

Agricultural Land Application of Compostable Material White Paper February 2010

The California Integrated Waste Management Board (Board), now known as CalRecycle, adopted a series of [Strategic Directives](#) in February 2007 to continue its commitment to protect and preserve public health and safety, resources and the environment. Strategic Directives (SD) 8.3 (formerly SD 8.4) directs Board staff to review Board regulations to ensure they are grounded in the best available science, address changing market conditions, and take advantage of developing technologies. Board staff developed priority regulatory areas for review that also supported the [Organics Roadmap](#). One of the priority areas Board staff selected to review is land spreading or land application of compostable material and how to determine beneficial use.

“Compostable material” is organic material which when accumulated and appropriately managed can become active compost. “Active compost” is compostable material that is in the process of being rapidly decomposed and is therefore unstable. In this paper, compostable material does not refer to material that has gone through a composting process and is considered stable.

The beneficial use of compostable materials is excluded from regulation as a compostable material handling activity. In particular, Title 14 California Code of Regulations (CCR) Section 17855(a)(9) states:

(9) Beneficial use of compostable materials is an excluded activity. Beneficial use includes, but is not limited to slope stabilization, weed suppression, alternative daily cover, and similar uses, as determined by the EA; land application in accordance with California Department of Food and Agriculture requirements for a beneficial use as authorized by [Food and Agricultural Code section 14501](#) et seq.; and reclamation projects in accordance with the requirements of the Office of Mine Reclamation of the Department of Conservation as authorized by Public Resources Code Section 2770 et seq.

This terminology is similar to part of the definition for disposal of compostable material found in 14 CCR Section 17852(a)(15)(C) which states:

...disposal does not include land application of compostable organic material. "Land Application" means the application of compostable material, excluding food material or mixed solid waste for the following applications: to forest, agricultural, and range land at agronomic rates; in accordance with California Department of Food and Agriculture (CDFA) requirements for beneficial use as authorized by [Food and Agricultural Code section 14501](#) et seq.; or for beneficial uses that may be otherwise exempt or excluded from regulation by CDFA.

This paper specifically focuses on the requirement that, to be a beneficial use and therefore excluded from CalRecycle requirements, application of compostable materials to agricultural lands needs to be in accordance with authorizations found in the Food and Agricultural Code Section 14501 or be otherwise exempted or excluded from regulation by CDFA.

CDFA indicated in a letter received on January 19, 2010 (dated January 14, 2009[sic]), that;

“CDFA does not have the authority to regulate land application of compostable materials. CDFFA regulates fertilizing materials, as defined in the FAC Section 14533, including recycled material to be used in agriculture only if plant nutrient claims are made. CDFFA is responsible for ensuring all fertilizers sold and distributed in the State of California are safe, effective, and meet the claims guaranteed on the product label.”

and further states;

“CDFFA believes that the CIWMB should look elsewhere to determine if there is either state or local authority to address the land application of compostable material.”

Background

In 1997/1998 the Board began the process of revising its regulation of compostable material handling in part to provide clarity on the requirements for the land application of compostable materials as a beneficial use. During the regulation development process, discussions were held with the CDFFA resulting in a March 11, 1997, letter¹ that stated:

“...as a generic framework for future materials, CDFFA believes that when a recycled material is being proposed for use in agriculture, the existing Food and Agriculture Codes and regulations be used as the determinant for beneficial agricultural use. If the manufacturers of the recycled materials want to expand uses into agriculture beyond what currently exists in statute, they may address their issues with CDFFA. This should preclude problems of regulatory overlap and allow for the appropriate regulation of agricultural activities by CDFFA.”

The Board’s regulations were subsequently revised to include a requirement that land application be in accordance with Food and Agricultural Code Section 14501 which states:.

14501(b) To provide assurance to the consumer of commercial fertilizers, agricultural minerals, packaged soil amendments, and auxiliary soil and plant substances that the product purchased is properly identified, and to provide assurance of the validity of the quality and quantity represented by the manufacturer of these products.

On August 18, 2009, Board staff met with two CDFFA staff, Asif A. Maan, Ph.D., Branch Chief, Inspection Services and Amadou Ba, Ph.D., Research Manager II, Fertilizing Materials Inspection Program. A draft of this white paper was provided to them for review and comment. The comments can be found in the appendix. As stated above, a reference to CDFFA relative to land application of compostable material when nutrient claims are not appropriate.

The land application of compostable material that results from crop or livestock production on farms and ranches has been a long-established practice. The increase in land application of compostable materials such as large-scale use of urban green material is fairly recent in California.

