



**IMPLEMENTATION OF GENERAL WASTE DISCHARGE
REQUIREMENTS FOR COMPOSTING OPERATIONS
(ORDER WQ 2015-0121-DWQ)**

**REPORT TO THE
STATE WATER RESOURCES CONTROL BOARD**

August 2017



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

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1. INTRODUCTION

On August 4, 2015, the State Water Resources Control Board (State Water Board) adopted General Waste Discharge Requirements for Composting Operations, Order WQ 2015-0121-DWQ (Composting General Order). Resolution No. 2015-0054 (Resolution) certified the Environmental Impact Report, State Clearinghouse No. 2015012021 (EIR), and adopted the Composting General Order. The Resolution directed State Water Board staff to work with representatives of the Regional Water Boards, California Department of Resources Recycling and Recovery (CalRecycle), Air Resources Board (ARB), California Department Food and Agriculture (CDFA), compost industry, and other interested stakeholders to develop performance measures related to the implementation of the Composting General Order. The Resolution also directed staff to report to the State Water Board on the development and progress of performance measures and the status of enrollment and compliance with the Composting General Order. This report presents the performance measures, an update on compliance with the Composting General Order, and education and outreach activities conducted for organic materials management.

1.1 COMPOSTING OVERVIEW

Compost contains beneficial micro-organisms that break down organic materials into a stable humus-rich soil amendment. Compost helps retain soil moisture and reduce irrigation needs and runoff potential. The use of compost is one of a combination of sustainability practices promoted by California's Healthy Soils Initiative to ensure agricultural soils have adequate organic matter and carbon content to be sustainable.

Assembly Bill No. 341 (Chesbro; Solid waste: diversion. 2011–2012 Reg. Sess.; Stats. 2011, ch. 476) established a policy goal that not less than 75 percent of the solid waste generated in the state be source-reduced, recycled, or composted by 2020. Assembly Bill No. 1826 (Chesbro; Solid waste: organic waste. 2013–2014 Reg. Sess.; Stats. 2014, ch. 727) instituted mandatory commercial organics recycling programs and set a goal to reduce disposal of organic material in landfills by 50 percent by 2020. Senate Bill No. 1383 (Lara. Short-lived climate pollutants: methane emissions: dairy and livestock: organic waste: landfills. 2015–2016 Reg. Sess.; Stats. 2016, ch. 395) grants CalRecycle the regulatory authority required to achieve mandated organic material disposal reduction targets, including a 50 percent reduction in the level of the statewide disposal of organic waste at landfills from the 2014 level by 2020, and a 75 percent reduction by 2025. By accepting diverted organic material from landfills, composting operations are a critical factor in achieving the goal to recycle, compost, or reduce the solid waste disposed in landfills and reduce the disposal of organic material.

Although finished compost is a beneficial product, composting operations may pose a threat to water quality during the storage and processing of uncomposted materials. Composting piles generate leachate, a liquid created when organic materials decompose or when excess moisture flows through the pile. Depending on its source, leachate may contain a variety of pollutants which can impact water quality if allowed to percolate to groundwater or run off into surface waters. Leachate has the potential to deplete oxygen in waterways and may contain unacceptably high levels of nitrogen, phosphorus, metals, pathogens, and other pollutants that

can impact waters of the state. Therefore, development and implementation of the Composting General Order was necessary to ensure composting facilities have measures in place to protect water quality.

1.2 PERMITTING

During the early 1990's, State Water Board staff developed standardized language for a conditional waiver of waste discharge requirements (WDRs) for composting operations. By 1996, most of the Regional Water Boards incorporated this language into region-specific conditional waivers of WDRs for composting operations (Green Waste Conditional Waivers). The Green Waste Conditional Waivers expired on January 1, 2003. Between 2003 and 2015, composting operations were either not regulated by the Water Boards or operating pursuant to individual WDRs. The development and issuance of individual WDRs is a lengthy process. In order to support the diversion of organic materials from landfills to composting operations while protecting water quality in the most time-efficient manner, the Composting General Order was developed and adopted.

The Composting General Order applies to facilities that accept materials such as leaves, grass, tree trimmings, manure, anaerobic digestate, biosolids, food scraps, and scrap paper products for the purpose of creating compost, and is applicable to both existing and new composting operations. The Composting General Order includes requirements for the siting, construction, operation, and maintenance of composting facilities to protect surface water and groundwater. These requirements include specifications for minimum setbacks from surface water and water supply wells, maximum permeability of the ground underneath composting piles, drainage requirements, and requirements for leachate collection and containment. Requirements were developed based on review of the Green Waste Conditional Waivers, water quality data received from Regional Water Board staff, literature review, and discussions with representatives from the Regional Water Boards, other regulatory agencies, and industry stakeholders.

Composting operations covered under the Composting General Order are categorized in two tiers based on the volume and type of feedstocks and site hydrogeologic conditions. Tier I facilities are limited to certain feedstocks in quantities that are considered a lower threat to water quality. Tier II facilities may accept larger volumes and materials which may pose a greater threat to water quality than those allowed in Tier I; therefore, requirements for Tier II are more protective than those for Tier I.

Composting facilities operating pursuant to the Composting General Order are assigned a threat to water quality and complexity rating based on site-specific and regional considerations. Annual WDR fees are tiered according to the threat to water quality and complexity rating (Appendix B). WDR fees are deposited into the Waste Discharge Permit Fund and allow Water Board staff to conduct regulatory oversight activities such as inspections and document reviews.

