vehicle trips in the Project area, the proposed GDD/RF contracts include a requirement for the selected waste hauler(s) to limit commuter trips and require use of carpooling and/or alternative modes of transportation. Commuter trips would be limited to less than the County's screening criteria of 110 daily vehicle trips. This restriction ensures that the vehicle miles traveled impacts associated with the proposed Project would be less than significant, requiring no further analysis. (See Section 3.17 for further details on the topic of transportation and vehicle miles traveled.)

Routes and Travel Distances

Each collection truck would begin its route at the provider's service yard and would then travel along a pre-determined route to provide roadside collection services to its customers. Each collection truck is expected to travel to the appropriate resource recovery or waste disposal facility once per day but may require two trips for more densely populated areas. Under the proposed Project, the routes for refuse collection that are driven from customer to customer are anticipated to remain generally the same as existing conditions. As the population expands in the

Project area, the number of routes may increase over time, as demonstrated by the increase in customers that is shown in Table 2-1. Route length is anticipated to remain generally consistent over time, even as new routes are added. Because the waste haulers have not yet been selected, the location of future service yards or other facilities necessary for future waste haulers to serve the Project area under the proposed GDD/RF contracts is highly speculative at this time. Existing landfills within Los Angeles County and near the service areas include Lancaster Landfill, Antelope Valley Landfill, Chiquita Canyon Landfill, and Sunshine Canyon Landfill. In the proposed Project area, there are currently no material recycling facilities, organic waste processing facilities, or transfer stations. As described in Section 2.3, the potential for the selected waste hauler(s) to propose new facilities to serve the Project area is currently unknown and speculative.

Each collection truck is assumed to travel an average of 200 miles per day of service. (This assumes that each truck would begin at a service yard, travel between customer locations along a designated route, travel to a nearby resource recovery or waste disposal facility one to two times, and then return to the service yard.) The Public Works field monitors would travel from their personal residence to their designated service area(s) each day. The surveillance routes used by the field monitors are anticipated to be an average of 200 miles per day per vehicle. As described in Section 2.3, the location(s) of service yards and other facilities that would be used by the selected waste hauler(s) are currently unknown and highly speculative at this time, and any new or expanded yards or facilities would require separate CEQA review. As such, the specific distances that collection trucks would travel to/from service yards and to/from resource recovery or waste disposal facilities, as well as the specific routes to/from these locations, are also currently unknown and cannot be known at this time. The assumption of a 200-mile trip per workday, per collection truck, is considered a conservative estimate and is based on information provided by Public Works. This conservative trip length assumption is reflected in the air quality, greenhouse gas (GHG), and energy analyses in this document.

Travel on Unpaved Roads

As described in Section 2.2, the Project area is characterized by a roadway network that includes approximately 2,739 miles of unpaved roads. The overwhelming majority--approximately 95 percent—of unpaved roads in the Project area are outside of County control—i.e., privately-owned and maintained. Implementation of the proposed Project would result in increased collection truck travel on the roadway network in the Project area, including collection truck travel on unpaved roads. Truck travel on unpaved roads produces more dust than truck travel on paved roads.

Application of dust suppressants on unpaved roads reduces dust generation from vehicle traffic by approximately 85%, relative to the amount of dust that is generated in the absence of such treatments (WGA 2006). Public Works performs periodic maintenance on County-maintained unpaved roads, including but not limited to grading and the application of a non-toxic, permeable soil stabilizing agent as a dust suppressant on an as-needed basis. Property owners along unpaved roads that are not maintained by the County will be encouraged by Public Works to apply dust suppressants to those roads. Public Works may do direct mailings, include information in newsletters and on its website, or make social media posts to encourage use of dust suppressants.

2.6 Approvals

Public Works, working in conjunction with the County of Los Angeles (County), is the lead agency for the proposed Project pursuant to CEQA Guidelines Section 15367. The proposed Project would require the following discretionary approvals from the County:

- Certification of the EIR by the County of Los Angeles Board of Supervisors
- Approval of the GDD or RF contracts by the County of Los Angeles Board of Supervisors

Discretionary approvals from other regulatory agencies may also be required and are listed as follows:

- Local Agency Formation Commission (LAFCO) – certification for the creation of GDDs, if GDDs receive voter approval. (LAFCO is considered a responsible agency for the proposed Project.)

2.7 References

CalRecycle (California Department of Resources Recycling and Recovery). 2021. *State of Disposal and Recycling for Calendar Year 2019.* February 12, 2021. Accessed January 7, 2022. https://www2.calrecycle.ca.gov/Publications/Details/1697.

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County of Los Angeles. 2015b. Antelope Valley Area Plan Environmental Impact Report. Final. Accessed September 1, 2021. https://planning.lacounty.gov/tnc/environmental/.

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Public Works (County of Los Angeles Department of Public Works). 2022. "Organic Waste Management." Webpage. Accessed January 7, 2022. https://dpw.lacounty.gov/epd/cleanla/OrganicWaste.aspx.

Western Governors' Association (WGA). 2006. WRAP Fugitive Dust Handbook. September 7, 2006. https://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf.

3 Initial Study Checklist

1. **Project title:**

   North County Solid Waste Collection Services Project

2. **Lead agency name and address:**

   County of Los Angeles Department of Public Works
   900 South Fremont Avenue
   Alhambra, California 91803

3. **Contact person and phone number:**

   Krystle K. Jafari, P.E., Associate Civil Engineer
   Los Angeles County Public Works
   626.458.3916

4. **Project location:**

   See Section 2.1, Project Location.

5. **Project sponsor's name and address:**

   County of Los Angeles Department of Public Works
   900 South Fremont Avenue
   Alhambra, California 91803

6. **General plan designation:**

   See Section 2.2, Project Area Land Uses.

7. **Zoning:**

   See Section 2.2, Project Area Land Uses.

8. **Description of project:**

   See Section 2, Project Description.

9. **Surrounding land uses and setting:**

   See Section 2.2, Project Area Land Uses.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

    Local Agency Formation Commission (LAFCO)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

No California Native American tribes have requested consultation. See Section 3.18 for details.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kryptle Japai — 01/25/2023

Signature — Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS** – Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. Less commonly, certain urban settings or features, such as a striking or renowned skyline, may also represent a scenic vista. Scenic vistas generally refer to views that are accessible from public vantage points, such as public roadways and parks. The Los Angeles County General Plan (General Plan) identifies a variety of mountain ranges that define the unincorporated areas of the County, including the San Gabriel Mountains and Santa Susana Mountains within Angeles National Forest (County of Los Angeles 2015a). The General Plan also identifies Hillside Management Areas and Ridgeline Management Areas for protection of these scenic areas and viewsheds.

The Project area encompasses the unincorporated communities within the northern County, generally located north of the Angeles National Forest. The Project area is divided into four service areas: Quartz Hill, Antelope Valley West, Antelope Valley East, and Acton/Agua Dulce. According to Figure 9.8 of the General Plan, all of these service areas except Quartz Hill contain some Hillside Management Areas and/or Ridgeline Management Areas. Generally, development standards in these areas are intended to limit aesthetic impacts from new developments (Los Angeles County Department of Regional Planning 2015).

Under the proposed Project, there would be changes to existing waste collection practices in the Project area involving additional waste collection services and an associated increase in collection trucks circulating the Project area. No construction-related work activities or land development can be defined at

this time, as explained in Section 2.4. The passage of additional collection trucks and field monitor vehicles along established roadways[5] in the Project area would not have the potential to compromise scenic vistas, as such vehicles are mobile and would not create permanent view obstructions. Dust would be produced by collection trucks (particularly those traveling on unpaved/dirt roads). However, dust attributable to the Project would not have substantial, adverse impacts on existing scenic vistas in the Project area. Dust generation from collection trucks would be limited to collection days and the passage of a collection vehicle. Most locations would receive the proposed waste hauling services one to two times per week, and most locations would be served by one to two additional collection trucks over existing conditions. As such, the number of additional trucks would not represent an appreciable change relative to the existing uses of roads. Any incremental increases in dust production resulting from the Project would be temporary and intermittent and would not occur on a daily basis within a given location or neighborhood. Furthermore, dust is ephemeral—it does not lead to substantial, permanent, or complete view obstructions and would fade after the passage of a vehicle. Visual effects associated with roadway dust from periodic waste collection activities would be temporary and intermittent for individual viewers and would not lead to substantial obstructions of scenic vistas in the Project area. Overall, the passage of additional collection trucks and field monitor vehicles along a given roadway would be fleeting and would be consistent with the existing, intended use of established roadways for the passage of vehicles. Thus, adoption of the proposed Project would not result in physical changes at Hillside Management Areas, Ridgeline Management Areas, or at any other areas where there could be potential impacts to the quality or availability of scenic views. Impacts to scenic vistas would be less than significant and no further analysis is required.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Project area includes one state-designated scenic highway, State Route 2, which is part of the Angeles Crest Scenic Byway within Los Angeles County (Caltrans 2021). This official state-designated scenic highway travels through the San Gabriel Mountains of the Angeles National Forest and into the southern area of the proposed Antelope Valley East service area. In addition to this state-designated scenic highway, the Project area also supports scenic drives, as designated in the Antelope Valley Area Plan. Examples include Pine Canyon Road, Elizabeth Lake Road, the Antelope Valley Freeway, 82nd Street East, 200th Street East, East Avenue O, Big Pines Highway, among others. Overall, 58 scenic drives are identified within and near the Project area as part of Map 4.2 in the Antelope Valley Area Plan (County of Los Angeles 2015b). No construction is proposed as part of this Project. As such, scenic resources within State Route 2 and locally designated scenic drives would not have the potential to be affected by the Project. While additional collection trucks and field monitor vehicles would travel along State Route 2 and locally designated scenic drives, the vehicles would not create permanent view obstructions. Dust would be produced by collection trucks (particularly those traveling on unpaved/dirt roads). However, dust attributable to the Project would not result in substantial damage to scenic resources such as trees, rock outcroppings, and/or historic buildings that can currently be observed from State Route 2 and/or locally designated scenic drives. As described under Section 3.1(a), dust generation from collection trucks would be limited to collection days and the passage of a collection vehicle. Most locations would receive the proposed waste hauling services one to two times per week, and most locations would be served by one to two additional collection trucks over existing conditions. Any incremental increases in dust production resulting from the Project would be

[5] For the purposes of this analysis, the term "established roadways" will be used hereafter to refer to existing roadways in the Project area, as well as any new roadways that may be approved and constructed as part of future growth that is anticipated to occur in the Project area. (Any new roadways that may be constructed during the life of the proposed GDD/RF contracts would not be the result of these contracts and would undergo separate review and approval from the County.)

temporary and intermittent and would not occur on a daily basis within a given location or neighborhood. Additionally, the number of additional trucks would not represent an appreciable change relative to the existing uses of roads. Furthermore, dust is ephemeral—it does not lead to substantial, permanent, or complete view obstructions and would fade after the passage of a vehicle. Visual effects associated with roadway dust from periodic waste collection activities would be temporary and intermittent for individual viewers and would not lead to substantial degradation of resources that can be observed from scenic highways and roadways. Overall, the passage of additional collection trucks and field monitor vehicles along State Route 2 and locally designated scenic drives would be fleeting and would be consistent with the existing, intended use of the roads for the passage of vehicles. The proposed Project would therefore have no impact to scenic resources within a state scenic highway or within a locally designated scenic drive and no further analysis is required.

c) ***In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

Less Than Significant Impact. The Project area includes both urban and non-urban areas. For example, portions of the Quartz Hill service area are urbanized, while much of the Antelope Valley service areas and the Acton/Agua Dulce service area are rural in character. The proposed Project would not change the visual quality of the service areas, collection route areas, or surrounding areas. The Project would not include development that could degrade the existing visual character or quality of the Project area or its surroundings. As discussed in Section 3.1(a), adoption of the proposed Project would also result in no physical changes to Hillside Management Areas, Ridgeline Management Areas, or any other areas where there could be potential impacts to the quality or availability of scenic views. The passage of additional collection trucks and field monitor vehicles along established roadways in the Project area would not have the potential to degrade the visual character or quality of public views, nor would they have the potential to conflict with applicable zoning and other regulations governing scenic quality. As also discussed in Section 3.1(a), dust would be produced by collection trucks (particularly those traveling on unpaved/dirt roads). However, dust attributable to the Project would not substantially degrade the existing visual character or quality of public views within the Project area. Dust generation from collection trucks would be limited to collection days and the passage of a collection vehicle. Most locations would receive the proposed waste hauling services one to two times per week, and most locations would be served by one to two additional collection trucks over existing conditions. Any incremental increases in dust production resulting from the Project would be temporary and intermittent and would not occur on a daily basis within a given location or neighborhood. Additionally, the number of additional trucks would not represent an appreciable change relative to the existing uses of roads. Furthermore, dust is ephemeral—it does not lead to substantial, permanent, or complete view obstructions and would fade after the passage of a vehicle. Visual effects associated with roadway dust from periodic waste collection activities would be temporary and intermittent for individual viewers, would not lead to substantial degradation of the existing visual character or quality of public views within the Project area, and would not conflict with policies governing scenic quality, as effects would be limited and ephemeral. The passage of additional vehicles would be fleeting and would be consistent with the intended purpose of established roadways. Therefore, substantial degradation in visual character or quality and/or conflicts with policies governing scenic quality would not result. Impacts would be less than significant and no further analysis is required.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The proposed Project would not include development that creates a new source of light or glare. While new vehicles including collection trucks would be introduced to the area, additional lighting from these vehicles would be minimal and intermittent in nature while servicing the Project area, such that daytime views are not adversely impacted. The passage of collection trucks and field monitor vehicles along roadways would not constitute a permanent new source of light or glare. New vehicles from the Project would not generally be active during nighttime. No impact would occur and no further analysis is required.

References

Caltrans (California Department of Transportation). 2021. California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983.

County of Los Angeles. 2015a. Los Angeles County General Plan 2035, Chapter 9: Conservation and Natural Resources Element. https://planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch9.pdf.

County of Los Angeles. 2015b. Town & Country: Antelope Valley Area Plan Update. Accessed July 18, 2021. https://planning.lacounty.gov/tnc/.

3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) ***Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

No Impact. The Project area contains some areas designated as Prime Farmland or Unique Farmland by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) (DOC 2021) associated with existing farming operations. However, the Project consists of changes to waste collection operations that would not convert any existing farmland to non-agriculture uses. Thus, there would be no impact and no further analysis is required.

b) ***Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

No Impact. The proposed Project would not conflict with existing zoning for agricultural use, as the Project would not involve any land use or zoning changes. Additionally, according to the DOC's Williamson Act Contract Land Map, the Project area does not contain land that is enrolled in a Williamson Act Contract (DOC 2017). Given this, the proposed Project would have no impact to existing zoning for agricultural use or a Williamson Act contract and no further analysis is required.

c) ***Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

No Impact. The Project area is not located within forest land, timberland, or a Timberland Production zone (DOC 2021). The proposed Project would result in a change in waste collection practices and would add collection trucks and field monitor vehicles to local roadways. These activities would not involve any land use or zoning changes. Thus, the proposed Project would have no impact on forest land, timberland, or Timberland Production zones and no further analysis is required.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As stated above, the Project area is not located within forest land, timberland, or a Timberland Production zone. The proposed Project would not involve any land use or zoning changes. Thus, the proposed Project would not result in the loss or conversion of forest land to non-forest use, no impact would occur, and no further analysis is required.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The proposed Project would not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur and no further analysis is required.

References

DOC (California Department of Conservation). 2017. State of California Williamson Act Contract Land (map).

DOC. 2021. DOC Maps: Agriculture, DOC Maps Data Viewer. Web. Accessed September 17, 2021. https://maps.conservation.ca.gov/agriculture/DataViewer/index.html.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Potentially Significant Impact. The Project area is located mostly within the Mojave Desert Air Basin (MDAB) with small portions of the Project area located within South Coast Air Basin (SCAB). Areas within the SCAB are subject to the rules and regulations imposed by South Coast Air Quality Management District (SCAQMD) and

areas within the MDAB are subject to the rules and regulations imposed by the Antelope Valley Air Quality Management District (AVAQMD). The AVAQMD, which was established by the state legislature, separated the Antelope Valley and northern Los Angeles County from the SCAQMD. The AVAQMD and the SCAQMD are the regional agencies responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the Antelope Valley region of the MDAB and the SCAB, respectively.

The Project would entail additional waste collection vehicles traveling along unpaved roads, which may result in potentially significant fugitive dust impacts. Therefore, the proposed Project may result in conflicts with the AVAQMD or SCAQMD air quality plans, and this would be a potentially significant impact to be discussed in further detail in an EIR.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Potentially Significant Impact. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide, particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. Pollutants also include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O_3, as well as CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.

Regarding National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) attainment status,[6] the MDAB is designated as a nonattainment area for federal and state O_3 8-hour and state O_3 1-hour standards (CARB 2019; EPA 2020). The MDAB is also designated as a nonattainment area for state PM_{10} and federal $PM_{2.5}$ standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as a nonattainment area for federal and state O_3 and $PM_{2.5}$ standards and the state PM_{10} standards. Both the MDAB and SCAB are designated as an attainment area for federal and state CO, SO_2 and NO_2 standards (CARB 2019; EPA 2020).

The proposed Project would result in emissions of criteria air pollutants for which the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (EPA) have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Projects that emit these pollutants have the potential to cause, or contribute to, violations of these standards. As previously discussed, the proposed Project would involve additional waste collection vehicles traveling along unpaved roads, which may result in increased fugitive dust impacts. Fugitive dust is a source for PM_{10} and $PM_{2.5}$ emissions. Because the MDAB and SCAB are designated as nonattainment areas for state PM_{10} and $PM_{2.5}$ standards and federal $PM_{2.5}$ standards, the proposed Project could potentially result in a cumulatively considerable net increase for these criteria pollutants. Therefore, this would be a potentially significant impact to be discussed in further detail in an EIR.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. It is possible that the proposed Project would expose sensitive receptors to substantial pollutant concentrations, such as increased particulate matter concentrations associated with dust produced by the travel of waste collection vehicles along unpaved roads. Health effects associated with particulate matter ($PM_{2.5}$ and PM_{10}) include premature death and hospitalization, primarily

[6] An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. These standards for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare are set by the EPA and CARB, respectively. Attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards.

for worsening of respiratory disease (CARB 2017). Valley fever can also be associated with increased exposure to fugitive dust. Valley fever is an illness caused by inhalation of the spores of the *Coccidioides* fungus. The fungal spores are generally found in the upper 30 centimeters (12 inches) of the soil horizon, especially in undisturbed soils. The spores become airborne when uncultivated soil is disturbed by natural or anthropogenic means (winds, grading, mining, farming, and recreational activities) (International Journal of Environmental Research and Public Health 2020; ESA 2018). Because the Project may generate significant amounts of fugitive dust, exposure of sensitive receptors to pollutant concentrations will be further discussed in the EIR, and this topic will include a detailed discussion of Valley fever.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed Project involves the collection of organic waste and the expansion of the existing solid waste collection program in the Project area. Some solid waste–related facilities, such as landfills or composting operations, have the potential to generate point sources of odors. As detailed in Section 2.3, the proposed Project does not include the expansion or creation of solid waste–related facilities. However, the proposed Project would involve additional collection trucks circulating the Project area. Collection trucks can result in temporary sources of odors, due to diesel emissions from diesel-fueled trucks and/or odors emanating from the collection bins of the trucks. However, such sources of odors would occur briefly and temporarily at a given receptor location. Most locations throughout the Project area would only receive the proposed waste hauling services one to two times per week, and each truck pass-by would be limited in duration. The proposed Project does not propose any point sources of odors, and odors from collection trucks would not be considered significant. Other emissions could include hazardous substances such as asbestos and lead. The proposed Project would not directly produce or emit such substances. As further discussed in Section 3.9, hazardous substances (including asbestos, lead, or other hazardous materials) would not generally be transported by the proposed collection trucks. If handled properly, such substances are disposed at designated collection centers or landfills equipped to handle potentially hazardous substances. Hazardous materials that may need to be disposed in the Project area (including asbestos and lead) would continue to be subject to applicable handling and disposal requirements. For these reasons, impacts associated with odors or other emissions would be less than significant and no further analysis is required.

References

CARB. 2017. Inhalable Particulate Matter and Health ($PM_{2.5}$ and PM_{10}). Page last reviewed August 10, 2017. Accessed January 2022. https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm.

CARB. 2019. "Area Designation Maps/State and National." Last reviewed October 24, 2019. http://www.arb.ca.gov/desig/adm/adm.htm.

EPA. 2020. "Region 9: Air Quality Analysis, Air Quality Maps." Last updated January 7, 2020. http://www.epa.gov/region9/air/maps/.

ESA. 2018. El Monte Sand Mining Project – Valley Fever Technical Report. Prepared for County of San Diego Planning and Development Services. July 2018.

International Journal of Environmental Research and Public Health. 2020. "Valley Fever: Environmental Risk Factors and Exposure Pathways Deduced from Field Measurements in California." July 22, 2020. https://mdpi-res.com/d_attachment/ijerph/ijerph-17-05285/article_deploy/ijerph-17-05285-v2.pdf.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. The proposed Project would not include construction activities that could have a substantial adverse effect on any candidate, sensitive, or special status species. Given the large Project area spanning the northern, lesser-developed area of the County, there are a number of species listed under the federal and/or California endangered species acts known to occur in the general area, and the Project area overlaps with designated critical habitat for Arroyo Southwestern Toad (*Anaxyrus californicus*), California Condor (*Gymnogyps californianus*), Desert Tortoise (*Gopherus agassizii*), and Mountain Yellow-legged Frog (*Rana muscosa*) (USFWS 2021). As mentioned in Section 2.2, portions of the areas served by the proposed Project are also within or adjacent to SEAs, which are officially designated areas within the County recognized as supporting irreplaceable biological resources (Los Angeles County 2015). The additional collection trucks and field monitor vehicles associated with the Project could increase noise and activity in the Project area, including portions of the area designated as SEAs, which has the potential to disturb special-status species. However, this would not be expected to have a significant adverse effect on such species because travel within these areas would be intermittent in nature and limited to established, designated roadways that are already developed and regularly used by other motor vehicles. The use of the roadways for collection trucks and field monitor vehicles would be consistent with the existing, intended use of the roadways. Additionally, according to the SEA Ordinance, projects within a SEA are subject to regulations if they meet the definition of "development" as defined in the ordinance. This would include projects involving alterations to vegetation or topography, construction activities, land divisions, and trail modification, among other actions representing a clear change in the physical environment (Los Angeles County 2019). The proposed Project would not result in any physical development or new ground disturbance. As such, no impact to special-status species is expected to occur and no further analysis is required.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. As discussed in Section 3.4(a), the proposed Project would not result in any new development that would result in substantial adverse effects to the physical environment. No construction is proposed as part of the Project, and waste collection activities would occur along designated, established roadways. Although areas with riparian habitat and natural communities exist within the County, these areas are generally distinct from the developed routes where collection activities would occur. The new trucks and vehicles from the proposed Project would travel on designated, established roadways and are not anticipated to have any effect on riparian habitat or other sensitive natural communities and therefore no impact is expected to occur, and no further analysis is required.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The proposed Project would not have a substantial adverse effect on any federally protected wetlands. The Project area contains numerous wetlands and aquatic habitats that may be subject to regulation under Section 404 of the Clean Water Act or other state or federal statutes; however, no

construction is proposed, and waste collection activities would not take place in or remove, fill or hydrologically interrupt any marshes, vernal pools or other federally protected wetlands. As such, no impact would occur from the proposed Project and no further analysis is required.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. As discussed in Section 3.4(a), the proposed Project would not result in any new development that would result in substantial adverse effects to the physical environment. The additional collection trucks and field monitor vehicles associated with the Project could increase noise and activity in the Project area; however, this would not be expected to have a significant adverse effect on wildlife because travel within these areas would be intermittent in nature and limited to established, designated roadways that are already developed and regularly used by other motor vehicles. New trucks and vehicles from the proposed Project would serve existing and future residential and commercial customers. Thus, no interference with the movement of native resident, migratory fish, or wildlife species, or with established native resident or migratory wildlife corridors, or with native wildlife nursery sites would occur. No impact would occur and no further analysis is required.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The proposed Project would not conflict with any local policies or ordinances protecting biological resources. No construction or land development is proposed, and waste collection activities would continue to occur along designated, established roadways. No trees would be removed as a result of the proposed Project, and as discussed in Section 3.4(a), no actions subject to the SEA Ordinance regulations would occur. No impact would occur and no further analysis is required.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project area is not within any of the regional conservation plans designated by the state (CDFW 2019). Therefore, implementation of the proposed Project would not conflict with the provisions of an adopted and applicable habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat plan, as none apply to the Project. No impacts would occur as a result of the proposed Project and no further analysis is required.

References

CDFW (California Department of Fish and Wildlife). 2019. *California Natural Community Conservation Plans*. [map]. April 2019. Accessed September 17, 2021. https://www.wildlife.ca.gov/Conservation/Planning/NCCP.

Los Angeles County. 2015. *Significant Ecological Areas and Coastal Resource Areas Policy Map.* [map]. February 2015.

Los Angeles County. 2019. SEA Ordinance.

USFWS (United States Fish and Wildlife Service). 2021. "IPaC resource list." Accessed September 17, 2021. https://ecos.fws.gov/ipac/location/BXK5R4CNLVEAROJHZT7FQVVBBY/resources.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. Under Section 15064.5 of the CEQA Guidelines, a cultural resource (object, building, structure, site, area, place, record, or manuscript) is generally considered a historical resource if it is eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, included in a local register of historical resources or identified as significant in a historical resource survey, or has been evaluated by a lead agency and determined to be historically significant. While the Project area may encompass historical resources, the proposed Project would not result in any physical changes that could cause a substantial adverse change in the significance of any historical resource. The proposed Project would result in changes to waste collection practices and would add collection trucks and field monitor vehicles to local roadways. This additional vehicle travel would be consistent with the existing, intended use of roadways for the passage of vehicles. No physical destruction, relocation, or alteration of any historical resource or its immediate surroundings is proposed and no construction activities would occur such that impacts to any existing historical resources could result. As such, there would be no impact and no further analysis is required.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

No Impact. The proposed Project would not result in a substantial adverse change in the significance of an archaeological resource because no construction or demolition is proposed that could unearth or damage archaeological resources. All Project activities would occur aboveground and new Project vehicles would travel on designated routes along established roadways, which would not result in new ground disturbance or excavation. As such, there would be no impact to archaeological resources from the proposed Project and no further analysis is required.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

No Impact. Similar to the analysis presented in Section 3.5(b) above, the proposed Project would not cause new ground disturbance or excavation that could unearth or disturb any human remains. Thus, there would be no impact to human remains from the proposed Project and no further analysis is required.

References

None.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The proposed Project would require the consumption of energy resources in several forms (electricity, natural gas, and petroleum) within the Project area, primarily associated with the operation of motor vehicles traveling within the Project area.

Petroleum, natural gas, and electricity consumption associated with motor vehicles used for the proposed Project is a function of the vehicle miles traveled (VMT) as a result of Project operation. As shown in Appendix A (calculation spreadsheets), the annual VMT attributable to the Project is expected to be 8,322,000 miles.[7] Fuel consumption from worker and truck trips are estimated by converting the total CO_2 emissions from the Project to gallons using the conversion factors for CO_2 to gallons of petroleum and natural gas. Electricity demand from electric vehicles is provided directly in EMFAC2021. Calculations for annual mobile source fuel consumption are provided in Table 3.6-1.

[7] As described in Section 3.17, haul trucks (including collection trucks) are not included in VMT for the purposes of the VMT thresholds for transportation. However, for the purposes of the energy analysis, the collection truck trips and routes are included in the total VMT for the Project.

Table 3.6-1. Annual Mobile Source Energy Demand

Fuel	Source	Vehicle MT CO_2	kg/CO_2/Gallon	Energy Consumption
Petroleum	Vehicles	1,757	10.21	17,938.97 gallons
Natural Gas	Vehicles	4,556	0.37	1,684.68 gallons
Electricity	Vehicles	NA	NA	2,234 kWh

Sources: Trips and vehicle CO_2 (Appendix A); kg/CO_2/Gallon (The Climate Registry 2021).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram; kWh = kilowatt hour

As shown in Table 3.6-1, total petroleum consumption for the Project annually is estimated to be 17,939 gallons.[8] Natural gas consumption for the proposed Project annually is estimated to be 1,675 gallons, and electricity demand is anticipated to be 2,234 kilowatt hours per year.[9] Moreover, vehicle usage associated with the proposed Project would use less petroleum due to advances in fuel economy and the increased use of electric vehicles over time. Energy consumption associated with the proposed Project is minor relative to regional demand and supplies. The proposed Project also includes strategies to reduce its energy demands, such as a vehicle fleet that includes alternative fuels (natural gas and electric), as well as a provision to promote use of carpooling and alternative transportation methods for new employees associated with the Project (see Section 3.17 for details). Furthermore, the purpose of the Project is to contribute to the implementation of statewide GHG reduction strategies. While the proposed Project would consume energy, it is also an important component of the County's efforts to comply with and implement statewide requirements for GHG reductions (particularly SB 1383). Therefore, energy use associated with the Project would be minor and would not be considered wasteful, inefficient, or unnecessary. Impacts would be less than significant and no further analysis is required.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The Project would be consistent with applicable standards, regulations, plans, and policies in place to reduce energy consumption. It is anticipated that worker vehicles would meet the applicable standards of AB 1493 (vehicles manufactured in 2009 or later), and as a result would likely consume less energy as fuel efficiency standards are increased and vehicles are replaced. The proposed Project would also support compliance with, and implementation of, SB 1383 which requires all jurisdictions in the state to provide organic waste collection services to all residents and businesses and to divert these organic materials from landfills.

Additionally, as discussed in Section 3.8, existing various plans are in place at the local, regional, and state level that are reducing energy use, including the County's Community Climate Action Plan, SCAG's 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, and CARB's Scoping Plan. Furthermore, approval of the proposed Project would not change these regulations and would not provide any goals, policies, or programs that would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant and no further analysis is required.

8 For context, California as a whole is expected to consume approximately 18.0 billion gallons of petroleum per year by 2023 (CARB 2021). Countywide total petroleum use by vehicles is expected to be 987.9 million gallons per year by 2023 (CARB 2021).

9 For context, Countywide total electricity demand was 65,649 million kilowatt hours and Countywide natural gas consumption was 2,937 million therms (2,352 million gallons) in 2020 (CEC 2021a CEC 2021b).

References

CARB. 2021. EMFAC 2021. Accessed October 2021. https://www.arb.ca.gov/emfac/2021/.

CEC. 2021a. Electricity Consumption By County. Accessed October 2021. http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

CEC. 2021b. Gas Consumption By County. Accessed October 2021. http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

No Impact. There are numerous known earthquake faults within the Project area and vicinity. This includes the Mojave section of the San Andreas Fault which crosses through the Acton/Agua Dulce and Antelope Valley East service areas, the Mirage Valley Fault and Llano Fault also in in the Antelope Valley East service area, and several unnamed Quaternary-age faults in the Antelope Valley West service area (CGS 2015). The Project would not introduce new habitable structures nor would it change the existing land uses of the service areas. Under the proposed Project, there would be changes to existing waste collection practices in the Project area involving additional waste collection services and an associated increase in collection trucks circulating the Project area. The passage of additional collection trucks and field monitor vehicles along established roadways in the Project area would not have the potential to increase the probability or exacerbate the potential for fault rupture. As such, while portions of the Project area overlap with several earthquake fault zones, the proposed Project would not increase the risk of loss, injury, or death involving rupture of an earthquake fault. With no introduction of new people or housing and no changes to the existing geological environment of the area, the proposed Project would also have no impact related to risk of loss, injury, or death from strong seismic ground shaking, seismic-related ground failure, or landslides. Additionally, implementation of the proposed Project would not increase the probability or exacerbate the potential for such events. As such, there would be no impacts related to seismic events from the proposed Project and no further analysis is required.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The proposed Project would not include construction or demolition activities that could cause substantial erosion impacts. The only potential source of soil erosion would be from new vehicles traveling on unpaved roads, or on roads located adjacent to soils susceptible to erosion by the motion of vehicles passing by. In 2023, the proposed Project would result in an increase of approximately

339 trucks per week to serve 44,236 residential and commercial customers. This is currently projected to grow to approximately 567 trucks serving an anticipated 73,710 customers per week by 2048. In addition, there would be three field monitors circulating the Project area each week. The addition of new vehicles traveling along roads (particularly unpaved/dirt roads) could potentially result in some soil erosion. However, the amount of soil erosion from such activities would be relatively minor compared to the typical erosion potential from ground-disturbing construction activities. Vehicles would travel along established, designated roadways that are already developed and regularly used by other motor vehicles. Public Works conducts regular road maintenance on County-maintained roads. Private roadways are generally maintained by property owners and would be expected to continue to be maintained. Use of existing infrastructure for its intended purpose would not lead to a new, significant erosion or drainage impact. As such, any potential soil erosion associated with the Project would be minor and incidental and is expected to be resolved by standard road maintenance practices, which would occur regardless of this proposed Project. Impacts would be less than significant and no further analysis is required.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. The Project would not introduce new habitable structures nor would it change the existing land uses within the service areas. Furthermore, changes to existing waste collection practices in the Project area involving additional waste collection services and an associated increase in collection trucks circulating the Project area would not cause any changes to the existing geological environment of the area and would not increase the existing risk of landslides, lateral spreading, subsidence, liquefaction, or collapse. As such, the proposed Project would have no impact related to soil instability or location on an unstable geologic unit and no further analysis is required.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact. Generally, expansive soils are those that contain certain clay minerals which expand excessively when wet and retract when dry. This drastic change in volume can cause damage to structures as water in the soil is absorbed and evaporated. The Project area generally contains loamy sand and well-drained young soils derived from granitic rocks (UCANR 2021). These soils generally do not have a high shrink-swell potential. Additionally, the proposed Project would not introduce any new structures, which could be damaged by expansive soils. The Project would change waste collection practices and introduce more vehicles to the Project area, which would not result in any direct or indirect risks to life or property associated with expansive soils. Thus, the proposed Project would have no impact and no further analysis is required.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed Project would not generate waste water or involve the use of septic tanks or alternative waste water disposal systems. There would be no impact and no further analysis is required.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. The proposed Project would not destroy any unique paleontological resources or geologic features because no construction or demolition activities are proposed. The proposed Project would include changes to existing waste collection practices in the Project area involving additional waste collection services and an associated increase in collection trucks circulating the Project area. All Project activities would occur aboveground and new Project vehicles would travel on designated routes along established roadways, which would not result in new ground disturbance or excavation. As such, there would be no impact from the proposed Project and no further analysis is required.

References

CGS (California Geological Survey). 2015. Fault Activity Map of California. Accessed September 17, 2021. https://maps.conservation.ca.gov/cgs/fam/.

UCANR (University of California Agriculture and Natural Resources). 2021. "High Desert Soils." Accessed September 17, 2021. http://celosangeles.ucanr.edu/Agriculture/High_Desert_Soils/.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Climate change refers to any significant change in measures of climate (e.g., temperature, precipitation, or wind patterns) lasting for an extended period of time (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere). The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate

change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5). The three GHGs evaluated herein are CO_2, CH_4, and N_2O because these gases would be emitted as a result of the proposed Project.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e). Consistent with CalEEMod Version 2020.4.0, the GHG emissions analysis presented herein assumes the GWP for CH_4 is 25 (i.e., emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

As discussed in Section 3.3, the Project is located largely within the AVAQMD's jurisdictional boundaries with a small portion of the western Project area within the SCAQMD's jurisdictional boundaries. The AVAQMD has prepared criteria and thresholds for determining significance of GHG emissions under CEQA. Per the *CEQA and Federal Conformity Guidelines*, any project is significant if it triggers or exceeds the most appropriate evaluation criteria, which states that a project would result in significant emissions if it "Generates total emissions (direct and indirect) in excess of the thresholds" as follows (AVAMQD 2016):

- Daily threshold: 548,000 pounds CO_2e per day
  - The AVAQMD has a daily threshold of 548,000 pounds CO_2e per day for multi-phase projects with phases shorter than one year. This is not applicable to the proposed Project as the Project does not include a construction component.
- Annual threshold: 100,000 tons CO_2e per year, which equates to 90,718 MT CO_2e per year.
  - Given the long-term nature of the proposed Project, the annual threshold is the more applicable threshold per the AVAQMD's guidance.

The SCAQMD also has significance thresholds that are applicable to GHGs. However, these thresholds were never formally adopted. Furthermore, they pertain to land use development projects. The proposed Project would involve implementation of new waste collection practices throughout the unincorporated Antelope Valley, Acton, and Agua Dulce areas. As explained in Section 2, Project Description, the proposed Project would not entail land use development. As such, the SCAQMD significance thresholds were not determined to be applicable to the proposed Project. The Project is thus analyzed below for its consistency with the AVAQMD thresholds.

Construction Greenhouse Gas Emissions

As discussed in Section 2.4, the proposed Project would involve changes to existing waste collection practices in the Project area. This would not require or result in any foreseeable construction-related work activities. As described in detail in Section 2.3, plans for infrastructure improvements initiated by the selected waste haulers, if any, are considered highly speculative at this time and, as such, are not addressed or analyzed in this document.

Operational Greenhouse Gas Emissions

As with the air quality analysis, mobile source GHG emissions were estimated using a spreadsheet model based on EMFAC 2021 emission factors. (A majority of the proposed Project's emissions would be mobile source emissions.)

All details for criteria air pollutants discussed in Section 3.3 are also applicable for the estimation of operational mobile source GHG emissions. Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the National Highway Traffic Safety Administration and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the Project's motor vehicles. The effectiveness of fuel economy improvements was evaluated to the extent it was captured in the EMFAC 2021 emission factors for motor vehicles in 2023, 2035, and 2048.

Estimated Project-generated GHG emissions for operational years 2023, 2035, and 2048 are shown in Table 3.8-1.

Table 3.8-1. Estimated Annual Operational Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons Per Year			
2023	4,763.00	0.82	0.02	4,794.53
2035	5,193.18	0.91	0.05	5,227.58
2048	6,695.35	1.156	0.06	6,747.46
			AVAQMD Threshold (tons per year)	90,718
			AVAQMD Threshold Exceed?	No

As shown in Table 3.8-1, estimated annual generated GHG emissions would be approximately 4,795 MT CO_2e in 2023, 5,228 MT CO_2e in 2035, and 6,747 MT CO_2e in 2048 as a result of the proposed Project. Annual GHG emissions would not exceed the AVAQMD threshold of 90,718 MT CO_2e per year. As such, impacts would be considered less than significant.

While the additional vehicle trips associated with the proposed Project would generate new GHGs, the Project would also contribute to the County's implementation of SB 1383, a statewide regulation that aims to reduce methane emissions by reducing the disposal of organic waste in landfills. Methane is one of several GHGs known as "short-lived climate pollutants," which are considered powerful climate forcers. One of the key sources of methane is the decomposition of organic materials within landfills. Reducing the amount of organic waste disposed in landfills prevents increases in the atmospheric release of fugitive methane emissions associated with the anaerobic breakdown of organic waste. CARB recommended the development of a Short-Lived Climate Pollutant Reduction Strategy as an action to help achieve the GHG emission reductions identified in state laws such as AB 32 and SB 32. Subsequently, SB 1383 directed CARB to approve and the begin implementing its plan to reduce short-lived climate pollutants. The Short-Lived Climate Pollutant Reduction Strategy, approved in March 2017, includes directives for addressing

landfill methane emissions via reductions in organic material disposal. SB 1383 also requires CalRecycle, in consultation with CARB, to develop regulations to reduce disposal of organic waste by 50% of 2014 levels by 2020 and 75% by 2025.

In consultation with CARB, CalRecycle recently developed and adopted a regulatory approach requiring jurisdictions and other regulated entities to implement a suite of programs to achieve SB 1383's statewide mandates. This regulatory approach is referred to as the Short-Lived Climate Pollutants: Organic Waste Reductions Regulation. One of the provisions of this regulation involves collection of organic waste, with a focus on mandatory source-separated collection of organic waste. As detailed in Section 2.3, the County recently adopted an ordinance requiring all businesses and residents in County unincorporated communities to subscribe to organic waste collection services, in compliance with this requirement. However, as also explained in Section 2.3, source-separated organic waste collection and diversion services are not readily available in the Project area under current conditions, and the proposed Project would include the introduction of this service to the Project area. As such, the proposed Project is an important aspect of the County's implementation of, and compliance with, SB 1383 and the state's associated organic waste reduction mandates.

CalRecycle published an Environmental Impact Report (EIR) for its Short-Lived Climate Pollutants: Organic Waste Reductions Regulation. The Draft EIR was circulated in July 2019, and the Final EIR was published in December 2019. This EIR (referred to herein as the "CalRecycle EIR") examines the potential for implementation of the organic waste methane emission reduction requirements to result in significant environmental impacts, including impacts in the category of GHG emissions. The GHG analysis in the CalRecycle EIR states that the organic waste reduction requirements would increase vehicle trips at the statewide and regional levels, in part due to the collection of organic waste from targeted generators and the movement of organic material to an organic waste recovery facility. However, the analysis in the CalRecycle EIR concludes that the GHG reductions achieved through implementation of the proposed organic waste reduction regulations would be "substantially greater than additional travel-generated emissions, so a net reduction in overall GHG emissions would be reasonably anticipated" (CalRecycle 2019). While the proposed Project analyzed herein includes collection truck trips that were not addressed in the CalRecycle EIR, such as collection of recyclables from residential customers, the impact conclusion from the CalRecycle EIR illustrates that at least a portion of the proposed Project's GHG emissions are anticipated to be offset by the benefits afforded from enabling increased organic waste diversion and the associated reductions in methane emissions. While the proposed Project's GHG emissions are demonstrated to be below a level of significance in the analysis above, the proposed Project is also an important component in achieving GHG reductions at the state and local level.

Overall and for the reasons described above, impacts are less than significant and no further analysis is required.

b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The Project would result in less-than-significant impacts related to conflicts with GHG emission reduction plans, for the reasons described as follows.

Potential to Conflict with the County's Community Climate Action Plan

The County's Community Climate Action Plan (CCAP) includes 26 local community actions to reduce GHG emissions from the County's community activities. Those actions are grouped into five strategy areas, two of which are appliable to the proposed Project. A qualitative analysis is provided below, describing how the

appliable strategy areas relate to the proposed Project. The proposed Project would become operational outside of the applicable timeline to tier from the County's CCAP; therefore, consistency with the County's CCAP was not utilized to determine significance of GHG impacts, and this discussion is provided for disclosure and informational purposes only.

Land Use and Transportation. The proposed Project would be consistent with the County's General Plan Policies to promote sustainability in transportation by promoting use of carpooling and alternative transportation methods for new employees associated with the Project (see Section 3.17).

Waste Reduction, Reuse, and Recycling. As discussed above, the proposed Project would implement and promote increased organic waste diversion and recycling in the Project area. As discussed in Section 3.8(a), increased organic waste diversion reduces GHG emissions. Recycling is also an important part of statewide efforts to reduce GHGs.

Potential to Conflict with the CARB Scoping Plan

The Climate Change Scoping Plan, approved by CARB in 2008 and updated in 2014, 2017, and 2022 provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, and it is not intended to be used for project-level evaluations.[10] Under the Scoping Plan, however, several state regulatory measures aim to identify and reduce GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area-source emissions (e.g., energy usage and high-GWP GHGs in consumer products) and changes to the vehicle fleet (e.g., hybrid, electric, and more fuel-efficient vehicles) and associated fuels, among others. The Project would comply with various GHG emission reduction regulations to the extent they apply to the Project's emissions sources including CARB's tractor-trailer GHG regulations and Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines. Furthermore, as explained in the CalRecycle EIR, implementation of SB 1383 and the Short-Lived Climate Pollutant Reduction Strategy is an integral part of the 2022 Climate Change Scoping Plan (CalRecycle 2019). As described in Section 3.8(a), the proposed Project is a component of the County's efforts to implement and comply with SB 1383. As such, the proposed Project would be consistent with the Climate Change Scoping Plan and would help implement the plan and its goals at the local level.

Potential to Conflict with the Southern California Association of Governments 2020– 2045 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG 2020–2045 RTP/SCS is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375. In addition to demonstrating the Region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020-2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2020-2045 RTP/SCS would result in more complete communities with various transportation and housing choices while reducing automobile use.

[10] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

The following strategies are intended to be supportive of implementing the 2020-2045 RTP/SCS and reducing GHGs: focus growth near destinations and mobility options; promote diverse housing choices; leverage technology innovations; support implementation of sustainability policies; and promote a green region (SCAG 2020). The strategies that pertain to residential development would not apply to the Project. The Project's potential to conflict with the remaining applicable strategies is presented below.

Focus Growth Near Destinations and Mobility Options. One of the strategies within the 2020-2045 RPT/SCS focuses on growth near existing transit and implementation of first/last mile strategies. The Project would not conflict with this strategy of the 2020-2045 RTP/SCS. While the proposed Project would not involve new growth or development, it would promote use of carpooling and alternative transportation methods for new employees associated with the Project (see Section 3.17).

Leverage Technology Innovations. One of the technology innovations identified in the 2020-2045 RTP/SCS that would apply to the Project is the promotion and support of low emission technologies for transportation, such as alternative fueled vehicles to reduce per capita GHG emissions. The Project would not conflict with SCAG's ability to implement this strategy. As described in Section 3.3, the proposed collection trucks fleet is expected to be made up of 27% diesel, 3% electric, and 70% natural gas–powered vehicles. As such, the Project's vehicle fleet is anticipated to include use of alternative fuels.

Support Implementation of Sustainability Policies. One of the strategies within 2020-2045 RTP/SCS is to support local sustainable development implementation projects that reduce GHGs. The proposed Project would promote and implement increased organic waste diversion and recycling in the Project area. As discussed in Section 3.8(a), increased organic waste diversion reduces GHG emissions. Recycling is also an important part of statewide efforts to reduce GHGs. As such, the proposed Project would support implementation of local and regional sustainability policies.

Promote a Green Region. The third applicable strategy within the 2020-2045 RTP/SCS involves promoting a green region through efforts such as supporting local policies for renewable energy production and promoting more resource efficient development (e.g., reducing energy consumption) to reduce GHG emissions. While the proposed Project would not involve renewable energy development or reduced energy consumption, it would promote and implement increased organic waste diversion and recycling in the Project area. As discussed in Section 3.8(a), increased organic waste diversion reduces GHG emissions. Recycling is also an important part of statewide efforts to reduce GHGs. As such, the proposed Project would support the promotion of a green region.

Based on the analysis above, the Project would be consistent with the SCAG 2020-2045 RTP/SCS.

Potential to Conflict with Senate Bill 32 and Executive Order S-3-05

Regarding consistency with SB 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future-year analysis. However, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan: Building on the Framework that "California is on track to meet the near-term 2020 GHG emissions limit and is well-positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, CARB (2014) states the following:

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under

> Assembly Bill 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally-driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and Executive Order S-3-05. This is confirmed in the 2017 Climate Change Scoping Plan Update, which states (CARB 2017):

> The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

The Project would not interfere with implementation of GHG reduction goals for 2030 or 2050 because it would not exceed the AVAQMD's threshold of 90,718 MT CO_2e per year. Because the Project would not exceed this threshold, this analysis provides support for the conclusion that the Project would not impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050.

Implementation of the Short-Lived Climate Pollutant Reduction Strategy is expected to provide 35% of the GHG emission reductions needed to meet the state's 2030 targets (CalRecycle 2019). The Short-Lived Climate Pollutant Reduction Strategy involves a portfolio of policies and measures, including reductions in organic waste disposal through implementation of SB 1383. As described in Section 3.8(a), the proposed Project is a component of the County's efforts to implement and comply with SB 1383. As such, the proposed Project would help implement policies at the local level that are expected to contribute to the achievement of the state's GHG reduction goals, as set forth in SB 32.

Overall and for the reasons described above, impacts are less than significant and no further analysis is required.

References

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3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The proposed Project would create new GDD/RF contracts for collection of refuse, recyclables, organic waste, bulky items, and illegal dumping. There is the potential for collection trucks associated with the proposed Project to incidentally collect and transport hazardous materials that are improperly disposed by residents or businesses. However, the Project would not be expected to lead to changes or increases in incidents of improper disposal of hazardous materials relative to existing conditions. In fact, requirements to sort refuse, recyclables, and organic waste could increase awareness of best practices for the proper disposal of solid waste. Additionally, the County contains permanent collection centers for proper disposal of household hazardous waste and electronic waste including paint, batteries, and fluorescent lights. County residents are able to dispose of hazardous materials at these permanent collection centers or during regularly held collection events (Public Works 2021). As such, the County has practices in place to encourage proper treatment and disposal of hazardous materials. The proposed Project would not substantially increase the transport, use, or disposal of hazardous materials compared to current conditions and any hazardous materials would continue to be subject to applicable handling and disposal requirements. As such, impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant and no further analysis is required.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. As discussed in Section 3.9(a) above, there is the potential for collection trucks associated with the proposed Project to incidentally collect and transport hazardous materials that are improperly disposed by residents or businesses. However, as explained above, the County has practices in place to encourage proper treatment and disposal of hazardous materials, and the Project would not be expected to lead to changes in the improper disposal of hazardous materials relative to existing conditions.

New vehicles for the Project would use fuels such as gasoline, natural gas, or diesel, as well as other potentially hazardous materials necessary for vehicle operation and maintenance which could result in spills or leaks of hazardous materials. As part of standard practices, the proposed GDD/RF contracts would require waste haulers to agree to certain public health and safety requirements including enclosing waste to prevent dropping, spilling, or blowing of materials from collection trucks, immediate clean-up of any such occurrences, and prevention of oil, hydraulic fluid, paint, or other liquid leaking from vehicles. Vehicles would be required to carry petroleum

absorbent agents and/or other appropriate cleaning agents which would allow for immediate coverage, treatment, and removal of the liquid materials from the ground. All materials would be transported, used, and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. For these reasons, the proposed Project is not anticipated to release hazardous materials into the environment that would pose a significant hazard to human health or the environment, and impacts resulting from the Project would be less than significant and no further analysis is required.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. As discussed in Section 3.9(b) above, the proposed Project may result in spills or leaks of hazardous materials from waste collection activities or directly from vehicles used for waste collection. Schools within the Project area may also have waste collected by the selected waste hauler(s) per the proposed GDD/RF agreements. This could result in hazardous spills, leaks, or emissions within one-quarter mile of existing or proposed schools. However, as previously discussed, waste haulers would be required to agree to prevention measures that address dropping, spilling, or blowing of materials from collection trucks, and prevention of oil, hydraulic fluid, or other potentially hazardous liquids leaking from vehicles. Waste haulers would be required to clean up any such spills or leaks that occur. With the handling of hazardous materials in accordance with all federal, state, and local laws, the proposed Project is not anticipated result in hazardous conditions in or around existing or proposed schools. As such, impacts would be less than significant and no further analysis is required.

d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. According to a review of the Department of Toxic Substances Control (DTSC) EnviroStor database, the Project area encompasses numerous cleanup sites ranging from voluntary cleanup sites, school investigation sites, and military evaluation sites, among others (DTSC 2021). However, the proposed Project would not involve any activities that could potentially disturb or release hazardous materials at these sites. The proposed Project would include changes to existing waste collection practices in the Project area involving additional waste collection services and an associated increase in collection trucks circulating the Project area. Waste collection would occur within residential and commercial areas, and no new ground disturbance, excavation, or construction activities are proposed as part of the Project. If waste haulers are required to travel through or to serve any hazardous materials sites, drivers would obey any restrictions in place, such as site access restrictions implemented by the DTSC. As such, the proposed Project would not create any significant hazards to the public or environment related to hazardous materials sites. No impact would occur and no further analysis is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The proposed Project would not result in any new development that could result in a safety hazard or excessive noise for people residing or working in the Project area. The proposed Project would result in an increase in collection trucks circulating the Project area which may expose drivers to noise from the Palmdale Regional Airport or Agua Dulce Airpark, but this would only occur when traveling around those areas and would thus be experienced intermittently and temporarily. Waste collection activities would take

place within existing and future residential and commercial locations and would not result in situating new residents or workers near airports such that there would be a safety hazard or excessive noise. As such, there would be no impact related to airport hazards and no further analysis is required.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. While the number of waste collectors in each service area would increase, collection trucks are among a variety of vehicles that travel the roadway network each day, and they would not affect use of the streets such that emergency response or evacuations would be impeded. Furthermore, collection trucks are mobile and would be able to move out of a given area in the event of an emergency. In addition, the GDD/RF agreements would require waste haulers to provide the County with maps of their collection routes and schedules, and the County would have the right to request changes to accommodate emergency evacuation plans or routes. Thus, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan; no impact would occur and no further analysis is required.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. High desert areas are not generally susceptible to wildfire, as desert vegetation is typically characterized by low fire frequency (BLM 1980). However, the Project area does contain areas designated by CAL FIRE (California Department of Forestry and Fire Protection) as Very High Fire Hazard Severity Zones (VHFHSZ), some of which are also within a State Responsibility Area (SRA). Most of the VHFHSZs are located in the Acton/Ague Dulce service area (CAL FIRE 2021). The proposed Project would include changes to existing waste collection practices in the Project area involving an associated increase in collection trucks circulating the Project area. The proposed Project would increase vehicle traffic on roadways within the Project area, some of which are within these VHFHSZs and/or lined with brush that could act as fuel for wildfires, thereby exposing drivers to potential existing wildfire hazards, or exacerbating wildfire hazards if Project vehicles suffer mechanical or equipment failures (such as electrical short circuits) that could ignite the vehicle and surrounding vegetation.

As part of the GDD/RF contracts, waste hauler(s) would be required to follow all applicable laws and regulations, including those pertaining to fire safety and the safe operation of collection trucks. For example, the United States Department of Transportation Federal Motor Carrier Safety Administration requires every truck (including refuse collection trucks), to be equipped with a fire extinguisher.[11] Additional requirements could include fire prevention and reporting training for vehicle operators, among other safety practices, as required by the County.

These practices would reduce the risk of loss, injury, or death from wildfire hazards. Additionally, collection trucks would pick up bulky items and illegally dumped waste, such as debris piles, that could act as additional fuel sources for wildfires. The removal of bulky items and illegally dumped waste may result in a beneficial impact regarding wildfires. With consideration of the above, the proposed Project is not anticipated to expose people or structures to a significant risk of loss, injury, or death involving wildland fires; impacts would be less than significant and no further analysis is required.

[11] Code of Federal Regulations, Title 49, Subtitle B, Chapter III, Subchapter B, Part 393.

References

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3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. The proposed Project would not violate any water quality standards or waste discharge requirements. The proposed Project would involve additional waste collection services and an associated increase in collection trucks circulating the Project area. All waste collection activities would take place along designated, established roadways, where runoff is generally designed to flow to the County's storm drain system. There is the potential for spilled litter, fuel leaks, or release of other forms of pollutants from collection trucks that could enter the County's storm drain system, in turn degrading water quality. However, waste haulers would be required to prevent and address such situations in a timely and effective manner. All waste collected would be placed in sealed carts or compartments within the collection trucks to reduce litter and spills. In addition, the proposed GDD/RF agreements would require the waste haulers to prevent waste from escaping from collection trucks during collection and transportation, and to immediately clean up all litter, spills, and leaks. Compliance with the GDD/RF agreements would ensure that incidental spills and leaks would not result in substantial degradation of water quality or increase in polluted discharge. As such, impacts would be less than significant and no further analysis is required.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. The proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, since the Project would not involve the use of any substantial amounts of water. The proposed Project would involve additional waste collection services and an associated increase in collection trucks circulating the Project area. The Project would not involve any form of development such as new residences, commercial establishments, or facilities that would require connection to water services. The only water required would be for the personal consumption of drivers and maintenance or operation of Project vehicles, which would be considered minimal to negligible relative to water that is currently used for consumption and vehicle maintenance in the Project area. Additionally, the Project would not introduce any new impervious surfaces that could interfere with groundwater recharge. As such, the proposed Project would result in no impacts to groundwater supplies or management of groundwater basins and no further analysis is required.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. As discussed in Section 3.7(b), the proposed Project would not involve any construction or demolition activities that could cause substantial erosion impacts. The proposed Project would include changes to existing waste collection practices and would result in an increase in collection trucks circulating the Project area. The only potential source of soil erosion would be from these new vehicles traveling on unpaved/dirt roads, or on roads located adjacent to soils particularly susceptible to erosion. Vehicles traveling along unpaved/dirt roads could also cause small, localized changes in the drainage of the road by creating ruts and tire tracks. However, the additional collection trucks and field monitor vehicles would travel along established, designated roadways that are already developed and regularly used by other motor vehicles. These vehicles would have designated collection and monitoring routes resulting in approximately one to three additional trucks along roadways in the Project area per week, which would not be an appreciable change relative to existing uses of established roadways. Use of existing public infrastructure for its intended purpose would not lead to a new, significant impact. Furthermore, Public Works conducts regular road maintenance on County-maintained roadways. Private roadways are maintained by property owners and would be expected to continue to be maintained. Use of existing infrastructure for its intended purpose would not lead to a new, significant erosion or drainage impact.

The proposed Project would only potentially result in small, incidental amounts of soil erosion and would not add any impervious surfaces to the Project area that could induce substantial erosion or siltation impacts. Therefore, impacts would be less than significant and no further analysis is required.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

No Impact. As discussed in 3.10(c)(i) above, the proposed Project may cause small, localized changes in the drainage pattern of unpaved/dirt roadways. However, these minor changes to drainage patterns are not anticipated to result in any substantial increase in the rate or amount of surface runoff. As discussed, use of roadways for their intended purposes would not lead to any new, significant impacts. Furthermore, Public Works conducts regular road maintenance on County-maintained roads, which would address potential roadway conditions that may create or exacerbate flooding issues. Private roadways are generally maintained by property owners. The proposed Project would not introduce impervious surfaces that could substantially increase the rate or amount of surface runoff in the Project area such that flooding would occur. There would be no impact and no further analysis is required.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The proposed Project would not increase the amount of runoff water in the Project area, since there would be no new development or addition of impervious surfaces. Accidental spills or leaks of solid waste, motor oil, or other materials from the new

collection trucks could contribute additional sources of polluted runoff if not cleaned up or properly removed. As previously discussed, the proposed GDD/RF agreements would require the waste hauler(s) to prevent solid waste from escaping from collection trucks during collection and transportation, and to immediately clean up any litter, spills, or leaks. As such, there would be a less than significant impact related to runoff water and no further analysis is required.

iv) Impede or redirect flood flows?

No Impact. The proposed Project does not involve any construction or the placement of any structures that would impede or redirect flood flows. Changes to existing waste collection practices in the Project area and the associated increase in collection trucks circulating the Project area would not affect flood flows. As described above, the additional collection trucks associated with the Project could potentially increase ruts and tire tracks on roadways (namely, unpaved roadways). However, such effects would be minor, since additional truck traffic would consist of approximately one to three additional trucks on Project area roadways each week. Furthermore, Public Works conducts regular road maintenance, which would address any potential roadway conditions that may create or exacerbate flooding issues. There would be no impact and no further analysis is required.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. The proposed Project would not risk release of pollutants due to Project inundation. The Project would not include any new development that could be affected by flood hazards, tsunamis, or seiches. The proposed Project would include changes to existing waste collection practices and would result in new collection trucks circulating the Project area. Such trucks would hold solid waste that could pollute waters, but these collection trucks are not anticipated to operate during floods or other weather events that would pose an inundation risk. There would be no impact and no further analysis is required.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. As previously discussed in Section 3.10(a), compliance with the GDD/RF agreements would ensure that incidental spills and leaks would not result in any degradation of water quality or increase in polluted discharge. Prevention measures and immediate cleanup activities for spills and leaks would ensure the Project would not conflict with any water quality control plan. Additionally, the changes to existing waste collection practices and increase in collection trucks circulating the Project area would not result in increased water demands in the Project area and would not introduce any new impervious surfaces that could interfere with groundwater recharge. As such, the proposed Project would result in no impacts related to conflict or obstruction of a water quality control plan or sustainable groundwater management plan, and no further analysis is required.

References

None.

3.11 Land Use and Planning

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	**LAND USE AND PLANNING** – Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. The proposed Project would not physically divide an established community. The proposed Project would include changes to existing waste collection practices and would result in an increase in collection trucks circulating the Project area. No construction is proposed as part of the Project and waste collection activities would take place along established roadways. The proposed Project would not involve development of features such as a highway, aboveground infrastructure, or an easement through an established neighborhood, which would have the potential to physically divide an established community. For these reasons, the proposed Project would not physically divide an established community, and no impact would result and no further analysis is required.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The proposed Project would result in the establishment of GDDs/RFs and associated solid waste hauling contracts for collection of refuse, recyclables, organic waste, bulky items, and illegally dumped items, in accordance with existing local, state, and federal regulations. A discussion of the proposed Project's consistency with applicable plans and policies is included below.

Los Angeles County Municipal Code

Z'berg-Kapiloff Solid Waste Control Act of 1976

Section 20.72.010 of the County's Municipal Code states that the County shall enforce the Z'berg-Kapiloff Solid Waste Control Act of 1976, which establishes a program for the issuance of permits for waste collectors. In compliance with this law and the County's Municipal Code, any future waste collectors operating within the unincorporated County would apply for and obtain permits. The County may establish GDD contracts within the Project area or, per 20.70.020 of the Municipal Code, award a nonexclusive, partially exclusive, or wholly exclusive franchise for solid waste within the Project area. If awarded, such solid waste handling service providers must comply with all terms and conditions of the contract imposed by the Board of Supervisors. The proposed Project would require waste collection practices in the

unincorporated communities within the Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts to more closely align with current waste regulations, since recycling services may not be currently available for all single-family residences, and no source-separated organic waste collection and diversion service is available for residences or commercial properties. The proposed Project is therefore consistent with guidance established in the Municipal Code.

Mandatory Organic Waste Disposal Reduction Ordinance

Chapter 20.91 of the County's Municipal Code describes the Mandatory Organic Waste Disposal Reduction Ordinance, which is required per SB 1383. The Ordinance requires all businesses and residents in the County unincorporated communities to subscribe to organic waste collection services, diverting organic waste and edible food from landfills to reduce emissions of methane and the impacts on climate change. The proposed Project would involve new waste collection practices in the unincorporated communities within the Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts to align with current waste regulations, since source-separated organic waste collection and diversion service is not generally available for residences or commercial properties under current conditions. The proposed Project would introduce source-separated organic waste collection and diversion services to residences and commercial properties in the Project area, thus ensuring that the County's Mandatory Organic Waste Disposal Reduction Ordinance is being implemented in the Project area, in compliance with SB 1383. The proposed Project would therefore be consistent with, and would contribute to the implementation of, the County's Mandatory Organic Waste Disposal Reduction Ordinance.

Antelope Valley Area Plan

The AVAP includes the following policy relevant to the proposed Project (Los Angeles County 2015a):

- Policy COS 9.4: Promote recycling and composting throughout the Antelope Valley to reduce air quality impacts from waste disposal activities and landfill operations.

As discussed above, the proposed Project would reduce solid waste disposal by diverting waste that would otherwise be sent to a landfill to be recycled, composted, or otherwise diverted. This would in turn reduce air quality impacts from waste disposal activities and landfill operations. There would be no conflicts with the AVAP.

Santa Clarita Valley Area Plan

The SCVAP includes the following policies relevant to the proposed Project (Los Angeles County 2012):

- Policy CO-1.3.2: Promote reducing, reusing, and recycling in all Land Use designations and cycles of development.
- Policy CO-2.1.3: Promote soil enhancement and waste reduction through composting, where appropriate.

The proposed Project would implement new waste collection practices that support recycling and composting efforts in land use designations that currently do not have recycling and/or source-separated organic waste collection and diversion services. This would support the policies included in the SCVAP and there would be no conflicts.

Los Angeles County General Plan

The County's General Plan identifies several issues regarding waste management in the unincorporated County. This includes the growing amounts of waste being generated and disposed of and a shortage of solid waste processing facilities, and the inability of the open-market system for solid waste collection services to adapt to federal and state laws regarding waste reduction (Los Angeles County 2015b). The General Plan mentions implementation of GDD/RF systems to replace the open-market system. The following policies from the General Plan are applicable to the proposed Project:

- Policy PS/F 5.1: Maintain an efficient, safe and responsive waste management system that reduces waste while protecting the health and safety of the public.
- Policy PS/F 5.5: Reduce the County's waste stream by minimizing waste generation and enhancing diversion.
- Policy PS/F 5.8: Ensure adequate and regular waste and recycling collection services.

The proposed Project would implement new waste collection practices that would result in increased waste diversion from landfills. The new services would include collection of recycling, organic waste, bulky items, and illegally dumped items within the Project area. This would reduce the County's waste stream and the amount of waste being sent to solid waste processing facilities by diverting items that would otherwise be landfilled under the current open-market and Commercial Franchise systems in the Project area, since recycling services may not be currently available for all single-family residences, and no source-separated organic waste collection and diversion service is available for residences or commercial properties. The proposed Project is therefore consistent with the vision and intent for solid waste disposal identified in the County's General Plan.

Overall, the proposed Project would comply with all applicable plans, policies, and regulations and therefore would have no significant environmental impact due to a conflict with any land use plan, policy, or regulation. There would be no impact and no further analysis is required.

References

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Los Angeles County. 2015b. Los Angeles County General Plan 2035, Chapter 9: Conservation and Natural Resources Element. https://planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch9.pdf.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a) ***Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

No Impact. The Project would not involve any new development that could affect availability of mineral resources. The proposed changes to waste collection practices and the associated increase in collection trucks circulating the Project area would not result in the loss of availability of any known mineral resource that would be of value to the region or the residents of the state. There would be no impact and no further analysis is required.

b) ***Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?***

No Impact. The Project would not involve any new development that could affect availability of mineral resources or mineral resource recovery sites and therefore would not result in the loss of availability of these resources. There would be no impact and no further analysis is required.

References

None.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. The California General Plan Guidelines, published by the Governor's Office of Planning and Research (OPR), provides guidance for the acceptability of specific land use types within areas of specific noise exposure. Table 3.13-1 presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. For the purpose of assessing the compatibility of new development with the anticipated ambient noise, the County utilizes the state's Community Noise and Land Use Compatibility standards summarized in Table 3.13-1. Noise-sensitive land uses include residential, schools, libraries, churches, nursing homes, hospitals, and open space/recreation areas. Commercial and industrial areas are not considered noise sensitive and have much higher tolerances for exterior noise levels. The "normally unacceptable" minimum noise level for considered noise-sensitive land uses is 70 A-weighted decibels (dBA) CNEL.

Table 3.13-1. Land Use Compatibility for Community Noise Environments

	Community Noise Exposure (CNEL)			
	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential-low density, single-family, duplex, mobile homes	50–60	55–70	70–75	75–85
Residential – multiple-family	50–65	60–70	70–75	70–85
Transit lodging – motel, hotels	50–65	60–70	70–80	80–85
Schools, libraries, churches, hospitals, nursing homes	50–70	60–70	70–80	80–85
Auditoriums, concert halls, amphitheatres	NA	50–70	NA	65–85
Sports arenas, outdoor spectator sports	NA	50–75	NA	70–85
Playgrounds, neighborhood parks	50–70	NA	67.5–77.5	72.5–85
Golf courses, riding stables, water recreation, cemeteries	50–70	NA	70–80	80–85
Office buildings, business commercial and professional	50–70	67.5–77.5	75–85	NA
Industrial, manufacturing, utilities, agriculture	50–75	70–80	75–85	NA

Source: OPR 2017.
Notes: CNEL = community noise equivalent level; NA = not applicable

1 Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

2 Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

3 Normally Unacceptable: New construction or development should be discouraged. If new construction of development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.

4 Clearly Unacceptable: New construction or development should generally not be undertaken.

As discussed in Section 2.3, the proposed Project does not include any construction-related work activities; thus, there would be no noise impacts related to Project construction. As also explained in Section 2.3, the proposed Project would not include land use development. As such, the land use compatibility noise metrics shown in Table 3.13-1 are not directly applicable to the proposed Project. However, these metrics nevertheless show the varying noise sensitivities of different land uses in the Project area and the noise levels that are expected to be considered acceptable at each, for the purposes of establishing an overall context for this noise analysis. Use of the CNEL metric in Table 3.13-1 also establishes the basis for the approach used in this analysis of analyzing 24-hour average noise levels. (CNEL is a 24-hour average noise metric.)

