



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE

REFER TO FILE:

EP-4
A3454-5

April 29, 2013

TO: Each Supervisor

FROM: Gail Farber 
Director of Public Works

**BOARD MOTION OF APRIL 20, 2010, ITEM NO. 44
CONVERSION TECHNOLOGIES IN LOS ANGELES COUNTY
SIX-MONTH STATUS UPDATE: OCTOBER 2012 THROUGH APRIL 2013 UPDATE**

On April 20, 2010, the Board approved Memoranda of Understanding for three conversion technology demonstration projects and awarded a contract for consultant services for the demonstration and commercial phases of the Southern California Conversion Technology Demonstration project, which is intended to foster solid waste alternatives to landfills within the County of Los Angeles.

At that time, the Board also instructed the Director of Public Works, in coordination with appropriate stakeholders, to assess the feasibility of developing a conversion technology facility at one or more County landfills; to identify other potentially suitable sites within the County of Los Angeles, and to report back to the Board within six months. In October 2010 Public Works submitted a preliminary siting assessment in response to this request and committed to providing the Board with a status report on our efforts every six months.

Subsequently, on September 25, 2012, the Board approved a motion by Supervisor Knabe directing Public Works, in conjunction with the Chief Executive Office, to work with key stakeholders to pursue and support the passage of legislation and regulations to encourage development of conversion technologies, including appropriate incentives for producing renewable energy, reducing landfill disposal, and producing low carbon fuels.

PP
BH
CR

ENVIRONMENTAL PROGRAMS DIVISION

The attached status update for October 2012 through April 2013 summarizes the efforts Public Works has undertaken in response to these Board actions to advance conversion technology development in the County of Los Angeles.

Highlights include:

- In concert with the Chief Executive Office and County's Legislative Advocates in Sacramento, introduced, Senate Bill 804 (SB 804), authored by Senator Ricardo Lara, to encourage development of conversion technologies, including establishing a clear pathway for permitting of conversion technology facilities and providing appropriate incentives for producing renewable energy.
- In concert with the County's legislative advocates in Sacramento, coordinated and participated in educational meetings with key Sacramento legislators, regulatory agencies and a stakeholder delegation of jurisdictions, utilities, and environmental groups. These meetings were convened to discuss the conversion technology legislation sponsored by the County's SB 804 as well as project development efforts and various benefits of conversion technologies.
- Continued to provide technical and planning services to potential County-based conversion technology projects. Some projects have made significant progress, and two cities (Glendale and Avalon) have released requests for proposals.
- Participated in the stakeholder process for development of CalRecycle's report to the State legislature on how to achieve the State's 75 percent recycling goal. The recommendations thus far developed have the potential to significantly impact solid waste management in the State, including conversion technology development.

Each Supervisor
April 29, 2013
Page 3

Public Works will continue to work with stakeholders to move forward with project development activities at sites within the County. Our next status report will be submitted to the Board by October 30, 2013..

CS/CS:dy

P:\Sec\EP-4\CT 6 month report cover memo 04-29-13

Attach.

cc: Chief Executive Office
County Counsel
Department of Public Health
Department of Regional Planning
Los Angeles County Integrated Waste Management Task Force
Regional Planning Commission
Sanitation Districts of Los Angeles County

BOARD MOTION OF APRIL 20, 2010, ITEM 44
CONVERSION TECHNOLOGIES IN LOS ANGELES COUNTY
SIX MONTH STATUS UPDATE: OCTOBER 2012 TO APRIL 2013

1 Introduction

On April 20, 2010, the County of Los Angeles Board of Supervisors unanimously approved three Memoranda of Understanding to develop demonstration conversion technology projects as part of the Southern California Conversion Technology Program. The purpose of the program is to encourage the development of conversion technologies as alternatives to landfills for the management of solid waste in the County. Board action on April 20, 2010, also awarded a contract for consultant services for the program's demonstration and commercial phases. The Board also approved a motion instructing the Director of the County of Los Angeles Department of Public Works, in coordination with appropriate stakeholders, to assess the feasibility of developing a conversion technology facility at one or more County landfills and to identify other potential facility sites within the County of Los Angeles. The motion further directed Public Works to report to the Board in six months with its findings.

In October 2010 Public Works submitted a Preliminary Siting Assessment to the Board identifying potential project sites proposed by 11 municipalities and 9 private companies, and committed to providing the Board with a status report on our efforts every 6 months. Since that time, Public Works has worked with interested stakeholders to evaluate additional possible project locations within the County.