The lack of clarity on how a determination relative to beneficial use of compostable materials should be made has resulted in a haphazard application of the regulations. In particular, CalRecycle’s staff is aware of several projects for land application of green material generated

¹ Letter from CDFFA dated March 11, 1997 signed by A.J. Yates, Undersecretary

from urban collection programs where the material contained non-compostable material contaminants. By definition, green material cannot include greater than 1% contaminant by weight. In some cases the material received for land application did not meet this limit and therefore could not be defined as green material.

Survey of Counties in California

In a survey of eight California counties (see Table 1), only two counties, Kern and Ventura, have current land application of compostable material projects. Several years ago Kings County had one land application project, the project is no longer active.

County	Application
Fresno	<ul style="list-style-type: none"> No Land Application
Humboldt	<ul style="list-style-type: none"> No Land Application
Imperial	<ul style="list-style-type: none"> Greens landfilled or screened at Allied-Imperial and used for ADC Off spec produce dumped on fallow fields and when dried tilled into the soil or burned Working with the Farm Bureau to get the area composters to take the off spec produce.
Kern	<ul style="list-style-type: none"> Land application of compostable material from the LA region Contamination can be greater than 1percent Required land applicators to clean up contaminants Land applied compostable material tilled into the soil after application Developing an ordinance package to regulate land application
Kings	<ul style="list-style-type: none"> 4-5 years ago there was some land application of compostable material with contaminants Worked with Ag Extension to determine agronomic rates of application then shortly thereafter the practice was discontinued
San Joaquin	<ul style="list-style-type: none"> No land application
Stanislaus	<ul style="list-style-type: none"> No knowledge of any land application
Ventura	<ul style="list-style-type: none"> LA processed green waste land applied on agricultural land amending soil – some on open land and orchards Green waste contained some contaminants - plastic and glass \leq1 percent by weight

Kern County has in the past had several locations where compostable material has been land applied. The Kern County LEA has had to take action to require some land applier to manually pick out the contaminants after the material was spread.



Land Application – Kern County

The Kern County LEA has drafted proposed county ordinances that, if approved, will restrict land application of compost and un-composted green material, wood waste and yard trimmings. The Kern County Green Waste Land Application Ordinance addresses both accumulation of physical contaminants in the soil and fugitive litter. The ordinances would regulate the land application of un-composted municipal green waste which contains non-biodegradable waste or unknown contaminants. The proposed ordinances states in part:

“Limits on Physical Contamination in Land Applied Compost or Uncomposted Green Material, Wood Waste or Yard Trimmings. Physical contamination cannot exceed .03% by weight or contain physical contaminants with a particle size in excess of 5/8 inch. The amount of the physical contaminants in any bulk materials subject to this chapter shall be calculated based on the total amount applied to a discrete field or area. At no time shall the physical contaminants of size or consistency that allows them to be wind driven from the site, or applied such that after application more than one quart of the physical contaminants can be collected per hundred square feet of the area.”

In Ventura County, a few growers are presently land applying compostable material in depths from approximately 1 foot up to 3 feet or more for agricultural purposes. Ventura County LEA staff indicated that compostable material has been land applied in Ventura County for a period in excess of 8 years. They are uncertain as to the number of acres involved, the specific amounts and locations where land application is practiced, as these are not tracked. The Ventura County LEA involvement has been in responding to public complaints. The complaints are generally about vectors, odors and aesthetics/visual issues.

The Ventura County LEA has determined that, based upon the provisions of 14 CCR Section 17852(a)(15)(C), land application of compostable material is not deemed to constitute disposal, and is therefore is an excluded activity if conducted in conformance with site-specific agronomic rates. In the absence of specific requirements developed by CDFG, the Ventura County LEA has

relied upon the determinations of credible agronomists when seeking to verify that land application is being conducted at agronomic rates.

The Ventura County LEA considers green material, as defined at 14 CCR Section 17852(a)(21), as appropriate for land application pursuant to the provisions of 14 CCR Section 17852(a)(15)(C). However, the Ventura County LEA is concerned that the 1% contamination allowed by 14 CCR Section 17852(a)(21) may result in unacceptable contamination of agricultural land by materials such as plastic, plastic film, and glass.

The Ventura County LEA has indicated that it is very concerned about the potential for disposal of solid waste to occur on agricultural land under the guise of land application of compostable materials. The LEA is participating in the drafting of a local ordinance intended to restrict land application of compostable materials in a manner that ensures that application does not exceed agriculturally beneficial rates, minimizes the creation of nuisance conditions, minimizes the accumulation of contaminants upon agricultural land, and prevents the development of fire hazards, while preserving the ability of growers to utilize compostable materials.

Other experts interviewed were Blake Sanden with UCD County Extension – Kern County, and David M. Crohn, PhD with University of California Redlands, Associate Professor - Extension Resource Conservation Specialist. The following is a summary of the result of those interviews.