The requirements of the Composting General Order are not intended to be universal. Specific activities are exempt from these requirements; owners of facilities with exempt activities may file a Notice of Non-Applicability (NONA) with the Regional Water Board, detailing the reasons for exemption from the Composting General Order. Existing composting facilities without applicable WDRs were required to apply for coverage under the Composting General Order by

August 4, 2016. Existing composting facilities operating pursuant to conditional waivers or other general orders applicable to composting operations may be able to continue operations in accordance with those orders until those orders expire or come up for renewal. Alternatively, the Regional Water Board may determine individual WDRs are more appropriate for some composting facilities, depending on site-specific conditions and operations, or a composting facility may be co-located at a landfill or other facility operating pursuant to individual or general WDRs which include requirements for the composting operation. New composting operations that are not currently operating are required to seek coverage under the Composting General Order not less than 90 days prior to commencement of the composting operation.

2. PERFORMANCE MEASURES

2.1 PERFORMANCE MEASURES OVERVIEW

Developing performance measures and providing subsequent reports is imperative in communicating to the public the effectiveness of the Water Boards in protecting California's waters. Establishing and using performance measures to track and report progress in meeting goals and targets helps to better manage and evaluate our programs, activities, priorities, and efficiency. The intent of the performance measures is to promote the improvement in communication and transparency between state regulators and the regulated community, to demonstrate the State Water Board's support for diversion of organic materials to composting and anaerobic digestion facilities, and to assess compliance with the Composting General Order.

Stakeholders expressed several concerns during the process of developing the Composting General Order and EIR. Concerns focused largely on the cost to comply with hydraulic conductivity requirements. Stakeholders argued that these costs have the potential to suppress the growth of new composting facilities, cause some existing composting facilities to go out of business, and cause green waste materials currently received at composting facilities to be redirected to landfills or land application. Additionally, stakeholders expressed concern that the requirements of the Composting General Order may be inconsistent with other applicable regulations. As part of the environmental evaluation, economic and environmental impacts were considered in the EIR. Performance measures provide a mechanism to follow-up on the concerns raised by stakeholders; regular reporting will provide a means to evaluate the impacts of the Composting General Order.

2.2 PERFORMANCE MEASURE DEVELOPMENT PROCESS

State Water Board staff met with stakeholders in 2016 on June 14 in Sacramento, June 23 in Riverside, and August 15 in Sacramento, to collaborate on the development of performance measures for the implementation of the Composting General Order. Representatives in attendance included composters, landowners, landfill owners, consultants, academia (University of California, Riverside), state agency staff (CalRecycle, Regional Water Board, State Water Board, ARB, and CDFA), Air District staff, county staff (Local Enforcement Agencies), and sanitation district staff. Stakeholder comments were compiled from the June meetings, distributed via e-mail, and posted online. There were approximately 25 and 70 attendees at the June performance measure meetings in Sacramento and Riverside, respectively. Eighteen stakeholders attended the August meeting to offer additional input and clarification.

2.3 PERFORMANCE MEASURES

The performance measure collaboration process identified four main goals. The first goal is to protect water quality and evaluate the effectiveness of the Composting General Order in achieving that goal. The second goal is to achieve effective and transparent communication of permit requirements and compliance information between regulators and stakeholders by improving training, coordination between local and state agencies, and information access. The third goal is to support the diversion of organic materials to composting and anaerobic digestion

facilities and engage in the Healthy Soils Initiative. The fourth goal is to assess implementation costs and assist industry stakeholders to identify sources of funding. Below is a summary of the actions taken by State Water Board staff in response to these performance goals.

Goal 1: Assess Water Quality Protection

The Composting General Order was developed to ensure composting facilities operate in a manner that protects water quality. State Water Board staff compiled regulatory compliance information from facilities enrolled in the Composting General Order, previous regulatory status, tier information, and the volume of organic material that is processed at composting operations. State Water Board staff will evaluate water quality monitoring data from enrolled facilities and report potential incidences of groundwater impacts. Comparing facility and monitoring information will aid in evaluating the adequacy of Composting General Order requirements.

Goal 2: Effective and Transparent Communication of Permit Requirements and Compliance Information between Regulators and Stakeholders

Stakeholders expressed concern that requirements of the Composting General Order may be inconsistent with other applicable regulations. To foster consistency and transparency, State Water Board staff meet frequently with state and local agencies to discuss composting-related regulations and associated inter-agency issues. State Water Board staff meet with smaller stakeholder groups, engage in continuous communication with Regional Water Board staff and individual stakeholders about Composting General Order implementation and applicability, and engage in a variety of organics management conferences and training courses. In addition, frequently asked questions and a list of fully enrolled facilities are available on the Water Board's compost webpage (www.waterboards.ca.gov/water_issues/programs/compost/).

Goal 3: Support Diversion of Organic Materials to Composting and Anaerobic Digestion Facilities and Engage in the Healthy Soils Initiative

Stakeholders expressed concern that the cost to comply with requirements in the Composting General Order may result in green waste materials currently received at composting facilities to be redirected to landfills or directly applied to land with no composting or pathogen reduction. Additionally, stakeholders were concerned that the flow of organic materials was unknown and that the Composting General Order would not prove to be an efficient regulatory mechanism to meet the expected increase in organic material diversion from landfills. State Water Board staff has and will continue to collaborate with CalRecycle and the Local Enforcement Agencies (LEAs), conduct education and outreach regarding proper land application and applicable governing regulations, encourage the responsible management of organic material through composting and anaerobic digestion, and communicate enforcement on illegal dumping. Further, State Water Board staff are working in coordination with CalRecycle staff on Assembly Bill No. 901 implementation (AB 901; Gordon. Solid waste: reporting requirements: enforcement. 2015–2016 Reg. Sess., Stats. 2015, ch. 746) to track the flow and movement of organic materials.

