

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

ORDER NO. 96-019

**CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS
FOR
GREENWASTE COMPOSTING OPERATIONS**

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Section 13260 (a) of the California Water Code requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, that could affect the quality of the waters of the State, shall file a report of waste discharge (ROWD).
2. California Water Code Section 13269 authorizes Regional Water Quality Control Board (CRWQCBs) to waive waste discharge requirements (WDRs) for a specific discharge or for a specific type of discharge where such a waiver is not against the public interest. Such waiver is conditional: it may be terminated for any type of discharge at any time; does not authorize any discharge that is otherwise prohibited or regulated; does not preclude the need for permits which may be required by other local or governmental agencies; and does not preclude the CRWQCB from taking enforcement actions for violations of the terms and conditions set forth in this Board Order or for any discharges that cause or threaten to cause violation of provisions of the Basin Plan or that create or threaten to create a condition of pollution or nuisance.
3. California Water Code Section 13267 (c) authorize CRWQCBs to enter a facility premise without prior notice in order to inspect: (a) the areas used for storage or treatment of greenwaste, food processing waste, agricultural waste, or paper waste, and (b) features needed for compliance with the Conditions set forth in this Order.
4. Title 23 of the California Code of Regulations (23 CCR) Section 2200 authorizes the CRWQCB to require the discharger to submit a fee of \$750.00 to the CRWQCB to cover staff review of the Report of Waste Discharge (ROWD). Pursuant to 23 CCR Section 2200.4 CRWQCBs will calculate any refund using a rate of \$50.00 per hour. Any unused fee funds will be refunded to the discharger.
5. The California Integrated Waste Management Board (CIWMB) has adopted regulations governing the composting of green material, animal material, sewage sludge and municipal solid waste under California Code of Regulation Title 14, Division 30, Chapter 3.1. There are significant differences in the scope, authority and focus of the CIWMB's regulations governing composting and the State Water Resources Control Board regulations governing discharges of waste to land.
6. "Greenwaste" consists of or contains waste from plants, including leaves, clippings, cuttings, trimmings of grass, weeds, shrubbery, bushes, or trees, residential or community garden wastes, and untreated wood wastes, and does not include any substance included in Finding 12.
7. "Food processing waste" consists of or contains only pre-processed and post-processed waste derived from plants, or foods processed or produced at restaurants, hospitals and food distributors and does not include any substance included in Finding 12.

8. "Agricultural waste" consists of the plant waste coming directly from an agricultural commodity, and is the product of farms and ranches and by-products processed from these products, as defined in Division 21, Part 2, Chapter 1, Section 58619 of the Food and Agriculture Code. Agricultural waste includes agricultural, floricultural, silvicultural, vermicultural or viticultural products, and does not include any substance included in Finding 12.
9. "Paper waste" consists of nonhazardous paper and paper by-products, and does not include any substance included in Finding 12 .
10. "Additive" consists of waste or products which are approved by the CRWQCB for mixture with feedstock or treated wastes in order to adjust the moisture level, carbon to nitrogen ratio, or porosity in order to create a condition favorable to composting, or to improve the end-product (including manures, fertilizers, and chemical amendments), and does not include any substance included in Finding 12.
11. "Discharger" means any person who discharges waste which could affect the quality of waters of the state, and includes any person who owns a waste management unit or who is responsible for the operation of a waste management unit [Title 23, California Code of Regulations (23 CCR) Section 2601].
12. Compliance with the terms and conditions of this Order is not sufficient to prevent the threat to water quality posed by discharges of the following wastes for treatment by composting:
 - a. municipal solid waste;
 - b. sludges (including sewage sludge, water treatment sludge, and industrial sludge);
 - c. septage;
 - d. liquid wastes, unless specifically approved by the CRWQCB;
 - e. animal waste, except manure when used as an additive;
 - f. oil and grease; and
 - g. hazardous, designated, and other wastes determined by the CRWQCB to pose a potential threat to water quality.
13. Discharges of up to 500 cubic yards at any given time of greenwaste, food processing waste, agricultural waste, or paper waste for storage and treatment by composting on properties such as agricultural or residential property, parks, community gardens, or nurseries are unlikely to affect the quality of the waters of the state.
14. Discharges whose total volume exceeds 500 cubic yards at any given time (including greenwaste, food processing wastes, agricultural waste, paper waste, or any approved additives) for storage and treatment by composting may affect the quality of the waters of the state through discharge of leachate containing organic or inorganic by-products of decomposition into ground or surface waters. Discharges of greenwaste, food processing waste, agricultural waste, or paper waste can be managed and treated in a manner that chemically or biochemically degrades by-products contained in waste and leachate, and contains, controls, or prevents any discharge of waste or associated leachate to waters of the state.
15. The use of additives as approved by the CRWQCB is not expected to pose a significant threat to water quality.
16. It is not against the public interest for the CRWQCB to waive the issuance of waste discharge requirements for discharges of greenwaste, food processing waste, agricultural waste or paper

