



California Integrated Waste
Management Board

December 2007

GUIDANCE DOCUMENT

How Conversion Technologies Fit Current Board Regulatory Structure

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1. Purpose of this Document

Over the past few years, there has been much confusion about the permitting and other requirements that apply to “conversion technology” facilities. This has been further complicated by the various types of processes that potentially fit within the general category of “conversion technologies” and the various legislative proposals to modify the applicable statutes. (Current statute does not define the term “conversion technologies.”)

This guidance document is intended to provide a basic outline of how **current** California Integrated Waste Management Board (CIWMB) statutes and regulations apply to various types of conversion technologies. The intent of this document is not to answer questions regarding specific sites or project descriptions. The application of CIWMB statutes and regulations to specific sites must be done on a case-by-case basis. This document provides an overview of the framework currently in place so that pertinent questions can be discussed regarding specific proposals and adjustments to those proposals can be made as necessary.

The guidance focuses on solid waste facility permit (SWFP) requirements, siting requirements, whether or not the activity would “count” as disposal or diversion, co-location, and biomass conversion. It is not a comprehensive discussion of all CIWMB requirements that may apply. Likewise, it does not include a discussion of any approvals that may be required by other state agencies or local jurisdictions. (A quick reference chart is included as Appendix A on p. 14).

2. Solid Waste and Solid Waste Disposal

Basic Definitions

Two basic definitions provide the context for the guidelines that follow (other terms are provided within the context of the guidelines and a full list of definitions is provided at the end of this document in Appendix B on p. 15).

The term “Solid Waste” potentially includes almost any discarded material other than specified types of waste like hazardous waste.

- PRC¹ 40191.** (a) Except as provided in subdivision (b), "solid waste" means **all putrescible and nonputrescible solid, semisolid, and liquid wastes**, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other **discarded** solid and semisolid wastes.
- (b) "Solid waste" **does not include** any of the following wastes:
- (1) Hazardous waste, as defined in Section 40141.
 - (2) Radioactive waste regulated pursuant to the Radiation Control Law (Chapter 8 (commencing with Section 114960) of Part 9 of Division

¹ All references to PRC are to the Public Resources Code, the main source of statutes that govern the CIWMB.

104 of the Health and Safety Code).

(3) Medical waste regulated pursuant to the Medical Waste Management Act (Part 14 (commencing with Section 117600) of Division 104 of the Health and Safety Code). Untreated medical waste shall not be disposed of in a solid waste landfill, as defined in Section 40195.1. Medical waste that has been treated and deemed to be solid waste shall be regulated pursuant to this division. (emphasis added²).

The term “Solid Waste Disposal” includes what would traditionally be considered to be disposal to land, but also includes “disposal” to the atmosphere for certain purposes.

PRC 40192. (a) Except as provided in subdivisions (b) and (c), "solid waste disposal" or "disposal" means the **final deposition of solid wastes onto land, into the atmosphere, or into the waters** of the state.

(b) Except as provided in Part 2 (commencing with Section 40900), for purposes of Part 2 (commencing with Section 40900), "disposal" means the management of solid waste through **landfill disposal or transformation at a permitted solid waste facility.**

(c) For purposes of Chapters 16 (commencing with Section 42800) and 19 (commencing with Section 42950) of Part 3, Part 4 (commencing with Section 43000), Part 5 (commencing with Section 45000), Part 6 (commencing with Section 45030), and Chapter 2 (commencing with Section 47900) of Part 7, "solid waste disposal" or "disposal" means the final deposition of solid wastes onto land.

However, unlike the statutes of the Department of Toxic Substances Control which focus on the nature of the hazardous waste in question to set forth how it is to be regulated, the CIWMB’s statutes focus on the method of handling of the solid waste in distinguishing how it is to be regulated. In other words, the focus is on whether the waste will be composted, or processed or disposed, rather than on the nature of the waste in determining whether a permit is required, the siting requirements that apply, and whether or not the handling activity is considered to be disposal or diversion.

Solid Waste Handling Not Regulated By The CIWMB

Certain solid waste handling activities may not be regulated by the CIWMB if they are already comprehensively regulated by another state agency. Statute was amended in 1993 to provide that the CIWMB was not to establish standards for activities that were already within the jurisdiction and authority of other state agencies.

PRC 43101. ...

(c) It is, therefore, the intent of the Legislature, in enacting this chapter, and in making the necessary revisions to this division and Division 7 (commencing with Section 13000) of the Water Code by the act enacting this chapter, to accomplish all of the following:

(1) As provided by Sections 40054 and 40055, the board, the state water board, and the regional water boards shall retain their appropriate statutory authority over solid waste disposal facilities and sites. **A clear and concise division of authority shall be maintained in both statute and regulation to remove all areas of overlap, duplication, and conflict between the board and the state**

² Any emphasis (bolding) shown in an excerpt from statute or regulations is added emphasis.

water board and regional water boards, or between the board and any other state agency, as appropriate.

PRC 43020. The board shall adopt and revise regulations which set forth **minimum standards** for solid waste handling, transfer, composting, transformation, and disposal, in accordance with this division, and Section 117590 of, and Chapter 6.5 (commencing with Section 25100) of Division 20 of, the Health and Safety Code. The board **shall not include** any requirements that are already under the authority of the State Air Resources Board for the prevention of air pollution or of the state water board for the prevention of water pollution.