- The level of non-organic contamination is less important than the type of soil and the amount or type of compostable material to be deployed.
- The public's perception of the types of material being incorporated into the soil is very important to agri-business.
- Any residual herbicides that are in the compostable material may initially hinder growth of the crops planted but for most herbicides that will pass over time depending on the half-life of the herbicide, the exceptions being Clopyralid, Picloram, and similar herbicides. Clopyralid is no longer registered for lawn use in the United States, though it is still available for restricted commercial uses.
- Marginal ground needs soil amendments.
- Compostable material is by nature unstable, and once blended or placed on soil it will produce intermediate byproducts as it goes through a process to break down the organic material
- A concern in using compostable material is the phytotoxicity or toxic effect of a compound on plant growth. In using uncomposted material there is a risk of transferring vectors and diseases; having different plant behaviors as a result of different additives and possibly tying up different nutrients as the uncomposted material breaks down in the soil.
- Potential of material being spread under the guise of beneficial use where none would actual benefits result from the practice.

Survey of Other States

Twelve states were queried regarding the status of land application of compostable material and regulations controlling the application. Specific responses are detailed below. Responses ranged from land application not occurring in their state (New Jersey), to allowing application up to two feet in depth plus additional application with the approval of the County Agricultural Extension

Office on a case by case basis (Florida), to allowing land application only under a permit and testing for metals and *fecal coliform* (Washington).

State	Contact Agency	Application
Colorado	Department of Public Health & Environment	<ul style="list-style-type: none"> • Land application of sludges at agronomic rate as determined by the Colorado Department of Agriculture • Compost falls under solid waste and land application of solid waste is not allowed • Land application of compost/compostable material could be done through recycling but it is not being done • City of Colorado Springs is partially composting/mulching city collected leaves and spreading them in the parks and on other city owned property
Florida	Department of Environmental Protection	<ul style="list-style-type: none"> • There is no land application of compostable material – <i>only processed yard trash</i> – vegetative matter resulting from landscaping maintenance or land clearing operations and includes material such as tree and shrub trimmings, grass clippings, palm fronds; trees and stumps passing through a 6 inch minus screen • Application of yard trash up to 2 feet in depth • Thicker application with approval from the County Extension office – case by case basis • No specific limits on contamination – judgment call – if excessive it is considered improper disposal of solid waste
Georgia	Department of Natural Resources	<ul style="list-style-type: none"> • Projects where land clearing is involved, the organic material must be mulched and incorporated back into the project • Clean mulch may be landspread without any regulatory controls • Land application of contaminated mulch is considered land application of solid waste • No prescriptive standards for contamination
Iowa	Department of Natural Resources	<ul style="list-style-type: none"> • Land application is an approved activity • Chipped and ground yard waste and brush is allowed at not more than 2 tons per acre • Land applied material must be tilled into the land within 48 hours • With a permit, yard waste and brush may be land applied at a greater rate if the Department of Agriculture and Land Stewardship makes a determination that it is a beneficial use
Maryland	Department of Natural Resources and Environmental Control Department of Agriculture	<ul style="list-style-type: none"> • There is no land application of green waste or compostable material • There are no state statutes and/or regulations to regulate or prohibit • Maryland Department of Agriculture would regulate land application • Maryland Department of Agriculture unaware of any land application of compostable material
Minnesota	Pollution Control Agency	<ul style="list-style-type: none"> • There is no land application of compostable material • Presently all yard waste and leaves must be composted and may not be used for Alternative Daily Cover • Exception – the Minneapolis franchise/contract hauler of yard waste and leaves was overwhelmed last year and landspread some leaves on agricultural land • Currently no statutes or regulations regulating or prohibiting land application of yard waste or leaves • Dredge spoils and lime from POTWs may be landspread with a State Disposal System permit
Nebraska	Department of	<ul style="list-style-type: none"> • Compostable material may be landspread at agronomic rates as determined