Additionally, State Water Board staff are continually engaged in the California Healthy Soils Initiative. State Water Board staff have met with staff from the California Department of Food and Agriculture (CDFA), CalRecycle, California Environmental Protection Agency (CalEPA), and the California Natural Resources Agency at more than twenty interagency meetings from the

autumn of 2015 to the present as composting operations are critical in supporting both diversion goals and the Healthy Soils Initiative.

Goal 4: Assess Implementation Costs

Stakeholders expressed concern that the cost to comply with hydraulic conductivity requirements of the Composting General Order may suppress the growth of new composting facilities or may cause some existing composting facilities to go out of business. To make financial assistance information more readily accessible, State Water Board staff have provided hyperlinks on the compost webpage to funding sources and financial aid available from multiple state agencies for use in organics management. State Water Board staff will also report known costs of compliance with the Composting General Order, dependent on cost submittals from the composting industry. State Water Board staff have solicited this information from stakeholders. Submittals may include engineered alternative cost comparisons, and if the costs to comply with the Composting General Order have caused any facilities to close, modify their operations to defray costs, or reduce the volume of materials composted.

Table 1 shows a summary of ideas that were proposed in 2016 at the June and August stakeholder meetings which were subsequently refined by State Water Board staff. Table 2 shows the performance measure deliverables.

Table 1. Summary of Goals, Strategies and Performance Measures

Division of Water Quality - 2016-2019 Composting General Order Implementation Performance Plan			
Vision			
<i>Protect water quality consistent with provisions of the California Water Code, division 7 and related state water quality control plans and policies to ensure protection of beneficial uses of the state's waters from composting operations.</i>			
Mission			
<i>The Compost General Order provides consistent statewide regulatory requirements for composting operations, streamlines the permitting process for composting operations that meet certain conditions, and supports California's diversion goal to recycle, compost or source reduce 75 percent of solid waste being disposed of in landfills by 2020 by diversifying the types of feedstocks allowed under the Compost General Order.</i>			
Goals	Strategies (Action Plans)	Objectives/Outcomes (Targets)	Performance Measures/Indicators
1. Assess Water Quality Protection	1.1)(a) Gather regulatory compliance information from the enrolled facilities as well as their previous regulatory status and evaluate the diversion of organic materials to composting by tracking the volume of material that is processed at composting operations.	1.1) To evaluate and report to the State Water Board (SWB) the effectiveness of the Composting General Order in protecting water quality.	1. Report to the SWB the number of enrolled facilities and their compliance approach by August 2017.
			2. Report to the SWB the number of enrolled facilities that were previously unregulated by August 2017.
			3. Report to the SWB the volume of organic materials processed at composting operations statewide by August 2017.
			4. Provide an annual update of the report to the SWB every autumn beginning in 2018.
1.1)(b) Track incidences of groundwater impacts from composting operations.			5. Report incidences of groundwater impacts in the annual update of the report to the SWB every autumn beginning in 2018.
1.1)(c) Track water quality monitoring data from composting operations.			6. Report on water quality monitoring data gathered from enrolled operations in the annual update of the report to the SWB every autumn beginning in 2018.
2. Effective and Transparent Communication of Permit Requirements and Compliance Information between Regulators and Stakeholders	2.1) SWB staff continue to train regulators and stakeholders on the implementation of the Composting General Order.	2.1) Improve permit training and collaboration with regulators and stakeholders	1. Continue educating regulators and stakeholders on the implementation of the Composting General Order by posting frequently asked questions (FAQ) and fact sheets on the SWB compost webpage by Q4 2016 (in process and ongoing).
	2.2) (a) Conduct joint facility inspections where applicable and share inspection reports.	2.2) Coordinate, to the extent feasible, compliance and enforcement activities amongst responsible state and local agencies. (where appropriate, ongoing)	not applicable
	2.2) (b) Report enforcement actions by state and local agencies to the Office of Enforcement and appropriate agency staff; post completed enforcement actions on state and local agency websites.		not applicable
	2.3) SWB staff will maintain a list of enrolled facilities as data becomes available.	2.3) Improve access and communication of enrollment information.	2. Maintain an updated list of enrolled facilities on the SWB compost webpage to improve access and communication of enrollment information beginning in September 2016 (currently in process).