PRC 43021. Regulations shall include **standards** for the design, operation, maintenance, and ultimate reuse of solid waste facilities, but **shall not include** aspects of solid waste handling or disposal which are solely of local concern or which are within the jurisdiction of the State Air Resources Board, air pollution control districts and air quality management districts, or the state water board or regional water boards.

Based on these restrictions, the CIWMB has in the past excluded certain waste handling activities from its regulations. For instance, while composting of biosolids on-site at a Publicly Owned Treatment Works (POTW) is regulated by the CIWMB, the treatment process at POTWs is not, because it is already comprehensively regulated by the Water Boards (i.e. there are no additional areas relating to the treatment of biosolids at POTWs that require additional standards or oversight).

While it is outside the scope of this outline to identify specific facilities that are not subject to regulation by the CIWMB, it should be noted that as specific project descriptions are developed, they may fall outside the CIWMB's regulation, even though they handle solid waste, due to the already existing regulatory structure set forth by other state agencies³.

3. Solid Waste Facility Permit (SWFP) Requirements

3.1 What Requires A Permit?

A Solid Waste Facility Permit (SWFP) is required for solid waste facilities.

PRC 44002. (a) (1) No person shall operate a solid waste facility without a solid waste facilities permit if that facility is required to have a permit pursuant to this division. ...

The types of facilities that would potentially require a SWFP are identified in statute:

PRC 40194. "Solid waste facility" includes a solid waste **transfer** or **processing** station, a **composting** facility, a **gasification** facility, a **transformation** facility, and a **disposal** facility.

³ Examples that have been raised are processing food waste at POTWs in combination with biosolids, and processing food waste at manure digesters.

3.2 What Is Excluded From The Permitting Requirement?

Transfer/processing sites that are only handling material that has been separated for reuse (or source separated) and not mixed waste to be disposed, would **not** be a solid waste facility and would **not** require a SWFP for transfer/processing . (However, if a site were handling compostable material it might still be regulated under those regulations located at 14 CCR 17850⁴ et seq. See Section 3.4 below)

This exception would also apply to transformation facilities handling material that has been separated for reuse as it is included within the definition of transfer/processing. Some types of conversion technologies are considered transformation by statute and would also potentially be within this exception (see section 3.6 below).

PRC 40200. (a) "Transfer or processing station" or "station" includes those 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.**

(b) "Transfer or processing station" or "station" does **not** include any of the following: ...

(2) A facility, whose principal function is to receive, store, convert, or otherwise process wastes which **have already been separated for reuse and are not intended for disposal.**

3.3 The “3-Part Test”

The CIWMB has further refined this statutorily authorized exemption through its regulations with what is known as the “3-part test.” In order to qualify for this exclusion from the permitting requirements, (1) the site must be receiving material that has been source separated (by the generator) or separated for reuse (at a centralized facility – such as a MRF) prior to receipt at the site; (2) less than 1% of the material must be putrescible and not causing a nuisance; and, (3) less than 10% of the residual leaving the site is being sent to disposal.

14 CCR 17402.5... (d) A "Recycling Center" means a person or business entity that meets the requirements of this subdivision. A recycling center shall not be subject to the requirements of Articles 6.0, 6.1, 6.2, 6.3 and 6.35 of this Chapter.

(1) A recycling center shall only receive material that has been **separated for reuse prior to receipt.**

(2) The **residual** amount of solid waste in the separated for reuse material **shall be less than 10%** of the amount of separated for reuse material received by weight.

(A) The residual amount is calculated by measuring the outgoing tonnage after separated for reuse materials have been removed.

(B) The residual amount is calculated on a monthly basis based on the number of operating days.

⁴ All references to CCR are to the CIWMB's regulations located in the California Code of Regulations (either Title 14 or 27).

(3) The amount of **putrescible wastes** in the separated for reuse material **shall be less than 1%** of the amount of separated for reuse material received by weight, and the putrescible wastes in the separated for reuse material **shall not cause a nuisance**, as determined by the EA.

(A) The amount of putrescible wastes is calculated in percent as the weight of putrescible wastes divided by the total incoming weight of separated for reuse material.

(B) The amount of putrescible wastes is calculated on a monthly basis based on the number of operating days.

(4) The only separation that may occur at the recycling center is the sorting of materials that have been separated for reuse prior to receipt.⁵

3.4 Anaerobic Digestion Would Be Regulated Like Composting

Anaerobic digestion (which is sometimes labeled as a conversion technology) actually fits within the definition of composting. PRC section 40200(b)(2) and the 3-part test do not apply to the handling of compostable material as the definition assumes that the material being handled has already been separated. Sites using Anaerobic Digestion would potentially be regulated under the CIWMB compostable material handling regulations depending upon the nature of their feedstock and how it is being handled (14 CCR 17850 et seq.).

PRC 40116. "Compost" means the product resulting from the **controlled biological decomposition** of organic wastes that are source separated from the municipal solid waste stream, or which are separated at a centralized facility. "Compost" includes vegetable, yard, and wood wastes which are not hazardous.