The proposed Project would result in an increase in the number of collection trucks in the Project area. The County General Plan Noise Element establishes a policy for noise-sensitive land uses to be protected from high noise levels. In the context of community noise and typical human response to noise, an increase in noise level of 5 dB is considered to be clearly perceptible; an increase of 3 dB is barely perceptible; and an increase of less than 3 dB is not perceptible (Caltrans 2013). Therefore, for the purposes of this noise analysis operational noise impacts are considered significant when they cause an increase of 3 dB from existing average daily traffic noise levels. An increase or decrease in noise level of at least 3 dB is required before any noticeable change in community response would be expected (Caltrans 2013).

Overall (i.e., throughout the Project area), the number of additional trucks is estimated to be approximately 339 trucks per week in Year 2023, 434 trucks per week by Year 2035, and 567 trucks per week by Year 2048. However, at any one location within the Project area, the number of daily truck trips would increase only marginally. For residential customers, the increase would be 2.25 trucks (assuming that 25% of residential customers request manure pickup service). Instead of one waste hauler truck during days of service, the typical residential area would experience three to four trucks. In commercial areas, instead of generally two waste hauler trucks during days of service, the typical commercial area would experience three trucks. In addition to the collection trucks that would circulate the Project area, three field monitors traveling in light-duty trucks would circulate the Project area on waste collection days, throughout the life of the Project. Thus, it is possible that at any one residential or commercial location, a field monitor vehicle may also drive by during days of service. These additional vehicles associated with the Project would travel on designated, established roadways and haul routes (similar to the existing service) and would be required to comply with Los Angeles County Code Section 12.08.520. This provision limits the individual allowable noise level of refuse collection vehicles to no more than 86 dBA at 50 feet and allowable hours of operation to between 6 a.m. and 10 p.m. (Los Angeles County 1978).

Noise from Project-Related In-Service Vehicle Trips. In order to estimate the additional noise resulting from the proposed Project's incremental increase in vehicle traffic, a wide variety of roadway types (with a correspondingly large range of average daily traffic volumes) within the Project area was surveyed using County-provided maps and Los Angeles County Public Works traffic count data. The number of Project-related vehicles (adjusted to account for both collection trucks and passenger vehicles (i.e., the field monitors)) were added to existing average daily traffic (ADT) volumes, and the resulting increase in noise was estimated. Consistent with acoustical principles and assuming that other factors (such as roadway vehicle speeds) would remain essentially unchanged, the change in traffic noise emanating from a roadway segment is related to the change in traffic volumes with the following expression:

$$\textit{Change in roadway segment traffic noise (dB)} = 10*LOG(V_2/V_1)$$

In the above equation, "V_2" is the roadway volume for the post-change (i.e., existing with Project ADT) condition and "V_1" is the pre-change (existing ADT) condition. Per the above mathematical expression, the Project would have to roughly double the traffic volumes on local roadways to increase traffic noise by 3 dBA and hence cause a potentially significant impact.

As shown in Table 3.13-2, the relatively small increase in traffic volumes associated with the Project would generally result in traffic noise increases of well under 1 decibel on a 24-hour average basis. The estimated noise increases range from 0 dBA to 2.7 dBA. The highest noise increase (2.6 and 2.7 dBA) would result along the two street segments identified in the survey with exceptionally low existing volumes (i.e., 51 and 53 vehicles per day as shown in Table 3.13-2). As stated previously, an increase of 3 dB is barely perceptible; and an increase of less than 3 dB is not perceptible. As such, traffic noise levels on an average daily basis would not increase noticeably as a result of the proposed Project and the associated increase in collection trucks. Because the proposed Project would result in estimated traffic noise increases of less than 3 dB, traffic noise would be below the thresholds described above.

Individual truck pass-bys and waste collection pickups would be clearly perceptible at nearby noise-sensitive receivers, including residences. However, such noise events would be temporary and intermittent and would also be limited in volume by Los Angeles County Code requirements. Specifically, Section 12.08.520 of the County Code limits the individual allowable noise level of refuse collection vehicles to no more than 86 dBA at 50 feet and allowable hours of operation to between 6 a.m. and 10 p.m. The individual truck pass-bys and

waste collection pick-ups would also be limited to a single day per week in residential neighborhoods, and each pass-by and/or waste collection event would be brief from the perspective of individual receivers. As such, individual noise events associated with the Project would be brief, periodic, and intermittent. Some commercial customers may receive service from collection trucks more than one day per week. Conversely, commercial customers would receive service from fewer additional collection trucks under the proposed Project, when compared to residential areas. (As explained in Section 2.4, commercial customers would receive service from one additional collection truck under the proposed Project, whereas residential customers would receive service from two to three additional collection trucks under the proposed Project.) Furthermore, commercial areas do not typically support noise-sensitive land uses, and noise increases associated with the Project would still be periodic and intermittent in commercial areas. Overall, noise increases associated with the Project would be brief and intermittent and would not occur on a daily basis for individual sensitive receptors. Furthermore, the County's thresholds for traffic noise impacts would not be exceeded, and traffic noise levels on an average daily basis would not increase noticeably, as described above and as demonstrated in Table 3.13-2. Operational noise from in-service vehicles associated with the proposed Project would thus be less than significant and no further analysis is required.

Table 3.13-2. Estimated Operational Noise Level Increase from Proposed Project

Proposed Service Area	Representative Roadways [1]	Location	Existing Average Daily Traffic Volume (ADT)	Existing with Project Average Daily Traffic Volume (ADT)[2]	Estimated Increase in 24-hour Average Noise Level (dBA $L_{eq\ 24\text{-}hr}$)
Quartz Hill	20th Street West	north of Avenue N-8	7,142	7,186	0.0
		north of Avenue O	6,687	6,731	0.0
		south of Avenue O	6,464	6,508	0.0
	Avenue L	west of 40th Street West	20,294	20,338	0.0
	Avenue L-12	east of 55th Street West	542	586	0.3
		west of 47th Street West	388	432	0.5
	Avenue L-4	east of 45th Street West	207	251	0.8
		west of 45th Street West	323	367	0.6
	Avenue L-8	east of 52nd Street West	4,823	4,867	0.0
		west of 40th Street West	4,179	4,223	0.0
		west of 52nd Street West	4,034	4,078	0.0

Table 3.13-2. Estimated Operational Noise Level Increase from Proposed Project

Proposed Service Area	Representative Roadways [1]	Location	Existing Average Daily Traffic Volume (ADT)	Existing with Project Average Daily Traffic Volume (ADT)[2]	Estimated Increase in 24-hour Average Noise Level (dBA $L_{eq\ 24\text{-}hr}$)
Antelope Valley East	Avenue M	east of 162nd Street East	139	183	1.2
	Avenue M-12	west of 50th Street West	777	821	0.2
	Avenue M-12	west of Yancee Lane	369	413	0.5
	170th Street East	north of Avenue P	6,742	6,786	0.0
		north of Lake Los Angeles Avenue	6,708	6,752	0.0
		north of Parkvalley Avenue	6,600	6,644	0.0
Antelope Valley West	Pine Canyon Road	east of Mile Marker 12.3	51	95	2.7
		south of Three Points Road	256	300	0.7
		west of Lake Hughes Road	542	586	0.3
		west of Mile Marker 11.97	53	97	2.6
	Spunky Canyon Road	west of Bouquet Canyon Road	213	257	0.8
	Three Points Road	south of Avenue D	304	348	0.6
Acton/ Agua Dulce	Agua Dulce Canyon Road	south of Frascati Street	3,985	4,029	0.0
		south of Kobe Road	1,868	1,912	0.1
		south of Sunny Brook Lane	1,832	1,876	0.1
		west of Escondido Canyon Road	3,956	4,000	0.0
	Cheseboro Road	north of Barrel Springs Road	289	333	0.6
	Mount Emma Road	east of Angeles Forest Highway	1,369	1,413	0.1
		east of Cheseboro Road	1,640	1,684	0.1

Table 3.13-2. Estimated Operational Noise Level Increase from Proposed Project

Proposed Service Area	Representative Roadways [1]	Location	Existing Average Daily Traffic Volume (ADT)	Existing with Project Average Daily Traffic Volume (ADT)[2]	Estimated Increase in 24-hour Average Noise Level (dBA $L_{eq\ 24\text{-}hr}$)
		north of Angeles Forest Highway	1,442	1,486	0.1
	Santiago Road	north of Sierra Highway	587	631	0.3
		south of Sierra Highway	3,356	3,400	0.1
		north of Soledad Canyon Road	1,975	2,019	0.1
		south of Soledad Canyon Road	81	125	1.9
	Soledad Canyon Road	east of Santiago Road	3,328	3,372	0.1
		west of Santiago Road	2,812	2,856	0.1
		north of Crown Valley Road	846	890	0.2
		south of Crown Valley Road	885	929	0.2
	Syracuse Avenue	east of Crown Valley Road	71	115	2.1
		west of Crown Valley Road	2,188	2,232	0.1

Source: Los Angeles County of Public Works, Machine Count Traffic Volumes. 2021. https://dpw.lacounty.gov/tnl/trafficcounts/.
Notes: The noise increases shown in this table would occur only on waste collection days. Waste collection would generally occur one day per week in most neighborhoods and commercial areas throughout the Project area, although some commercial customers may receive service more than once per week.

[1] Roadways shown in this table range from major thoroughfares with approximately 20,000 ADT to rural roadways that experience about 50 ADT. (Based on a review of Public Works' publicly available traffic counts in the Project area, a roadway volume of 50 ADT represents the lowest volumes encountered and thus the worst-case relative to the increase in vehicles resulting from the Project.)

[2] Existing with Project volumes are estimated by adding 2.25 collection trucks plus one field monitor passenger vehicle to the daily existing ADT. In order to account for the fact that heavy trucks are louder than passenger vehicles, the number of collection trucks was multiplied by a factor of 19, which is the approximate number of passenger vehicles necessary to generate the same amount of sound energy as one heavy truck at a travel speed of 35 miles per hour (Caltrans 2013).

Noise from Project-Related Commuter Vehicle Trips. Three field monitors and two new office employees would be associated with the proposed Project, equating to five new employees over the life of the Project. Additionally, one employee would be needed per new haul truck, which would be expected to equate to approximately 69 employees in 2023 at the start of the Project, increasing to 114 employees at the end of the contracts in 2048. However, the total number of commuter trips associated with the Project would be limited to 108 total daily vehicle trips, per stipulations included in the GDD/RF contracts. It is anticipated that the routes used for these 108 daily commuter trips would be along a variety of freeways or other major thoroughfares, rather than along any one route. However, even if all 108 additional daily trips utilized the same commuting route to and from the Project area, the relative increase compared to the existing volumes on freeways and/or arterial highways within and near the Project area would be relatively small and would

not be expected to result in a doubling of the traffic volume, which would be necessary to increase traffic noise levels by a perceptible amount. As detailed in Section 2.3, new or expanded service yards or other facilities that may be needed for future waste haulers to serve the Project area are considered highly speculative at this time and thus, localized impacts associated with commuters arriving at a specific location is outside the scope of this analysis and therefore not considered herein. Nevertheless, commuter trips to/from the Project area in general are anticipated to be below a level of significance, as described above. Operational noise from Project-related commuter vehicles associated with the proposed Project would thus be less than significant and no further analysis is required.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The County of Los Angeles Municipal Code's Chapter 12.08 (Noise Control) includes regulation of groundborne vibration (in Section 12.08.560, Vibration), as follows: "Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz." However, refuse collection is among the activities exempted from this in the Municipal Code (with the exception of the aforementioned Section 12.08.520, which regulates noise from refuse collection vehicles but not vibration).

As discussed in Sections 2.3 and 2.4, the proposed Project would not require or result in any foreseeable construction-related work activities; thus, there would be no vibration impacts related to construction. Operationally, the proposed Project would result in an increase in the number of collection trucks in the Project area as discussed above in Section 3.13(a). It is estimated that instead of one waste hauler truck during days of service, the typical residential area would experience 3 to 4 trucks. Because collection trucks are mounted on rubber tires with flexible suspensions, and because they typically travel at relatively low speeds (particularly during collection and within residential neighborhoods), the amount of vibration transmitted through the ground would be low to negligible. Based upon information provided by the Federal Transit Administration (FTA 2018), trucks and buses traveling on paved roads at 30 miles per hour typically create vibration levels of approximately 63 VdB (vibration decibels) at a reference distance of 50 feet. By way of comparison, this vibration level expressed in terms of inches per second (in/sec) would be approximately 0.0017 in/sec, which would be less than the County's threshold of perception of 0.01 in/sec. At a distance of 25 feet, the same source (i.e., trucks traveling on paved roads at 30 miles per hour) would create a vibration level of approximately 0.0047 in/sec, which would also be less than the County's threshold of perception of 0.01 in/sec. (It is noted, however, that collection trucks are exempt from the County's threshold of perception for vibration.) Groundborne vibration diminishes rapidly with distance, and multiple collection trucks would not typically operate simultaneously in proximity to any one receiver; thus, a cumulative increase in ground vibration from multiple trucks is unlikely (Caltrans 2020). Additionally, because vibration diminishes rapidly with distance, the amount of vibration from collection trucks that would be experienced at an actual structure would be minimal, since structures within the Project area are typically set back from roadways by sidewalks, driveways, and/or landscaped areas. Thus, potential impacts from the proposed Project related to groundborne vibration would be less than significant and no further analysis is required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project's proposed service areas are located in the northern portion of the County. Airports in the vicinity of the proposed service areas consist of the following:

- General William J. Fox Airfield, located in Lancaster adjacent to portions of the Antelope Valley East and West service areas;
- Agua Dulce Airport, located in the community of Agua Dulce in unincorporated Los Angeles County, within the Acton/Agua Dulce service area;
- Palmdale Regional Airport/Air Force Plant 42, located in Palmdale adjacent to portions of the Antelope Valley East service area

The proposed Project would not result in any new development that could result in excessive airport-related noise for people residing or working in the Project area. The proposed Project would result in an increase in collection trucks circulating the Project area, and drivers could thus be exposed to noise from airports within or near the Project area. However, this exposure would primarily occur when traveling near the airports and would thus be experienced intermittently and temporarily. Furthermore, based on a review of the noise contours for the airports listed above, substantial airport noise is not typically experienced within the Project area. Based upon the County of Los Angeles Airport Land Use Commission (Los Angeles County 2004), the 60 dBA, 65 dBA, and 70 dBA Community Noise Equivalent Level noise contours for General William J. Fox Airfield all lie within the City of Lancaster (outside of the Project service areas). Similarly, the noise contours for the Agua Dulce Airport are limited to the boundaries of the airport itself. Portions of the Palmdale Regional Airport/Air Force Plan 42's 65 dBA CNEL contour lie within unincorporated Los Angeles County; however, no commercial or residential land uses exist within those areas - all areas within the 65 dBA CNEL contour are either vacant lands or are agricultural use.

Waste collection activities would take place within existing and future residential and commercial areas and would not result in situating new residents or workers near airports such that there would be a safety hazard or excessive noise. For these reasons, there would be no impact related to airport noise and no further analysis is required.

References

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Los Angeles County. 2004. Los Angeles County Airport Land Use Plan. Accessed September 28, 2021. December 2004. http://planning.lacounty.gov/assets/upl/data/pd_alup.pdf.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed Project would include changes to existing waste collection practices, resulting in additional waste collection services and an associated increase in collection trucks circulating the Project area. These proposed changes to existing waste collection practices would not be growth inducing, either directly or indirectly. Existing and future residences and businesses would be served based on projected and planned growth in the Project area over time, which would be expected to occur with or without the proposed Project.

The proposed Project would introduce new employment opportunities to the Project area. New employment has the potential to lead to growth. The proposed Project would result in up to four new types of collection trucks to the Project area (trucks collecting recyclables, trucks collecting organic waste, trucks collecting bulky items, and trucks collecting illegal dumping). As shown in Table 2-2 in the Project Description, approximately 69 new trucks would circulate the Project area per day at the beginning of the GDD/RF contracts, approximately 88 new trucks would circulate the Project area per day under 2035 (midway) conditions, and approximately 114 new trucks would circulate the Project area per day by 2048, at the end of the GDD/RF contracts. As proposed, the Project would directly result in the employment of 114 new waste hauler employees by 2048, two new office employees, and three new field monitors. This total of 119 new employees by 2048 would constitute a negligible increase in terms of employment and population growth within the Project area. According to 2019 American Community Survey 5-year estimates, the employed civilian labor force in Quartz Hill, Acton, Agua Dulce, North Antelope Valley, and South Antelope Valley consists of 4,144 citizens, 3,426 citizens, 1,698 citizens, 69,147 citizens, and 87,931 citizens, respectively (U.S. Census Bureau 2020). Compared to the existing labor force of the Project area and surrounding areas, an increase of 119 new employees would not constitute a substantial increase in employment growth. According to the AVAP Draft EIR, the number of employed civilians in the unincorporated areas of the Antelope Valley at the time of AVAP buildout (anticipated to occur well beyond

2035) would be 134,351 employees. As also shown in the AVAP Draft EIR, employment projections for unincorporated Antelope Valley and unincorporated Santa Clarita Valley for 2035 are 97,763 employees. Extrapolating this growth through the end of the proposed GDD/RF contracts in 2048, there would be 140,974 employees in 2048 in the unincorporated Antelope Valley and unincorporated Santa Clarita Valley (County of Los Angeles 2015). According to the SCAG 2020-2045 RTP/SCS, the larger Los Angeles County unincorporated area would have approximately 320,100 employed civilians by 2045 (SCAG 2020). Compared to the plan projections shown in the AVAP Draft EIR and the SCAG RTP/SCS, 119 new employees by 2048 would be a minimal increase in employment and would fall well within the various plan projections described above.

The Project does not include any new homes, businesses, extension of roads or other infrastructure that would induce population growth. The proposed Project is intended to serve the current population within the service area and anticipated growth through the year 2048, when the proposed GDD/RF contracts are expected to end. With consideration of the above, the proposed Project would result in a less than significant impact related to population growth and no further analysis is required.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed Project would not displace existing housing or people, as no construction, demolition, or change in land uses can be defined at this time. There would be no impact and no further analysis is required.

References

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SCAG (Southern California Association of Governments). 2020. Connect SoCal Demographics and Growth Forecast Technical Report. Accessed January 10, 2022. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579.

U.S. Census Bureau. 2020. 2019: ACS 5-Year Estimates Data Profiles. DP03 Selected Economic Characteristics. https://data.census.gov/cedsci/table?q=quartz%20hill,%20acton,%20agua%20dulce,%20north%20antelope%20valley,%20south%20antelope%20valley%20employment.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

No Impact. The proposed Project would not result in the provision of or need for any new or physically altered fire protection, police protection, school, park, or other public facilities. Under the proposed Project, there would be changes to existing waste collection practices and an increase in collection trucks circulating the Project area. No construction or change in land uses can be defined at this time, and waste collection activities would take place along established, designated roadways. While the addition of vehicle traffic within areas prone to wildfires could increase fire risk, waste hauler(s) would be required to comply with all applicable fire prevention, response, and reporting requirements, which would minimize fire-related risks. This would decrease the Project's contribution to wildfire risks and any associated needs for additional fire protection services within the Project area. Additionally, as discussed in Section 3.14(a), the proposed Project is not anticipated to result in any substantial population growth. As discussed in Section 2.3, the Project would not authorize or program the development of solid waste–related facilities and/or infrastructure. No impacts would occur and no further analysis is required.

References

None.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) ***Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

No Impact. As described in Sections 3.14 and 3.15, the proposed Project would not result in substantial population growth that would increase the use of existing parks and recreational facilities. Accordingly, no impact involving deterioration of park facilities would occur as a result of the proposed Project. There would be no impact and no further analysis is required.

b) ***Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

No Impact. The proposed Project does not include development of any residential uses and would not generate new permanent residents that would increase the demand for recreational facilities, as described in Section 3.14. As such, no new or expanded recreational facilities would be included as part of the Project or required as a result of the Project. No impact would occur as a result of the proposed Project and no further analysis is required.

References

None.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. The proposed Project would not conflict with any applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The General Plan, including the Mobility Element, the Antelope Valley Area Plan Mobility Element, the Santa Clarita Valley Area Plan Circulation Element, the Bicycle Master Plan, and Step by Step Los Angeles County, include programs and policies that address the circulation system in the County. The SCAG RTP/SCS comprises land use and transportation strategies that increase mobility options to achieve a more sustainable growth pattern. The proposed Project would result in the establishment of GDDs/RFs and associated solid waste hauling contracts for collection of refuse, recyclables, organic waste, bulky items, and illegally dumped items, in accordance with existing local, state, and federal regulations. A description of the existing transportation system in the service area is provided below, followed by a discussion of the proposed Project's consistency with applicable programs, plans, ordinances, and policies.

Environmental Setting

Roadways

The County maintains more than 4,700 miles of major roads and local streets; operates and maintains hundreds of traffic control devices; and administers and manages public transit services, such as shuttle buses and dial-a-ride services, in unincorporated areas of the County (Los Angeles County 2021). The major freeway routes providing interstate and regional connections through the Project area are Interstate-5 (I-5) (Golden State Freeway), State Route (SR)-14 (Antelope Valley Freeway), SR-138 (Pearblossom Highway), County Sign Route N3 (Angeles Forest Highway), and SR-2. A map of the service area is presented in Figure 2-1.

Rail and Transit

The Los Angeles County Metropolitan Transportation Authority, more commonly known as Metro, is the regional public transit service operator in Los Angeles County. Metro operates Metro Local (buses), Metro Rail (light rail), and Metro Rapid (express bus). Local municipal transportation agencies in the service area include the City of Santa Clarita Transit, the Antelope Valley Transit Authority, and Kern Transit, which provide both local routes, and regional connections, to Metro routes in the greater Los Angeles area.

Metrolink is a commuter rail service, governed by the Southern California Regional Rail Authority (SCRRA), which connects the Southern California region, including Los Angeles, Orange, Ventura, San Bernardino, and Riverside counties. Metrolink has 7 lines and 62 stations, and it serves 2,300 daily passengers, covering a network of 538 route-miles. Within the service area, the Antelope Valley Line connects downtown Los Angeles, Glendale, Burbank, Sun Valley, Sylmar/San Fernando, Newhall, Santa Clarita, Canyon Country, Vincent Grade/Acton, Palmdale, and Lancaster.

Amtrak is a national rail operator. The nearest Amtrak stations to the service area are in Lancaster and Palmdale (Amtrak 2021), with thruway bus connections provided north to Bakersfield and Metrolink connections provided south to Los Angeles.

Relevant Plans and Programs

County of Los Angeles General Plan 2035

The Mobility Element of the General Plan contains goals designed to further the County's mobility strategy pursuant to California Complete Streets Act of 2007. The Mobility Element addresses this requirement with policies and programs that consider all modes of travel, with the goal of making streets safer, accessible and more convenient to walk, ride a bicycle, or take transit (Los Angeles County 2015).

Antelope Valley Area Plan Mobility Element

The AVAP Mobility Element creates the framework for a balanced, multi-modal transportation system across the Antelope Valley through goals, policies, and local ordinances that address three key topics: regional movement of services and goods, local transportation meeting the needs of residents, and the balance required to meet the demands of both (Los Angeles County 2015).

Santa Clarita Valley Area Plan Circulation Element

The Santa Clarita Valley Area Plan Circulation Element plans for the continued development of efficient, cost-effective and comprehensive transportation systems that are consistent with regional plans, local needs, and the Santa Clarita Valley's community character. The Circulation Element identifies and promotes a variety of techniques for improving mobility that go beyond planning for construction of new streets and highways. These techniques include development of alternative travel modes and support facilities; increased efficiency and capacity of existing systems through management strategies; and coordination of land use planning with transportation planning by promoting concentrated, mixed-use development near transit facilities (Los Angeles County 2012).

Los Angeles County Bicycle Master Plan 2012 and Bicycle Master Plan Update

The Los Angeles County Board of Supervisors adopted the current Bicycle Master Plan in March 2012. Metro publishes the Metro Bike Map, a regional map that includes existing bicycle facilities within all jurisdictions of Los Angeles County. The Bike Map identifies Class II Bike Lanes, Class III Bike Routes, and Bicycle Boulevards throughout the County. There are limited designated, on-road bicycle facilities within the Project area, given the rural nature of the area.

On October 15, 2019, the Board of Supervisors directed Public Works to initiate an update to the 2012 Bicycle Master Plan in partnership with Regional Planning, Beaches and Harbors, Parks and Recreation, and the Sheriff's Department and Highway Patrol. The update is proposed to review and assess the list of bikeways for possible deletion or addition of new bikeways; consider design guidelines for Class IV bikeways and for inclusion of micro-mobility devices in bikeway infrastructure; and develop first/last mile bikeway improvements. As of this writing, no updates to the Bicycle Master Plan have been completed to date.

Step by Step Los Angeles County

In 2019, the Los Angeles County Board of Supervisors adopted Step by Step Los Angeles County: Pedestrian Plan for Unincorporated Communities, a policy framework for how the County proposes to get more people walking, make walking safer, and support healthy active lifestyles. It also includes Community Pedestrian Plans for the communities of Lake Los Angeles, Walnut Park, Westmont/West Athens, and Whitter-Los Nietos (of these communities, Lake Los Angeles is located within the Project area). The Step by Step pedestrian plan communities were selected based on key criteria that identified communities in unincorporated Los Angeles County with high rates of pedestrian collisions that resulted in death or injury. Step by Step outlines actions, policies, procedures, and programs that the County of Los Angeles will consider to enhance walkability across unincorporated communities. The pedestrian plans also provide guidance in developing a network of sidewalks, off-street paths, and trails and facilities (such as lighting, crosswalks and benches) that allow people to walk safely and comfortably to key destinations. It includes policies that address safety, traffic, education, and programs to promote a safe, walkable community (Los Angeles County Department of Public Health 2019).

Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS)

SCAG develops the RTP, which presents the transportation vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura counties. Senate Bill (SB) 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. Under the law, SCAG is tasked with developing a Sustainable Communities Strategy (SCS), an element of the RTP that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board (CARB). The SCS outlines the plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. This overall land use development pattern supports and complements the proposed transportation network that emphasizes system preservation, active transportation, and transportation demand management measures.

The 2016 RTP/SCS identified priorities for transportation planning within the Southern California region, set goals and policies, and identified performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area (SCAG 2016). The RTIP, also prepared by SCAG and based on the RTP, lists all of the regionally funded/programmed improvements within a 7-year horizon.

The 2020–2045 RTP/SCS, also known as Connect SoCal, is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians (SCAG 2020).

Analysis

The proposed Project would implement new waste collection practices that would result in increased waste diversion from landfills. The new services would include collection of recyclables, organic waste, bulky items, and illegally dumped items and the number of collection trucks circulating the Project area would increase relative to existing conditions. Under existing conditions, most areas are assumed to be served by collection trucks and bulky items trucks, with a route supervisor circulating the area to monitor service (equating to two types of collection trucks and one light-duty vehicle). Under proposed conditions, the Project area would be served by five types of collection trucks: trucks collecting refuse, recyclables, organic waste, bulky items, and illegal dumping. Rural, equestrian areas would also be served by a sixth type of truck that would collect manure. Public Works would also introduce three Field Monitors and two new office employees as part of the proposed Project. The Field Monitors would travel in light-duty trucks, and three Field Monitors are assumed to circulate the Project area per waste collection day, throughout the life of the Project.

As described in Chapter 2 (Table 2.2), it is anticipated that there would be an additional 69 daily trucks at the beginning of the contracts in 2023, 88 additional trucks by 2035 (represents the midpoint of the contracts), and 114 additional trucks by 2048 (represents the ending year of the contracts). This assumes that the solid waste collection service is provided 5 days per week, with an approximate equal number of customers served per day. The new Field Monitors and office employees (Public Works employees) would generate 10 daily trips. The office employees would commute to a County facility within the Project area, while the Field Monitors would commute from their residence to a waste hauling route and may therefore commute to a different location within the Project area each workday. It is likely that additional vehicle trips would be generated by the waste haul employees (truck drivers) commuting to and from the service providers' yards. It is unknown where these employees would commute to, since the location of future service yards is unknown, speculative, and outside the scope of this analysis, as further discussed in Section 2.3. As further described in Section 3.17(b) below, the County would implement project design feature PDF-TR-1, which would limit the waste hauler employee trips to 49 commuter trips (i.e., 98 daily vehicle trips). The balance would be required to carpool or use public transportation. This provision will be included in the Invitation For Bids/Request for Proposals for waste haulers and would ensure that employee commuter trips are limited, thus limiting the Project's impacts to roadways where feasible and limiting the Project's overall contribution to vehicle miles traveled (VMT).

Each collection truck would begin its route at the provider's service yard and would then travel along a pre-determined route, collecting waste from customer locations. Each collection truck is expected to travel to the appropriate resource recovery or waste disposal facility once per day but may require two trips for more densely populated areas. Under the proposed Project, the routes that are driven from customer to customer are anticipated to remain generally the same as existing conditions. As the population expands in the Project area, the number of routes may increase over time. Because the waste haulers have not yet been selected, the location of future service yards is highly speculative at this time. Existing landfills within Los Angeles County and near the service areas include Lancaster Landfill, Antelope Valley Landfill, Chiquita Canyon Landfill, and Sunshine Canyon Landfill.

While the proposed Project would add additional vehicle and trucks trips to the service area, the Project would not alter the existing roadway network nor hinder the County's ability to emphasize a diversity of transportation modes or choices. The Project would not include site improvements that would interfere with existing public transit, bicycle, or pedestrian facilities, or impede the construction of new or the expansion of such existing facilities in the future. There would be no conflict with the existing pedestrian or bicycle facilities in the area. Bicyclist and pedestrian safety would be maintained at existing levels in the area, as there would be no changes to the existing pedestrian or bicycle circulation system. Therefore, the proposed Project would not conflict with the adopted policies, plans, or programs described above, and impacts would be less than significant and no further analysis is required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact**.** CEQA Guidelines Section 15064.3(b) focuses on Vehicle Miles Traveled (VMT) for determining the significance of transportation impacts. As shown in the analysis below, the Project would be screened from a project-level analysis, no impacts due to conflicts or inconsistencies with Section 15064.3(b) are presumed, and impacts would be less than significant.

The thresholds used in the analysis include guidance from the Los Angeles County Transportation Impact Analysis Guidelines (Los Angeles County 2020). The guidelines are generally based on the California State Office of Planning and Research's (OPR) Technical Advisory (OPR 2018), which provides guidance and tools to properly carry out the principles within SB 743 and to evaluate transportation impacts in CEQA.

Background

On September 27, 2013, SB 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required the OPR to amend the CEQA Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, is no longer considered an environmental impact under CEQA and VMT has been adopted as the most appropriate measure of project transportation impacts for land use projects and land use plans. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018 and the guidelines must be implemented statewide by July 1, 2020.

The Updated CEQA Guidelines state that "…generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts…" and define VMT as "…the amount and distance of automobile travel attributable to a project…". It should be noted that "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. Per Section 21099 of the Public Resource Code, the selection of the VMT criteria for determining the significance of transportation impacts was intended, in part, to promote reductions of greenhouse gas emissions, and pursuant to SB 375, the California Air Resources Board GHG

emissions reduction targets for metropolitan planning organizations call for reductions in GHG emissions only from cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT). Other relevant considerations may include the effects of the project on transit and non-motorized travel.

Screening Criteria

Consistent with OPR's Technical Advisory, the County of Los Angeles Transportation Impact Analysis Guidelines contain screening criteria to determine if a project generates a significant impact on VMT. A project need only meet one of the screening criteria to have a presumption of less than significance:

- Non-Retail Project Trip Generation (110 daily trips or less): If a development project generates 110 or less net daily vehicle trips, further analysis is not required, and a less than significant determination can be made. As described above, automobile VMT is the primary metric that should be evaluated and most appropriately meets the intent of SB 743. With implementation of the proposed GDD/RF contracts, there would be three new Field Monitors and two new office employees (County employees) that would generate 10 daily trips, commuting to and from County facilities and/or the start of their daily monitoring route. Because the waste haulers have not yet been selected, it is not known how many additional (if any) employees would be needed to operate the additional collection trucks that would be required based on the contract requirements. However, the County would implement PDF-TR-1, which would limit the waste hauler trips to 49 commuter trips (98 daily vehicle trips). The balance would be required to carpool or use public transportation. This provision will be included in the Invitation For Bids/Request for Proposals for waste haulers. With PDF-TR-1, the Project would generate a total of 108 daily trips, which would fall below the screening threshold of 110 daily trips. Thus, the Project would be screened from conducting a project-specific VMT analysis and impacts can be presumed to be less than significant.

PDF-TR-1 The Invitation For Bids/Request for Proposals for the new waste hauling contracts will limit total commuter trips for waste hauling employees to 49 employees. The balance will be required to carpool and/or use alternative modes of transportation (e.g., transit, walking, bicycling).

As described above, with PDF-TR-1, the Project trip generation falls below the threshold of 110 daily trips. Therefore, the Project would be screened from conducting a project-specific VMT analysis and impacts are presumed to be less than significant. No further analysis is required.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact**.** The Project would not include construction of any new roadways or modifications to any intersection geometry. Collection trucks would be traveling on streets along routes already used routinely by such vehicles; therefore, the proposed Project would not result in a significant design hazard or result in an incompatible use. The number of collection trucks circulating the Project area would increase. Due to lower speeds and intermittent stops observed by collection trucks, collection trucks can lead to other vehicles passing in the opposing traffic lane and can also reduce sightlines for passing vehicles. However, compliance with traffic laws for safe passing would promote roadway safety, consistent with current conditions. Collection trucks would be required to follow all traffic laws and would use safety precautions, such as flashing lights, to warn passing vehicles. Any passing vehicles would also be required to adhere to traffic laws concerning safe passing practices. Impacts would be less than significant and no further analysis is required.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact**.** The proposed Project would not result in physical changes related to the basic methods used to collect solid waste in the Project area. Collection trucks would travel on streets and along routes already used routinely by such vehicles; therefore, the proposed Project would not result in a significant impact to emergency access. Impacts would be less than significant and no further analysis is required.

References

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3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

No Impact. While the Project area may encompass tribal cultural resources that could be listed or eligible for listing in the California Register of Historical Resources, or in a local register, the proposed Project would not result in any physical changes that could cause a substantial adverse change in the significance of any tribal cultural resource. The additional collection trucks that would circulate the roadway system as a result of the proposed Project and the addition of organic waste diversion and recycling services to the Project area would not lead to the physical destruction, relocation, or alteration of any tribal cultural resource or its immediate surroundings. The collection trucks would travel along designated roadways, consistent with existing or future traffic patterns. As such, new areas of ground disturbance would not occur. Furthermore, no construction activities would occur as part of the proposed Project such that impacts to any existing tribal cultural resources could result. As such, there would be no impact and no further analysis is required.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

No Impact. The Project area may encompass tribal cultural resources that may have been (or will be in the future) determined by the County to be significant pursuant to Public Resources Code Section 5024.1. However, as described in Section 3.18(a), the proposed Project would involve additional collection trucks circulating the roadway system in the Project area and the addition of organic waste diversion and recycling

services to the Project area, which would not lead to the physical destruction, relocation, or alteration of any tribal cultural resource or its immediate surroundings. The collection trucks would travel along designated roadways, consistent with existing or future traffic patterns. As such, new areas of ground disturbance would not occur. Furthermore, no construction activities would occur as part of the proposed Project such that impacts to any existing tribal cultural resources could result.

On August 31, 2021, notification of the proposed Project was sent via certified mail to California Native American tribal representatives that are traditionally or culturally affiliated with the geographic area. Public Works received responses via email from two tribes: the Fernandeño Tataviam Band of Mission Indians and the San Manuel Band of Mission Indians. Both tribes stated that they do not have concerns with implementation of the proposed Project. As such, no concerns regarding potential effects to tribal cultural resources have been identified by California Native American tribes or by the County as part of the Assembly Bill 52 notification and consultation process. For the foregoing reasons, no impacts would occur and no further analysis is required.

References

None.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact. The proposed Project does not include any construction or new development that would increase the demand for water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications services. The proposed Project would include changes to existing waste collection practices and would result in an increase in collection trucks circulating the Project area. There are no proposed Project activities that would result in a significant increase in water usage or discharge of wastewater for Project operation. As discussed in Section 3.10, the proposed Project would not create new sources of runoff water with the potential to exceed the capacity of existing infrastructure. For these reasons, the Project would not entail the relocation or construction of new or expanded water, wastewater treatment, or storm drainage facilities.

The proposed Project would increase natural gas and electricity usage in the Project area. Based on information from Public Works, some of the new vehicles associated with the Project would use natural gas, and some would be electric. (Specifically, 70% of the new fleet is anticipated to use natural gas and 3% is anticipated to be electric.) The total increase in natural gas and electricity consumption that is estimated for the proposed Project is shown in Section 3.6. As demonstrated therein, the natural gas and electricity estimated to be consumed by the Project would be minor relative to existing and future projected supplies and/or demands in the region. As such, new or expanded facilities are not anticipated to be needed.

Because the proposed Project does not propose any new development, the Project would not result in any significant new demand for utilities, particularly in the categories of water, wastewater, stormwater drainage, and telecommunications. Collection activities under the proposed Project would occur within areas of the County using existing infrastructure. The need for new service yards or other facilities for future waste haulers to serve the Project area is highly speculative at this time and thus, the utilities required for any such facilities is outside the scope of this analysis and therefore not considered herein. The Project, as proposed, would result in no impact related to the relocation or construction of new or expanded utilities infrastructure or facilities, and no further analysis is required.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. As discussed in 3.19(a), the proposed Project does not include any construction, new development, or other activities that would substantially increase the demand for water. As such, there would be no impact to the availability of water supplies. No further analysis is required.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. As discussed in 3.19(a), the proposed Project does not include any construction or new development that would substantially increase wastewater generation. There would be no impact and no further analysis is required.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. The proposed Project would collect solid waste generated by residences and commercial properties. The Project itself would not increase the amount of solid waste that is produced; rather, it would change how solid waste is collected and disposed. The Project would have a beneficial impact to solid waste reduction goals and to the capacity of local landfills because new collection trucks would collect recyclables and organic waste, allowing for the diversion of materials that would generally go to a landfill in the absence of the proposed Project. While deliveries to recycling and organic waste processing facilities would increase, the facilities that may be used for these purposes are outside of the scope of this Project and analysis (see Section 2.3 for further details). As described in Section 2.3, the facilities that may be used by the selected waste hauler(s) to service the Project area are unknown and speculative at this time. Waste haulers that respond to Public Works' Invitation for Bids/Request for Proposals may rely on existing, available infrastructure. Alternatively, they may also propose to develop new or expanded infrastructure for the purposes of serving the Project area. Whether new or expanded infrastructure would be required, as well as the scope, location, and development scenarios for any such infrastructure, is highly speculative at this time. In the event that new or expanded infrastructure is proposed by a selected waste hauler, the new or expanded infrastructure would be required to undergo local permitting and approval processes (including CEQA review), at the expense of the waste hauler. As such, while the Project could potentially result in the need for new or expanded infrastructure pertaining to the increased diversion of organic waste and recyclables from landfills, the future potential development of such infrastructure is currently unknown and would require environmental review, if it were to be proposed. Furthermore, on a long-term, regional scale, the need for new or expanded organic waste/recycling infrastructure would be balanced overtime by reduced demands on landfills and an associated reduction in future needs for new or expanded landfills.

The proposed Project would require waste collection practices in the unincorporated communities within the Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts to more closely align with current waste regulations, since recycling services may not be currently available for all single-family residences, and source-separated organic waste collection and diversion services are not generally available for residences or commercial properties. This Project would enable compliance with the County's Mandatory Organic Waste Disposal Reduction Ordinance, which is required per SB 1383. The Ordinance requires all businesses and residents in the County unincorporated communities to subscribe to organic waste collection services, thereby enabling diversion of organic waste from landfills. Therefore, the proposed Project would assist in the attainment of state and local solid waste reduction goals. No impact would occur and no further analysis is required.

*e) **Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

No Impact. As discussed in 3.19(d) above, the proposed Project would divert materials that would otherwise go to the landfill in the absence of the proposed Project. This would allow the unincorporated communities in the Project area to better comply with existing solid waste regulations. Specifically, the addition of source-separated organic waste collection and diversion services to the area would facilitate compliance with SB 1383, which is a statewide effort to reduce emissions of short-lived climate pollutants (e.g. methane) by diverting organic waste from landfills. As such, the Project would support compliance with statutes and regulations related to solid waste, and no impact would occur and no further analysis is required.

References

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3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As discussed in Section 3.9(g), the Project area contains areas designated as VHFHSZs by CAL FIRE, mostly located in the Acton/Ague Dulce service area (CAL FIRE 2021). The proposed Project would include changes to existing waste collection practices and would result in an increase in collection trucks circulating the Project area. The proposed Project would thus increase vehicle traffic on roadways within or near these VHFHSZs, thereby exposing drivers to potential wildfire hazards, or exacerbating wildfire hazards if Project vehicles suffer mechanical or equipment failures that could ignite the vehicle and surrounding vegetation. However, waste hauler(s) would be required to comply with all applicable fire prevention, response, and reporting requirements, which would minimize fire-related risks. Additionally, collection trucks would pick up illegally dumped waste such as debris piles that could act as fuel sources for wildfires, which may result in a beneficial impact. The proposed Project does not include any new development or installation of associated infrastructure. As discussed in Section 3.9(f), the proposed Project would not conflict with the County's emergency plan or any disaster routes. The GDD/RF agreements would require waste haulers to provide the County with maps of their collection routes and schedules, and the County would have the right to request changes to accommodate emergency evacuation plans or routes. No impacts would occur and no further analysis is required.

References

CAL FIRE (California Department of Forestry and Fire Protection). 2021. FHSZ Viewer. Accessed September 17, 2021. https://egis.fire.ca.gov/FHSZ/.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a) ***Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?***

Less Than Significant Impact. As discussed in Section 3.4, the additional collection trucks and field monitor vehicles associated with the Project would not be expected to have a significant adverse effect on existing biological resources because travel through the Project area would be intermittent in nature and limited to established, designated roadways that are already developed and regularly used by other motor vehicles. The use of the roadways for collection trucks and field monitor vehicles would be consistent with their existing and intended use. As such, impacts would be less than significant.

As discussed in Section 3.5, the proposed Project would not result in any physical changes that could cause a substantial adverse change in the significance of any historical or archaeological resources. No physical destruction, relocation, or alteration of any historical resource or its immediate surroundings is proposed and no construction activities would occur as part of the Project such that impacts to any historical resources or

archaeological resources could result. For these reasons, the proposed Project would not eliminate any important examples of major periods in California history or prehistory, and no impact would occur.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Potentially Significant Impact. As discussed in the respective issue areas, the proposed Project would not result in any significant or potentially significant impacts to environmental resources except for air quality. Potentially significant cumulative air quality impacts will be discussed in further detail in an EIR. For other environmental topics, compliance with standard measures and applicable federal, state, and local regulations would ensure that any impacts associated with the proposed Project are less than significant, and therefore would not result in any cumulatively considerable impacts.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. As detailed throughout this Initial Study, the proposed Project would not result in significant impacts in the environmental categories typically associated with indirect or direct effects to human beings, such as aesthetics, hazards and hazardous materials, noise, or public services. However, potentially significant air quality impacts may result and will be discussed in further detail in an EIR.

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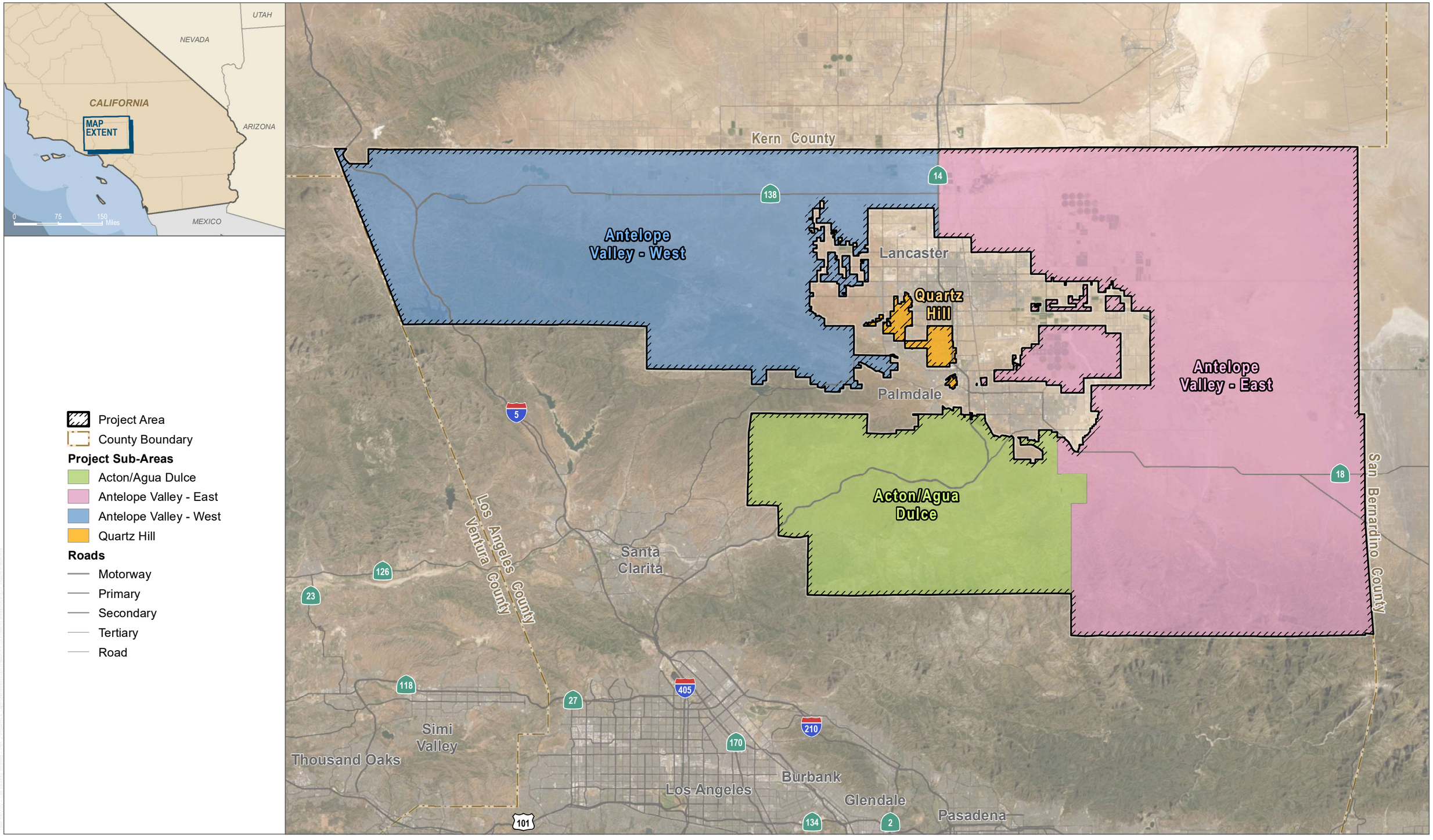
County of Los Angeles Department of Public Works

Ed Dingman – Senior Civil Engineer (Transportation Planning and Programs)
Reyna Soriano – Civil Engineer (Transportation Planning and Programs)
Ebigalle Voigt – Senior Civil Engineering Assistant (Transportation Planning and Programs)
Krystle K. Jafari - Associate Civil Engineer (Transportation Planning and Programs)
Steven Milewski – Senior Civil Engineer (Environmental Programs Division)
Kent Tsujii, Associate Civil Engineer (Traffic Safety & Mobility)

Dudek (Environmental Consultant)

Eric Wilson – Contract Manager
Steve Peterson – Project Director
Michele Finneyfrock – Project Manager
Angelica Chiu – Environmental Analyst
Nicholas Lorenzen – Air Quality/Greenhouse Gas Emissions Specialist
Michael Green, INCE Bd. Cert. – Senior Noise Specialist
Dennis Pascua – Transportation Services Manager
Lisa Valdez – Senior Transportation Planner
Christopher Starbird – GIS Specialist

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SOURCE: Esri and Digital Globe, OpenStreetMap

DUDEK 0 3 6 Miles

FIGURE 2-1

Project Area

North County Solid Waste Collection Services Project

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Appendix A

Greenhouse Gas Emissions and Energy Data

Operational year 2048 - Proposed Project Operational Mobile Source Emissions Summary - EMFAC2021																		
Vehicle Type	EMFAC Class	Average Daily Trip Length (miles)	Avg. Daily Trips (trips/day)	Avg. Daily VMT (VMT/day)	Annual Trips (trips/year)	Annual VMT (VMT/year)	Idling Minutes per Day (min/day)	Emission Factors			Emissions — Daily (Pounds/day)					Emissions — Annual (Metric Tons/yr)		
								CO2	CH4	N2O	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
Passenger Vehicles	LDA, LDT1, LDT2	21.5	108	2,322	39,420	847,530	N/A	Running Exhaust, Running Loss(grams/mile)			Running Exhaust, Running Loss				Running Exhaust, Running Loss			
								222.546	0	0.02739	1,139.24	—	0.14	1,180.74	188.62	—	0.02	195.49
								Starting Exhaust, Hot Soak, Running Loss Evaporative (grams/trip)			Starting Exhaust, Hot Soak, Running Loss Evaporative				Starting Exhaust, Hot Soak, Running Loss Evaporative			
								55.4592	0.043614	0.02739	13.205	0.01	0.007	15.37	2.19	0	0	2.55
	LHDT1, LHDT2, MHDT, HHDT	200	114	22,800	29,640	5,928,000	60	Running Exhaust, Running Loss(grams/mile)			Running Exhaust, Running Loss				Running Exhaust, Running Loss			
								1069.55	0.261483	0	53,761.37	13.144	—	54,063.67	6,340.36	1.55	—	6,376.01
								Idling			Idling				Idling			
								83.7554	0.00239	0.01572	1,263.00	0.036	0.237	—	164.19	0	0.03	173.42
								Total Passenger Vehicles and Trucks			**56,176.81**	**13.19**	**0.38**	**55,259.78**	**6,695.35**	**1.56**	**0.06**	**6,747.46**

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Attachment D

NOP Comment Letters

From: Acton Town Council <atc@actontowncouncil.org>
Sent: Wednesday, February 22, 2023 4:30 PM
To: Coby Skye <CSKYE@dpw.lacounty.gov>; Acton Town Council <atc@actontowncouncil.org>
Subject: Question regarding organic waste processing facilities

CAUTION: External Email. Proceed Responsibly.

Dear Mr. Skye;
Thank you for convening the Scoping meeting last week for the proposed garbage disposal district/franchise waste hauling program in the Antelope Valley. I have obtained a copy of the "Countywide Organic Waste Management Plan" that was issued in 2018 and which identifies the locations of all existing and proposed organic waste handling/ processing facilities in the County (Figures 4A-1 through 4A-6) and would like to confirm that no additional organic waste processing facilities are needed or are being planned for by the County beyond those already shown in Figures 4A-1 through 4A-6. If this is incorrect, kindly clarify how many more organic waste facilities will be required to process the County's organic waste and where they will be located.
The issue has been discussed in previous ATC meetings and is still a concern as we put together our scoping comments because (according to Table 4A- 4 of the "Countywide Organic Waste Management Plan"), the Antelope Valley is already processing the majority of food waste generated in the County; this, coupled with the fact that 5 of the 6 existing Class III landfills are located in Supervisor District 5, gives the impression that the County tends to consider District 5 in general and the Antelope Valley in particular as the "place" to locate waste facilities in the County. The Plan also indicates that the County has a significant shortfall in food waste processing capacity and that new facilities are needed; it is not clear that the existing and proposed organic waste facilities listed in Figures 4A-1 through 4A-6 of the Plan will be sufficient to accommodate all of the County's organic waste disposal needs. Thus, it seems likely that plans are under development to construct new facilities to address this shortfall; yet, I can find no documents or reports on the County SWIMS website pertaining to such plans. Any information that you could provide would be very helpful. Also, would you please add this email to the "Scoping Record" along with any response that you are able to provide.
Thank you in advance for your time and attention in addressing this email.
Sincerely;
Jacqueline Ayer
Correspondence Secretary

Krystle Jafari

From: Acton Town Council <atc@actontowncouncil.org>
Sent: Wednesday, March 01, 2023 4:22 PM
To: PW-EPD NC Solid Waste EIR; Acton Town Council
Subject: Acton Town Council Scoping Comments in response to DPW NOP
Attachments: FINAL comment letter - garbage disposal districts - SIGNED.pdf; SIGNED Final letter re GDD Franchise program IS-ND.pdf; Final comments on Revised ND - Signed.pdf

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Jafari;
Attached please find scoping comments submitted by the Acton Town Council in response to the "NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT" issued by the Department of Public Works pursuant to the "North County Solid Waste Collection Services Project". As indicated in the attached letter, the Acton Town Council would like to include as part of our Scoping Comments all previous letters that we have submitted; these previous letters are attached as well. Please contact us if you have any questions or would like to discuss any of the matters that are addressed in the attached correspondence.
Sincerely;
Jacqueline Ayer
Correspondence Secretary

Krystle Jafari

From: PW-EPD NC Solid Waste EIR
Sent: Thursday, March 02, 2023 3:39 PM
To: 'Acton Town Council'
Cc: PW-EPD NC Solid Waste EIR
Subject: RE: Acton Town Council Scoping Comments in response to DPW NOP

Hello Jacqueline,

This is to confirm receipt of the Acton Town Council's comments on March 1, 2023.

Thank you,

Krystle K. Jafari, P.E.
Associate Civil Engineer
Los Angeles County Public Works
Office: (626) 458-3916

From: Acton Town Council <atc@actontowncouncil.org>
Sent: Thursday, March 02, 2023 10:36 AM
To: PW-EPD NC Solid Waste EIR <NoCoSolidWasteEIR@pw.lacounty.gov>
Subject: Re: Acton Town Council Scoping Comments in response to DPW NOP

CAUTION: External Email. Proceed Responsibly.

Hello;
Can you please confirm receipt of the comments that were submitted yesterday by the Acton Town Council regarding the North County Solid Waste EIR project?
Thank you
Sincerely;
Jacqueline Ayer
Correspondence Secretary

On Wed, Mar 1, 2023 at 4:21 PM Acton Town Council <atc@actontowncouncil.org> wrote:

> Dear Ms. Jafari;
> Attached please find scoping comments submitted by the Acton Town Council in response to the "NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT" issued by the Department of Public Works pursuant to the "North County Solid Waste Collection Services Project". As indicated in the attached letter, the Acton Town Council would like to include as part of our Scoping Comments all previous letters that we have submitted; these previous letters are attached as well. Please contact us if you have any questions or would like to discuss any of the matters that are addressed in the attached correspondence.
> Sincerely;
> Jacqueline Ayer
> Correspondence Secretary

ACTON TOWN COUNCIL
P.O.Box 810, Acton CA 93510

Department of Public Works
Attention: Krystle K. Jafari, P.E.
P.O. Box 1460
Alhambra, CA 91802-1460
Electronic Transmission of eight (8) pages to:
NoCoSolidWasteEIR@pw.lacounty.gov

February 28, 2023

Subject: Acton Town Council Scoping Comments on the "North County Solid Waste Collection Services Project" (formerly known as the "*Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts and/or Residential Franchise Program*").

Reference: Notice of Preparation of An Environmental Impact Report Feb.2, 2023. State Clearinghouse Project No. 2022020271.

Dear Ms. Jafari;

The Acton Town Council greatly appreciates that the Los Angeles County Department of Public Works ("Department") has determined that the "North County Solid Waste Collection Services Project" warrants an Environmental Impact Report ("EIR") under the California Environmental Quality Act ("CEQA") and we respectfully submit the following scoping comments in response to the referenced "Notice of Preparation" ("NOP"). According to the NOP, the "Project" consists of contracts executed between the County and waste disposal companies that will establish either waste disposal franchises or garbage disposal districts for residences and commercial businesses in North Los Angeles County. The critical requirement that is imposed by these contracts is that all residential and commercial waste must be separated and placed into three separate waste containers (refuse, recyclables, and organic/food waste) and then transported as segregated waste streams by the contractor to segregated facilities for proper processing. The project will significantly increase the frequency of waste disposal trips on the many miles of dirt road in North County because the contractor will have to make separate trips to pick up each of the three segregated waste streams to avoid comingling them; it is believed that the project will require the contractor to visit each residential and commercial customer three times per week which will triple truck emissions and substantially increase ambient dust levels in all service areas.

The NOP properly recognizes that the waste transportation component of the "Contract Project" will create direct and significant air quality impacts because it will generate significant ambient dust and also result in significantly higher criteria and toxic air pollutants. CEQA mandates that the County impose feasible mitigation measures that will avoid or substantially lessen the Project's environmental impacts [CEQA Guidelines, § 15126.4] and it specifically defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" [CEQA Statute § 21061.1]. Additionally, CEQA does not permit the Lead Agency to find that a mitigation measure is infeasible unless substantial evidence in the record clearly demonstrates that there are certain factors which render the mitigation measure materially infeasible [CEQA Guidelines, § 15091]. Taken together, these CEQA provisions clearly direct the Department to incorporate feasible mitigation measures into the EIR that will substantially reduce the Project's ambient dust and criteria/toxic pollutant emissions.

The Acton Town Council believes that a Project alternative which will substantially lessen the Project's air quality impacts is the use of "Split-Body" waste disposal trucks in place of traditional vehicles. "Split-Body" waste disposal trucks segregate and transport two different types of solid waste in a single vehicle; this will reduce the number of trucks deployed on local dirt roads by at least one-third and thereby substantially lessen the Project's direct environmental impacts. "Split-Body" trucks have been used in California for more than 15 years[1] (including in areas where snow and heavy weather can be significant factors); thus, their technology is proven. The use of "Split-Body" waste disposal trucks will significantly reduce the number of weekly truck trips on the dirt roads of North Los Angeles County and thereby significantly reduce ambient dust levels. It will also provide other benefits such as reducing greenhouse gas and toxic/ criteria air pollutant emissions and reducing "wear and tear" on dirt roads.

The Acton Town Council has conducted a literature search on "Split-Body" waste disposal vehicles and found no deficiencies that render this alternative technologically, environmentally, or socially "infeasible" as that term is contemplated by CEQA. Furthermore, requiring the use of "Split-Body" waste disposal vehicles in the contracts that are issued pursuant to the "Project" is not economically infeasible because the costs that may be incurred by the contractor to purchase new "split body" vehicles will be amortized over the 14 year life of the contract[2]. Furthermore, virtually all waste disposal vehicles in the state will have to be replaced by 2040 anyway because the California Air

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[1] https://www.lakeconews.com/news/5572-garbage-goes-green-company-adopts-innovative-approaches-for-waste-disposal. See also https://www.cityofsantacruz.com/Home/Components/News/News/1729/814?arch=1&npage=11

[2] Waste trucks last anywhere from 7 to 15 years. https://www.mswmanagement.com/collection/collection-vehicles/article/13034702/waste-collection-vehicle-maintenance, and https://www.mswmanagement.com/collection/article/13028524/a-finger-on-the-pulse-of-collection-operations.

Resources Board recently rejected a proposal that would allow waste disposal vehicles to sidestep new "zero emission" standards[3]. For all these reasons, the Acton Town Council recommends that "Split-Body" trucks be considered as an "environmentally superior alternative" for mitigating the Project's significant air quality impacts. We further point out that mere preferences expressed by corporate waste disposal companies are not relevant in any CEQA feasibility determination because they do not meet CEQA's "substantial evidence" standard for establishing the feasibility of a project alternative or mitigation measure.

The Acton Town Council is also aware that the County does not have sufficient waste processing, disposal, and/or handling facilities to accommodate the significant volumes of segregated organic waste streams that will be generated as a result of the project[4]; in particular, the County lacks facilities to process food waste[5] which comprises nearly half of all organic waste[6]. It is estimated that more than 5,000 tons per day of food waste is generated in the County, but as of 2018, only 2% of this (or 98 tons per day) could be accommodated by the food waste handling/disposal facilities within the County[7]. To the Acton Town Council's knowledge, existing and planned organic waste handling facilities in general, and food waste handling facilities in particular, are insufficient to process all the new waste streams that will be generated in the County; thus, a foreseeable consequence of the Project will be the construction and operation of new organic and food waste processing facilities to accommodate the Project's new waste streams.

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[3] "The California Air Resources Board Public Hearing to Consider the Proposed Advanced Clean Fleets Regulation Staff Report: Initial Statement of Reasons". Issued August 30, 2022 https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/isor2.pdf. Pages 258-260.

[4] The Los Angeles County *Countywide Organic Waste Management Plan* issued in 2018 states "Additionally, the process for which organic waste processing and recycling facilities get sited, permitted, designed and constructed is costly and time consuming. Therefore, it should be understood that although the County may be able to collect more organic waste, there are not sufficient facilities capable of processing and recycling that organic waste into useful end products under existing or near-term conditions. Due to the shortfall in capacity, it is likely that the unprocessed organic waste material will end up in landfills until this issue is resolved. While there is additional capacity available at out-of-County facilities, there is competition for that capacity, since it is subject to out-of-County jurisdictional control and quarantine restrictions, and there are environmental impacts related to greater haul distances and localized impacts due to increased facility use Talk about cumulative impacts" [page 10] and "As demonstrated by the scenario analyses and Figures 5-1 and 5-2, the County will not be able to meet all of the projected organic waste processing demand of all jurisdictions through the 15-year planning period by utilizing existing in-County capacity alone, even when considering the "status quo" scenario (Scenario 1) in which diversion rates do not increase. The scenarios do show that by utilizing out-of-County organic waste processing capacity to compensate for the in-County shortfall, the organic waste processing needs of the County may be able to be met. However, this analysis does not take into account that all California counties are striving to meet the state diversion goals, and thus, out-of-County organic waste recycling facilities may have limited capacity to accept organic waste from Los Angeles County" [page 32].

[5] Id. at 32.

[6] Id. at 14.

[7] Id. at 32.

The project definition provided by the NOP is narrowly constrained to address only waste transportation activities; it does not address either the waste processing activities that will result from the project or the new waste processing facilities that must be constructed and operated to accommodate all the recycling waste and organic waste and food waste streams that will be generated by the project. All of this is inconsistent with CEQA, which defines "Project" to mean "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" [CEQA Guidelines §15378]. Though the NOP correctly identifies the Project's direct physical changes to the environment (because it asserts that the waste transportation activity will increase air pollutant emissions), it omits the reasonably foreseeable indirect changes to the environment that are associated with the waste processing activities that will result from the project; therefore, the project description provided by the NOP is deficient.

CEQA defines a reasonably foreseeable indirect change as "a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment" [Guidelines 15064(d)(2)]. Though not mentioned in the NOP, it is reasonably foreseeable that the project will result in a significant expansion of recycling waste and organic waste and food waste processing activities; this is because the project requires residences and commercial businesses to segregate their waste and thereby create new and substantial recyclable, organic, and food waste streams that must be processed separately. It is also reasonably foreseeable that the project will trigger the construction and operation of new recycling waste and organic waste and food waste processing facilities because there is a significant dearth of such facilities in the County (as discussed above). Both of these "reasonably foreseeable" outcomes will cause indirect physical changes to the environment; therefore, CEQA requires that the EIR fully address these elements by broadening the project description to include both the direct changes (air quality) and indirect changes (the construction and operation of new and expanded recyclable/organic/food waste facilities) resulting from the project.

It must further noted that the purpose of the project is to ensure proper implementation of County Ordinance 21-0059 as well as various state statutes that are intended to divert waste from landfills; the first phase of this effort will require customers to segregate their waste into three categories (recyclables, refuse, and organic+green waste). However, the County intends to initiate a second phase of the project which will require customers to further segregate their waste by separating food waste from green waste[8];

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[8] When introducing Ordinance 21-0059 on November 2, 2021, Supervisor Kuehl stated "Eventually, there is going to be a fourth bin, or specialized bags that the collectors will give out to you, for this kind of [food] waste, because it can be turned into mulch. And, even more excitingly for L.A. County, it can be turned into energy; and not just a little energy, a lot." It is clear from this comment that The County's full intent for the project is to segregate green waste from food waste.

therefore, the project will ultimately result in the collection and disposal of four segregated waste streams (organic, food, recyclables, and refuse) all of which must be processed separately. Accordingly, the comments presented herein presume that the Project will ultimately result in the segregation and collection of four separate waste streams rather than the three waste streams described on page 2 of the NOP (refuse, recyclables, and organic waste).

CEQA also requires that the EIR address the potentially significant effects that the Project may have on the environment and it specifically mandates that the EIR consider all effects resulting from either direct physical changes in the environment or reasonably foreseeable indirect physical changes in the environment [Guidelines 15064(d)]. The NOP correctly identifies the potentially significant direct effects of the project because it asserts that the Project will alter air quality. However, the NOP fails to identify the potentially significant indirect effects of the project. The Project's indirect effects are determined by the particular organic waste process that is utilized. For instance, state law authorizes "surface spread" of processed and even unprocessed food waste to a depth of 12-inches up to three times a year in agricultural zones; though such practices are currently not permitted under the County Code, and though the contracts that will be issued pursuant to the Project indicate that "land application" of food waste and organic waste is not contemplated, all of the contracts will include a clause stating that "Land Application" will be authorized by the County if there is a "lack of viable facilities"[9]. It is already known with certainty that there is a *significant lack* of food and organic waste treatment facilities in the County, therefore it is known with relative certainty that "land application" of food waste and organic waste will occur as a direct result of the project. Accordingly, the EIR must address the substantial impacts that will result if the contractual clause allowing "Land Application" is exercised; these impacts include air quality, odor, water quality, transportation, wildfire, aesthetic, land use, noise, service system, public service, greenhouse gas emission, biological resource, and health (disease).

The Acton Town Council has tried diligently to obtain information from the County regarding the pending activities that will address existing shortfalls in organic waste and food waste processing capacities in the County; such information would allow us to narrow our scoping comments considerably. However, no information has been provided in response to our requests; therefore, the Acton Town Council offers the following broad recommendations regarding the Project's indirect impacts that must be considered in the EIR and which will result from the construction and operation of new waste processing facilities. These impacts include aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials. hydrology and water

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[9] Notice of Invitation for Bids for Antelope Valley Garbage Disposal Districts (BRC0000275) issued February 22, 2022 (Scope of Work: Section C of Exhibit 3A1 – Task 1 Services).

quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.

The Acton Town Council understands that the Department believes the project scope consists solely of the transportation component of the waste disposal program that will be launched when the "Project" is approved; the Department does not consider the waste stream processing, handling, and disposal components of the program to be a part of the project scope. However, it is important to note that the "project" actually consists of a slate of executed contracts between the County and certain waste disposal companies [NOP at 2] and that the County will only approve a contract if the bidder shows that it has the equipment, vehicles, manpower, and facilities necessary to both *transport* the segregated waste streams and *dispose* of the segregated waste streams in accordance with state law. In fact, the "Invitation for Bids" that was issued by the County in early 2022 for the Antelope Valley Garbage Disposal District Program explicitly directs bidders to identify the locations where they would deliver the segregated refuse, recyclable, green, and food waste streams generated by the project[10]. In other words, the plain language of the contracts which comprise the "Project" confirm that the "Project" involves both waste *transportation* and waste *processing/treatment/ disposal*. Furthermore, the County will have (or perhaps already has) substantial knowledge regarding the contractor's plan for processing and managing the recyclable waste and organic waste and food waste streams that the project will generate, including what facilities are proposed and where they are located. Accordingly, the County will have all the information it needs to prepare a proper and legally sufficient EIR that assesses both the direct environmental impacts and the indirect environmental impacts of the "whole" project.

Notably, CEQA does not permit the County to sidestep its obligation to address the Project's indirect impacts associated with processing the recyclable waste and organic waste and food waste streams by claiming that these are separate activities that will undergo a separate CEQA review at a later time. CEQA very clearly requires that the EIR consider the "whole of the action" to prevent an impermissible "piecemeal" review in which a project is chopped into smaller parts that individually undergo minimal or ministerial permit review but which cumulatively pose significant environmental consequences [*McQueen v. Bd. of Directors* [1988] 202 Cal.App.3d 1136, 1144 ("A narrow view of a project could result in the fallacy of division, that is, overlooking its cumulative impact by separately focusing on isolated parts of the whole")]. Courts always consider separate activities to be one CEQA project and require them to be reviewed together where the second activity "is a reasonably foreseeable consequence of the first activity" [Sierra Club v. The West Side Irrigation District (2005) 128 Cal.App.4th 690]. These are precisely the circumstances presented here: Because the Project will create new and significant recyclable and organic and food waste streams,

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[10] Ibid.

and because the County does not have sufficient capacity to process all the new waste streams created by the Project, a reasonably foreseeable consequence of the Project is the construction and operation of new waste handling facilities to process the organic and food wastes that the Project will generate.