Table 1. Summary of Goals, Strategies and Performance Measures

continued

Division of Water Quality - 2016-2019 Composting General Order Implementation Performance Plan			
Goals	Strategies (Action Plans)	Objectives/Outcomes (Targets)	Performance Measures/Indicators
3. Support Diversion of Organic Materials to Composting and Anaerobic Digestion Facilities and Engage in the Healthy Soils Initiative	3.1) (a) Provide education and outreach on proper land application (may include pamphlets, hyperlinks, and/or fact sheets posted to the SWB Compost webpage).	3.1) Evaluate current regulations, permitting processes, and enforcement authority with state and local agencies on land application of organic material and chip & grind facilities.	1. In the August 2017 report to the SWB, report on education and outreach activities coordinated with CalRecycle, provide an annual update.
	3.1) (b) Track enforcement actions on chip & grind facilities and illegal land application of organic material.		2. Beginning in the autumn of 2018, report the number of enforcement actions in the annual update of the report to the SWB.
	3.2) Coordinate with CalRecycle on implementation of Assembly Bill No. 901 (AB 901; Gordon. Solid waste: reporting requirements: enforcement. 2015–2016 Reg. Sess., Stats. 2015, ch. 746).	3.2) Improve current reporting of movement of organic materials through CalRecycle's implementation of AB 901. AB 901 will require waste, recycling, and compost facilities, as well as exporters, brokers, and transporters of recyclables or compost to report to CalRecycle on the types, quantities, and flows of materials that are disposed of, sold, or transferred inside or outside of the state, with reporting anticipated to begin in 2019.	3. Starting with the 2018 annual report to the SWB, report actions taken in coordination with CalRecycle on AB 901 implementation. As reporting in accordance with AB 901 regulations will not commence until 2019, the 2020 annual report to the SWB will be the first to include an update on the reporting information.
	3.3) (a) Track the number of facilities enrolled and information about each facility's compliance approach, plans, issues, and status.	3.3) Enroll composting operations* through streamlined process (via Composting General Order). * may include anaerobic digestion (AD) facilities	4. By August 2017, report to the SWB the facilities enrolled and their compliance information; update annually.
	3.3) (b) Provide assistance to compost operators for utilization of the SWB's GeoTracker information system to upload required documents (e.g. technical reports, monitoring reports, etc.).		5. Provide GeoTracker deployment and training to compost operators for the utilization of the database to upload required documents. Phase-in to begin August 2017.
	3.3) (c) Compare the amount of time that it takes to complete the enrollment process for the Composting General Order versus issuance of individual WDRs.		6. Report to the SWB by August 2017 a comparison of the amount of time it takes to issue notices of applicability (NOAs) for enrollment under the Composting General Order relative to the amount of time it generally takes to issue individual Waste Discharge Requirements for composting facilities.
	3.4) Provide CalEPA with information the SWB is collecting to ensure the responsible management of organic wastes. Responsible management of wastes will be communicated by means of education and outreach programs, deterrents/ enforcement on illegal dumping, and the use of the Compost General Order.	3.4) Coordinate with other state and local agencies to support the use of compost (e.g. agricultural lands, rangelands, etc.).	7. Beginning in the autumn of 2018, report enforcement actions or recommendations to ensure responsible management of organic material as part of the annual report to the SWB (and CalEPA).

Table 1. Summary of Goals, Strategies and Performance Measures

continued

Division of Water Quality - 2016-2019 Composting General Order Implementation Performance Plan			
Goals	Strategies (Action Plans)	Objectives/Outcomes (Targets)	Performance Measures/Indicators
4. Assess Implementation Costs	4.1) (a) Gather cost of compliance data from the organics management industry,	4.1) Assess the cost of compliance with the Compost General Order.	1. Beginning in the autumn of 2018, report known costs of compliance with the Composting General Order in the annual update of the report to the SWB.
	4.1) (b) Evaluate and track if any facilities are closing or reducing/changing feedstock due to specific cost of compliance.		2. Beginning in the autumn of 2018, report if any facilities are closing or reducing/changing feedstock due to specific cost of compliance with the Composting General Order in the annual update of the report to the SWB.
	4.1) (c) Assist the industry by identifying sources of funding and evaluating the Water Board's authority to provide financial assistance.		3. Provide information for potential funding sources on the State Water Board's compost webpage by August 2017.
	4.2) Gather information on approved engineered alternatives and associated costs from organics management industry.	4.2) Evaluate approved engineered alternatives and costs.	4. Beginning in the autumn of 2018, report known engineered alternatives and associated costs in the annual update of the report to the SWB.

Table 2. Performance Measure Deliverables

Division of Water Quality - 2016-2019 Composting General Order Implementation Performance Plan		
No.	Performance Deliverables	Due Date
1.1	Report to the SWB the number of enrolled facilities and their compliance approach by August 2017.	August 2017
1.2	Report to the SWB the number of enrolled facilities that were previously unregulated by August 2017.	August 2017
1.3	Report to the SWB the volume of organic materials processed at composting operations statewide by August 2017.	August 2017
1.4	Provide an annual update of the report to the SWB every autumn beginning in 2018.	Autumn 2018
1.5	Report incidences of groundwater impacts in the annual update of the report to the SWB every autumn beginning in 2018.	Autumn 2018
1.6	Report on water quality monitoring data gathered from enrolled operations in the annual update of the report to the SWB every autumn beginning in 2018.	Autumn 2018
2.1	Continue educating regulators and stakeholders on the implementation of the Composting General Order by posting frequently asked questions (FAQ) and fact sheets on the SWB compost webpage by Q4 2016 (in process and ongoing).	(in process and ongoing)
2.2	Maintain an updated list of enrolled facilities on the SWB compost webpage to improve access and communication of enrollment information beginning in September 2016 (currently in process).	(in process and ongoing)
3.1	In the August 2017 report to the SWB, report on education and outreach activities coordinated with CalRecycle, provide an annual update.	August 2017
3.2	Beginning in the autumn of 2018, report the number of enforcement actions in the annual update of the report to the SWB.	Autumn 2018
3.3	Starting with the 2018 annual report to the SWB, report actions taken in coordination with CalRecycle on AB 901 implementation. As reporting in accordance with AB 901 regulations will not commence until 2019, the 2020 annual report to the SWB will be the first to include an update on the reporting information.	Autumn 2018
3.4	By August 2017, report to the SWB the facilities enrolled and their compliance information; update annually.	August 2017
3.5	Provide GeoTracker deployment and training to compost operators for the utilization of the database to upload required documents. Phase-in to begin August 2017.	August 2017
3.6	Report to the SWB by August 2017 a comparison of the amount of time it takes to issue notices of applicability (NOAs) for enrollment under the Composting General Order relative to the amount of time it generally takes to issue individual Waste Discharge Requirements for composting facilities.	August 2017
3.7	Beginning in the autumn of 2018, report enforcement actions or recommendations to ensure responsible management of organic material as part of the annual report to the SWB (and CalEPA).	Autumn 2018
4.1	Beginning in the autumn of 2018, report known costs of compliance with the Composting General Order in the annual update of the report to the SWB.	Autumn 2018
4.2	Beginning in the autumn of 2018, report if any facilities are closing or reducing/changing feedstock due to specific cost of compliance with the Composting General Order in the annual update of the report to the SWB.	Autumn 2018
4.3	Provide information for potential funding sources on the State Water Board's compost webpage by August 2017.	August 2017
4.4	Beginning in the autumn of 2018, report known engineered alternatives and associated costs in the annual update of the report to the SWB.	Autumn 2018