See sections 4.2, 4.4, and 5.1 below for the significance for siting and diversion that derive from this activity being classified as composting. (Compost facilities require SWFP as nondisposal facilities, are only required to be identified in an NDFE not a CSE, and do not "count" as disposal.)

Similarly, any other conversion technology site that would meet the 3-part test might still be permitted and regulated as a compost or chip and grind site if it is handling compostable feedstock in a manner that makes those requirements applicable. For example, a facility stockpiling feedstock in a manner that resulted in green material reaching compost temperatures.)

3.5 Gasification

Gasification is a separately defined type of solid waste facility. Therefore, gasification of solid waste requires a SWFP. The following statute only includes within its definition gasification facilities that handle solid waste. A facility that is "gasifying" material that has been separated for re-use or source separated would not meet the requirements of this section, would not be defined as a gasification facility and would instead be analyzed as a transfer/processing facility. If it met the "3-Part Test," it would not require a SWFP. (i.e. the exception described above in section 3.2 would apply.)

⁵ Construction and demolition and inert debris (CDI) Recycling Centers includes an additional requirement that the separated material can only be Type A inert material. (Essentially a "4-Part Test" for the exclusion.) 14 CCR 17381.1

PRC 40117. "Gasification" means a technology that uses a noncombustion thermal process to **convert solid waste** to a clean burning fuel for the purpose of generating electricity, and that, at minimum, meets all of the following criteria:

(a) The technology does not use air or oxygen in the conversion process, except ambient air to maintain temperature control.

(b) The technology produces no discharges of air contaminants or emissions, including greenhouse gases, as defined in subdivision (g) of Section 42801.1 of the Health and Safety Code.

(c) The technology produces no discharges to surface or groundwaters of the state.

(d) The technology produces no hazardous waste.

(e) To the maximum extent feasible, the **technology removes all recyclable materials and marketable green waste compostable materials from the solid waste stream prior to the conversion process** and the owner or operator of the facility certifies that those materials will be recycled or composted.

(f) The facility where the technology is used is in compliance with all applicable laws, regulations, and ordinances.

(g) The facility certifies to the board that any local agency sending solid waste to the facility is in compliance with this division and has reduced, recycled, or composted solid waste to the maximum extent feasible, and the board makes a finding that the local agency has diverted at least 30 percent of all solid waste through source reduction, recycling, and composting.

14 CCR 17402.5 ... (b) The following general definitions may apply to one or more of the activities that are more specifically defined in subdivisions (c) and (d) of this section. ...

(3) "Separated for Reuse" means materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream for the purpose of additional sorting or processing those materials for recycling or reuse in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace, and includes materials that have been "source separated".

(4) "Source Separated" means materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream, at the point of generation, for the purpose of additional sorting or processing those materials for recycling or reuse in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.

3.6 Other Conversion Technologies Handling Non-Separated Waste

If a conversion technology facility is handling non-separated waste (i.e. doesn't meet the "3-Part Test") then where it falls within the CIWMB's regulatory structure depends upon the process being used. In all of these cases, a SWFP of some type would be required.

Facilities using **pyrolysis, distillation, or biological conversion**⁶ and not meeting the "3-Part Test" would require a SWFP as a Transformation Facility.

PRC 40201. "Transformation" means **incineration, pyrolysis, distillation, or biological conversion** other than composting. "Transformation" does not include composting, gasification, or biomass conversion.

⁶ This is not the same as "Biomass Conversion" – see section 7 below.

Facilities using **gasification** on non-separated waste (i.e. doesn't meet the 3-part test) would require a SWFP as a gasification facility. Gasification is expressly excluded from the definition of transformation. (definitions excerpted above).

All other types of conversion technologies not included in one of the above definitions (gasification, transformation) would fall within the general definition of transfer/processing (excerpted above in section 3.2) and would require a SWFP as a transfer/processing facility if handling non-separated waste (i.e. doesn't meet the 3-part test).

PRC 40172. "Processing" means the reduction, separation, recovery, conversion, or recycling of solid waste.

(See section 7 below for a discussion of Biomass Conversion)

4. Siting Requirements

4.1 No Siting Requirement If Not A Solid Waste Facility

Countywide Siting Elements (CSE) and Nondisposal Facility Elements (NDFE) are only required to include Solid Waste Facilities (i.e. those that require a SWFP). Therefore, conversion technology sites that do not require a SWFP (as discussed above in section 3) are not required to be described in a CSE or NDFE. (Local land use requirements are not affected by these provisions and would still be applicable).

PRC 41701. Each countywide siting element and revision thereto shall include, but is not limited to, all of the following: ...

(d) The identification of an area or areas for the location of new **solid waste transformation or disposal facilities**, or the expansion of existing facilities, that are consistent with the applicable city or county general plan, if the county determines that existing capacity will be exhausted within 15 years or additional capacity is desired.

14 CCR Section 18755. General Requirements.

(a) The Siting Element shall demonstrate that there is a countywide or regionwide minimum of 15 years of combined **permitted disposal capacity through existing or planned solid waste disposal and transformation facilities** or through additional strategies.