CEQA also establishes that individual activities are considered parts of a "whole project" if they are interdependent; CEQA does not permit related activities to undergo separate environmental reviews unless they have "independent utility" wherein each activity is fully viable on its own and is not dependent on any other activity [*Communities for a Better Environment v. City of Richmond* [2010] 184 Cal.App.4th 70] Seen through this lens, it is again apparent that the "whole of the project" consists of two interdependent activities (*waste transportation and waste processing/treatment/disposal*) which together comprise the "whole" project that must be addressed in the EIR.

The interdependence between the waste transportation side of the project and the waste processing/treatment/disposal side of the project is clearly demonstrated in the contracts that will be issued pursuant to the project which require that the segregated wastes be both transported and processed by the contractor at the contractor's designated facilities in accordance with SB 1383 and other statutes[11]. This makes sense; segregated waste transportation activities are not viable on their own because they rely on segregated waste processing and treatment facilities to take the waste from the trucks and thereby allow the trucks to return to pick up more waste. Similarly, segregated waste processing and treatment activities are not viable on their own because they rely on trucks to continually deliver waste for processing and treatment. Waste transportation and waste processing/treatment are two sides of the same waste disposal "coin"; neither has "independent utility" from the other and neither is viable on its own. Accordingly, CEQA requires that both these activities (waste transportation and waste processing/treatment/disposal) be fully addressed and their impacts assessed in the EIR.

It is also pointed out that, for obvious reasons, the new organic waste and food waste processing facilities that will be required to accept the new waste streams generated by the Project will have to come "on line" within the same timeframes[12]. Therefore, it is both reasonable and appropriate for the County to address the waste transportation and waste processing activities jointly and contemporaneously. Furthermore, neither jurisdictional concerns nor circumstances wherein multiple approvals are required provide sufficient grounds for the County to avoid considering all activities that comprise the "whole of the project" and thereby sidestep its CEQA obligation. As the California Association of Environmental Professionals has clarified:

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11 Ibid.

12 The Invitation for Bids issued in February 22, 2022 states "COUNTY intends to have Organic Waste Diverted from landfills at the start of this CONTRACT". Ibid.

The term "project" refers to the whole of an action and to the underlying physical activity being approved, not to each government approval (CEQA Guidelines Section 15378(c)). Thus, even if the Lead Agency needs to grant more than one approval for a project, only one CEQA document should be prepared. Similarly, if more than one government agency must grant an approval, only one CEQA document should be prepared. This approach ensures that responsible agencies granting later approvals can rely on the lead agency's CEQA document[13].

Finally, the Acton Town Council hereby incorporates all of the comments that we have already provided to the Department since the Fall of 2021 pertaining to "North County Solid Waste" issues which were submitted pursuant to the prior action known as the "*Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West Garbage Disposal Districts and/or Residential Franchise Program*". Our prior written comments are being sent along with this letter.

If you have any questions or require clarification regarding any of the matters raised herein, please do not hesitate to contact us at atc@actontowncouncil.org.

Sincerely;

_____
Jeremiah Owen, President
The Acton Town Council

_____

13 https://ceqaportal.org/tp/CEQA%20Project%20Description%202020%20Update.pdf

ACTON
TOWN COUNCIL
1887
P.O.Box 810, Acton CA 93510

Reyna Soriano
P.O. Box 1460
Alhambra, CA 91802-1460
Electronic Transmission of eleven (11) pages to:
rsoriano@dpw.lacounty.gov

July 8, 2022

Subject: Acton Town Council Comments on the Notice of Intent Issued June 10, 2022.

References: Notice of Intent and Initial Study/Revised Negative Declaration for the "Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts" Issued June 10, 2022.

Dear Ms. Soriano;

The Acton Town Council appreciates the opportunity to provide comments on the Revised Negative Declaration that was issued by the Department of Public Works ("Department") for the "Garbage Disposal District or Residential Franchise Contracts Project" (hereafter referred to as "Project"). It is understood that, for each Garbage Disposal District ("District"), the County will pursue a competitive bidding process to select a private business to remove segregated refuse, recyclables, and organic waste and then dispose of these segregated waste streams at authorized refuse, recycling, and organic waste processing facilities, respectively. It is also understood that the revised "Initial Study/Revised Negative Declaration" issued in June, 2022 and referred to hereafter as "Neg Dec" was prepared pursuant to the California Environmental Quality Act ("CEQA") and is intended to replace the "Initial Study/Revised Negative Declaration" that was previously released in February, 2022 and regarding which the Acton Town Council submitted comments on March 25, 2022. Please note that the comments presented below are intended to supplement (not replace) the earlier comments that the Acton Town Council submitted.

The Acton Town Council appreciates the Department's efforts to develop mitigation measures to reduce the ambient dust that will be generated by the Project as a result of increased vehicle deployment on unpaved roads in rural communities. It is understood that these measures will reduce ambient dust to a level that is "less than significant"; this will allow the Department to avoid the preparation of an Environmental Impact Report ("EIR") pursuant to CEQA. However, the Acton Town Council has a number of concerns regarding these mitigation measures and other aspects of the Neg Dec and the GDD Program. Additionally, we recommend certain program changes that will enhance and strengthen the GDD program. These concerns and recommendations are provided below.

Concerns Regarding Program Measures to Reduce Particulate Emissions.

In previous comments submitted to the Department, the Acton Town Council observed that the Project would generate significant ambient dust because it would result in increased vehicle traffic on an extensive network of dirt roads that exist throughout the Project Area. To address this concern, the Neg Dec provides two different options for reducing particulate emissions from the project and it suggests that property owners can choose which option they wish to implement. The Neg Dec assumes that implementation of either of these options will reduce particulate emissions to a "less than significant" level and thereby allow the County to avoid the preparation of an Environmental Impact Report. The first option is referred to herein as the "easement+ treatment" option and it requires the owners of parcels that are accessed by roads which are not maintained by the County to provide written authorization to the contracted waste disposal company ("contractor") to pass over their roads; it also requires the owners of parcels over which contractor will travel on a dirt road to provide written attestation that the dirt road will undergo treatment with non-toxic dust suppressants to the satisfaction of both the County and the contractor at least once every three years. The second option requires parcel owners to transport their waste bins, dumpsters, and other items for disposal to a county-maintained road each week where they will be picked up by the contractor; this alternative is referred to herein as the "self-haul" option. To understand the broader implications of the "easement + treatment" and "self-haul" options that the Neg Dec relies upon to conclude that particulate emissions are "less than significant", the following Implementation Analysis is provided which considers these options as the will apply to the "Hubbard Road Residential Neighborhood" in Acton that is accessed via Hubbard Road:

Hubbard Road is an existing road that is used to access more than 40 existing residences. Hubbard Road is a mostly dirt road that is several miles long and connects to Escondido Canyon Road on both ends. It has been designated and approved by the County as a "private and future street" (not a private street) which, by definition, provides public and commercial access and egress opportunities without requiring separate easements. Local residents estimate that 50% of the homes accessed via Hubbard include equestrian facilities and equestrian uses. This suggests that approximately 20 homes utilize a weekly dumpster service for manure hauling. It is also estimated that at least half the parcels that access Escondido Canyon Road via Hubbard Road are vacant. To exercise the "easement + treatment" option, all the owners of all the parcels accessed via Hubbard Road (whether vacant or not) would have to grant access to the contractor and make arrangements among themselves to regularly treat the many miles of dirt roads that are in the neighborhood[1]. If

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[1] Page 11 of the IFB Addendum Issued by the Department on June 8, 2022 states "CONTRACTOR must alter its routes to avoid traveling on private roads without expressed written consent to do so as required above in item a, or on private unpaved roads that have not been properly documented as having been treated as required above in item c."

If both of these conditions are not fully met before the first scheduled "pickup" day under the GDD Contract, the contractor will not provide waste hauling services to the Hubbard neighborhood because the dust suppression measures that the Neg Dec assumes will be in place to reduce particulate emissions will not be implemented. Under such circumstances, residents in the Hubbard neighborhood will have to exercise the "self-haul" option which requires them to transport their blue, grey and green waste containers and their dumpsters to either Escondido Canyon Road or the paved portion of Hubbard Road once per week.

A concern with the "easement + treatment" option is that it gives the contractor substantial discretion regarding whether the road treatment provided by residents is "satisfactory"; such discretion can be (and will be) abused. This is because the "easement + treatment" option gives the contractor (who has a guaranteed annual revenue stream under the GDD program) an opportunity to increase profits by unilaterally declaring that a particular section along Hubbard Road is "unsatisfactory" and thereby suspend service to all portions of the neighborhood that is accessed via this road section; suspension of service will persist until the company is "satisfied" (whatever that may mean).

Another concern with the "easement + treatment" option is that approximately one-third of Acton is in a Significant Ecological Area ("SEA"); roadway activities in these areas are regulated by the Significant Ecological Area Ordinance and according to the County's SEA Implementation Guide, such activities require environmental review. Moreover, it is doubtful that the Department of Regional Planning (who administers the SEA Program) would be amenable to property owners in Acton laying down dust control palliatives without environmental review[2] even if they are categorized as "non-toxic" because the salts and compounds present in the palliatives could be carried into the Santa Clara River. Accordingly, it appears likely that the "easement + treatment" option will require all property owners within the SEA (including owners of vacant land who may live out of state or out of the country) to undergo an environmental review process before this option can be exercised. This will add to the costs and burdens imposed on property owners who simply wish to have their waste properly disposed of.

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[2] The palliatives that the Acton Town Council has researched fall into the following categories: Water absorbing salts (which do not work well in hot dry areas); Organic Petroleum Products (which are generally considered toxic); Organic Nonpetroleum Lignin Derivatives (which require frequent re-application, corrode aluminum, affect BOD levels in streams, quickly leach out in the rain, are slippery in the rain and become brittle and useless when dry); Molasses and Sugar Beet Extracts (which appear to be the best option and last the longest but cost $7,000 or more for per mile to apply); Vegetable oils (which oxidize and breakdown quickly in high UV areas like Acton); Electrochemical Derivatives (which have only limited lifespans and can have significant environmental impacts); and clay additives (which become very slippery when wet and their impacts to biota are not clear).

A concern with the "self-haul" option is that it will result in at least 40 round trips along the dirt roads accessed via Hubbard by residents to transport and drop off the waste containers at the County maintained road in the morning and another 40 round trips along the dirt roads accessed via Hubbard to pick up the waste containers in the evening. The 80 round trips on dirt roads in the Hubbard neighborhood that will occur under the "self-haul" mitigation measure will actually generate far more particulate emissions than the GDD Project without the "self-haul" condition because the unconditioned GDD Project merely requires the contractor to deploy three garbage trucks per week on a one-way trip through the Hubbard neighborhood. Stated more plainly, the "self-haul" option does not reduce GDD Project particulate emissions to a level that is "less than significant"; to the contrary, it will generate substantially more particulate emissions than the unconditioned GDD Project because it will result 80 round trips (or 160 one-way trips) per week over the dirt roads in the Hubbard neighborhood rather than just the three "one way" weekly vehicle trips that would occur under the unconditioned GDD Project.

Another artifact of the "self-haul" option is that it will result in hundreds of waste containers and manure dumpsters lined up along County highways awaiting pick up from the contractor. In Acton, these waste containers and dumpsters will be concentrated on Soledad Canyon Road, Escondido Canyon Road, Sierra Highway and Angeles Forest Highway which are all two-lane roads that serve as major transit corridors for commuters traveling between greater Los Angeles and cities in the Antelope Valley. These roads twist and wind over hills and valleys and commuter speeds frequently exceed 70 miles per hour; thus, the presence of hundreds of waste containers and dumpsters haphazardly placed along the side of the road and at the roadway edge of these commuter corridors will present a significant hazard to speeding drivers. Accordingly, the "self-haul" option presents significant road hazards that must be addressed in the environmental review conducted for the Project. Moreover, the additional traffic hazards that will be created by a slow-moving train of four waste disposal vehicles separately collecting recyclables, organic waste, refuse, and manure along these commuter highways and blocking an entire highway lane for the hour or more required to pick up, empty, and put down each of the hundreds of waste container that line the highway is difficult to contemplate. These significant traffic hazards must also must be addressed in the environmental review conducted for the Project.

Regarding the issue of roadway hazards, the Initial Study presented in the Neg Dec does clarify that the collection trucks can reduce sightlines for passing vehicles and lead to other vehicles passing in the opposing traffic lane (page 85). However, the Initial Study dismisses these concerns by concluding that roadway use will be consistent with current conditions and that "compliance with traffic laws for safe passing would promote roadway safety, consistent with current conditions". These conclusions are flawed and entirely insupportable. First, the conditions presented by the "self-haul" option will differ substantially from "current conditions" because the "self-haul" option will result in the

jumbled placement of hundreds of waste containers and dumpsters along major commuter corridors that are located haphazardly at the roadway edge; these circumstances do not exist under "current conditions" because today, residents have their waste picked up at their driveway; they do not transport their waste bins and dumpsters to the County highway. Second, the "self-haul" option will result in a slow-moving train of three or four waste disposal vehicles that block commuter highway lanes for extended periods of time each week to empty waste containers and dumpsters lined up along the highway; these circumstances do not exist under "current conditions" because today, waste is picked up at each individual residence, not at the County highway. Third, under "current conditions", there is no "compliance with traffic laws" along the highways that will be impacted by the Project because commuters routinely exceed the speed limit by 10, 20 and even 30 mph and they routinely practice unsafe passing; so, no matter how careful the waste disposal truck operators are, their vehicles will impede unlawful high-speed traffic flow and cause major accidents. The Initial Study does not address these facts; instead, it simply concludes that, with the GDD Project, commuters will abandon their current unsafe driving practices and will instead wait patiently for their opportunity to safely pass a slow-moving train of four waste disposal vehicles that are lined up and impeding traffic on major commuter highways for hours at a time. The Neg Dec provides no explanation of how this miraculous conversion will come about, it simply assumes that it will. In other words, the assumptions regarding traffic safety that are presented in the Neg Dec are fundamentally implausible and entirely unsupported; accordingly, the Neg Dec errs in concluding that the GDD Project will not result in significant traffic hazards.

An additional fact that is revealed by this Implementation Analysis is that the "options" which the Neg Dec presents as choices that individual property owners can make for themselves are not really "choices" at all. Specifically, the "easement + treatment" option can only be utilized if *all* property owners in the neighborhood select it; if one parcel owner does not "buy in" on this option (either because the parcel is vacant and the owner cannot be reached or for some other reason), then the "easement + treatment" option is not available to anyone and the "self-haul" option becomes mandatory, not optional.

CEQA requires a Lead Agency to conclusively demonstrate the feasibility of any assumption that is made regarding activities which are claimed to reduce an environmental impact to a level that is "less than significant". CEQA defines the term "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors" [CEQA Guidelines § 15364 and Public Resources Code § 21061.1]. Looking at the "easement + treatment" mitigation measure through this "feasibility" lens reveals that it is intrinsically infeasible because it requires nearly every property owner in Acton to voluntarily agree to certain conditions which will require considerable effort and impose considerable expense. This option is socially infeasible because it requires all property owners along miles of dirt road within a neighborhood to voluntarily collaborate and cooperate on preparing paperwork,

arranging for road treatments, and jointly paying for these treatments; if one property owner does not participate, then no property owners in the neighborhood can exercise this option. Moreover, it is likely that many owners of vacant property will be disinclined to participate because they will not receive any services under the GDD program anyway, so why should they agree to pay for road treatments? The "easement + treatment" option may also be legally infeasible because property owners cannot force their neighbors to sign documents and it is doubtful that they would be allowed to apply dust control treatment to a neighbors' property without first obtaining permission. Therefore, the "easement + treatment" option is not feasible and is insufficient for the purpose of CEQA. By extension, the Neg Dec errs in concluding that the "easement + treatment" option will render the Air Quality Impacts of the GDD Project "less than significant".

CEQA also requires a Lead Agency to conclusively demonstrate the veracity of every claim that is made in a negative declaration regarding an activity which will reduce an environmental impact to a level that is "less than significant". As indicated in the Implementation Analysis presented above, the "self-haul" option does not reduce particulate emissions to a level that is less than significant; to the contrary, it will generate significantly more particulate emissions than the unconditioned GDD Project. The "self-haul" option will not achieve the emission reductions that are claimed by the Neg Dec, thus the Neg Dec errs in concluding that the "self-haul" option will render the Air Quality Impacts of the GDD Project "less than significant".

The Initial Study Only Considers Waste Hauling Impacts and Does Not Address Waste Disposal Impacts.

Consistent with the issues discussed in our previous letter submitted March 25, the Acton Town Council remains substantially concerned that the revised Neg Dec only considers the waste hauling component of the Project and does not address the environmental impacts of processing the segregated waste once it is hauled away; by looking at only the hauling portion of the "project" and sidestepping the waste processing component, the Initial Study fails to consider the "whole of the action" as required by CEQA. It is noted that the Department already has detailed information on all the recycling, green/food waste, and refuse facilities that the contractor will utilize to dispose of the wastes that are collected under the GDD program because such information was provided in each proposal that was submitted in response to the Department's "Invitation for Bids" issued for the GDD Project in February. Accordingly, the County has a substantive basis for assessing the environmental impacts of any new facilities proposed by the contractor; it also has a substantive basis for developing mitigation measures and alternative scenarios that will reduce such impacts. All of this information should be incorporated into the environmental document that is prepared for the Project.

Under the GDD Program, Vacant Land Owners Will be Required to Pay for Contractor Cleanup Activities in All County Rights of Way.

At the Acton Town Council meeting convened on June 25, 2022, Councilmembers observed that the County currently cleans up litter and debris left along the roadsides and in County "Rights of Way"; it was noted that these services were always prompt and greatly appreciated. It was also noted that much of the garbage that litters County rights of way are not put there by local residents. For instance, in Acton, 90% of the trash that accumulates in the area surrounding the intersection of Crown Valley Road and Sierra Highway comes from fast-food and food-truck businesses in the area which are frequented almost exclusively by commuters. This is not conjecture; it is fact. The Acton Women's Club is the sponsor for roadside cleanup in that area and club members are all too familiar with the real source of the trash that accumulates there.

During the meeting, Councilmembers asked whether the costs that the County currently incurs for trash removal in County rights of way will transferred to the project and thus paid for by local residents through the Project fees assessed on their property taxes. In response, staff indicated that the right of way clean up services are already paid for by the County and that this will not change even if the Project is approved. Specifically, residents understood that the "vacant parcel fees" collected pursuant to the Project would not be diverted to clean up County rights of way and would instead be used to clean up private parcels where illegal dumping had occurred. However, the "Invitation for Bids" ("IFB") that the Department issued to contractors for the Project states otherwise. In fact, a major element of the "Task II" Scope of Work is the cleanup of abandoned waste and litter in County Rights of Way (page 49). In fact, the IFB explicitly defines "abandoned waste" and "litter" to include only debris that is in the County right of way; it does not include material that is dumped onto vacant land. In other words, the Scope of Work that is presented in the IFB is inconsistent with the services that the Department described to our community in all of the meetings that have been convened regarding the GDD Program. The Acton Town Council is substantially concerned that residents were given an inaccurate picture of where their taxes will go.

The Project Requires Owners of Vacant Property to Pay for Concierge Waste Collection and Disposal Services to all Homeless Encampments and Unlawful Tent and Recreational Vehicle Dwellers Throughout the District.

Homeless encampments have spread like an epidemic throughout the Antelope Valley, and there has been an alarming increase in the number of individuals who unlawfully place their RVs and tents on vacant property and live there on a permanent basis. The County does nothing about it. These individuals discharge human waste into the environment and perpetrate additional violations of environmental regulations with impunity. The County does nothing about it. Now, the County intends to facilitate these unlawful residential uses by providing all illegal RV and tent dwellers with free concierge waste disposal services

and, according to Part II of the Scope of Work set forth in the IFB, *these services will be paid for by the owners of vacant properties in the Antelope Valley* (see pages 53-54). And, because the IFB specifies that the, RV/tent dwellers are not "customers", they will not be required to segregate their waste in the manner required by actual "customers". Worst of all, the IFB allows the Department to direct contractors to provide these waste disposal services ***outside the district*** (see page 57 of Part II); this means the Department will use fees paid by owners of vacant land in the Antelope Valley to pay for concierge waste disposal services and homeless encampment clean up services *throughout the county*! This was ***NEVER*** mentioned in any of the public meetings that have been convened over the last year to discuss the GDD Project. The Department never disclosed that vacant property owners will be forced to pay for concierge waste hauling services to unlawful RV and tent dwellers. The Department never disclosed that vacant property owners will be forced to pay for cleaning up homeless encampments that should not exist in the first place and would not exist if the County enforced its own ordinances. And the Department never disclosed that the fees collected from vacant property owners in the Antelope Valley will be used to pay for such services throughout the County. The Acton Town Council opposes any County action that encourages or supports unlawful RV/tent residential uses and we are certainly not inclined to support the levying of any tax on local property owners to pay for services that facilitate such unlawful uses *particularly when they are located outside of a district*.

It Appears that Vacant Parcel Fees WILL NOT be Used to Clean Up Illegally Dumped Debris on Vacant Parcels.

For more than a year, the Department has explained to Acton residents that the GDD Project includes fees assessed on vacant parcels for the purpose of providing funding to clean up vacant parcels where illegal dumping has occurred. However, very little information has been made available to the public regarding the mechanism that will be used to clean up illegally dumped waste on privately owned vacant property or how parcels will be selected for cleanup. The Acton Town Council assumed that some of this information would be available in the IFB that was issued for the Project, so we requested a copy. Surprisingly, the IFB makes no mention of cleaning up illegally dumped waste on private property and such activities are not included anywhere in the Scope of Work. The Acton Town Council is appalled that the one service which the Department *guaranteed* would be provided under the GDD Program to clean up illegally dumped debris on vacant properties does not appear anywhere in the IFB. Accordingly, the Acton Town Council does not support the GDD Program as it is currently described in the IFB Scope of Work.

Changes and Additions Recommended for the GDD Program

The Acton Town Council offers the following additional comments that recommend changes to the GDD Program:

Eliminate the Use of Fees Paid by Property Owners to Provide Concierge Waste hauling and Disposal Services to RV/tent dwellers and Clean Up Homeless Encampments: As discussed above, the tent and RV dwellings on vacant land violate the County Code; these uses also frequently violate adopted state and federal regulations including California's Porter-Cologne Act and the Federal Safe Drinking Water Act. These unlawful uses must not be facilitated or accommodated, and Antelope Valley property owners must not be forced to pay for such services which the County should not be providing anyway. Therefore, the GDD Program Scope of Work must be revised to eliminate the concierge waste disposal services to RV/tent dwellers and the homeless encampment cleanup services. Additionally, the County should do its job by relocating these RV/tent dwellers, providing them services and thereby comply with local, state, and federal regulations.

Eliminate the Use of Fees Paid by Property Owners to Clean Up County Rights of Way: As discussed above, the trash and waste dumped on County rights of Way are not left there by the residents of the Antelope Valley and they are certainly not discarded by owners of vacant land where no development exists. Therefore, the owners of vacant land should not be required to pay for cleanup of waste they clearly did not generate.

Add Requirements for Vacant Parcel Cleanup Activities: For more than a year, the Department has consistently represented to the Community of Acton that the fees collected from vacant property owners would be used to clean up vacant properties within the district where illegal dumping has occurred. This would bring a number of benefits to rural communities like Acton where the illegal dumping of construction debris, soil, and waste on vacant lands has become an epidemic. However, and in order to support such a program, rural residents must understand how the program will work, how parcels will be selected for cleanup, and other administrative aspects of the program. In an effort to obtain information regarding this aspect of the Project, the Acton Town Council has repeatedly asked for details on how it will work; no information has been provided. Now, having reviewed the IFB and the various addenda to the IFB, we understand that the cleanup vacant properties where illegal dumping has occurred is not included in the GDD Program Scope of Work. This is unacceptable. The GDD Program must be revised to include the promised cleanup activities on properties where illegal dumping has occurred.

Contract Term: From the information provided at the public meeting on June 27, the Acton Town Council understands that the Department has revised the contract term proposed for the GDD Program by reducing it from 25 years to 10 years with two optional 5-year term extensions. This change is appreciated; however, the Neg Dec issued by the Department on June 9 reports that the GDD contracts will extend to 25 years and does not reflect the revised 10-year contract term. Furthermore, according to page 1 of the IFB Addendum issued May 25, 2022, the 10-year contract term is an option that the Department is exploring and is not a "sure thing". The Acton Town Council respectfully requests that the Neg Dec be revised to reflect that a 10-year contract term with two 5-year optional extensions is being considered in addition to the 25-year contract term that it currently

describes. Additionally, it is essential that the County share with the residents the price difference between these two options so that we can provide input that will influence the County's decision regarding which option will be exercised.

Citizen Advisory Council: The Department must form a "Citizen Advisory Council" within each GDD that is comprised solely of property owners within the GDD. Councils will meet publicly and their purpose will be to 1) provide direction on how the fees collected on vacant parcels will be allocated for cleanup purposes; 2) prioritize the areas where cleanup will occur; 3) convey to the Department any community complaints, concerns, and problems that property owners have expressed regarding the contracted GDD service provider; 4) provide ***meaningful*** input on the Department's decision on whether to exercise the option to extend a waste disposal company's contract beyond the initial 10 year term or any subsequent terms; and 5) make recommends regarding reductions in and suspensions of the vacant parcel fee collection program. The Citizen Advisory Council is essential for the following reasons:

- Rural residents must play a substantial role in determining how their Project fees are spent within their own community.
- Rural property owners are very apprehensive about the significant fees that will be levied on vacant parcels under the GDD program; it is estimated that the vacant parcel fees combined across all districts will exceed $10 million each year. In the West Valley District, vacant parcel fees are projected to comprise 52% of the total revenue collected for the District. These are substantial sums, yet the Department has not explained how they will be spent, who will make the decisions to spend them, what criteria will be used to make such decisions, and what fiscal responsibility measures will be implemented to ensure that these funds are "well spent". Over the last 5 years, *the County has collected more than $50 million from the rural residents of the 5th District* to pay for "grants" to fund park projects, homeless services, "safe water" projects, roads, transit projects and other actions which are supposed to benefit us. Yet, and insofar as the Acton Town Council can determine, *not one penny* of these fees and taxes collected from rural residents in the 5th district has gone to benefit any rural communities in the 5th District. Rural residents have no say in how all this tax money is spent, and we are never consulted by the County or Metro or RPOSD or LHASA or any other agency that takes money from rural residents in the 5th District and spends it elsewhere. The County has consistently failed to provide us with any support or assistance to pursue the "grant" programs which we pay for, and as a result, 5th District rural residents have become completely disenfranchised. Meanwhile, we watch helplessly as millions of dollars are wasted on grants issued to "public benefit" organizations run by "administrators" earning six figure salaries and which do nothing but "outreach" and "advocacy". There is little wonder that we rural residents take a dim view of the Department's proposal to charge waste disposal fees on vacant properties that do not even generate waste, particularly since we have not been provided with information on

how the funds will be spent and what measures will be used to prevent fraud, waste, and abuse.

- There must be a mechanism for ensuring reasonableness in the vacant parcel fee collection process by providing opportunities for such fees to be reduced and even suspended when appropriate. There must also be full transparency and accountability for expenditures of vacant parcel fees when they are made. Accordingly, the GDD must allow property owners full access to revenue and expenditure data and it must be structured in such a way that it triggers reductions in, and even suspensions of, vacant parcel fees when the revenues collected via these fees exceed the expenditure rate. The Acton Town Council recommends a 25% "float" which triggers a 50% reduction in the vacant parcel fee for any tax year in which vacant parcel revenues accrued in the previous tax year exceed 125% of what was expended during that previous tax year. And, when vacant parcel revenues accrued in a tax year are twice the amount expended during that tax year, the vacant parcel fee will be suspended for the following tax year.
- The Acton Town Council is substantially concerned that the Department will issue perfunctory extensions to waste disposal contracts because doing so clearly provides the easiest and most convenient path for the County to "deal with" waste issues in the North County. Contract extensions should not be contemplated unless there is material and substantial evidence that the contractor provided at least adequate (and preferably superior) service during the base period. Accordingly, it is critical that the Department solicit, accept, and duly consider input from we rural residents and property owners before deciding to extend any contract under the GDD Program. Accordingly, the Citizen Advisory Council (which will be comprised solely of property owners within the GDD) must play a key role in the decision to exercise a contract extension.

If you have any questions or wish to discuss any of the comments and concerns provided above, please do not hesitate to contact us at atc@actontowncouncil.org.

Sincerely,

Jeremiah Owen, President
The Acton Town Council

cc: Anish Saraiya, 5th District Planning and Public Works Deputy [ASaraiya@bos.lacounty.gov].
Donna Termeer, 5th District Field Deputy [DTermeer@bos.lacounty.gov].
Chuck Bostwick, 5th District Assistant Field Deputy [CBostwick@bos.lacounty.gov].

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Electronic Transmission of six (6) pages to:
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March 25, 2022

Subject: Acton Town Council Comments Submitted in Response to the Notice of Intent Received March 2, 2023 From the Department of Public Works.

References: Initial Study/Negative Declaration for the Acton, Agua Dulce, and Antelope Valley "Garbage Disposal District or Residential Franchise Contracts" Project Dated February, 2022.
E-mail from the Department of Public Works dated March 17, 2022 5:35 PM Extending the Comment Period to March 26, 2022.

Dear Mr. Milewski;

The Acton Town Council would like to express its appreciation to you and the Department of Public Works for extending the comment deadline on the referenced Initial Study/Negative Declaration prepared for the "Garbage Disposal District or Residential Franchise Contracts Project" (hereafter referred to as "Project"). It is understood that, for each Garbage Disposal District ("District"), the County will pursue a competitive bidding process to select a private business to remove segregated refuse, recyclables, and organic waste and then dispose of these segregated waste streams at authorized refuse, recycling, and organic waste processing facilities, respectively. Accordingly, for each District, a successful bidder will have to demonstrate that it 1) has sufficient vehicle capacity to transport all the segregated waste streams generated by the District; and 2) has adequate control over separate refuse/recycling/organic waste processing facilities of sufficient capacity to accommodate all the segregated waste streams generated by the District. In furtherance of this competitive bidding process, and as a first step in the LAFCO public agency formation protocol which creates the Districts, the County has prepared an Initial Study to address the environmental impacts that will result from the District formation "project". The Acton Town Council has reviewed the Initial Study, and we offer the following comments; in the interest of brevity, the comments are arranged topically.

The Initial Study Does Not Account for Dust Emissions.

The Acton Town Council understands that the project will require residents to segregate their waste into three different containers, and according to the Initial Study, these containers will be picked up by different trucks, so the Project will triple the number of waste hauling trucks that operate in our community. Notably, most of the roads in Acton are dirt, so tripling the waste hauling truck trips in Acton will result in a significant increase in ambient dust levels in the community. We are concerned that the Initial Study does not account for the increased ambient dust resulting from the project, and we ask that this error be corrected.

The Initial Study Only Considers Waste Hauling Impacts and Does Not Address Waste Disposal Impacts.

The Initial Study only considers the waste hauling component of the "project" and does not address the environmental impacts of processing the segregated waste once it is hauled away; by looking at only the hauling portion of the "project" and sidestepping the waste processing component, the Initial Study fails to consider the "whole of the action" as required by the California Environmental Quality Act ("CEQA"). The Initial Study indicates that implementing the processing component of the Franchise Contract project will be left entirely to the bidder's discretion because it states "waste haulers responding to the Invitation for Bids/Request for Proposals may propose new or expanded service yards in order to serve the Project area. Other facilities may also be proposed, such as transfer stations and/or organic waste processing facilities. However, such future facilities and infrastructure is considered highly speculative and outside the scope of the currently proposed Project"[1]. The Initial Study further asserts that impacts associated with the new organic and recycling waste handing infrastructure that will be developed to serve District customers are "too speculative"; this indicates that such impacts will not be evaluated before the Project is approved[2]. Finally, the Initial Study then states that any waste processing facilities that are proposed by the successful Franchise Contract bidder will undergo CEQA review later[3] (which presumably means after the Franchise Contract is approved).

The problem with this approach is that the County cannot approve the "project" or create any Garbage Disposal Districts or authorize any Franchise Contracts for waste disposal services until it has first conducted a CEQA review of both the waste hauling component and the waste processing component of the "project". The County is reminded that the "project" is the formation of Garbage *Disposal* Districts, not Garbage *Hauling* Districts, and

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[1] Page 5.

[2] Page 6.

[3] Ibid.

that District customers will pay for both hauling *and* disposal services. Yet, the Initial Study only addresses the waste hauling component of the "project"; the waste disposal component remains unaddressed. This leaves a considerable CEQA compliance "gap" in the County's environmental review. It is critical for the County to understand that CEQA demands an environmental assessment which addresses the "whole of the project"; it also requires that this environmental assessment be completed *before* the Board approves any District or authorizes any Waste Disposal Franchise Contract. The reason is simple: analyzing the environmental impacts of a Waste Disposal Franchise Contract after it is approved is like shutting the barn door after the horse has escaped. The California Courts have clarified that conducting a CEQA review after project approval renders CEQA useless and renders the CEQA document itself nothing more than a post-hoc rationalization for a decision already made; doing so also precludes the opportunity for considering feasible alternatives and mitigation measures to reduce impacts.

The Acton Town Council also rejects the County's argument that the organic waste processing infrastructure and the recyclable waste processing facilities which will be developed and secured by Franchise Contractors to serve their Garbage Disposal Districts are "too speculative" to evaluate. We understand that bidders will be required to provide details regarding the segregated waste disposal facilities that they will utilize to serve the waste disposal contract, and we presume that the County will not award any Franchise Contract without first confirming that the waste disposal contractor has a robust plan in place to secure sufficient transportation units and develop sufficient organic and recyclable waste processing facilities to accommodate the entire volume of all the segregated waste streams generated in the District. Therefore, the County will have all the information that it needs to conduct a proper CEQA review of the "whole project"; and, pursuant thereto, it should conduct an environmental assessment of both the transportation element and the waste processing element of the "project" before approving any Garbage Disposal District or issuing any Franchise Garbage Disposal Contract.

One solution to address the CEQA compliance "gap" noted in the Initial Study is for the County to require bidders to include a "Proponent's Environmental Assessment" ("PEA") with their proposal; the PEA will provide all the information that the County requires to conduct a CEQA review of their proposal "as a whole" (which includes both waste hauling and waste processing). This eliminates all concerns regarding "speculative impacts" and it puts the County on a path to prepare an adequate CEQA document before approving any Garbage Disposal District or issuing any Franchise Contract for the "project". This will also allow affected residents to provide more specific and informed public comments on the "project" before it is approved by the County. This approach is workable because the Initial Study states that Franchise Contractors will bear the costs incurred to develop and permit any new or expanded waste facilities that are required to serve their Districts[4];

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[4] Ibid.

accordingly, their bids will reflect the scope and extent of the waste disposal facility development and associated permitting that will be required to fully serve District customers. In other words, because the County will not issue any Franchise Contract for any Garbage Disposal District without first evaluating the facilities that the bidder will utilize for processing recyclable and organic wastes, confirming that the facilities are sufficient to fully serve the segregated waste disposal needs for the District, and ensuring that the rates offered by the bidder are consistent with the costs required to develop and permit such facilities, there will be more than sufficient information available for the County to prepare a comprehensive CEQA review of the "project as a whole". It is recognized that this approach may require a few iterative steps in the Request for Proposal ("RFP") process and that it may require the County to issue RFP amendments based on the initial bids received; however, this is a small price to pay for ensuring that the "project" fully complies with CEQA.

Project Impacts and Recommended Mitigations:

The Initial Study indicates that the RFP issued by the County for the Franchise Contracts will not impose any substantive conditions on the contractors other than requiring them to "provide curbside pickup of refuse, recyclables, and organic waste (i.e., yard waste and food waste) for customers in the Project area". The Initial Study also assumes that the number of waste haul trips per customer will simply increase from one to 3 and it declares without foundation or basis that tripling waste haul trips will have no impact. The Acton Town Council disagrees. Most of the roads in rural communities like Acton are not improved and are not maintained by the County, thus tripling trash truck deployment on these dirt roads will not only create increased dust levels, but will also degrade the roads and compel property owners to increase road maintenance activities. As such, the County has an obligation to condition the RFP in a manner that reduces impacts and "works" for our community. For instance, the County should condition the RFP to require that refuse and recyclables are picked up in "split body" garbage trucks in rural areas where roads are predominantly dirt; this will allow one truck to process two segregated waste streams and thereby reduce the number of trucks traveling on privately maintained dirt roads. Also, the RFP should require that compostable materials are picked up on the same day as the recyclables and refuse to ensure that residents do not "get it wrong" by putting out the incorrect bin on the incorrect day.

Concerns Regarding the Length and Other Terms of the Franchise Contracts.

At the Acton Town Council meeting on March 21, residents voiced considerable concerns when it was revealed that the Franchise Contracts will have very long terms; in particular, residents expressed concern that long contract terms tend to disincentivize good service. After all, why should a contractor provide good service when it has a guaranteed customer base and a guaranteed revenue stream and a guaranteed payment program that forces customers to pay through their property taxes? It seems to the Acton Town Council that

the only real "leverage" for ensuring good customer service is the contract length and the contract terms; if a contract is too lengthy or the terms are too soft, customer service is guaranteed to suffer. The Initial Study asserts that, for each District, the Franchise Contract term will be 25 years[5] and County staff have indicated that the only real mechanism available to address inferior customer service is the "Contractor Alert Reporting Database" ("CARD") system which tracks poorly performing contractors. The Acton Town Council has researched the CARD system, and according to information posted on the County website, it is primarily used during the solicitation process for new or renewed County contracts[6]; it is not clear what sort of remedies could be applied via the CARD system to address poor customer service by Franchise Contractors. So, while tracking poorly performing franchise contractors via the CARD system will be useful for informing County decisions made 25 years from now regarding future franchise contracts, it will not demonstrably address poor customer service within Garbage Disposal Districts. County staff also clarified that poor contractor performance can result in "debarment"; however, this does not provide any real assurances because the County's debarment process is hardly ever used and the Acton Town Council can find no evidence showing that it has been applied to large companies[7].

The Initial Study asserts that the lengthy contract term was selected to "get the best possible rates for customers[8]"; this was repeated by staff at the March 21 meeting who indicated that the long contract term will allow bidders to depreciate investments. However, no information has been provided to support the claim that, to "get the best possible rates for customers" a 25-year contract term is necessary. More importantly, there are substantial reasons why a 25-year contract should never be contemplated. First, the current economic situation has introduced massive uncertainties in fuel, labor, and equipment cost projections over the next ten years; it is not certain how much these costs will increase, but it is certain they will increase substantially. These uncertainties are magnified substantially when projections extend to 25 years. Accordingly, to protect their future economic interests, bidders will have to "hedge their bets" by adding substantial margins to their bid rates to forestall potential losses. Second, the useful life of garbage trucks and most of the other equipment that will be utilized by Franchise Contractors is typically 10 years and certainly not more than 15 years, thus the "depreciation" argument is non-persuasive; the Acton Town Council can conceive of no tax implication or fiscal attribute that will provide sufficient economic benefits to warrant a 25-year contract term.

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[5] Page 7.

[6] https://auditor.lacounty.gov/wp-content/uploads/2019/09/CARD-Manual.pdf .

[7] According to the County's "Listing of Debarred Contractors", nearly all those debarred are individuals; the only vendors identified are 5 very small companies. See https://doingbusiness.lacounty.gov/listing-of-contractors-debarred-in-los-angeles-county/ .

[8] Page 5.

Third, the Acton Town Council expects that significant technological advancements will occur across all service industries over the next 10 years including waste management; therefore, it would be foolish to "lock" the residents of Acton into a binding 25-year contract with a waste disposal company that is not compelled to innovate. Fourth, the Acton Town Council can find no municipality that has agreed to a 25-year waste disposal contract[9]; even the Franchise Contracts that the County has executed to serve areas outside of the Antelope Valley, Acton, and Agua Dulce have a maximum contract length of only 11 years and 6 months[10]. Why is it necessary to burden the residents of Acton, Agua Dulce, and the Antelope Valley with 25-year Franchise Contracts when the residents of other unincorporated areas have access to reasonably priced waste disposal services through contracts that have much shorter terms? Unless the County can address all the concerns mentioned above (especially regarding customer service) and also quantify and support in detail the benefits that Acton residents will derive from a long-term Franchise Contract, the Acton Town Council stands firmly opposed to any contract that exceeds a base term of 10 years with one or two optional extensions.

The Acton Town Council also seeks to ensure that the Franchise Agreements developed pursuant to the "project" are not exclusive, and that residents will be able to choose smaller service-based companies should they wish. This request is consistent with the Board Motion adopted November 16, 2021 because all Franchisees will have to comply with mandatory diversion requirements.

Thank you again for considering these comments. If you have any questions or require further clarification regarding any of the issues raised herein, please do not hesitate to contact the Acton Town Council at atc@actontowncouncil.org.

Sincerely,

Jeremiah Owen, President
The Acton Town Council

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[9] The City of Seattle recently executed a 10-year contract with Waste Management to provide segregated waste disposal services for organic waste, recyclables, and refuse; the contract allows the City to unilaterally extend the contract for up to 4 additional years. See https://www.seattle.gov/Documents/Departments/SPU/Documents/SPUWMSolidWaste17077BFinal.pdf. The City of Santa Ana recently executed a 10-year contract with Republic that included a mutual option to extend for five years and a City option to extend for up to 36 months. https://www.santa-ana.org/latest-news/city-council-approves-trash-collection-agreement-establishes-clean-city-initiative. The City of Orange recently executed a 5-year contract with CR&R to provide segregated waste disposal services to handle organic waste, recyclables, and refuse; the contract also provides for three optional three-year terms. See https://citydocs.cityoforange.org/WebLink/DocView.aspx?id=243991163&undefined&cr=1.

[10] http://file.lacounty.gov/SDSInter/bos/supdocs/120636.pdf.

Krystle Jafari

From: Mary Johnson <maryjohnson767@gmail.com>
Sent: Thursday, March 02, 2023 1:23 PM
To: PW-EPD NC Solid Waste EIR
Cc: Don Henry; Mary Johnson; Cliff Grimes; Scott Keller; Chris Yewdall; Candy Clemente; Kathryn Segura; English, Stephanie
Subject: Corrected Subject Title: Agua Dulce Town Council comments on NOP for Draft EIR for North County Solid Waste Collection Services Project
Attachments: 3-2-23GDDScopeCommentsEIRDraft.pdf

CAUTION: External Email. Proceed Responsibly.

Please note the corrected subject title.

---------- Forwarded message ---------
From: **Mary Johnson** <maryjohnson767@gmail.com>
Date: Thu, Mar 2, 2023 at 1:19 PM
Subject: Agua Dulce Town Council comments on NOP or
To: <NoCoSolidWasteEIR@pw.lacounty.gov>
Cc: Don Henry <bh33605@aol.com>, Mary Johnson <maryjohnson767@gmail.com>, Cliff Grimes <cliffwgrimes@gmail.com>, Scott Keller <scottwilliamkeller@gmail.com>, Chris Yewdall <cyewdall@msn.com>, Candy Clemente <cccryder@aol.com>, Kathryn Segura <phdanimals@yahoo.com>, Stephanie English <SEnglish@bos.lacounty.gov>

Dear Ms. Jafari,

Attached please find a letter from the Agua Dulce Town Council regarding comments on the Notice of Preparation of Scoping for a Draft Environmental Impact Report for the North County Solid Waste Collection Services Project. Please add this to all previous correspondence we have submitted regarding this project known as Garbage Disposal Districts. Feel free to contact me if you have any questions.

Mary Johnson, Secretary
Agua Dulce Town Council
33201 Agua Dulce Canyon Rd, Box 8
Agua Dulce, CA 91390
http://www.adtowncouncil.com

Meetings: 2nd Wednesday of the month
Via Zoom: Jan, Feb, Apr, May, July, Oct, Nov. Zoom link on website
In Person: at Agua Dulce Women's Club: Mar, June, Sept, Dec
6:30 PM-Administrative Meeting, 7:00 PM-Community Meeting
All meetings are open to the public

AGUA DULCE TOWN COUNCIL

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March 2, 2023

Ms. Krystle K. Jafari, P.E.
Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460

Via Email to: NoCoSolidWasteEIR@pw.lacounty.gov

RE: Comments on Notice of Preparation of Scoping for a Draft Environmental Impact Report – North County Solid Waste Collection Services Project

Dear Ms. Jafari:

The Agua Dulce Town Council (The Council) appreciates the opportunity to submit comments as to the scope and content of the environmental information to be evaluated in the proposed Project Environmental Impact Report (EIR). The Proposed Project consists of executing new contracts with solid waste haulers to establish either residential and commercial franchises or garbage disposal districts for the Acton/Agua Dulce and Antelope Valley areas in the unincorporated northern area of the County of Los Angeles. Selected waste haulers would provide refuse, recyclables, and organic waste hauling services to commercial and residential properties, as well as bulky item pick up. If the necessary voter approval is not achieved to establish garbage disposal districts (GDDs), residential and commercial franchises would be established instead. Please accept these comments as well as all previous comments sent regarding the Original and Recirculated Initial Study/Negative Declaration released in 2022 into the public record regarding the scope and content of the EIR.

Insufficient Public Outreach

There has been a lack of adequate outreach to the Agua Dulce community. In reviewing the outreach on this program, the Department of Public Works has only held 4 meetings over the course of 7 years for Agua Dulce. The first was a Department of Public Works presentation on October 16, 2016 at the Acton-Agua Dulce Library. That meeting introduced the concept of Residential Trash Franchises. The second meeting was March 11, 2020 at the Agua Dulce Town Council regular meeting that introduced the concept of Garbage Disposal Districts. When the original Initial Study/Negative Declaration (IS/ND) was released on February 11, 2022, the Agua Dulce Town Council was not notified, nor was there a meeting that included the Agua Dulce community. The third meeting was a virtual meeting by Public Works on June 30, 2022 where the Recirculated Initial Study/Negative Declaration was introduced. And the fourth and final meeting was a virtual Scoping meeting February 16, 2023. Going forward, the Agua Dulce Town Council is requesting that effective community engagement and deliberative dialogue between the Department of Public Works and the community of Agua Dulce is part of the process.

Scope and Content to Be Evaluated in the Project EIR

In reviewing the Initial Study – North County Solid Waste Collection Services Project, dated February 2023, we have specific comments and concerns that we request be evaluated in the EIR.

2.3 Project Background and Purpose
The Initial Study states "…the specific manner in which an individual waste hauler may respond to the Invitation for Bids/Request for Proposals is considered highly speculative at this time and therefore, is not analyzed in this document." The Initial Study is not considering any new or expanded service yards, additional waste processing facilities and infrastructure, or transfer stations the services of the Garbage Disposal District Project will generate. This manner of evaluation does not allow for environmental review of the "whole of the project" as required by CEQA. The Department of Public Works has data from other existing GDDS and there is adequate data on existing waste processing facilities. By separating the waste hauling impacts from the waste disposal facility impacts, the Project EIR is viewed in isolation as opposed to being viewed as the "whole of the project." The Council disagrees with the Initial Study's assessment of the limited environmental review of only the waste hauling component, particularly in view of the fact that SB1383 addresses the recycling of organic waste including food, green material, landscape and pruning waste, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges. The Council requests the entire project including the waste hauling impacts and the waste facilities impacts be evaluated in the EIR.

3.3 Air Quality - Fugitive Dust Impacts
The Council is pleased that Public Works has determined and agreed with The Council that the agency does not have the authority to control the maintenance of private unpaved roads and that the two options for residential customers whose property is not accessible from a public road have been eliminated from consideration. Submitting written authorization for the waste hauler to access the customer's property and provide written attestation by the property owner that the road will be treated with a non-toxic dust suppressant, and be properly maintained to a standard acceptable to the County and the waste hauler or requiring residents to haul waste containers to an agreed upon location along the public right-of-way on a public roadway were neither feasible nor practical. This results in Potentially Significant Impacts that cannot be mitigated and those impacts needs to be analyzed in the EIR.

The additional truck traffic generated by the Project will most likely require additional maintenance of private unpaved roadways. This will result in additional grading and road maintenance that may contribute to the adverse effect of fugitive dust. The Council requests this issue also be evaluated in the EIR.

3.4 Biological Resources
Application of dust suppressants need to be analyzed. Portions of the Project are within or adjacent to Significant Ecological Areas (SEAs) including the Santa Clara River and its watershed. In the Project Description, 2.5 Project Operation states "Public Works performs periodic maintenance on County-maintained unpaved roads, including but not limited to grading and the application of a non-toxic, permeable soil stabilizing agent as a dust suppressant on an as-needed basis. Property owners along unpaved roads that are not maintained by the County will be encouraged by Public Works to apply dust suppressants to those roads. Public Works may do direct mailings, include information in newsletters and on its website, or make social media posts to encourage use of dust suppressants." If Public Works will use and encourage the use of dust suppressants, the potential environmental and health impacts need to be evaluated. The Biological Resources potential adverse effects include: impacts to sensitive species, riparian habitat, protected wetlands, movement of migratory fish or wildlife species and impacts to native flora and fauna populations. The Initial Study indicates "no impact." We challenge that finding and request this issue be evaluated in the EIR.

3.7 Geology and Soils
New vehicles traveling on unpaved roads WILL result in potential soil erosion. Based on the Initial Study dated February 2023, 339 additional trucks will be in the Project area. In Agua Dulce, most unpaved roads have equestrian properties that currently contract for manure disposal. Those residents will continue to have manure disposal as well as the new organic waste disposal, new recyclable disposal, illegal dumping trucks and additional trucks for bulky pick-ups. That is an increase of 4 additional

industrial waste trucks that equates to a 67% increase in disposal truck traffic. This doesn't even take into account the light-duty Public Works trucks that will be traveling for the Program. The Initial Study indicates "less than significant impact" relating to soil erosion. The Council challenges that finding because the additional truck traffic WILL result in soil erosion and request this issue be evaluated in the EIR.

The additional truck traffic generated by the Project will most likely require additional maintenance of private unpaved roadways. This will result in additional grading and road maintenance that will contribute to the adverse effect of deterioration of soil erosion. The Council requests this issue be evaluated in the EIR.

Additionally, application of dust suppressants needs to be analyzed. In the Project Description, 2.5 Project Operation states "Public Works performs periodic maintenance on County-maintained unpaved roads, including but not limited to grading and the application of a non-toxic, permeable soil stabilizing agent as a dust suppressant on an as-needed basis. Property owners along unpaved that are not maintained by the County will be encouraged by Public Works to apply dust suppressants to those roads. Public Works may do direct mailings, include information in newsletters and on its website, or make social media post to encourage use of dust suppressants." If Public Works will use and encourage use of dust suppressants, the potential environmental and health impacts need to be evaluated. It is also unclear as to who determines whether the dust suppressant retreatment is 'needed' – Public Works or the homeowners whose properties adjoin the treated road. The Geology and Soils potential adverse effects include soil contamination. The Initial Study indicates "less than significant impact" relating soil erosion. The Council challenges that finding and requests this issue be evaluated in the EIR.

3.9 Hazards and Hazardous Materials

Application of dust suppressants need to be analyzed. In the Project Description, 2.5 Project Operation states "Public Works performs periodic maintenance on County-maintained unpaved roads, including but not limited to grading and the application of a non-toxic, permeable soil stabilizing agent as a dust suppressant on an as-needed basis. Property owners along unpaved that are not maintained by the County will be encouraged by Public Works to apply dust suppressants to those roads. Public Works may do direct mailings, include information in newsletters and on its website, or make social media post to encourage use of dust suppressants." If Public Works will use and encourage use of dust suppressants, the potential environmental and health impacts need to be evaluated. The Hazards and Hazardous Materials potential adverse effects include: toxicity to humans during and after application. The Initial Study indicates "less than significant impact." The Council challenges that finding and requests this issue be evaluated in the EIR.

3.10 Hydrology and Water Quality

Application of dust suppressants need to be analyzed. All of Agua Dulce and many portions of the community of Acton are served by private wells. Groundwater supplies those private wells and we are protective of the quality of that groundwater. In the Project Description, 2.5 Project Operation states "Public Works performs periodic maintenance on County-maintained unpaved roads, including but not limited to grading and the application of a non-toxic, permeable soil stabilizing agent as a dust suppressant on an as-needed basis. Property owners along unpaved that are not maintained by the County will be encouraged by Public Works to apply dust suppressants to those roads. Public Works may do direct mailings, include information in newsletters and on its website, or make social media post to encourage use of dust suppressants." If Public Works will use and encourage use of dust suppressants, the potential environmental and health impacts need to be evaluated. The Hydrology and Water Quality potential adverse effects include surface and groundwater quality deterioration. The Initial Study indicates "less than significant impact." We challenge that finding and request this issue be evaluated in the EIR.

The additional truck traffic generated by the Project will most likely require additional maintenance of private unpaved roadways. This will result in additional grading and road maintenance that may contribute to the adverse effect of substantially altering the existing drainage pattern resulting in soil erosion, increase in the amount of surface runoff, and impeding or redirecting flood flows. The Council

requests this issue be evaluated in the EIR.

3.17 Transportation
CEQA Guidelines Section 15064.3, subdivision (b) focuses on Vehicle Miles Traveled (VMT) for determining the significance of transportation impacts. If a project generates 110 or less net daily vehicle trips, further analysis is not required. The Initial Study indicates the 3 new Public Works Field Monitors and 2 Office Employees would generate 10 daily trips. The Initial Study states that because the waste haulers have not been selected, it is unknown how many additional employees would be needed to operate the additional collection trucks. The Study further states that the County would require the waste hauler trips be limited to 49 commuter trips (98 vehicle trips). Using this formula, the project would generate 108 daily trips which falls just below the screening threshold of 110 daily trips.

The Council disputes this calculation. The Initial Study indicates there will be an increase in 69 additional collection trucks per day. Each of those trucks will require a driver making 2 vehicle trips resulting in 138 daily trips. This number added to the 10 daily trips generated by Public Works totals 148 daily vehicle trips. This is 25% over the threshold of 110 or less net daily vehicle trips. The Initial Study indicates there is "less than significant impact" regarding Transportation related to CEQA Guidelines section 15064.3. The Council challenges the findings in the Initial study in that the net daily vehicle trips exceeds the threshold of 110 and requests this issue be evaluated in the EIR as a Potentially Significant Impact.

Alternatives to be evaluated in the EIR
There are a number of valid and effective alternatives the Council requests be evaluated in the EIR.

- **Garbage Disposal Districts vs. Exclusive Residential Franchise**
  Public Works has unilaterally decided that a GDD is the best option for Agua Dulce. There is another Alternative Collection Option; the Exclusive Residential Franchise (RF). For some reason, Public Works has indicated RF option is less desirable. The Agua Dulce Town Council sees RF as a viable, perhaps superior alternative. It offers the same 3 bin services. The major difference is that the fees are paid directly to the waste hauling company, not the Department of Public Works through the LA County Tax Assessor. Also, RF does not assess fees to vacant parcels. The Council requests this alternative be included and evaluated in the EIR. Additionally, the Council is formally requesting a side by side comparison of services and fees between GDDs and RFs as it is an integral aspect of thoroughly assessing the options available to homeowners in the community.
- **Incentive to Reduce Waste**
  There is no incentive to reduce waste. Customers will be required to pay for 3 full size bins when they may only use less than half of the volume of the containers. Customers don't pay less if they produce less waste. There should be some consideration given to scale the rates based on the amount of waste produced by each homeowner and increase the rates for excess producers. As an example, if a homeowner is only able to fill a particular bin once every two weeks, it should be possible for them to select a once-every-two-week collection service for that bin with a corresponding reduction in their waste services cost as a result of the bi-weekly instead of weekly collection service.
- **Option to Opt-Out If the Property Owner Generates No Organic Waste**
  Our community of Agua Dulce has many property owners who have livestock and farm animals. Some of those families accumulate their organic waste to feed to their animals, thereby eliminating generation of organic waste for disposal. Additionally, many property owners practice composting of organic waste and return that organic matter and nutrients to the soil. Many also have wood chippers they use to recycle yard waste into mulch thereby eliminating generation of green waste. Property owners who do not generate organic waste should not be forced to pay for a service they will not use. The Council requests this alternative be evaluated in the EIR.
- **Alternating Week Pick Up Schedules**
  In other jurisdictions, recyclables and non-organic trash is alternated every other week with weekly pick up of organic and green waste. This cuts down truck trips substantially. This is a viable alternative that would reduce significant impacts and the Council requests this alternative be evaluated in the EIR.
- **Split-Body Waste Collection Vehicles**

In other jurisdictions, the waste collection trucks are "split-body" trucks with separate compartments for different types of waste. This cuts down truck trips substantially. This is a viable alternative that would reduce significant impacts and the Council requests this alternative be evaluated in the EIR.

- **Combination of Alternating Week Pick-Up Schedules and Split-Body Waste Collection Vehicles**
  Combining both of the above alternatives, truck trips are cut substantially. This is a viable alternative that would reduce significant impacts and the Council requests this alternative be evaluated in the EIR.
- **Convenient Drop Off Location for Recyclables**
  In other jurisdictions, a conveniently located drop off facility for all recyclables is offered. This would reduce truck trips by allowing homeowners to self-dispose their recyclables. This is a viable alternative that would reduce significant impacts and the Council requests this alternative be evaluated in the EIR.
- **Citizens Advisory Committee**
  A Citizens Advisory Council should be considered that consists of property owners of both occupied and vacant lots, that would regularly meet publicly to review potential areas slated for cleanup, help to assure compliance, provide guidance on contract extensions, review complaints from customers relating to the contractors services, be part of the decision making on where the Vacant Parcel funding goes, and general oversight of the program. The Council requests this component be added to the Program and is evaluated in the EIR.
- **Continuation of Open Market System**
  Based on California State Mandates as well as Los Angeles County Mandates, waste haulers must comply with the new regulations and mandates. Allowing the continuation of the Open Market option fulfills the mandates and the Council requests this alternative be evaluated in the EIR.

Inclusions and Exclusions in Invitation for Bids/Request for Proposals
Although the EIR does not specifically address the Invitation for Bids/Request for Proposals (IFB/RFPs), it is referenced in **2.3 Project Background and Purpose**. The Council wants to make sure our comments and concerns about what is included and excluded in the IFB/RFPs is received. The Initial Study states Public Works will issue revised IFB/RFPs. While researching the previous IFB/RFBs, the Council was confused and concerned on a number of troubling items included in the IFB/RFPs.

- **Abandoned and Occupied Homeless Encampments**
  In the original IFB/RFP, the County was requiring the waste collection company to provide regular trash service to occupied Homeless Encampments and People Experiencing Homelessness as well as clean-up of Abandoned Homeless Encampments. Additionally there is a provision that states, "Services in this section may be required to be provided outside of the Service Area." This will be service provided free of charge and paid for by the residents of Acton and Agua Dulce. This service has not been disclosed at any public meeting, nor is it included in any documents pertaining to the GDDs, except for the IFB/RFP. The Agua Dulce Town Council opposes ANY funding for the trash collection and clean-up costs related to ANY Homeless Encampments. The residents of Agua Dulce should not have the burden of paying for waste generated by Homeless Encampments or People Experiencing Homelessness. Separately, the residents of Agua Dulce are already paying a one-quarter of a cent sales tax for generating funds for the specific purposes of funding homeless services and short-term housing based on the passage of Measure H. A GGD should not be supplementing funds for homeless services and we are stunned that these services found their way into the project with no disclosure. This service item needs to be eliminated from the IFB/RFP.
- **Conflicting Information on Services Available to Vacant Parcels**
  There seems to be conflicting information related to services available to Vacant Parcels with a GDD. During meetings, Public Works staff has repeatedly stated that Vacant Parcels would receive illegal dumping removal. In the virtual meeting on June 30, 2022, there was one slide that states: "GDD Services – Vacant Parcels. Every vacant property will receive access to the following services: illegal dumping removal, assistance with community cleanup events, expanded landfill vouchers and roll-off bins." Upon review of the Invitation for Bids (IFB), we

discovered that Task II Services-Abandoned Waste Collection Services only covers illegal dumping in the Public Right-of Way. Based on that fact, vacant parcel owners are getting zero service for their fees. And by shifting clean-up of Right-of-Way debris from Public Works to the Contractor; the Contractor will in turn pass on those costs to those of us in the GDD. We are greatly concerned on how Vacant Parcels that may be the victim of illegal dumping will be serviced and cleaned up. Within the IFB there doesn't seem to be a mechanism for clean up by the contractor. The definition of "Abandoned Waste means Solid Waste which has been improperly discarded or dumped at locations in the Public Right-of-Way excluding at the Set-Out Site.." This conflicting information needs to be resolved. Moreover, given that many of the instances of illegal dumping that occur within the Agua Dulce area are created by individuals who live in areas adjacent to the community who are simply passing through the area, the GDD should also address a more robust enforcement program that becomes a genuine disincentive for those who dump illegally to continue to do so. Failure to implement a meaningful and punitive enforcement program will simply increase the convenience with which illegal dumpers can continue to do so at the expense of those within the GDD that are paying for the removal of their illegally dumped trash.

- **Revenue Stream for Public Works**
  It certainly appears that Public Works is advocating for GDDs. When examining the Invitation for Bids (IFB), it is shown that Public Works will be receiving a steady stream of funding.
  - **Director's Fund:** Each Contract Year, CONTRACTOR shall create and maintain a fund for use upon Director's request for as-needed tasks similar in nature or related to Contract Services (Task 1 and Task 2 Services). The amount of this fund shall be calculated based on the number of parcels at the rate of $0.09 per parcel per month per year and shall be available for use at the Director's request after the Commencement Date. Unused funds shall rolled over to the next Contract Year. Is this item included in existing GDDs in other areas? The Council is opposed to this funding and we request this item is eliminated from the IFB/RFP.
  - **Antelope Valley Illegal Dumping Task Force Annual Funding:** Each Contract Year, CONTRACTOR shall create and maintain a fund for use by the Antelope Valley Illegal Dumping Task Force. The task force may use the funds for its expenses within the Service Area. Six months from the start of each Contract Year, typically on January 1, CONTRACTOR shall transfer the entire annual amount of the fund to the task force account. The Director shall provide contact information. The amount of this fund shall be calculated based on the number of Refuse Units at the rate of 0.1% of the monthly Basic Rate per Refuse Unit per month per year. Refuse Unit counts are based on the numbers in the Invitation for Bids and adjusted annually thereafter on the Refuse Numbers reported by the Office of the Assessor on July 1. The Council is opposed to the manner of this funding. . According to the area plan, Agua Dulce is within the boundary of the Santa Clarita Valley, not the Antelope Valley. Any funding of this type should be generated by the residents within the Antelope Valley GDD who are paying for their own waste collection fees. This is an unnecessary financial burden on tax payers who do not live within the boundary of the Antelope Valley. This funding needs to be generated in a different manner. Do the existing GDDs in other areas have this provision and funding designated in their contracts?
  - **Vacant Parcel Funding:** There is much confusion about Vacant Parcel Funding and any services they will be receiving. The IFB/RFPs indicate the County shall retain all trash service fees paid by owners of vacant parcels. In reviewing other GDDs, the only vacant properties that are assessed fees are vacant commercial and industrial properties. These properties are assessed at 25% of the Service Fee. The Council is opposed to vacant parcel funding of any sort if they do not receive any service. Additionally, the Council is opposed to including vacant residential and vacant agricultural properties with a 25% service fee. The vacant residential and agricultural properties should not be included in fees since those vacant land use designations are not included in GDDs in other areas. .

Additional Concerns Comments

- **Contract Length**
  According to section **2.Project Description-2.5.Project Operation**, the contracts are anticipated

to extend up to 25 years. In the other areas where GDDs are administered, current County contracts only extend up to 11 years. The document indicates the longer contract durations are proposed to get the best competitive rates. There is no documentation that this long term contract will lead to the best rates. In fact, a shorter term contract may lead to more competitive rates and will allow for review of customer service. The current economy poses substantial uncertainty in fuel, labor, and equipment costs. The Council is opposed to any contract that has a longer term than the current urban contracts and request that be reflected in the EIR and the contract length be reduced to a number no greater than any existing GDDs in another area. The Council is mindful of the recent decision taken by the City of Santa Clarita to award a 10 year trash collection franchise to Burrtec after a tender process that also included Waste Management and Athens. The City of Santa Clarita's decision was evaluated on metrics that considered professionalism, quality and familiarity with SB 1383. Burrtec's rate was also half that of the Waste Management proposed total for residential collection and almost $120 difference for commercial customers. Furthermore, Waste Management was evaluated by the city as having the lowest technical ability, knowledge about the industry and knowledge of the law. The mid-2022 decision taken by the City of Santa Clarita simply doesn't support the argument that longer contracts generate the most competitive rates and demonstrates that higher rates won't necessarily mean a better service for customers.

We ask that you carefully review our comments and include our requests for issues to be evaluated in the proposed Project EIR. We look forward to additional community engagement in shaping the future of waste collection in our community.

Respectfully,

Don Henry

Don Henry, President
Agua Dulce Town Council – 2023

cc: Ms. Stephanie English, 5th District Deputy SEnglish@bos.lacounty.gov

Krystle Jafari

From: dan.duncan <dan.duncan@dsquaredsolutions.net>
Sent: Sunday, February 26, 2023 5:17 PM
To: PW-EPD NC Solid Waste EIR
Cc: dan.duncan
Subject: North County Solid Waste Collection Services Project - EIR Scoping Comments
Attachments: North County Solid Waste Collection Services Project_EIR Scoping Comments_February 26.pdf

CAUTION: External Email. Proceed Responsibly.

Good afternoon, please see the attached letter.

Thank you

February 26, 2023

Department of Public Works
Attention: Krystle K. Jafari, P.E.
P.O. Box 1460
Alhambra, CA 91802-1460

Via email to:
NoCoSolidWasteEIR@pw.lacounty.gov

North County Solid Waste Collection Services Project / Initial Study, Comments

Dear Krystle K. Jafari,

Thank you for the opportunity to provide input on the *North County Solid Waste Collection Services Project* (Project) EIR's areas of analysis.

The Project description appears inadequate, in that it doesn't encompass the full scope of the action; the organic waste processing facilities are described as, currently non-existent in the project area and their future disposition too speculative to evaluate. A project is defined within CEQA as the ***whole of the action*** and yet the Project's description is void of potentially significant details about the organic waste processing facilities. Though they may be non-existent within the Project's area, the CEQA analysis can't justify ignoring them by hiding behind CCR14 §15145 and suggest a thorough investigation has taken place. Given SB-1383 is being implemented across the state, there must be existing organic waste processing facilities and the CEQA analysis should identify the existing closest applicable facilities, with adequate capacity, to address the Project area's organic waste stream and evaluate the project with those locations. There's no reason to assume the successful bidder for the Project's waste management services will construct local facilities (unless required to do so), or if they do, they'll be completed before the service begins. Suggesting the organic waste facilities will be the subject of a future CEQA action, amounts to ***piecemealing*** under the CEQA regulations and is not permitted.

Because the Initial Study (IS) was improperly prepared assuming organic waste facilities were not included, most of the IS's determinations are inaccurate and need to be reevaluated assuming the whole of the action.

The Project's description in Section 2.3 (page 5), is inconsistent with the project descriptions on pages 35, 48, 70, and 73. See below.

> *However, as also explained in Section 2.3, source-separated organic waste collection and diversion services are not readily available in the Project area under current conditions, and the proposed Project would include the introduction of this service to the Project area.*

The proposed Project would introduce source-separated organic waste collection and diversion services to residences and commercial properties in the Project area, thus ensuring that the County's Mandatory Organic Waste Disposal Reduction Ordinance is being implemented in the Project area, in compliance with SB 1383.

However, as described in Section 3.18(a), the proposed Project would involve additional collection trucks circulating the roadway system in the Project area and the addition of organic waste diversion and recycling services to the Project area, which would not lead to the physical destruction, relocation, or alteration of any tribal cultural resource or its immediate surroundings.