waste to waste management units for composting, provided such units are properly designed and operated and that such discharges comply with the Conditions set forth in this Order.

17. Section 402 of the Clean Water Act (33 U.S.C. Section 1342 (p)) and regulations adopted by the U.S. Environmental Protection Agency (40 CFR Section 122.26) require that facilities which discharge storm water associated with industrial activity be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. The State Water Resources Control Board (SWRCB) has adopted a General NPDES Permit for industrial activity (NPDES General Permit No. 91-13-DWQ, as amended by No. 92-12-DWQ). Accordingly, composting operations are included in Standard Industrial Classifications 2875 and 2879. Persons engaged in mixing fertilizers from purchased fertilizer materials (2875) or in manufacturing soil conditioners (2879) must, as a condition of this waiver of WDRs, obtain coverage and comply with the conditions of the General Permit.
18. The conditions of the waiver of WDRs provided for by this Board Order implement the Water Quality Control Plan for the Colorado River Basin CRWQCB, and are consistent with applicable provisions of SWRCB regulations governing discharges of waste to land [Title 23, California Code of Regulations (23 CCR) Sections 2510-2601, "Chapter 15"].
19. The CRWQCB has circulated a Negative Declaration for Conditional Waiver of WDRs for the discharge of greenwaste, food processing waste, agricultural waste or paper waste for composting, in accordance with the California Environmental Quality Act (CEQA) and with the terms and conditions of the waiver of WDRs contained herein. The CRWQCB has assessed the potential impacts on the physical environment of such discharges and has considered all of the comments received. The CRWQCB has by Resolution No. 96-018 adopted the Negative Declaration. Individual composting operations may have site-specific or local impacts on the physical environment that cannot be anticipated at this time. Such impacts may require supplemental environmental assessment under CEQA by state or local governmental agencies.
20. This Order does not preempt or supersede the authority of federal or state agencies, or municipalities or other local agencies to prohibit, restrict, or control discharges of waste subject to their jurisdiction.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, dischargers shall comply with the following:

A. Waiver of WDRs

WDRs for discharge of greenwaste, food processing waste, agricultural waste, or paper waste to land for composting are waived, as follows:

1. Any person discharging or proposing to discharge up to 500 cubic yards at any given time of greenwaste, food processing waste, agricultural waste or paper waste for storage and treatment by composting shall not be required to file a ROWD and shall not be subject either to the conditions set forth in this Board Order or to the issuance of WDRs.
2. Any person discharging or proposing to discharge waste whose total volume exceeds 500 cubic yards at any given time (including greenwaste, food processing waste, agricultural waste, paper waste, and any approved additives) for storage and treatment by composting under the terms of this Board Order shall submit a ROWD (see attached form) to the CRWQCB documenting compliance with the conditions set forth in this Board Order. Either a Notice of Intent to comply with the requirements set forth in State Water Resources

Control Board (SWRCB) Order Nos. 91-13-DWQ and 92-12-DWQ for discharge of storm water or documentation that NPDES storm water permit requirements are not applicable to the discharger's composting facility, together with the appropriate filing fee should be submitted. Such persons shall comply with the conditions set forth in this Order. Any ROWD submitted pursuant to this Board Order shall contain the information on the attached ROWD form.