State	Contact Agency	Application
	Environmental Quality	<p>by the Nebraska Department of Agriculture</p> <ul style="list-style-type: none"> Compostable material may also be landspread as a special waste but only once at a specific location; additional land application at that location will be considered disposal
New Jersey	Department of Environmental Health	<ul style="list-style-type: none"> No known land application of compostable material other than farmers landspreading compostable material generated as part of their agricultural operations on their own land All the counties and many of the cities operate compost sites
Oregon	Department of Environmental Quality	<ul style="list-style-type: none"> Land application is allowed as an agricultural exclusion and must meet certain criteria Excluded from solid waste definition Solid waste is essentially defined as mixed/municipal solid waste but does not include materials used for fertilizer, soil conditioning, humus restoration or for other productive purposes or salvageable for these purposes and is used on land in agricultural operations and the growing and harvesting of crops and the raising of fowls or animals; provided the materials are used at or below agronomic application rates To be considered a productive purpose, the waste must provide a net benefit in the agricultural operation and cannot create an adverse impact to human health or the environment For growing crops, the material must be used at or below agronomic rates. Land application is typically two to six inches
Texas	Commission on Environmental Quality	<ul style="list-style-type: none"> Land application of yard trimmings, clean wood materials, vegetative materials and manure at rates below or equal to agronomic rates as determined by the Texas Agricultural Extension Service are exempt from any permitting requirements The aforementioned compostable material is considered recyclable material and is limited to incidental amounts of non-recyclable waste; that is defined as < 10 percent by volume or scale weight, further all material received by a facility cannot exceed 5 percent of the total scale weight or volume of all material received in the previous 6 months For composting or mulching of green material an entity must file for a Notice of Intent to recycle and then they can landspread mulch for beneficial use at an agronomic rate as determined by the Texas Agricultural Extension Service
Washington	Department of Ecology	<ul style="list-style-type: none"> Land application is allowed for solid waste, including green waste, for its agronomic value, soil amending capacity including land reclamation Solid waste means all putrescible and non-putrescible solid wastes including garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction material and recyclable material Land application is applied at a rate that does not exceed the agronomic rate with consideration of the carbon to nitrogen ratio to control nutrient leaching A permit and testing for metals and concentrations of fecal coli form bacteria is required An alternate method of land application is by obtaining a Beneficial Use Determination (BUD) for a specific mix of material; it has multiple uses A BUD is only good for a specific mix, different mix requires a new BUD
Wisconsin	Department of Natural Resources	<ul style="list-style-type: none"> Land application of yard waste is an exempted activity Yard waste is defined as leaves, grass clippings, yard and garden debris and brush, including woody vegetative material no greater than 6 inches in diameter Yard waste does not include stumps, roots or shrubs with intact root balls No limits on contamination but it is expected to be negligible Contaminated land application would be considered illegal dumping

CASE STUDY

As reported by the Kern County LEA staff, beginning in the mid-1990s, green material from large municipalities in the Los Angeles area was directed to Kern County for land application. At one point there was land application of compostable material for a number of projects totaling 400+ acres. Primarily two companies were involved with the projects, Green 2 Green and LA Waste Industries. Green 2 Green obtained their compostable material from Waste Management Inc. Green 2 Green land applied in five different areas, and LA Waste Industries in two different areas.

Community Recycling owns approximately 4000 acres in Kern County and land applies composted material on approximately eight different areas on their property.

The LEA issued Notice and Orders to affect clean-ups at several sites where the level of contaminants were determined to be a nuisance. The contaminants were manually removed and included metal, plastic, glass, bottles of prescription medication, sharps, and construction and demolition debris (see photos below). The LEA notes that impacts relative to accumulation of inert materials from land application were land devaluation, limited selection of crops that can be grown, and the public perception of tainted crops.



Contaminants from Land Application in Kern County



Litter Accumulation – Kern County

Issues Specific to Water

The State Water Resources Control Board (State Water Board) staff provided the following information on issues related to water quality and compostable materials:

From a water quality perspective, constituents of primary concern in compostable materials include pesticides, pathogens, nutrients, metals, and salts. Where compostable materials are proposed to be discharged to land, they may affect surface water and groundwater quality. A waste that may affect water quality is subject to the requirements of California Water Code (CWC) Section 13260.

CWC §13260 requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state, to submit a Report of Waste Discharge (ROWD) to the appropriate Regional Water Quality Control Board (Regional Water Board). A ROWD will

provide the Regional Water Board with information regarding the characteristics of the compostable material, characteristics of the land application site (i.e., depth to groundwater, soil type, distance to surface water, etc.), method of application (including volume, thickness, duration, frequency), as well as any other information that would help the Regional Water Board make its decision on how to regulate the discharge.

Based on the information provided in the ROWD and the relative threat to water quality, the Regional Water Board will either:

- conditionally waive waste discharge requirements for the land application of certain compostable materials, if doing so would be compatible with its basin plan (in accordance with CWC §13269) or
- issue waste discharge requirements (WDRs) for the discharge that reflect whether Title 27 requirements are applicable, as follows:
 - the Regional Water Board finds that the discharge qualifies for an exemption from the provisions of California Code of Regulations (CCR) Title 27 §20090 based on the following: “The following activities shall be exempt from the [State Water Board]-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed...(f) “Use of nonhazardous decomposable waste as a soil amendment pursuant to applicable best management practices, provided that [a Regional Water Board] may issue waste discharge or reclamation requirements for such use,” or
 - the Regional Water Board finds that the discharge is not exempt from the provisions of CCR Title 27, in which case the material may only be discharged with containment appropriate for of the waste as specified in Title 27.