Subsequently, on September 25, 2012, the Board approved a motion by Supervisor Knabe directing Public Works, in conjunction with the Chief Executive Office (CEO), to work with key stakeholders to pursue and support the passage of legislation and regulations to encourage development of conversion technologies, including appropriate incentives for producing renewable energy, reducing landfill disposal, and producing low-carbon fuels.

This report provides a summary of key actions and accomplishments by Public Works, in concert with the CEO and the County's legislative advocates in Sacramento, in response to the above Board actions, for October 2012 to April 2013.

2 Project Background

For over a decade, Public Works has evaluated and promoted the development of conversion technology facilities as an alternative to the landfilling of solid waste by the County's municipalities and communities. In addition to diverting solid waste from landfill disposal, such facilities produce renewable energy (whether electric or as gaseous or liquid fuels), reduce environmental impacts, and create local green-collar jobs. Together with technical and public outreach consultants, Public Works has vetted various noncombustion thermal, biological, chemical, and mechanical conversion

technologies, assessed potential project sites, worked with local and State agencies to create a permitting pathway for the technologies, and created a Countywide public outreach plan to educate stakeholders about the benefit of these technologies.

One of the most significant barriers to the development of conversion technologies in California has been inconsistent definitions and other provisions in State laws and regulations, which act as disincentives to the development of conversion technologies. To address this issue, on September 25, 2012, the Board approved a motion directing Public Works, in conjunction with the Chief Executive Office, to work with the Sanitation Districts of Los Angeles County and other key stakeholders to:

- Actively pursue and support the passage of State and Federal legislation and regulations that would establish a clear pathway to encourage the development of conversion technologies, including clarification of the definition of conversion technologies and ensuring they qualify for appropriate incentives for producing renewable energy, reducing landfill disposal, and producing low-carbon fuels.
- Support legislation to provide renewable energy status and to continue to provide diversion credits and other incentives for energy production at existing facilities in the County Los Angeles that generate energy from waste.
- Outreach to State agencies and other stakeholders to share information on the technical performance and multifaceted benefits of conversion technologies, such as their role in meeting the solid waste management needs of local jurisdictions, producing green fuels, and reducing greenhouse gas emissions.
- Work with conversion technology companies to identify potential regulatory changes that are necessary to streamline the permitting process to allow conversion technology facilities to flourish in California while complying with California's strict environmental standards.

3 Conversion Technology Legislation

In response to the September 25, 2012, Board motion, Public Works has carried out each of the action steps listed below, as outlined in the previous report. The following sections describe in greater detail the actions taken by Public Works to complete these steps over the past six months.

- Work with the County's legislative advocates in Sacramento and Washington DC to identify opportunities to sponsor and/or support legislation.
- As appropriate, meet with key legislative staff to garner support for legislation.

- Coordinate with CalRecycle and other State regulatory agencies to promote updated regulations and legislation.
- Host workshops and tours to promote awareness among stakeholders.
- Through an online survey, communicate with conversion technology developers, including companies with projects in development in other States, to identify changes and incentives needed to move conversion technologies forward.
- Continue public education efforts, including presentations, educational booths at conferences and schools, and print media.

3.1 Senate Bill 804

Senate Bill 804 (SB 804) was introduced in February 2013 by Senator Ricardo Lara (D-33). Sponsored by the County Los Angeles and the California State Association of Counties (CSAC), the intent of the bill is to provide a permitting pathway for conversion technologies in California. Specifically, SB 804, as amended on April 9, 2013, would:

- Direct the Californian Energy Commission and the California Air Resources Board to research and provide a report to the legislature on new solid waste conversion technologies to quantify the net environmental benefits of managing postrecycled, residual solid waste through conversion technologies rather than landfilling.
- Establish clear definitions in statute for conversion technologies for the purposes of establishing permitting pathways for conversion technology projects, including correcting scientifically inaccurate definitions currently in statute and clarifying the definition of anaerobic digestion. Such projects would continue to be subject to California's strict environmental laws and regulations, such as the California Environmental Quality Act.
- Broaden and clarify the definition of biomass conversion to allow for cleaner, noncombustion conversion technologies to also be permitted under the definition. Currently the definition is limited to only facilities that combust biomass.
- Clarify that the biomass portion of residual solid waste also qualifies for the Renewable Portfolio Standard (RPS) when used to create renewable energy, regardless of the technology utilized. Prior to receiving such a credit, a facility must demonstrate that it provides for a net reduction in emissions, including greenhouse gas emissions, compared to managing the same materials through a landfill, and it also must certify that both marketable recyclables and marketable compostable materials have been separated and sent to recycling or composting. This will provide new, cleaner conversion technologies parity with landfills, which currently receive RPS credit when using landfill gas to create renewable energy.