(b) The Siting Element shall describe and identify the areas, numbers and types of new solid waste disposal and transformation facilities, as well as the expansion of existing solid waste **disposal and transformation facilities** necessary to provide a minimum of 15 years of combined **permitted disposal capacity**.

PRC 41732. (a) City, county, and regional agency nondisposal facility elements prepared pursuant to Section 41730, 41731, or 41750.1, as the case may be, shall include a description of any new **solid waste facilities and the expansion of existing solid waste facilities** that will be needed to implement the jurisdiction's source reduction and recycling element and to thereby meet the diversion requirements of Section 41780. The nondisposal facility element may include the identification of specific locations or general areas for new solid

waste facilities that will be needed to implement the jurisdiction's source reduction and recycling element. ...

14 CCR Section 18752. Scope. ...

(c) For the purpose of this Article, a nondisposal facility is any solid waste facility required to obtain a permit pursuant to Article 1 (commencing with Section 44001) Chapter 3 Part 4, except a disposal facility or a transformation facility.

4.2 Siting Requirement For Facilities That Require SWFP

One of the requirements for obtaining a SWFP is that the facility be identified in the CSE, if it is a disposal or transformation facility, or the NDFE, if it is any other type of solid waste facility.

PRC 44009. (a) ... (2) If the board determines that the permit is not consistent with ... **Division 31 (commencing with Section 50000)**, the board shall object to provisions of the permit and shall submit those objections to the local enforcement agency for its consideration.

50001. (a) ... **no person shall establish or expand a solid waste facility, as defined in Section 40194**, in the county **unless** the solid waste facility meets one of the following criteria:

(1) The solid waste facility is a **disposal facility or a transformation facility, the location of which is identified in the countywide siting element** or amendment thereto, which has been approved pursuant to Section 41721.

(2) The solid waste facility is a facility which is designed to, and which as a condition of its permit, **will recover for reuse or recycling at least 5 percent** of the total volume of material received by the facility, and which **is identified in the nondisposal facility element** or amendment thereto, which has been approved pursuant to Section 41800 or 41801.5.

40151. "Nondisposal facility" means any solid waste facility required to obtain a permit pursuant to Article 1 (commencing with Section 44001) of Chapter 3 of Part 4, except a disposal facility or a transformation facility.

Those facilities utilizing conversion technologies that require a SWFP would have to be identified in the applicable CSE (if it is within the transformation definition) or the applicable NDFE (if it is within the composting, transfer/processing, or gasification definition).

4.3 Process For Amending CSE

The local approval process required for a CSE amendment is known as "majority/majority approval." Simply stated, the County and a majority of the cities within the county that have a majority of the population must approve the amendment. The more cities within a particular county, the more involved this process can become. Also, a CSE amendment would require compliance with CEQA.

PRC 41721.5. (a) Any amendments to the countywide siting element shall be **approved by the county and by a majority of the cities within the county which contain a majority of the population of the incorporated**

area of the county except in those counties which have only two cities, in which case the amendment is subject to approval of the city which contains the majority of the population of the incorporated area of the county.

(b) Any person or public agency proposing the development of a solid waste disposal or transformation facility may initiate an amendment to the countywide siting element by submitting a site identification and description to the county board of supervisors.

(c) The county shall submit the site identification and description to the cities within the county within 20 days after the site identification and description is submitted to the county board of supervisors. Each city shall act upon the proposed amendment within 90 days after receipt of the proposed amendment. If a city fails to act upon the proposed amendment within 90 days after receiving the amendment, the city shall be deemed to have approved the proposed amendment as submitted.

(d) If the county or a city disapproves the proposed amendment, the county or city shall mail notice of its decision by first-class mail to the person or public agency proposing the amendment within 10 days of the disapproval, stating its reasons for the disapproval.

(e) No county or city shall disapprove a proposed amendment unless it determines, based on substantial evidence in the record, that the amendment would cause one or more significant adverse impacts within its boundaries from the proposed project.

(f) Within 45 days after the date of disapproval by the county or a city of a proposed amendment, or a decision by the board not to concur in the issuance, modification, or revision of a solid waste facilities permit pursuant to Section 44009, any person may file with the superior court a writ of mandate for review of the disapproval or the decision. The evidence before the court shall consist of the record before the county or city which disapproved the proposed amendment or the record before the board in its determination not to concur in issuance, modification, or revision of the solid waste facilities permit. Section 1094.5 of the Code of Civil Procedure shall govern the proceedings conducted pursuant to this subdivision.

4.4 Process For Amending NDFE

The local approval process for amending a NDFE is simpler. It simply requires approval by at least one jurisdiction that will be using the facility (typically the one in which it is located). In addition, NDFE amendments are statutorily exempt from CEQA.

PRC 41730. Except as provided in Section 41750.1, **each city shall prepare, adopt,** and, except for a city and county, transmit to the county in which the city is located a nondisposal facility element that includes all of the information required by this chapter and that is consistent with the implementation of a city source reduction and recycling element adopted pursuant to this part....

PRC 41731. Except as provided in Section 41750.1, **each county shall prepare, adopt,** and, except for a city and county, transmit to the cities located in the county a nondisposal facility element that includes all of the information required by this chapter and that is consistent with the implementation of a county source reduction and recycling element adopted pursuant to this part. ...