3. COMPOSTING OPERATIONS

3.1 COMPOST STATEWIDE

3.1.1. Permitting

Approximately 97 composting operations are operating pursuant to some type of WDR issued by the Water Boards. As shown in Table 3, Waste Discharge Requirement Types for Composting Operations Statewide, at least 60 composting facilities have enrolled or are in the process of enrolling under the Composting General Order and at least 24 are operating pursuant to individual WDRs. An additional 13 are operating pursuant to Order No. R9-2014-0041, Conditional Waivers of Waste Discharge Requirements for Low Threat Discharges in the San Diego Region - Waiver No. 5: Discharges of Waste to Land at Composting Facilities (Region 9 Conditional Waiver). At least six facilities have requested and been granted exemption from the Composting General Order by filing a NONA. A list of enrolled facilities is available on the State Water Board's compost webpage; the list is regularly updated and includes links to State Water Board database records for the listed facilities.

Table 3: Waste Discharge Requirement Types for Composting Operations Statewide

Regional Water Board	Statewide Enrollees for the Composting General Order					Other Types of WDRs	
	Tier I Enrollees	Tier II Enrollees	Enrollment In Process	General Order Total	NONA*	Individual WDRs	Region 9 Conditional Waiver
1 – North Coast			4	4			
2 – San Francisco	1	1	2	4		2	
3 – Central Coast		1	5	6			
4 – Los Angeles	1	2	2	5		3	
5 – Central Valley	4	9	16	29	2	9	
6 – Lahontan		1		1		3	
7 – Colorado Riv.		1		1		3	
8 – Santa Ana	3		7	10	4	4	
9 – San Diego				0			13
Total	9	15	36	60	6	24	13

*Operations submitted an acceptable Notice of Non-Applicability (NONA) to the Regional Water Board.

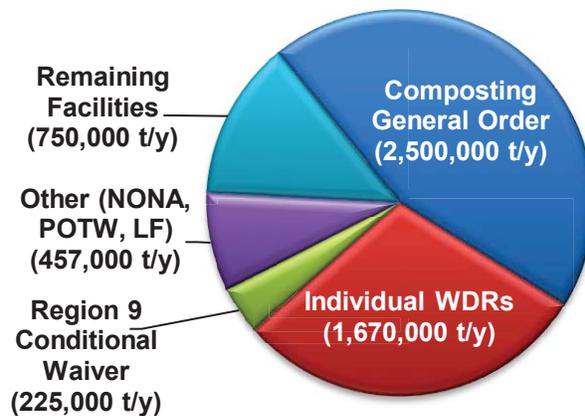
Table 3 was compiled for the purpose of tracking Composting General Order enrollment and does not represent all regulated composting facilities statewide. Using data primarily from CalRecycle, the EIR estimated there were 153 composting facilities in the state in 2013. Currently, approximately 170 composting facilities are listed in CalRecycle's databases, and approximately 160 composting operations are in the Water Boards' databases.

CalRecycle and Water Boards databases may include additional facilities that are tracked for purposes other than compliance with composting-specific WDRs. For example, requirements for composting activities at publicly owned treatment works (POTWs), landfills, transfer stations, and agricultural facilities are often included in WDRs for the primary facility and may not be searchable as a composting facility in a database. Conversely, a distributor of compost or mulch or rural transfer station may appear as a composting facility in a CalRecycle database, but does not conduct active composting operations. Additionally, Regional Water Board staff may determine other composting operations may only need to operate pursuant to the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (Industrial General Permit), the requirements of the Composting General Order may not be applicable, and the owner may submit a NONA. However, the Water Board databases are not currently able to track NONAs. Therefore, the total number of WDR-regulated composting facilities shown in Table 3 does not match the estimated number from available databases. State Water Board staff will work to continue to improve transparency, communication, and collaboration with other regulatory agencies and stakeholders and develop a means to clarify apparent discrepancies.

3.1.2. Volume Composted

According to CalRecycle records, approximately 5.6 million tons per year (t/y) of organic materials are composted statewide. As shown in Figure 1, Estimated Annual Composting Throughput by Water Board Regulatory Mechanism, approximately 78% of the statewide composting throughput, or approximately 4.4 million tons per year, occurs at composting operations enrolled or enrolling under the Composting General Order, operating pursuant to individual WDRs, or waivers. Of the statewide composting throughput, approximately 45% occurs at composting facilities operating pursuant to the Composting General Order, approximately 30% occurs at composting facilities operating pursuant to individual WDRs, approximately 4% occurs at composting facilities currently operating pursuant to the Region 9 Conditional Waiver, and approximately 8% occurs at composting facilities co-located at POTWs, landfills or facilities otherwise exempt from the Composting General Order. Water Board staff are looking into the status of the facilities responsible for processing the remaining 13% of the composting throughput. With a significant number of composting facilities operating pursuant to the Composting General Order, and accounting for a significant volume of the statewide throughput, Water Board staff are confident the Composting General Order will provide an effective regulatory mechanism for the protection of water quality across the state.