The Project itself would not increase the amount of solid waste that is produced; rather, it would change how solid waste is collected and disposed.

Areas to be analyzed:

Air Quality (AQ) – the project's overall purpose is to reduce greenhouse gas (GHG) emissions; however, the project may have other significant air quality impacts, please analyze and contrast the project's overall AQ impacts on the residents of the Project area to the overall benefit(s) derived from the reduction in GHG.

Biological Resources – given much of the project are is rural, there will be increased levels of wildlife activities over dense communities. As such, nesting bird impacts are more probable from large trucks increasing their activities.

Energy – the IS's discussion references fuel consumption and miles driven; however, no destinations are given. Real facilities need to be used in the evaluation.

Greenhouse Gas Emissions – the project's intention is to reduce GHG emissions that are blamed for Global Warming, please provide the Project area's anticipated reduction in Global Warming due the control of the project's GHG.

Hazards – composting has been described as a landfill diversion strategy. Composting is associated with a number of hazards; compost piles have been attributed to breeding dangerous pathogens. If compost piles are not properly managed, they can produce methane, a flammable gas. These issues should be analyzed and other potential hazards of composting studied.

Hydrology and Water Quality – organic waste streams include manure. Water quality impacts from animal waste is well studied and their commercial operations regulated by the Regional Water Quality Control Boards. Animal waste in organic waste streams needs to be analyzed.

Transportation – *Vehicle Miles Traveled* is discussed even though the location of the waste management facilities remains a mystery. This is one more confirmation that the project does not address the whole of the action.

Wildfire – composting has been described as a landfill diversion strategy. On rare occasions composting piles have been reported to spontaneously combust. Given some of the project area's Very High Hazard wildfire status, even a rare occasion could be serious and the potential for these fires should be well understood

Regarding possible alternatives, please consider the following:

- Include in the hauler requirements, that each waste hauling truck needs to accommodate the different waste streams. Using a market-driven approach, a multi-compartment truck will reduce vehicle trips to each residence along with their impacts. By having one truck to accommodate the different waste streams, many of the baseline conditions at residential pickup locations will remain the same.

- Consider offering centralized local disposal facilities. It wasn't that many years ago that those who recycled had to take their materials to special locations. Having a centralized drop-off location would allow those who may not generate much waste or those who pass by a location regularly, to drop off some or all of their waste.

- When considering waste receptacles, please consider wind-resistant containers. Some of the project area is subject to very high winds and it's not uncommon to see the currently used containers blown over, or blown out into the highway. Possibly a water tank built into the bottom so on windy days ballast can be added to the container. This may be a new concept, but if it's a requirement of the haulers, they'll invent one.

Program related comments not applicable to CEQA:

The County is implementing these organic waste management programs in numerous areas, in addition, cities within LA County, as well as other counties in the state are implementing similar programs. It would be helpful for the county to provide a matrix showing cities and counties across the state and what the residents area being charge for the waste management services.

It's unfortunate the County has chosen to develop this program with a lack of transparency. One only needs to hear the public comments to understand the residence are very frustrated about the lack of information on the program's cost to residence and its operation. It appears the public is only allowed to ask questions or give comments during mandated public meetings.

I encourage the County to provide program details on its webpage where questions can get submitted and will be answered for everyone to see. In addition, the County should hold regular updates to keep the public informed as to the program's progress and development. In addition, since this program may be creating special funding districts, the County should educate the public about how that process works.

Sincerely,

D. Duncan
Lancaster, CA 93539

Krystle Jafari

From: Judy Fuentes <jfuentes47@icloud.com>
Sent: Thursday, February 23, 2023 3:31 PM
To: PW-EPD NC Solid Waste EIR
Subject: "Krystle K. Jafari"

CAUTION: External Email. Proceed Responsibly.

Krystle K. Jafari
P.O. Box 1460
Alhambra, CA 91802-1460

North County Solid Waste Collection
services Project
No. 2022020271

NoCoSolidWasteEIR@pw.lacounty.gov

Section 3.3 Air Quality

It is vague how property owners will be notified about GDDS

A. Will all local and foreign property owners be sent letters?

B. Will a third glossy, uninformative newsletter be sent (somehow) to property owners? Mine was sent certified mail at $6.24.

C. What about property owners who do not use or have computers or websites? If people don't know about this how can it be resolved?

What is the bottom line? To recycle? Then pay people to do it but don't make it difficult to do. Educate people how to recycle and what it is,what can be considered organic or what is the alternative. Do we rinse, clean, brush, bury, etc..

E. Excessive winds do blow dust on dirt roads occasionally, but it is more likely to happen when vehicles travel on these roads at an excessive speed. That excessive speed would be ten to fifteen miles an hour by any vehicle, large or small.

How would waste trucks be required to Slow Down on dirt roads and how would it be enforced?

Could fewer trips for waste collectors happen if the following was incorporated?
a. Inspectors ride along with pick up drivers?
b. Yard waste is retrieved at an on-call basis since everyone does not have yard waste every week?
c. Recyclables are picked up on an on-call basis when needed?
d. Community recycle bins are conveniently located?
e. Monthly bulky item pick ups are scheduled in different areas or as needed?
f. Why can't inspectors ride in trash trucks during pick ups in order to reduce traffic trips and therefore dust on dirt roads?

Since the pm 2.5 and pm 10 particulate matter is stated to cause potentially significant impacts on residents, please address the following:

a. What percentage of residents have asthma or other dust related breathing problems currently?
b. Based on the added number of trips throughout the life of the project, how many more breathing problems can be expected?
(3.3c.)

Sincerely,

Judith Fuentes
47458 92nd St. West
Antelope Acres, CA. 93536

661-723-1882

Open my shared note:



Krystle K. Jafari
Notes

Sent from my iPad

Krystle Jafari

From: Judy Fuentes <jfuentes47@icloud.com>
Sent: Thursday, February 23, 2023 3:46 PM
To: PW-EPD NC Solid Waste EIR
Subject: Krystle K. Jafari

CAUTION: External Email. Proceed Responsibly.

Krystle K. Jafari
P.O. Box 1460
Alhambra, CA 91802-1460

North County Solid Waste Collection
services Project
No. 2022020271

NoCoSolidWasteEIR@pw.lacounty.gov

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Sincerely,

Judith Fuentes
47458 92nd St. West
Antelope Acres, CA. 93536

661-723-1882

Sent from my iPad

Krystle Jafari

From: Judy Fuentes <jfuentes47@icloud.com>
Sent: Sunday, February 26, 2023 10:27 AM
To: PW-EPD NC Solid Waste EIR
Subject: Krystle K. Jafari

CAUTION: External Email. Proceed Responsibly.

Krystle K. Jafari
P.O. Box 1460
Alhambra, CA 91802-1460

North County Solid Waste Collection
services Project
No. 2022020271

NoCoSolidWasteEIR@pw.lacounty.gov

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(3.3c.)

Sincerely,

Judith Fuentes
47458 92nd St. West
Antelope Acres, CA. 93536

661-723-1882

Sent from my iPad

Krystle Jafari

From: M Grijalva <meg373@gmail.com>
Sent: Wednesday, February 22, 2023 4:07 PM
To: PW-EPD NC Solid Waste EIR
Subject: Trash proposals Agua Dulce

CAUTION: External Email. Proceed Responsibly.

Hello,

I live in Agua Dulce and I really don't like the idea of trash service being added to my tax bill. I know my neighbors don't either.
There are so many issues with the proposals you have made about dust abatement and things like that that just aren't practical for those of us that don't live near a main road.
I worry that the price you negotiate will end up being much higher then what we are paying now with less services.
Right now I pay about $130 for 3 months and that is for 3 small trash bins. We are a large family so go through a lot of trash. Please make sure that us residents aren't effected negatively with your proposals or you will end up with a fight on your hands and it will likely have to go to a ballot.

Thank you.

M. Grijalva
--
Melanie

NATIVE AMERICAN HERITAGE COMMISSION

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NAHC HEADQUARTERS
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Suite 100
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(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

February 1, 2023

Krystle K. Jafari, P.E.
County of Los Angeles Department of Public Works
P.O. Box 1460
Alhambra, CA 91802

Re: 2022020271, North County Solid Waste Collection Services Project, Los Angeles County

Dear Ms. Jafari:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

Krystle Jafari

From: Olesya Konovalova <olesya777@hotmail.com>
Sent: Thursday, February 02, 2023 9:30 AM
To: PW-EPD NC Solid Waste EIR
Subject: Comments North County Solid Waste Collection Services – Scoping Meeting for Draft Environmental Impact Report

CAUTION: External Email. Proceed Responsibly.

Hello,

Several things that bother me. I do not want increase in trucks picking up "pre-sorted" trash from remote areas. It will be cheaper if you hire people to sort it in the "end" location. I have hearing impairment that magnifies vibrations that garbage trucks create. I feel my whole house shaking when now twice a week trash trucks show up in the neighborhood.

In your plan "no impact" on NOISE level is simply a lie.

"No" to Sorted trash. "No" to extra trucks.

Another thing I want to continue paying for trash collection as a regular bill and I don't want it to be tied in to my LA county property taxes.

You need to solve illegals problem with trashing a desert, and you can't put this burden on legal homeowners.

Thank you,
Olesya Konovalova

From: PW-EPD NC Solid Waste EIR <NoCoSolidWasteEIR@pw.lacounty.gov>
Sent: Thursday, February 2, 2023 8:40 AM
To: PW-EPD NC Solid Waste EIR <NoCoSolidWasteEIR@pw.lacounty.gov>
Subject: North County Solid Waste Collection Services – Scoping Meeting for Draft Environmental Impact Report

Dear Town Councils:

Los Angeles County Public Works is soliciting input from interested parties and agencies as to the scope and content of the environmental information to be evaluated in the proposed North County Solid Waste Collection Services Project Draft Environmental Impact Report. We will hold a virtual scoping meeting at 6 pm on February 16, 2023. You may register for the meeting here.

The attached Notice of Preparation is being circulated for a 30-day comment period starting on February 2, 2023, and ending on March 3, 2023. Interested parties may submit their comments in writing to Los Angeles County Public Works, Attention Krystle Jafari, P.E., P.O. Box 1460, Alhambra, CA 91802-1460 or via e-mail at NoCoSolidWasteEIR@pw.lacounty.gov.

If you have any questions, please contact Public Works via this e-mail address.

Regards,

David Coscia
Program Manager II
Los Angeles County Public Works

Krystle Jafari

From: Sam Wang <swang1@aqmd.gov>
Sent: Wednesday, March 01, 2023 10:08 PM
To: PW-EPD NC Solid Waste EIR
Subject: South Coast AQMD Staff's Comments on Notice of Preparation for a Draft Environmental Impact Report for North County Solid Waste Collection Services Project
Attachments: LAC230207-11 NOP North County Solid Waste Collection Services Project.pdf

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Jafari,

Attached are South Coast AQMD staff's comments on Notice of Preparation for a Draft Environmental Impact Report for North County Solid Waste Collection Services Project (South Coast AQMD Control Number: LAC230207-11). Please contact me if you have any questions regarding these comments.

Regards,

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation
South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765
(909) 396-2649
swang1@aqmd.gov

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL: March 1, 2023

NoCoSolidWasteEIR@pw.lacounty.gov
Krystle K. Jafari, P.E., Associate Civil Engineer
County of Los Angeles
Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460

Notice of Preparation for a Draft Environmental Impact Report (Draft EIR) for North County Solid Waste Collection Services Project (Proposed Project)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the CEQA document. Please send a copy of the CEQA document upon its completion and public release directly to South Coast AQMD as copies of the CEQA document submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

CEQA Air Quality Analysis

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website[1] as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod[2] land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds[3] and localized significance thresholds (LSTs)[4] to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of

[1] South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook.
[2] CalEEMod is available free of charge at: www.caleemod.com.
[3] South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.
[4] South Coast AQMD's guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA ***operational*** thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment[5].

Mitigation Measures

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook,[6] South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2022 Air Quality Management Plan,[7] and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.[8]

Mitigation measures for operational air quality impacts from mobile sources that the Lead Agency should consider in the CEQA document may include the following:

- Require zero-emissions (ZE) or near-zero emission (NZE) on-road haul trucks such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. Given the state's clean truck rules and regulations aiming to accelerate the utilization and market penetration of ZE and NZE trucks such as the Advanced Clean Trucks Rule[9] and the Heavy-Duty Low NOx Omnibus Regulation[10], ZE and NZE trucks will become increasingly more available to use. The Lead Agency should require a phase-in schedule to incentive the use of these cleaner operating trucks to reduce any significant adverse air quality impacts. South Coast AQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive

[5] South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.
[6] https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook
[7] South Coast AQMD's 2022 Air Quality Management Plan can be found at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan (Chapter 4 - Control Strategy and Implementation).
[8] Southern California Association of Governments' 2020-2045 RTP/SCS can be found at: https://www.connectsocal.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf.
[9] CARB. June 25, 2020. *Advanced Clean Trucks Rule*. Accessed at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks.
[10] CARB has recently passed a variety of new regulations that require new, cleaner heavy-duty truck technology to be sold and used in state. For example, on August 27, 2020, CARB approved the Heavy-Duty Low NOx Omnibus Regulation, which will require all trucks to meet the adopted emission standard of 0.05 g/hp-hr starting with engine model year 2024. Accessed at: https://ww2.arb.ca.gov/rulemaking/2020/hdomnibuslownox.

programs with the Lead Agency. At a minimum, require the use of 2010 model year[11] that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. Include environmental analyses to evaluate and identify sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the CEQA document, where appropriate. Include the requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.

- Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Final CEQA document. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Proposed Project through CEQA prior to allowing this higher activity level.
- Provide electric vehicle (EV) charging stations or at a minimum, provide the electrical infrastructure and electrical panels should be appropriately sized. Electrical hookups should be provided for truckers to plug in any onboard auxiliary equipment.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at swang1@aqmd.gov.

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

SW
LAC230207-11
Control Number

[11] CARB adopted the statewide Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. More information on the CARB's Truck and Bus Regulation is available at: https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.

Krystle Jafari

From: Sandra Sarabia <SSarabia@avaqmd.ca.gov>
Sent: Thursday, February 09, 2023 7:20 AM
To: PW-EPD NC Solid Waste EIR
Cc: Barbara Lods; Bret Banks
Subject: Notice of Preparation of an EIR Solid Waste Collection
Attachments: 0223 018 Notice of Prep of an EIR Solid Waste Collection.pdf

CAUTION: External Email. Proceed Responsibly.

Good Morning,

In response to your request for comment, please see the attached document.

If you need any further assistance or have any questions, please feel free to contact me.

Thank you,

Sandra Sarabia
Air Quality Specialist
Antelope Valley AQMD
(661) 723-8070 ext. 20
ssarabia@avaqmd.ca.gov |www.avaqmd.ca.gov

Antelope Valley Air Quality Management District
2551 W. Avenue H
Lancaster, CA 93536 **661.723.8070**

In reply, please refer to AV0223/018

February 7, 2023

Krystle K. Jafari
Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460

RE: Notice of Preparation for an Environmental Impact Report for North County Solid Waste Collection Services Project, State Clearinghouse No. 2022020271

Dear Ms. Jarfari,

The Antelope Valley Air Quality Management District (District) has received the request to review Notice of Preparation for an Environmental Impact Report for the North County Solid Waste Collection Services Project, State Clearinghouse No. 2022020271, requesting the proposed project to execute new contracts with solid waste haulers to establish either residential and commercial franchises or garbage disposal districts for the Acton/Agua Dulce and Antelope Valley areas in the unincorporated territory of the County of Los Angeles. This project site is located in Antelope Valley (East & West), Quartz Hill, and Acton/Agua Dulce in the State of California.

We have reviewed the documents and based on the information available to us at this time, we have no comment.

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (661) 723-8070 x23.

Sincerely,

Barbara Lods

Barbara Lods
Operations Manager

BJL/SS

Sent via Email

Printed on recycled paper

Attachment E

Scoping Meeting Attendees

NAME	ORGANIZATION	TITLE
Tiffany Caldwell	Department of Regional Planning	Regional Planner
Josephine Gutierrez	LA County Public Works	Senior Civil Engineer
Mary Johnson	Agua Dulce Town Council	
June Perkins	Acton Town Council, AD AC Senior Citizens Club	Board member
Cliff Grimes	Agua Dulce Town Council	Council Member
Ashley Sparks	Waste Management (Hauler)	Recycling Manager
Josh Mann	Waste Management (Hauler)	
Frank Vasquez	Waste Management (Hauler)	Public Sector Recycling Manager
Michele Reiter	LLARTC	Treasurer
Guy Randles	Green Valley Town Council	Treasurer
Deb Hill	Lake Los Angeles Rural Town Council	VO
Susan Zahnter	Association of Rural Town Councils	Director
Linda Wucherpfennig		
Edwin Momeny		
Jacqueline Ayer	The Acton Town Council	
Richard Zahnter	Three Points/Liebre Mt. Town Council	Vice President
Josephine Chen	Los Angeles County Public Works	Program Manager
Maggie Quiroz	Los Angeles County Public Works	
Chuck Linn	Homebased Realty	

Attachment F

IS/ND and Recirculated IS/ND Comment Letters

Attachment F1

IS/ND Comment Letters

March 10, 2022

Reyna Soriano
rsoriano@dpw.lacounty.gov

Comments for Initial Study/Negative Declaration for the Acton, Agua Dulce, and Antelope Valley Garbage DisposalDistrict/Residential Franchise Contracts (IS/ND A AD AV GDD/RF) also known as
Project

The one and one-half page glossy brochure from PE Director Mark Pestrella dated Summer 2021 was the first and only one of the quarterly newsletters I received to keep "AV residents

Informed on important waste management issues,
* including new laws planning for countywide disposal capacity

Addressing illegal dumping

Providing bulky item collection

Holding annual clean-up events, diversion and waste reduction programs (This is unclear if these are annual events or programs.)

and

Creating the new proposed Garbage Districts for Acton, Agua Dulce and other North County unincorporated communities."

That is a lot .

I am a long time resident of the unincorporated community of Antelope Acres, the area now known as Antelope Valley - West, who lives too near the irregular annexed border of Lancaster.

The beginning of March 2022 was the only other time I have received communication on the Project in the form of the IS/ND.

Comments

Air Quality 3.3 c) Many residents in rural areas live on dirt roads. An increase of three or four heavy duty trucks for pick ups and traveling on these roads create fugitive dust if it is windy or not.
The AVAQMD should address this issue as a potentially significant impact.

Geology and Soil 3.7 b) Soil erosion on public or private unpaved roads would not be maintained by PW, so these byways used by additional garbage trucks would create erosion impacts and change water drainage flows that could affect paved roadways.

The Project would comply with the General Plan and AVAP, however, predictions about anything having to do about any future impacts is highly speculative. (Page 6 Project and Purpose).

There is an assumption a customer will request manure service. A bulky item and illegal dumping truck will be in use for the Project 5 days a week. (If illegally dumped trash is picked up daily why should anyone worry about what is dumped and where?)

Is “promoting” the same as suggesting or encouraging? Specifically for sorting trash for composting or recycling or other.
How will this be taught, controlled or enforced?

Public Works leaves open new construction possibilities for recycle industries and landfills in unincorporated areas of the Project. This is of great concern to me because the idea that any open space in the AV can be filled with sprawling industrial facilities is already taking place.

It must be made clear and transparent how the AV residents will not have to pay the price for illegal dumping and refuse other than our own.

Thank you,

Judith Fuentes
47458 92nd St. West
Antelope Acres, CA. 93536

From: Acton Town Council <atc@actontowncouncil.org>
Sent: Wednesday, March 16, 2022 9:15 PM
To: David Coscia <DCOSCIA@dpw.lacounty.gov>; Acton Town Council <atc@actontowncouncil.org>
Cc: Ebigalle Voigt <EVOIGT@dpw.lacounty.gov>; Reyna Soriano <RSoriano@dpw.lacounty.gov>; Steve Milewski <smilewski@dpw.lacounty.gov>; Wendy Bui <WGLATKY@dpw.lacounty.gov>
Subject: Re: Notice of Intent to Adopt a Negative Declaration

CAUTION: External Email. Proceed Responsibly.

To my knowledge, the ATC does not receive the "North County Newsletter" and your email provides no information on how to access such a publication. I did an internet search and found no reference to a "North County Newsletter" issued by DPW (though I found other newsletters by DPW, including a "Works Newsletter", an "Inside Solid Waste Newsletter" and a "Recycling Program Newsletter"). It seems rather absurd for you to tell me that information I have requested on behalf of the ATC is posted in some newsletter that I do not have access to and which you could have sent in your email, but chose not to.

The ATC received the Notice of Intent just 2 weeks before the comment period closed, so we did not have sufficient time to address the project. Now, when I access the website identified in the Notice of Intent (https://pw.lacounty.gov/epd/cleanla/), the ND and IS are nowhere to be found. Meanwhile, the ATC is still waiting for the "pick list" of services that we asked for in August and which (we thought) DPW wanted us to use to solicit public comment. Presumably, DPW is no longer interested in providing us that information or receiving public comment on it.

It is understood that you want to wait to inform the public of the dates when DPW intends to take actions on implementing the Trash Franchise program, but that does not work for our community. Information and notices from DPW regarding the Franchise Trash Program always arrive either too late (such as the IS/ND notice we received just 2 weeks before the comment period ended) or not at all (such as the "pick list" we requested in August and still have not received). Because we cannot rely on DPW to provide timely notices and information regarding the trash franchise program, we wish to know now the tentative dates for when DPW plans to move forward on the various activities that are relevant to the Program.

Your email appears to direct us to consult the DPW website for information (presumably https://pw.lacounty.gov/epd/cleanla/); but the DPW website is such a hodgepodge of program descriptions, lists, awards, "free disposal day" announcements, flashing pictures and an uncountable number of links that, even if we checked it every day, we would still be likely to miss important information regarding the Trash Franchise Program. DPW should set up a dedicated website for the Trash Franchise Program so that the public does not have to sift through random announcements and the extensive "word salad" that characterizes the DPW webpage.

I apologize for the irritated tone of this email, but the Trash Franchise Program is a big deal to our community, and frankly, DPW has

not made the process transparent. In fact, it seems that DPW is doing everything it can to withhold information regarding the program from the public. This is not opinion, it is fact, as evidenced by the late Notice we received and the utter lack of outreach and communication from DPW over the last 7 months. The fact that you have already established tentative dates for accomplishing key aspects of the program but are now refusing to disclose those dates to the public is simply beyond the pale.

In closing, I respectfully request that you share with the ATC the tentative dates DPW has set for the LAFCO hearings, the Proposition 218 hearings, the vote by the registered voters, and any other activities that are slated to occur as part of the Trash Franchise Program.

Regards
Jacqueline Ayer
Correspondence Secretary

On Tue, Mar 8, 2022 at 7:37 AM David Coscia <DCOSCIA@dpw.lacounty.gov> wrote:

> Dear Ms. Ayer
>
> Thank you for contacting Los Angeles County Public Works. I was on vacation last week and unable to respond sooner.
>
> We have not posted the information you are requesting because we are still in the preliminary stages of establishing the Garbage Disposal Districts (GDDs). If you have received the copy of our North County Newsletter, we have provided basic information about the procedures for establishing the GDDs. These include LAFCO hearings, Proposition 218 hearings, and a vote by the registered voters of each district. All of these steps require proper legal notification a certain number of days before the event. Some of these require that we hold community meetings as well.
>
> Currently, we have preliminary dates for these events. If something derails our plans, we don't want to provide you with incorrect information. It is better that we wait and provide you with the legal notification that has the proper date and information. The information for each procedure will be posted on the website at the time of the legal notification.
>
> If I may be of further service, please let me know.
>
> Regards,
>
> David Coscia
>
> Program Manager II

Los Angeles County Public Works

(626) 458-3529

From: Reyna Soriano <RSoriano@dpw.lacounty.gov>
Sent: Thursday, March 3, 2022 2:03 PM
To: David Coscia <DCOSCIA@dpw.lacounty.gov>; Steve Milewski <smilewski@dpw.lacounty.gov>
Cc: Ebigalle Voigt <EVOIGT@dpw.lacounty.gov>
Subject: FW: Notice of Intent to Adopt a Negative Declaration

I received this request asking about the procedure for GDD approval. Can you provide a response to her inquiry?

Thank you.

Reyna Soriano (she/her/ella)

Civil Engineer

Los Angeles County Public Works

Office: (626) 458-5192

From: Acton Town Council <atc@actontowncouncil.org>
Sent: Thursday, March 3, 2022 1:51 PM
To: Reyna Soriano <RSoriano@dpw.lacounty.gov>; Acton Town Council <atc@actontowncouncil.org>
Subject: Notice of Intent to Adopt a Negative Declaration

Dear Ms. Soriano;

The Acton Town Council received the "Notice of Intent to adopt a Negative Declaration" from the Department of Public works regarding franchise contracts this week, and I have gone to the DPW website for additional information. Unfortunately, there is nothing posted on the DPW website other than the Initial Study/Negative Declaration document. No information is provided regarding the procedures and schedule for property owners to vote on the Garbage Disposal District proposal and no information is posted for the LAFCO proceeding and no program implementation description or schedule is provided. Can you please clarify where such information can be found? And if such information is not publicly available, can you please clarify why that is the case? The matter has been set for discussion at the ATC meeting scheduled for March 7, 2022, so any information that you can provide will be greatly appreciated

Sincerely,

Jacqueline Ayer.

Reyna Soriano

From: Judith Anaya <judyanaya62@gmail.com>
Sent: Thursday, March 24, 2022 6:57 AM
To: Reyna Soriano
Subject: No to the Trash proposal

CAUTION: External Email. Proceed Responsibly.

1. 2 extra trucks per week will:

    - increase wear & tear on roads - especially dirt roads - ruts, increased pot holes
    - increase in noise pollution - can hear trucks coming from 1/2 mile away
    - increase in air pollution - dust - particulate matter, valley fever
    - increase in consumer costs - not everyone will need all bins emptied each week but you have to pay regardless
    - increase in traffic hazards with extra trucks on roads - visually hard to see around them
    - increase in visual pollution - seeing trash trucks everywhere, seeing dust

Thank you,
Judy Anaya
40202 97th St W
Leona Valley, CA 93551

Sent from my iPhone

Reyna Soriano

From: Michelle Flanagan <2000acres@gmail.com>
Sent: Thursday, March 24, 2022 2:04 PM
To: Reyna Soriano
Subject: Leona Valley Trash

CAUTION: External Email. Proceed Responsibly.

I am strongly against the proposed trash collection and addition of the billing to our tax bills

These are some of the issues.

- increase wear & tear on roads - especially dirt roads - ruts, increased pot holes
- increase in noise pollution - can hear trucks coming from 1/2 mile away
- increase in air pollution - dust - particulate matter, valley fever
- increase in consumer costs - not everyone will need all bins emptied each week but you have to pay regardless
- increase in traffic hazards with extra trucks on roads - visually hard to see around them
- increase in visual pollution - seeing trash trucks everywhere, seeing dust

Thank you

Michelle Flanagan
Cell #661-917-0917

SAVE OUR RURAL TOWN

March 26, 2022

Steven Milewski
Senior Civil Engineer
Environmental Programs Division
Department of Public Works
900 S. Fremont Avenue Annex, 3rd Floor
Alhambra, CA 91803
Electronic Transmission of eleven (11) pages to:
smilewski@dpw.lacounty.gov
RSoriano@dpw.lacounty.gov

Subject: Save Our Rural Town Comments on the Initial Study Prepared for the "Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts" Project.

References: Initial Study/Negative Declaration Dated February, 2022.

Dear Mr. Milewski;

Save Our Rural Town ("SORT") respectfully submits the following comments on the referenced Initial Study/Negative Declaration; we understand that the County extended the public comment deadline to March 26, 2022, therefore we ask that these comments be deemed timely submitted.

INTRODUCTION

SORT understands that the "Project" now contemplated by the Los Angeles County Department of Public Works ("County") is the formation of Garbage Disposal Districts ("GDDs") and the issuance of Residential Franchise contracts for waste hauling and disposal services in Acton, Agua Dulce and certain communities within the Antelope Valley (hereafter referred to as the "Project"). According to pages 4-5 of the Initial Study, the Project is motivated by the need to implement an Ordinance adopted by the County Board of Supervisors in November 2021; SORT has evaluated this Ordinance, and understands that it requires residents in unincorporated areas to divert certain wastes from landfills by segregating their trash into three separate waste streams (organic, recyclables, and refuse) and ensure that the organic waste is delivered to an appropriate organic processing facility rather than a landfill[1].

[1] Page 1 of the certified "Mandatory Organic Waste Disposal Reduction" Ordinance found here: http://file.lacounty.gov/SDSInter/bos/supdocs/163717.pdf

SORT is a public advocacy organization that is dedicated to the protection of rural communities and rural residents. SORT was founded on the twofold premise that rural communities should be preserved and that rural residents should be shielded from adverse impacts posed by projects authorized by agencies who are unfamiliar with the unique challenges that rural communities face. SORT's activities are geared toward ensuring that agencies identify and weigh the impacts of projects on rural communities and incorporate adequate mitigation measures into the projects to reduce such impacts *before* approval. A principal tool that SORT relies upon to further its rural protective purpose is the California Environmental Quality Act ("CEQA") which requires public agencies to feasibly mitigate all adverse environmental impacts to a level that is less than significant and avoid or minimize environmental effects that are otherwise not significant. SORT has applied a CEQA lens to the County's proposed "Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts" Project, and offers the analysis presented below.

COMMENTS REGARDING THE PURPOSE AND INTENT OF THE PROJECT AND ITS ENVIRONMENTAL IMPLICATIONS.

According to pages 4- 5 of the Initial Study, the intent of the Project is to collect organic waste and divert it from landfills by directing it to suitable organic waste processing facilities, and its purpose is to ensure implementation of the "Mandatory Organic Waste Disposal Reduction" Ordinance adopted November 16 2021 (referred to hereafter as "Ordinance"). The Initial Study further asserts on page 4 that the Ordinance "states that all businesses and residents in County unincorporated areas must subscribe to organic waste collection services". SORT has reviewed the Ordinance and notes that it does not "state that all businesses and residents in County unincorporated areas must subscribe to organic waste collection services". To the contrary, the Ordinance offers a suite of options for organic waste generators (aka residents) to ensure their organic waste is diverted from landfills, including making arrangements with various types of "Haulers" (defined as persons that collect organic waste, recyclables, or trash and deliver it to the proper processing facility) and even "Self-Managing" the waste.

SORT also notes that implementation of the Ordinance is contingent on the existence of two separate and distinct public service elements: organic waste hauling and organic waste processing[2]. Page 5 of the Initial Study affirms that the organic waste hauling component of the public services required to implement the Ordinance is not currently available in the "Project Area"; other County documents demonstrate that the organic waste processing component of the public services required to implement the Ordinance is limited Countywide[3] and is virtually

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[2] The Project establishes "Authorized Haulers" defined in Section 20.91.030 of the Ordinance and requires them to collect "organic waste and divert it to an appropriate organic waste processing facility" (Page 1: http://file.lacounty.gov/SDSInter/bos/supdocs/163717.pdf). Thus, Ordinance implementation requires the "Authorized Haulers" established by the Project to provide two separate and distinct public services: 1) Collect organic waste; and 2) Deliver it to an appropriate organic waste processing facility.

[3] Page 31 of the 2018 "Countywide Organic Waste Management Plan" indicates the County is expected to generate 21,606 tons of organic waste/day ("tpd_6") by 2029. The waste processing capacity currently available in the County is only 5890 tpd_6 (page 23), and proposed facilities will add less than 5,000 tpd_6 (Table 4A-3). In other words, only 50% of organic waste produced countywide by 2029 can be processed (cont.)

non-existent in the Project Area[4]. In other words, County documents demonstrate that there is a clear dearth of the organic processing facilities required for the Project; this is echoed on pages 5-6 of the Initial Study, which affirms that the Franchise Contractors will need to propose new and expanded service yards and new infrastructure such as organic waste processing facilities. Since the County failed to consider the environmental effects of the new organic waste processing facilities and infrastructure required to implement the Ordinance prior to adopting it, the County must now address these impacts as part of the Project that is now pending to implement the Ordinance. Notably, the Initial Study fails to do so.

The Initial Study declines to address the environmental impacts of developing and operating the new organic waste processing facilities and infrastructure required for the organic waste processing element of the public services provided by the Project because it claims that such impacts are "too speculative". However, however this claim is contradicted by the Initial Study itself which asserts on pages 5-6 that Franchise bidders will include in their proposals the "new or expanded service yards in order to serve the Project area" and other facilities "such as transfer stations and/or organic waste processing facilities". In other words, the bids will provide the County with full details of all the organic waste processing facilities and infrastructure that bidders will require for the Project, thus the County will have everything it needs to develop a credible and complete CEQA review before approving the project. More importantly, the County will be obligated to reject any Franchise proposal that fails to provide specific details regarding the organic waste processing facilities to which organic waste will be delivered because the County cannot issue a Franchise Contract to any bidder that fails to conclusively and satisfactorily demonstrate that it has the capacity to properly process the full volume of organic waste streams generated by all customers in the District for the entire life of the contract. The importance of assessing the environmental impacts of developing and operating the organic waste processing facilities necessary for the Project cannot be overstated; the County itself is fully aware that organic waste facilities create significant environmental impacts and in many ways are more impactful that landfills. For example, and as the Los Angeles County Sanitation Districts point out, odor and vector problems are of particular concern in organic waste processing facilities[5]. The County is mandated by CEQA to address these environmental impacts, and the failure of the Initial Study to address these impacts renders it deficient.

SORT is particularly concerned regarding the Initial Study's failure to address the environmental impacts of processing the food waste which (SORT understands from information presented by the County at public meetings) will be co-mingled with other organic waste. According to County data, Los Angeles County is expected to generate 21,606 tons per

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in the County (see https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=8691&hp=yes&type=PDF Additionally, page 18 of the "Countywide Organic Waste Management Plan 2020 Annual Report" issued in August, 2021 asserts that, for every scenario that is analyzed, the County "would not be able to process or recycle all the projected countywide organic waste to be disposed through the 15-year planning period by utilizing existing in-County capacity alone. The County would also be unable to process all the projected organic waste to be disposed even when portions of out-of-County capacity is utilized as well". The Report is here: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=15950&hp=yes&type=PDF

[4] Table 4A-1 of the "Countywide Organic Waste Management Plan" indicates there is one chipping/grinding operation in Lancaster that has a capacity of 50 tpd[6].

[5] See letter from the Los Angeles County Sanitation Districts provided in Exhibit A.

day ("tpd$_6$") of organic waste by 2029[6] and a large portion of that is food waste[7], but food waste processing is not permitted in nearly all of the existing organic waste processing facilities in the County. In fact, the current food waste processing capacity in the County is only 98 tpd$_6$[8] and proposed food waste processing facilities in the County will only provide an additional 1,350 tpd$_6$ capacity[9]. As further proof that the Project will require the development and operation of substantial new organic processing facilities that are specifically tailored to process food waste, a County report on the status of its organic waste processing capacity that was issued in August, 2021 states "It should be noted that certain materials have a much greater shortfall in capacity than others, particularly food, wood waste, and paper products, with a combined annual shortfall in in-County capacity of about 4 million tons"[10]. In other words, because the Project requires residents to co-mingle food with other organic waste, and because the County has virtually no organic processing facilities that can accept food waste, the Project will result in the development and operation of extensive new infrastructure to process the significant quantities of co-mingled food and organic waste that the Project will produce. The environmental impacts of developing and operating these new co-mingled organic waste facilities are not addressed in the Initial Study, which renders the initial Study deficient. The Initial Study must be revised to address these impacts and sufficient time must be provided for the public and decisionmakers to review and consider these impacts well in advance of Project approval. This is possible because the County will have access to all the information required to conduct an environmental analysis because successful bidders will be required to explain in detail how this co-mingled waste will be processed; if they don't, then the County cannot (and should not) approve their contract.

ERRORS AND DEFICIENCIES NOTED IN THE AIR QUALITY ANALYSIS COMPONENT OF THE INITIAL STUDY

SORT has found a number of errors in the Air Quality Analysis component of the Initial Study; these errors are set forth sequentially below.

Page 26: asserts that "Most locations throughout the Project area would only receive the proposed waste hauling services one to two times per week. As such, effects from the proposed Project at any one location throughout the Project area would be limited and intermittent." This statement is incorrect. All locations will receive service at least three times per week because the Initial Study expects three different trucks to visit each location to pick of the three different waste streams that will be collected (refuse, organic material, and recyclables). Accordingly, effects will not be "limited and intermittent"; they will be three times more frequent than current conditions.

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6 See page 31 of the "Countywide Organic Waste Management Plan"

7 Id at 14.

8 Id at 31.

9 Id at Table 4A-3.

10 See page 18 of the "Countywide Organic Waste Management Plan 2020 Annual Report" issued in August, 2021.

Table 3.3-1: asserts that the AVAQMD Thresholds of Significance for $PM_{2.5}$ are 82 pounds per day and 15 tons per year. However, Table 3.3-3 asserts that the AVAQMD threshold for $PM_{2.5}$ is 65 pounds per day, and Table 3.3-4 asserts that the AVAQMD threshold for $PM_{2.5}$ is 12 tons per year. It appears that Table 3.3-1 is incorrect; according to the "AVAQMD CEQA and Federal Conformity Guidelines" document, the AVAQMD threshold for PM2.5 is 65 pounds per day and 12 tons per year (see https://avaqmd.ca.gov/files/e5b34d385/AV%20CEQA%20Guides%202016.pdf).

Air Emissions from Project Operations: were assessed using the 2021 version of the California Air Resources Board's Mobile Source Emissions Inventory Model (EMFAC), and the results of this analysis are provided in Appendix A of the Initial Study. Notably, EMFAC only addresses exhaust, evaporative, and break & tire wear emissions (Section 2.3 of the EMFAC Handbook at (https://ww2.arb.ca.gov/sites/default/files/2021-06/emfac2021_volume_2_pl_handbook_ada.pdf) and thus does not account for fugitive dust emissions resulting from waste haul operations on dirt roads. This is no small thing; the majority of customers receiving trash hauling service under the Project are located on dirt roads, so fugitive dust emissions will be significant. For example, SORT estimates that at least 90% of the roads in Acton and Agua Dulce are maintained by residents (not the county) and that at least 75% of these privately maintained roads are dirt; accordingly, at least 65% of the roads traveled in Acton and Agua Dulce by each waste hauling vehicle will be dirt, and their operation will generate significant fugitive dust. The failure of the Initial Study to account for fugitive dust emissions is a significant deficiency, and it must be corrected by conducting additional air quality analyses. This will not be difficult: the California Air Resources Board has established a default PM10 and PM2.5 emission factor for unpaved roads at 2 pounds and 0.2 pounds per vehicle mile traveled (page 40 of the CALEEMOD Users guide at http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6). Reconciling these emission factors with the 13,800 daily vehicle miles traveled ("VMT") values reported for 2023 in Appendix A of the Initial Study and assuming that just 20% of the roads are unpaved yields a PM_{10} emission rate of 5,520 pounds per day and a $PM_{2.5}$ emission rate of 552 pounds per day (both of which exceed AVAQMD and AQMD significance thresholds). In other words, the Initial Study conclusion that the Project will not result in potentially significant air quality impacts is based on a deficient air quality analysis that fails to consider fugitive dust emissions, thus a Negative Declaration is not the appropriate CEQA document for the Project.

ERRORS AND DEFICIENCIES NOTED IN THE PUBLIC SERVICE ANALYSIS COMPONENT OF THE INITIAL STUDY

The Initial Study asserts on page 70 that the Project will have no impact on public services or require new or altered facilities. SORT disagrees. Districts created by the Project will operate as local government entities that provide public services and have established governmental boundaries that are approved by LAFCO, and they will supply the two essential public services required by the Ordinance; namely, the collection of separated organic and recyclable waste streams from unincorporated areas and the delivery of organic and recyclable waste streams to the proper processing facilities and/or end users. Property taxes collected by the Districts from the public will pay for both separated waste hauling services and separated waste disposal services, therefore District operations must include both of these public services. Furthermore, the Districts will bear the statutory burden of complying with the Ordinance and adopted State diversion regulations; if a District fails to secure sufficient organic waste facility capacities to

properly dispose of its organic waste, it will be deemed in violation of the Ordinance and AB 1383 and will be held accountable. It is therefore axiomatic that District operations will include both separated waste collection services and separated waste processing services; District operations will not, as the initial Study suggests, be limited merely to waste hauling services. Accordingly, District (Project) operations are contingent on the existence of sufficient transportation capacity to haul the separated waste streams *as well as* sufficient processing capacity to properly process the separated waste streams. In other words, separated waste hauling and separated waste processing are two sides of the same District "coin". Thus, and consistent with CEQA, the environmental review conducted for the Districts must consider *all* facilities required for *all* District operations "end to end" (i.e., hauling and processing).

Unfortunately, the Initial Study myopically considers only the waste hauling component of District operations, and based on this truncated perspective, it concludes that the Project will not require any new or altered facilities. The Initial Study is incorrect. As indicated above, the combined capacity of both existing and proposed organic waste processing facilities in the Project area is very limited, and no existing or proposed organic waste facilities in the Project area are capable of processing food waste. Therefore, District operations will clearly require the development new infrastructure and facilities to process the massive amounts of co-mingled food and organic wastes that will be produced within each District. The Initial Study ignores all of this. Not only does the Initial Study fail to contemplate the capacity of the various waste processing facilities that will be required to serve each District, it does not even project what the waste volumes will be for each District. The entire "Public Services" section of the Initial Study is deficient and must be revised to address the separated waste stream volumes generated by each District created by the Project, and consider the scope, extent, and location of all the public service facilities and infrastructure that each District will need to comply with the Ordinance and AB 1383. And, based on this fundamental analysis, the Initial Study must fully and properly address the environmental impacts of constructing and operating these facilities.

Stated more plainly: the County cannot create any District that provides public services in the form of separated waste hauling services and separated waste disposal services and it cannot approve any Franchise Contract to provide the public with separated waste hauling and separated waste disposal services until it has conducted an adequate CEQA review of all the facilities and infrastructure required to provide such public. The Initial Study is insufficient for these purposes.

RECOMMENDED REVISION TO SECTION 2.2 OF THE INITIAL STUDY.

Section 2.2 of the Initial Study states that adopted Land Use Plan goals and strategies maintain rural nature by restricting "urban infrastructure (e.g., curbs, gutters, sidewalks, street lighting, and traffic signals)"; this is not correct. The County General Plan and the Antelope Valley Area Plan polices which maintain rural nature actually restrict development, not infrastructure. In other words, urban infrastructure is not restricted per se, rather it is development which would result in the installation of such infrastructure that is restricted. For instance, General Plan Land Use Policy LU 6.1 states (with emphasis added) "Protect rural communities from the encroachment of *incompatible development* that conflict with existing land use patterns and *service standards*". As another example, Chapter 7 of the Antelope Valley Area Plan strongly discourages development in Acton that requires the installation of curbs, gutters, street lights

and traffic signals. The distinction that SORT is identifying here is very important, and it is why the County's Rural Commercial Ordinance requires "by right" commercial land uses to undergo a discretionary Conditional Use Permit Process if they warrant the installation of a traffic signal. Given this distinction, SORT recommends the following revision to Section 2.2 of the Initial Study:

Key land use goals and strategies for the Project area, as expressed in the land use plans described above, include maintaining its rural and secluded nature by:

- Restricting ~~high intensity~~ land uses ~~and~~ that would result in the installation of urban infrastructure (e.g., curbs, gutters, sidewalks, street lighting, and traffic signals);

CONCLUSION

SORT respectfully requests that the County revise the Initial Study to address the concerns presented above.

Sincerely;

/S/ Jacqueline Ayer
Jacqueline Ayer
Director, Save Our Rural Town

EXHIBIT A

Comment Letter Submitted by Los Angeles County Sanitation Districts Addressing Environmental Impacts of Organic Waste Processing Facilities.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

May 24, 2019

Mr. Gary Gero
Los Angeles County Chief Sustainability Officer
Chief Sustainability Office
Hall of Administration
500 W. Temple St
Los Angeles, Ca 90012

Dear Mr. Gero:

Comments on Los Angeles Countywide
Sustainability Plan Discussion Draft (dated April 5, 2019)

On behalf of the Sanitation Districts of Los Angeles County, I am pleased to submit comments to you regarding the Discussion Draft of the "Our County" Countywide Sustainability Plan ("Draft Plan"). The Draft Plan provides a comprehensive and multi-faceted look at County government, as well as a range of activities that affect residents, communities and businesses, and provides a long-term vision via 12 overarching goals and nearly 150 proposed actions aimed at achieving a more sustainable way of life. The Sanitation Districts own and/or operate solid waste and wastewater facilities in Los Angeles County, and produce 81 megawatts of green power from waste. In addition to protecting public health and the environment, the Sanitation Districts' mission includes converting waste into resources such as recycled water, energy and recycling materials, all of which contribute to the sustainability of the region. The Sanitation Districts' wastewater system serves 5.6 million people in 78 cities and unincorporated areas, and our solid waste facilities manage about 25% of the county's solid waste.

The Sanitation Districts are identified as a Partner for several proposed actions (e.g. Actions 32, 33, 104, 115), and we would be pleased to participate with the County and other partners and stakeholders in carrying out these and other actions as outlined below. We appreciate the extensive outreach that your office has done, and the opportunity to contribute to the County's efforts to promote sustainability.

Our comments on the Draft Plan are summarized below.

1. **Bold aspirational goals and targets** – the Draft Plan sets forth many goals and targets, some of which may be very challenging to meet. Although aspirational goals and targets can help motivate action, we would urge you to consider the potential feasibility and cost of attaining some of the most ambitious goals. Examples are provided below.

    a. Recycling and landfill diversion are a good example of an area where much progress has been made since the late 1980s when AB 939 was enacted, and the public has developed a fairly high degree of awareness and willingness to take action (e.g. put items in recycling containers, support initiatives such as replacing plastic grocery bags with reusable bags). However, over the past few years, markets for recyclable materials have

been severely disrupted and recycling rates have fallen, reversing previous progress. A May 2019 article in the Orange County Register explains the state of recycling markets and the challenges facing solid waste managers. https://www.ocregister.com/2019/05/17/your-recyclables-are-going-to-the-dump-heres-why/ The text notes that LA County diverted 65% of waste in 2016, but it is likely that overall recycling rates are much lower today, as California had been exporting well over half of its recyclables to China in 2016 and China no longer accepts many recycled commodities such as plastics. It may take 2-3 years of concerted effort by all sectors, and incentives and capital investments to create new processing facilities and markets for many materials that used to be recycled at high rates.

Furthermore, substantial rate hikes for residents and businesses are likely as new recycling programs and diversion requirements – such as those for organic waste – adopted by the State are implemented.

b. Similarly, the Draft Plan proposes aggressive targets for shifting water supplies from imported water to local water supplies. Strategy 2C proposes getting 50-65-80% of water from local sources by 2045 (p. 52). Given that nearly 60% of current water supplies are imported, and climate change may impact future local water supply availability, the feasibility of shifting to the 80% target should be addressed. Cleaning up contaminated groundwater basins, implementing expensive multi-benefit stormwater projects and installing large-scale water recycling infrastructure together with additional water conservation efforts, will certainly augment local water supplies substantially, but will come at a high cost. The County also should create a strategy for addressing potential conflicts that may arise in implementation of its sustainability initiatives, such as the impact of aggressive indoor water conservation and the potential impacts of "net zero" requirements on the availability of recycled water supplies for large-scale recycled water projects.

2. **Need for focused County efforts to achieve organic waste targets** – in Strategy 9D, the County has set targets for reducing the quantity of organic waste sent to landfills and for increasing the total capacity for processing organic waste in Southern California (75-90-95% diversion and 20-30-45% increase in capacity) (p. 124). It would be helpful to understand how these percentage goals for diversion and for new capacity translate into tonnage. It would also be beneficial for the County to set a specific goal for adding new capacity in Los Angeles County specifically, and to address the incentives and mechanisms by which the County will encourage the siting of new or expanded facilities.

   a. **Action 113** -- No matter where organic waste management facilities are located, it is important for them to be well-operated and that they not create nuisance issues, such as odors and vectors. These issues are even more of a concern with organic waste facilities than with mixed waste facilities.

3. **Differential pricing programs to incentivize diversion of waste, Action 104** – this Action may be problematic because it may lead to strategies that are inconsistent with Proposition 26 requirements, at least at publicly owned facilities, and may create significant affordability concerns for lower income residents in the County. In addition, it appears that the cost of waste management will have to rise significantly over the next 10 years due to all of the State's new requirements and the desire to stabilize recycling markets, and attempting to influence consumer behavior via pricing programs may be confounded by these larger trends.

4. **Need to integrate organic waste diversion goals with energy goals** – In Strategies 7A and 7B, the County seeks to transition to a clean energy system and a zero-emission transportation

system. In pursuit of these ambitious goals, the County should recognize and encourage renewable natural gas (RNG). RNG is readily available and produced locally within LA County. Moreover, its production relies on proven technologies through anaerobic digestion of organic wastes and wastewater. Therefore, RNG can facilitate decarbonization of the fuel supply, support waste diversion goals, and reduce heavy truck and vehicle emissions as well as emissions of greenhouse gases and short lived climate pollutants. Incentives for RNG production and use should be included in commitments to renewable energy supplies (Action 77) and electricity and natural gas investment plans supporting local clean energy resources (Action 83). Furthermore, incentives should be provided for RNG fueling to facilitate streamlined permitting and construction of zero-emission vehicle infrastructure (Action 85).

5. **Recycled water** – The Sanitation Districts already supply approx. 100,000 Acre-Feet per year (AFY) and are, planning new projects with water agency partners for up to 200,000 AFY in additional projects over the next decade. Development of the Recycled Water Master Plan should include all wastewater agencies, water wholesalers and select water agencies and retailers serving Los Angeles County. Los Angeles County Flood Control District is also a critical partner because of their role in operating the spreading grounds used for groundwater recharge. The Recycled Water Master Plan should also consider future options not currently available under state regulations such as direct potable reuse. Finally, the Sustainability Plan should link recycled water planning with Action 64, since the amount of recycled water available for new reuse projects is dependent on ongoing studies to determine the minimum recycled water discharge requirements necessary to protect habitat in the Los Angeles, San Gabriel and Santa Clara Rivers.

6. **Effect of water conservation on wastewater conveyance and treatment.** In addition to the impacts of indoor water conservation and net zero ordinance on recycled water supplies highlighted in 1B. above, other unintended consequences to centralized wastewater treatment facilities should be considered. These include increased maintenance needs, increased odors, and the increase strength of wastewater requiring changes in treatment.

7. **We are interested in participating in Action 64 (coordinated management guidelines for local waterways) and Action 108 (net zero ordinance).** We suggest that other wastewater agencies be invited to participate in these efforts as well.

Thank you for the opportunity to provide comments. If you have any questions, please contact Sharon Green of my staff at sgreen@lacsd.org or (562) 908-4288 ext. 2503.

Very truly yours,

Martha Tremblay
Department Head
Technical Services

MT:SG:ep

Susan Zahnter
Lake Hughes, CA 93532
threepointsliebremountain@gmail.com

26 March 2022

SENT VIA EMAIL

Los Angeles County Department of Public Works
Attn: Civil Engineer Reyna Soriano
P.O. Box 1460
Alhambra, CA 91802-1460
(626) 458-5192
rsoriano@dpw.lacounty.gov

Dear Ms. Soriano,

Subject: Notice of Intent to Adopt a Negative Declaration; Acton, Agua Dulce, and Antelope Valley Garbage Disposal District, or Residential Franchise Contracts

I truly appreciate the extension of the public comment period until March 26th, and the opportunity to submit written comments regarding the proposed Acton, Agua Dulce, and Antelope Valley Garbage Disposal Districts Initial Study document. As a rural resident of the Antelope Valley, I have a particular interest in this proposal and the Initial Study/Negative Declaration that states no significant impacts to rural communities will result from this proposal.

Firstly, the Initial Study (IS) document is a California Environmental Quality Act (CEQA) Document, and as such, should remain publicly available on the Department of Public Works Website, easily searchable via the internet, and found on its pages devoted to this Garbage Disposal District (GDD). Unable to find the IS online, I enquired, and was told it was removed on March 12th because the public comment period ended (and was extended until March 26th). Again, I am very appreciative of the extension of the comment period, but must state, as a CEQA legal document addressing this project, the IS should remain publicly available.

WASTE HAULING SERVICES, COSTS, AND EFFECTS TO LANDOWNERS

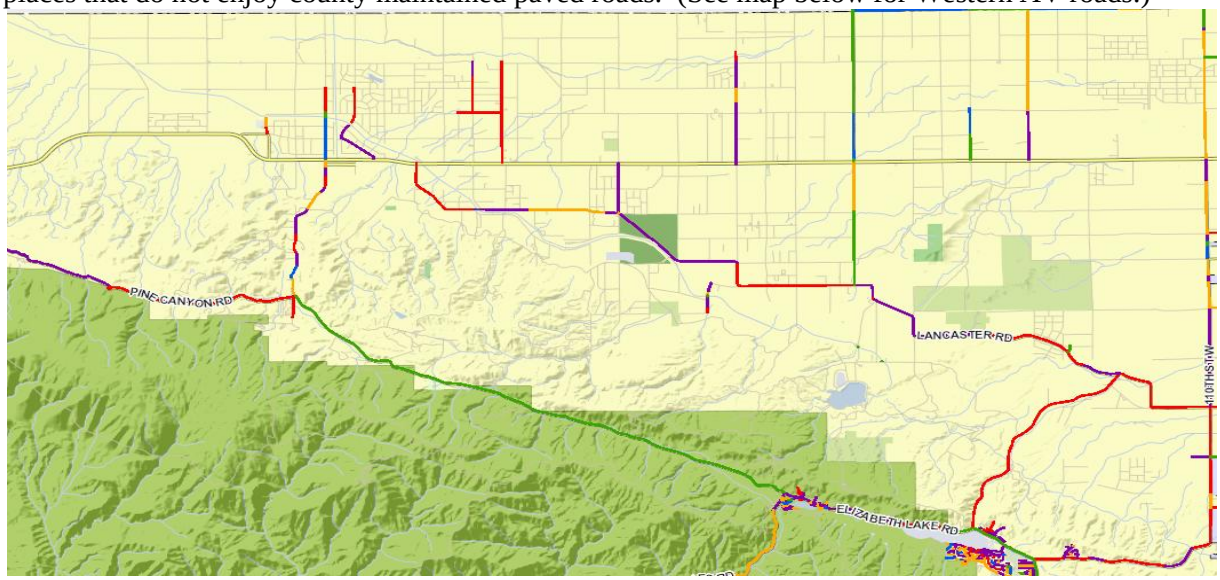
I am very disturbed at the potential disposal contract with Waste Management, made supposedly with the best interests of residents and landowners at stake, ***which will extend twenty-five years***! This is an "exclusive" contract and feels akin to the voted indebtedness. This means there is no opportunity, within *my lifetime*, to consider better and/or less expensive services from another waste hauler or contractor. Other contracts involving GDDs extend to seven years with some possibility for extension if allowed and granted. Moreover, my vacant lot adjoining my residence will cost 25% of my residential lot disposal tax, essentially doubling my vacant property tax bill, with very limited disposal service. As a retired person, on a fixed income, continuing increases in the cost to live in Los Angeles County will force me to leave my home of thirty-six years.

There are approximately 67,000 vacant parcels and if cost per vacant lot is one quarter of actual waste hauling services (around $500 per year as it costs now), then estimated revenue for such charges is expected to render $8,375,000--a huge amount of money. As I see it, all vacant landowners, who will be required to pay for services they will not receive, will subsidize lawbreaking illegal dumpers.

Landowners who receive trash, construction waste, and fill material for money, can then report it as "illegal dumping" and have it cleaned up. The clean-up of many homeless encampments and illegally parked RVs that "litter" the valley will be subsidized by responsible landowners. This should not be a way for county to avoid enforcement of property owners' responsibility to maintain a safe and sanitary condition on their land, by charging everyone else, consequently eliminating enforcement responsibility. I predict an *increase* in illegal dumping when perpetrators know that someone else will clean up what they leave behind. Environmental damage and illegal dumping has occurred for years because of a lack of adequate enforcement of current laws that are supposed to protect the health and safety of residents in the AV.

AIR QUALITY IMPACTS, ROADWAYS, AND AESTHETICS

The IS, 3.1, states there is no impact to scenic qualities as a result of the GDD project due to the mobile temporary nature of the passage of trucks and field supervisors' vehicles. The IS states, "The passage of additional collection trucks and field monitor vehicles along established roadways in the Project area would not have the potential to degrade the visual character or quality of public views, nor would they have the potential to conflict with applicable zoning and other regulations governing scenic quality. The passage of additional vehicles would be fleeting and would be consistent with the intended purpose of established roadways. Therefore, substantial degradation in visual character or quality and/or conflicts with policies governing scenic quality would not result. No impact would occur" (IS 17). While many of the outlying areas do have roads, a majority are neither paved, nor maintained by Public Works. While they might be "established roadways," they might not be the type the IS assumes, and the movement of trucks, however "fleeting," will produce an increase in ambient dust particulates that will certainly be entrained on winds common to the Antelope Valley (AV). This can obscure views in scenic areas, like the Pacific Crest Trail (crossing the Western AV), mountain views, County Sanctuaries, conservation lands, the State of California Poppy Reserve, other wildflower fields, and the Angeles Forest. The IS mentions only State Route 2 as a State Scenic Highway. However, I ask that DPW review the Antelope Valley Area Plan Scenic Drives Map 4.2 (AVAP Scenic Highways Map 4.2) to determine the possible effects of wind-driven dust particulates from the many daily truck trips necessary for this project in most places that do not enjoy county maintained paved roads. (See map below for Western AV roads.)



LA County Public Works publicly maintained roads, https://pw.lacounty.gov/gmed/lacroads/Find.aspx

The map identifies roads currently maintained by DPW in the Western AV. The gray lines are roads that will need to be accessed to reach all residential service locations. Bear in mind difficulties in accessing unmaintained unpaved roads like these during dry weather (soft sandy soil), wet weather (wet clay) and snow events (icy roads). These roads will be essentially impassable if ruts or damage created by heavy truck travel occur. It is fairly easy to project conditions created by action such as this might, over repeated trips, cause impediment to emergency services, sheriff, and fire protection and the full array of offered waste management services proposed by this project. Increased cost of maintenance to dirt roads by residents could impose a hardship to many, with no indication that services would be able to continue, yet property owners would continue to pay.

The IS should also consider the cumulative impacts to air quality with respect to other proposed and existing dust producing construction projects in the Western AV—NW Highway 138; massive additional utility scale renewable energy projects (large sources of dust) required by implementation of the Sustainability Plan's de-carbonization goals; the Centennial Specific Plan; ongoing sand, gravel, and cement mining and production operations; and fallow agricultural lands. The IS references the AVAQMD Rule 403, which has been consistently unsuccessful in containing fugitive dust across the AV. There will be cumulative impacts from various projects, and the trips by trucks and service vehicles all produce vehicle miles traveled and commensurate emissions in addition to $PM_{2.5}$ and PM_{10} produced by the additional trips on "dirt roads." A search for "dirt road" in the IS brought no matches, which leads me to conclude little consideration of the fugitive dust—particulate matter produced by additional travel on dirt roads across the AV were considered at all. Only the euphemistic term "designated established roadways" appears. A definition is required to determine what is meant by "designated established roadway." The map indicates a large network of privately maintained (if at all) and the small network of publicly maintained dirt roads. Project impacts to local residents who must travel dirt roads to and from their homes are potentially significant with respect to services and must be reviewed in an EIR and mitigated to a less than significant level. How will the project manage dirt road conditions if it is impossible or too costly for landowners to maintain them, perhaps leading to interruption in services the landowners will be required to pay for?

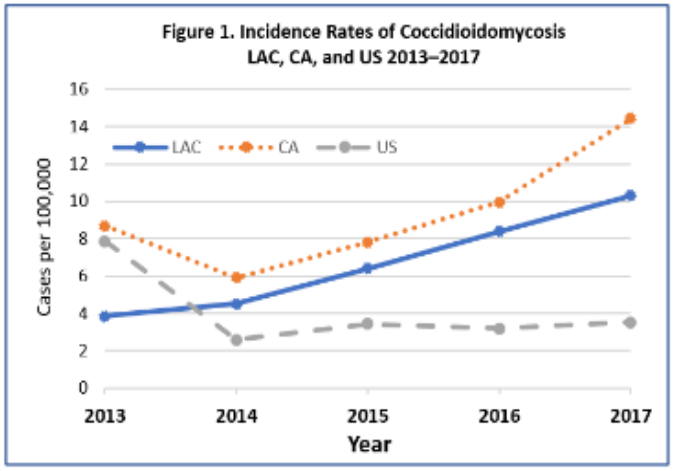
AIR QUALITY AND PUBLIC HEALTH

For many years I have participated in responses to various EIRs, MNDs, and Negative Declarations for projects that have and will continue to affect AV residents as a result of airborne particulates $PM_{2.5}$ and PM_{10}. Particulate pollution has plagued our air in the form of dust, which affects the health of residents here in several ways and to a greater degree than anywhere else in the county. Rural residents across the Antelope Valley are extremely concerned about air quality risks like fugitive dust and air-borne spores of the fungus *Coccidioides immitus.* Fugitive dust creates a public health issue, and can affect "sensitive receptors"—children, asthmatics, the elderly, those with pulmonary disease, cardiovascular disease, as well as the general public at large, because it can carry the spores of *Coccidioides immitus*—better known as Valley Fever. Its presence here puts residents all over the Antelope Valley at risk for this fungal infection anytime the soil is disturbed. In fact, the spores traveling aloft in the wind have caused infections many miles from the source of fugitive dust.

Prominent and predictable AV winds can carry dust borne spores over many miles and affect young and old alike. As Los Angeles County Public Health Department states, "Anyone can get Valley Fever; those most at risk for severe disease include people over 60 years of age or older, African-Americans, Filipinos, [Hispanics], pregnant women, and people with diabetes or other conditions that weaken their immune system. People who live, work, or travel in Valley Fever areas are also at a higher risk of becoming

infected, especially if they work or participate in activities where soil is disturbed" (LA County Valley Fever Cases Increase 2017). Symptoms are wide ranging and can cause permanent debilitating illness, and death. It is difficult to treat and contributes to public health issues that can affect everyone in the Antelope Valley, including the most vulnerable to pulmonary illness—as mentioned above, and include the socially and economically disadvantaged, as well as lower income residents who live in less expensive outlying rural areas, some of which are identified by LALAFCO as Disadvantaged Unincorporated Communities (LALAFCO DUC Map).

This is obviously a very important issue borne out by the most recent Los Angeles County Public Health publication "Key Indicators of Health 2017," which reveals the AV experiences the highest numbers of pulmonary illness in Los Angeles County; the AV has the county's highest percentage of children with asthma; the highest pneumonia/ influenza mortality rate; the highest COPD/Emphysema mortality; and the highest cardiovascular mortality rate than all other county Service Plan Areas" (Key Indicators Of Health 2017). The risk of pulmonary disease is greater for residents here, and it is not only particulates produced by automobile and industrial operations, but those of fugitive dust that contribute to such illnesses.



Valley Fever Incidence 2013 to 2017

Reported cases of Valley Fever have increased in Los Angeles County and in California in the past several years. Accordingly, from 2013 to 2017, the number of reported coccidioidomycosis cases in AV's SPA1 has increased from 18.9 cases to its highest rate 54.5 cases reported per 100,000 people, and outpaces the other seven SPAs by double digits. While cases are reported from throughout the county, most cases have occurred in northern areas, specifically Antelope Valley and San Fernando Valley. Overall, the rate of coccidioidomycosis in LA County between 2013 and 2017 has increased from 3.85 cases to 10.38 cases per 100,000 people; "***among residents of Antelope Valley the rate is about 9-fold higher than elsewhere in the county***"(PH News Release, July 21, 2017). Increased incidence of Valley Fever can impose large public costs in lost productivity, disability, and healthcare, and its ramifications are felt across rural communities here.

Rural town councils together—comprising the Association of Rural Town Councils (ARTC) participated in a 2018 project proposal submission to the California Air Resources Board's Community Air Protection Program. As is usual, many submissions came from areas predominantly experiencing emissions particulates; but the ARTC, in conjunction with the AVAQMD, presented a grant proposal to monitor air

quality for fugitive dust particulates $PM_{2.5}$ and PM_{10}, since the compliance status of the Antelope Valley with respect to state and federal ambient air quality standards for $PM_{2.5}$ and federal standards for PM_{10} has never been established. The proposal states:

> "What is certain is that ambient particulate is directly responsible for the sharp rise in Valley Fever diagnoses in the Community (the Antelope Valley is burdened with the highest incidents of Valley Fever in Los Angeles County[2] and has the fifth highest burden in California[3]; the incidence of Valley Fever in the Antelope Valley Community continues to increase at an alarming rate[4]) and it substantially exacerbates other health problems that disproportionately burden Antelope Valley Community residents. . . portions of the Antelope Valley are in the 99th percentile for cardiovascular disease rates and asthma, and in the100th percentile for low birth weights" (AVAQMD-ARTC Community Air Monitoring Program 2018, pg.1).

Town councils and their residents, place such importance upon air quality, they put forth great effort and extended outreach to compile and submit a proposal that would fund air quality monitoring across the AV. The IS assertion that there will be no impact or no cumulative impact to air quality is disingenuous when there have been ongoing serious air quality problems associated with multiple existing sources, and other proposed large scale projects identified in the AVAQMD-ARTC Community Air Monitoring Program Proposal.

Finally, I am thankful for the opportunity to submit comments by the extended date of March 26th. I respectfully request that you read and consider not only this letter, but the attached AVAQMD-ARTC Community Air Monitoring Program 2018 document as evidence of the need for the Acton, Agua Dulce, Antelope Valley GDDs Project to conduct additional environmental review to evaluate air quality effects to rural communities. Unfortunately, the evaluation of air quality impacts in the IS extends only to particulates produced by the burning of fossil fuels in the process of delivering waste hauling services when there is overwhelming evidence that fugitive dust is a major source of particulates. Please provide adequate evaluation and additional CEQA review for physical impacts to local roads from repeated heavy truck travel, significant effects of fugitive dust particulates from such regular activity on aesthetic enjoyment of the AV's visual resources, and perhaps most importantly, public health.

Sincerely,

Susan Zahnter
Western AV Resident

COMMUNITY AIR PROTECTION PROGRAM **AB617**

ANTELOPE VALLEY COMMUNITY AIR MONITORING PROGRAM





SUBMITTED BY:

THE ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT

IN PARTNERSHIP WITH THE

ASSOCIATION OF RURAL TOWN COUNCILS

JULY 31, 2018

Antelope Valley
Air Quality Management District

ASSOCIATION OF
RURAL TOWN COUNCILS

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ENDNOTES

ATTACHMENT 1 - Letters and communications from individuals and organizations expressing intent to participate in the antelope valley community monitoring program steering committee.

ATTACHMENT 2 - Letters of support from throughout the Antelope Valley Community

ATTACHMENT 3 - Draft test matrix and data quality objectives for the Antelope Valley Community Air Monitoring Program.

ATTACHMENT 4 - AVAQMD and ARTC joint CAPP submittal dated April 30, 2018

I. INTRODUCTION

The Antelope Valley Air Quality Management District ("AVAQMD"), in partnership with the Association of Rural Town Councils ("ARTC"), seeks to develop and implement an action-oriented community air monitoring plan under the Community Air Protection Program ("CAPP") established pursuant to AB 617. Consistent with the requirements established for the CAPP by the California Air Resources Board ("CARB"), the AVAQMD provided an initial submittal on April 30, 2018 that set forth detailed information regarding the Antelope Valley Community including health indicator data showing the substantial health inequities experienced by Antelope Valley residents along with data demonstrating that the Antelope Valley Community meets the "Disadvantaged Community" criteria established by AB 617. As discussed in the April 30 submittal, the Antelope Valley Community often experiences elevated ambient particulate levels that are not localized and are in fact widely dispersed by sustained wind events that frequently shift direction. It is believed that all neighborhoods and areas within the Antelope Valley Community experience high ambient particulate events[1], however there is insufficient data to determine whether some areas are more affected than others, or even where the primary particulate sources are. This uncertainty is magnified by the fact that the compliance status of the Antelope Valley with respect to state and federal ambient air quality standards for PM2.5 and federal standards for PM10 has never been established.