PRC 41734. (a) (1) Prior to adopting or amending a nondisposal facility element, the city, county, or regional agency shall submit the

element or amendment to the task force created pursuant to Section 40950 for review and comment.

(2) Prior to adopting or amending a regional agency nondisposal facility element, if the jurisdiction of the regional agency extends beyond the boundaries of a single county, the regional agency shall submit the element or amendment for review and comment to each task force created pursuant to Section 40950 of each county within the jurisdiction of the regional agency.

(b) Comments by the task force shall include an assessment of the regional impacts of potential diversion facilities and shall be submitted to the city, county, or regional agency and to the board within 90 days of the date of receipt of the nondisposal facility element for review and comment.

PRC 41735. (a) Notwithstanding Division 13 (commencing with Section 21000), the adoption or amendment of a nondisposal facility element **shall not be subject to environmental review.** ...

5. Diversion or Disposal?

5.1 Material Is Disposed Only If Goes To A Disposal Or Transformation Facility That Requires A SWFP

A jurisdiction's disposal tonnage is the amount of solid waste it has sent to a permitted (SWFP) disposal facility or transformation facility. Material sent to a facility that is not required to obtain a SWFP, or one that needs a SWFP but is not classified as a disposal facility or as a transformation facility, does not "count" as disposal. If that material was originally part of the jurisdiction's base year disposal tonnage and is now being sent elsewhere, it would consequently be treated as diversion since it would not be counted as disposal.

PRC 41780. (a) Each city or county **source reduction and recycling element** shall include an implementation schedule that shows both of the following:

(1) For the initial element, the city or county **shall divert 25 percent** of all solid waste **from landfill disposal or transformation** by January 1, 1995, through source reduction, recycling, and composting activities.

(2) Except as provided in Sections 41783, 41784, and 41785, for the first and each subsequent revision of the element, the city or county **shall divert 50 percent** of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting activities.

(b) Nothing in this part prohibits a city or county from implementing source reduction, recycling, and composting activities designed to exceed these requirements.

PRC 41781. (a) Except as provided in Sections 41781.1, and 41781.2, for the purpose of **determining the base rate of solid waste from which diversion requirements shall be calculated, "solid waste" includes only the following:**

(1) The amount of solid waste generated within a local agency's jurisdiction, the types and quantities of which **were disposed of at a**

permitted disposal facility as of January 1, 1990. Nothing in this section requires local agencies to perform waste characterization in addition to the waste characterization requirements established under Sections 41030, 41031, 41330, 41331, and 41332.

(2) The amount of solid waste **diverted from a disposal facility or transformation facility** through source reduction, recycling, or composting.

(b) For the purposes of this section, **"solid waste" does not include any solid waste which would not normally be disposed of at a disposal facility.**

(c) For the purposes of this chapter, the amount of solid waste from which the required reductions are measured shall be the amount of solid waste existing on January 1, 1990, with future adjustments for increases or decreases in the quantity of waste caused only by changes in population or changes in the number or size of governmental, industrial, or commercial operations in the jurisdiction.

PRC 40192. (a) Except as provided in subdivisions (b) and (c), "solid waste disposal" or "disposal" means the final deposition of solid wastes onto land, into the atmosphere, or into the waters of the state.

(b) Except as provided in Part 2 (commencing with Section 40900), **for purposes of Part 2 (commencing with Section 40900), "disposal" means the management of solid waste through landfill disposal or transformation at a permitted solid waste facility.**

(c) For purposes of Chapters 16 (commencing with Section 42800) and 19 (commencing with Section 42950) of Part 3, Part 4 (commencing with Section 43000), Part 5 (commencing with Section 45000), Part 6 (commencing with Section 45030), and Chapter 2 (commencing with Section 47900) of Part 7, "solid waste disposal" or "disposal" means the final deposition of solid wastes onto land.

5.2 Special Rules For Transformation

A jurisdiction that sends solid waste to a transformation facility that was permitted prior to 1/1/95 and that requires a SWFP may count that waste as diversion for up to 10% of its 50% requirement. This rule only applies to three specific existing facilities and would not apply to any new facilities. (See section 7 below for similar rule for Biomass Conversion)

41783. For any city, county, or regional agency source reduction and recycling element submitted to the board after January 1, 1995, **the 50 percent diversion requirement** specified in paragraph (2) of subdivision (a) of Section 41780 **may include not more than 10 percent through transformation**, as defined in Section 40201, if all of the following conditions are met:

(a) The transformation project is in compliance with Sections 21151.1 and 44150 of this code and Section 42315 of the Health and Safety Code.

(b) The transformation project uses front-end methods or programs to remove all recyclable materials from the waste stream prior to transformation to the maximum extent feasible.

(c) The ash or other residue generated from the transformation project is routinely tested at least once quarterly, or on a more frequent basis as determined by the agency responsible for regulating the testing and disposal of the ash or residue, and, notwithstanding Section 25143.5 of the Health and Safety Code, if hazardous wastes are present, the ash or residue is sent to a class 1 hazardous waste

disposal facility.