When evaluating the application of compostable materials to cropland relative to the requirements of the CWC, the following issues should be considered:

- The types and amounts of compostable material applied to land are related to the potential for adverse impacts to water quality including water pollution.
- Runoff from areas where compostable materials have been stockpiled or applied may transport pollutants in the compostable materials to surface water, and leachate from the areas may transport pollutants to groundwater.
- Application of compostable materials can result in leaching of metals and salts from underlying soils into groundwater. Application of large amounts of organic material to land can change the reduction-oxidation potential of the soil, resulting in mobilization of ionic materials that were adsorbed on the soil.
- The types and amounts of compostable material applied to land are related to the potential for adverse impacts to water quality including water pollution.
- Soil types (sandy, clayey, etc.), geology, topography, and depth to groundwater must be considered when evaluating the threat to water quality at sites where compostable material is applied.

- CCR Title 27 §20164 defines best management practices (BMPs) as “a practice, or combination of practices, that is the most effective and feasible means of controlling pollution generated by nonpoint sources for the attainment of water quality objectives.” The State Water Board has not established BMPs for application of compostable materials to land.
- Those portions of the Central Valley Regional Water Control Board’s Designated Level Methodology related to soil amendments may be helpful for development of BMPs.
http://www.waterboards.ca.gov/centralvalley/plans_policies/guidance/index.shtml
- Application of compostable materials to land in the San Diego Region must comply with Conditional Waiver No. 8
http://www.waterboards.ca.gov/sandiego/board_decisions/waivers/docs/Conditional_Waiver_8_Final.pdf

Issues specific to Air

Staff interviewed Janet Spencer and Kevin Eslinger with the California Air Resources Board. The following is a summary of the interview.

- Land application of compostable materials can increase the release of methane (CH₄).
- Land application of compostable materials can increase the release of Nitrous Oxide (N₂O)
- Land application of compostable materials can increase the release of volatile organic compounds (VOCs).
- Nitrous oxides (NO_x) would not likely be generated from land application of compostable materials at ambient temperatures

Options

- a. No Change to regulations.

As the current regulations reference CDFA requirements which as indicated by CDFA are not applicable the no change option would not be appropriate. Only compostable material where the seller or provider is making nutritive claims would fall under the jurisdiction of the CDFA as a fertilizer and be regulated as such. In all other cases there would continue to be a need to determine when land application of compostable materials is disposal or a beneficial use.

- b. Delete Title 14 sections that address disposal and beneficial use of compostable materials.

Regulations in Title 14 would be deleted relative to disposal and beneficial use of compostable material on agricultural land. Without regulations to clarify when application of compostable material could be regarded as either beneficial or disposal, application of waste derived compostable material on agricultural land would need to be viewed as disposal. The only State requirements for land application would be with the SWRCB and the RWQCBs. Local governments

could continue to address issues through development and implementation of local ordinances.

- c. Revise regulations to include new criteria for determining disposal and for determining beneficial use of compostable materials applied to agricultural lands.

Suggested criteria in revised regulations would include the level of non-organic contaminants, agronomic benefit, water and air quality concerns, and could be comprehensive in approach to cover all areas of concern through reference to other regulatory agency requirements. The criteria would need to be developed in consultation with other regulatory agencies and stakeholders. The criteria may need to take into account material types, variation in agriculture uses, potential water and air impacts, climatology and other variables.

- d. Revise regulations to only address non-organic contaminants for land applied compostable materials.

Regulations that just focus on non-organic containments in compostable material would address public health and safety impacts resulting from the containments, but not other potential impacts to water or air quality. SWRCB and RWQCB requirements would continue to apply.

- e. Revise regulations to provide for an identified agricultural expert(s) that could make a determination on the beneficial use of material applied. The expert would determine if the use of the material is consistent with agricultural needs and practices and could include a finding relative the affects of any non-organic containments.

Regulations would identify an agricultural expert(s) to determine appropriate use of compostable materials. It is not clear what expert(s) might be available to make required findings and what the mechanism might be to facilitate the findings. Additional research would be required before determining if this is a viable option. SWRCB and RWQCB requirements would continue to apply.

APPENDIX



January 14, 2009

Margo Reid Brown, Acting Director
Department of Resources Recycling and Recovery
801 K Street, MS 19-01
Sacramento, CA 95814

Dear Ms. Brown:

RE: CDFA Authority Regarding Compostable Materials

California Department of Food and Agriculture's (CDFA) legal office performed a review of the California Integrated Waste Management Board's (CIWMB) draft document titled "Land Application - Compostable Material" and determined that CDFA has no authority over compostable materials as set forth in the CIWMB draft document. The CIWMB draft document makes broad generalizations in evaluating CDFA authority and how it is being implemented regarding the land application of compostable materials based on the CIWMB staff interpretation of the Food and Agricultural Code (FAC), Division 7, Chapter 5. Article 1. Section 14501 (b).