What is certain is that ambient particulate is directly responsible for the sharp rise in Valley Fever diagnoses in the Community (the Antelope Valley is burdened with the highest incidents of Valley Fever in Los Angeles County[2] and has the fifth highest burden in California[3]; the incidence of Valley Fever in the Antelope Valley Community continues to increase at an alarming rate[4]) and it substantially exacerbates other health problems that disproportionately burden Antelope Valley Community residents. For instance (and as discussed in detail below), portions of the Antelope Valley are in the 99th percentile for cardiovascular disease rates and asthma, and in the100th percentile for low birth weights according to the June 2018 version of CalEnviroscreen.

Ambient particulate in the Antelope Valley Community results from a combination of factors including unique geology and geography, highly variable meteorological conditions, sustained winds, and a wide variety of particulate sources (dispersed in some areas and concentrated in others) which results in particulate that is entrained in one area to be carried great distances and deposited in a different area. For this reason, the AVAQMD and ARTC consider ambient particulate to be a systemic problem that affects the Antelope

Valley Community "as a whole", and we propose to address it "as a whole" through implementation of the Antelope Valley Community Air Monitoring Program wherein the AVAQMD expects to 1) Use the particulate concentration data to ascertain the extent to which elevated PM2.5 concentrations occur; 2) Reconcile the particulate concentration data with meteorological data to identify the primary source or sources of particulate that contribute to ambient particulate levels; and 3) Work with residents, business owners, health experts, and CARB to develop and implement particulate emission reduction strategies that are tailored to the primary particulate sources that are identified. As shown below, the proposed Antelope Valley Community Air Monitoring Program satisfies all elements established for the CAPP by AB 617, and it achieves the "action oriented" community monitoring objectives that CARB has established as set forth in the in the draft "Community Air Protection Blueprint" released June 7, 2018. For simplicity, the Antelope Valley Community Monitoring Plan set forth below is presented in a format that parallels the "Blueprint" document.

II. THE ANTELOPE VALLEY COMMUNITY MONITORING PROPOSAL WAS DEVELOPED FROM A COMMUNITY-FOCUSED FRAMEWORK.

The AVAQMD and ARTC recognize that AB 617 mandates community-based air pollution monitoring and reduction programs, and it seeks to enfranchise residents to become partners in developing and implementing strategies for cleaning up the air in their communities. As presented in detail in the following sections, the Antelope Valley Community Monitoring Program encompasses all aspects of the "Community-Focused Framework" embodied by AB 617 because it:

- Will be implemented in partnership with community members and solicits participation by schools and local agencies;
- Engages local land use and transportation agencies;
- Provides community members with direct access to local air quality data;
- Pinpoints the location and characteristics of sources responsible for high particulate levels in the Antelope Valley Community.
- Relies on source-based data to develop appropriate and effective control measures.

III. THE ANTELOPE VALLEY COMMUNITY AIR MONITORING PROGRAM BUILDS ON EXISTING INFORMATION TO FILL PARTICULATE CONCENTRATION DATA-GAPS

The Antelope Valley is an isolated and predominantly rural area which has demonstrably disproportionate health burdens that are either directly attributable to, or exacerbated by, airborne particulate[5] and which has monitoring facilities that are insufficient for determining whether the area meets state or federal air quality standards for PM 2.5[6] or federal PM10 standards. However, the data that is provided by the single Beta Attenuation Mass Monitor (BAMS) located within the Antelope Valley Community demonstrates that the area is out of compliance with state ambient air quality standards for PM10, and it reveals exceedances of the federal 24-hour standard for PM2.5. The proposed Antelope Valley Community Monitoring Program builds on this foundation by quantifying ambient particulate concentrations throughout the community to increase our understanding of air quality in the community and increase public awareness regarding neighborhood particulate levels. As discussed in more detail below, this is achieved by deploying low-cost sensors at key locations throughout the community to capture real-time air quality "snapshots" that are immediately accessible by the public via on-line tools. Through extensive community participation efforts undertaken to date, the AVAQMD and the ARTC recognize that the Antelope Valley Community is burdened with a wide range of particulate sources, such as:

- A freeway and several major highways that traverse the community as mapped CalTrans "Truck Networks" and also carry more than 110,000 vehicles per day.

- Multiple freight lines that run both north-south and east-west through the community as well as a heavily-used passenger railway that runs down the center of the community.

- 45,000 acres of solar fields where native vegetation has been removed and routine "mowing" occurs. These solar fields are crisscrossed with unpaved roads that are used for access and panel washing and which generate significant fugitive dust.

- Numerous agricultural operations that are exempt from fugitive dust regulations and which are scheduled to become fallow over the next 5 years due to new water restrictions and therefore contribute additional fugitive dust that will be dispersed across the Antelope Valley Community.

- Construction and development to accommodate sharp population increase projections.

- Multiple large sand, gravel and quarry operations that are neither covered nor enclosed.

The Antelope Valley Community Air Monitoring Program strategically places sensors throughout the community to ensure these sources are captured; as discussed in detail below, final sampling locations will be selected based on extensive community input and discussions with residents throughout the Antelope Valley Community, thus placing data collection decisions directly in the hands of residents and community-based organizations like the ARTC. The Antelope Valley Community Air Monitoring Program is action-based and will use data that is collected to identify principal particulate pollutant sources and develop effective control strategies. Therefore, it achieves the "overlap" that CARB seeks between communities selected for air monitoring and communities selected for emission reductions. It will also be useful in evaluating the effectiveness of specific emissions reduction strategies and tracking progress in air pollution reductions achieved.

IV. THE ANTELOPE VALLEY COMMUNITY MONITORING PROGRAM IS A COMMUNITY-DRIVEN ACTION.

The AVAQMD and ARTC recognize that Antelope Valley Community members are intimately familiar with their neighborhoods and are the best resource for identifying particulate monitoring sites that properly capture the particulate "profile" within the community. The AVAQMD and ARTC also recognize the importance of enlisting participation and support from land use agencies and public health officials to address the public health-based purpose which lies at the core of AB 617. Correspondingly, the Antelope Valley Community Monitoring Program described herein has incorporated the expertise and input from community members, elected officials, land use experts, health officials, and soil experts in an extensive and collaborative process; key outreach efforts are summarized in Table 1.

Table 1. Collaboration Activities Undertaken in Furtherance of the Proposed Antelope Valley Air Quality Monitoring Plan.

May 30, 2018	Presentation at the regularly scheduled meeting of the Association of Rural Town Councils attended by elected representatives from more than 10 neighborhoods that represent the entirety of rural Antelope Valley. At this meeting, an update on the grant process was provided, and it was conveyed that most outreach activities would occur in June after the CARB released further details on AB 617 implementation.

Table 1 (continued)

June 15, 2018	Outreach to rural town councils to request the opportunity to present the Antelope Valley Community Monitoring Plan and solicit input on locations and implementation from rural residents.
June 19, 2018	Presentation at the regularly scheduled meeting of the AVAQMD Governing Board (comprised of rural residents, elected officials from the Cities of Lancaster and Palmdale, and representatives of the County of Los Angeles). An update of the grant proposal effort was provided along with a draft proposal for locating the particulate sensors.
June 20, 2018	Presentation at the regularly scheduled meeting of the Antelope Acres Town Council attended by residents and elected community members from the northwesternmost neighborhood of the Antelope Valley. At this meeting, input on sample locations and support was solicited and received; the draft plan was modified accordingly.
June 23, 2018	Presentation at the "2018 AV Valley Fever Awareness Seminar" where input on sample locations and support was solicited from community members, elected city officials, and public health experts.
June 26, 2018	Presentation at the regularly scheduled meeting of the Lake Los Angeles Town Council attended by community members from the easternmost neighborhood of the Antelope Valley. At this meeting, input on sample locations and support was solicited and received.
June 27, 2018	Presentation at the regularly scheduled meeting of the Association of Rural Town Councils attended by elected representatives from more than 10 neighborhoods that represent the entirety of rural Antelope Valley. At this meeting, input on sample locations and support was solicited and received; the draft plan was modified accordingly.
June 28, 2018	Coordination with the Los Angeles County Department of Regional Planning to solicit support and commitment to serve on the Antelope Valley Community Air Monitoring Program Steering Committee.
July 1, 2018	Outreach to Dr. Antje Lauer of the University of California at Bakersfield Department of Biology to solicit support and commitment to serve on the Antelope Valley Steering Committee
July 5, 2018	Meeting with the Antelope Valley Resource Conservation District to gather input, inquire regarding soil data, and solicit recommendations regarding sample locations; the draft plan was modified accordingly.
July 5, 2018	Meeting with the Antelope Valley Dust Control Group to gather input and solicit participation and recommendations regarding sample locations; the draft plan was modified accordingly.
July 10, 2018	Presentation at the regularly scheduled meetings of the Palmdale City Council. At this meeting, input and support was solicited and received.
July 12, 2018	Presentation at the regularly scheduled meeting of the Littlerock/ Pearblossom Town Council attended by community members from the southernmost neighborhood of the Antelope Valley. Input on sample locations and support was solicited and received.

It is the AVAQMD's and the ARTC's intent to disseminate the data that are collected and use it to identify which of the many sources identified above are contributing to unhealthful particulate levels, and then implement targeted action through: 1) The development of new control strategies; and 2) Engagement with local land use authorities and public health experts to reduce emissions and exposure to air pollution. Toward this end, the AVAQMD and the ARTC have already solicited the participation of community members, land use agencies, public health officials, soil specialists, and Valley Fever experts from academia to participate in the Steering Committee that will be formed upon award of the CAPP Grant. Letters and communications expressing the intent of these agencies, organizations and individuals are provided in Attachment 1. We are also coordinating with schools and local agencies for their participation in the Antelope Valley Community Air Monitoring Program, and we believe we have assembled all the elements of local knowledge, land use authority, and scientific expertise that is essential to the development and implementation of effective clean-air solutions and healthy communities.

V. THE ANTELOPE VALLEY COMMUNITY MONITORING PROGRAM WILL MEET CARB'S TIMELINE FOR ACTION ESTABLISHED FOR AB 617 IMPLEMENTATION.

The AVAQMD and the ARTC recognize that an ambitious schedule has been established for the development and implementation of the community monitoring component of AB 617. Among other things, this schedule demands the formation of a steering committee by the Fall of 2018, and the deployment of monitors by July, 2019. To meet this schedule, the AVAQMD and the ARTC have undertaken the following actions:

- We have already received commitments from community members, land use authorities, public health experts, transportation authorities, and academics to participate in the Steering Committee as soon as the grant is awarded. This enables us to "hit the ground running" and ensures that the Antelope Valley Community Steering Committee will be fully operational before the Fall 2018 deadline.

- We have already identified proposed locations for deploying the monitors based on extensive community input and we have developed a test matrix with established Data Quality Objectives that are discussed in more detail below.

As a result of these extensive outreach and planning efforts undertaken to date, the Antelope Valley Community Air Monitoring Program is almost "shovel ready"; as such, the AVAQMD and the ARTC are confident that the Program will meet all the AB 617 deadlines established by CARB.

VI. PUBLIC ENGAGEMENT IS ESSENTIAL TO THE DEVELOPMENT OF THE PROPOSED ANTELOPE VALLEY COMMUNITY AIR MONITORING PROGRAM.

The AVAQMD and ARTC understand that the success of the Antelope Valley Community Air Monitoring Program hinges on coordination with a wide variety of stakeholders, therefore we have conducted multiple outreach activities and different types of engagement and will continue to do so going forward. As indicated in Table 1, engagement activities conducted to date include community meetings, town council meetings, workshops, seminars, AVAQMD Board meetings, City Council Meetings, and individual and small group meetings. As a result of these activities, a draft test matrix setting forth proposed monitoring sites and data quality objectives was prepared (as discussed in more detail below). We have identified the following benefits that will be provided by the Antelope Valley Community Monitoring Program as a result of past and future outreach efforts:

- It ensures a ground-up, community-based approach to identify the proposed monitoring sites; this is appropriate, since it is the community residents who are the experts regarding ambient particulate "problem areas". This achieves a fundamental AB 617 objective by directly involving community members in the design of solutions for their community.

- It provides an entirely transparent process for identifying proposed monitoring sites because public involvement and community input occurs at every step.

- The focus on all public outreach efforts has been on 1) air quality data access opportunities; and 2) The location of air monitoring sites to ensure proper capture of all essential locations throughout the Antelope Valley Community based on local experience and knowledge provided by the affected community members. This provides residents with better information about their community and it supports actions to reduce emissions and exposure within communities. Data quality measures and objectives (such as precision and accuracy) have also been discussed (particularly at the ARTC meeting on June 28); such measures are essential to ensure that monitoring data support sound decision-making and action.

- It achieves a strong technical- and science-based foundation by coordinating with soil specialists, land use agencies and public health experts to identify and address the most significant particulate emissions sources that contribute to elevated health risks such as Valley Fever, COPD and childhood asthma.

- It focuses immediate action where the nature of contributing particulate air pollution sources is known.

- It provides a path to ensure that particulate emissions in the Antelope Valley do not increase because it establishes important baseline ambient particulate levels from existing sources.

- It facilitates the implementation of measures to reduce the impacts of emissions sources that sit close to sensitive populations by identifying the extent to which such sources contribute to ambient particulate burdens on sensitive populations.

- City and county government participation is guaranteed because city and county government agencies have committed to participating on the Steering Committee that will be formed for the Antelope Valley Community Air Monitoring Program.

- It incorporates a strong focus on public health by engaging public health officials and academic experts on the steering committee with the aim of tracking health data (including Valley Fever, COPD and childhood asthma) and improving the availability of public health information for the decision-making process.

These benefits that will be garnered by the Antelope Valley Community Air Monitoring Program mirror the public engagement benefits set forth in Carb's "Blueprint" document, and they achieve the goals and objectives established by AB 617 for community air monitoring programs under the CAPP.

VII. THE ANTELOPE VALLEY COMMUNITY WARRANTS SELECTION AS A "FIRST YEAR" PRIORITY COMMUNITY.

Beginning on page 10 of the draft "Blueprint" document, CARB establishes the steps and proposed criteria for considering the prioritization and selection of communities in the first year of CAPP Program implementation. The following paragraphs set forth how the Antelope Valley Community Air Monitoring Program meets each of these criteria, and why it should be approved for the first year of CAPP implementation.

The Antelope Valley Community merits inclusion in the list of Step 1 communities - *IDENTIFICATION OF POTENTIAL COMMUNITIES*:

CARB will develop a broad list of communities based on recommendations by local air districts and individual communities according to requirements set forth in the draft "Process and Criteria for 2018 Community Selections" document issued February, 2018 which address the extent to which communities are disadvantaged and experience air pollution-related adverse health impacts. On April 30, 2018, the AVAQMD and ARTC jointly and timely submitted extensive evidence[7] showing that the Antelope Valley Community

meets all of CARB's criteria pertaining to significant adverse health impacts within the Antelope Valley Community that are either directly attributed to, or significantly exacerbated by, high ambient particulate levels. We also submitted extensive documentation showing that the Antelope Valley Community meets every element of the AB 617 definition of "Disadvantaged Community" and it satisfies all the "Disadvantaged Community" criteria set by California Health & Safety Code § 39711. The extensive information that the AVAQMD and the ARTC have already jointly submitted reflects the first-hand knowledge of local air quality impacts and it resoundingly represents the concerns of both community members and community-based organizations. All of this constitutes substantial evidence that the AVAQMD has been, and will continue, working to develop a comprehensive and robust community monitoring program that is action-based, and pollutant-reduction focused. For all of these reasons, the Antelope Valley Community warrants inclusion in the CARB's initial identification of potential communities.

The Antelope Valley Community merits inclusion in the list of Step 2 communities: ***ASSESSMENT OF CUMULATIVE AIR POLLUTION EXPOSURE BURDEN.***

CARB has identified 6 criteria that will be applied to assess the cumulative air pollution exposure burden of each community that is identified in Step 1; the Antelope Valley Community scores very high on each of these factors, to wit:

1. Exposure to Air Pollution - Concentrations of Pollutants:

The Antelope Valley Community is substantially burdened by high ambient particulate levels that are generated by large, uncontrolled, and unenclosed area sources (agriculture, solar farms, sand and gravel operations) as well as mobile sources (freeways, highways, truck routes and freight rail lines) that are slated to increase substantially with population growth and which are exacerbated by sustained high wind profiles and frequent gust events. It is already firmly established that the Antelope Valley Community substantially exceeds state and federal ambient air quality standards for PM10 and, according to the June, 2018 version of CalEnviroscreen, the entire Antelope Valley Community is in the 91st percentile for ozone (see Figure 1). These data from reliable sources clearly establish that the Antelope Valley Community is exposed to high pollutant concentrations and therefore meets Criteria #1.

2. Exposure to Air Pollution – Density of Air Pollution Sources:

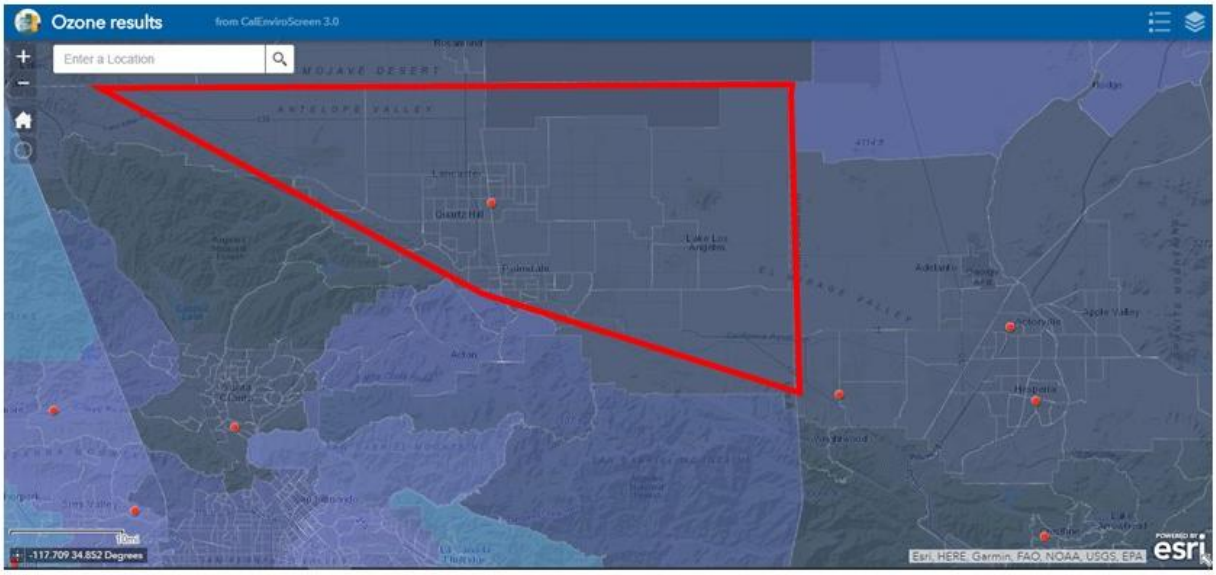
The Antelope Valley Community has a high density of mobile and stationary particulate sources, including multiple freight lines, a major freeway (SR14) and three major highways (Sierra Highway, CA-138, and the Pearblossom Highway). In addition, there are 45,000 acres of solar farms that generate fugitive dust located west of (and therefore typically upwind of) Northeast Lancaster and environs which (according to the June, 2018 version of CalEnviroscreen) has a CALENVIROSCREEN Disadvantaged Community Score of 75-80% (see Figure 2). There are also at least 5 unenclosed and uncontrolled rock, sand and gravel operations that are all located immediately west of (and therefore typically upwind of) the community of Littlerock and environs which has a CALENVIROSCREEN Disadvantaged Community Score of 75%. There is no doubt that the Antelope Valley Community is burdened with a high density of large magnitude air pollutant sources and therefore meets Criteria #2.

3. Exposure to Air Pollution – Health Risks:

As a preliminary comment, the ARTC and AVAQMD note that the only health concern identified in the Draft "Blueprint" as being pertinent to the Step 2 health "criteria" is "cancer burden"; we are concerned that this singular focus erroneously ignores serious non-cancer health impacts of air pollution, including cardiovascular disease, COPD, childhood asthma, Valley Fever, etc. When a broader lens is applied to health risks and burdens, published health indicator data reveal that the Antelope Valley Community experiences excessive, substantial, and seriously life-threatening non-cancer health burdens that are linked to high particulate levels. For instance, ambient particulate is directly linked to the incidence of Valley Fever (which has recently spiked in the Antelope Valley Community). It also exacerbates COPD and childhood asthma (which disproportionately burden the Antelope Valley; in fact, the Antelope Valley COPD and childhood asthma rates are the highest in Los Angeles County *and twice the county average* (as discussed in our April 30 2018 submittal included in Attachment 4). There is no question that the Antelope Valley Community faces excessive, life-threatening health burdens from pollution, and thus meets Criteria #3.

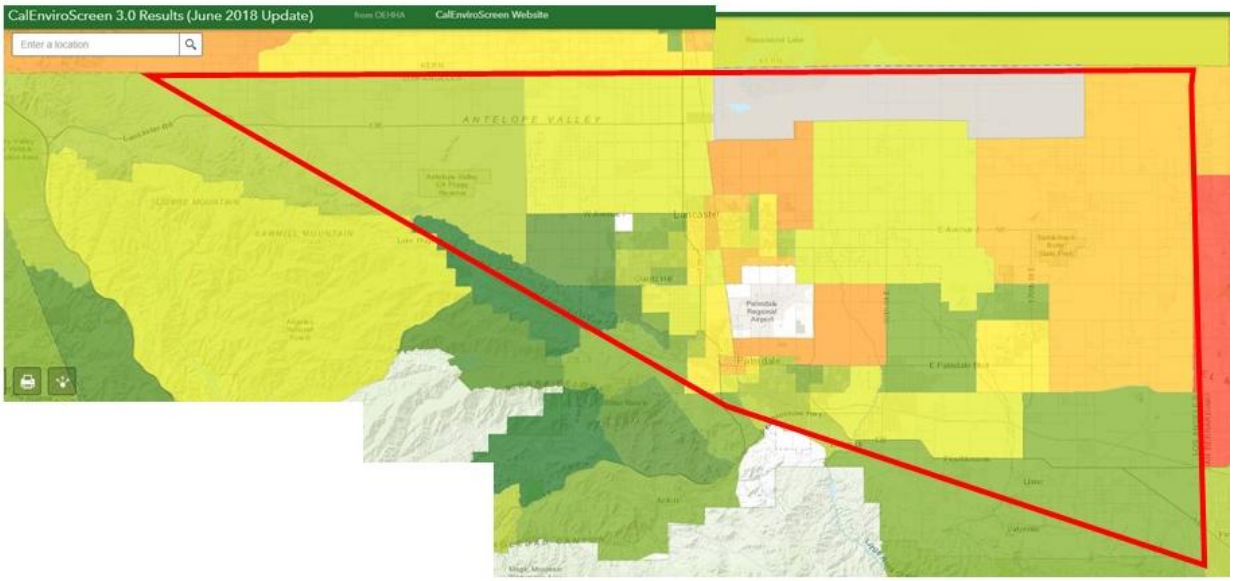
4. Sensitive Populations: The Antelope Valley Community has a number of sensitive populations located near mobile and stationary area sources. For instance, there are at least 5 senior/assisted living facilities located within 400 meters of either the Antelope Valley Freeway, the High Desert Corridor, or freight/passenger railways. Additionally, the

Figure 1. Ozone Results for the Antelope Valley Community from CalEnviroscreen 3.0



ANTELOPE VALLEY COMMUNITY BOUNDARY

Figure 2: CalEnviroscreen 3.0 results for the Antelope Valley Community



ANTELOPE VALLEY COMMUNITY BOUNDARY

large K-8 Palmdale Learning Plaza is located immediately adjacent to the 14 freeway and the R. Rex Parris High School lies adjacent to a freight/passenger railway. The Del Sur Elementary school is entirely surrounded by solar farms where vegetation (which controls fugitive dust) is routinely removed. The Lake Los Angeles School is within 2,000 feet of a large agricultural operation and the Knight High School is approximately 2,500 feet from large sand/gravel/quarry operations. There is no question that the Antelope Valley Community has a number of sensitive populations located in close proximity to mobile and stationary pollutant emission sources of concern, and therefore meets Criteria #4.

5. Measures of Vulnerability to Air Pollution - Public Health Indicators:
The draft "Blueprint" document identifies asthma, heart disease, and low birth weight as key indicators of health that reflect the incidence or worsening of disease related to air quality. Published data reveal a substantial prevalence of these health problems in the Antelope Valley Community; in fact, they are the highest in the state. For instance, according to the June 2018 version of CalEnviroscreen, areas within the Antelope Valley Community rank in the 99th percentile for cardiovascular disease rates (see results reported for census tract 6037900701, 6037900803, 6037900804, etc.) and asthma (census tract 6037900804, 6037900806, 6037900701, etc.) The incidence of low birth weight is even worse; the June 2018 version of CalEnviroscreen reports that portions of the Antelope Valley Community are in the 100th percentile for low birth weight (see for example reports for census tract 6037910101). These facts supplement the health indicator data previously provided in our April 30, 2018 submittal (reproduced in Attachment 4) showing that emphysema/COPD is a top cause of death in the Antelope Valley Community, claiming 58.9 lives per 100,000 which is more than double the county-wide death rate and nearly the highest in the country. Additionally, the incidence of childhood asthma across all zip codes in the Antelope Valley Community uniformly exceeds 15% and can be as high as 16.5% according to health statistics reported by the UCLA Center for Health Policy Research. There is no doubt that the Antelope Valley Community meets every element of Criteria #5, and perhaps even ranks highest in the state in this regard.

6. Measures of Vulnerability to Air Pollution – Socioeconomic Factors and Unemployment:
The draft "Blueprint" document identifies poverty levels and unemployment rates as socio-economic factors that indicate vulnerability to air pollution. Published data reveal a substantial prevalence of these and other socioeconomic factors within the Antelope Valley

Community. For instance, according to the June 2018 version of CalEnviroscreen, a large area of the Antelope Valley Community ranks above the 94th percentile for both poverty and unemployment (see results reported for census tract 6037900102 and 6037910501 with rates as high as 99%). Other areas rank well above the 80th percentile for poverty (i.e. census tracts 6037900104, 6037910001, 6037900103...) and well above the 90th percentile for unemployment (i.e. 6037900104, 6037910402, 6037910403...). These facts supplement the socioeconomic data previously provided by the AVAQMD and ARTC in our April 30, 2018 submittal. There is no doubt that the Antelope Valley Community meets every element of Criteria #6.

The health indicator data and facts presented above reveal that the Antelope Valley Community experiences among the highest "cumulative air pollution exposure burdens" in California, and thus warrants inclusion on the list of "first year" communities selected under the CAPP.

The Antelope Valley Community merits inclusion in the list of Step 3 communities: ***SELECTION OF FIRST YEAR COMMUNITIES.***

The Draft "Blueprint" indicates that, to select the "first-year" communities, CARB will consider two other factors in addition to the "cumulative air pollution exposure burden". These factors are 1) Regional Diversity - to build capacity and support existing community let solutions; and 2) Source Variety – to support development of a range or emission reduction strategies that can be transferred to other communities. As set forth below, the Antelope Valley Community meets all the elements of each of these factors.

Regional Diversity: By selecting the Antelope Valley as a "first year" community, CARB will achieve regional diversity by increasing particulate monitoring capacity and supporting existing community led activities because the Antelope Valley Community Air Monitoring Program will:

- Substantially increase particulate monitoring capacities within the Antelope Valley by collecting extensive ambient particulate concentration data to supplement the lone BAMS site that is currently operated. The Antelope Valley Community is woefully underserved in terms of particulate monitoring capabilities which are so inadequate that CARB has never even established whether the community is in compliance with either state or federal PM2.5 standards. There is no question that there is a substantial need to increase the particulate monitoring capacity in the Antelope Valley, and the proposed Antelope Valley Community Monitoring Program does precisely that.

- Supplement the particulate monitoring activities of community-based groups such as the Antelope Valley Dust Control Group and individual residents who have installed and operate particulate sensors and unique "dust trap" monitoring equipment in several areas of the Antelope Valley Community. The data that these groups and individuals have collected indicate that neither the federal nor the state PM2.5 ambient air quality standards are met; however, limited funds and manpower prevent them from developing and implementing a comprehensive, source-based particulate monitoring program such as that proposed herein as the Antelope Valley Community Air Monitoring Program. There is no question that this proposed monitoring program will both support AND enhance existing community-led pollutant monitoring and reduction solutions already underway.

<u>*Source Variety*</u>: By selecting the Antelope Valley as a "first year" community, CARB will capture a variety of particulate emission and thereby support development of a range of emission reduction strategies that can be transferred to many different communities, including both urban and rural. The Draft "Blueprint" document identifies 5 specific source types as the "pollution source mix" that CARB is targeting to support strategies that benefit different types of highly burdened communities: 1) Freight- related; 2) Industrial sources common in disproportionately burdened areas; 3) Urban mixes of traffic, commercial, and residential sources of air pollution; 4) Rural sources of air pollution; and 5) Sources along the US-Mexico border. The AVAQMD and ARTC point out that *the proposed Antelope Valley Community Air Monitoring Program captures every one of these source types except those along the US Mexico Border*. This is because the Antelope Valley Community is unique in that it includes:

- An extensive and heavily used freight railway network that connects North and Central California to the Southwestern and Eastern United States AND extensive trucking routes (including SR 14, CA 138, and the Pearblossom Highway) that connect North, Central, and Southern California to Southwestern and Eastern United States.

- A high concentration of multiple large industrial rock, sand, and gravel quarry operations. Such operations are common in disproportionately burdened urban areas where particulate standards have never been met (such as individual operations that exist in the City of Los Angeles along the Los Angeles River) as well as in rural areas (such as those found in the Temescal Valley in Riverside County).

- A dense urban core that is home to several hundred thousand residents that are immersed in an urban mix of traffic, commercial and residential sources.

- A rural area that routinely experiences significant ambient particulate events because it is home to extensive agricultural activities *as well as* approximately 45,000 acres of solar farms from which all native vegetation has been removed and is routinely "mowed".

Because the Antelope Valley Community encompasses a broad spectrum of pollution sources, it warrants inclusion as a "First Year" Community under the CAPP Program. This is particularly true since most of the "Statewide Strategies to Deliver New Reductions in Impacted Communities" that are identified in CARB's Draft "Blueprint" are not applicable to major particulate sources in the Antelope Valley Community (as discussed in further detail below).

VIII. THE ANTELOPE VALLEY COMMUNITY WARRANTS SELECTION AS A "FIRST YEAR" COMMUNITY BECAUSE THE "STATEWIDE STRATEGIES TO DELIVER NEW REDUCTIONS IN IMPACTED COMMUNITIES" ARE INAPPLICABLE TO MOST OF THE PARTICULATE SOURCES IN THE ANTELOPE VALLEY.

The AVAQMD and the ARTC appreciate CARB's recognition that local planning decisions often contribute to the placement of residences and sources too close to each other; this causes cumulative impacts that can only be mitigated through the development and implementation of multiple pollution reduction strategies. To meet this need, CARB has developed a number of emission reduction strategies, incentive programs, and regulations addressing clean cars, trucks, buses, vehicles, ships at port, cargo handling equipment and locomotives, and stationary sources such as chrome plating, composite wood project manufacturing, and commercial cooking operations. We note however that these strategies address only two of the five primary particulate sources of concern in the Antelope Valley Community, thus they are not applicable to most of the key sources of concern.

The AVAQMD and ARTC are also aware that AB 617 requires certain industrial sources to be retrofit with pollution controls in areas that are designated as non-attainment. However, these additional regulations will not address the Antelope Valley Community's concerns with PM2.5 because the attainment status of the Antelope Valley Community with respect to PM2.5 has never been demonstrated. Thus, the added stationary source control requirements imposed by AB 617 will not address PM2.5 concerns in the Antelope Valley Community.

It is essential that the Antelope Valley Community be identified as a "first-year" community as a means of monitoring and ultimately controlling major particulate sources which are a

direct cause of the substantial increases in Valley Fever diagnoses and which are proven to increase the frequency and severity of health problems such as COPD, heart disease, and asthma which disproportionately burden the nearly 600,000 residents of the Antelope Valley Community.

IX. THE ANTELOPE VALLEY COMMUNITY AIR MONITORING PROGRAM IS AN ACTION-ORIENTED PROGRAM.

The AVAQMD and ARTC propose the Antelope Valley Community Air Monitoring Program for the twofold purpose of enhancing understanding particulate pollution impacts within our community and supporting effective implementation of emission reduction programs. We have prepared a draft test matrix and established Data Quality Objectives ("DQOs") for this effort (presented in Attachment 3) and we intend to begin air monitoring by February, 2019 to assess particulate levels during the "Spring Winds" that are common in the Antelope Valley. The AVAQMD and ARTC are therefore confident that the Antelope Valley Community Air Monitoring Program will meet CARB's July 1, 2019 deadline for initiating monitoring activities.

We recognize that CARB's overarching goal for community air monitoring programs is to acquire action-oriented data to meet community needs. To achieve this goal, we will build on the proposed test matrix and implement best practices to create a collaborative partnership between the AVAQMD, the Antelope Valley Community, and CARB which ensures the data will be accessible, transparent, and understandable. Correspondingly, the AVAQMD and the ARTC are committed to developing an "Air Monitoring Strategy" that encompasses all of the 14 elements that fall into the 3 key categories set forth in the "Blueprint" Document: 1) The purpose of the community air monitoring program; 2) How the community air monitoring program will be conducted; 3) How the data will be used to support air pollution reductions in the community. Each of these categories are reflected in the draft test matrix provided in Attachment 3 and summarized below:

The Purpose of the Antelope Valley Community Air Monitoring Program:

The Antelope Valley Community Air Monitoring Program purpose is to assess particulate levels within the Antelope Valley Community in a manner that allows primary particulate sources to be identified and paves the way for developing particulate emission reduction strategies; the program will also establish the extent to which the Antelope Valley complies

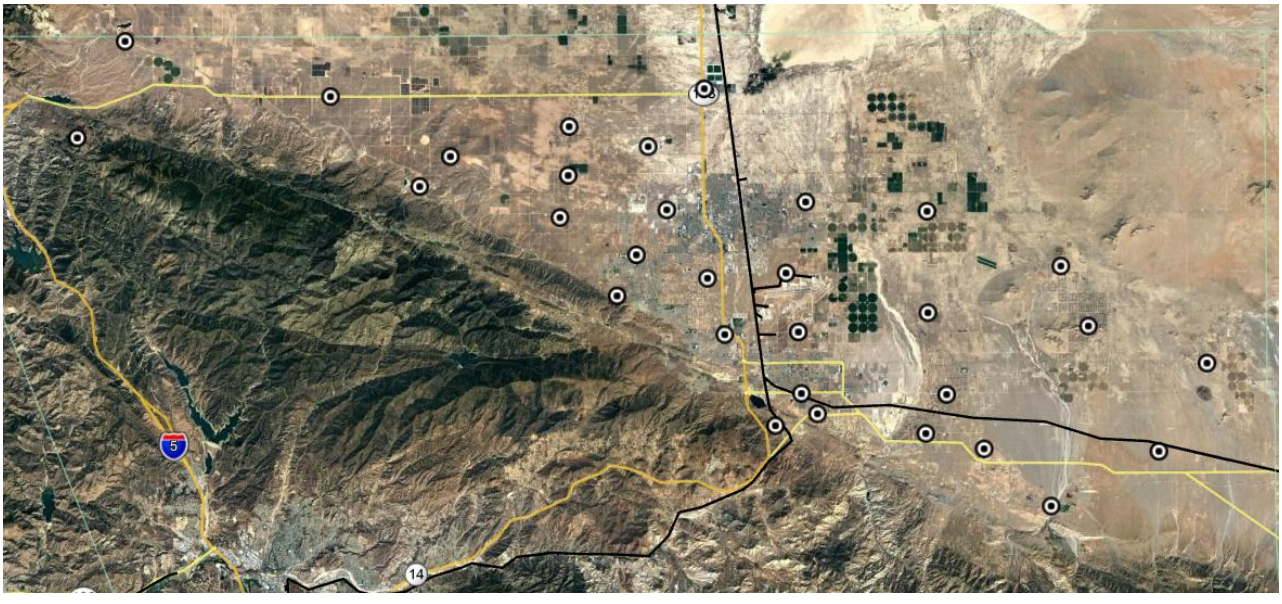
with State and Federal Ambient particulate Standards. Thus, it achieves the goal of acquiring "action-oriented" data under the CAPP as set forth in AB 617.

How the Antelope Valley Community Air Monitoring Program Will Be Conducted:

The Antelope Valley Community Air Monitoring Program will be conducted by deploying a network of particulate sensors at strategic locations throughout the Antelope Valley Community which provide real-time particulate concentration data that will be made accessible to the public via internet access to the "cloud". The particulate concentration results will also be reconciled with meteorological data from nearby airport and federal met station facilities to identify the primary source(s) of ambient particulate within the Antelope Valley Community. Over time, when areas of high particulate concentrations are found, additional monitors will be installed surrounding the problem area to more closely pinpoint the source.

The AVAQMD and ARTC have tentatively identified 31 sampling locations that are strategically placed to characterize particulate levels throughout the Antelope Valley Community. These sampling locations are depicted in Figure 3 and were developed based on source location studies and extensive community outreach in which community members and local officials were asked to mark sampling locations that they considered to be critical for project success.

Figure 3. Antelope Valley Community Air Monitoring Program Sampling Locations.



The AVAQMD and ARTC recognize that the Antelope Valley Community Air Monitoring Program will only be successful if the data collected is accurate and representative of actual ambient particulate conditions. To ensure accurate and representative data, the Antelope Valley Community Air Monitoring Program will incorporate comprehensive data quality measures and objectives that address data accuracy, precision and completeness; details regarding the proposed "Data Quality Objectives" ("DQOs") and data validation that will be implemented are provided with the draft test matrix in Attachment 3.

How Data from the Antelope Valley Community Air Monitoring Program Will Support Actions to Reduce Air Pollution:

The data from the Antelope Valley Community Air Monitoring Program will be made immediately available to the public via online access and will communicate current air quality conditions. The data will also be used to identify primary particulate sources and assess the extent to which source-focused monitoring (i.e. fenceline monitoring) would be efficacious. It will also pave the way for developing particulate emission reduction strategies that are tailored to match the source characteristics. Emission reduction strategies will be developed based on stakeholder input and complement ongoing control efforts currently underway by the Antelope Valley Resource Conservation District and the Antelope Valley Dust Control Group. Additionally, the data will be used to establish the extent to which the Antelope Valley complies with State and Federal Ambient particulate Standards and track the progress of emission reduction strategies that are implemented. As such, the Antelope Valley Community Air Monitoring Program supports all of the actions established in the "Blueprint" document because it:

- Provides real-time air quality data to notify residents and inform their daily activities and "flag" air quality concerns to protect children during school activities.

- Identifies sources contributing to air pollution burdens within the community to support development of a community emissions reduction program.

- Tracks progress toward improving air quality within the community by measuring the effectiveness of emission reduction strategies that are developed and implemented by the AVAQMD.

When taken together, the draft text matrix, DQO's and "action plan" elements of the Antelope Valley Community Air Monitoring Program that are set forth above meet all the "checklist" items for developing a community air monitoring program that are established by the "Blueprint" document as shown in Figure 4.

Figure 4. Checklist for the Antelope Valley Community Air Monitoring Program

CATEGORY	PLANNING ELEMENT	DESCRIPTION	✓
WHAT IS THE PURPOSE THE AIR MONITORING WILL ADDRESS?	1. Community partnerships	Establishes community steering committee to develop community air monitoring.	✓
	2. Community-specific purpose for air monitoring	Characterizes the air pollution concern within the community (e.g., pollutants, locations of pollution) and monitoring need(s).	✓
	3. Scope of actions	Describes the range of potential communication and actions that air monitoring data will support.	✓
	4. Air monitoring objectives	Defines the purpose of monitoring - what will be measured, when and where it will be measured, and why (e.g., to document highest concentration).	✓
	5. Roles and responsibilities	Identifies all parties responsible for air monitoring.	✓
HOW WILL MONITORING BE CONDUCTED?	6. Data quality objectives	Establishes level of data quality required to meet objective (e.g., precision, bias, sensitivity).	✓
	7. Monitoring methods and equipment	Identifies selected method and suitability of method to meet data quality objectives.	✓
	8. Monitoring areas	Indicates where monitoring will be conducted and the rationale for selecting those areas.	✓
	9. Quality control procedures	Specifies procedures that will be utilized to ensure data is scientifically defensible.	✓
	10. Data management	Describes how data will be collected, managed, and stored.	✓
	11. Field measurements	Lays out the air monitoring timeline and field procedures for those conducting monitoring.	✓
HOW WILL THE DATA BE USED TO TAKE ACTION?	12. Evaluating effectiveness	Designates a procedure to check that original objectives are being met.	✓
	13. Analyze and interpret data	Outlines approach for analyzing data (e.g., comparing trends, identifying sources).	✓
	14. Communicate results	Establishes how information will be shared with the community, decision-makers, and CARB to inform appropriate actions.	✓

Please submit any written comments by July 23, 2018 to: https://www.arb.ca.gov/lispub/comm/bclist.php.

X. ANTELOPE VALLEY COMMUNITY AIR MONITORING PROGRAM GRANT REQUEST

Project Management and Staffing

The Antelope Valley Community Air Monitoring Program will be conducted by deploying a network of particulate sensors at strategic locations throughout the Antelope Valley Community providing real-time particulate concentration data that will be made accessible to the public via internet. The final sampling locations will be selected based on extensive community input and discussions with residents throughout the Antelope Valley Community. The data collection decisions will be developed directly from local residents and Antelope Valley community-based organizations.

The Antelope Valley Community Program Steering Committee, for administrative purposes, will provide oversight of all aspects of this study along with interactions with the local community during the entire duration of the project. All field work involving the sensors will be performed AVAQMD air monitoring staff.

Proposed Schedule

The proposal is for an 18-month monitoring program with a data reduction/analysis effort conducted in parallel; after 12 months, the results will be evaluated to identify which areas of the Antelope Valley Community experience high concentrations. Sensor locations will be modified accordingly to identify the location(s) of primary particulate sources of concern. These efforts will be followed by a two-month period for issuing draft and final project reports that will identify areas where high particulate concentrations are noted and outline future steps to be implemented to mitigate and control particulate emissions from the noted areas of concern.

Proposed Cost and Payment Terms

The AVAQMD intends to complete the project within the costs as outlined. The project charges will include labor expended to conduct the project, plus any incidental expenses such as field supplies, travel, and report production shown in the table below. The average labor rate assumed for this project is $100/hour; the overall cost for the proposed work is estimated at $115,000.

This cost estimate assumes the CAPP Program imposes minimal progress and final report requirements and does not include extensive Test/QA Plan development labor hours. If CARB requires extensive reporting and Test/QAPP preparation for the CAPP Program, project costs will be higher than those set forth here.

TASK	HOURS	COST
Finalize particulate sensor locations	80	$8,000
Develop CARB-approved Test/Quality Assurance Plan	60	$6,000
Acquire ~40 PurpleAir PAII Sensors	N/A	$12,000
Deploy sensors with data acquisition and public access capabilities.	160	$16,000
Review sensor results during the initial 12-month period & reconcile with meteorological data to identify high particulate concentration area(s)	360	$36,000
Redeploy sensors to further characterize sources contributing to high particulate concentrations	100	$10,000
Final data reduction and draft report	120	$12,000
Final report	40	$4,000
Contingency & Steering Committee coordination (~10%)	N/A	$11,000
Total		**$115,000**

ENDNOTES:

[1] The Antelope Valley Community is not in compliance with state Ambient Air Quality Standards for PM10; it is not known whether the Antelope Valley complies with federal PM10 standards.

[2] In a presentation by the Los Angeles County Department of Public Health at the Valley Fever Awareness Seminar on June 23, 2018, Dr. Rachel Civen reports that the Antelope Valley is the epicenter for Valley Fever infections in Los Angeles County and it is where 80% of all Valley Fever diagnoses in the County occur. In 2016, the Valley Fever burden in the Antelope Valley was nearly 55 cases per 100,000.

[3] The 2016 Valley Fever burden in Kings County, Kern County, San Luis Obispo County and Fresno County exceeded 60 per 100,000; the Antelope Valley's burden was 53.8 per 100,000 (*supra*).

[4] The incidence of Valley Fever in Los Angeles County in 2017 increased by 49% (from 668 cases reported in 2016 to 994 cases reported in 2017 [*supra*]).

[5] Valley Fever is directly caused by exposure to soil-based particulate (*supra*) and as set forth in the April 30, 2018 CAPP submittal from the AVAQMD and ARTC, airborne particulate exacerbates COPD and asthma.

[6] The Antelope Valley's compliance status for state and federal ambient air quality standards for PM 2.5 is "unclassified", meaning that there is insufficient data to establish whether the area complies with these standards.

[7] For the sake of completeness, the AVAQMD's entire submittal dated April 30, 2018 is included herein as Attachment 4.

ATTACHMENT 1

LETTERS AND COMMUNICATIONS FROM INDIVIDUALS AND ORGANIZATIONS EXPRESSING INTENT TO PARTICIPATE IN THE ANTELOPE VALLEY COMMUNITY MONITORING PROGRAM STEERING COMMITTEE.

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Amy J. Bodek, AICP
Director

July 9, 2018

Bret Banks, Executive Director
Antelope Valley Air Quality Management District
bbanks@avaqmd.ca.gov

VIA E-MAIL

Dear Mr. Banks:

LETTER OF INTENT REGARDING THE COMMUNITY AIR PROTECTION PROGRAM COMMUNITY STEERING COMMITTEE GRANT APPLICATION

As you may know, the Los Angeles County (County) Department of Regional Planning (Department) is responsible for planning and shaping the development of safe, healthy, equitable, and sustainable communities while respecting individual rights and protecting the natural environment in the unincorporated areas of the County.

The County Board of Supervisors recently adopted the Antelope Valley Area Plan (AV Plan), a component of the Los Angeles County General Plan, that provides a blueprint for future development and conservation within the unincorporated Antelope Valley. The AV Plan establishes a number of policies related to air quality, including coordination with the Antelope Valley Air Quality Management District (AVAQMD) to develop and implement regional air quality policies and programs, and encourage native vegetation to reduce erosion and wind-borne dust and sand.

The Department is currently working with 13 communities within the Antelope Valley to implement the AV Plan through Community Standards Districts that tailor zoning regulations to meet community needs. This effort will require extensive community engagement and partnership with local Town Councils to ensure that the communities are informed and can participate with a greater understanding of planning and zoning.

The Community Air Grants Program (Air Grants) and the Community Air Protection Program (CAPP), a community-focused emissions reduction program under Assembly Bill 617 to reduce air pollution in disproportionately burdened communities, are consistent with the County's goals for improving air quality and meaningfully engaging with communities to identify and implement solutions.

320 West Temple Street • Los Angeles, CA 90012 • 213-974-6411 • Fax: 213-626-0434 • TDD: 213-617-2292

I am in support of AVAQMD's application for an Air Grant under CAPP, and should an Air Grant be awarded to AVAQMD, we also intend to participate as a member on the CAPP Community Steering Committee to further our local partnerships and support community engagement and land use planning efforts in the Antelope Valley.

If you have any questions, please do not hesitate to contact Ms. Susan Tae, AICP, Supervising Regional Planner of the Community Studies North Section, who is overseeing our long-range planning efforts in the Antelope Valley. She may be reached by e-mail at stae@planning.lacounty.gov, or by phone at (213) 974-6476.

Sincerely,

Amy J. Bodek, AICP
Director

AJB:DS:MC:ST:ems

S_AP_070918_L_GRANT_APP_BANKS

COUNTY OF LOS ANGELES
Public Health

LOS ANGELES COUNTY
HEALTH AGENCY

BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

FRANK ALVAREZ, M.D., M.P.H.
SPA 1 & 2 Area Health Officer, Community Services
26415 Carl Boyer Drive, #160
Santa Clarita, CA 91350
TEL (661) 287-7054 • FAX (661) 255-5531

www.publichealth.lacounty.gov

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July 25, 2018

Bret Banks
The Antelope Valley Air Quality Management District
43301 Division Street Suite 206
Lancaster, CA 93535

Subject: The Los Angeles County Department of Public Health's partnership with the Antelope Valley Air Quality Management District to Implement a Community Air Protection Program.

The Los Angeles County Department of Public Health (Public Health) is pleased to partner with the Antelope Valley Air Quality Management District (AVAQMD) to pursue a grant opportunity under AB 617 to develop and implement a much needed PM10 and PM2.5 monitoring program within the Antelope Valley Community. Public Health's mission is to protect health, prevent disease and injury, and promote health and well-being for everyone in Los Angeles County. Public Health is concerned by the high prevalence of childhood asthma and chronic obstructive pulmonary disease ("COPD") among Antelope Valley residents, along with an increase in Valley Fever diagnoses in the Antelope Valley Region over the past couple of years. Funding for a monitoring program is the essential first step to understand the major air impacts in the region.

The Community Air Grants Program (Air Grants) and the Community Air Protection Program (CAPP), a community-focused emissions reduction program under Assembly Bill 617 to reduce air pollution in disproportionately burdened communities, align with the County's goals for improving air quality and meaningfully engaging with communities to identify and implement solutions.

Should an Air Grant be awarded to AVAQMD, Public Health intends to participate as a member on the CAPP Community Steering Committee to further our local partnerships and support community engagement and land use planning efforts in the Antelope Valley.

If you have any questions, please do not hesitate to contact me by e-mail at falvarez@ph.lacounty.gov.

Sincerely,

Frank Alvarez, MD
SPA 1 & 2 Area Health Officer, Community Services

Dr. Antje Lauer, Professor of Biology, California State University, Bakersfield

---------- Forwarded message ----------
From: **Antje Lauer** <alauer@csub.edu>
Date: Thu, Jul 5, 2018 at 3:59 PM
Subject: RE: Fwd:
To: merrylou nelson <merrylou.nelson@gmail.com>

Hello Merrylou, thank you for considering me being part of this effort. And yes, I would like to be part of the committee. I hope the meetings will not be during the week. I am not teaching on Fridays next semester. Also, I will be on vacation from July 15th to August 16th this year.

Best regards,

Antje Lauer

Association of Rural Town Councils
C/O Three Points-Liebre Mountain Town Council
P.O. Box 76
Lake Hughes, CA 93532
ourartc@gmail.com

28 July 2018

SENT VIA EMAIL

Mr. Bret Banks, Executive Director
Antelope Valley Air Quality Management District
43301 Division Street, Suite 206
Lancaster, CA 93535
bbanks@avaqmd.ca.gov

Dear Mr. Banks,

RE: AB 617, Community Air Protection Program Steering Committee

The Association of Rural Town Councils (ARTC) consists of fourteen rural council areas representing constituents across the Greater Antelope Valley Community. The ARTC has fully supported the Antelope Valley Air Quality Management District's collaboration with our organization to identify, quantify, evaluate, and set forth plans to reduce PM2.5 and PM10 particulates that contribute to our high rates of respiratory diseases, and can carry valley fever spores that cause the fungal infection—*Coccidioidomycosis*. The Antelope Valley (AV) is prone to dust control issues exacerbated by frequent high-wind events, predictable drought, development, agricultural activities, mining operations; and will face further impacts due to projected population increase, major infrastructure projects, and continued utility-scale renewable energy development, further increasing health risks to residents.

The Association is committed to engagement with the AV community regarding air quality, and has already participated in numerous meetings meant to address complex issues associated with reducing and controlling fugitive dust. Our work has included outreach to the public, medical professionals, many meetings with city and county officials and departments, professional educators, the farming/agricultural community, and the military. There is much more to accomplish, and we see that our participation in the Steering Committee is another important step to further our goal of improving air quality and protecting the health of residents in the Antelope Valley.

Sincerely,

Susan Zahnter
Director

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JOHN FERGIONE

TROY GABBARD • LOCKHEED MARTIN

CATHY HART • ANTELOPE VALLEY COLLEGE

MARK HEMSTREET • HEMSTREET HOSPITALITY

CHUCK HOEY • CHARLES HOEY & ASSOCIATES

ALLEN HOFFMAN• THE BOEING COMPANY

HARVEY HOLLOWAY • CB COMMERCIAL-VALLEY REALTY

DIANNE KNIPPEL• ANTELOPE VALLEY COLLEGE FOUNDATION

ROBYN LAWHON • MERRILL LYNCH

MIKE MILLER • CITY OF PALMDALE

RHONDA NELSON • NORTHROP GRUMMAN

MACY NESHATI• ANTELOPE VALLEY TRANSIT AUTHORITY

DR. COLETTE NICHOLS • ANTELOPE VALLEY HOSPITAL

CARRIE RAWLINGS • MOJAVE AIR AND SPACE PORT

DONALD RHEA • CLANCYJG INTERNATIONAL

OLIN ROGERS • LEGAL SHIELD

REGINA ROSSALL • WESTSIDE UNION SCHOOL DISTRICT

BILL TAYLOR • GRANITE CONSTRUCTION COMPANY

MARK TROTH • BERKSHIRE HATHAWAY HOME SERVICES - TROTH, REALTORS

GEORGE WHITESIDES • THE SPACESHIP COMPANY

JOHNNY ZAMRZLA • WESTERN PACIFIC ROOFING CO.

LIFETIME HONOREES
JANICE ANDERSON
CHERIE BRYANT
KATIE CORBETT
JOSEPH DAVIES
MICHAEL DISPENZA
GORDON ELDER
RON EMARD
DR. JACKIE FISHER
PATRICIA FREGOSO-COX
ROGER HEMME
AIDA O'CONNOR
ALIS CLAUSEN ODENTHAL
DR. GEORGE "BUD" REAMS
FRANK C. ROBERTS
THE HONORABLE DICK SPANN
CHRIS SPICHER
JACK STEWART
LEW STULTS
MONNA WAGNER
COLEEN WALKER CLUTTERHAM

July 11, 2018

Brett Banks
Antelope Valley Air Quality Management District
43301 Division Street
Suite 105
Lancaster, CA 93535

Dear Mr. Banks,

The Antelope Valley Board of Trade is a civic and membership organization founded in 1957. Our mission is to engage in maintaining and promoting diverse business and industry, quality infrastructures, and a strong legislative voice for the benefit of its members and the Greater Antelope Valley. We take pride in our community and are appreciative of AVAQMD and Association of Rural Towns Council for implementing the Community Air Protection Program. This project is of interest to the entire Antelope Valley and critical to addressing the issue in a systematic and comprehensive way. AVBOT represents the entire Antelope Valley and due to its comprehensive focus, we intend to participate in the Antelope Valley Community Monitoring Program Steering Committee. Whatever duties this entails, we fully wish to comply and serve as a helpful resource to this project and our community. Thank you for spearheading this initiative. We look forward to working with you.

Best,

Anna Lee Buehn
Executive Director
Antelope Valley Board of Trade

41319 12TH STREET WEST, SUITE 104 • PALMDALE, CALIFORNIA 93551 • (661) 947-9033
EMAIL: ADMINISTRATION@AVBOT.ORG • WEBSITE: WWW.AVBOT.ORG

ATTACHMENT 2

LETTERS OF SUPPORT FROM THROUGHOUT THE ANTELOPE VALLEY COMMUNITY

Association of Rural Town Councils
C/O Three Points-Liebre Mountain Town Council
P.O. Box 76
Lake Hughes, CA 93532
661.724.2043
ourartc@gmail.com

25 April 2018

Mr. Bret Banks, Executive Director
Antelope Valley Air Quality Management District
43301 Division Street Suite 206
Lancaster CA 93535

Dear Mr. Banks,

Subject: The Association of Rural Town Council's Partnership with the Antelope Valley Air Quality Management District to Implement a PM10 and PM2.5 Monitoring Program within the Antelope Valley Community

Reference: California Air Resources Board's AB617 Grant Program

The Association of Rural Town Councils is pleased to partner with the Antelope Valley Air Quality Management District in pursuing a grant opportunity under AB 617 to develop and implement a PM10 and PM2.5 monitoring program within the Antelope Valley Community. The Association of Rural Town Councils (ARTC) has long been concerned by the extremely high incidence of childhood asthma and chronic obstructive pulmonary disease (COPD) among Antelope Valley residents, and we note with growing alarm the steep increase in Valley Fever diagnoses that has occurred over the last two years within in the Antelope Valley Community. The latter is directly related to the presence of respirable particulate in the air, and the former health outcomes are certainly exacerbated (and perhaps even caused) by the same. This, coupled with the fact that the Antelope Valley has not been shown to comply with all state and federal ambient air quality standards for particulate, has led the ARTC to partner with the AVAQMD to explore a PM2.5 and PM10 monitoring program. The ARTC seeks to investigate and document the extent to which high PM2.5 and PM10 concentrations occur within the Antelope Valley Community as a necessary "first step" in addressing broader health concerns in the area.

The ARTC appreciates the opportunities provided by AB 617, and we look forward to collaborating with the AVAQMD in pursuit of such opportunities.

Sincerely,

Susan Zahnter
Director

Jeffrey Hillinger
Assistant Director

Merrylou Nelson
Secretary

lancaster ca
it's positively clear

R. Rex Parris Mayor
Marvin E. Crist Vice Mayor
Ken Mann Council Member
Angela E. Underwood-Jacobs Council Member
Raj Malhi Council Member
Mark V. Bozigian City Manager

July 5, 2018

Bret Banks
Antelope Valley Air Quality Management District
43301 Division Street, Suite 206
Lancaster CA 93535

Subject: The Antelope Valley Resource Conversation District's Partnership with the Antelope Valley Air Quality Management District to Implement a Community Air Protection Program (AB617).

Dear Mr. Banks:

The City of Lancaster is pleased to submit this letter of support for Antelope Valley Air Quality Management District (AVAQMD) and its partnering participant Antelope Valley Resource Conversation District (AVRCD), in pursuing a grant opportunity under AB 617. Receiving funding to develop and implement a PM10 and PM2.5 monitoring program within the Antelope Valley Community will be essential in addressing major impacts to our region's air quality. With a mission to develop various mitigation strategies and promote conservation and restoration of natural resources for our area, AVRCD and AVAQMD will work together to address concerns related to extremely high incidences of childhood asthma and chronic obstructive pulmonary disease ("COPD") among Antelope Valley residents, as well as address the increase in Valley Fever diagnoses that has occurred in the Antelope Valley Region.

AVAQMD and AVRCD are integral members of the Antelope Valley community and the City applauds your efforts to help remedy ongoing issues related to extremely high occurrences of respiratory illnesses impacting Antelope Valley residents.

As such, it is with great pleasure that I offer my support in the efforts of AVAQMD and AVRCD to receive funding to implement a Community Air Protection Program in the Antelope Valley.

Respectfully,

R. Rex Parris, Mayor
RRP:aw

44933 Fern Avenue • Lancaster, CA 93534 • 661.723.6000
www.cityoflancasterca.org

RESOURCE
CONSERVATION

Antelope Valley Resource
Conservation District

Claudette Beck, President
Jeff Olesh, Vice President
Tammy Lucas, Secretary/Treasurer
Keith Deagon, Director
Jenna Roper, Director
Debra Gillis, Executive Director

Promote conservation and restoration of natural resources by
providing plant materials, educational programs, and expertise in conservation.

April 25, 2018

Bret Banks
The Antelope Valley Air Quality Management District
43301 Division Street Suite 206
Lancaster CA 93535

Subject: The Antelope Valley Resource Conversation District's Partnership with the Antelope Valley Air Quality Management District to Implement a Community Air Partner Program (AB617).

Dear Mr. Banks:

The Antelope Valley Resource Conversation District (AVRCD) is pleased to partner with the Antelope Valley Air Quality Management District in pursuing a grant opportunity under AB 617 to develop and implement a PM10 and PM2.5 monitoring program within the Antelope Valley Community. The AVRCD's mission is to promote conservation and restoration of natural resources for our area by providing plant materials, educational programs, and expertise in conservation. AVRCD has become concerned by the extremely high incidence of childhood asthma and chronic obstructive pulmonary disease ("COPD") among Antelope Valley residents, along increase in Valley Fever diagnoses that has occurred in the Antelope Valley Region.

The AVRCD has been active in researching and developing various mitigation strategies to control wind-blown fugitive dust in the Antelope Valley. A better understanding of fugitive dust, the specific regional areas of concern along with various control strategies should result in approaches reverse the high incidence of lung disease in the Antelope Valley.

The AVRCD is excited to support and partner with the AVAQMD to explore a PM2.5 and PM10 monitoring program. The AVRCD seeks to explore the extent to which high PM2.5 and PM10 concentrations occur within the Antelope Valley Community as a necessary "first step" in addressing broader health concerns in the area.

The AVRCD appreciates the opportunities provided by AB 617, and we look forward to collaborating with the AVAQMD in pursuit of such opportunities.

Sincerely,

Claudette Beck

Claudette Beck
President of the Board of Directors

44811 N. Date Avenue, Suite G, Lancaster, CA 93534
661-305-3405, 661-752-8246 fax
www.avrcd.org

April 25, 2018

Bret Banks
The Antelope Valley Air Quality Management District
43301 Division Street Suite 206
Lancaster CA 93535

Subject: The Partners for Fugitive Dust/Valley Fever with the Antelope Valley Air Quality Management District to Implement a Community Air Partner Program (AB617).

Dear Mr. Banks:

The Partners for Fugitive Dust/Valley Fever (PFDVF) is pleased to partner with the Antelope Valley Air Quality Management District in pursuing a grant opportunity under AB 617 to develop and implement a PM10 and PM2.5 monitoring program within the Antelope Valley Community. PFDVF has become concerned by the extremely high incidence of childhood asthma and chronic obstructive pulmonary disease ("COPD") among Antelope Valley residents, along increase in Valley Fever diagnoses that has occurred in the Antelope Valley Region.

The PFDVF has been active promoting awareness of Valley Fever throughout the High Desert Region. PFDVF Walk for Valley Fever was established to raise awareness of the disease and fund medical research. The Antelope Valley has been identified as having one of the highest incidences of Valley Fever in all of California. The Valley Fever spores are commonly associated with disturbed soil, fugitive dust and high wind areas. A better understanding of fugitive dust, the specific regional areas of concern along with various control strategies should result reduce cases of Valley fever in the Antelope Valley.

The PFDVF is excited to support and partner with the AVAQMD to explore a PM2.5 and PM10 monitoring program. The PFDVF seeks to explore the extent to which high PM2.5 and PM10 concentrations occur within the Antelope Valley Community as a necessary "first step" in addressing broader health concerns in the area.

The PFDVF appreciates the opportunities provided by AB 617, and we look forward to collaborating with the AVAQMD in pursuit of such opportunities.

Sincerely

Richard Campbell
Partners for Fugitive Dust/Valley Fever

SAVE OUR RURAL TOWN

Brett Banks
Air Pollution Control Officer
The Antelope Valley Air Quality Management District
43301 Division Street Suite 206
Lancaster CA 93535

April 27, 2018

Subject: Save Our Rural Town's Collaboration with the Antelope Valley Air Quality Management District to Implement a Particulate Monitoring Program within The Antelope Valley Community

Reference: California Air Resources Board's AB617 Grant Program

Dear Mr. Banks;

Save Our Rural Town ("SORT") is thrilled to collaborate with the Antelope Valley Air Quality Management District ("AVAQMD") in its pursuit of a grant to develop a PM10 and PM2.5 monitoring program within the Antelope Valley. As you know, SORT has members that live throughout the Antelope Valley, and SORT actively participates in discretionary project reviews conducted by Federal, County, and Local agencies to ensure that projects within the Antelope Valley are appropriately conditioned with adequate emission controls. SORT also seeks to establish the compliance status of the Antelope Valley with regard to State and Federal Ambient Air Quality Standards, and toward this end, continues to collaborate with State, County, and Local agencies. SORT supports the AVAQMD's proposed effort under the AB 617 Grant Program, and we stand ready to provide the technical and community outreach support that the AVAQMD requires in pursuit of this effort.

Sincerely

Jacqueline Ayer
Director, Save Our Rural Town

Antelope Valley Dust Control Group

July 29, 2018

California Air Resources Board
1001 I Street
Sacramento, CA 95814

To Whom it May Concern,

I write on behalf of the Antelope Valley Dust Control Group ("AVDCG") in support of the Antelope Valley Air Quality Management District ("AVAQMD") and the Association of Rural Town Councils ("ARTC") in their proposal to develop and implement an action-oriented community air-monitoring plan under the Community Air Protection Program ("CAPP") established pursuant to AB 617. We have had the opportunity to review the proposed program, and we strongly support it. Additional monitoring to identify active source areas would greatly benefit the Antelope Valley Community, as the area often experiences elevated ambient particulate levels that are not localized and are widely dispersed by sustained wind events. Based on health indicator data showing the substantial health inequities experienced by Antelope Valley residents along with data demonstrating that the Antelope Valley Community meets the "Disadvantaged Community" criteria established by AB 617, it seems as though the Antelope Valley is a perfect fit for funding during the first year of the program.

As an organization with extensive knowledge and expertise in desert wind erosion, and which focuses on reducing PM10 emissions from fugitive dust particulate sources within the Antelope Valley specifically, we can attest to the poor air quality, attributable health concerns, and the need to identify primary sources within the region. It is believed that all areas within the Antelope Valley Community experience high ambient particulate events, however there is insufficient data to determine whether some areas are more affected than others, or even where the primary particulate sources are, due to the fact that there is only one PM10 monitor within the entire region. This uncertainty is magnified by the fact that the compliance status of the Antelope Valley with respect to state and federal ambient air quality standards for PM2.5 and federal standards for PM10 has never been established.

Thank you for your time and attention to this matter. Your approval of the grant proposal that has been submitted by the Antelope Valley Air Quality Management District ("AVAQMD") and the Association of Rural Town Councils ("ARTC") would be greatly appreciated by the Antelope Valley community.

Sincerely,

Julie Schuder

Julie Schuder
President
Antelope Valley Dust Control Group

July 6, 2018

To: Bret Banks, Executive Director, Antelope Valley Air Quality Management District

Dear Sir: The Antelope Acres Town Council would like to comment on the Antelope Valley Community Air Monitoring Program, based on AB 617, a project proposed by the AVAQMD in partnership with the Association of Rural Town Councils, and the Cities of Lancaster and Palmdale.

We appreciate the opportunity to comment on this project. We live in an atmosphere of undetermined air quality due to the fact that there has never been research to establish whether the Antelope Valley is in or out of compliance with state and federal air quality requirements.

We strongly support this project. It will be the first opportunity to establish a system of reliable data collecting monitors to determine what the PM 2.5 levels truly are in the Antelope Valley (AV).

We are confident that this program will generate sufficient information to give the AVAQMD the ability to establish local programs to further reduce air pollution.

We have only one air monitor in the entire Antelope Valley and we believe that due to the fact it is located in downtown Lancaster the data collected is not reliable and does not reflect the true conditions in the outlying areas of the Antelope Valley.

We have very diverse conditions here in the AV. Contributing factors like rock quarries in the southern portion of the Valley, Agricultural

operations in many areas , thousands of acres solar farms, railroad emissions, diesel exhaust from hundreds of thousands of cars and trucks traveling on HWY 14, Sierra Hwy and Hwy 138. Additionally the blowing fugitive dust and sand generated from many different sources affect the overall air quality.

We the residents of Antelope Acres would appreciate it if this grant proposal is awarded to this group so that once and for all the true conditions can be identified and acknowledged for future projects. We are confident that we will finally be able to have reliable data for future use.

Sincerely,

Virginia Stout, President

Antelope Acres Town Council



July 25,2018

Mr. Bret Banks, Executive Director

Antelope Valley Air Quality Management District

43301 Division Street, Suite 206

Lancaster, CA 93535

Re: ARTCAVAQMD CAPP Proposal

Dear Mr. Banks,

Thank you for the opportunity for Lake Los Angeles Town Council (LLARTC) to support this extremely important proposal for the Antelope Valley. Lake Los Angeles is situated in the northeast portion of the Antelope Valley and frequently experience severe wind and dust storms. The education that we have gained about the serious fugitive dust and PM2.5 problems has made us aware of some serious issues and the need for the monitoring that ARTC and AVAQMD is proposing.