(d) The board holds a public hearing in the city, county, or regional agency jurisdiction within which the transformation project is proposed, and, after the public hearing, the board makes both of the following findings, based upon substantial evidence on the record:

(1) The city, county, or regional agency is, and will continue to be, effectively implementing all feasible source reduction, recycling, and composting measures.

(2) The transformation project will not adversely affect public health and safety or the environment.

(e) The transformation facility is permitted and operational on or before January 1, 1995.

(f) The city, county, or regional agency does not include biomass conversion, as authorized pursuant to Section 41783, in its source reduction and recycling element.

6. Co-location

Conversion Technology Located at Site With A SWFP

Locating a conversion technology facility on the same site as one that has a SWFP would not change the status of the conversion technology facility from what was discussed above in section 3. If the conversion technology requires a SWFP, it would still need one at the co-location, or would need to be added to the existing SWFP. If the conversion technology facility did not need a SWFP, it would not need a SWFP at the co-location, but the existing SWFP, or its supporting documents, would need to be modified or amended to reflect the additional activity on the site and/or adjustments to permit boundaries. The extent of the modification or revision would vary from site to site. (LEA Advisory #39 discusses how this determination is made. LEA Advisories can be found on the CIWMB website at www.ciwmb.ca.gov/LEACentral/Communct.htm)

7. Biomass Conversion

7.1 Biomass Conversion Does Not Require SWFP

Biomass Conversion is separately defined and is limited to specified types of feedstock. It is **not** included in the definition of solid waste facility and is also expressly excluded from the definition of transformation. The definition of what qualifies as biomass conversion is detailed but essentially encompasses facilities that burn wood, lawn and crop residuals to produce electricity.

Biomass Conversion Facilities do **not** require a SWFP and are their operations are **not** regulated by the CIWMB. Likewise, Biomass Conversion Facilities are **not** subject to the siting requirements (i.e. not required to be in CSE or NDFE).

40106. (a) "**Biomass conversion**" means the controlled combustion, when separated from other solid waste and used for producing electricity or heat, of the following materials:

- (1) Agricultural crop residues.
- (2) Bark, lawn, yard, and garden clippings.
- (3) Leaves, silvicultural residue, and tree and brush pruning.

(4) Wood, wood chips, and wood waste.

(5) Nonrecyclable pulp or nonrecyclable paper materials.

(b) "Biomass conversion" does not include the controlled combustion of recyclable pulp or recyclable paper materials, or materials that contain sewage sludge, industrial sludge, medical waste, hazardous waste, or either high-level or low-level radioactive waste.

(c) For purposes of this section, "nonrecyclable pulp or nonrecyclable paper materials" means either of the following, as determined by the board:

(1) Paper products or fibrous materials that cannot be technically, feasibly, or legally recycled because of the manner in which the product or material has been manufactured, treated, coated, or constructed.

(2) Paper products or fibrous materials that have become soiled or contaminated and as a result cannot be technically, feasibly, or legally recycled.

PRC 40194. "Solid waste facility" includes a solid waste transfer or processing station, a composting facility, a gasification facility, a transformation facility, and a disposal facility.

PRC 40201. "Transformation" means incineration, pyrolysis, distillation, or biological conversion other than composting.

"Transformation" **does not include** composting, gasification, or **biomass conversion**.

7.2 Biomass Conversion Is Limited In "Counting" As Diversion

Similar to transformation, statute limits the amount of material sent to biomass conversion that may "count" as diversion for up to 10% of the 50% diversion requirement.

41783.1. (a) For any city, county, or regional agency source reduction and recycling element submitted to the board after January 1, 1995, **the 50 percent diversion requirement** specified in paragraph (2) of subdivision (a) of Section 41780 **may include not more than 10 percent through biomass conversion** if all of the following conditions are met:

(1) The biomass conversion project exclusively processes biomass.

(2) The biomass conversion project is in compliance with all applicable air quality laws, rules, and regulations.

(3) The ash or other residue from the biomass conversion project is regularly tested to determine if it is hazardous waste and, if it is determined to be hazardous waste, the ash or other residue is sent to a class 1 hazardous waste disposal facility.

(4) The board determines, at a public hearing, based upon substantial evidence in the record, that the city, county, or regional agency is, and will continue to be, effectively implementing all feasible source reduction, recycling, and composting measures.

(5) The city, county, or regional agency does not include transformation, as authorized pursuant to Section 41783, in its source reduction and recycling element.

Appendix A - Summary of Various Conversion Technologies within CIWMB Requirements

Conversion Process	IWMA* Category?	SWFP* or EAN* Required? PRC 40194	Siting: NDFE* or CSE* Required? PRC 50001	Is it Disposal or Diversion? PRC 41780, 41781, 40192
If only handling separated material (meets 3-part test)	Excluded from definition of Transfer/Processing PRC 40200(b)(2); 14 CCR 17402.5	No	Neither	Diversion if meet 3-part test
The requirements below only apply if the processes noted are used on waste material that does not meet the “3-Part Test”				
Transformation ¹	Transformation PRC 40201	Yes	CSE	Pre-1995 permit-up to 10 of the 50% diversion requirement, otherwise – disposal PRC 41783
Pyrolysis ¹	Transformation PRC 40201	Yes	CSE	Same as above
Distillation ¹	Transformation PRC 40201	Yes	CSE	Same as above
Biological Conversion	Transformation PRC 40201	Yes	CSE	Same as above
Anaerobic Digestion ¹	Composting PRC 40116	Yes	NDFE	Diversion
Gasification ¹	Gasification PRC 40117	Yes	NDFE	Diversion
Other Processes	Transfer/Processing PRC 40200; PRC 40172	Yes	NDFE	Diversion
By definition, Biomass Conversion Facilities can only handle separated material of specified types				
Biomass Conversion	Biomass Conversion PRC 40106; PRC 40201	No	Neither	Up to 10 of the 50% diversion requirement PRC 41783.1