CDFA does not have the authority to regulate land application of compostable materials. CDFA regulates fertilizing materials, as defined in the FAC Section 14533, including recycled material, to be used in agriculture only if plant nutrient claims are made. CDFA is responsible for ensuring all fertilizers sold and distributed in the State of California are safe, effective, and meet the claims guaranteed on the product label. The CIWMB draft document also referred to recent legislation, AB 856, as an avenue through which compostable materials may be identified as an organic input material. However, organic input materials must comply with the requirements of the National Organic Program (NOP) standards, as specified in Part 205 (commencing with Section 205.1) of Subchapter M of Chapter I of Subtitle B of Title 7 of the Code of Federal Regulations. Currently, NOP recognizes composted materials that comply with their standards for organic production but not compostable materials.

Based on these findings, CDFA is requesting that all references to CDFA as a regulatory authority over the land application of compostable material be removed from the CIWMB draft document titled "Land Application - Compostable Material." CDFA believes that the CIWMB



Ms. Margo Reid Brown
January 14, 2010
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should look elsewhere to determine if there is either state or local authority to address the land application of compostable materials.

Please feel free to contact me, if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Nate Dechoretz for". The signature is written in a cursive style.

Will Brown
Undersecretary

Enclosure

cc: A.G. Kawamura, Secretary, CDFA
Nate Dechoretz, Acting Deputy Secretary, CDFA
Rick Jensen, Acting Division Director, CDFA
Richard Estes, Legal Counsel, CDFA
Asif Maan, Branch Chief, CDFA
Raymond Seamans, CDRRR

California Water Code Section 13260

- (a) All of the following persons shall file with the appropriate regional board a report of the discharge, containing the information which may be required by the regional board:
- (1) Any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.
 - (2) Any person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.
 - (3) Any person operating, or proposing to construct, an injection well.
- (b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.
- (c) Every person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.
- (d)(1)(A) Each person who is subject to subdivision (a) or (c) shall submit an annual fee according to a fee schedule established by the state board.
- (B) The total amount of annual fees collected pursuant to this section shall equal that amount necessary to recover costs incurred in connection with the issuance, administration, reviewing, monitoring, and enforcement of waste discharge requirements and waivers of waste discharge requirements.
- (C) Recoverable costs may include, but are not limited to, costs incurred in reviewing waste discharge reports, prescribing terms of waste discharge requirements and monitoring requirements, enforcing and evaluating compliance with waste discharge requirements and waiver requirements, conducting surface water and groundwater monitoring and modeling, analyzing laboratory samples, and reviewing documents prepared for the purpose of regulating the discharge of waste, and administrative costs incurred in connection with carrying out these actions.
- (D) In establishing the amount of a fee that may be imposed on any confined animal feeding and holding operation pursuant to this section, including, but not limited to, any dairy farm, the state board shall consider all of the following factors:
- (i) The size of the operation.
 - (ii) Whether the operation has been issued a permit to operate pursuant to Section 1342 of Title 33 of the United States Code.
 - (iii) Any applicable waste discharge requirement or conditional waiver of a waste discharge requirement.
 - (iv) The type and amount of discharge from the operation.
 - (v) The pricing mechanism of the commodity produced.
 - (vi) Any compliance costs borne by the operation pursuant to state and federal water quality regulations.
 - (vii) Whether the operation participates in a quality assurance program certified by a regional water quality control board, the state board, or a federal water quality control agency.
- (2) (A) Subject to subparagraph (B), any fees collected pursuant to this section shall be deposited in the Waste Discharge Permit Fund, which is hereby created. The money in the fund is available for expenditure by the state board, upon appropriation by the Legislature, solely for the purposes of carrying out this division.
- (B)(i) Notwithstanding subparagraph (A), the fees collected pursuant to this section from stormwater dischargers that are subject to a general industrial or construction stormwater permit under the national pollutant discharge elimination system (NPDES) shall be separately accounted for in the Waste Discharge Permit Fund.
- (ii) Not less than 50 percent of the money in the Waste Discharge Permit Fund that is separately accounted for pursuant to clause (i) is available, upon appropriation by the Legislature, for expenditure by the regional board with jurisdiction over the permitted industry or construction site that generated the fee to carry out stormwater programs in the region.
- (iii) Each regional board that receives money pursuant to clause (ii) shall spend not less than 50 percent of that money solely on stormwater inspection and regulatory compliance issues associated with industrial and construction stormwater programs.
- (3) Any person who would be required to pay the annual fee prescribed by paragraph (1) for waste discharge requirements applicable to discharges of solid waste, as defined in Section 40191 of the Public Resources Code, at a waste management unit that is also regulated under Division 30 (commencing with Section 40000) of the Public Resources Code, shall be entitled to a waiver of the annual fee for the discharge of solid waste at the waste management unit imposed by paragraph (1) upon verification by the state board of payment of the fee imposed by