B. Conditions

1. Any discharger who violates or fails to comply with the terms and conditions contained in this Board Order or who fails to notify the CRWQCB within 30 days of any significant changes in the nature of the discharge, or in ownership, operation or location of the facility, shall be found to be discharging waste in violation of California Water Code Section 13264.
2. The discharge of greenwaste, food processing waste, agricultural waste, or paper waste for storage and treatment by composting shall not cause or threaten to cause a condition of water contamination or pollution.
3. The use of additives is allowed, provided that such use of additives does not pose a threat to water quality, and provided that such use is approved by the CRWQCB.
4. The discharge of any waste other than greenwaste, food processing waste, agricultural waste, paper waste, or additives (refer to Finding 8), on any area used to store or treat wastes is prohibited. Such wastes include but are not limited to those listed in Finding 10.
5. Containment structures such as berms, liners or surface impoundments shall be maintained in order to ensure proper performance whenever wastes are discharged.
6. The dischargers shall design, construct and maintain the areas used for storage and treatment of greenwaste, food processing waste, agricultural waste, or paper waste and additives to control and manage all runoff, runoff, and precipitation which falls onto or within the boundaries of the storage and treatment areas. All areas at which greenwastes, food processing wastes, agricultural wastes, or paper waste and additives are discharged for storage or treatment shall be protected from inundation by surface flows associated with the 24-hour, 25-year storm event that may occur during the period of storage of wastes or treatment. In the event that rainfall exceeds the 24-hour, 25-year storm event, liquids and storm water shall be discharged in a manner approved by the CRWQCB and shall not cause or threaten to cause contamination, pollution, or nuisance.
7. Prior to the onset of the rainy season, the discharger shall conduct an annual survey of the operation in order to assure that the site has been graded and prepared for the rainy season to eliminate and prevent erosion and to prevent ponding.
8. The discharger shall allow the CRWQCB staff to:
 - a. copy any record required to be kept under the terms and conditions of this Board Order; and
 - b. sample any waste, additives, discharge, runoff or runoff; and
 - c. take recordings, photographs, or videotapes of the facility.

9. All areas upon which waste is discharged for storage and treatment shall have surfaces capable of preventing degradation of waters of the state as a result of waste storage or treatment. Such surfaces shall be designed, constructed and maintained to: (1) impede vertical movement of liquid phase constituents and (2) reliably transmit most of the liquid generated during storage and treatment of waste laterally across the upper surface of the layer, thereby preventing significant quantities of liquids from entering ground or surface waters throughout the lifetime of the operation. If the equipment operating near or on storage and treatment areas produces subsidence, cracking, or otherwise compromises any surface, the discharger shall repair any damaged areas immediately.
10. The discharger shall inspect storage and treatment areas for emergence of leachate, ponding, or surface failures such as cracking or subsidence; such inspections shall be frequent enough to ensure compliance with the conditions of this Board Order. If visible leachate, ponding, cracking, or subsidence of surfaces is observed, the discharger shall immediately take necessary measures to maintain the performance standards described in Condition 9.
11. A dischargers shall notify the CRWQCB of: (1) any significant change in the nature and quantity of waste composted, area of operation, or season of operation, and (2) termination of operation.
12. This Board Order shall remain in effect until such time as it is rescinded.

I, Philip A. Gruenberg, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on May 22, 1996.


Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

SCH #95053034

**NEGATIVE DECLARATION
FOR
CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR
GREENWASTE COMPOSTING OPERATIONS**

1. Lead Agency

California Regional Water Quality Control Board
Colorado River Basin Region
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2. Project Location

Upon adoption by the California Regional Water Quality Control Board (CRWQCB), Colorado River Basin Region, the provisions of the conditional waiver of waste discharge requirements (WDRs) would be applicable throughout the Region, as described below.