¹If not meeting the 3-part test

SWFP: Solid Waste Facility Permit
 NDFE: Nondisposal Facility Element

Disposal: Tonnage going to a disposal or transformation facility requiring a Solid Waste Facility Permit

Diversion: Tonnage would “count” as diversion if had been “counted” as disposed in jurisdiction’s base-year

IWMA: Integrated Waste Management Act
 EAN: Enforcement Agency Notification
 CSE: Countywide Siting Element

Appendix B – Selected Public Resources Code Definitions and Other Sections

40106. (a) "Biomass conversion" means the controlled combustion, when separated from other solid waste and used for producing electricity or heat, of the following materials:

- (1) Agricultural crop residues.
- (2) Bark, lawn, yard, and garden clippings.
- (3) Leaves, silvicultural residue, and tree and brush pruning.
- (4) Wood, wood chips, and wood waste.
- (5) Nonrecyclable pulp or nonrecyclable paper materials.

(b) "Biomass conversion" does not include the controlled combustion of recyclable pulp or recyclable paper materials, or materials that contain sewage sludge, industrial sludge, medical waste, hazardous waste, or either high-level or low-level radioactive waste.

(c) For purposes of this section, "nonrecyclable pulp or nonrecyclable paper materials" means either of the following, as determined by the board:

- (1) Paper products or fibrous materials that cannot be technically, feasibly, or legally recycled because of the manner in which the product or material has been manufactured, treated, coated, or constructed.
- (2) Paper products or fibrous materials that have become soiled or contaminated and as a result cannot be technically, feasibly, or legally recycled.

40116. "Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or which are separated at a centralized facility. "Compost" includes vegetable, yard, and wood wastes which are not hazardous waste.

40117. "Gasification" means a technology that uses a noncombustion thermal process to convert solid waste to a clean burning fuel for the purpose of generating electricity, and that, at minimum, meets all of the following criteria:

- (a) The technology does not use air or oxygen in the conversion process, except ambient air to maintain temperature control.
- (b) The technology produces no discharges of air contaminants or emissions, including greenhouse gases, as defined in subdivision (g) of Section 42801.1 of the Health and Safety Code.
- (c) The technology produces no discharges to surface or groundwaters of the state.
- (d) The technology produces no hazardous waste.
- (e) To the maximum extent feasible, the technology removes all recyclable materials and marketable green waste compostable materials from the solid waste stream prior to the conversion process and the owner or operator of the facility certifies that those materials will

be recycled or composted.

(f) The facility where the technology is used is in compliance with all applicable laws, regulations, and ordinances.

(g) The facility certifies to the board that any local agency sending solid waste to the facility is in compliance with this division and has reduced, recycled, or composted solid waste to the maximum extent feasible, and the board makes a finding that the local agency has diverted at least 30 percent of all solid waste through source reduction, recycling, and composting.

40120.1. "Disposal" has the same meaning as "solid waste disposal" as defined in Section 40192.

40121. "Disposal facility" or "facility" means any facility or location where disposal of solid waste occurs.

40122. "Disposal site" or "site" includes the place, location, tract of land, area, or premises in use, intended to be used, or which has been used, for the landfill disposal of solid wastes. "Disposal site" includes solid waste landfill, as defined in Section 40195.1.

40124. "Diversion" means activities which reduce or eliminate the amount of solid waste from solid waste disposal for purposes of this division, including Article 1 (commencing with Section 41780) of Chapter 6.

40140. "Hazard" includes any condition, practice, or procedure which is or may be dangerous, harmful, or perilous to employees, property, neighbors, or the general public.

40141. (a) "Hazardous waste" means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may do either of the following:

(1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

(2) Pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(b) Unless expressly provided otherwise, "hazardous waste" includes extremely hazardous waste and acutely hazardous waste.

40151. "Nondisposal facility" means any solid waste facility required to obtain a permit pursuant to Article 1 (commencing with Section 44001) of Chapter 3 of Part 4, except a disposal facility or a transformation facility.

40172. "Processing" means the reduction, separation, recovery,

conversion, or recycling of solid waste.

40180. "Recycle" or "recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. "Recycling" does not include transformation, as defined in Section 40201.

40190. "Segregated from other waste material" means any of the following:

- (a) The placement of recyclable materials in separate containers.
- (b) The binding of recyclable material separately from the other waste material.
- (c) The physical separation of recyclable material from other waste material.

40191. (a) Except as provided in subdivision (b), "solid waste" means all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes.