Section 48000 of the Public Resources Code, and provided that the fee established pursuant to Section 48000 of the Public Resources Code generates revenues sufficient to fund the programs specified in Section 48004 of the Public Resources Code and the amount appropriated by the Legislature for those purposes is not reduced.

(e) Each person discharges waste in a manner regulated by this section shall pay an annual fee to the state board. The state board shall establish, by regulation, a timetable for the payment of the annual fee. If the state board or a regional board determines that the discharge will not affect, or have the potential to affect, the quality of the waters of the state, all or part of the annual fee shall be refunded.

(f)(1) The state board shall adopt, by emergency regulations, a schedule of fees authorized under subdivision (d). The total revenue collected each year through annual fees shall be set at an amount equal to the revenue levels set forth in the Budget Act for this activity. The state board shall automatically adjust the annual fees each fiscal year to conform with the revenue levels set forth in the Budget Act for this activity. If the state board determines that the revenue collected during the preceding year was greater than, or less than, the revenue levels set forth in the Budget Act, the state board may further adjust the annual fees to compensate for the over and under collection of revenue.

(2) The emergency regulations adopted pursuant to this subdivision, any amendment thereto, or subsequent adjustments to the annual fees, shall be adopted by the state board in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health, safety, and general welfare. Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, any emergency regulations adopted by the state board, or adjustments to the annual fees made by the state board pursuant to this section, shall not be subject to review by the Office of Administrative Law and shall remain in effect until revised by the state board.

(g) The state board shall adopt regulations setting forth reasonable time limits within which the regional board shall determine the adequacy of a report of waste discharge submitted under this section.

(h) Each report submitted under this section shall be sworn to, or submitted under penalty of perjury.

(i) The regulations adopted by the state board pursuant to subdivision (f) shall include a provision that annual fees shall not be imposed on those who pay fees under the national pollutant discharge elimination system until the time when those fees are again due, at which time the fees shall become due on an annual basis.

(j) Any person operating or proposing to construct an oil, gas, or geothermal injection well subject to paragraph (3) of subdivision (a), shall not be required to pay a fee pursuant to subdivision (d), if the injection well is regulated by the Division of Oil and Gas of the Department of Conservation, in lieu of the appropriate California regional water quality control board, pursuant to the memorandum of understanding, entered into between the state board and the Department of Conservation on May 19, 1988. This subdivision shall remain operative until the memorandum of understanding is revoked by the state board or the Department of Conservation.

(k) In addition to the report required by subdivision (a), before any person discharges mining waste, the person shall first submit both of the following to the regional board:

(1) A report on the physical and chemical characteristics of the waste that could affect its potential to cause pollution or contamination. The report shall include the results of all tests required by regulations adopted by the board, any test adopted by the Department of Toxic Substances Control pursuant to Section 25141 of the Health and Safety Code for extractable, persistent, and bioaccumulative toxic substances in a waste or other material, and any other tests that the state board or regional board may require, including, but not limited to, tests needed to determine the acid-generating potential of the mining waste or the extent to which hazardous substances may persist in the waste after disposal.

(2) A report that evaluates the potential of the discharge of the mining waste to produce, over the long term, acid mine drainage, the discharge or leaching of heavy metals, or the release of other hazardous substances.

(l) Except upon the written request of the regional board, a report of waste discharge need not be filed pursuant to subdivision (a) or (c) by a user of recycled water that is being supplied by a supplier or distributor of recycled water for whom a master recycling permit has been issued pursuant to Section 13523.1.

Central Valley Regional Water Control Board's Designated Level Methodology (Page 44)

7.1 Soil Amendments

§2511(f) permits the re-use of a waste as a soil amendment under certain conditions. Reuse as a soil amendment may provide a lower cost alternative to Class I or Class II disposal for such wastes as sewage treatment sludges and incinerator ashes. A waste that contains constituents in excess of Designated Levels may still be used for this purpose provided that the following conditions are met:

- 1) the waste is not 'hazardous';
- 2) loading rates of the waste to the soil are such that constituent concentrations in soils remain below Designated Levels for the site (i.e., the resulting concentrations in soil will not pose a threat to ground or surface water quality) and below levels which would be injurious to plants or crops or, through plant uptake, to consumers of crops from the site;
- 3) waste application is controlled to prevent direct constituent release to surface waters via tail water from the field; and
- 4) the waste is shown to provide a benefit for the soil on which it is applied, such that the re-use does not simply constitute disposal. A site monitoring program should be implemented to ascertain compliance with points (2) and (3) above.