Senate Bill 804 is scheduled for its first committee hearing on April 30, 2013, in the Senate Energy, Utilities, and Communications Committee.

4 Public Outreach

Over the past six months, Public Works has conducted a variety of local and Statewide outreach and education efforts, primarily to engage stakeholders on the need for a legislative “fix” to help clarify existing statute that would enable projects to be developed in California.

4.1 MRF Standards Workshop

On November 26, 2012, Public Works hosted CalRecycle and key stakeholders at the Department’s Alhambra offices for an afternoon workshop. The workshop focused on standards being developed by CalRecycle to determine the quantities or characteristics of solid waste residuals that will be allowed for mixed waste processing facilities as well as material recovery facilities and other facilities who wish to use any residuals for energy recovery or other beneficial uses other than recycling. The event was well attended by local stakeholders and included an option for online participation.

This workshop represented one in a series of workshops hosted by CalRecycle intended to solicit feedback from stakeholders on the policy options that would help the State reach its 75 percent recycling, composting, and source reduction goal by 2020 as mandated by Assembly Bill 341 (AB 341, 2011 Statutes). CalRecycle will submit their findings in a report to the Legislature and submitted by January 1, 2014.

Public Works continues to work with CalRecycle and appropriate stakeholders to pursue policy changes that would establish a viable permitting process for these alternatives based on performance standards rather than prescriptive definitions, provide diversion and greenhouse gas reduction credits for these alternatives under applicable State law, and provide that energy produced by these conversion technology facilities be designated as renewable energy.

4.2 CSAC Policy Conference

From November 27 to November 30, 2012, Public Works participated in the CSAC Policy Conference. Attended by County representatives throughout the State, this event provided an opportunity to discuss regional issues and included a special policy meeting of the Conversion Technology Working Group. As a result of Public Works’ outreach and education efforts with CSAC, the Agricultural and Natural Resources Policy Committee adopted recommendations to support legislation encouraging development of conversion technologies. This led to CSAC becoming a co-sponsor of SB 804.

4.3 Conversion Technology Survey

In January 2013 Public Works released a survey to solicit input from a variety of waste managers, industry leaders, and conversion technology vendors on the challenges facing conversion technology development in California. The user-friendly online survey is posted on Public Works' website www.SoCalConversion.org. The purpose of this survey is to identify legislative actions, regulatory changes, and incentives that are necessary to facilitate development of conversion technologies in California. Initial results of the survey indicate that two of the major challenges for conversion technology development are regulatory hurdles and misleading or insufficient information about conversion technologies. Public Works will use the results from this survey to define and actively pursue necessary changes and incentives to regulatory and policy positions, both locally and on the State level. The results of the survey will also be made available on Public Works' website. In addition, survey respondents that provide contact information through the survey form will be e-mailed a copy of the survey findings.

4.4 VerdeXChange

From February 3 to February 5, 2013, Public Works participated in VerdeXChange, an annual Los Angeles conference focused on global and California energy, renewable technology, and sustainability. This year, the conference featured two panel discussions dedicated to the economics and implementation of conversion technology projects as well as a panel on the regulations and policies associated with these projects. Panelists represented conversion technology developers; solid waste consultants; and local jurisdictions, including Public Works.

4.5 Outreach Day

On March 18, 2013, Public Works in coordination with the County's Legislative Advocates in Sacramento and CSAC, hosted a Sacramento-based outreach day. This was an opportunity to meet with legislative offices, regulatory agencies, and interested members of the public to discuss conversion technologies and the merits of SB 804. The event began with a policy discussion featuring Director, Gail Farber, Assistant Deputy Director, Pat Proano, and representatives of CSAC. Following a meet-and-greet reception, the group was given the opportunity to view the documentary "Trashed," which covered a variety of international solid waste issues. The event was attended by over 70 people, including representatives from several legislative offices and State agencies.

5 Grant Opportunities

Public Works regularly researches potential State and Federal grant opportunities that the County's Conversion Technology Program could apply for. A grant would offset

operation costs and enable Public Works to provide additional resources to stakeholders, potentially spurring project development in the region.

The National Science Foundation and the Environmental Protection Agency – Region 9 are two examples of funding opportunities that Public Works is researching. By reaching out to these agencies at the Federal level Public Works is raising awareness of conversion technologies and creating opportunities for future collaboration and funding.