The Colorado River Basin Region comprises all basins east of the Santa Ana and San Diego regions draining into the Colorado River, Salton Sea and local sinks from the southerly boundary of the Lahontan Region to the California-Mexico boundary.

3. Project Description

The CRWQCB proposes to waive the issuance of waste discharge requirements (WDRs) for dischargers proposing to compost green waste, agricultural waste, food processing waste or paper waste where the discharge is less than 500 cubic yards at any given time. The Board Order No. 96-019 contains conditions which protect surface and ground water quality via runoff/runoff control and containment, and restriction of vertical movement of liquid phase constituents for discharges exceeding 500 cubic yards of green waste, agricultural waste, food processing waste or paper waste at any given time.

A project is the "whole of an action that has the potential for resulting in physical environmental change, directly or ultimately." [CEQA Guidelines Section 15378 (a)]. Additionally, a project refers to "the underlying activity being approved by one or more agencies, not the government approvals." [CEQA Guidelines Section 15378 (c)]. Discharges of wastes covered by this conditional waiver will not have a significant impact on the physical environment, provided that the discharges are in compliance with the conditions set forth in Board Order No. 96-019. A brief discussion of potential environmental impacts and mitigation measures associated with establishment and operation of compost facilities operations treating the waste types identified in the Board Order No. 96-019 is included in the Project Background and the Environmental Evaluation sections.

Section 13263 of the California Water Code (CWC) requires that CRWQCB's prescribe requirements as to the nature of any existing or proposed discharge within its area of jurisdiction. However, CWC Section 13269 authorizes CRWQCBs to issue a conditional waiver of waste discharge requirements for specific discharges and for specific types of discharges, where such waivers are not against the public interest.

4. Findings of Significant Effect on the Environment

Based upon the attached Environmental Checklist, the CRWQCB finds that as long as the conditions established by the CRWQCB, all applicable laws, and local and state regulations are complied with, the discharges of wastes identified and managed as described in the Board Order No. 96-019 will not result in a significant effect on the environment, as that term is defined in the Public Resources Code (PRC), Section 21068.

5. Project Background

Through consultation and coordination with the CRWQCBs, SWRCB staff developed tentative order for the conditional waiver of WDRs for discharges of green waste, agricultural waste, food processing waste, or paper products waste to a waste management unit for composting. The conditions of the waiver require that dischargers are responsible for assuring that composting operations treating the waste types specified in this Board Order No. 96-019 do not adversely affect water quality.

The Tentative Order provides a basic framework for the conditional waiver of WDRs for composting. The CRWQCB may incorporate stricter requirements into their waiver, and may institute a Monitoring and Reporting Program on a site-specific, project-specific basis. The CRWQCB may also revoke a waiver of WDRs if the discharger violates the conditions of the waiver, or it may incorporate additional requirements or assess civil penalties on the discharger.

The proposed project does not prevent the CRWQCB from adopting individual WDRs for composting operations where it is in the public interest to do so. Where Regional Board staff concludes on the basis of its review of information concerning a discharge for composting that a waiver of WDRs is not appropriate, staff will prepare WDRs to be considered by the CRWQCB.

After the CRWQCB adopts the Board Order No. 96-019 waiving WDRs, staff is responsible for administration of the waiver. The CRWQCB has the authority, as Board Order No. 96-019 clearly indicates, to terminate the conditional waiver at any time for any specific discharge or any specific type of discharge. The CRWQCB may, as a condition of the waiver, request and review such information as it deems necessary to evaluate the water quality impacts of discharges for which the CRWQCB has waived WDRs.