We have learned that the Antelope Valley has the highest COPD, childhood asthma, and Valley Fever rates in LA County and is among the highest in the State. We have learned that 100,000 cars and trucks per day on the freeway contribute heavily to PM 2.5 as well as the many gravel, sand and quarry operations. Solar farms and large agricultural operations are contributing source and are exempt from dust regulations.

We support the ARTC's and AVAQMD's air monitoring proposal because it considers the Antelope Valley community as a whole; it does not "pick and choose" which neighborhoods will be monitored because it properly recognizes that frequent and sustained wind events in the Antelope Valley carry dust and PM2.5 that is generated in one neighborhood to adjacent neighborhoods. The ARTC's and AVAQMD's air monitoring proposal factors this in, and accounts for the fact that PM2.5 generated in one neighborhood is often carried to adjacent neighborhoods and even miles away.

We already know that fugitive dust is the cause of all our Valley Fever concerns, but the major sources of fugitive dust in the Antelope Valley have never been identified or located. We support the the ARTC's and AVAQMD's air monitoring proposal because it seeks to identify and locate these major sources *which is the first step in eliminating them*.

We support the ARTC's and AVAQMD's air monitoring proposal because the Antelope Valley continues to be underserved in terms of air monitoring, and continues to be designated as "unclassified" for PM2.5, (which means that no state or federal agency has bothered to determine whether the our community is even in compliance with ambient air quality standards for PM2.5). The ARTC's and AVAQMD's air monitoring proposal addresses this deficiency, and attempts to answer the question: Could PM2.5 be a problem in the Antelope Valley that perhaps contribute to the high incidence of COPD and childhood asthma that is experienced in the Antelope Valley?

Sincerely Yours

Stormy Hope

Corresponding Secretary

Lake Los Angeles Rural Town Council

CC: ARTC-AV

Littlerock Town Council (661) 944-2299
P.O. Box 05
Littlerock, CA 93543
www.littlerocktc.org

07/23/2018

RE: **Community Air Protection Program, AB617**

To Whom It May Concern,

The Littlerock Town Council supports the ARTC's and AVAQMD's air monitoring proposal under the CAPP program. We have needed something like this for a long time. The communities of Littlerock, Sun Village, Pearblossom, Llano, and Lake Los Angeles all reside down wind of several industrial rock quarries and the dust that they produce has been a very big concern for the Southeast Antelope Valley community.

Since 2014, it has been noted by the Los Angeles County Health Department that the community of the Antelope Valley has the highest account of COPD, child asthma, and other breathing related conditions. We know that there are several industries in our region that create dust across the entire valley and so this is a condition that we all share. When we looked into who was monitoring our air we found out from the AVAQMD that there was only one system that was being used and that it was located in the middle of the City of Lancaster which does not equally represent the conditions that are found in the outlining desert community.

ARTC's and AVAQMD's air monitoring proposal would provide sensors that could be placed in and around the areas where the heaviest activity might be suspected for a true and accurate account of the particulates in the air that we breathe.

We truly hope that the ARTC's and AVAQMD's air monitoring proposal will be accepted in order to identify where the troubled areas are and classify them so that we can address ways to control the matter over time.

I appreciate you taking the time to listen to my concerns and look forward to hearing from you in the near future.

Very truly yours,



Jeffrey W. Hillinger

Councilman, Littlerock Town Council

LEONA VALLEY TOWN COUNCIL

P.O. BOX 795 • LEONA VALLEY • CA 93551

July 24, 2018

Bret Banks, Executive Director
AV Air Quality Management District
43301 Division St.
Lancaster, CA 93535

Re: CAPP, AB 617

To Whom it May Concern:

The Leona Valley Town Council (LVTC) supports the Associated Rural Town Council's (ARTC) and Antelope Valley Air Quality Management District's (AVAQMD) air monitoring proposal under the CAPP program because it properly considers all the varied sources of PM2.5 scattered throughout the Antelope Valley Community and it provides a logical path to determine which sources are problematic and which are not.

It also considers the Antelope Valley community as a whole; it does not "pick and choose" which neighborhoods will be monitored, because it properly recognizes that frequent and sustained wind events in the Antelope Valley carry dust and PM2.5 that is generated in one neighborhood to adjacent neighborhoods. For that reason, LVTC requests at least one monitor be located in the main area of Leona Valley to determine the particulate levels in our community.

Fugitive dust and PM2.5 is a problem in the Antelope Valley, but it has never been properly measured or assessed. We understand that Antelope Valley has the highest COPD, childhood asthma, and Valley Fever rates in Los Angeles County and is among the highest in the State.

There are several major sources of PM2.5 in Antelope Valley, including mobile sources (110,000 cars and trucks per day on the freeway) that travel numerous routes; many gravel, sand, and quarry operations that are entirely unenclosed; fugitive dust generated by solar farms (45,000 acres at last count); and large agricultural operations that are entirely exempt from local fugitive dust regulations.

We understand that Antelope Valley continues to be designated as "unclassified" for PM2.5, (which means that no state or federal agency has bothered to determine whether our community is even in compliance with ambient air quality standards for PM2.5). The ARTC's and AVAQMD's air monitoring proposal addresses this deficiency.

Sincerely,

Perri Bach

Perri Bach
President, LVTC

Pearblossom Rural Town Council
P.O. Box 416
Pearblossom, CA 93553
PearblossomRTC@gmail.com

Atmospheric particulate matter that have a diameter of less than 2.5 micrometers ($PM_{2.5}$) and are transported within fugitive dust is a problem in the Antelope Valley, but it has never been properly measured or assessed.

The Antelope Valley has the highest number of cases of COPD, childhood asthma, and Valley Fever rates in LA County, and has among the highest in the State.

There are several major sources of $PM_{2.5}$ in Antelope Valley, including mobile sources (110,000 cars and trucks per day on the freeway); many gravel, sand, and quarry operations that are entirely unenclosed; fugitive dust generated by solar farms (45,000 acres at last count); and large agricultural operations that are entirely exempt from local fugitive dust regulations.

We support the Association of Rural Town Councils' (ARTC) and Antelope Valley Air Quality Management District's (AVAQMD) air monitoring proposal under the Community Air Protection Program (CAPP) because it properly considers all the varied sources of $PM_{2.5}$ scattered throughout the Antelope Valley Community and it provides a logical path for us to determine which sources are problematic and which are not.

We also support the ARTC's and AVAQMD's air monitoring proposal because it is ensures that control measures that are developed will be tailored to the sources that are causing $PM_{2.5}$ problems within our community, so it is both fair and balanced.

We support the ARTC's and AVAQMD's air monitoring proposal because it considers the Antelope Valley community as a whole; it does not "pick and choose" which neighborhoods will be monitored because it properly recognizes that frequent and sustained wind events in the Antelope Valley carry dust and $PM_{2.5}$ that is generated in one neighborhood to adjacent neighborhoods. The ARTC's and AVAQMD's air monitoring proposal factors this in, and accounts for the fact that $PM_{2.5}$ generated in one neighborhood is often carried to adjacent neighborhoods and even miles away.

We already know that fugitive dust is the cause of all our Valley Fever concerns, but the major sources of fugitive dust in the Antelope Valley have never been identified or

located. We support the ARTC's and AVAQMD's air monitoring proposal because it seeks to identify and locate these major sources *which is the first step in eliminating them.*

We support the ARTC's and AVAQMD's air monitoring proposal because the Antelope Valley continues to be underserved in terms of air monitoring, and continues to be designated as "unclassified" for $PM_{2.5}$, (which means that no state or federal agency has bothered to determine whether the our community is even in compliance with ambient air quality standards for $PM_{2.5}$). The ARTC's and AVAQMD's air monitoring proposal addresses this deficiency, and attempts to answer the question: Could $PM_{2.5}$ be a problem in the Antelope Valley that perhaps contributes to the high incidence of COPD and childhood asthma that is experienced in the Antelope Valley?

ROOSEVELT RURAL TOWN COUNCIL

48157 70th Street East, Lancaster, California 93535 (661)946-1323

President: Barbara Firsick Vice President: Ron Ferrell
Treasurer: Doris Hoeppner Secretary: Myrle McLernon,

July 24, 2018

Subject: ARTC CAPP AB617

Fugitive dust and PM2.5 is a problem in the Antelope Valley, but it has never been properly measured or assessed.

Rural communities and the entire Antelope Valley are experiencing the consequences of declining Agriculture, influx of Utility Scale Solar Development and suburban development construction and the Adjudication project has the potential to create further consequences with regard to fugitive dust and its impact on air quality and public health.

We support the ARTC's and AVAQMD'S air monitoring proposal because the Antelope Valley continues to be underserved in terms of air monitoring, and continues to be designated as "unclassified" for PM2.5, (which Means that no state or federal agency has bothered to determine whether our community is even in compliance with ambient air quality standards for PM2.5) The ARTC's and AVAQMD's air monitoring proposal addresses this deficiency, and attempts to answer the question: Could PM2.5 be a problem in the Antelope Valley that perhaps contribute to the high incidence of COPD and childhood asthma that is experienced in the Antelope Valley?

Sincerely,

Barbara Firsick
President
Roosevelt Rural Town Council

Three Points-Liebre Mountain Town Council
P. O. Box 76
Lake Hughes, CA 93532
3pointsliebremountain@gmail.com
661.724.2043

30 July 2018

SENT VIA EMAIL

Mr. Bret Banks, Executive Director
Antelope Valley Air Quality Management District
43301 Division Street Suite 206
Lancaster CA 93535
bbanks@avaqmd.ca.gov

Dear Mr. Banks,

RE: AB 617 Grant Proposal, Community Air Protection Program

It is our desire to support Antelope Valley Air Quality Management District's (AVAQMD) efforts in obtaining grant monies provided by State Assembly Bill 617, and for your organization to transmit this support to Community Air Protection Program officials. Without doubt, the Antelope Valley has air quality issues concerning particulate matter in our air. Certain members of our town council have been involved for some time with efforts to address air quality issues across the Valley due to various types of development. As a result of geographical and climatic conditions, the Valley is prone to dust control issues exacerbated by frequent high-wind events, drought, development, agricultural activities, and fallowing of agricultural land--all of which have contributed to Dust Bowl conditions and the highest rates of pulmonary and respiratory illness, including Coccidioidomycosis (also known as Valley Fever), in Los Angeles County.

To our misfortune, our Antelope Valley Community has only one air quality monitoring station situated in downtown Lancaster. It is vitally necessary to increase the number of monitoring stations, and vitally necessary to record, evaluate, and classify air quality conditions for the protection of residents, which remain incomplete and unquantified at this time, in order to determine best practices to control or prevent airborne dust and other pollutants, and to prioritize action in addressing local air quality.

Furthermore, the Antelope Valley Community faces a plethora of major infrastructure, housing, and commercial/industrial development that will certainly add to air quality concerns in the years ahead: The High Desert Corridor (with a planned inland truck port); the Northwestern Highway 138 Improvement Project (a planned truck and commuter route to I-5 North); California High Speed Rail; Centennial Specific Plan (over 19,000 homes plus 10 million square feet of industrial space) with accompanying auto and industrial pollution; and local cities' ongoing suburban, commercial, and industrial development. Additionally, there are currently more than 40,000 acres across the Greater Antelope Valley of existing industrial-scale renewable energy projects; National Cement Company mining and kiln operations; several active sand, rock, and gravel mining operations; mineral and metals

mining; as well as current Interstate 5, State Route 138--east and west, and State Highway 14 contributions to vehicle exhaust pollutants.

Again, we offer our support for the AVAQMD's AB 617 CAPP grant proposal, and your organization's effort to improve monitoring for Antelope Valley air quality, prioritize evaluation and remediation in areas of most need, and recommend and implement subsequent actions. We are certain the District will perform such work with integrity and transparency, and with an ongoing desire for improvement of health outcomes and quality of life issues related to particulate pollutants in our air.

Most Sincerely,

Richard Zahnter
President

Susan Zahnter
Vice President

Karen Plemmons
Secretary

Diane Phillips
Treasurer

ATTACHMENT 3

DRAFT TEST MATRIX AND DATA QUALITY OBJECTIVES FOR THE ANTELOPE VALLEY COMMUNITY AIR MONITORING PROGRAM.

The AVAQMD and ARTC have developed a monitoring strategy which assesses particulate levels within the Antelope Valley Community in a manner that allows primary particulate sources to be identified and paves the way for developing particulate emission control strategies and establishing the extent to which the Antelope Valley complies with State and Federal Ambient Air Quality Standards for particulate. Thus, it achieves CARB's goal of acquiring "action-oriented" data under the community air monitoring portion of the CAPP as set forth in AB 617. The following paragraphs briefly summarize the Test Plan and QAPP aspects of our proposed Antelope Valley Community Air Monitoring Program.

PROBLEM DEFINITION AND BACKGROUND:

The Antelope Valley is recognized as an area that does not meet State Ambient Air Quality Standards for PM10, however it is not known whether the area meets State or Federal standards for PM2.5. Additionally, the Antelope Valley Community experiences disproportionate health burdens which are substantially exacerbated by excessive levels of ambient particulate and (in the case of Valley Fever) are directly caused by ambient dust. To address these problems, the AVAQMD and ARTC propose to implement an extensive particulate monitoring program within the Antelope Valley Community that will identify the location of primary sources of ambient particulate and provide the data necessary to develop and implement particulate reduction strategies that are tailored for these sources once they are identified. Ambient particulate in the Antelope Valley is attributed to the following disparate and unquantified sources:

The 14 Freeway and several major highways traverse the heart of the community and serve as mapped CalTrans "Truck Networks" that also carry more than 110,000 vehicles per day during the work week. Particulate emissions generated by the mobile sources that use these freeway and highway facilities will increase over time because the population of the Antelope Valley Community is projected to increase by more than 30% by 2040 (see the Southern California Association of Governments Regional Transportation Plan http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf).

Multiple freight lines run both north-south and east-west through the community and carry goods from Central and Southern California to all points east of California. The north-south tracks are also heavily-used by passenger rail; all of these uses are slated to increase with population.

45,000 acres of solar fields have been developed within the Antelope Valley, and all have had their native vegetation removed (which has also removed the native root systems that hold dirt in place). These solar fields are crisscrossed with miles of unpaved roads used for

access and panel washing and which generate significant levels of fugitive dust. Many of these solar fields are located in soil areas that are documented as having active Valley Fever spores. The number of solar fields in the Antelope Valley is projected to increase substantially over the next 10 years with the implementation of SB 350 which established a new "Renewable Portfolio Standard" ("RPS") of 50%.

Construction and development; these sources are slated to grow significantly to accommodate the sharp population increase (>30%) that is slated for the Antelope Valley by 2040.

Agricultural operations (all of which are specifically exempt from fugitive dust regulations). It is expected that fugitive dust generated by these sources will increase considerably over the next 5 years because new water restrictions will cause many existing farms to cease operations and their lands will become fallow.

Numerous and large sand, gravel and quarry operations that are not covered or enclosed are operated in the southern portion of the Antelope Valley Community.

The multi-fold "problem" that will be addressed by the proposed Antelope Valley Community Air Monitoring Program is to identify 1) The extent to which the Antelope Valley Community does or does not comply with adopted PM2.5 standards; 2) The location and nature of the primary sources that contribute to ambient particulate levels in the Antelope Valley Community; and 3) Strategies that will reduce or eliminate particulate emissions from these primary sources once they are identified.

PROJECT DESCRIPTION

The Project is to deploy a network of particulate sensors at strategic locations throughout the Antelope Valley Community that provide real-time particulate concentration data that will be made accessible to the public via internet access to the cloud. The particulate concentration results will also be reconciled with meteorological data from nearby airport and federal met station facilities to identify the primary source(s) of ambient particulate within the Antelope Valley Community. Once these sources are identified, tailored emission reduction strategies can be developed and implemented to reduce ambient particulate concentrations within the community.

DATA GENERATION AND ACQUISITION

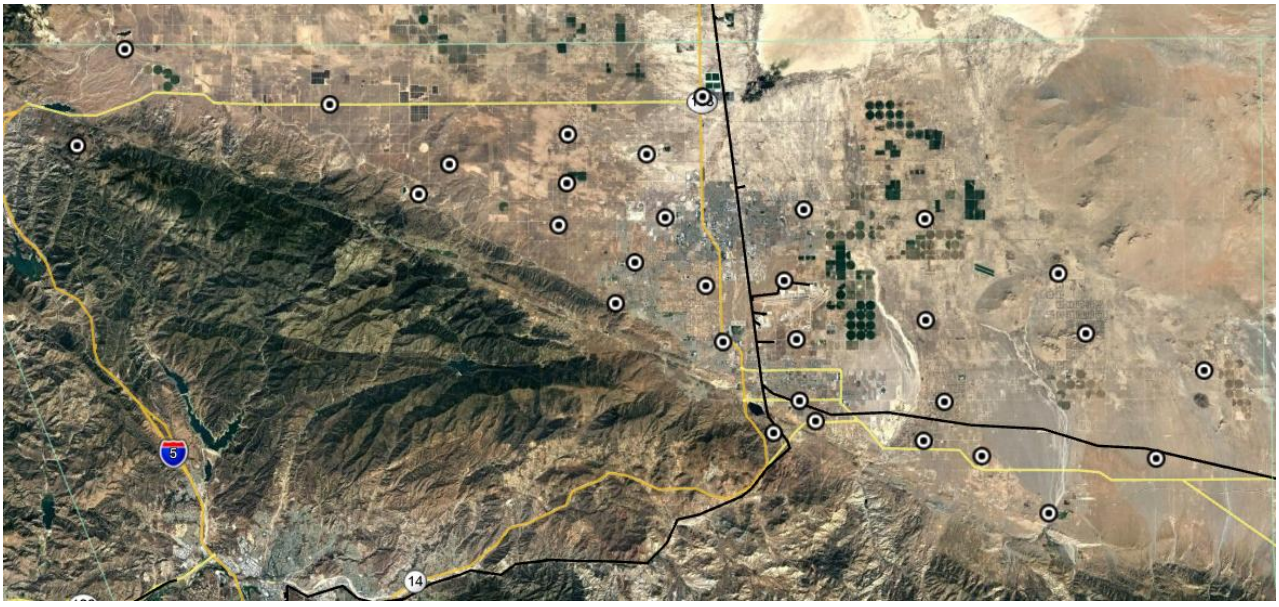
The success of the data generation and acquisition portion of the Antelope Valley Community Air Monitoring Program hinges on 3 essential elements that are necessary for a

comprehensive and robust program: 1) Sampling Methodology; 2) Sampling Location, and 3) Sampling duration/frequency. Each of these elements are discussed below:

Sampling Methodology: The proposed Antelope Valley Community Air Monitoring Program will deploy "Purple Air II" ("PA-II") optical sensors which provide real-time PM10, PM2.5, and PM1.0 particulate concentration data that is immediately accessible in the "cloud" for monitoring sites equipped with "wifi". As discussed in more detail below, most of the proposed sampling sites will have "wifi" capability, however those sensors placed in remote areas where "wifi" is not available will be equipped with data logging capabilities that permit data retrieval from a micro-chip assembly. The PA-II system has been field-evaluated by the South Coast Air Quality Management District ("SCAQMD") and found to provide reasonably accurate data (see http://www.aqmd.gov/docs/default-source/aq-spec/field-evaluations/purple-air-pa-ii---field-evaluation.pdf?sfvrsn=2). However, the Antelope Valley Community Air Monitoring Program will implement its own quality assurance plan to assess data accuracy, precision and completeness (as discussed below).

Sampling Location: The AVAQMD and ARTC have tentatively identified approximately 30 sampling locations that are strategically placed to characterize particulate levels throughout the Antelope Valley Community. These tentative sampling locations are depicted in the figure below and were developed based on source locational studies and extensive community and stakeholder outreach in which residents and local officials were asked to mark the key sampling locations.

ANTELOPE VALLEY COMMUNITY AIR MONITORING PROGRAM SAMPLING LOCATIONS.



Sampling Duration/Frequency: The PA-II sensors proposed for use in the Antelope Valley Community Air Monitoring Program operate continuously and will provide data 24/7. When excess particulate levels are measured, the PA-II data will be reconciled with meteorological data to identify the particulate source location. Over time, areas with high ambient particulate levels will be differentiated from low level areas, and the sensors can be relocated to "cluster" around high load areas to more accurately locate primary particulate sources.

DATA QUALITY OBJECTIVES AND CRITERIA

The AVAQMD and ARTC recognize that the Antelope Valley Community Air Monitoring Program will only be successful if the data that is collected is reasonably accurate and representative of ambient particulate conditions occurring within the Antelope Valley Community. To achieve this purpose, "Data Quality Objectives" ("DQOs") are typically established that are intended to reflect the purpose of the study, define the most appropriate type of information to collect, and specify tolerable levels of potential errors. The DQOs recognize that:

- The particulate concentration data collected for the Antelope Valley Community Air Monitoring Program is intended to be quantitative, though not to such a degree that it will be "regulatory quality" (such as determining compliance with ambient air quality standards).

- The data is also intended to reflect particulate concentrations throughout the varied neighborhood profiles of the Antelope Valley Community; to achieve the high level of representativeness required for program DQO's, PA-II sensors will be deployed at more than 30 sample locations.

- The particulate concentration data are also intended to provide "real time" results that will be relied upon by the public and must therefore be reasonably reliable.

Based on lab studies of the PA-II system conducted by the SCAQMD, it appears that the system achieves a high (85-95%) accuracy rate for PM1 at concentrations in the 10-30 $\mu g/m^3$ range and is biased low (65-75%) for at concentrations exceeding 50 $\mu g/m^3$. These results indicate that the PA-II is more likely to underreport high PM1 concentrations rather than overreport them. For PM2.5, the PA-II is biased somewhat high for low (<45 $\mu g/m^3$) particulate concentrations but is fairly accurate for higher concentrations. For PM10, PA-II results are consistently biased low, however they are reasonably accurate for low (<45 $\mu g/m^3$) particulate concentrations. These results indicate that the PA-II is unlikely to

overpredict ambient particulate concentrations and will provide data that can reasonably assumed to be "floor values". Based on mass measurement correlation data obtained from field studies of the PA-II system conducted by the SCAQMD, the AVAQMD and ARTC have determined that project DQOs can be met by the PA-II systems if a sampling completeness of 85% is achieved for the 30+ sampling sites that are proposed. According to SCAQMD field test results, the PA-II appears to be a generally reliable instrument, but to ensure that the Antelope Valley Community Monitoring Program achieves an 85% completeness level or better, we propose to acquire 25% more sensors than is required; this will allow us to quickly replace sensors that have failed and thus maintain a high data recovery rate and, by extension, achieve sample representativeness.

To ensure that total measurement uncertainty will be within the range prescribed for the Antelope Valley Community Air Quality Monitoring Program DQO, the initially proposed Measurement Quality Objectives ("MQOs") are set forth below; these MQOs will likely change based on discussions with CARB and other stakeholders.

An Accuracy threshold on the order of +/- 30%: To assess data accuracy, the Antelope Valley Community Air Monitoring Program will deploy duplicate PA-II sensors at the BAMS site located in the City of Lancaster. Data from the PA-II sensors will be compared to certified PM10 and PM 2.5 data from the BAMS to assess the level of accuracy achieved by the PA-II sensors, and the "accuracy band" that is calculated from this comparison will be applied to the results obtained from all the sampling locations. The AVAQMD and ARTC recognize that the PA-II sensors rely on optical sensing rather than gravimetric analysis, and that the results may be sensitive to particulate characteristics. We also recognize that the "accuracy band" derived for the PA-II sensors deployed at the urban Lancaster BAMS site may not be directly transferrable to rural areas next to a solar farm because the characteristics of urban-sourced particulate may differ from rural-based ambient dust. To address this, the AVAQMD and ARTC request that CARB permit the intermittent deployment of highly accurate portable monitors that CARB maintains to assess data accuracy in the non-urban portions of the Antelope Valley Community.

A Precision threshold on the order of 85%: The test matrix for the proposed Antelope Valley Community Air Monitoring Program includes a 10% duplicate rate to assess measurement precision. This means that 10% of the sampling locations will be outfitted with duplicate PA-II sensors that will be used to establish a measurement "precision band".

A Detection Level threshold of 5 µg/m^3: This detection level seems reasonable, based on SCAQMD lab- and field-studies.

DATA VALIDATION AND USABILITY

The accuracy and precision factors derived from the duplicate and comparative analysis results will be applied to the particulate data that is collected to establish a valid data set. When high particulate levels are measured, the data will be validated through application of the accuracy and precision factors and then reconciled with meteorological data from the Fox Field Airport (in the north portion of the community) and the U.S Weather Station at Sandberg (located in the west); we also hope to access data collected by private air fields and US Air Force Plant 42 (located in the south-central portion of the community). The primary source locations that are identified via this methodology will be visually inspected to the greatest extent possible to confirm proper source identification. Over time, these activities will enable the AVAQMD and ARTC to "map" primary source locations, and based on this information, cluster PA-II sensors in the area to confirm the extent to which the source contributes significantly to ambient particulate levels. The data will be configured, maintained and stored in a format that is easily understood and readily accessible.

POST MONITORING ACTIONS

The Antelope Valley Community Air Monitoring Program will be conducted by deploying a network of particulate sensors at strategic locations throughout the Antelope Valley Community which provide real-time particulate concentration data that will be made accessible to the public via the internet. The particulate concentration results will also be reconciled with meteorological data from nearby airport and federal metrological stations to identify the primary source(s) of ambient particulate within the Antelope Valley Community. Over time, when areas of high particulate concentrations are found, additional monitors will be installed surrounding the problem area to more closely pinpoint the source. Source-focused monitoring (i.e. fenceline monitoring) will be utilized to accurately determine the specific source of emissions.

AVAQMD will develop particulate emission reduction strategies that are tailored to the individual source characteristics. Emission reduction strategies will be developed based on stakeholder input and complement ongoing control efforts currently underway by the air district along with various support organizations in the Antelope Valley. Additionally, all data will be reviewed to determine the Antelope Valley Region's compliance with State and Federal Ambient Particulate Standards. Finally, AVAQMD will track the progress of emission reduction strategies that are developed and implemented based on data collected from the CAPP study.

ATTACHMENT 4
AVAQMD AND ARTC JOINT CAPP SUBMITTAL DATED APRIL 30, 2018

COMMUNITY AIR PROTECTION PROGRAM **AB617**

ANTELOPE VALLEY COMMUNITY AIR MONITORING PROPOSAL



SUBMITTED BY:

THE ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT

IN PARTNERSHIP WITH THE

ASSOCIATION OF RURAL TOWN COUNCILS

APRIL 30, 2018

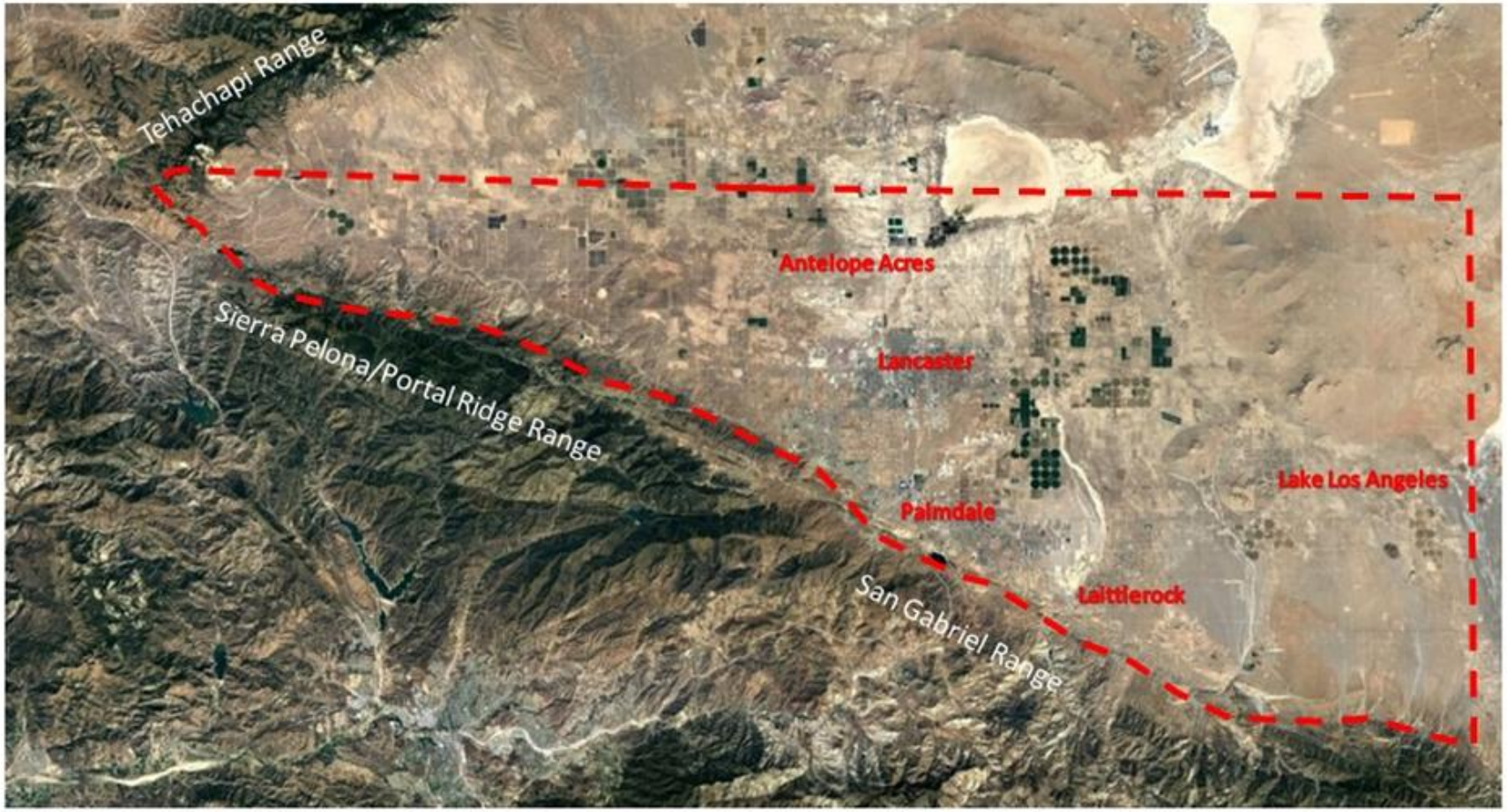
INTRODUCTION

The Antelope Valley Air Quality Management District seeks to participate in the CAPP program to establish the prevalence of ambient PM10 and PM2.5 as a potentially significant source of the severe and extensively documented health problems that are extant in the Antelope Valley. For more than a decade, the Antelope Valley has experienced among the highest incidence of emphysema and chronic obstructive pulmonary disease ("COPD") in the country[1], and very high childhood asthma rates occur uniformly throughout the Antelope Valley Community. According to health statistics gathered by the UCLA Center for Health Policy Research, 15.4% of children in the Antelope Valley Community have asthma; this is notably higher than the California average of 14.1% and the Los Angeles County average of 13.1%[2]. Additionally, the incidence of Valley Fever in the Antelope Valley is substantial; nearly 30% of all Valley Fever cases reported in Los Angeles County have occurred in the Antelope Valley, and Los Angeles County is second only to Kern County in the number of Valley Fever cases reported each year[3]. The incidence rate of Valley Fever in the Antelope Valley Community is substantial, based on preliminary 2017 date, the incidence rate is estimated to be 62 cases per 100,000 in population[4]. Ambient particulate pollution causes respiratory insults that demonstrably exacerbate both COPD[5,6] and asthma[7,8.9] and are causally linked to the incidence of Valley Fever[10].

The Antelope Valley Community is predominately rural, but it has a suburban core comprised of the Cities of Lancaster and Palmdale where approximately 60% of the population resides. It is one of a handful of areas in California that has never been properly assessed for compliance with either the National or California Ambient Air Quality Standards ("AAQS") for PM2.5[11, 12]. It has also not been properly assessed for compliance with the National AAQS for PM10[13] though it is established that the Antelope Valley Community does not comply with California's AAQS for PM10[14].

The Antelope Valley Community is a "high desert" community that is surrounded by mountains; it is formed by the convergence of the Tehachapi range (running south and west) and the Sierra Pelona/Portal Ridge/San Gabriel ranges (running north and west). This essentially creates a desert "bowl" area that is characterized by high wind speeds which shift direction quickly and unpredictably. As a result, particulate from areas sources located in one portion of the Antelope Valley Community are rapidly transported to, and deposited within, other portions of the community. As discussed in further detail below, high windspeeds (> 20 miles per hour) and inconsistent wind patterns predominate in the Antelope Valley; this results in rapid dust dispersion throughout the Antelope Valley Community irrespective of area source location. In other words, particulate released on the west side of the Valley affects residents on the east side just as particulate released from the east side of the Valley affect residents on the west side. This, coupled with the fact

FIGURE 1. ANTELOPE VALLEY COMMUNITY



that health burdens from Valley Fever, childhood asthma and COPD occur uniformly throughout the Antelope Valley mean that the District's proposal considers the Antelope Valley Community "as a whole" rather than a patchwork of neighborhoods.

Based on local knowledge, the District believes that the principal particulate sources in the Antelope Valley Community are: 1) The large disturbed areas on the west side where more than 40,000 acres of defunct agricultural operations and utility-scale solar farms are located; 2) The 100,000+ vehicles per day that enter and exit the Antelope Valley Community along the southern boundary via the 14 Freeway (the primary route of access to the Los Angeles area); 3) The agricultural operations on the east side (which include both defunct and active operations); and 4) The numerous rock, gravel, and sand quarries/processing operations along the south side.

The District is applying for CAPP funding to achieve the threefold purpose of assessing PM10 and PM2.5 levels in the Antelope Valley Community, identifying the principal area sources of these particulate, and facilitating public access to particulate data in a manner that permits health-impaired individuals to make informed decisions regarding the extent to which they should participate in outdoor activities. In this regard, the District's CAPP proposal achieves multiple goals established by AB 617, including community air monitoring, data display/communications, and emission assessment.

COMMUNITY DESCRIPTION

The Antelope Valley Community lies entirely within the County of Los Angeles and is bounded by the Tehachapi Range on the northwest, the Sierra Pelona/Portal Ridge/San Gabriel ranges on the south, the Kern County line on the north, and the San Bernardino County line on the east. Antelope Valley Community boundaries are depicted in Figure 1. The Antelope Valley Community meets the definition of "Disadvantaged Community" that is contemplated by AB 617 and it satisfies all the "Disadvantaged Community" criteria set forth in the California Health and Safety Code § 39711:

- The Antelope Valley Community is disproportionately burdened by negative health effects that either result from, or are exacerbated by, ambient particulate pollution. For instance, the Antelope Valley Community has one of the highest Valley Fever incidence rates in California (a condition directly attributable to ambient levels of respirable particulate). Additionally, (and as set forth above) the Antelope Valley Community is disproportionately burdened by COPD and childhood asthma; these COPD and asthma health burdens are demonstratively exacerbated by ambient PM10 and PM2.5 levels.

- The Antelope Valley Community has the highest "housing instability" rate in the County[15]; 11.3% of adults in the Antelope Valley Community report not having their own place to live or sleep over the last 5 years (more than twice the County average of 4.8%). The Antelope Valley Community meets the "Disadvantaged Community" criteria pertaining to "low levels of homeownership" and "high rent burden".

- The Antelope Valley Community has among the highest unemployment rates in Los Angeles County; 12.4% of adults are unemployed and looking for work [16]. This is 22% higher than the county average, and only one area within Los Angeles County has a markedly higher rate (South Los Angeles County is at 13.6%). The Antelope Valley Community meets the "Disadvantaged Community" criteria for high unemployment.

- 21.4% of the population of the Antelope Valley Community has a household income that is less than 100% of the Federal Poverty Level ("FPL")[17]. This is 16% higher than the County average of 18.4% and 53% higher than the state average of 14%[18]. The Antelope Valley Community meets the low income "Disadvantaged Community" criteria.

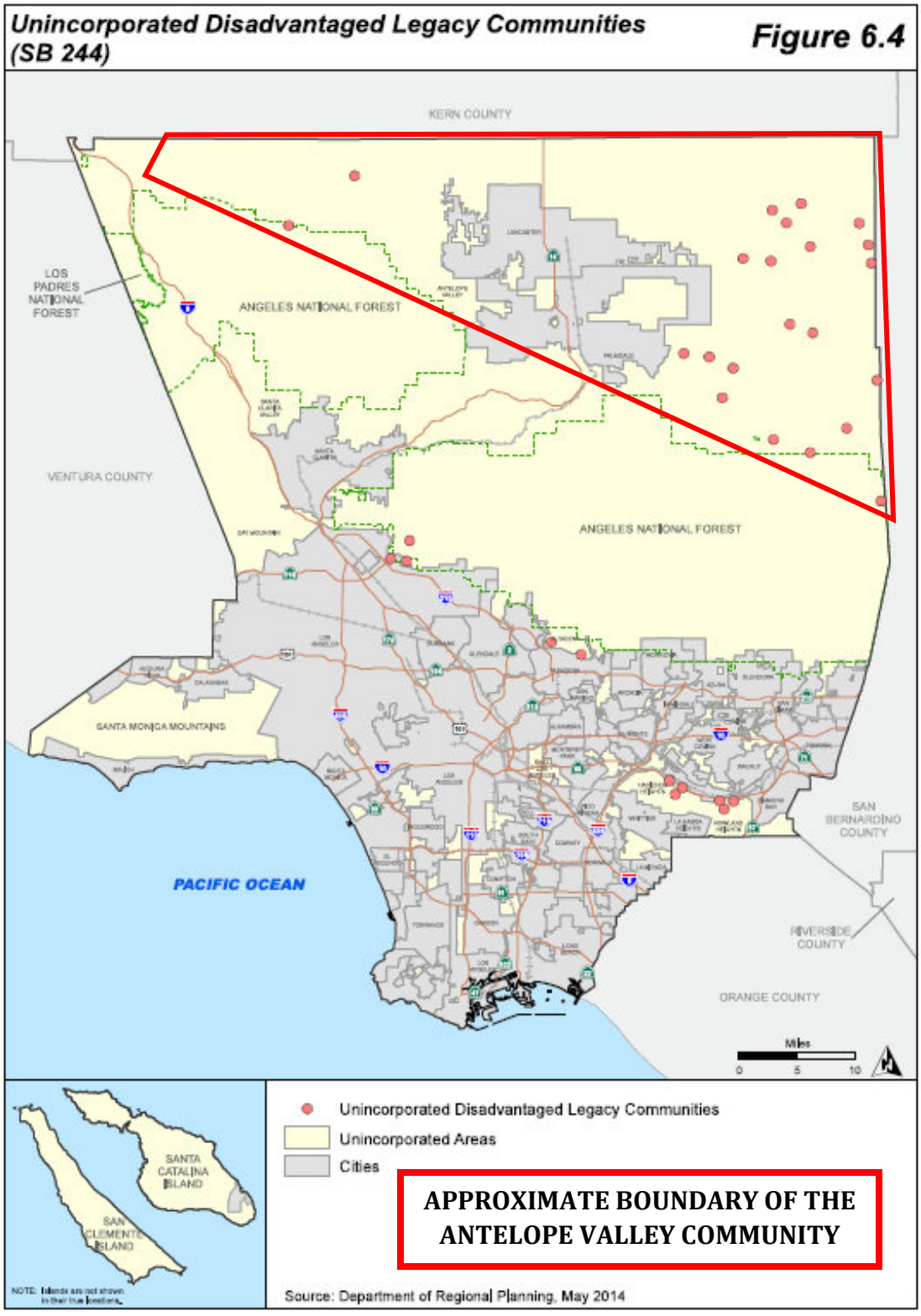
The boundaries of the Antelope Valley Community encompass the residents that have the highest PM10 and PM2.5 exposure burden from anthropogenic and non-anthropogenic area sources. These boundaries were established based on the District's assessment of likely mobile and stationary area source locations, soil erodability indices, land use characteristics, and meteorological data. The District acknowledges that this boundary encompasses a large area, but this is necessary because of the unique characteristics which create health burdens in areas that are not immediately adjacent to area sources of ambient particulate.

DATA SOURCES FOR EXPOSURE BURDEN ASSESSMENT

The data resources relied upon to assess exposure burden within the Antelope Valley Community include CalEnviroScreen, SB 244 Disadvantaged Legacy Community data, ambient monitoring data, meteorological data, health indicator data, soil erodability data, CalTrans traffic data and additional data assembled from a variety of historical records.

Disadvantaged Legacy Communities under SB 244: SB 244 mandates the identification of disadvantaged unincorporated communities (referred to as "legacy Communities") where the lack of public and private investment threatens the health and safety of the residents of these communities and fosters economic, social, and educational inequality. In accordance with SB 244, the County of Los Angeles mapped Disadvantaged Unincorporated Legacy Communities and identified these Legacy Communities in the recently adopted County General Plan. The map is provided in Figure 2 and has been edited slightly to show the approximate boundaries of the Antelope Valley Community. As indicated in Figure 2, the Antelope Valley Community encompasses numerous Disadvantaged Legacy Communities.

FIGURE 2. DISADVANTAGED LEGACY COMMUNITIES IN THE ANTELOPE VALLEY.



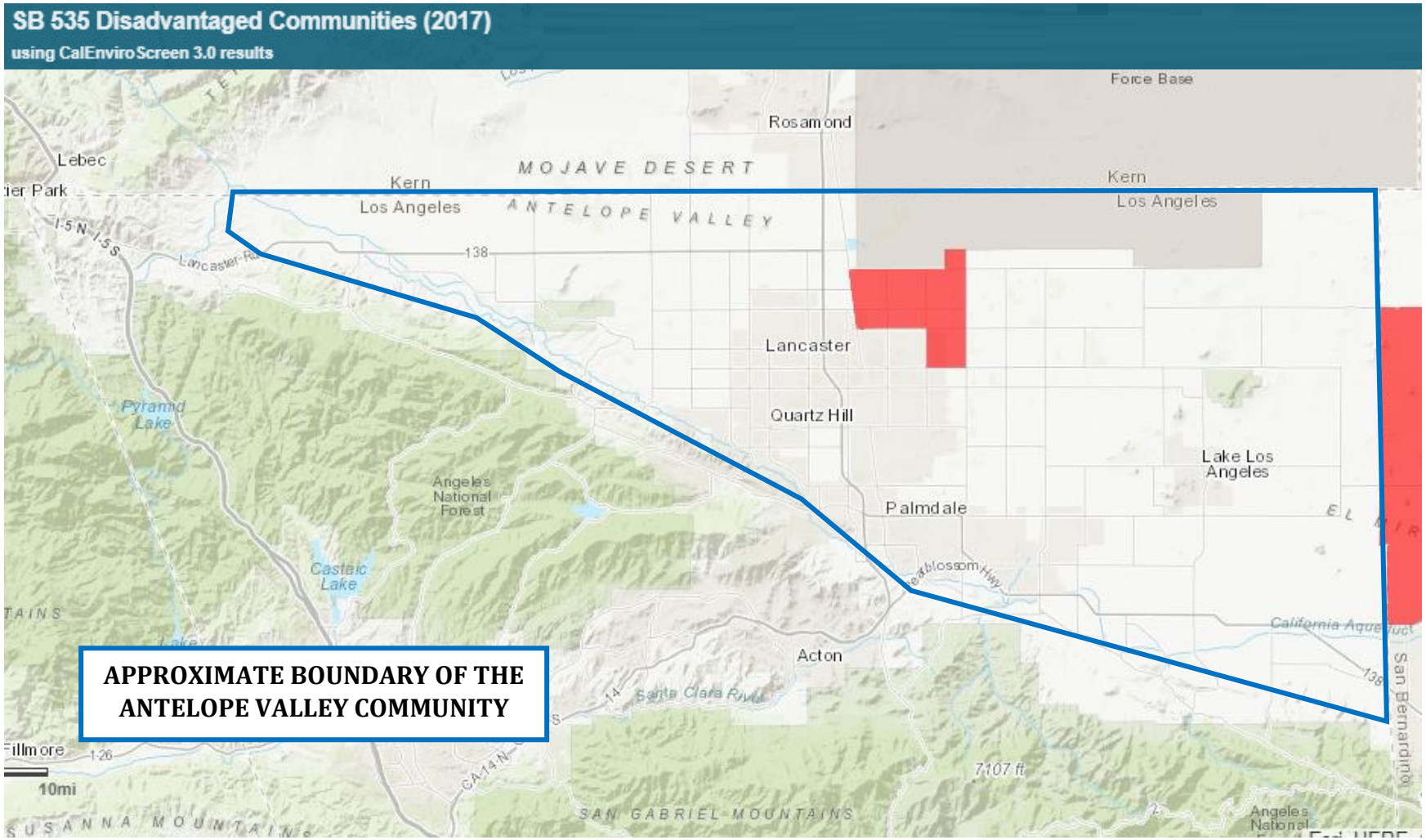
CalEnviroScreen: California state law defines environmental justice to mean "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies." Environmental justice principles are an important part of State's goal to restore, protect and improve the environment, and to ensure the health of people, the environment and the economy. CalEnviroScreen is a mapping tool developed to identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. A screenshot of CalEnviroScreen 3.0 results are provided in Figure 3 which has been modified slightly to show the approximate boundaries of the Antelope Valley Community. As indicated in this figure, the heart of the Antelope Valley Community is a disadvantaged area where residents are deemed "especially vulnerable to pollution's effects".

Ambient Monitoring Data: Within the Antelope Valley Community, the AVAQMD maintains and operates one ambient monitoring sampler that collects and reports PM10 and PM2.5 concentrations. The sampler is located within the City of Lancaster and is surrounded by urban development which, to some extent, shields the monitoring station from windblown dust that occurs in the greater Antelope Valley Community outside the urban core. Nonetheless, it is not uncommon for the ambient sampling equipment in Lancaster to detect PM2.5 levels exceeding the 35 $\mu g/m^3$ Federal 24-hour AAQS. However, there is insufficient data from this monitoring station to evaluate the data in terms of the California PM2.5 AAQS. The fact that the data collected from this monitoring station reveals high ambient particulate levels despite potential shielding provided by surrounding urban development is the primary reason that AVAQMD is proposing a broader PM2.5 and PM 10 monitoring program within the Antelope Valley Community under the CAPP program.

Health Indicator Data: The impetus for the AVAQMD's proposed PM2.5/PM10 monitoring effort under the CAPP is provided by extensive health indicator data supplied by the Los Angeles County Department of Public Health and the UCLA Center for Health Policy Research (both of which are cited herein). Data from these sources reveal that a uniformly high frequency of Valley Fever and childhood asthma occur throughout the Antelope Valley Community. This information (reconciled with wind data and other anecdotal evidence) indicates that ambient dust problems are not constrained to only certain neighborhoods, and it supports the AVAQMD's conclusion that PM2.5 and PM10 monitoring under the CAPP should not be conducted in a fragmented manner in only certain neighborhoods, rather it should be conducted across the Antelope Valley Community *as a whole*.

CalTrans traffic data: Information provided by the California Department of Transportation reveals that the peak daily vehicle trip rate along the southern boundary of the Antelope Valley Community exceeds 110,000; this rate has climbed over the last 10 years[19]. The AVAQMD seeks to explore whether this contributes appreciably to PM10 and PM2.5 levels.

FIGURE 3. CALENVIROSCREEN 3.0 DATA FOR THE ANTELOPE VALLEY COMMUNITY.

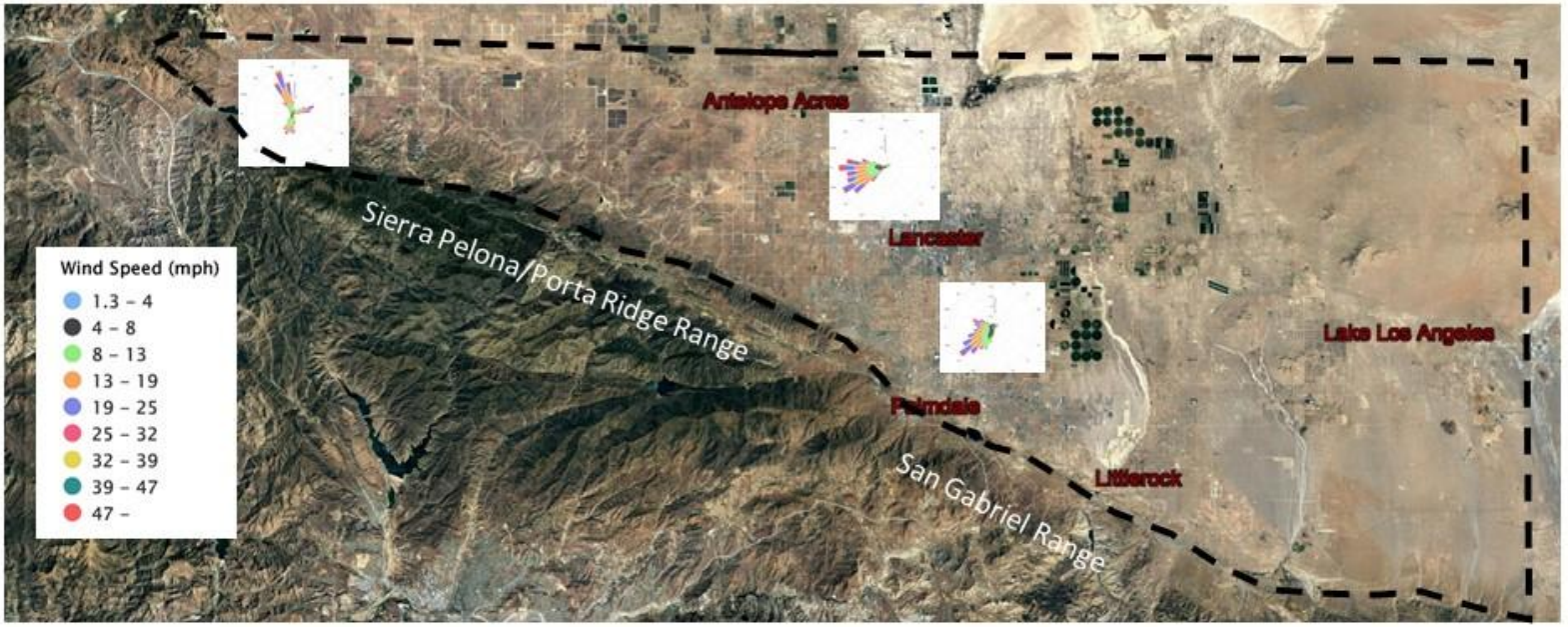


Meteorological Data: Several meteorological stations located within the Antelope Valley Community provide extensive historic wind data. Average windspeed and direction data from these resources for the time period between 2010 and 2018 is provided in a "windrose" format in Figure 2. These data reveal that the Antelope Valley Community experiences nearly constant winds exceeding 15 miles per hour and frequently experience significant (> 25 miles per hour) wind events. In the western portion of the Antelope Valley Community, significant wind events occur from nearly all points of the compass. In the east, high winds from the southwest and northwest predominate, though significant wind events from the east and north east are common. Rapid directional shifts during high wind events also occur in the Antelope Valley Community, as evidenced in the chart included at the bottom of figure 2 which reports windspeed and direction at Fox Airport in April of 2013. This chart shows that 25 mph easterly winds quickly shift to 25 mph westerly winds within just a few hours. Because of the high windspeeds and frenetic directional profiles within the Antelope Valley Community, the AVAQMD suspects that particulate entrained on the west side of the Antelope Valley Community can cause high ambient particulate levels on the east side and vice versa; the AVAQMD seeks to confirm this through implementation of a CAPP monitoring program.

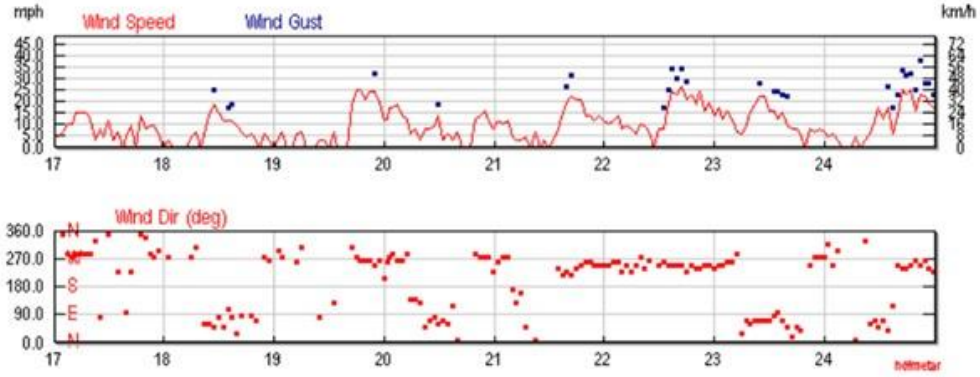
Soil Erodability Data: Wind erodability data for the Antelope Valley that has been compiled by the US Department of Agriculture indicate the areas within the Antelope Valley Community having soils with a high "erodability index" (established based on tons per acre per year). These data (available in map format as depicted in Figure 3) will be used by the AVAQMD to inform locational decisions for placement pf PM2.5 and PM10 sampling equipment in the Antelope Valley Community.

Additional Data: Windblown particulate is common in the Antelope Valley Community and has been well documented for nearly a century. A 1970 soil survey of the Antelope Valley conducted by the U.S. Department of Agriculture reports "Soil blowing is a hazard in all parts of the Antelope Valley area"[20]. A 1990 article in the Los Angeles Times reports that development occurring in the western portion of the Antelope Valley Community continually blanketed the east side with dust for days.[21] In 1991, the US Department of Agriculture Soils Conservation Service launched a program to stabilize windblown particulate from thousands of acres of land in the Antelope Valley that reduced visibility at Edwards Air Force Base, scoured painted surfaces and landscaping in the area, and caused numerous traffic accidents on area roads[22]." A detailed study conducted by the Department of Defense in 1963 reports "The incidence of sand and dust storms is directly related to the occurrence of winds of appreciable velocity". It goes on to report that, over a 10-year period the mean number of days when visibility was less than a mile due to blown dust at Muroc Air Base (now Edwards Air Force Base) was 0.4 per month and that records collected in Palmdale from 1948 to 1953 show an average of 6 dust storms per year[23].

FIGURE 4. ANTELOPE VALLEY COMMUNITY WINDROSE DATA

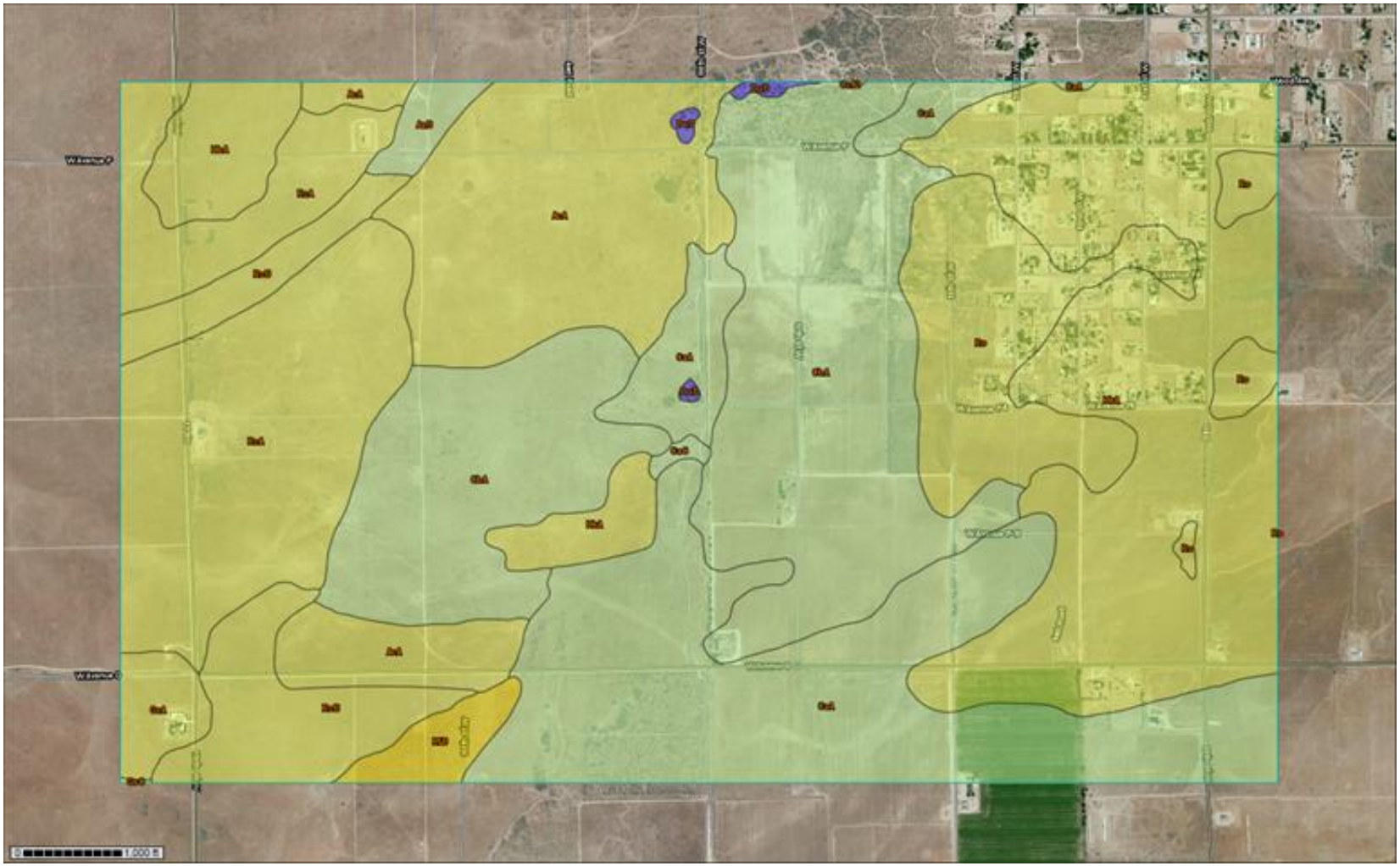


Weather Data from the William J Fox Field Airport for April, 2013



Data taken from www.wunderground.com

FIGURE 5. SOIL ERODABILITY MAP FOR A SMALL AREA WITHIN THE ANTELOPE VALLEY COMMUNITY.



Indication of wind erodibility index (tons/acres/year): 56 (yellow), 86 (light yellow), 134 (light green), 250 (dark blue). Data was obtained from the USDA websoilsurvey database

Recent events reveal that windblown particulate exposure problems continue to exist. In April, 2013 windblown dust reduced visibility to such an extent that it caused nine different traffic collisions on the 14 freeway within the Antelope Valley. Numerous sources of these dust events are well documented; wind blowing from the east over farmland and even construction sites can generate such dust clouds that visibility is limited on neighborhoods to the west, and even cause visibility problems on portions of Air Force Plant 42. Particulate entrained by westerly winds blowing over solar farm developments and construction sites on the west side can completely block the view of the nearby Tehachapi Mountains (shown in the photograph on the cover of this submittal). The AVAQMD seeks to explore the extent to which such dust events create PM2.5 and PM10 exposure burdens within the Antelope Valley Community.

CRITERIA RELIED UPON TO PRIORITIZE COMMUNITIES

The District is proposing only one project for the CAPP program, and it involves a single community (the Antelope Valley Community). Therefore, it is not necessary for the District to prioritize the communities within the region.

CANDIDATE COMMUNITIES WITH EXPOSURE BURDENS.

The District has identified only the Antelope Valley Community as a single community that has high cumulative exposure burdens; the Antelope Valley Community is described above.

PUBLIC OUTREACH APPROACH AND SCHEDULE

The District has already initiated public outreach on this project, and it will continue such activities throughout 2018. The District's outreach approach is founded on 1) Discussions and communications with members of local neighborhood councils who are elected by rural residences within the Antelope Valley Community; 2) Stakeholder meetings with the city officials from Lancaster and Palmdale; 3) Discussions with local dust control groups including the Antelope Valley Resource Conservation District and the Antelope Valley Dust Control Group; 4) Meetings with County health officials and local school districts. These meetings and discussions will be convened for the purpose of pinpointing specific areas within the community where notable particulate-related respiratory insults frequently occur, "mapping" where these areas overlay sensitive receptors within the Antelope Valley Community, identifying the most appropriate sampling locations and equipment, and soliciting recommendations regarding data display and inventory reporting methodologies to ensure that the data is publicly available in a format that is most useful to residents and public officials. The tentative schedule for this outreach effort is summarized in Table 1.

TABLE 1. PUBLIC OUTREACH SCHEDULE FOR THE ANTELOPE VALLEY COMMUNITY CAPP PROGRAM.

MAY	Make a presentation and solicit input at the regularly scheduled meeting of the Association of Rural Town Councils
	Make a presentation and solicit input at the regularly scheduled council meeting convened by the City of Lancaster
	Make a presentation and solicit input at the regularly scheduled council meeting convened by the City of Palmdale
	Convene discussions with officials from the Los Angeles County Health Department regarding neighborhood-based health statistics that pertain to ambient particulate-related health concerns.
JUNE	Convene meetings and discussions with the Antelope Valley Resource Conservation District to gather input and acquire soil erodability maps of the Antelope Valley to pinpoint likely particulate entrainment areas.
	Convene meetings and discussions with the Antelope Valley Dust Control Group to gather input and assess appropriate sampling and data collection methodologies to maximize the scope, extent, and quality of the particulate data that will be collected.
	Convene meetings and discussions with local City, County and District officials to identify appropriate and secure sampling locations within the Antelope Valley Community.
	Meet with the Antelope Acres rural council (in the west Antelope Valley)
	Meet with the Lake Los Angeles rural council (in the east Antelope Valley)
	Meet with the Littlerock rural council (located in the south Antelope Valley) Meet with other community councils that express an interest in participating,
	Provide a progress report and solicit additional input at the regularly scheduled meeting of the Association of Rural Town Councils
	Provide a progress report and solicit additional input at the regularly scheduled council meeting convened by the City of Palmdale
	Provide a progress report and solicit additional input at the regularly scheduled council meeting convened by the City of Palmdale
JULY	Convene a meeting with the Antelope Valley Resource Conservation District and the Antelope Valley Dust Control Group to finalize the proposed sampling program (including methodologies, data quality objectives, and quality assurance planning) and particulate data reporting platforms for public access.
	Convene meetings and discussions with local City, County and District officials to finalize the proposed sampling program and the particulate data reporting platforms that will be provided by AVAQMD for public access.
	Present the proposed sampling program and the particulate data reporting platforms for public access at the regularly scheduled meeting of the Association of Rural Town Councils and solicit final input regarding same.

THE DISTRICT'S RELATIONSHIP WITH COMMUNITY MEMBERS AND COMMUNITY-BASED ORGANIZATIONS

The District has established meaningful relationships with the neighborhoods and localities that comprise the Antelope Valley Community and with residents and community-based organizations that have striven to address particulate concerns for decades. These groups support the AVAQMD's CAPP Proposal effort and are identified below. Many have agreed to provide letters of support (some of which are included in Attachment A). However, and due to time constrains, some letters are not yet completed. Additional letters received in future shall be provided to the Air Resources Board in a supplemental package.

The Association of Rural Town Councils:

The Association of Rural Town Councils is an affiliation of rural town council groups from the northern portion of unincorporated Los Angeles County that work together to address issues and develop collaborative solutions to matters of concern to the Antelope Valley Community. The Association of Rural Town Councils is partnering with the AVAQMD on the CAPP monitoring program proposal.

The Los Angeles County Department of Public Health

The Los Angeles County Department of Public Health ("DPH") strongly supports the AVAQMD's proposed CAPP effort and provided the fundamental health data and "health indicator" statistics upon which the AVAQMD's proposal is founded. The AVAQMD and the DPH will continue to collaborate on the CAPP effort to ensure a comprehensive, health-based monitoring program is developed.

The City of Lancaster

The City of Lancaster is one of two incorporated Cities within the Antelope Valley Community under the jurisdiction of the AVAQMD. The City of Lancaster has two seats on the AVAQMD Governing Board. Currently the Vice Mayor of Lancaster serves as the Chairman of the AVAQMD Governing Board. The City of Lancaster produces more solar power per capita than any other city in the state. Lancaster also changed its building code to require that new homes include rooftop solar to demonstrate the local governments are making real efforts to address climate change. Lastly, Lancaster is home to the BYD electric truck and bus factory and has committed to have the 75-bus fleet of the Antelope Valley Transit Authority operate all electric buses by the end of 2018.

The City of Palmdale

The City of Palmdale is one of two incorporated Cities within the Antelope Valley Community under the jurisdiction of the AVAQMD. The City of Palmdale has two seats on the AVAQMD Governing Board. Currently a Councilman from Palmdale serves as the Vice Chairman of the AVAQMD Governing Board. Palmdale is home to Kinkisharyo the #1 supplier of low-floor light rail vehicles in North America

The Antelope Valley Resource Conservation District

Resource Conservation Districts began in the 1930's when the problem of soil erosion in the United States became so severe that President Roosevelt introduced the Standard State Conservation District Law to combat the degradation of the country's land resources. Resource Conservation Districts are local government bodies, chartered by the state and organized and operated by local farmers, ranchers and interested citizens. The Antelope Valley Resource Conservation District is managed by 5 non-salaried directors who are land users and familiar with local resource problems.

The Antelope Valley Dustbusters Taskforce

The Antelope Valley Dustbusters Taskforce is a locally-based, multi-agency working group that was organized and convened to formulate dust mitigation strategies. The Taskforce consists of local farmers, representatives from academia, private consulting companies and research institutes, the California Air Resources Board, the Antelope Valley AQMD, the Natural Resources Conservation Service, the Antelope Valley Resource Conservation District, the Desert Mountain Resource Conservation and Development Council, the Southern California Edison Company and many others.

The Partners for Fugitive Dust/ Valley Fever in the A.V.

The Partners for Fugitive Dust/ Valley Fever in the A.V. is an Antelope Valley grassroots organization with a mission to decrease fugitive dust through translation of scientific research to real world application. In addition. fugitive dust work Partners has expended their efforts provide awareness for Valley Fever. In 2017 Partners sponsored the first annual AV Valley Fever Walk to share valuable information and raise funds for valley fever research.

Save Our Rural Town:

Save Our Rural Town is a grassroots organization formed to protect rural communities and preserve the rural form within the County of Los Angeles. Among other things, Save Our Rural Town has collaborated with the AVAQMD, the City of Lancaster, and the County of Los Angeles in the implementation of site specific dust control measures on solar farm development projects within the Antelope Valley Community. Save Our Rural Town members are located throughout the Antelope Valley and beyond.

CONCLUSION

The District looks forward to the opportunity to participate in the CAPP Program and through such efforts, shed more light on ambient particulate levels within the Antelope Valley Community as a necessary first step in addressing broader health concerns in the area.

END NOTES

[1] Emphysema/COPD is a top cause of death in the Antelope Valley portion of Los Angeles County, claiming 58.9 lives per 100,000 which is more than double the county-wide death rate [page 24 of the Los Angeles County "Key Indicators of Health" Report published by the LA County Department of Public Health: http://publichealth.lacounty.gov/ha/docs/2015LACHS/KeyIndicator/PH-KIH_2017-sec%20UPDATED.pdf]). According to the CDC, this morbidity rate is among the highest in the Country [see https://www.cdc.gov/copd/data.html].

[2] According to health statistics reported by the UCLA Center for Health Policy Research [http://askchisne.ucla.edu/ask/_layouts/ne/dashboard.aspx#/], the incidence of childhood asthma across all zip codes in the Antelope Valley Community uniformly exceeds 15%, and can be as high as 16.5%. When reconciled with current population data, the overall incidence of childhood asthma in the Antelope Valley Community is 15.4% which is substantially higher than the Los Angeles County Average of 13.1% reported by the UCLA Health Policy Research Center. The Los Angeles County Department of Public Health reports that 72% of children with asthma that live within the Antelope Valley Community regularly miss school [http://publichealth.lacounty.gov/docs/HealthNews/Child_Asthma_2014.pdf]

[3] The LA County Department of Public Health reports that 591 cases of Valley Fever were occurred in the Antelope Valley Service Planning Area between 2011 and 2015 ["Valley Fever Overview – What we Know and Don't Know" Presentation by the Los Angeles County Department of Public Health to the AVAQMD in 2018]; this is 29% of the 2,032 cases that the LA County Department of Public Health reported in Los Angeles County between 2011 and 2015 (*ibid*). The California Department of Public Health reports Valley Fever incidence statistics by County, and between 2013 and 2015, the number of Valley Fever diagnoses in Los Angeles County was second only to Kern County: [https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/YearlySummRptsofSelectedGenCommDisinCA2011-2015.pdf#page=38]

[4] The LA County Department of Public Health estimates 853 Valley Fever cases were diagnosed in 2017 (ibid), Assuming 29% were in the Antelope Valley (as noted above), and reconciling this with the 396,357 population of the Antelope Valley portion in LA County [http://publichealth.lacounty.gov/ha/docs/2015LACHS/KeyIndicator/PH-KIH_2017-sec%20UPDATED.pdf] yields an estimated incidence rate of 62 cases per 100,000.