In February 2012 Public Works submitted an application to the California Energy Commission for a grant to fund “The Conversion Technology Center,” a virtual State resource for both the public and private sectors, for planning and implementing waste-based conversion technology biofuels projects. Public Works did not receive a grant; however, discussions with the Energy Commission have resulted in an additional grant solicitation under the umbrella of the AB 118 Alternative Vehicle Technology program specifically for resource centers such as the one proposed by Public Works. The new solicitation will be released in June 2013, and Public Works will submit an application at that time.

6 Update on Phase III Demonstration Projects

On April 20, 2010, the Board approved Memoranda of Understanding with CR&R Incorporated, Rainbow Disposal Company, and International Environmental Solutions (IES). Due to economic and financial constraints, projects proposed by Rainbow and IES are indefinitely on hold; however, CR&R's project continues to make significant progress towards development.

6.1 CR&R Incorporated

CalRecycle issued a solid waste facility permit to CR&R on November 26, 2012. The permitted operations include transfer processing, anaerobic digestion (AD), fuel-energy production, construction and demolition processing, and green waste processing. CR&R has begun marketing the project to cities in Riverside County and hopes to have commitments on feedstock equal to the capacity of the first AD facility by the end of 2013. The fueling station is expected to be in operation in 2013 and they expect to break ground on the AD facility in August 2013 and are on track to begin operation in 2014.

Public Works continues to coordinate with CR&R regarding:

- Market development of the high-quality digestate that would be produced by the AD facility.
- Identifying market rate opportunities to increase waste tonnage directed to the facility.

This collaboration is expected to be mutually beneficial to Public Works and CR&R, fostering the development of conversion technologies on a broader scale in the County of Los Angeles.

7 Update on Phase IV Commercial Projects

A discussion of all 18 sites considered within the County Los Angeles was included in the April 2012 Report to the Board of Supervisors and those sites that progressed were included in the October 2012 report. This report provides updates on those sites that have progressed in project development since October 2012.

7.1 Calabasas Landfill, City of Calabasas/County of Los Angeles

The Calabasas Landfill is owned by the County of Los Angeles and operated by the Sanitation Districts. In 2011 Public Works conducted a preliminary feasibility analysis evaluating various options for siting a conversion technology facility at the landfill that would 1) extend the life of the existing landfill, and 2) increase the financial viability of the landfill. The feasibility analysis determined that a 700 tons per day (tpd) AD project at the Calabasas Landfill could provide significant benefits to both the County and the Sanitation Districts. On July, 3, 2012, the County's Chief Executive Office submitted a letter to the Board requesting authorization to:

- Expend funds from the County Refuse Disposal Trust Fund to reimburse the Calabasas Landfill Capital Fund for the debt service payment on the Calabasas Landfill project revenue bonds.
- Restructure existing long-term debt to provide near-term savings and better align debt service payments with future operational revenues at the Calabasas Landfill.
- Prepare the necessary environmental documentation for a possible future recommendation to amend the County ordinance that sets rates for the Calabasas Landfill and the County ordinance that established the wasteshed area to allow for contracts with large volume waste haulers.
- Request approval from the State to substitute a pledge of revenue as an alternative financial assurance mechanism for post-closure maintenance of the Calabasas Landfill.

Further action with regard to a conversion technology project at Calabasas Landfill is on hold at this time.

7.2 Scholl Canyon Landfill, City of Glendale/County of Los Angeles

The City is moving forward with plans to develop a conversion technology project at the Scholl Canyon Landfill. The landfill is located in the City of Glendale on property owned jointly by the City (90 percent) and the County (10 percent) and is operated by the

Sanitation District. The City has completed its review and assessment of the responses to the request for qualification, which were received in March 2012. At this time the City is preparing a formal request for proposal for the project. While this process is driven by the City, Public Works will continue to coordinate with and support the City on an as-needed basis.

7.3 Pebbly Beach Landfill, City of Avalon

The City of Avalon released an RFP for residential and commercial waste collection, operation of the Material Recovery Facility, hazardous waste collection facility, and landfill. The RFP requests proposers to include an option to integrate a waste-to-energy system into the contract.

At the request of the City of Avalon, Public Works participated on the assessment team for review and consideration of the recent responses to the RFP. The conversion technology proposals received as part of the RFP included only anaerobic digestion and did not completely meet the needs of the City. As a result, the City has decided to reissue a separate RFP specifically for a conversion technology facility to be located at the landfill. Public Works will continue to coordinate with and support the City on an as-needed basis.