Conditional Waiver No. 8 – Discharges/Disposal of Solid Wastes to Land Conditional (Pages 1-3)

Waiver No. 8 is for discharges of solid wastes to land, which may be a source of pollutants that can adversely affect the quality of waters of the state. The following types of discharge not regulated or authorized under WDRs may be eligible for Conditional Waiver No. 8:

- Discharges of plant crop residues to land
- Discharge/application of amendments and/or mulches to soil
- Discharges/disposal of inert wastes to solid waste disposal facilities only accepting inert wastes
- Discharges of soils containing wastes to temporary waste piles
- Discharges/disposal/reuse of soils characterized as inert from known contaminated sites to land

Discharges from these types of projects have similar properties, potential threat to water quality, and waiver conditions. Therefore, discharges from all these types of projects were grouped into one discharge classification. Discharges that comply with the waiver conditions are not expected to pose a threat to the quality of waters of the state.

Solid wastes that are discharged to land may contain bacteria, nutrients, pesticides, heavy metals, and other pollutants. Storm water and surface runoff that is allowed to come into contact with solid wastes can leach these pollutants into soil and underlying groundwater. Additionally, solid wastes are significant sources of sediment that may be transported to surface waters by wind or in storm water or surface runoff. However, with proper management, discharges of solid wastes to land are not expected to pose a threat to the quality of waters of the state. Therefore, waiver conditions must require proper management of solid wastes discharged to land to minimize or eliminate the discharge of pollutants to waters of the state.

Waiver conditions should be developed in order for members of the public, cities, counties, local agencies and organizations, and/or the San Diego Water Board to determine if any discharges or disposal of solid wastes to lands pose a threat to the quality of the waters of the state. If dischargers of solid wastes are not in compliance with waiver conditions, they can be issued a Notice of Violation and required to correct deficiencies in order to continue being waived under Conditional Waiver No. 8. If dischargers of solid wastes violate waiver conditions, the San Diego Water Board can terminate the conditional waiver for the discharge and begin regulating the discharge with individual WDRs and/or take other enforcement actions.

Conditional Waiver No. 8 only applies to discharges/disposal of solid wastes to land within the San Diego Region. Discharges/disposal of solid wastes to lands outside of the San Diego Region must comply with conditional waivers and/or WDRs issued by the appropriate Regional Water Board.

In order to be eligible for Conditional Waiver No. 8, discharges must comply with certain conditions to be protective of water quality. The waiver conditions applicable to discharges of solid wastes to land include the following:

- 8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land
- 8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land
- 8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil
- 8.II.C. Specific Waiver Conditions for the Discharge of Soils Containing Wastes to Temporary Waste Piles
- 8.II.D. Specific Waiver Conditions for Discharges of Inert Wastes to Solid Waste Disposal Facilities Only
Accepting Inert Wastes
- 8.II.E. Specific Waiver Conditions for the Discharge/Disposal/Reuse of Inert Soils and Materials from
Contaminated Sites to Land

Discharges of solid wastes to land that comply with the general and specific waiver conditions in Conditional Waiver No. 8 are not expected to pose a threat to the quality of waters of the state.

8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land

1. Prevent the direct or indirect discharge of solid wastes to any surface waters of the state (including ephemeral streams and vernal pools).
2. Operations or facilities that accept and/or discharge solid wastes to land must comply with local, state, and federal ordinances and regulations and obtain any required permits, certifications, and/or licenses.
3. Solid wastes must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
4. The discharger must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
5. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
6. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land

1. Plant crop residues must be managed to prevent transport of pollutants to waters of the state.
2. Plant crop residues may be used as feedstock for composting.
3. Plant crop residues cannot be burned and applied to land.
4. Application of any products (e.g., fertilizers, pesticides) to plants or soil must be used in accordance with manufacturer's guidelines and must not have an adverse effect on the quality of any waters of the state.
5. Concentrations of pesticides and/or herbicides or any other pollutants associated with the plant crop residues must not adversely affect the quality or beneficial uses of underlying groundwater.
6. Implement management measures (MMs) and/or best management practices (BMPs) around areas where plant crop residues have been discharged to land to minimize or eliminate runoff and leachate to surface waters and groundwater.

8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil

1. Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.

2. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the Natural Resource Conservation Service (NRCS), University of California Cooperative Extension (UCCE), and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.

3. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).

4. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

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