Figure 1: Estimated Annual Composting Throughput by Water Board Regulatory Mechanism (tons/year)

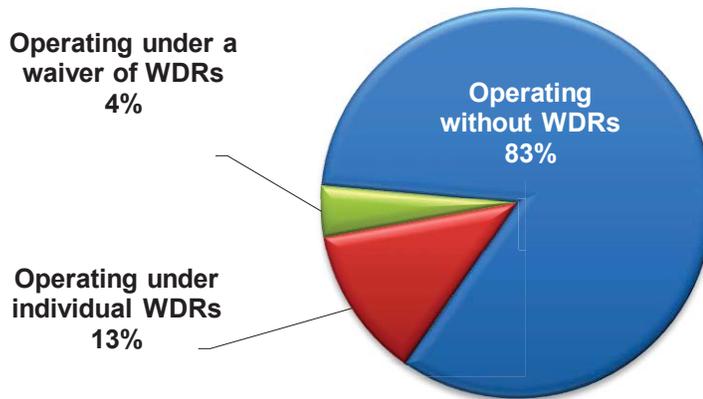


3.2 COMPOSTING FACILITIES ENROLLED UNDER WQ 2015-0121-DWQ

3.3.1. Enrollment Process

The Composting General Order provides a streamlined and efficient permitting process by reducing permitting delays compared to permitting through individual WDRs. Further, implementation of the Composting General Order provides Regional Water Board staff with a tool to be more responsive to the expected increase in the number of composting operations as a result of increasing organic materials diversion requirements as discussed previously and the Healthy Soils Initiative. Sixty composting facilities are enrolled or in the process of enrolling under the Composting General Order. Prior to enrollment under the Composting General Order, many of these facilities had been operating without WDRs. A few facilities had been operating pursuant to individual WDRs and enrolled under the Composting General Order once it became available. Figure 2, Regulatory Status for Composting Facilities Prior to General Order Enrollment, provides a summary of facilities' regulatory status prior to the adoption of the Composting General Order.

Figure 2: Regulatory Status for Composting Facilities Prior to General Order Enrollment

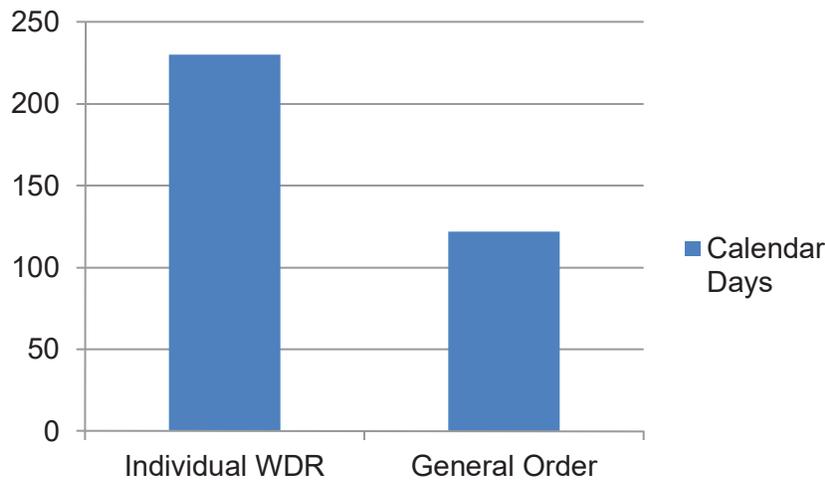


In order to demonstrate the efficiency of the Composting General Order, a comparison was made showing the amount of time it takes to issue notices of applicability (NOAs) for enrollment under the Composting General Order relative to the amount of time it generally takes to issue individual Waste Discharge Requirements for composting facilities.

The issuance of individual WDRs is a public process, and timing aspects are constrained by statute and Regional Water Board priorities. A minimum of 140 days is required for the public process from the time a Report of Waste Discharge (ROWD) is considered complete by Regional Water Board staff to the time a WDR can be adopted by the Regional Water Board. Significant staff time is required to prepare WDRs based on site-specific information provided in the ROWD; it often takes several iterations and revisions for the ROWD to be considered complete. This iterative process can result in an additional 90 days before a ROWD is considered complete and the public process of drafting and adopting individual WDRs can commence. With those considerations, a conservative estimate results in the individual WDR process requiring a total of 230 calendar days to complete from start to finish. Often, the process may take a year or more.

While the issuance of individual WDRs must be a public process and adopted by the Regional Water Boards, enrollment under the Composting General Order requires approval by the Regional Water Board's Executive Officer with few statutory time constraints. The process for issuance of a NOA for enrollment under the Composting General Order has taken an average of 122 calendar days, resulting in the enrollment process for the Composting General Order being nearly twice as time-efficient compared to the individual WDR issuance process (Figure 3, Permitting Process Time Comparison). Therefore, implementation of the Composting General Order is successful as a streamlined tool for Regional Water Boards to regulate composting facilities and provides a more rapid response to the anticipated increasing number of composting facilities statewide.

Figure 3: Permitting Process Time Comparison



3.3.2. Compliance Approaches

The Composting General Order requires the discharger to submit proposed schedules for implementation of the identified collection, control, and monitoring practices. Compliance schedules must be supported with appropriate technical or economic justification, be as soon as practicable, and in no case may schedules exceed six years from the date the Notice of Intent was submitted to the Regional Water Board. The Regional Water Board Executive Officer may modify the schedules based on evidence that meeting the compliance date is technically or economically infeasible.

To date, all composting operations enrolled under the Composting General Order have proposed compliance schedules within the six year timeframe. Table 4, Summary of Compliance Schedules, presents a breakdown of the compliance schedules for fully enrolled composting facilities. Seventeen percent (17%) of the enrolled facilities are under development and are being constructed to the design specifications of the Composting General Order prior to beginning operations. Twenty-one percent (21%) are existing facilities and were found to implement design specifications at least as protective as the requirements in the Composting General Order.