6. Local Government Responsibility

It is the responsibility of a local government with general permitting authority to ensure that a compost operation has been sited appropriately, adequately planned and equipped, has adequate control and monitoring mechanisms [See References (1), (6), and (8)], and is consistent with the CRWQCB's Basin Plan. Additional key factors in design and operation of composting operations as related to health of workers and surrounding population include uniform mixing of the compost, moisture control, temperature control, dust control, ventilation of buildings (if applicable), odor control, and runoff/runoff control (2). The CRWQCB is responsible for protection of surface and ground water quality. Other local or state agencies have regulatory authority over siting, design and operation of composting operations.

7. Reasonable Alternatives to the Proposed Action

The CRWQCB has three alternatives to the waiver of WDRs for discharges of the specified wastes at waste management units for composting:

- a) The CRWQCB could issue individual WDRs for composting.
- b) The CRWQCB could issue general WDRs for composting.
- c) The CRWQCB could waive issuance of WDRs for composting operations on a case-by-case basis.

Any of the above alternatives would result in the expenditure of additional staff resources to review and process applications for WDRs. Staff would also need to review monitoring reports and conduct compliance inspections for those operations for which WDRs are adopted. The above alternatives are not warranted because there are conditions in the waivers which protect surface and ground water quality, and compliance with these conditions will result in minimal or no threat to water quality.

8. Discussion of Environmental Evaluation

III. Geologic Problems

III (f). Erosion, change in topography or ground surface

Establishment and operation of a composting operation may result in compaction and overcovering of the soil. Dischargers treating food processing waste, agricultural waste or paper wastes are required to comply with Condition 10 of the Board Order, which requires installation of an impermeable surface or compaction of the soil to impede vertical migration of liquid phase constituents from compost to ground water. Impacts resulting from compaction and overcovering are not quantifiable at this time, and will need to be addressed at the time of design and planning and establishment of individual compost operations.

There may be a change in ground surface relief features as a result of grading of a site to be used for composting. Construction activities may include building of access roads, grades, berms, and water retention basins. Condition 6 of the Board Order requires that the discharger designs, constructs and maintains the areas used for storage and treatment of wastes so that all precipitation, runoff and runoff is controlled and contained, thereby controlling erosion, but possibly resulting in a minor change in topography or ground surface features. It is not possible to quantify impacts pertaining to grading at this time and potential site-specific impacts will need to be addressed during the planning, design and establishment of individual compost operations.

IV. Water Quality

IV (a), (c) and (h). Discharge into surface water, alteration of surface or ground water quality

The information collected indicates that composting of uncontaminated green waste is relatively innocuous. However, composting of food processing waste, agricultural waste and paper wastes, and any approved additives poses greater threats to water quality as described below. Implementation of Conditions 5, 6, 7 and 10 mitigate the potential adverse impacts. Inorganic and organic compounds may be present in the waste prior to treatment. These

may include salts, pesticides, fertilizers, nutrients or chemical additives commonly used in the agriculture, food processing, home horticulture and lawn care, or paper processing industries. Such compounds could leach from a compost treatment or storage area into surface waters if no runoff or runoff controls or containment have been incorporated into the design of an operation. Further degradation may result if normal pH is not maintained and the compost is not kept under aerobic conditions. An increase in physical and/or chemical properties such as total dissolved solids (TDS), total settleable solids (TSS), biochemical oxygen demand (BOD), chemical oxygen demand (COD), odor, and turbidity, or in constituents such as nitrates, pesticides, or trace metals may result from excessive liquid entering into a treatment area (6). The underlying soils may become saturated as a result of the formation of leachate in the waste; ground water may be degraded as well as surface water (6) (8). Typically, during composting, microbial activity and heat generated within a compost pile breaks down many types of pesticides and additives applied to green waste, agricultural, food processing wastes or paper wastes. Organophosphates and carbamates are almost completely broken down during treatment (3) (7), and organochlorines are reduced from 30 to 50 percent over a 30-day period (4) (5) (8). Metals such as lead, zinc, cadmium, and copper can be introduced into yard trimmings in the form of pesticides, and are not destroyed during the compost treatment process. Although metal concentrations in finished compost may be higher than those found in the original material, published analyses indicate that the concentrations of metals in compost are not present at designated levels and are non-hazardous, and will not restrict land application of the finished product (9). Paper such as pulp or fiber may contain residual bleaching agents or solvents (10), or other compounds. The Board Order No. 96-019 does not allow any hazardous or designated wastes to be treated by composting. The generator of these materials should be able to provide the discharger with data verifying that the waste is non-hazardous and is not a designated waste.