[5] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3958649/.

[6] The Federal Environmental Protection Agency reports "Epidemiological panel studies exploring the potential relationship between daily particle pollution levels and respiratory effects in people with COPD reported increased symptomatic response, increased use of evening medication (winter time), and small decrements in spirometric lung function in the days immediately following elevated particle pollution (PM10 and PM2.5) levels" [https://www.epa.gov/particle-pollution-and-your-patients-health/health-effects-pm-patients-lung-disease#copd]

[7] https://ehp.niehs.nih.gov/wp-content/uploads/124/12/EHP92.alt.pdf .

[8] The Federal Environmental Protection Agency reports "In general, epidemiologic data provide substantial evidence for the association between particle pollution exposure and adverse effects in individuals with allergies and asthma, as assessed by frequency and severity of respiratory symptoms, pulmonary function changes, medication use, and ambient particle pollution levels. There is evidence that both the development of asthma and its exacerbation can be associated with particle pollution exposure"[https://www.epa.gov/particle-pollution-and-your-patients-health/health-effects-pm-patients-lung-disease#copd]

[9] Page 7 of the California Air Resources Board titled "Assessment of California's Statewide Air Monitoring Network for the Children's Environmental Health Protection Act (SB 25)" found here: https://www.arb.ca.gov/ch/programs/sb25/adequacyreport.pdf . Notably, this report concludes that ambient PM10 and PM2.5 levels can be adequately predicted in areas that do not have monitors by using data from the closest established monitoring station, ad it also concludes that little variations are found in "Community-to-Community" comparisons of ambient particulate levels. However, these conclusions are only applicable to the urban areas that were considered in the studies reported therein; they do not apply to areas like the Antelope Valley that experience frequent and significant dust storm episodes resulting from high wind events that entrain particulate released from area sources that are a thousand acres or more in size and which only have a single monitoring station located in the middle of a city.

[10] Coccidioidomycosis (Valley fever) is an infectious disease acquired by inhalation of soil-dwelling Coccidioides fungus spores [https://wwwnc.cdc.gov/eid/article/21/11/15-0129_article]; these spores are common in the Antelope Valley.

[11] PM2.5 area designations for the National AAQS are mapped here: https://www.arb.ca.gov/desig/adm/2015/fed_pm25.pdf

[12] PM2.5 area designations for the California AAQS are mapped here: https://www.arb.ca.gov/desig/adm/2015/state_pm25.pdf

[13] PM10 area designations for the National AAQS are mapped here: https://www.arb.ca.gov/desig/adm/2015/fed_pm10.pdf

[14] PM10 area designations for the California AAQS are mapped here: https://www.arb.ca.gov/desig/adm/2015/state_pm10.pdf

[15] Page 8 of Los Angeles County Department of Public Health "Key Indicators of Health" Study [http://publichealth.lacounty.gov/ha/docs/2015LACHS/KeyIndicator/PH-KIH_2017-sec%20UPDATED.pdf]

[16] Ibid

[17] Ibid

[18] See https://www.kff.org/other/state-indicator/population-above-and-below-100-fpl/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

[19] See Caltrans trip count data provided here: http://www.dot.ca.gov/trafficops/census/

[20] Page 110 of the report found here: https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/antelopevalleyCA1970/antelopevalleyCA1970.pdf]

[21] http://articles.latimes.com/1990-08-24/local/me-1242_1_antelope-valley-residents

[22] Results reported on Page 113 of the 1993 Proceedings from the "Wildland Shrub and Arid Land Restoration Symposium" convened in Las Vegas, Nevada October 19-21.

[23] http://www.dtic.mil/dtic/tr/fulltext/u2/417036.pdf

Reyna Soriano

From: Karen <karen@hdeci.com>
Sent: Saturday, March 26, 2022 4:42 PM
To: Reyna Soriano
Subject: Comment - Garbage Disposal Districts
Attachments: Truck Dust - on a damp day.jpg

CAUTION: External Email. Proceed Responsibly.

I am writing in regards to the **Initial Study/Negative Declaration Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts**.

I can't help but feel that whoever wrote this "study" doesn't really understand the dynamics of the Antelope Valley. Aside from the Quartz Hill Service Area we are talking about roughly 1800 square miles of mostly well spaced out large single family residences. To suggest the addition of up to Six ADDITIONAL Trucks - trucks collecting refuse, trucks collecting recyclables, trucks collecting organic waste, trucks collecting bulky items, and trucks collecting illegal dumping, and trucks collecting manure - won't have an impact on our properties and communities is simply ludicrous.

3.1 Aesthetics

To state there will be **No Impact** is false. There are numerous hills (outside of of "publicly accessible vantage points") and vast expanses of "natural" flat land that can be viewed by simply looking. You don't need a public access point to enjoy the views in the Antelope Valley. All of these extra oversized trucks will definitely cause visual pollution on a predominantly raw landscape.

3.3 Air Quality

To state there will be a **Less Than Significant Impact** indicates the person writing this study analysis does not know the Antelope Valley. Most of the roads to rural residences are dirt roads. There will be a significant increase in dust from all the additional trucks. (see attached image from my trash collection of just one truck) Additionally, the Antelope Valley has an extremely high incidence of coccidioidomycosis (Valley Fever) carried in disturbed dust. There is no discussion in this study of this significant impact to the residents of the Antelope Valley.

3.7 Geology and Soils

Multiple big heavy trucks driving on dirt roads will most definitely have an impact in creating ruts. Ruts that can fill with water create erosion rivers that can destroy private property with run off.

3.9 Hydrology and Water Quality

As stated above in Geology and Soils, multiple trucks on primarily dirt roads WILL cause ruts which will lead to water pooling or water running off causing erosion**.** The Antelope Valley has a history of very bad pot holed roads because of the loose sandy soil which they build on. Add rain (liquefaction) and the weight of the trucks and the roads will degrade even faster**.**

3.13 Noise

The noise generated by these trucks is definitely not "less than significant". Because of its rural sparseness, most of the Antelope Valley is very quiet. On trash day I can hear the truck coming from more than 1/2 mile away. Multiply that by all the extra trucks and you have a significant increase in noise pollution. Combine that with the fact that some of the trucks begin picking up before 7am it is a noise polluting wake up call.

3.17 Transportation

As stated previously much of the Antelope Valley is rural isolated farm residences, many located off main roads. The Antelope Valley has a high accident rate on these rural roads. Adding numerous additional trucks, traveling at slow speed with unpredictible stops, WILL increase the accident rate which will be directly attributable to trying to get around these large trucks.

3.21 Mandatory Findings of Significance

b) The cumulative impacts mentioned above do have a significant cumulative impact. Additionally, adding up to 5 more very large trucks will degrade our roads creating safety hazards for motorists .

There has to be a better, more efficient way to meet the state mandate. Adding more trucks is truly inappropriate on so many levels.

Thank you for your consideration.

Karen Bryan



Attachment F2

Recirculated IS/ND Comment Letters

From: Russ Fawkes <refawkes@gmail.com>
Sent: Sunday, June 12, 2022 4:43 PM
To: David Coscia <DCOSCIA@dpw.lacounty.gov>
Cc: clunetta@signalscv.com
Subject: GDDs Notice of Intent, Recirculated Negative Declaration - Acton, Agua Dulce, Quartz Hill, eastern and western Antelope Valley

Mr. Coscia,

It is the epitome of bureaucratic arrogance to expect the general public to understand the jargon and convoluted department-speak of your declarations and notices. My wife and I are college graduates with additional graduate school backgrounds. We have separately reviewed your docs and have no idea what you're saying.

In Acton and Agua Dulce, unfortunately, we no longer have The Country Journal to explain complex issues for the layman.

It would be most beneficial if you were to either send out an explanation of what you are trying to accomplish in plain English, or communicate with The Signal, the Santa Clarita newspaper to allow one of their reporters to put this into language that we can understand.

Everyone knows that the current monopoly that is held by Waste Management is a problem, It's hard to tell if what you're disseminating is a solution or just unintelligible words.

Thank you.

Russ Fawkes
Acton, CA

Reyna Soriano

From: Annamarie <annmusky@aol.com>
Sent: Wednesday, June 15, 2022 3:28 PM
To: Reyna Soriano
Subject: GARBAGE DISPOSAL DISTRICTS qustion

CAUTION: External Email. Proceed Responsibly.

Ms. Reyna Soriano, Civil Engineer, (626) 458-5192)

Notice of Intent, no mention of cost.
Recirculated Negative Declaration, too long to read and really understand.

I know this has been presented before and been rejected by the community, since the cost would be put on property taxes. Correct?

Information should be made clearer to the people, in a simpler from.

I want to present the information so it can be understand. Can you possible provide a simpler announcement?

Annamarie, Concerned Citizen of Littlerock
(Formerly of Littlerock Town Council)

Reyna Soriano

From: Nicole Schoolcraft <nicoleschoolcraft@icloud.com>
Sent: Wednesday, June 15, 2022 4:08 PM
To: Reyna Soriano
Subject: Garbage disposal districts

CAUTION: External Email. Proceed Responsibly.

Hello! Questions sorry lots of big words, let's be honest.
My question is, I have a dumpster, will I be paying this fee plus fees will be added to my taxes?
And how I read it, this is for recycling green waste, etc that they removed from my house years ago and do not collect even before I moved to the dumpster.
Can you confirm the amount added to our taxes? I couldn't locate that (sorry if I missed it)

Thank you for your time and response

Nicole Schoolcraft
(Sent from my iPhone)

Reyna Soriano

From: Don Laird <rte248@yahoo.com>
Sent: Thursday, June 30, 2022 7:12 PM
To: Reyna Soriano; Acton Town Council; Jacki Ayer; Pam Wolter
Subject: GDD for Acton
Attachments: 2022-6-28_GDD letter.pdf

CAUTION: External Email. Proceed Responsibly.

Ms. Soriano,

Please see the attached document. This is my response to Public Work's proposal of garbage pick-up in Acton made on Monday, June 27th at the Acton Town Council.

Thank you
Don Laird
rte248@yahoo.com

At the ATC's last meeting, on Monday June 27th, representatives from LA County's Public Works made a presentation concerning their proposals on garbage collection for Acton. In their presentation there was a discussion concerning use of trash collection trucks on public use dirt roads. It was Public Work's position EVERY resident on the public use dirt road is required to sign off an agreement stating they will coat the road to lessen the dust that could be caused by the trash trucks. Failure to get EVERY resident to agree and pay for this coating will cause all residents to transport their trash to a central collection point at a county-maintained road for pickup. Neither of these solutions are workable.

Hubbard Road is a dirt road that leaves County maintained Escondido up by 14 Freeway and connects with Escondido again approximately 5 miles later just outside the town of Acton. Hubbard is the main feed line for our neighborhood but is not the only public use dirt road.

Using Google Maps, I have found approximately 35 homes off of Hubbard. Like a family tree, there are many branches coming off of Hubbard in its journey back to Escondido, just outside the town of Acton.

Ranchitos -feeds off of Hubbard and has 12 homes

Rainbow Glen feeds off Ranchitos, which feeds off Hubbard - it has 3 homes

Bahmer Ranch feeds off Hubbard - it has no homes

Margarita Hills feeds off Bahmer Ranch, which feeds of Hubbard and has 7 homes

Carmach CT feeds off Margarita Hills, which feeds off Bahmer Ranch, which feeds off Hubbard, and it has 1 home

Hawley Road feeds off Margarita Hill Dr and Hubbard Road and has 1 home

Upper Youngs Canyon feeds off Hubbard and has 2 homes

Meritt Rd. feeds off Hubbard and has 3 homes

Ave W-14 feeds off Meritt Rd. which feeds off Hubbard and has 6 homes

Jones Canyon feeds off Ave. W-14, which feeds off Meritt Rd, which feeds off Hubbard and it has 1 home

Ave X feeds off Meritt Rd, which feeds off Hubbard and it has 7 homes.

Hubbard will eventually turn into a county-maintained road a mile or two before it re-connects with Escondido outside Acton.

The County's position is their trucks will not use Hubbard and therefore any road that feeds off Hubbard, unless EVERY resident signs and pays for Hubbard and their assigned road to be coated to lessen the dust. In our neighborhood we would need to get 83 residents, on 12 dirt roads, to sign and pay for their road and Hubbard to coated. We would also have to get these 83 homes to agree on how to share the cost since we have about 11 homes within 3/4 of a mile from Escondido and many times that number literally miles from Escondido. Those close to Escondido will balk at paying a much higher cost to coat a

road that is miles from their house when they are only 3/4 of a mile from Escondido. With 11 feeder dirt roads coming off of Hubbard the cost will be prohibited at best.

If we are unable to get all 83 homes to agree to pay for the coating and maintaining of the roads, the counter solution from Public Works is for residents to haul their own trash to a County maintain road (Escondido on the west or Escondido on the North). If this is the solution, then we will have approximately 249 trash containers (83 homes with 3 containers) on Escondido. Then we will add the yard bins for horse manure. I would guess ownership of horses on Hubbard is almost 50% which would equate to about 41 bins of manure with 249 trash containers. Add in the 4 allowances for large item pick-up, such as old couches, mattresses or large appliances, then we could have 249 trash containers, 41 large bins of manure and assorted refrigerators, couches or old chairs on Escondido.

Metal bins for the collection of horse manure - how does the County expect residents to take a bin, weighing hundreds of pounds, to a collection point possibly miles from their house? When I moved to Acton in 1988, the neighborhood surrounding Hubbard was filled with young families looking for a better life. Those children have grown and with few exceptions, our neighborhood is a collection of retirees. How can you expect to have people who are 60 plus, to lift and carry full trash bins to a collection point up to several miles away? It is not only unfair but cruel.

Remember, Escondido is an escape route for a backed up 14 Freeway. What do you think will happen if someone drives by on their way home and notices this unsightly collection of trash? It is reasonable to believe Escondido will become a dumping ground for others. Who would notice another couple of bags of trash in the middle of this mess?

The crows will quickly find this unsightly collection and make it part of their feeding pattern. With strong wind gusts, a common occurrence during the afternoon hours in Acton, trash from the garbage bags opened by the crows, will spread out. This will not only be unsightly but dangerous to our wildlife.

As for the environment, instead of having 1 or possibly 2 trucks a week collecting the trash, you will have 83 homes making multiple trips to drop off and pick up their bins. The county will trade 1 truck for 166 car/pick-up trips - this will not lessen our carbon footprint.

Hubbard is a feeder line for our neighborhood. We have over a hundred trips made by residents on a daily basis on Hubbard and the feeder routes off Hubbard. We also have UPS, Fed, Amazon, plumbers, construction, Waste Management trash collection trucks and other business trucks using Hubbard. I cannot comprehend that the County could not get approval for the use of trucks on a public use dirt road like everyone else.

There is a better solution for everyone, we just have to keep searching.

Thank you

Don Laird

7050 Ranchitos Drive

rte248@yahoo.com

Reyna Soriano

From: Steve Milewski
Sent: Monday, July 4, 2022 4:56 PM
To: ramiller@telwest.com
Cc: David Coscia; Reyna Soriano; Ebigalle Voigt
Subject: RE: New GDDs

Mr. Miller,

Thank you for your comments. I am forwarding them to our environmental team.

Steve Milewski
Senior Civil Engineer
Los Angeles County Public Works
Office: (626) 458-3573

-----Original Message-----
From: ramiller@telwest.com <ramiller@telwest.com>
Sent: Sunday, July 3, 2022 8:32 AM
To: Steve Milewski <smilewski@dpw.lacounty.gov>; David Coscia <DCOSCIA@dpw.lacounty.gov>
Subject: New GDDs

CAUTION: External Email. Proceed Responsibly.

Gentlemen, could you please provide what type of dust mitigation and attestation will be acceptable for residences located on private dirt roads.

Sincerely,

Robert Miller
Acton, Ca

Reyna Soriano

From: John Goit sr <johngoitsr@yahoo.com>
Sent: Sunday, July 3, 2022 1:00 PM
To: rsoria-no@dpw.lacounty.gov
Cc: Reyna Soriano
Subject: Trash district

CAUTION: External Email. Proceed Responsibly.

My home is one of only 5 on a mile of dirt road. Mine is 1 mile from a paved county road. As a retired LA County road superintendent I know what dust control measures cost. I currently grade my road to keep it in shape with my own road grader. The absentee lot owners will not help pay for dust control. Your plan is unworkable. I suggest you eliminate the recyclable truck to eliminate some dust. Folks can recycle for themselves. Organic waste is going to be the majority of all waste. Trash will now only be plastic, tin cans and other metals. Most folks out here are more concerned about more trash trucks during rainy weather tearing up our roads. I am speaking as the Vice President of Sundale Mutual water district that encompasses AVE C to Ave D, From 90th west to 80 that west and Ave A to Ave B from 80th west to 65th St west. You may call me, or e-mail me, to set up a meeting with the Sundale Board of Directors to discuss this further.

John goit , 49913 80thst west . Lancaster ca, 93536 , 661 433 4486

Reyna Soriano

From: John Parsons <jparsonsl@aol.com>
Sent: Monday, July 4, 2022 12:14 PM
To: Reyna Soriano
Subject: Fwd: Trash pickup dust issues imposed by L.A. County

CAUTION: External Email. Proceed Responsibly.

Reyna,

Sorry. I had to correct your email address.

John Parsons

John

-----Original Message-----
From: John Parsons <jparsonsl@aol.com>
To: bobjan1977@hotmail.com <bobjan1977@hotmail.com>; rsoriano@dpwlacounty.org <rsoriano@dpwlacounty.org>
Cc: 834rock@gmail.com <834rock@gmail.com>; moe1@antelecom.net <moe1@antelecom.net>; jdrake@avpress.com <jdrake@avpress.com>; olsonbarry@me.com <olsonbarry@me.com>; onephnurse@antelecom.net <onephnurse@antelecom.net>; cfandf@gmail.com <cfandf@gmail.com>; trr@posteo.net <trr@posteo.net>; jamesbridwell@yahoo.com <jamesbridwell@yahoo.com>
Sent: Mon, Jul 4, 2022 12:06 pm
Subject: Trash pickup dust issues imposed by L.A. County

To: Jan Wise (Juniper Hills Town Council) and Reyna Soriano (L.A. County Dept of Public Works):

I just read Julie Drake's article in the Sunday, 7/3/22 issue of the A.V. Press. It concerns the county's plan to force us to accept an expanded trash/garbage pickup system with multiple bins to accept different types of trash, all paid for on our property taxes. I have already expressed opposition to this as I am happy with Waste Management's service as it now exists. I am also totally opposed to vacant parcels being taxed for services that those parcels will never receive. We in this very rural area of Juniper Hills just don't need the kind of service they may need in urban or suburban Palmdale or Lancaster.

My new concern highlighted in this article is the proposal to enforce dust control standards on the private dirt roads that cover miles of access to houses in Juniper Hills. The alleged reason being is the new mandated multiple trash carts will require more waste pickup trucks going down the dirt roads, hence more dust.

For example, my house on private dirt road Ave Y-8 is over 1/4 mile from county maintained road 96th St. East. My dirt road also traverses a deep canyon. If we are unable to provide county acceptable expensive dirt road dust control, then the only option offered by the county is that I, and others on Ave Y-8, move our trash cart pickup place from the current locations near our houses to the county maintained 96th St. East and Ave Y-8 intersection. I would like to see someone from the county visit us and demonstrate pulling a loaded (100 to 200 pound) 96 gallon toter trash cart, by hand, up and down steep hills, through soft sand and over to said intersection. The only practical way to move all these carts every week would be to buy some kind of hydraulic lift on a dedicated

truck or trailer. The cost of this equipment would be prohibitive for most people and every homeowner would need to buy his own, or hire someone to move the carts over and back for them.

Actually, we have very little dust on our dirt roads due to their decomposed granite composition. Also, Waste Management trucks have used these roads for decades and the dust they create is of little consequence.

My request is that we in Juniper Hills have the option to not be included in this waste control district. Leave things as they are and let us continue to contract with Waste Management.

Jan: Has the J.H. Town Council taken a stand on this?

John Parsons
9305 East Ave Y-8
Juniper Hills, CA 93543
Tel: 661-9441569

Reyna Soriano

From: Steve Milewski
Sent: Monday, July 4, 2022 4:55 PM
To: Dick Miller
Cc: David Coscia; Reyna Soriano; Ebigalle Voigt
Subject: RE: Recirculated Initial Study/Negative Declaration regarding GDD's for North County

Mr. Miller,

Thank you for your comments. I am forwarding them to our environmental team.

Steve Milewski
Senior Civil Engineer
Los Angeles County Public Works
Office: (626) 458-3573

From: Dick Miller <rlmiller@telwest.com>
Sent: Monday, July 4, 2022 1:36 PM
To: Steve Milewski <smilewski@dpw.lacounty.gov>; David Coscia <DCOSCIA@dpw.lacounty.gov>
Subject: Recirculated Initial Study/Negative Declaration regarding GDD's for North County

CAUTION: External Email. Proceed Responsibly.

I've reviewed the IS/ND document prepared Dudek regarding the creation of four GDD areas in North L.A. County. The cost of reaching the noble objectives addressed by Dudek is glaringly absent. Starting with the IS/ND document, how much was Dudek paid by the county to prepare the study, which compared to the potential cost of the project is probably negligible. Why did county employees already on staff in the Public Works Department not prepare the report?

The project adds vehicles and employees, and other direct costs to residents that may live on private unpaved roads. Evidently the project shifts cost from a monthly bill from the trash hauler to tlhe property tax bill. The cost is an impact that should have been discussed, especially since the additional costs, no matter now paid, will be significantly more. I personally would not support the proposed project until seeing a cost estimate and cost evaluation of alternatives.

How many trash haulers are anticipated to be competing for the four franchises? In other words, will there be significant competition, or will Waste Management be the default winner of the franchises?

- How does the cost for the use of landfills factor in for competing trash haulers.

- Missing is a declaration as to the financial impact of the project.
- Do the growth estimations consider the decreasing availability of water that could significantly affect future growth, if responsible growth planning is in force.
- What do the field monitors do?
- Why was the cost and end value of recycling not evaluated?
- How many additional county employees, office and field, will be required once the project is implemented along with cost.?

Richard L. Miller
4306 E. Ave V-5
PO Box 901146
Palmdale, CA 93590

Reyna Soriano

From: Olesya Konovalova <olesya777@hotmail.com>
Sent: Monday, July 4, 2022 8:59 PM
To: Reyna Soriano
Subject: Department of Public Works (Attention Reyna Soriano)

CAUTION: External Email. Proceed Responsibly.

Hello,

I am a resident of Palmdale side of Lake Los Angeles. I protest against paying trash bill out of my taxes.

I want a referendum to let people of Palmdale and Lancaster sides of Lake Los Angeles to decide if they want you to let them touch their taxes.

I see why you are doing it. I want you instead go after landlords who harbor illegals, who dumps trash. GO AFTER LANDLORDS. Let homeowners residing in Lake LA be!

Olesya Konovalova

Reyna Soriano

From: Alec Garren <alec.garren@outlook.com>
Sent: Tuesday, July 5, 2022 11:51 AM
To: Reyna Soriano
Subject: Garbage Disposal Districts

CAUTION: External Email. Proceed Responsibly.

Hello, I am Alec Garren a resident in Juniper Hills at 29441 106th Street East. I am writing to voice my concern and disdain regarding the Garbage Disposal districts.

First, I think these are an unnecessary measure to add a layer of bureaucracy between the residents and the east management services, and I do not consent to you or any of your i invested colleagues negotiating on my behalf, telling me what I will pay, and then applying that amount to my property taxes at the risk of a lien on my real property. The ongoing overreach by the state legislature in mandating what types of disposal services are required do not require a further overreach on behalf of the county.

Second, I find the dust reduction measures, which were added due to the extra trucks, to be ridiculous, unenforceable and prohibitive for many members of the community. Expecting people to either:
A. Pay for expensive and environmentally questionable chemical treatments to reduce dust on their own private roads that are currently travelled regularly by these same garbage trucks is ridiculous. That it has no concern for how are properties drain and manage storm runoff is potentially even more concerning.
B. That if they cannot afford to they must drag their heavy waste containers for distances that could reach a mile or more to reach a county maintained road, often multiple containers, potentially multiple days a week, back and forth. Is an unnecessary burden on the elderly, infirm, and handicap-able citizens that live rurally.
C. Thus you leave the only option for many people being to either lie on their dust mitigation paperwork in order to receive the same service they get today, or dump their waste illegally.

Finally, I find it ridiculous that you expect us to consent to this service without even a broad estimate as to what it would cost, and as you continue to struggle processing bids, it seems increasingly likely that those costs are going to be politically untenable, give us a number, or at the very least, a range of numbers.

In closing, I appreciate your efforts and concern for our desert in attempting to combat illegal dumping. However, I find this proposed solution ludicrous on the grounds mentioned above, and as such I have no choice but to oppose this. No, Garbage Districts, no dust control.

Regards,
Alec Heath Garren
Vice President- Juniper Hills Town Council
29441 106th Street East
Juniper Hills, CA 93543

Reyna Soriano

From: tacia sallvin <taciasal@yahoo.com>
Sent: Tuesday, July 5, 2022 2:19 PM
To: Reyna Soriano
Subject: Garbage Disposal District!

CAUTION: External Email. Proceed Responsibly.

Not physically possible on a slope at 6,500 feet and limited space which can only accommodate one container !
Some don't fit all sizes!!!!!

Sent from my iPhone

Reyna Soriano

From: Bob and Jan Wise <bobjan1977@hotmail.com>
Sent: Tuesday, July 5, 2022 11:10 AM
To: Reyna Soriano
Subject: COMMENTS ON PROPOSED GARBAGE DISPOSAL DISTRICTS

CAUTION: External Email. Proceed Responsibly.

As a resident of Juniper Hills in the proposed Antelope Valley East GDD, I believe will cause an unnecissary hardship on many of the residents in Juniper Hills who live on private dirt roads. Both the written consent and proof of dust suppression measure for access to the roads for waste collection, or requiring residents to move their containers to a county-maintained road is unacceptable. Many of the residents in Juniper Hills have shared bins with their neighbors, which would no longer work under the new proposal, and most likely would cost more.

Thank you,
Janice Wise
11619 Juniper Hills Rd.

Reyna Soriano

From: Guy Randles <guy.randles@gmail.com>
Sent: Wednesday, July 6, 2022 11:13 AM
To: Reyna Soriano
Subject: Green Valley-GDD

CAUTION: External Email. Proceed Responsibly.

-Green Valley's County dirt roads are rarely maintained, any amount of rain ruts the roads severely, so any dust mitigation would be washed away with the dirt as we have always observed.
> -Three collection truck's on our roads will severely compromise our ageing water system.
> Our observation from years of water leaks is that after trash collection is when water leaks occur.
> Trash collection trucks weigh 20,000 lbs empty, after filling up with waste, that total can be 45,000 lbs. The roads in town were not designed to bear that amount of weight.
> Three collection trucks and supervisorial vehicles will definitely create more exhaust pollution, and dust particulates. The majority of the rural roads here are dirt and not paved. The north west part of the 5th District has a high concentration of Valley Fever from wind blown dust particles. We cannot have that here.
> The county always references pricing and availability to services in the south county, but we are the rural north county which cannot be compared. We are a very unique area and all of your actions should reflect that aspect.
> There are just too many unknown's about the GDD that the county is pushing thru to come in alignment with state mandates.

Guy Randles
Green Valley Town Council Board Member
Green Valley County Water District Board Member

Reyna Soriano

From: Ann Trussell <ann@anntrussell.com>
Sent: Thursday, July 7, 2022 4:06 PM
To: Reyna Soriano
Subject: NOTICE OF INTENT TO ADOPT A RECIRCULATED NEGATIVE DECLARATION ACTON/AGUA DULCE, QUARTZ HILL, ANTELOPE VALLEY EAST, AND ANTELOPE VALLEY WEST GARBAGE DISPOSAL DISTRICTS AND/OR RESIDENTIAL FRANCHISE PROGRAM

CAUTION: External Email. Proceed Responsibly.

Attention to Reyna Soriano

I was able to attend the Rural Town Council meeting last week for the presentation on the proposed ACTON/AGUA DULCE, QUARTZ HILL, ANTELOPE VALLEY EAST, AND ANTELOPE VALLEY WEST GARBAGE DISPOSAL DISTRICTS AND/OR RESIDENTIAL FRANCHISE PROGRAM. I am a resident of Acton, I live on a private road and I am also a Realtor® and work the Antelope Valley area. In that capacity, I represent many land parcels on behalf of sellers and buyers. Many of the parcels I represent have illegal dumping on them.

Although I appreciate all of the research that has been done and the idea of coming to better green solutions for our environment, I believe this system still has a few flaws to work around. I would not vote for it unless major changes were made. Here are just a few comments from last weeks meeting.

1. Residents are required to maintain, apply dust control palliatives, and provide access permission on private dirt roads; I believe it would be difficult to get all neighbors to agree to or pay extra money for a dust control substance to be put on the roads. Especially long private roads where many neighbors don't even know each other.
2. If that is not possible, transport of trash containers and dumpsters to a location at a county maintained road for pick-up--no roll out services for the disabled or those who might need assistance. It is not even a reasonable request to have property owners say that have manure dumpsters to haul them to a county maintained road. Again, some of these roads are over a mile long.
3. Charging vacant lots 25% of the eventual waste hauling cost that applies to residential lots, subsidizing illegal dumping. Many of the vacant land owners that is suggested, also get taxed, may or may not live in the area or the country, and have not seen their investment parcels ever. Although it is mentioned that they would be entitled to a voucher to have illegal dumping removed, how would that ever be manned? Some areas as soon as they are cleaned get dumped on again. Currently, it is nearly impossible to get someone from the county out to a parcel. I think that is an undue purdon on those landowners.
4. Food waste containers emitting odors, attracting vermin, dogs, flies, and wildlife (bears, coyotes), especially in desert heat. Currently, rural properties are allowed to mix manure and food which breaks down relatively quick. Single bins would be lighter and could possibly blow over in our endless winds.
5. Residents and landowners should know fees before the vote occurs. Definitely! Self explanatory.
6. Concern that the AV will be targeted for placement of food waste digester facilities. There are no existing facilities, although Calabasas has one planned. Where would this be located?
7. One community already has issues with 10 ton trucks on County maintained dirt roads damaging water infrastructure. And on the private roads? Who then would maintain them? The county? Most of the private roads have dedicated easements that the county requires but doesn't maintain or service.
8. The AV is already targeted for deposit of green waste, aka mulch, from LA, which is full of trash, can spontaneously combust, burns for days, causing air pollution and expensive fire department services to control fire spread.

9. Enforcement, enforcement, enforcement is lacking with regard to many different county departments. Concerns there will be no follow through with 3 'monitors' for the entire AV for illegal dumping. There is not enough county manpower for this program.
10. Seems more emphasis will be on cleaning up illegal dumping, not stopping it (enforcement)--since statements made indicate parts of the AV are 'remote' and difficult to patrol. The illegal dumping sites are out of control and quite frankly I do not see at this point of how the county will ever be able to clean it up.
11. More law enforcement and punitive deterrence. Yes, we definitely need more patrolling in the AV with consequences.

Ann Trussell
Acton Resident
661-713-2358
ann@anntrussell.com

Reyna Soriano

From: Linda Wucherpfennig <v11guzzigal@hotmail.com>
Sent: Thursday, July 7, 2022 7:59 PM
To: Reyna Soriano
Cc: bobjan1977@hotmail.com
Subject: Re: Garbage Disposal Districts Comments & Questions

Importance: High

CAUTION: External Email. Proceed Responsibly.

Ms. Soriano:

The referenced GDD proposal will negatively impact many residents of the Eastern Antelope Valley. Following are my primary concerns:

1. Dust Suppression
    a. Living 1 mile back on private dirt roads will cause a monetary and severe inconvenience. We utilize easements to reach our home and in order to comply with your requirements it would be very costly and not guaranteed to last through rains, snow, and use by large garbage disposal trucks. Gravel has not proven to be a reliable dust suppression; base would wash out with the first rains/snow and paving is not allowed as outlined in our CSD. Add in the cost for any of these of these options would be more than the value of our home. Water is not an option due to 1) the severe drought and 2) no availability of a water source along the aforementioned 1 mile.
2.
3. 2. Option to move our 3 yard dumpster to Juniper Hills Road.
    a. a. This is not an option due to my being a senior citizen with a medical condition that does not allow me to walk for a total of 4 miles.
    b. b. replacing our 3 yard dumpster with smaller containers to equal it would cause a serious inconvenience and still would not be able to walk the required 4 miles for just one container. Replacing our 3-yard dumpster with containers would equal a total of 18 96-gallon wheeled carts. This is the definition of absurdity.
    c. c. the containers would block our mailboxes causing the post office to not be able to deliver our mail.
    d. d. Wild animals in the Juniper Hills area, e.g., coyotes, bobcats, bears, ravens etc., would break into the containers which would result in trash being strewn up and down Juniper Hills Rd. Also, this would create a negative impact to the animals by providing them with a non-natural food source and the chances of being hit by cars traveling the road
    e. e. Wind would knock the containers over and depending on the force (which frequently is very strong) have the containers end up down the street. Will the county come collect and return the containers?
4. 3. Degradation of roads
    a. a. Having a total of 3 to 4 large garbage trucks travel our roads would cause a degradation to our dirt roads. This would result in travel being difficult on the roads. Currently with only one

truck traveling our roads on a weekly basis we have experienced ruts and holes that cause difficulty when traveling in our car and motorhome. I cannot even imagine what 3 to 4 trucks will do to our roads.

5. 4. Costs
    a. a. The cost for garbage pick-up vary significantly within our Juniper Hills area. How does the county plan to equitably charge out the costs. Living in a primarily agricultural area we all have different collection requirements. We require a 3-yard bin to collect mostly our green waste. The neighbors have 1-yard bins and a very few have the 96-gallon containers. We currently pay $126 per month for our dumpster. Will the County be able to match this cost?
    b. b. How will the County handle billing disagreements? Do we contact the County or the vendor?
    c. c. Will the differences in collection requirements and costs be part of the bidding process?
    d. d. Who will pick up trash strewn about by animals and/or the wind?
6. 5. Property Tax Billing.
    a. a. Will there be on Opt Out Clause to this plan?
    b. b. How will the County handle the difference in costs per customer.

These are just a few concerns that the County seriously needs to address. We are not a one fits all area and I feel as if the County has not done their due diligence or research.

I look forward to hearing from you.

Linda Wucherpfennig
626-483-1891
Juniper Hills, CA

Reyna Soriano

From: Acton Town Council <atc@actontowncouncil.org>
Sent: Friday, July 8, 2022 6:45 PM
To: Reyna Soriano
Cc: Saraiya, Anish; Termeer, Donna; Bostwick, Charles; Acton Town Council
Subject: Acton Town Council Comments on Revised Negative Declaration for the GDD Program

CAUTION: External Email. Proceed Responsibly.

PLEASE CONFIRM RECEIPT

Dear Ms. Soriano;
Attached please find comments from the Acton Town Council regarding the proposed Garbage Disposal District Program for Acton, Agua Dulce, and Antelope Valley Communities.
If you have any questions or are unable to open the attached, please contact us at atc@actontowncouncil.org.

Sincerely;
The Acton Town Council

SAVE OUR RURAL TOWN

July 9, 2022

Reyna Soriano
P.O. Box 1460
Alhambra, CA 91802-1460
Electronic Transmission of eleven (11) pages to:
rsoriano@dpw.lacounty.gov

Subject: Save Our Rural Town Comments on the Revised Initial Study Prepared for the "Acton, Agua Dulce, and Antelope Valley Garbage Disposal District or Residential Franchise Contracts" Project.

References: Revised Initial Study/Negative Declaration Dated June, 2022.

Dear Ms. Soriano;

Save Our Rural Town ("SORT") respectfully submits the following comments on the revised Initial Study/Negative Declaration ("IS/ND") referenced above; it is understood that the deadline for submitting public comments on the IS/ND is July 9, 2022; therefore, we ask that these comments be deemed timely submitted. Please note that these comments are intended to supplement (not replace) the comments that we previously submitted on March 26, 2022. All the comments that we previously submitted are incorporated herein by reference. Also, we appreciate that the County made the revisions we requested to Section 2.2 of the IS/ND.

SORT understands that the IS/ND prepared for the Garbage Disposal District Project ("GDD Project") has been revised in response to concerns raised in public comment regarding the air quality impacts of the project. Specifically, changes have been made to address the increased levels of ambient dust and particulate emissions that will be generated by the GDD Project. SORT appreciates the diligence that the Los Angeles County Department of Public Works ("County") has shown toward the public concerns that were raised by revising the project to address them. However, SORT has concluded that the options which the GDD Program will offer to customers within each district to address particulate emission concerns will not achieve the reductions that the IS/ND claims and thus will not reduce particulate emissions to a level that is less than significant:

- The first option requires property owners to sign documents that grant the waste disposal company access over their property and attest that they will periodically apply treatments to the roadways on their property to control dust. SORT has no confidence that all property owners (including vacant landowners) along a dirt roadway will sign the documents required by this option. And, if one property owner refuses to cooperate, then none of the residents in the neighborhood can avail themselves of the first option and will have to default to the second option. The first option is intrinsically unworkable because the County has no viable mechanism to enforce the treatment requirements and it would have to obtain new agreements every time a property changed ownership.

- The second option is equally troubling; it requires property owners to carry their three disposal carts (recycling, organic waste, and refuse) to and from the nearest county-maintained road each week. This option will result in significantly more particulate emissions than the GDD project proposed in the original IS/ND because it requires every property owner along a dirt road to make two round trips from their house to a county road every week; the first round trip is to drop off the waste carts in the morning and the second round trip is to pick up the waste carts in the afternoon. All of these round trips in private vehicles will generate far more particulate emissions that if three waste disposal trucks just drove down the dirt road and picked up the garbage as was originally proposed in the GDD Project contemplated in January, 2022.

Because the options that are presented in the revised IS/ND cannot be practically implemented, the particulate emission factors that are assumed in the revised IS/ND for vehicle travel on dirt roads (found in Appendix A) are not representative of what the particulate emissions will be when the GDD Project is actually implemented; in fact, they are substantially biased low. SORT is also highly critical of the lack of detail provided in the Air Quality Analysis that is included in the revised IS/ND. Specifically, Appendix A fails to provide sufficient information regarding the fundamental assumptions upon which this analysis is based. For example, there is no information regarding the particulate emission factor that was used for truck and vehicle travel on unpaved roads or how it was manipulated to derive the particulate emissions that are reported. This is a fatal flaw; every quantitative environmental analysis should provide sufficient information to allow the public to "follow" how the conclusions were derived and confirm that the calculations were done correctly. The revised IS/ND does not provide such detail; it merely provides output from a canned air quality model ("EMFAC2021") without any explanation or clarification. The public does not habitually conduct air quality modeling using EMFAC2021, therefore it cannot be presumed that the public is sufficiently familiar with EMFAC2021 to enable them to confirm that the calculations were done correctly. Moreover, SORT concludes that the Air Quality Analysis is deficient because it appears to only consider particulate emissions that will result if Option 1 is implemented by all customers throughout all franchise districts; it does not calculate emissions if customers exercise Option 2. Specifically, it does not appear that the Air Quality Analysis accounts for all the ROG, NO_X, CO, SO_X, PM_{10}, $PM_{2.5}$, CO_2, CH_4, and N_2O emissions resulting from the two round trips per week that all the residents who live on dirt roads will have to make to drop off and pick up their three waste containers when they exercise Option 2 because Option 1 did not work. Accordingly, SORT disputes all the conclusions that are presented in the revised IS/ND regarding air quality impacts. If the County wants to comply with the California Environmental Quality Act, it is recommended that an Environmental Impact Report be prepared for the GDD Program.

Finally, SORT renews our request that the County properly comply with CEQA and address the environmental impacts of the "whole action" which includes both waste hauling and waste disposal. This issue was addressed at length in our previous letter, and since the County has received all the bids submitted for the GDD Program, it has all the information it needs to assess the environmental impacts of the "whole" GDD Program.

Sincerely;
/S/ Jacqueline Ayer
Jacqueline Ayer
Director, Save Our Rural Town

Lake Los Angeles Rural Town Council
P.O. Box 500012
Lake Los Angeles, CA 93591

July 8, 2022

Department of Public Works
Attention Reyna Soriano
P.O. Box 1460 Alhambra, CA 91802-1460
e-mail: rsoriano@dpw.lacounty.gov

Dear Madam,

At our last Town Council meeting you requested community feedback on the proposed changes in the latest GDD update.

The Lake Los Angeles Rural Town Council would like to formally submit our objection to the changes below in red, from your ppt. presentation:

> Every occupied property will receive access to basic service, which includes: • Trash, recycling and green/food waste collection • Illegal dumping services • Bulky item collection • Annual cleanup • Excess green waste and trash collection • Potential landfill vouchers and/or free disposal days
>
> GDD Services – Occupied Parcels (Not on County-Maintained Roads) Properties not accessible from County-maintained roads must provide the following, in writing: • Consent for access • Attestation for dust control, if road is not paved Alternative: • Customer move containers to County-maintained road for collection • 3 cubic yard dumpster can be converted to six, 96-gallon wheeled carts • Availability of recyclables and green waste collection reduces need for trash.

We respectfully request that these changes be removed in their entirety. If every occupied property is required to pay for service, with no opting out, mere “access” to a required full service that is pre-paid, at great personal effort, is simply not, in any interpretation, a reasonable requirement and actually indicates an economic injustice to those residents.

Every property that currently receives service from Waste Management, clearly indicating reasonable hauling access, must continue to receive full minimum service under the GDD’s. Not doing so would surely open the County to numerous lawsuits, particularly from those community members who are physically unable to “access” the

service by self-hauling to a city-maintained road. This would clearly violate the ADA, in addition to being an outright social injustice against our already grossly underserved community members. Not to mention, robbing our elderly residents on a fixed income, of payment via their property taxes, and then making an unreasonable physical demand to even “access” this required “service.”

With all due respect, it seems that these changes are tailored to the specific complaints from our more affluent unincorporated neighbors, who currently appear, as evidenced by these specific amendments, to have more influence when raising objections, due to their perceived money and power in this situation, at the extreme personal expense of the underserved rural communities in the East Antelope Valley.

We ask that you consider the devasting impact of these changes to our most vulnerable community members, who are the most impacted by these prohibitive requirements.

Respectfully Submitted,
Stormy Hope
Corresponding Secretary
Lake Los Angeles Rural Town Council

July 9, 2022

Los Angeles County Department of Public Works
Attention: Civil Engineer Reyna Soriano
P. O. Box 1460
Alhambra, Ca. 91802-1460
(626) 458-5192
rsoeiano@dpw.lacounty.gov

Dear Ms. Soriano:

Subject: Proposed Acton, Agua Dulce, and Antelope Valley Garbage Disposal District Recirculated Initial Study/Negative Declaration (R-IS/ND) Public Works Request for Bids.

The Antelope Acres Town Council appreciates the opportunity to comment on the Recirculated Initial Study/Negative Declaration: Public Works Request for Bids.

Costs of GDD Program: To date Public Works has not been able to divulge the costs of the GDD Program to residents. Based on information found in the "Request for Bids" "Garbage Disposal District Estimated Annual Amount (2-2-2022) the amount identified for the Antelope Valley West is $12.0 Million. Calculations estimated the annual cost to be from $1,020.00 to $1,295.00 for residents of all properties and approximately $200 for each vacant parcel owner. Current annual service is approximately $480.00 for basic residential service and no cost for vacant parcels.

A threefold increase in costs is a significant impact to the property owner!!

What additional costs have not been identified and addressed?

Public Works stated in a recent presentation that final information on rates will be available before the process goes to a vote by property owners. The County is asking property owners and voters to make decisions based on trust not facts. The GDD Program should be complete before a vote by the people.

The Open Market System currently in place may not offer service to all residents that may want service but that is due to the remoteness of the property. The GDD Program is potentially mandating environmental consequences by creating up to 6 trucks per week on roads without adequately evaluating that impact.

The current "Open Market System" may not comply with SB 1383 but Public Works has not defined the GDD Program sufficiently to reassure residents that future unknown areas of concern that have already been designated as "to speculative for evaluation" may identify future projects with huge implementation costs.

Services for Vacant Land: Currently there are no available services to vacant parcels that includes those properties that have experienced illegal dumping.

Public works is only allowed to clean up alongside of the roads and even the GDD proposal does not allow them to access private property for cleanups.

Taxing vacant parcels amounts to taxation without representation! Property owners are expected to absorb the costs for all Illegal Dumping. Laws /Ordinances currently exist that are not being enforced by responsible County departments. We suggest that enforcement efforts be stepped up so additional ordinances are not required.

Mitigation Requirements: There has not been an Environmental Impact Report done on this project. DPW's evaluation deemed none required, a Negative Declaration was sufficient.

We find that the proposed requirements for "Occupied parcels not on County Roads" and dirt roads is allowing Public Works to unjustly require property owners to assume financial and environmental responsibilities that are above and beyond the normal scope of what should be the owner's responsibility. Part of DPW's job is to develop a system that accounts for all requirements within the scope of the GDD and then enforce those requirements.

Water use for dust control is not possible in the current environment. Palliative use would require an independent system controlled by and administered by the County. Selection of approved products, contracts with an approved professional and financial record keeping to assure proper accounting and enforcement for in the GDD Program.

The requirement to apply palliatives every 3 years is ridiculous. We live in an area consumed by Solar Projects…dust control by water spraying and palliative application has been required for those projects for several years and **is not effective**!

Driving on dirt roads can create dust…driving on dirt roads in a cautious manner does not create dust. We suggest that the hauler's trucks have a reasonable speed limit such as 10 miles per hour.

Palliative application costs are estimated to be approximately $7,000.00 per year per resident if required. This is not going to be effective and it will be cost prohibitive.

Dirt Roads and Dust: Collection points along dirt roads: Again dust control is a factor. Requiring cans to be relocated for blocks or even miles is not acceptable or enforceable. Not only does this require a truck to move the cans to an accessible collection point but for handicapped and elderly residents it is not possible. Please remove this option from the plan.

We believe that an Environmental Impact Report is required for this Project.

Hauler's Contract: We strongly object to the length of the proposed contract. Normal County contract run 5 to 7 years with the option to extend. This contract is to expire in 2048!! The stated reason is to give the Hauler an incentive to invest in long term infrastructure projects. The current company is Waste Management; they have two trash facilities and the necessary equipment to accomplish the tasks. We believe they will be the only viable bidder and do not require such a lengthy contract. Please adjust the time frame to a more acceptable time frame.

Summary: In addition to our own experiences and research concerning living in and serving Antelope Acres for many years we have reviewed the information submitted by the Antelope Valley Association of Rural Town Councils (ARTC). We concur with their conclusions and advice concerning the proposed GDD project. The North Valley will not be better served with the extensive ridged program being forced upon our residents. We are being unduly penalized with no opportunity for relief other than establishing a Residential Franchise Program.

Thank you for the opportunity to comment on this important issue.

Virginia Stout
President
Antelope Acres Town Council

AGUA DULCE TOWN COUNCIL

33201 Agua Dulce Canyon Road * Box Number 8 * Agua Dulce, CA 91390
Website: www.adtowncouncil.com

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  BH33605@aol.com
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  Lou@LouVince.com

July 8, 2022

Ms. Reyna Soriano
Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460

Via Email to: rsoriano@dpw.lacounty.gov

RE: Comments on Recirculated Negative Declaration for Proposed Garbage Disposal Districts and/or Residential Franchises

Dear Ms. Soriano:

The Agua Dulce Town Council appreciates the opportunity to submit comments on the Recirculated Initial Study/Negative Declaration for Acton/Agua Dulce Garbage Disposal District (GDD) and/or Residential Franchise (RF) Program. Please accept these comments into the public record.

In reviewing documents associated with the project, we have specific comments and concerns not only on the program, but how the program and documents were developed.

Public Outreach
There has been a lack of adequate outreach to the Agua Dulce community. In reviewing the outreach on this program, the Department of Public Works has only done 3 meetings over the course of 7 years for Agua Dulce. The first was a Department of Public Works presentation on October 16, 2016 at the Acton-Agua Dulce Library. That meeting introduced the concept of Residential Trash Franchises. The second meeting was March 11, 2020 at the Agua Dulce Town Council regular meeting that introduced the concept of Garbage Disposal Districts. The final meeting was a virtual meeting by Public Works on June 30, 2022 where the Recirculated Initial Study/Negative Declaration was introduced. When the original Initial Study/Negative Declaration (IS/ND) was released on February 11, 2022, the Agua Dulce Town Council was not notified, nor was there a meeting that included the Agua Dulce community. We are grateful for the recent virtual meeting, but having the presentation done at a regular Agua Dulce Town Council meeting would have garnered additional community participation.

Fugitive Dust Impacts
In response to public comments regarding potential fugitive dust impacts resulting from the proposed increase in waste collection trucks on unpaved roads in the original IS/ND, Public Works revised and clarified the IS/ND such that truck travel on unpaved roads is addressed. We agree that the increased number of trips by waste collection companies will have significant impacts regarding fugitive dust. The separate collection of refuse, recyclables, organic waste, manure, and bulky items/illegal dumping would result in 5 truck trips on a weekly basis. That is a 400% increase in waste collection trucks. Additionally,

there would be Public Works Field Monitors circulating the Project area in light duty trucks.

In an effort to mitigate the fugitive dust impact on unpaved roads, the Recirculated IS/ND introduces 2 options for residential customers whose property is not accessible from a public road.

1. Submit written authorization for the waste hauler to access the customer's property and provide written attestation by the property owner that the road will be treated with a non-toxic dust suppressant, and be properly maintained to a standard acceptable to the County and the waste hauler.
2. Residents would be required to haul waste containers to an agreed upon location along the public right-of-way on a public roadway.

Neither of these options is feasible. The burden of getting all residents on unpaved roads to agree to and pay for dust suppression and maintenance of the road is unreasonable and will result in "non-compliant customers." Many unpaved roads have additional feeder unpaved roads that will require approval from ALL residences along the route. There are also many unanswered questions on dust suppressants. The best way to reduce dust on unpaved roads is to reduce traffic on the road. Acceptable treatments have not been disclosed nor do we know the cost and means of application needed. The second option has clearly not been adequately evaluated. Some of the unpaved roads and feeder roads extend several miles with up to 80+ residences. The additional traffic generated by residents hauling multiple bins, with a weight up to 250 pounds in some cases, several miles to a public roadway is not reasonable. If it **was** practical, the number of bins on public roadways would be extreme and potentially dangerous. Hauling bins to a roadway that has a traffic speed limit of 55 miles per hour (with traffic frequently exceeding 70 mph) will be putting the residents placing and recovering the bins and the vehicles traveling on the roadway at undue risk for injury or death. On recycling days, we can expect scavengers picking through the bins to take recyclables they can turn in for cash. That will lead to additional litter left from the scavengers being scattered on the sides of the public roads. Hauling unwanted furniture and large bulky items to a public roadway may encourage illegal dumping since passers-by may assume that these items are not part of a scheduled bulky item collection and return to dump similarly large items in the vicinity. Because neither of these options are feasible, the IS/ND is inadequate and an Environmental Impact Report needs to be prepared.

Contract Length

According to sections 2.Project Description-2.5.Project Operation, the contracts are anticipated to extend up to 25 years. In the urban areas, current County contracts extend up to 11 years. The document indicates the longer contract durations are proposed to get the best competitive rates. There is no documentation that this long term contract will lead to the best rates. In fact, a shorter term contract may lead to more competitive rates and will allow for review of customer service. The current economy poses substantial uncertainty in fuel, labor, and equipment costs. The Agua Dulce Town Council is opposed to any contract that has a longer term than the current urban contracts.

Evaluation of Environmental Impacts

The Agua Dulce Town Council has reviewed the IS/ND and found the following deficiencies within the document.

3.1 Aesthetics (Pages 17-20)

The preparers of the IS/ND indicate that there would be a "less than significant impact" for *c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public view of the site and its surroundings?* Hauling waste bins from unpaved roads to a collection point on a public roadway has not been considered in the evaluation. While the bins placed in the right-of-way of a public roadway are temporary, there will be up to 5 collection times per week. If the bins are placed the evening before scheduled collection, those bins may remain on the public road for up to 24 hours depending upon the collection schedule. The effects would NOT be limited and ephemeral. And the view is not fleeting…it is lasting. This will result in substantial degradation in visual character and/or quality. The IS/ND is deficient in the evaluation.

3.3 Air Quality (Pages 23-35)

The preparers of the IS/ND indicate that there would “less than significant impacts” for Air Quality. The additional vehicle trips generated by the necessity of hauling bins to and from a public roadway have not been considered in the evaluation. As an example, if a private property owner hauls their bin down to a public right of way, this entails two trips along the unpaved roadway to drop off the bin and a further two trips to collect it. This is triple the number of trips that would be needed by a trash truck to collect the same bin directly at the customer’s property. This example is for just one homeowner located on an unpaved road who is obligated to move their bin to a paved collection area. If there are 20 homes along the same unpaved road, then the number of trips required to collect a bin for each home is 80 when a single trash truck could simply travel up the unpaved road in one trip. In addition to the fugitive dust created by 80 trips along an unpaved road by the homeowners, the IS/ND fails to account for the increase in carbon emissions from the 79 additional trips to and from the collection point by the homeowners. It cannot be argued that the unpaved road treatment will mitigate fugitive dust since the homeowners in the scenario are being required to haul their bins to a nearby collection point since their unpaved road has not been treated, essentially exacerbating the problem of fugitive dust and air quality as opposed to mitigating it. The IS/ND is deficient in the evaluation.

3.6 Energy (Pages 41-42)

The preparers of the IS/ND indicate that there would be “less than significant impacts” for Energy. The additional vehicle trips generated by the necessity of hauling bins to a public roadway have not been considered in the evaluation. The number of vehicle miles traveled needs to take into account the additional vehicle trips generated by the necessity of hauling bins to a public roadway. In the example used above, there would be 80 private vehicle trips along an unpaved road as compared to one trip by a trash collection truck which is a 39 fold increase in vehicle fuel consumption and emissions. The IS/ND is deficient in the evaluation.

3.8 Greenhouse Gas Emissions (Pages 46-52)

The preparers of the IS/ND indicate that there would be “less than significant impacts” for Greenhouse Gas Emissions. The additional vehicle trips generated by the necessity of hauling bins to a public roadway have not been considered in the evaluation. The number of vehicle miles traveled needs to take into account the additional vehicle trips generated by the necessity of hauling bins to a public roadway. As an example, if a private property owner hauls their bin down to a public right of way, this entails two trips along the unpaved roadway to drop off the bin and a further two trips to collect it. This is triple the number of trips that would be needed by a trash truck to collect the same bin directly at the customer’s property. This example is just for one homeowner located on an unpaved road who is obligated to move their bin to a pave collection area. The IS/ND fails to account for the increase in carbon emissions from the 3 additional private vehicle trips to and from the collection point by each homeowner as compared to the single trip required by a trash collection truck which is a 300% increase in the vehicle emissions. The IS/ND is deficient in the evaluation.

3.17 Transportation

The preparers of the IS/ND indicate that there would be “less than significant impacts” for *c) Would the project substantially increase hazards due to a geometric design (e.g, sharp curves or dangerous intersections) or incompatible uses (e.g.farm equipment)?* Hauling waste bins to a public roadway has not been considered in the evaluation. While the bins placed in the right-of-way of a public roadway are temporary, there will be up to 5 collection times per week. If the bins are placed the evening before scheduled collection, those bins may remain on the public road for up to 24 hours depending upon the collection schedule or longer depending on how promptly each homeowner retrieves their bin. The number of bins on public roadways would be extreme and potentially dangerous. Hauling bins to a roadway that has a traffic speed limit of 55 miles per hour (with traffic frequently exceeding 70 mph) will be putting the residents placing the bins and the vehicles traveling on the roadway at undue risk for injury or death. On recycling days, we can expect scavengers picking through the bins to take recyclables they can turn in for cash. Roadway safety may be jeopardized. The Agua Dulce area is prone to high winds on many days of the year which can regularly reach gusts in excess of 40-60 miles per hour. If an empty trash can is left by the side of the road during a high wind event, it may be blown into the public roadway and cause an immediate road hazard and threat to public safety. The IS/ND is deficient in the evaluation.

Garbage Disposal Districts vs. Exclusive Residential Franchise
Public Works has unilaterally decided that a GDD is the best option for Agua Dulce. There is another Alternative Collection Option; the Exclusive Residential Franchise (RF). For some reason, Public Works has indicated RF option is less desirable. The Agua Dulce Town Council sees RF as a viable, perhaps superior alternative. It offers the same 3 bin services. The major difference is that the fees are paid directly to the waste hauling company, not the Department of Public Works through the LA County Tax Assessor. Also, RF does not assess fees to vacant parcels. The Agua Dulce Town Council is formally requesting a side by side comparison of services and fees between GDDs and RFs as it is an integral aspect of thoroughly assessing the options available to homeowners in the community.

Lack of Clarity Concerning Roll-Out Service for Elderly or Disabled
There seems to be inconsistencies regarding Roll-Out Service for Elderly or Disabled Persons. In meetings, Public Works staff indicated that Roll-Out Service (Contractor to provide manual container roll-out for all or a portion of Collection at the request of any Customer without additional charge for Elderly or Disabled Occupants) would be provided as a free service. Elderly means a person aged 62 or older. In review of the IFB, roll-out service has certain parameters and may not be available or workable within the Agua Dulce area. This needs to be clarified and explained fully for the public to understand. Our community has a large population of senior citizens and this service would be utilized by many.

GDD Vacant Parcel Fees-Revenue Stream for Public Works?
It certainly appears that Public Works is advocating for GDDs. When examining the Invitation for Bids (IFB), it is shown that Public Works will be receiving a steady stream of funding.

1. **Director's Fund:** Each Contract Year, CONTRACTOR shall create and maintain a fund for use upon Director's request for as-needed tasks similar in nature or related to Contract Services (Task 1 and Task 2 Services). The amount of this fund shall be calculated based on the number of parcels at the rate of $0.09 per parcel per month per year and shall be available for use at the Director's request after the Commencement Date. Unused funds shall rollover to the next Contract Year. For example, Acton/Agua Dulce has a total of 10,342 parcels that would generate a fund of $0.09 x 10,342 x 12 =$11,169 every year.
2. **Antelope Valley Illegal Dumping Task Force Annual Funding:** Each Contract Year, CONTRACTOR shall create and maintain a fund for use by the Antelope Valley Illegal Dumping Task Force. The task force may use the funds for its expenses within the Service Area. Six months from the start of each Contract Year, typically on January 1, CONTRACTOR shall transfer the entire annual amount of the fund to the task force account. The Director shall provide contact information. The amount of this fund shall be calculated based on the number of Refuse Units at the rate of 0.1% of the monthly Basic Rate per Refuse Unit per month per year. Refuse Unit counts are based on the numbers in the Invitation for Bids and adjusted annually thereafter on the Refuse Numbers reported by the Office of the Assessor on July 1. For example, in Acton/Agua Dulce, there are 5,397 occupied parcels. Each parcel will have at least 3 units, many will have more. Using a 25% add on for additional units, that brings an average of 3.75 units. 5,397 occupied parcels with 3.75 average units, equates to 20,239 Refuse Units. For example, if the refuse unit rate was $45 per month, the fund would generate 20,239 x $45 x .1% x 12 = $10,929 each contract year.
3. **Vacant Parcel Funding:** The County shall retain all trash service fees paid by owners of vacant parcels. We have been told by Public Works staff that vacant parcels will be billed at a lower rate, typically 50%. We have not been given any estimates for the cost of monthly service. As a rough estimate for 3 bin monthly service, we are using $70 per month…it may be more or less, but for calculations, this is the number we are using to determine Vacant Parcel Funding. Acton/Agua Dulce have 4,945 vacant parcels. 4,945 x $70 x .5 x 12 = $2,076,900. It's easy to see why Public Works wants the formation of GDDs.

Fast-Tracking of GDD approval
It appears as if Public Works is fast-tracking this project in hopes of getting approval for this option. When the Agua Dulce Town Council requested an extension of the comment period so Public Works could present the proposal at one of our regular meetings, Public Works denied that request for the following

reason, *"Based on the project schedule, we are not able to extend the 30-day public review period. In order for waste collection to begin next year assuming the GDDs are approved, the County will need to include waste collection services on property owners' tax bill by July 2023. In order to get to that point, Public Works needs to provide the Local Agency Formation Commission (LAFCO) the CEQA documents approximately 2 months prior to their public hearing in September. LAFCO will then conduct a protest hearing in November with the expectation that LAFCO will recommend the County conduct a special election to finalize the formation of the GDDs. The County would then need to conduct the special election in the Spring of 2023 and have the election certified in advance of the July deadline to include the item on the property tax. If we are delayed in any of these steps, we risk delaying service by an entire year in order to make the next property tax billing cycle."* While we respect deadlines, the reality is that the residents of Agua Dulce and other areas included in the proposed GDDs already have a trash collection service so there is no pressing need to fast track the GDD proposal and moving forward without an adequate and thorough review of CEQA documents is unacceptable.

Conflicting Information on Services Available to Vacant Parcels

There seems to be conflicting information related to services available to Vacant Parcels with a GDD. During meetings, Public Works staff has repeatedly stated that Vacant Parcels would receive illegal dumping removal. In the latest virtual meeting on June 30, there was one slide that states: "GDD Services – Vacant Parcels. Every vacant property will receive access to the following services: illegal dumping removal, assistance with community cleanup events, expanded landfill vouchers and roll-off bins." Upon review of the Invitation for Bids (IFB), we discovered that Task II Services-Abandoned Waste Collection Services only covers illegal dumping in the Public Right-of Way. Based on that fact, vacant parcel owners are getting zero service for their fees. And by shifting clean up of Right-of-Way debris from Public Works to the Contractor; the Contractor will in turn pass on those costs to those of us in the GDD. We are greatly concerned on how Vacant Parcels that may be the victim of illegal dumping will be serviced and cleaned up. Within the IFB there doesn't seem to be a mechanism for clean up by the contractor. The definition of "Abandoned Waste means Solid Waste which has been improperly discarded or dumped at locations in the Public Right-of-Way excluding at the Set-Out Site.."

Abandoned and Occupied Homeless Encampments

If we hadn't reviewed the Invitation for Bids, we would not have known that within the proposed GDD, the County is requiring the waste collection company to provide regular trash service to occupied Homeless Encampments and People Experiencing Homelessness as well as clean-up of Abandoned Homeless Encampments. Additionally there is a provision that states, "Services in this section may be required to be provided outside of the Service Area." This will be service provided free of charge and paid for by the residents of Acton and Agua Dulce. This service has not been disclosed at any public meeting, nor is it included in any documents pertaining to the GDDs, except for the IFB. The Agua Dulce Town Council opposes any funding for the trash collection and clean up costs related to ANY Homeless Encampments. The residents of Agua Dulce should not have the burden of paying for waste generated by Homeless Encampments or People Experiencing Homelessness. Separately, the residents of Agua Dulce are already paying a one-quarter of a cent sales tax for generating funds for the specific purposes of funding homeless services and short-term housing based on the passage of Measure H. A GGD should not be supplementing funds for homeless services and we are stunned that these services found their way into the project with no disclosure.

Other Considerations

The Agua Dulce Town Council wants to acknowledge other options for consideration when creating waste collection services.

1. There is no incentive to reduce waste. Customers will be required to pay for 3 full size bins when they may only use less than half of the containers. Customers don't pay less if they produce less waste. There should be some consideration given to scale the rates based on the amount of waste produced by each homeowner and increase the rates for excess producers.
2. In other jurisdictions, green/organic waste and recycling are done on a schedule of every other week. This cuts down truck trips substantially.
3. In other jurisdictions, the waste collection trucks are "split-body" trucks with separate compartments for different types of waste. This cuts down truck trips substantially.

4. There needs to be something in place for part-time residents. Some residents travel or have other homes. During the time they are away from the area, their services can be suspended resulting in a reduction of fees when no waste is being created.
5. A Citizens Advisory Council should be considered that consist of property owners of both occupied and vacant lots, that would regularly meet publicly to review potential areas slated for cleanup, help to assure compliance, provide guidance on contract extensions, review complaints from customers relating to the contractors services, be part of the decision making on where the Vacant Parcel funding goes, and general oversight of the program.

We ask that you carefully review our comments and consider them as you move forward with the proposed project. If there will be substantial changes relating to the Recirculated IS/ND, we ask that the timeline be delayed for adequate review.

Respectfully,

Don Henry

Don Henry, President
Agua Dulce Town Council – 2022

cc: Ms. Stephanie English, 5th District Deputy SEnglish@bos.lacounty.gov

Association of Rural Town Councils
C/O S. Zahnter
46834 266th St. West
Lake Hughes, CA 93532
ourartc@gmail.com

9 July 2022

SENT VIA EMAIL

Los Angeles County Department of Public Works
Attn: Civil Engineer Reyna Soriano
P.O. Box 1460
Alhambra, CA 91802-1460
(626) 458-5192
rsoriano@dpw.lacounty.gov

Dear Ms. Soriano,

Subject: Proposed Acton, Agua Dulce, and Antelope Valley Garbage Disposal Districts Recirculated Initial Study/Negative Declaration; Public Works Request For Bids

The Association of Rural Town Councils appreciates the opportunity to comment on the Recirculated Initial Study/Negative Declaration (R-IS/ND), and is also appreciative of outreach to rural communities by Public Works (PW) via the Association of Rural Town Councils (ARTC). The ARTC is comprised of thirteen member councils which represent rural communities across the unincorporated areas of Northern Los Angeles County. Originally formed to serve as a forum for rural residents, town councils seek to represent their constituents with regard to local, county, regional, and state issues, and provide an exchange for information regarding their governance. Each of our communities enjoys surroundings both diverse and unique to each rural area across the Antelope Valley, and face different challenges propagated by the possible imposition of Garbage Disposal Districts (GDDs) with regard to cost, dust control, illegal dumping, homeless encampments, illegally sited RV parking, traffic, and potential to damage water delivery infrastructure on dirt roads, which has occurred in at least one rural community town council area. Lack of enforcement of current laws and ordinances is a very large factor in the lack of trust residents feel when presented with, and possible imposition of such a large and costly project in rural communities who can least afford it.

The ARTC understands that illegal dumping occurs due to persons purposely intent on dumping, limited access to garbage disposal for residents in the far reaches of the Antelope Valley, though self-hauling for those residents has been an option for some time. Where waste disposal service is available, not all residents subscribe, and many perhaps cannot afford the cost. Additionally, the increase in homeless encampments, the increase in recreational vehicles (RVs) parked on private land sans a residence, are defying Los Angeles County Ordinance requirements for septic and garbage disposal in association with parking on a private residential property, and therefore polluting sensitive desert areas, including Significant Ecological Areas, and ephemeral water courses through unpermitted human waste disposal, and trash. Yet, the County does nothing to stop obvious violations of land use ordinances, litter laws, and public health ordinances, while residents and landowners funding GDDs will be paying for homeless encampment trash service, and essentially anyone illegally residing on lands in the Antelope Valley (AV). This leads many town council members to question PW's actual ability to undertake enforcement of the current ordinances that do not allow RVs to park on lots without a permitted residence, or uncounted and

many multiple instances of squatting that contribute to improper human waste disposal, and illegal dumping across the Antelope Valley that GDD customers and vacant landowners are expected to fund. Such illegal activities will be supported by LA County property owners' dollars, and sanctioned by Los Angeles County Public Works, and is objectionable.