Table 4: Summary of Compliance Schedules

Percentage of Enrolled Facilities	Scheduled Year for the Completion of Compliance Modifications
17%	(new, built to comply with the Composting General Order)
21%	(already in compliance)
17%	2017
17%	2018
8%	2019
8%	2020
8%	2021
4%	2022

Dischargers may propose engineered alternatives for the design and construction of ponds, working surfaces, and drainage ditches to demonstrate compliance with the requirements of the Composting General Order. As shown in Figure 4, Compliance Status and Proposed Compliance Approaches at Tier I Facilities, more than 75% of the fully-enrolled Tier I facilities were already in compliance with Tier I specifications upon enrollment or are new facilities being designed to comply. Tier II facilities, as shown on Figure 5, Compliance Status and Proposed Compliance Approaches at Tier II Facilities, may require more modifications to meet Composting General Order specifications as only 27% are either in compliance or are new facilities being designed to comply. Of the facilities needing improvements, approximately 40% are modifying their working surfaces and 67% will be modifying their wastewater management ponds. Figure 6, Compliance Status and Proposed Working Surface Improvements at Tier II Facilities, shows that of the Tier II facilities proposing a working surface improvement, most are proposing either compacted soil or asphalt concrete/Portland cement concrete. As shown on Figure 7, Compliance Status and Proposed Wastewater Pond Improvements at Tier II Facilities, of the Tier II facilities needing to conduct improvements to the wastewater pond, most are proposing to retrofit an existing pond.

Figure 4: Compliance Status and Proposed Compliance Approaches at Tier I Facilities

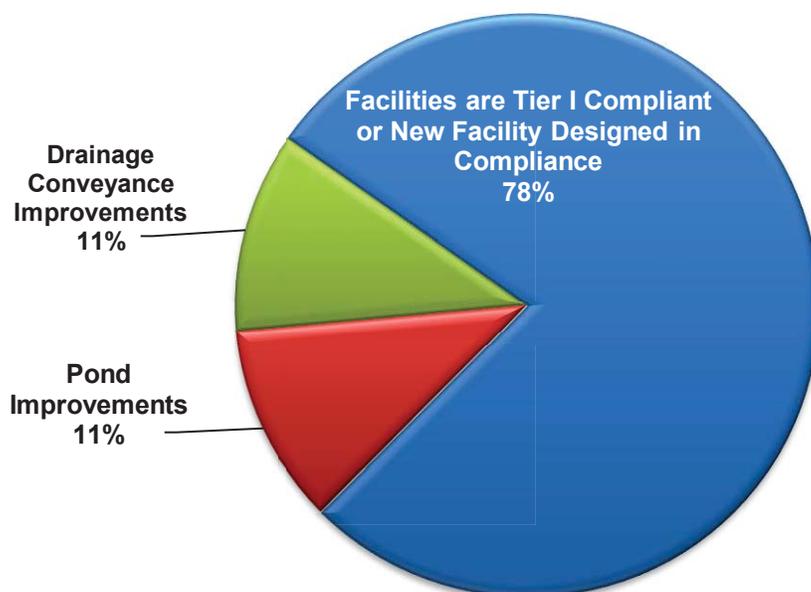


Figure 5: Compliance Status and Proposed Compliance Approaches at Tier II Facilities

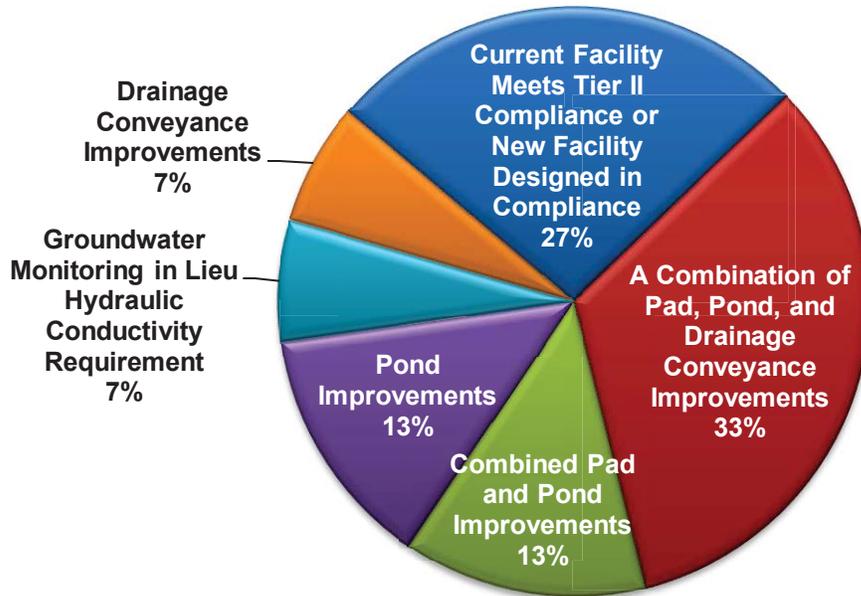


Figure 6: Compliance Status and Proposed Working Surface Improvements at Tier II Facilities