Mitigations to potential water quality impacts are an intrinsic part of the Board Order No. 96-019. Condition 2 specifies that the discharge of the wastes to be stored and composted shall not cause or threaten to cause a condition of nuisance or pollution. Condition 9 requires that a discharger submit an explanation of how a compost unit will be managed to prevent anaerobic decomposition of wastes, and impede liquid phase constituents from migrating to ground or surface water to the CRWQCB. Tensiometers or lysimeters can be used to measure and monitor soil moisture levels at or near the soil surface (8). Condition 10 of the Board Order No. 96-019 requires that all areas at which waste is discharged for storage and treatment be compacted or underlain by a durable, impermeable surface which impedes any liquid phase constituents from entering ground water. Condition 6 requires that a discharger design, constructs and maintains a compost operation so that the compost operation is protected from inundation, all runoff and precipitation is managed to divert liquids away from waste and compost storage and treatment areas (2), and that any surface impoundments and containment structures be adequate to withstand a 24-hour, 25-year storm. Condition 5 requires that these containment structures be maintained to ensure adequate containment.

V. Ambient Air Quality

V (a) and (b). Air quality standards, exposure to pollutants

Air quality impacts such as dust and particulates may occur as a result of equipment operation or windy conditions. They can be controlled by keeping adequate moisture in and on the treatment unit, and adhering to local, regional and state air quality management requirements. Siting and design of compost operations are within the purview of local land

use authorities, and mitigation measures relating to air quality would be required as a condition of their approval.

V (d). Objectionable odors

There may be unpleasant odors if anaerobic decomposition occurs, or if the treatment unit becomes saturated. Decomposing lignin produces naturally occurring phenols. These natural phenols compromise the taste and odor of water, but are non-toxic (6). Proper aeration and frequent mixing and turning of the compost will help prevent odor from becoming a significant adverse impact (1) (3) (6). If necessary, regulatory control is within the purview of local government.

VI. Transportation /Circulation

VI (a) Generation of additional vehicular movement

Although it is not possible to evaluate potential traffic impacts on a region-wide basis, there may be an increase in local traffic due to haulers transporting waste to a composting facility. A local agency may require traffic studies to determine if there will be adverse environmental impacts associated with a possible increase in traffic. It is necessary to plan, site and design compost operations on a project-specific basis. It is possible to alleviate most foreseeable traffic impacts by siting a compost operation in an uncongested or unpopulated area and by establishing adequate ingress and egress patterns.

VII. Biological Resources

VIII (a-e). Threatened, rare and endangered species or habitats, locally designated species, wetlands, habitat for species dispersion and migration

There may be impacts to plants and animal habitat when establishing and operating a composting operation. It will be necessary to obtain site-specific data on a project-by-project basis to determine potential impacts to flora and fauna, especially if a operation is located in or adjacent to sensitive habitat. The appropriate local, state and federal agencies must be contacted to determine if siting a compost operation in a specific area will adversely impact a sensitive ecosystem. Local land use authority and mitigation measures in another agency's jurisdiction may require additional, site-specific CEQA compliance.

VIII. Noise

X (a) Increase in existing noise levels

There may be an increase in existing noise levels as a result of equipment operation during establishment, construction and operation. Although it is not possible to quantify site-specific noise impacts at this time, any compost operation must be located in accordance with local land use and zoning ordinances, and operated in accordance with noise ordinances, if any apply.

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