(b) "Solid waste" does not include any of the following wastes:

- (1) Hazardous waste, as defined in Section 40141.
- (2) Radioactive waste regulated pursuant to the Radiation Control Law (Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code).
- (3) Medical waste regulated pursuant to the Medical Waste Management Act (Part 14 (commencing with Section 117600) of Division 104 of the Health and Safety Code). Untreated medical waste shall not be disposed of in a solid waste landfill, as defined in Section 40195.1. Medical waste that has been treated and deemed to be solid waste shall be regulated pursuant to this division.

40192. (a) Except as provided in subdivisions (b) and (c), "solid waste disposal" or "disposal" means the final deposition of solid wastes onto land, into the atmosphere, or into the waters of the state.

(b) Except as provided in Part 2 (commencing with Section 40900), for purposes of Part 2 (commencing with Section 40900), "disposal" means the management of solid waste through landfill disposal or transformation at a permitted solid waste facility.

(c) For purposes of Chapters 16 (commencing with Section 42800) and 19 (commencing with Section 42950) of Part 3, Part 4 (commencing with Section 43000), Part 5 (commencing with Section 45000), Part 6 (commencing with Section 45030), and Chapter 2 (commencing with

Section 47900) of Part 7, "solid waste disposal" or "disposal" means the final deposition of solid wastes onto land.

40194. "Solid waste facility" includes a solid waste transfer or processing station, a composting facility, a gasification facility, a transformation facility, and a disposal facility.

40195. "Solid waste handling" or "handling" means the collection, transportation, storage, transfer, or processing of solid wastes.

40195.1. (a) "Solid waste landfill" means a disposal facility that accepts solid waste for land disposal, but does not include a facility which receives only wastes generated by the facility owner or operator in the extraction, beneficiation, or processing of ores and minerals, or a cemetery which disposes onsite only the grass clippings, floral wastes, or soil resulting from activities on the grounds of that cemetery.

(b) For the purposes of Article 3 (commencing with Section 43500) and Article 4 (commencing with Section 43600) of Chapter 2 of Part 4, "solid waste landfill" does not include a facility which receives only nonhazardous wood waste derived from timber production or wood product manufacturing. For the purposes of the fee imposed by Section 48000, facilities which receive only nonhazardous wood waste derived from timber production or wood product manufacturing shall, notwithstanding Section 48000, pay a quarterly fee to the state board on all solid waste disposed at each disposal site, which does not exceed the amount of the fee due and payable to the state board by those facilities during the 1992 calendar year.

40200. (a) "Transfer or processing station" or "station" includes those 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.

(b) "Transfer or processing station" or "station" does not include any of the following:

(1) A facility, whose principal function is to receive, store, separate, convert, or otherwise process in accordance with state minimum standards, manure.

(2) A facility, whose principal function is to receive, store, convert, or otherwise process wastes which have already been separated for reuse and are not intended for disposal.

(3) The operations premises of a duly licensed solid waste handling operator who receives, stores, transfers, or otherwise processes wastes as an activity incidental to the conduct of a refuse collection and disposal business in accordance with regulations adopted pursuant to Section 43309.

40201. "Transformation" means incineration, pyrolysis,

distillation, or biological conversion other than composting.
"Transformation" does not include composting, gasification, or biomass conversion.

43020. The board shall adopt and revise regulations which set forth minimum standards for solid waste handling, transfer, composting, transformation, and disposal, in accordance with this division, and Section 117590 of, and Chapter 6.5 (commencing with Section 25100) of Division 20 of, the Health and Safety Code. The board shall not include any requirements that are already under the authority of the State Air Resources Board for the prevention of air pollution or of the state water board for the prevention of water pollution.

43021. Regulations shall include standards for the design, operation, maintenance, and ultimate reuse of solid waste facilities, but shall not include aspects of solid waste handling or disposal which are solely of local concern or which are within the jurisdiction of the State Air Resources Board, air pollution control districts and air quality management districts, or the state water board or regional water boards.

43101. The Legislature hereby finds and declares as follows:

(a) The board and the state water board have submitted a report entitled Joint Report: Reforming the California Solid Waste Disposal Regulatory Process, and have recommended legislation to the Governor and the Legislature that identifies areas of regulatory overlap, conflict, and duplication and makes recommendations for change.

(b) The report found that regulatory overlap, conflict, and duplication were evident between the board and the state water board and between the board and local enforcement agencies and that regulatory reform was necessary to streamline the state's solid waste disposal regulatory process. In addition, it was found that a recasting of the solid waste facilities permit was warranted to make more efficient and streamlined the permitting and regulation of solid waste disposal facilities. The report also makes numerous other appropriate recommendations for improving the manner in which the management of solid waste is regulated by the state which require immediate legislative response.

(c) It is, therefore, the intent of the Legislature, in enacting this chapter, and in making the necessary revisions to this division and Division 7 (commencing with Section 13000) of the Water Code by the act enacting this chapter, to accomplish all of the following:

(1) As provided by Sections 40054 and 40055, the board, the state water board, and the regional water boards shall retain their appropriate statutory authority over solid waste disposal facilities and sites. A clear and concise division of authority shall be maintained in both statute and regulation to remove all areas of overlap, duplication, and conflict between the board and the state water board and regional water boards, or between the board and any other state agency, as appropriate. ...