The County of Los Angeles Public Works "Request For Bids" document offers the "Garbage Disposal District Estimated Annual Amount" (February 22, 2022) is listed below:

Acton/Agua Dulce	$3.5 Million
Antelope Valley West	$12.0 Million
Antelope Valley East	$7.5 Million
Quartz Hill	$4.0 Million
Estimated Total	$27,000,000 Million

Without knowing actual cost of individual trash collection services in each district, including PW's administrative costs, the ARTC performed an average calculation, adding all districts' cost estimated by PW totaling $27 million. Having been informed that 67,000 vacant lots exist in the AV, along with 43,000 residential lots, and statements that indicate vacant lots would be charged 25% of residential lots; 25% of $27,000,000 equals $6,750,000. Subtract that from $27,000,000 and it equals $20,250,000. So, *average* yearly cost to vacant lot owners totals $101. *Average* yearly cost of service to residential lots is approximately $471.00 (for 1 refuse unit), and will be much higher in areas that require additional refuse units, like manure disposal, and will have service costs in the distantly placed, sparsely populated areas of the AV—and most on private dirt roads. If residents are required to pay out of pocket for application of dust control palliatives costing $7,000 per mile for the most environmentally friendly beet juice molasses version (and might attract vermin), it will send costs far beyond reach for rural residents, and essentially penalizes them for living rurally. Moreover, large vacant parcel owners paying the same as small vacant parcel owners, and will receive the most benefit if their property is selected for illegal dumping clean-up, homeless encampment clean-up, etc.

In continuing effort to anticipate cost, the ARTC reviewed the Lennox Garbage Disposal District Report 2020-2021 shows continuing yearly total cost increases (2021-2024) ranging from $279 currently, to $349, $436, $493, $545 in 2024 (for 1 refuse unit); with yearly cost of living increases tied to the Consumer Price Index allowed in the revised ordinance (2020-0027). We can also be assured of additional charges related to transport out of the AV for food and green waste, since there are no facilities here that provide anaerobic digestion processes. The spreading of composted green waste combined with food waste is not welcome in the AV, as rural communities already accept many tons of green waste from Los Angeles, full of trash and invasive weed species, and with a propensity for spontaneous combustion—several fires have occurred, taking days and costly fire department resources to extinguish. The ARTC stresses residents of rural areas must be informed as to what fees will be imposed prior to voting on an issue that will likely incur excessively punitive costs due to logistical circumstances, for not only trash and recycling, but dust palliative application, and vacant lot charges.

The ARTC questions why Measure H funds cannot not be used to clean up human waste and trash at homeless encampments and illegally parked RV properties, for which residents who purchase goods and services in the AV already pay. From 2017 until 2021, Measure H revenue has totaled $1,456, 271, 288—one and a half billion dollars (https://auditor.lacounty.gov/homeless-and-housing-measure-h-special-revenue-fund/). Huge sums of money have gone to "homeless services" with little to

show, and virtually no enforcement of previously mentioned violations of ordinances responsible landowners must abide by. The ARTC requests the option to use Measure H funds be considered in order to reduce GDD costs to landowners in LA County. Property owners should not be expected to pay more for such services, which are outlined in detail in PW's Request For Bids (RFB) process, under Item 2D, Homeless Encampments, Abandoned Encampments, Occupied Encampments—where carts, bags, and dumpsters are delivered and picked up—essentially a 'concierge' service for collection and disposal of waste and contaminated loads (p.67/447).

The R-IS/ND Preface states, "The document that follows constitutes the revised IS/ND for the currently proposed Acton/Agua Dulce, Quartz Hill, Antelope Valley East, and Antelope Valley West GDDs and/or a Residential Franchise (RF) Program. Public Works is recirculating this revised IS/ND for public review in a good-faith effort to inform the public of the bases for concluding that there are no potential significant environmental effects for the Project." (Preface,v.). In fact, statements in the R-IS/ND indicate the operational aspects of the projects and environmental review fall upon the selected contractors, are highly speculative; but conversely, also state PW must consider and "analyze the environmental effects of the potential establishment of GDDs or RFs in the Project area as well as the contracts with waste hauler(s)" (Ch.2.5, p.3). PW will review contracts to assure potential waste haulers can accommodate services that must align with required State and County Mandatory Organic Waste Reduction Ordinance. Not only must PW evaluate impacts of the actual creation of GDDs, but it must, by its own statements, review also activities of waste hauling companies, since PW claims CEQA requires PW to ***evaluate the submitted contracts for their ability to perform without significant impact to rural communities and other residents within GGDs*.** PW cannot claim environmental review falls upon its contractors for highly speculative activities necessary for satisfaction of their duties, and also claim to evaluate the submitted contracts and conclude there are less than significant impacts as a result of the formation and execution of GDDs.

Furthermore, how can the R-IS/ND be used to determine that there are no significant environmental impacts when it has not yet been certified by the Board of Supervisors, and according to the R-IS/ND, "Public Works will issue an Invitation for Bids/Request for Proposals for waste haulers in the Project area to service the proposed GDDs or RFs," and "[while] Public Works is in the process of issuing, reviewing, and awarding waste hauling bids, it is also initiating the special district formation process to establish GDDs in the Project area"(Ch. 2.3, pgs. 4, 5). How can adequate evaluation be done when bids are awarded before environmental review and mitigations assigned might be shown by respondents during public comment to be unequivocally incomplete, inadequate, or misdirected? The apparent ability of PW to review contracts prior to finalization of the R-IS/ND and formation of GDDs, could lead one to conclude necessary equipment and facilities to perform the obligations for each bid are known, and not open for public review. The ARTC argues that the imposition of expensive dust control measures and road maintenance upon residents constitute a significant impact, and can, as previously mentioned, pointed to as a hidden cost imposed upon residents dramatically compounding the ultimate cost of trash collection services.

After discussion with PW at our last ARTC meeting (29 June 2022), and based on information provided it is clear that there are environmental issues remaining unsatisfied with the options offered as mitigation, especially as relates to dust control measures foisted upon landowners and residents that the ARTC concludes are untenable and potentially environmentally damaging. According to the RFB, is it not the responsibility of the lead agency, PW, to assure mitigation reduces impacts to a less than significant

level? Turning the responsibility of dust control measures to residents in order to evade more extensive environmental review is unfair to residents who might have neither heavy equipment for road maintenance, nor adequate funds to treat roads on a massive scale, with dust palliatives, as determined by PW as a measure to reduce dust/air quality impacts to less than significant. There is reasonable assumption that dust control agents, even though labeled "environmentally friendly," can wash into waterways in sensitive desert areas, and SEA areas—habitat which supports State of California and Federally listed wildlife, and can become entrained with dust during high wind events. Mitigation offered by the R-IS/ND to alleviate dust concerns is itself a significant impact, and requires environmental review.

A study published in 2011, " Wildlife Conservation and Solar Energy Development in the Desert Southwest, United States,"Author(s): Jeffrey E. Lovich and Joshua R. Ennen , published in BioScience examined the potential effects of the proliferation of utility-scale renewable energy development on the desert environment, ***including dust suppressants on graded roads*** and determined:

> Dust can have dramatic effects on ecological processes at all scales (reviewed by Field et al. 2010). At the smallest scale, wind erosion, which powers dust emission, can alter the fertility and water-retention capabilities of the soil. Physiologically, dust can adversely influence the gas exchange, photosynthesis, and water usage of Mojave Desert shrubs (Sharifi et al. 1997). Depending on particle size, wind speed, and other factors, dust emission can physically damage plant species through root exposure, burial, and abrasions to their leaves and stems. The physiological and physical damage to plant species inflicted by dust emissions could ultimately reduce the plants' primary production and could indirectly affect wildlife food plants and habitat quality.
>
> To combat dust, solar energy facilities apply various dust suppressants to surfaces with exposed soil (**e.g., graded areas, areas with vegetation removed, roads**). There are eight categories of common dust suppressants used for industrial applications: water, salts and brines, organic nonpetroleum products, synthetic polymers, organic petroleum, electrochemical substances, clay additives, and mulch and fiber mixtures (reviewed in Piechota et al. 2004). In a study conducted in the Mojave Desert in which the hydrological impacts of dust suppressants were compared, Singh and colleagues (2003) reported that changes did occur in the volume, rate, and timing of runoff when dust suppressants were used. In particular, petroleum-based and acrylic-polymer dust suppressants drastically influenced the hydrology of disturbed areas by increasing runoff volume and changing its timing. When it is applied to disturbed desert soils, magnesium chloride (MgCl2), a commonly used salt-based dust depressant, does not increase runoff volume but does, however, increase the total suspended solids loads in runoff (Singh et al. 2003). Others have highlighted the fact that there is a dearth of scientific research and literature on the effects of dust suppressants on wildlife, including the most commonly used category of dust depressant: brines and salts (Piechota et al. 2004, Goodrich et al. 2008). However, the application of MgCl2 to roads was correlated with a higher frequency of plant damage (Goodrich et al. 2008). Because chloride salts, including MgCl2, are not confined to the point of application but have the ability to be transported in runoff (White and Broadly 2001), the potential exists for a loss of primary production associated with plant damage in the habitats surrounding a solar facility, which could directly affect wildlife habitat.

According to the United States Environmental Protection Agency and a panel comprised of experts from the University of Las Vegas, Nevada, "Most of the research on dust suppressants has been conducted by industry and has focused on the effectiveness (or performance) of dust suppressants, that is, the ability to

abate dust. Little information is available on the potential environmental and health impacts of these compounds. Potential environmental impacts include: surface and groundwater quality deterioration; soil contamination; toxicity to soil and water biota; toxicity to humans during and after application; air pollution from volatile dust suppressant components; accumulation in soils; changes in hydrologic characteristics of the soils; and impacts on native flora and fauna populations" (Potential Environmental Impacts of Dust Suppressants: "Avoiding Another Times Beach,"An Expert Panel Summary, Las Vegas, Nevada, May 30-31, 2002).

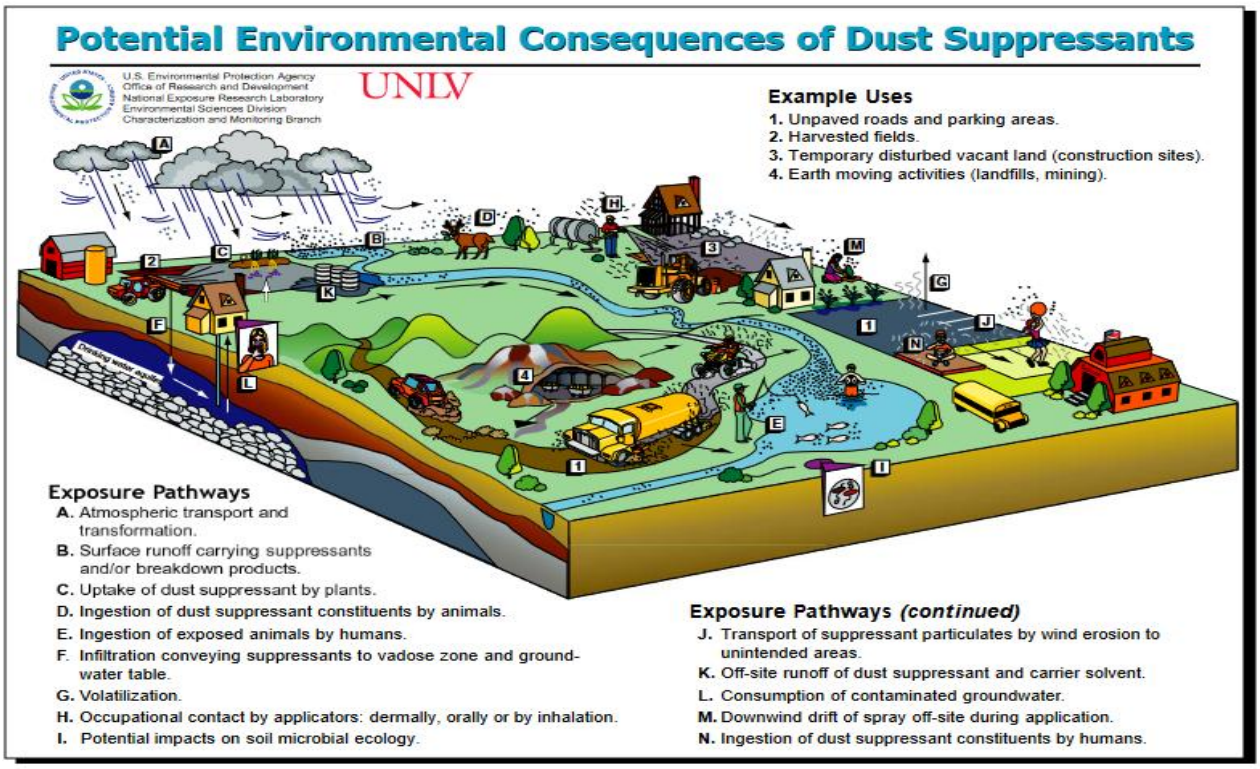


Figure 2-1: Conceptual model of the various uses of dust suppressants and the potential environmental consequences

The environmental consequences of dust palliatives put forth by PW to assuage resident's concerns regarding several dire health consequences, including Valley Fever, asthma, cardiovascular illness, and COPD, present additional significant impacts that must be explored. Do not forget the potential for PW employees or contractors to be affected by dust and dust palliatives that can become entrained on high wind conditions common to the AV during the course of operations.

Additionally, the difficulties involved in permission to pass on vacant lots and private dirt roadways might also prove legally questionable, especially if even one of the property owners refuses to grant permission for trucks to pass for trash collection. PW and the contractor will need to track all permissions, promissory documents for applying dust control measures, and condition of roads. This involves hundreds of miles of dirt roads in the AV. The other mitigation offered is to have residents bring their carts and dumpsters to a public road. This is unworkable for residents who live miles from a public roadway. For those who live closer and in more populated areas, PW must consider congestion and possible infringement on travel due to trash truck traffic, infeasibility of public roadside location of carts and dumpsters in maintaining adequate roadside right of way, especially if there are numerous trash carts

per residence, along with dumpsters and manure waste containers. Leaving obstructions in the road right of way is unlawful; residents cannot be expected to move carts and dumpsters, in many instances, great distance from their homes. The fugitive dust created from such activity is certainly termed a significant impact and also subject to environmental impact review. A solution that should be considered is the establishment of secured "dump stations" at various locations in very rural areas that would contain several very large roll-off dumpsters. Residents, whose identity and address would be verified by an attendant, could use them to drop off their trash, recyclables, food waste, green waste, and bulky item drop-off, manure, and perhaps even e-waste. Travel by large trucks would be limited, fugitive dust vastly reduced, and such a solution would likely lower costs to residents who will definitely struggle with potential cost on property tax bills.

Besides the imposition of dust control measures on dirt roads, those rural communities who have public water systems, and infrastructure for purveying water to residents, have experienced instances of broken water pipes resulting from passage of heavy trucks. The ARTC is unable to find any weight restrictions that apply to dirt roads, only paved roads, and according to Title 15, there are even exceptions to weight restrictions on roads that possess restrictions, such that "Vehicles subject to the provisions of Sections 1031—1036 of the Public Utilities Code of the state of California which vehicle has received a certificate from the Public Utilities Commission of the state declaring that the public necessity and convenience require the operation of such vehicle provided that the certificate specifically authorizes that vehicle to be operated in the subject area for the purpose authorized in the certificate" (15.48.030, Item 3.) The ARTC must assume PW or the GDD contractor maintains certificates of public convenience and necessity from the State of California Public Utilities Commission for the proposed trash service. That aside, the ARTC asks that a survey of rural areas with public water conveyance systems be evaluated, and asserts that any damage from future activities associated with garbage disposal be corrected by PW and/or its contractor providing service.

Finally, the ARTC sees the need for environmental review for significant impacts and mitigation measures meant to reduce impacts from fugitive dust produced by frequent multiple truck trips required for garbage disposal, and should, in fact, have been evaluated in an environmental impact review, not a negative declaration. Moreover, this should include review of what is termed "the whole of the project,"—facilities not yet in existence, but deemed necessary for compliance with S.B. 1383, like food waste digesting plants, and recycling centers. To underline the concern rural communities have for placement of such facilities and mulch/green waste operations, the ARTC can state rural areas of the AV reject being targeted for mulch distribution on open lands, food waste digestion facilities, and additional landfill projects. Because of a current lack of information at this writing, PW must provide accurate costs to be imposed on landowners and residents in each district, as soon as possible, and well before actual voting takes place. A tally of projected cost for illegal dumping, clean-up of homeless encampments, and illegal RV parking would be helpful, in order to apply Measure H funding to reduce cost to individual land owners. This bears repeating—a lack of enforcement of current laws and ordinances has produced conditions which now necessitate action at the expense of landowners who abide by those same laws and ordinances. The emphasis on cleaning up rather than enforcing codes and ordinances does a disservice to rural communities, and levies unfair costs upon residents. Perhaps most importantly, GDDs might cost those with fewer resources, who

sought homeownership in less populated areas of the AV, to lose their homes, when they cannot pay for such increases added to property tax bills, or pay thousands of dollars for dust palliatives needed as a result of mitigation measures imposed on residents by PW in the R-IS/ND.

There is little doubt that an offering of garbage disposal services will reduce instances of illegal dumping and human waste pollution; and the assignment of cash from vacant land owners will provide adequate funding to clean up homeless encampments. However, the unintended consequences of imposing PW's and the R-IS/ND mitigation strategies on all landowners, will impact air quality, public health, sensitive and biologically valuable lands, worsen traffic conditions in more populated areas, affect community water infrastructure, and add onerous cost to residents who can least afford it, and identify them as "non-compliant."

Sincerely,



Susan Zahnter
Director

CC: Fifth District Supervisor Kathryn Barger, Public Works Deputy Anish Saraiya, Senior Field Deputy Donna Termeer, Assistant Field Deputy Charles Bostwick,

LEONA VALLEY TOWN COUNCIL

P.O. BOX 795 • LEONA VALLEY • CA 93551

Department of Public Works
Attention Reyna Soriano
P.O. Box 1460
Alhambra, CA 91802-1460
e-mail: rsoriano@dpw.lacounty.gov

Re: Revised Initial Study and Recirculated Neg. Dec. for the proposed Garbage Disposal Districts

Ms. Soriano,

The Leona Valley Town Council submits the following comments on the above. We appreciate the presentation made at our recent Town Council meeting and want to bring some concerns to your attention.

The County's existing Garbage Disposal Districts (GDD) are in high density urban areas. It seems that not enough thought has gone into putting the proposed GDDs into rural areas, which are quite different in numerous respects. Houses are spaced much further apart, many are on long dirt roads, and they have unique needs for trash disposal. Different amounts of waste are generated depending on the time of year. Typically, much less waste is generated during the winter months, which could result in multiple trips for empty bins.

Our residents are already very concerned with the increase in trash trucks which will be required for pick up of two additional trash bins, trucks for bulky item pick up, trucks for illegal dumping, trucks for manure, and trucks for monitoring each property. At a minimum, the present proposal will at least triple the number of waste hauling trucks that operate in our community. There will be major physical impacts to local roads from repeated heavy truck travel. There will be increased pollution which will affect air quality, scenic views, and noise levels.

Elizabeth Lake Road is the only main access road for not only Leona Valley, but also the outlying communities of Lake Hughes, Elizabeth Lake, etc. Each truck will have to pass through Leona Valley to service the other communities. This will be an excessive impact on Leona Valley and will result in a larger burden on our residents in terms of road damage, air quality, noise pollution, etc. Elizabeth Lake Road is a two lane street which is heavily used during the early morning hours as a commuter bypass. Having trash trucks stopping at every house to empty bins already creates a traffic hazard because cars cannot get around them. To increase this threefold will create an untenable daily situation.

More than 50% of the roads in Leona Valley and surrounding communities are dirt, and tripling the waste hauling truck trips will result in a significant increase in ambient dust levels in the community. The County's solution to this is to spray a substance onto the dirt roads to suppress the dust. However, this will break down quickly with the volume of traffic from the trucks. For private dirt roads, the plan is to require the residents themselves to apply dust control palliatives, which is an additional excessive cost and effort, and could result in acidification of our ground water. This ties directly into the requirement that residents living on private roads will have to provide an easement to the waste hauler, as well as certification of dust control. Many of our private roads have multiple residents. Our understanding is that all the residents must certify and agree to the easements in order to get service. If even one person refuses, then everyone will be forced to move their bins to the county maintained road every week. They cannot leave them there, but must return them to their own private property. This may be physically impossible for many of our elderly and disabled residents, and a very difficult requirement for all of them. Los Angeles County Code specifically states that nothing is to be placed on the roadway or shoulder easements. Various trespassing laws could also come in to play if bins are moved offsite. Even if the waste hauler assists with this process, it is an excessive burden on the residents and the environment to have multiple bins moved every week.

The dust issue is obviously very important, which is borne out by the most recent Los Angeles County Public Health publication "Key Indicators of Health 2017," which reveals the AV experiences the highest numbers of pulmonary illness in Los Angeles County; the AV has the county's highest percentage of children with asthma; the highest pneumonia/ influenza mortality rate; the highest COPD/Emphysema mortality; and the highest cardiovascular mortality rate than all other county Service Plan Areas" (Key Indicators Of Health 2017). The risk of pulmonary disease is greater for residents here, and it is not only particulates produced by automobile and industrial operations, but those of fugitive dust that contribute to such illnesses.

Reported cases of Valley Fever have increased in Los Angeles County and in California in the past several years. Specifically, from 2013 to 2017, the number of reported coccidioidomycosis cases in AV's SPA1 has increased from 18.9 cases to its highest rate of 54.5 cases reported per 100,000 people, and outpaces the other seven SPAs by double digits. While cases are reported from throughout the county, most cases have occurred in northern areas, specifically Antelope Valley and San Fernando Valley.

Overall, the rate of coccidioidomycosis in LA County between 2013 and 2017 has increased from 3.85 cases to 10.38 cases per 100,000 people; "among residents of Antelope Valley the rate is about 9-fold higher than elsewhere in the county" (PH News Release, July 21, 2017). Increased incidence of Valley Fever can impose large public costs in lost productivity, disability, and health care, and its ramifications are felt across rural communities here.

Another concern is that only the waste hauling component of the "project" is considered and the environmental impacts of processing the segregated waste once it is hauled away are not. By looking at only the hauling portion of the "project" and sidestepping the waste processing component, there is a failure to consider the "whole of the action" as required by the California Environmental Quality Act ("CEQA"). Implementation of the processing component of the Franchise Contract project will be left entirely to the bidder's discretion because "waste haulers responding to the Invitation for Bids/Request for Proposals may propose new or expanded service yards in order to serve the Project area. Other facilities may also be proposed, such as transfer stations and/or organic waste processing facilities. However, such future facilities and infrastructure is considered highly speculative and outside the scope of the currently proposed Project".

Since impacts associated with the new organic and recycling waste handling infrastructure that will be developed to serve District customers are "too speculative", this indicates that such impacts will not be evaluated before the Project is approved. Also, if any waste processing facilities that are proposed by the successful Franchise Contract bidder will undergo CEQA review later (which presumably means after the Franchise Contract is approved, this will result in piecemealing, which is prohibited by CEQA.

The problem with this approach is that the County cannot approve the "project" or create any GDDs or authorize any Franchise Contracts for waste disposal services until it has first conducted a CEQA review of both the waste hauling component and the waste processing component of the "project". The County is reminded that the "project" is the formation of Garbage Disposal Districts, not Garbage Hauling Districts, and accordingly, their bids will reflect the scope and extent of the waste disposal facility development and associated permitting that will be required to fully serve District customers. In other words, because the County will not issue any Franchise Contract for any GDD without first evaluating the facilities that the bidder will utilize for processing recyclable and organic wastes, confirming that the facilities are sufficient to fully serve the segregated waste disposal needs for the District, and ensuring that the rates offered by the bidder are consistent with the costs required to develop and permit such facilities, there will be more than sufficient information available for the County to prepare a comprehensive CEQA review of the "project as a whole". It is recognized that this approach may require a few iterative steps in the Request for Proposal ("RFP") process and that it may require the County to issue RFP amendments based on the initial bids received; however, this is a small price to pay for ensuring that the "project" fully complies with CEQA.

Our residents have also voiced considerable concerns over the very long terms of the contracts; in particular, residents expressed concern that long contract terms tend to disincentivize good service. After all, why should a contractor provide good service when it has a guaranteed customer base and a guaranteed revenue stream and a guaranteed payment program that forces

customers to pay through their property taxes? In general, the only real "leverage" for ensuring good customer service is the contract length and the contract terms; if a contract is too lengthy or the terms are too soft, customer service is guaranteed to suffer.

The County asserts that the lengthy contract term was selected to get the best possible rates for customers by allowing bidders to depreciate investments. However, no information has been provided to support the claim that, to "get the best possible rates for customers" a 25-year contract term is necessary. More importantly, there are substantial reasons why a 25-year contract should never be contemplated. First, the current economic situation has introduced massive uncertainties in fuel, labor, and equipment cost projections over the next ten years; it is not certain how much these costs will increase, but it is certain they will increase substantially. These uncertainties are magnified substantially when projections extend to 25 years. Accordingly, to protect their future economic interests, bidders will have to "hedge their bets" by adding substantial margins to their bid rates to forestall potential losses.

The useful life of garbage trucks and most of the other equipment that will be utilized by Franchise Contractors is typically 10 years and certainly not more than 15 years, thus the "depreciation" argument is non-persuasive; we can conceive of no tax implication or fiscal attribute that will provide sufficient economic benefits to warrant a 25-year contract term.

Also, significant technological advancements will occur across all service industries over the next 10 years including waste management; therefore, it would be foolish to "lock" residents into a binding 25-year contract with a waste disposal company that is not compelled to innovate.

We can find no municipality that has agreed to a 25-year waste disposal contract; even the Franchise Contracts that the County has executed to serve areas outside of the Antelope Valley, Acton, and Agua Dulce have a maximum contract length of only 11 years and 6 months. Why is it necessary to burden the residents of our local areas with 25-year Franchise Contracts when the residents of other unincorporated areas have access to reasonably priced waste disposal services through contracts that have much shorter terms? Unless the County can address all the concerns mentioned above (especially regarding customer service) and also quantify and support in detail the benefits that residents will derive from a long-term Franchise Contract, we stand firmly opposed to any contract that exceeds a base term of 10 years with one or two optional extensions.

There are also concerns over the new green/food waste system (SB 1383), which is the impetus for this program. Food waste containers will emit odors, attracting vermin, dogs, flies, and wildlife (bears, coyotes, mountain lions), especially in desert heat. The larger animals easily knock over the bins spreading waste and further polluting the environment. Wind gusts are consistently between 30 to 50 mph, which also contributes to bins being blown over and trash blown over vast areas of the Antelope Valley. The Antelope Valley rural areas are already

targeted for deposit of green waste, aka mulch, from Los Angeles, which is full of trash, can spontaneously combust, burns for days, cause air pollution, and requires expensive fire department services to control fire spread.

We have been requesting information about the proposed fees since the first presentation of this project. We are continually told that they are not yet available, but that it "might" be cheaper. It is impossible to evaluate the pros and cons of the program without some idea of costs. One of the alleged purposes of adding these fees to our property tax bills and imposing them on vacant parcels is to raise funds to tackle the illegal dumping problems that are plaguing the Antelope Valley. Fees imposed on small rural communities would be used to address problems that exist throughout the entire county, and are more predominant in areas other than where the fees are being collected, creating a burden on the rural areas within the GDDs. Also, there is no guarantee that any of the funds would be used for this purpose. Environmental damage and illegal dumping has occurred for years because of a lack of adequate enforcement of current laws that are supposed to protect the health and safety of residents in the Antelope Valley. The fees, combined with the high costs for dust management, will put waste collection beyond a large portion of the low/moderate income range of the Antelope Valley residents.

Finally, the unincorporated Antelope Valley, as depicted on your proposed GDD maps, contains approximately 1800 square miles with a population of 35,000 residents. Our analysis of just the Antelope Valley-West portion indicates an area of approximately 628.5 square miles with a population of 12,136, a Census District population of 19.31 people per square mile. According to Division 4B - ORGANIC WASTE MANAGEMENT, Chapter 20.91 - MANDATORY ORGANIC WASTE DISPOSAL REDUCTION ORDINANCE Section 20.91.110 – Waivers, of Los Angeles County Code:

C. Low Population Waivers. If approved by CalRecycle, the Director may grant waivers for some or all of the requirements of this Chapter to Organic Waste Generators that reside in census tracts with a population density of less than seventy-five (75) people per square mile.

Based on this code, we believe the extremely low 19.31 density of the Antelope Valley-West portion of the GDD requires a waiver. The negative impacts to the environment and excessive costs to the people far outweigh any good that the proposed plan may suggest will be gained.

Therefore, the Leona Valley Town Council opposes the Garbage Disposal District as presently proposed and requests the County to address the above issues.

Thank you for your consideration,

Peggy Fuller

Peggy Fuller
LVTC Land Use Co-Chair

From: David Coscia <DCOSCIA@dpw.lacounty.gov>
Sent: Monday, July 11, 2022 12:48 PM
To: Reyna Soriano <RSoriano@dpw.lacounty.gov>
Subject: FW: Proposed Garbage Disposal Districts for the North County areas including the Antelope Valley - Questions/Concerns

---

From: dan.duncan <dan.duncan@dsquaredsolutions.net>
Sent: Monday, July 11, 2022 12:35 PM
To: Steve Milewski <smilewski@dpw.lacounty.gov>; David Coscia <DCOSCIA@dpw.lacounty.gov>
Cc: dan.duncan@DSquaredsolutions.net
Subject: Proposed Garbage Disposal Districts for the North County areas including the Antelope Valley - Questions/Concerns

CAUTION: External Email. Proceed Responsibly.

Good afternoon,

I recently became aware of the County's project to implement Garbage Disposal Districts in the North County areas including the Antelope Valley and have some questions and concerns.

How were the impacted residents notified of the project? I live in the area and only became aware of it over the weekend.

The maps shown in the presentation on the project's website do not provide the necessary resolution to determine the status of each specific roads in the area, is a street-detail map available to identify what unpaved roads are County maintained?

Please clarify the following statement from the project's webpage:

Property owners must provide written consent to the contracted waste hauler in order to access their property if not accessible from a County maintained road. Property owners along unpaved non-County maintained private roads will also need to provide attestation that the road has been treated to mitigate dust impacts.

How does this apply to properties located on a publicly accessible, non-paved road, accessible from a County maintained road? There are two different conditions being described: "not accessible" and "non-County maintained". The road I live on is accessible to whoever desires to drive down it, however, it doesn't appear to be maintained.

What are the details for dust mitigation; what is approved for use? how often does it need to be applied?

The CEQA discussion appears to identify the "additional practices…to reduce the generation of dust" (applying dust suppressants on private properties) as a mitigation measure, however, no mitigation measures are listed. By not considering the contribution of air pollutants from private roads, the CEQA analysis doesn't seem to evaluating the totality of the project's impacts, this would not be in keeping with CEQA's intentions.

Is there additional information available, other than that what's available on the https://pw.lacounty.gov/epd/NewGDDs/ website? Such as public comments, etcetera.

Thanks for your time and assistance.

Dan Duncan

PO Box 9537

Lancaster, CA 93539

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Air Quality Data

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North County Solid Waste Collection Services 2025 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2025
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.77	13.8	14.1	0.13	0.39	915	916	0.37	92.8	93.2	13,945
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	14.3	11.3	0.13	0.39	915	916	0.37	92.8	93.2	13,772
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.22	7.46	4.72	0.08	0.13	631	631	0.13	64.0	64.1	9,278
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	1.36	0.86	0.02	0.02	115	115	0.02	11.7	11.7	1,536

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.30	9.66	8.49	0.12	0.18	915	915	0.17	92.8	93.0	13,083
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.77	13.8	14.1	0.13	0.39	915	916	0.37	92.8	93.2	13,945
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.28	10.2	5.77	0.12	0.18	915	915	0.17	92.8	93.0	12,910
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.75	14.3	11.3	0.13	0.39	915	916	0.37	92.8	93.2	13,772
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	7.35	4.56	0.08	0.13	631	631	0.12	64.0	64.1	9,254
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.01	0.11	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	23.6
Total	0.22	7.46	4.72	0.08	0.13	631	631	0.13	64.0	64.1	9,278
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	1.34	0.83	0.02	0.02	115	115	0.02	11.7	11.7	1,532
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.04	1.36	0.86	0.02	0.02	115	115	0.02	11.7	11.7	1,536

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.11	9.29	0.96	0.11	0.17	614	615	0.17	62.4	62.5	11,837
General Light Industry	0.12	0.28	4.96	0.01	< 0.005	123	123	< 0.005	12.4	12.4	578
Unrefrigerated Warehouse-No Rail	0.07	0.09	2.58	0.01	< 0.005	178	178	< 0.005	18.0	18.0	667
Total	0.30	9.66	8.49	0.12	0.18	915	915	0.17	92.8	93.0	13,083
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.11	9.74	0.97	0.11	0.17	614	615	0.17	62.4	62.5	11,814
General Light Industry	0.11	0.32	3.14	< 0.005	< 0.005	123	123	< 0.005	12.4	12.4	512
Unrefrigerated Warehouse-No Rail	0.07	0.10	1.67	0.01	< 0.005	178	178	< 0.005	18.0	18.0	584
Total	0.28	10.2	5.77	0.12	0.18	915	915	0.17	92.8	93.0	12,910
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	1.28	0.13	0.01	0.02	77.3	77.3	0.02	7.85	7.87	1,398
General Light Industry	0.01	0.04	0.46	< 0.005	< 0.005	15.4	15.4	< 0.005	1.56	1.56	62.4

Unrefrigerated Warehouse-No Rail	0.01	0.01	0.24	< 0.005	< 0.005	22.4	22.4	< 0.005	2.27	2.27	71.5
Total	0.04	1.34	0.83	0.02	0.02	115	115	0.02	11.7	11.7	1,532

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570

Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570
Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	28.0	0.00	0.00	7,300	3,500	0.00	0.00	912,500
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500
Unrefrigerated Warehouse-No Rail	23.0	0.00	0.00	5,996	1,015	0.00	0.00	264,654

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00
General Light Industry	0.00	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	0.00	—

General Light Industry	0.00	—
Unrefrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2

Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—

Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—

Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	a

Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	a
Operations: Solid Waste	vf
Operations: Refrigerants	—

North County Solid Waste Collection Services 2045 - Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2045 -
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	10.2	9.15	0.11	0.21	1,015	1,016	0.20	103	103	12,075
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	10.7	8.18	0.11	0.21	1,015	1,016	0.20	103	103	11,969
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	6.46	2.22	0.07	0.11	700	700	0.10	71.1	71.2	7,982
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	1.18	0.40	0.01	0.02	128	128	0.02	13.0	13.0	1,322

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.15	8.45	3.64	0.10	0.15	1,015	1,015	0.14	103	103	11,188
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.43	10.2	9.15	0.11	0.21	1,015	1,016	0.20	103	103	12,075
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.15	8.88	2.67	0.10	0.15	1,015	1,015	0.14	103	103	11,083
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.42	10.7	8.18	0.11	0.21	1,015	1,016	0.20	103	103	11,969
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	6.41	2.06	0.07	0.11	700	700	0.10	71.1	71.2	7,934
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.01	0.05	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.6
Total	0.11	6.46	2.22	0.07	0.11	700	700	0.10	71.1	71.2	7,982
Annual	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.02	1.17	0.38	0.01	0.02	128	128	0.02	13.0	13.0	1,314
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.58
Water	—	—	—	—	—	—	—	—	—	—	1.42
Waste	—	—	—	—	—	—	—	—	—	—	1.07
Refrig.	—	—	—	—	—	—	—	—	—	—	0.09
Off-Road	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.02	1.18	0.40	0.01	0.02	128	128	0.02	13.0	13.0	1,322

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	8.38	0.98	0.09	0.15	738	738	0.14	74.9	75.1	10,283
General Light Industry	0.02	0.03	1.28	< 0.005	< 0.005	123	123	< 0.005	12.4	12.4	451
Unrefrigerated Warehouse-No Rail	0.03	0.04	1.39	< 0.005	< 0.005	155	155	< 0.005	15.7	15.7	454
Total	0.15	8.45	3.64	0.10	0.15	1,015	1,015	0.14	103	103	11,188
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	8.81	0.99	0.09	0.15	738	738	0.14	74.9	75.1	10,282

General Light Industry	0.02	0.04	0.80	< 0.005	< 0.005	123	123	< 0.005	12.4	12.4	402
Unrefrigerated Warehouse-No Rail	0.03	0.04	0.88	< 0.005	< 0.005	155	155	< 0.005	15.7	15.7	399
Total	0.15	8.88	2.67	0.10	0.15	1,015	1,015	0.14	103	103	11,083
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	1.16	0.13	0.01	0.02	92.8	92.8	0.02	9.43	9.45	1,216
General Light Industry	< 0.005	0.01	0.12	< 0.005	< 0.005	15.4	15.4	< 0.005	1.57	1.57	48.9
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	0.13	< 0.005	< 0.005	19.5	19.5	< 0.005	1.97	1.97	48.7
Total	0.02	1.17	0.38	0.01	0.02	128	128	0.02	13.0	13.0	1,314

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37
Total	—	—	—	—	—	—	—	—	—	—	3.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37

Total	—	—	—	—	—	—	—	—	—	—	3.37
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.56
Total	—	—	—	—	—	—	—	—	—	—	0.56

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.47
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.47
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.47
Total	—	—	—	—	—	—	—	—	—	—	1.42

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.39
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.29
Total	—	—	—	—	—	—	—	—	—	—	1.07

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.09

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	34.0	0.00	0.00	8,864	4,199	0.00	0.00	1,094,739
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500

Unrefrigerated Warehouse-No Rail	20.0	0.00	0.00	5,214	883	0.00	0.00	230,134

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,500	1,500	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	4,680	261	0.0330	0.0040	19,276

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Heavy Industry	231,250	0.00
General Light Industry	231,250	0.00
Unrefrigerated Warehouse-No Rail	231,250	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1.24	—
General Light Industry	1.24	—
Unrefrigerated Warehouse-No Rail	0.94	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2
Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—

Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—

Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	a
Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	Road repair

North County Solid Waste Collection Services 2025 - Alternative Two: Alternating Collection Weeks Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2025 - Alternative Two: Alternating Collection Weeks
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.80	15.9	14.2	0.15	0.43	1,053	1,054	0.40	107	107	16,605
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.77	16.5	11.5	0.15	0.43	1,053	1,054	0.40	107	107	16,427
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	9.02	4.85	0.10	0.16	726	726	0.15	73.7	73.8	11,175
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	1.65	0.89	0.02	0.03	132	133	0.03	13.4	13.5	1,850

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.33	11.7	8.68	0.14	0.22	1,053	1,054	0.21	107	107	15,744
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.80	15.9	14.2	0.15	0.43	1,053	1,054	0.40	107	107	16,605
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.30	12.3	5.96	0.14	0.22	1,053	1,054	0.21	107	107	15,565
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.77	16.5	11.5	0.15	0.43	1,053	1,054	0.40	107	107	16,427
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.22	8.91	4.70	0.10	0.16	726	726	0.15	73.7	73.8	11,152
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.01	0.11	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	23.6
Total	0.23	9.02	4.85	0.10	0.16	726	726	0.15	73.7	73.8	11,175
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	1.63	0.86	0.02	0.03	132	133	0.03	13.4	13.5	1,846
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.04	1.65	0.89	0.02	0.03	132	133	0.03	13.4	13.5	1,850

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.13	11.3	1.14	0.13	0.21	753	753	0.20	76.4	76.6	14,498
General Light Industry	0.12	0.28	4.96	0.01	< 0.005	123	123	< 0.005	12.4	12.4	578
Unrefrigerated Warehouse-No Rail	0.07	0.09	2.58	0.01	< 0.005	178	178	< 0.005	18.0	18.0	667
Total	0.33	11.7	8.68	0.14	0.22	1,053	1,054	0.21	107	107	15,744
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.13	11.9	1.16	0.13	0.21	753	753	0.20	76.4	76.6	14,469
General Light Industry	0.11	0.32	3.14	< 0.005	< 0.005	123	123	< 0.005	12.4	12.4	512
Unrefrigerated Warehouse-No Rail	0.07	0.10	1.67	0.01	< 0.005	178	178	< 0.005	18.0	18.0	584
Total	0.30	12.3	5.96	0.14	0.22	1,053	1,054	0.21	107	107	15,565
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.02	1.57	0.15	0.02	0.03	94.7	94.7	0.03	9.61	9.64	1,712
General Light Industry	0.01	0.04	0.46	< 0.005	< 0.005	15.4	15.4	< 0.005	1.56	1.56	62.4

Unrefrigerated Warehouse-No Rail	0.01	0.01	0.24	< 0.005	< 0.005	22.4	22.4	< 0.005	2.27	2.27	71.5
Total	0.04	1.63	0.86	0.02	0.03	132	133	0.03	13.4	13.5	1,846

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570

Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570
Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	32.0	0.00	0.00	8,343	4,288	0.00	0.00	1,117,943
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500
Unrefrigerated Warehouse-No Rail	23.0	0.00	0.00	5,996	1,015	0.00	0.00	264,654

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00
General Light Industry	0.00	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	0.00	—

General Light Industry	0.00	—
Unrefrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2

Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—

Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—

Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	a

Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	a
Operations: Solid Waste	vf
Operations: Refrigerants	—

North County Solid Waste Collection Services 2045 - Alternative Two: Alternating Collection Weeks Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2045 - Alternative Two: Alternating Collection Weeks
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	12.2	9.69	0.13	0.24	1,228	1,228	0.23	125	125	14,603
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	12.7	8.59	0.13	0.24	1,228	1,228	0.23	125	125	14,482
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	7.93	2.53	0.09	0.13	846	846	0.13	85.9	86.1	9,780
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	1.45	0.46	0.02	0.02	154	154	0.02	15.7	15.7	1,619

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.18	10.4	4.18	0.12	0.18	1,228	1,228	0.17	125	125	13,716
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.46	12.2	9.69	0.13	0.24	1,228	1,228	0.23	125	125	14,603
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17	10.9	3.09	0.12	0.18	1,228	1,228	0.17	125	125	13,596
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.45	12.7	8.59	0.13	0.24	1,228	1,228	0.23	125	125	14,482
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	7.88	2.38	0.09	0.13	846	846	0.12	85.9	86.1	9,731
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.01	0.05	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.6
Total	0.13	7.93	2.53	0.09	0.13	846	846	0.13	85.9	86.1	9,780
Annual	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.02	1.44	0.43	0.02	0.02	154	154	0.02	15.7	15.7	1,611
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.58
Water	—	—	—	—	—	—	—	—	—	—	1.42
Waste	—	—	—	—	—	—	—	—	—	—	1.07
Refrig.	—	—	—	—	—	—	—	—	—	—	0.09
Off-Road	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.02	1.45	0.46	0.02	0.02	154	154	0.02	15.7	15.7	1,619

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.13	10.3	1.17	0.11	0.18	911	911	0.17	92.6	92.7	12,697
General Light Industry	0.02	0.03	1.28	< 0.005	< 0.005	123	123	< 0.005	12.4	12.4	451
Unrefrigerated Warehouse-No Rail	0.04	0.04	1.73	0.01	< 0.005	194	194	< 0.005	19.6	19.6	568
Total	0.18	10.4	4.18	0.12	0.18	1,228	1,228	0.17	125	125	13,716
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.12	10.8	1.19	0.11	0.18	911	911	0.17	92.6	92.7	12,695

General Light Industry	0.02	0.04	0.80	< 0.005	< 0.005	123	123	< 0.005	12.4	12.4	402
Unrefrigerated Warehouse-No Rail	0.03	0.05	1.10	< 0.005	< 0.005	194	194	< 0.005	19.6	19.6	498
Total	0.17	10.9	3.09	0.12	0.18	1,228	1,228	0.17	125	125	13,596
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.02	1.43	0.15	0.01	0.02	115	115	0.02	11.7	11.7	1,501
General Light Industry	< 0.005	0.01	0.12	< 0.005	< 0.005	15.4	15.4	< 0.005	1.57	1.57	48.9
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	0.16	< 0.005	< 0.005	24.3	24.3	< 0.005	2.47	2.47	60.8
Total	0.02	1.44	0.43	0.02	0.02	154	154	0.02	15.7	15.7	1,611

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37
Total	—	—	—	—	—	—	—	—	—	—	3.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37

Total	—	—	—	—	—	—	—	—	—	—	3.37
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.56
Total	—	—	—	—	—	—	—	—	—	—	0.56

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.47
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.47
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.47
Total	—	—	—	—	—	—	—	—	—	—	1.42

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.39
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.29
Total	—	—	—	—	—	—	—	—	—	—	1.07

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.09

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	39.0	0.00	0.00	10,168	5,187	0.00	0.00	1,352,325
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500

Unrefrigerated Warehouse-No Rail	25.0	0.00	0.00	6,518	1,103	0.00	0.00	287,667

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,500	1,500	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	4,680	261	0.0330	0.0040	19,276

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Heavy Industry	231,250	0.00
General Light Industry	231,250	0.00
Unrefrigerated Warehouse-No Rail	231,250	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1.24	—
General Light Industry	1.24	—
Unrefrigerated Warehouse-No Rail	0.94	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2
Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—

Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—

Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	a
Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	Road repair

North County Solid Waste Collection Services 2045 - Alternative Three: Commingling Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2045 - Alternative Three: Commingling
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	9.76	8.91	0.10	0.20	973	973	0.19	98.7	98.9	11,396
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	10.2	8.02	0.10	0.20	973	973	0.19	98.7	98.9	11,299
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	6.10	2.09	0.07	0.10	670	670	0.10	68.1	68.2	7,502
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	1.11	0.38	0.01	0.02	122	122	0.02	12.4	12.4	1,242

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.14	7.98	3.40	0.10	0.14	973	973	0.13	98.7	98.8	10,510
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.42	9.76	8.91	0.10	0.20	973	973	0.19	98.7	98.9	11,396
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	8.38	2.51	0.09	0.14	973	973	0.13	98.7	98.8	10,412
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.41	10.2	8.02	0.10	0.20	973	973	0.19	98.7	98.9	11,299
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.10	6.05	1.93	0.07	0.10	670	670	0.09	68.1	68.2	7,453
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.01	0.05	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.6
Total	0.11	6.10	2.09	0.07	0.10	670	670	0.10	68.1	68.2	7,502
Annual	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.02	1.10	0.35	0.01	0.02	122	122	0.02	12.4	12.4	1,234
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.58
Water	—	—	—	—	—	—	—	—	—	—	1.42
Waste	—	—	—	—	—	—	—	—	—	—	1.07
Refrig.	—	—	—	—	—	—	—	—	—	—	0.09
Off-Road	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.02	1.11	0.38	0.01	0.02	122	122	0.02	12.4	12.4	1,242

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	7.91	0.95	0.09	0.14	712	712	0.13	72.3	72.4	9,673
General Light Industry	0.02	0.03	1.28	< 0.005	< 0.005	126	126	< 0.005	12.8	12.8	451
Unrefrigerated Warehouse-No Rail	0.02	0.03	1.18	< 0.005	< 0.005	135	135	< 0.005	13.7	13.7	386
Total	0.14	7.98	3.40	0.10	0.14	973	973	0.13	98.7	98.8	10,510
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	8.31	0.96	0.09	0.14	712	712	0.13	72.3	72.4	9,671

General Light Industry	0.02	0.04	0.80	< 0.005	< 0.005	126	126	< 0.005	12.8	12.8	402
Unrefrigerated Warehouse-No Rail	0.02	0.03	0.75	< 0.005	< 0.005	135	135	< 0.005	13.7	13.7	339
Total	0.14	8.38	2.51	0.09	0.14	973	973	0.13	98.7	98.8	10,412
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	1.09	0.12	0.01	0.02	89.5	89.5	0.02	9.09	9.11	1,144
General Light Industry	< 0.005	0.01	0.12	< 0.005	< 0.005	15.8	15.8	< 0.005	1.61	1.61	48.9
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.11	< 0.005	< 0.005	17.0	17.0	< 0.005	1.72	1.72	41.4
Total	0.02	1.10	0.35	0.01	0.02	122	122	0.02	12.4	12.4	1,234

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37
Total	—	—	—	—	—	—	—	—	—	—	3.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37

Total	—	—	—	—	—	—	—	—	—	—	3.37
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.56
Total	—	—	—	—	—	—	—	—	—	—	0.56

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.47
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.47
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.47
Total	—	—	—	—	—	—	—	—	—	—	1.42

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.39
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.29
Total	—	—	—	—	—	—	—	—	—	—	1.07

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.09

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	34.0	0.00	0.00	8,864	3,948	0.00	0.00	1,029,321
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500

Unrefrigerated Warehouse-No Rail	17.0	0.00	0.00	4,432	750	0.00	0.00	195,614

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,500	1,500	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	4,680	261	0.0330	0.0040	19,276

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Heavy Industry	231,250	0.00
General Light Industry	231,250	0.00
Unrefrigerated Warehouse-No Rail	231,250	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1.24	—
General Light Industry	1.24	—
Unrefrigerated Warehouse-No Rail	0.94	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2
Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—

Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—

Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	a
Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	Road repair

North County Solid Waste Collection Services 2025: Alternative Three - Commingling Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2025: Alternative Three - Commingling
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.74	12.8	13.3	0.11	0.37	819	820	0.35	83.0	83.4	12,421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.72	13.2	10.8	0.11	0.37	819	820	0.35	83.0	83.4	12,272
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	6.65	4.30	0.07	0.12	564	565	0.11	57.2	57.3	8,202
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	1.21	0.78	0.01	0.02	103	103	0.02	10.4	10.5	1,358

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.27	8.59	7.73	0.10	0.16	819	819	0.15	83.0	83.2	11,559
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.74	12.8	13.3	0.11	0.37	819	820	0.35	83.0	83.4	12,421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.25	9.05	5.25	0.10	0.16	819	819	0.15	83.0	83.2	11,410
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.72	13.2	10.8	0.11	0.37	819	820	0.35	83.0	83.4	12,272
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.18	6.54	4.15	0.07	0.11	564	565	0.11	57.2	57.3	8,178
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.01	0.11	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	23.6
Total	0.20	6.65	4.30	0.07	0.12	564	565	0.11	57.2	57.3	8,202
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	1.19	0.76	0.01	0.02	103	103	0.02	10.4	10.5	1,354
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.04	1.21	0.78	0.01	0.02	103	103	0.02	10.4	10.5	1,358

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	8.24	0.86	0.09	0.15	558	558	0.15	56.6	56.8	10,487
General Light Industry	0.12	0.28	4.96	0.01	< 0.005	126	126	< 0.005	12.7	12.7	578
Unrefrigerated Warehouse-No Rail	0.05	0.07	1.91	< 0.005	< 0.005	135	135	< 0.005	13.7	13.7	493
Total	0.27	8.59	7.73	0.10	0.16	819	819	0.15	83.0	83.2	11,559
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	8.65	0.87	0.09	0.15	558	558	0.15	56.6	56.8	10,466
General Light Industry	0.11	0.32	3.14	< 0.005	< 0.005	126	126	< 0.005	12.7	12.7	512
Unrefrigerated Warehouse-No Rail	0.05	0.07	1.23	< 0.005	< 0.005	135	135	< 0.005	13.7	13.7	432
Total	0.25	9.05	5.25	0.10	0.16	819	819	0.15	83.0	83.2	11,410
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	1.14	0.11	0.01	0.02	70.2	70.2	0.02	7.12	7.14	1,239
General Light Industry	0.01	0.04	0.46	< 0.005	< 0.005	15.8	15.8	< 0.005	1.60	1.60	62.4

Unrefrigerated Warehouse-No Rail	0.01	0.01	0.18	< 0.005	< 0.005	17.0	17.0	< 0.005	1.72	1.72	52.8
Total	0.03	1.19	0.76	0.01	0.02	103	103	0.02	10.4	10.5	1,354

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570

Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570
Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	26.0	0.00	0.00	6,779	3,100	0.00	0.00	808,209
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500
Unrefrigerated Warehouse-No Rail	17.0	0.00	0.00	4,432	750	0.00	0.00	195,614

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00
General Light Industry	0.00	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	0.00	—

General Light Industry	0.00	—
Unrefrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2

Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—

Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—

Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	a

Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	a
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North County Solid Waste Collection Services 2025: Alternative Four- Cart Rollout Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2025: Alternative Four- Cart Rollout
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.76	14.0	13.6	0.13	0.40	65.1	65.5	0.37	9.33	9.70	14,073
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.74	14.5	11.1	0.13	0.40	65.1	65.5	0.37	9.33	9.70	13,914
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21	7.59	4.49	0.09	0.14	45.2	45.4	0.13	6.52	6.65	9,377
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	1.38	0.82	0.02	0.02	8.25	8.28	0.02	1.19	1.21	1,552

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.29	9.83	8.06	0.12	0.18	65.1	65.3	0.17	9.33	9.50	13,211
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.76	14.0	13.6	0.13	0.40	65.1	65.5	0.37	9.33	9.70	14,073
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.27	10.3	5.50	0.12	0.18	65.1	65.3	0.17	9.33	9.50	13,052
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.74	14.5	11.1	0.13	0.40	65.1	65.5	0.37	9.33	9.70	13,914
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	7.47	4.34	0.08	0.13	45.2	45.4	0.12	6.52	6.64	9,353
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.01	0.11	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	23.6
Total	0.21	7.59	4.49	0.09	0.14	45.2	45.4	0.13	6.52	6.65	9,377
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	1.36	0.79	0.02	0.02	8.25	8.28	0.02	1.19	1.21	1,548
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.04	1.38	0.82	0.02	0.02	8.25	8.28	0.02	1.19	1.21	1,552

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.11	9.47	0.97	0.11	0.18	45.8	45.9	0.17	6.59	6.76	12,081
General Light Industry	0.12	0.28	4.96	0.01	< 0.005	8.82	8.83	< 0.005	1.25	1.25	578
Unrefrigerated Warehouse-No Rail	0.06	0.07	2.13	0.01	< 0.005	10.6	10.6	< 0.005	1.49	1.49	551
Total	0.29	9.83	8.06	0.12	0.18	65.1	65.3	0.17	9.33	9.50	13,211
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.11	9.94	0.98	0.11	0.18	45.8	45.9	0.17	6.59	6.76	12,058
General Light Industry	0.11	0.32	3.14	< 0.005	< 0.005	8.82	8.83	< 0.005	1.25	1.25	512
Unrefrigerated Warehouse-No Rail	0.05	0.08	1.38	< 0.005	< 0.005	10.6	10.6	< 0.005	1.49	1.49	483
Total	0.27	10.3	5.50	0.12	0.18	65.1	65.3	0.17	9.33	9.50	13,052
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	1.31	0.13	0.01	0.02	5.80	5.82	0.02	0.84	0.86	1,427
General Light Industry	0.01	0.04	0.46	< 0.005	< 0.005	1.12	1.12	< 0.005	0.16	0.16	62.4

Unrefrigerated Warehouse-No Rail	0.01	0.01	0.20	< 0.005	< 0.005	1.34	1.34	< 0.005	0.19	0.19	59.0
Total	0.04	1.36	0.79	0.02	0.02	8.25	8.28	0.02	1.19	1.21	1,548

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570

Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570
Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	28.0	0.00	0.00	7,300	3,573	0.00	0.00	931,407
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500
Unrefrigerated Warehouse-No Rail	19.0	0.00	0.00	4,954	839	0.00	0.00	218,627

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00
General Light Industry	0.00	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	0.00	—

General Light Industry	0.00	—
Unrefrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2

Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—

Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—

Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	98 percent paved. 9.58 tons for average weight

Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	a
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North County Solid Waste Collection Services 2045 - Alternative Four: Cart Rollout Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2045 - Alternative Four: Cart Rollout
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	10.2	9.15	0.11	0.21	75.0	75.2	0.20	10.9	11.1	12,077
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	10.7	8.18	0.11	0.21	75.0	75.2	0.20	10.9	11.1	11,972
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	6.46	2.22	0.07	0.11	52.1	52.2	0.10	7.61	7.71	7,984
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	1.18	0.40	0.01	0.02	9.51	9.53	0.02	1.39	1.41	1,322

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.15	8.45	3.64	0.10	0.15	75.0	75.1	0.14	10.9	11.0	11,191
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.43	10.2	9.15	0.11	0.21	75.0	75.2	0.20	10.9	11.1	12,077
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.15	8.89	2.67	0.10	0.15	75.0	75.1	0.14	10.9	11.0	11,085
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.42	10.7	8.18	0.11	0.21	75.0	75.2	0.20	10.9	11.1	11,972
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	6.41	2.06	0.07	0.11	52.1	52.2	0.10	7.61	7.71	7,935
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.01	0.05	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.6
Total	0.11	6.46	2.22	0.07	0.11	52.1	52.2	0.10	7.61	7.71	7,984
Annual	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.02	1.17	0.38	0.01	0.02	9.51	9.53	0.02	1.39	1.41	1,314
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.58
Water	—	—	—	—	—	—	—	—	—	—	1.42
Waste	—	—	—	—	—	—	—	—	—	—	1.07
Refrig.	—	—	—	—	—	—	—	—	—	—	0.09
Off-Road	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.02	1.18	0.40	0.01	0.02	9.51	9.53	0.02	1.39	1.41	1,322

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	8.39	0.98	0.09	0.15	54.7	54.9	0.14	7.99	8.13	10,286
General Light Industry	0.02	0.03	1.28	< 0.005	< 0.005	8.97	8.97	< 0.005	1.28	1.28	451
Unrefrigerated Warehouse-No Rail	0.03	0.04	1.39	< 0.005	< 0.005	11.3	11.3	< 0.005	1.62	1.62	454
Total	0.15	8.45	3.64	0.10	0.15	75.0	75.1	0.14	10.9	11.0	11,191
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	8.81	0.99	0.09	0.15	54.7	54.9	0.14	7.99	8.13	10,284

General Light Industry	0.02	0.04	0.80	< 0.005	< 0.005	8.97	8.97	< 0.005	1.28	1.28	402
Unrefrigerated Warehouse-No Rail	0.03	0.04	0.88	< 0.005	< 0.005	11.3	11.3	< 0.005	1.62	1.62	399
Total	0.15	8.89	2.67	0.10	0.15	75.0	75.1	0.14	10.9	11.0	11,085
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	1.16	0.13	0.01	0.02	6.94	6.96	0.02	1.02	1.04	1,216
General Light Industry	< 0.005	0.01	0.12	< 0.005	< 0.005	1.14	1.14	< 0.005	0.16	0.16	48.9
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	0.13	< 0.005	< 0.005	1.43	1.43	< 0.005	0.21	0.21	48.7
Total	0.02	1.17	0.38	0.01	0.02	9.51	9.53	0.02	1.39	1.41	1,314

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37
Total	—	—	—	—	—	—	—	—	—	—	3.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37

Total	—	—	—	—	—	—	—	—	—	—	3.37
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.56
Total	—	—	—	—	—	—	—	—	—	—	0.56

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.47
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.47
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.47
Total	—	—	—	—	—	—	—	—	—	—	1.42

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.39
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.29
Total	—	—	—	—	—	—	—	—	—	—	1.07

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.09

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	34.0	0.00	0.00	8,864	4,200	0.00	0.00	1,095,005
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500

Unrefrigerated Warehouse-No Rail	20.0	0.00	0.00	5,214	883	0.00	0.00	230,134

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,500	1,500	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	4,680	261	0.0330	0.0040	19,276

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Heavy Industry	231,250	0.00
General Light Industry	231,250	0.00
Unrefrigerated Warehouse-No Rail	231,250	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1.24	—
General Light Industry	1.24	—
Unrefrigerated Warehouse-No Rail	0.94	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2
Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—

Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—

Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	a
Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
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North County Solid Waste Collection Services 2025 - Alternative Five: Split Body Trucks Detailed Report

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7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2025 - Alternative Five: Split Body Trucks
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.79	15.4	14.1	0.14	0.42	1,013	1,013	0.40	103	103	15,942
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.76	16.0	11.4	0.14	0.42	1,013	1,013	0.40	103	103	15,768
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	8.64	4.76	0.10	0.16	698	698	0.15	70.8	71.0	10,704
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	1.58	0.87	0.02	0.03	127	127	0.03	12.9	13.0	1,772

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.32	11.2	8.52	0.14	0.21	1,013	1,013	0.20	103	103	15,080
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.79	15.4	14.1	0.14	0.42	1,013	1,013	0.40	103	103	15,942
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.29	11.8	5.84	0.14	0.21	1,013	1,013	0.20	103	103	14,906
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Total	0.76	16.0	11.4	0.14	0.42	1,013	1,013	0.40	103	103	15,768
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.21	8.53	4.61	0.10	0.15	698	698	0.14	70.8	71.0	10,680
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	0.01	0.11	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	23.6
Total	0.23	8.64	4.76	0.10	0.16	698	698	0.15	70.8	71.0	10,704
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	1.56	0.84	0.02	0.03	127	127	0.03	12.9	12.9	1,768
Area	0.00	—	—	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—	—	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00
Off-Road	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.04	1.58	0.87	0.02	0.03	127	127	0.03	12.9	13.0	1,772

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.13	10.9	1.10	0.12	0.20	720	720	0.19	73.0	73.2	13,863
General Light Industry	0.12	0.28	4.96	0.01	< 0.005	123	123	< 0.005	12.4	12.4	578
Unrefrigerated Warehouse-No Rail	0.07	0.09	2.47	0.01	< 0.005	170	170	< 0.005	17.2	17.2	638
Total	0.32	11.2	8.52	0.14	0.21	1,013	1,013	0.20	103	103	15,080
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.12	11.4	1.11	0.12	0.20	720	720	0.19	73.0	73.2	13,836
General Light Industry	0.11	0.32	3.14	< 0.005	< 0.005	123	123	< 0.005	12.4	12.4	512
Unrefrigerated Warehouse-No Rail	0.06	0.10	1.59	0.01	< 0.005	170	170	< 0.005	17.2	17.2	559
Total	0.29	11.8	5.84	0.14	0.21	1,013	1,013	0.20	103	103	14,906
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.02	1.50	0.14	0.02	0.03	90.5	90.5	0.03	9.19	9.22	1,637
General Light Industry	0.01	0.04	0.46	< 0.005	< 0.005	15.4	15.4	< 0.005	1.56	1.56	62.4

Unrefrigerated Warehouse-No Rail	0.01	0.01	0.23	< 0.005	< 0.005	21.4	21.4	< 0.005	2.17	2.17	68.3
Total	0.04	1.56	0.84	0.02	0.03	127	127	0.03	12.9	12.9	1,768

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570

Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	291
Graders	0.36	3.06	3.66	0.01	0.17	—	0.17	0.16	—	0.16	570
Total	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	862
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	31.0	0.00	0.00	8,082	4,100	0.00	0.00	1,068,944
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500
Unrefrigerated Warehouse-No Rail	22.0	0.00	0.00	5,736	971	0.00	0.00	253,147

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00
General Light Industry	0.00	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	0.00	—

General Light Industry	0.00	—
Unrefrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2

Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—

Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—

Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	62 percent paved. 9.55 tons for average weight

Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	a
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North County Solid Waste Collection Services 2045 - Alternative five: Spilt Body Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North County Solid Waste Collection Services 2045 - Alternative five: Spilt Body
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.461474240178816, -118.04372370307351
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3626
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—

General Light Industry	1.00	1000sqft	0.02	1,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	11.8	9.51	0.13	0.23	1,180	1,180	0.22	120	120	14,100
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	12.3	8.47	0.13	0.23	1,180	1,180	0.22	120	120	13,986
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	7.65	2.43	0.09	0.13	813	813	0.12	82.6	82.7	9,424
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	1.40	0.44	0.02	0.02	148	148	0.02	15.1	15.1	1,560

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.17	10.0	4.00	0.12	0.17	1,180	1,180	0.17	120	120	13,214
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.45	11.8	9.51	0.13	0.23	1,180	1,180	0.22	120	120	14,100
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17	10.5	2.96	0.12	0.17	1,180	1,180	0.17	120	120	13,099
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Total	0.44	12.3	8.47	0.13	0.23	1,180	1,180	0.22	120	120	13,986
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	7.60	2.28	0.09	0.12	813	813	0.12	82.6	82.7	9,376
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.56
Water	—	—	—	—	—	—	—	—	—	—	8.58
Waste	—	—	—	—	—	—	—	—	—	—	6.45
Refrig.	—	—	—	—	—	—	—	—	—	—	0.52
Off-Road	0.01	0.05	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.6
Total	0.13	7.65	2.43	0.09	0.13	813	813	0.12	82.6	82.7	9,424
Annual	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.02	1.39	0.42	0.02	0.02	148	148	0.02	15.1	15.1	1,552
Area	0.00	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.58
Water	—	—	—	—	—	—	—	—	—	—	1.42
Waste	—	—	—	—	—	—	—	—	—	—	1.07
Refrig.	—	—	—	—	—	—	—	—	—	—	0.09
Off-Road	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91
Total	0.02	1.40	0.44	0.02	0.02	148	148	0.02	15.1	15.1	1,560

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.12	9.95	1.13	0.11	0.17	879	879	0.17	89.3	89.4	12,240
General Light Industry	0.02	0.03	1.28	< 0.005	< 0.005	123	123	< 0.005	12.4	12.5	451
Unrefrigerated Warehouse-No Rail	0.03	0.04	1.59	0.01	< 0.005	178	178	< 0.005	18.1	18.1	522
Total	0.17	10.0	4.00	0.12	0.17	1,180	1,180	0.17	120	120	13,214
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.12	10.4	1.15	0.11	0.17	879	879	0.17	89.3	89.4	12,239

General Light Industry	0.02	0.04	0.80	< 0.005	< 0.005	123	123	< 0.005	12.4	12.5	402
Unrefrigerated Warehouse-No Rail	0.03	0.05	1.01	< 0.005	< 0.005	178	178	< 0.005	18.1	18.1	459
Total	0.17	10.5	2.96	0.12	0.17	1,180	1,180	0.17	120	120	13,099
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.02	1.37	0.15	0.01	0.02	110	111	0.02	11.2	11.3	1,447
General Light Industry	< 0.005	0.01	0.12	< 0.005	< 0.005	15.4	15.4	< 0.005	1.57	1.57	48.9
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	0.15	< 0.005	< 0.005	22.4	22.4	< 0.005	2.27	2.27	56.0
Total	0.02	1.39	0.42	0.02	0.02	148	148	0.02	15.1	15.1	1,552

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37
Total	—	—	—	—	—	—	—	—	—	—	3.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3.37

Total	—	—	—	—	—	—	—	—	—	—	3.37
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.56
Total	—	—	—	—	—	—	—	—	—	—	0.56

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.19
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.03

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	—	—	—	—	—	—	—	—	—	—
Total	0.00	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.86
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.86
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.86
Total	—	—	—	—	—	—	—	—	—	—	8.58
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.47
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.47
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.47
Total	—	—	—	—	—	—	—	—	—	—	1.42

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	2.34
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.34
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1.77
Total	—	—	—	—	—	—	—	—	—	—	6.45
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.39
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.29
Total	—	—	—	—	—	—	—	—	—	—	1.07

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.26
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.26
Total	—	—	—	—	—	—	—	—	—	—	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	0.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.09

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.08	0.80	1.91	< 0.005	0.01	—	0.01	0.01	—	0.01	291
Graders	0.20	0.98	3.59	0.01	0.05	—	0.05	0.05	—	0.05	570
Total	0.28	1.78	5.50	0.01	0.06	—	0.06	0.05	—	0.05	861
Annual	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.32
Graders	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.59
Total	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.91

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	38.0	0.00	0.00	9,907	5,000	0.00	0.00	1,303,582
General Light Industry	7.00	0.00	0.00	1,825	700	0.00	0.00	182,500

Unrefrigerated Warehouse-No Rail	23.0	0.00	0.00	5,996	1,015	0.00	0.00	264,654

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,500	1,500	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	4,680	261	0.0330	0.0040	19,276

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Heavy Industry	231,250	0.00
General Light Industry	231,250	0.00
Unrefrigerated Warehouse-No Rail	231,250	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1.24	—
General Light Industry	1.24	—
Unrefrigerated Warehouse-No Rail	0.94	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Graders	Diesel	Average	1.00	8.00	148	0.41

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.1	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	33.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	43.0
AQ-DPM	1.18
Drinking Water	63.4
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	55.7
Traffic	1.49
Effect Indicators	—
CleanUp Sites	83.2
Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	17.6
Cardio-vascular	3.07
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—

Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	86.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	17.4
Physically Disabled	39.7
Heart Attack ER Admissions	92.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—

Wildfire Risk	12.1
SLR Inundation Area	0.0
Children	99.4
Elderly	69.3
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	A
Operations: Vehicle Data	a
Operations: Fleet Mix	a
Operations: Road Dust	62% paved. 10.15 AVW
Operations: Consumer Products	0
Operations: Architectural Coatings	0
Operations: Energy Use	0
Operations: Water and Waste Water	kl;
Operations: Off-Road Equipment	Road repair