7.4 City Terrace MRF, Southland Disposal

City Terrace Material Recovery Facility/Transfer Station is located in East Los Angeles/Unincorporated County of Los Angeles and is owned by Southland Disposal. The company has submitted a Conditional Use Permit application to the County Department of Regional Planning to expand their facility from 700 to 1,500 tpd. Although Southland Disposal was initially planning to pursue an anaerobic digestion project with compressed natural gas production from the biogas, this component of the project has been put on hold due to space limitations as well as the complexity of the permitting effort. Once they have accomplished their primary goal of Material Recovery Facility expansion, it is expected that they will reconsider the conversion technology component at the City Terrace Material Recovery Facility.

7.5 South Gate MRF, Interior Removal Specialists (IRS) Demo

IRS Demo is pursuing the development of a conversion technology project at their site. Based on information available to the County through the technology database, the City of Avalon technology assessment, and other project resources, the County has provided technical information and project development support to IRS Demo. IRS Demo is currently evaluating the development of a 50 tpd gasification project with generation of electricity using a fuel cell. Public Works is working on developing a Memorandum of Understanding with IRS Demo for continued project development and support.

8 Next Steps

Over the next six months, Public Works will actively engage on multiple fronts to implement the Board's directives to advance conversion technology legislation in the State and create a clear pathway for their development. Among these efforts, Public Works will:

- Continue to work with Senator Lara, CSAC, and the County's legislative advocates in supporting the passage of SB 804.
- Prepare and submit an application to the Energy Commission when the solicitation is released for the "Centers for Alternative Fuels and Advanced Vehicle Technology" grant.
- Compile and examine results from the conversion technology survey.
- Monitor the permitting, design, and construction of the CR&R project.
- Work through CEAC/CSAC to expand the efforts of the conversion technology working group, generating interest among more jurisdictions and encouraging participation.

A3454
EPD



STATEMENT OF PROCEEDINGS FOR THE
REGULAR MEETING OF THE BOARD OF SUPERVISORS
OF THE COUNTY OF LOS ANGELES HELD IN ROOM 381B
OF THE KENNETH HAHN HALL OF ADMINISTRATION
500 WEST TEMPLE STREET, LOS ANGELES, CALIFORNIA 90012

Tuesday, April 20, 2010

9:30 AM

44. Recommendation: Approve Memoranda of Understanding (MOUs) for three separate conversion technology demonstration projects for the purpose of developing solid waste alternatives to landfills; authorize the Director of Public Works to implement the MOUs with CR&R Inc., International Environmental Solutions, and Rainbow Disposal Company, Inc.; award and authorize the Director to execute a four-year consultant services contract with Alternative Resources Inc., in a total amount not to exceed \$1,290,600 for the Southern California Conversion Technology Demonstration Project Phase III and IV. (Department of Public Works) (10-0875)

Karen Bertram, James Binder, Chip Clements, Teri Cohan Link, Wayde Hunter, Mark McDannel, Paul Relis, Bruce H. Shuman, Gabrielle Weeks, Miguel Zermeno, Peter Zorba and Steve Zurn addressed the Board.

Pat Proano, Assistant Deputy Director, Department of Public Works, responded to questions posed by the Board. Coby Skye, Civil Engineer, Department of Public Works, was also present.

After discussion, Supervisor Yaroslavsky made a motion instructing the Director of Public Works to:

1. In coordination with appropriate stakeholders, including the County Sanitation Districts and other appropriate County departments, assess the feasibility of developing a conversion technology facility at one or more County Landfills; and
2. Report back to the Board within six months, with findings regarding the development of a conversion technology facility at a County landfill, and identifying other potentially suitable sites within Los Angeles County.

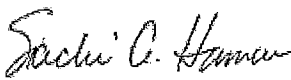
On motion of Supervisor Yaroslavsky, seconded by Supervisor Molina, this item was approved as amended.

Ayes: 5 - Supervisor Ridley-Thomas, Supervisor Yaroslavsky, Supervisor Knabe, Supervisor Antonovich and Supervisor Molina

Attachments: [Board Letter](#)
[Motion by Supervisor Yaroslavsky](#)
[Report](#)
[Video](#)
[Audio](#)

The foregoing is a fair statement of the proceedings of the regular meeting held April 20, 2010, by the Board of Supervisors of the County of Los Angeles and ex officio the governing body of all other special assessment and taxing districts, agencies and authorities for which said Board so acts.

Sachi A. Hamai, Executive Officer
Executive Officer-Clerk
of the Board of Supervisors

By 

Sachi A. Hamai
Executive Officer