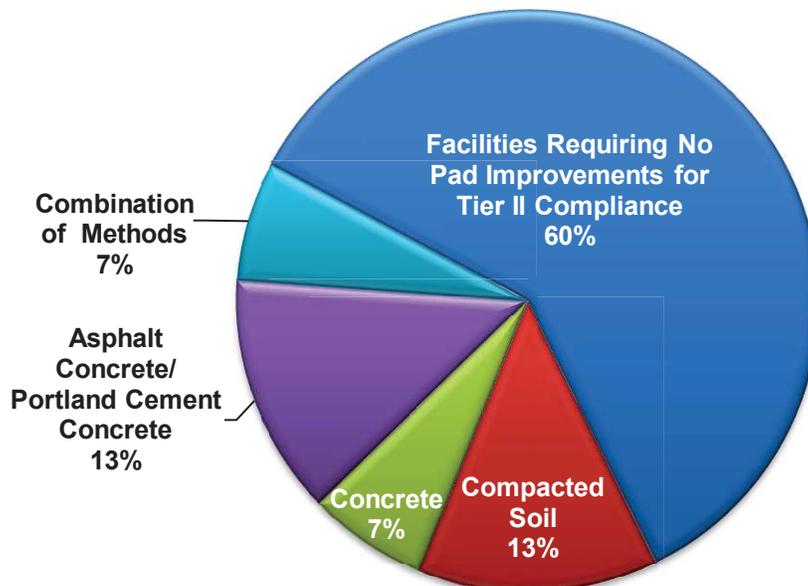
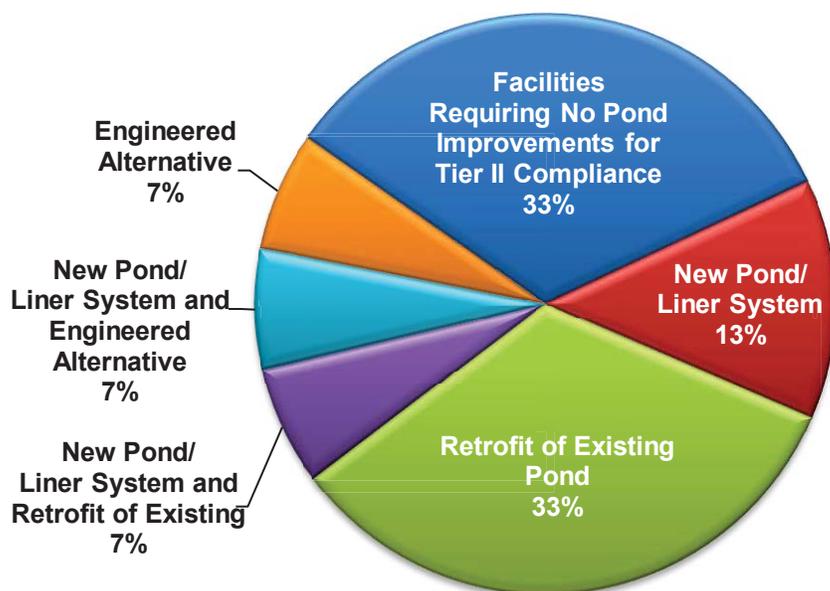


Figure 7: Compliance Status and Proposed Wastewater Pond Improvements at Tier II Facilities



3.3.3. Compliance Issues

State Water Board staff have not received reports of compliance issues at composting facilities. Owners and operators of composting facilities are working toward meeting their proposed schedules for compliance with the Composting General Order.

3.3 COMPOSTING OPERATIONS WITH INDIVIDUAL WDRs OR REGION-SPECIFIC GENERAL WDRs

There are at least 24 composting facilities operating pursuant to individual WDRs. Most of these individual WDRs were adopted prior to the adoption of the Composting General Order; many of these are in accordance with California Code of Regulations, title 27, to provide the necessary higher level of protection due to the siting of the facility or the materials accepted. Of these facilities, 8 are co-located at landfills and requirements for the composting operations are incorporated in the WDRs for the landfill.

In addition, there are 13 composting facilities enrolled in the Region 9 Conditional Waiver. Beginning in 2018; prior to the expiration of the Region 9 Conditional Waiver, the San Diego Regional Water Board will evaluate the facilities enrolled in this waiver to determine if those operations are appropriate to enroll under the Composting General Order.

4. ORGANIC MATERIALS MANAGEMENT

4.1 GENERAL OVERVIEW

The requirements in the Composting General Order are intended to protect against potential threats to water quality from composting operations. However, stakeholders expressed interest in the manner in which the Water Boards oversee non-composting, organic materials management facilities. In response to these comments, the Resolution directed Water Board staff to convene interagency work groups on organics management and land application, conduct education and outreach regarding land application of uncomposted green material, and engage in the Healthy Soils Initiative. While the Composting General Order was developed to streamline permitting of composting operations with similar materials and operations, chip and grind and land application activities are regulated in a different manner because the activities are different from the composting process.

4.2 CHIP AND GRIND FACILITIES

The chip and grind process is not similar to the compost process. The chip and grind process involves mechanically reducing the size of green materials including tree and yard trimmings, untreated wood wastes, and natural fiber products. CalRecycle requires chip and grind material to be on site for a maximum of 48 hours or up to 7 days with LEA approval, and are not to reach active composting temperatures. Organic material from chip and grind facilities can be used as feedstock for biomass energy, composting, or anaerobic digester facilities; or may be applied directly to land as a soil amendment.

Although organic materials do not remain for long periods of time at chip and grind facilities, the materials may pose a threat to waters of the state unless managed appropriately. Due to the nature of these operations, chip and grind facilities may more appropriately be regulated under the Industrial General Permit or individual WDRs. During the outreach process, State Water Board staff became aware that very few chip and grind facilities were enrolled under the Industrial General Permit. In response to this, State Water Board staff conducted education and outreach efforts to chip and grind operators in January 2017. As a result of this outreach, an additional 29 chip and grind facilities have enrolled under the Industrial General Permit as of July 25, 2017.

4.3 LAND APPLICATION OF UNCOMPOSTED ORGANIC MATERIALS

Land application is the spreading of uncomposted organic materials on land including rangeland and cropland. These materials may include grass clippings from curbside greenwaste collection, weeds, shrubbery, trees, leaves, garden waste, plant trimmings, bark, agricultural plants, or food waste. Uncomposted organic materials may contain contaminants such as metals, pathogens, nutrients (e.g. nitrate), salinity (sodium chloride), or other waste constituents, and may harbor damaging insects. In addition, uncomposted organic materials from sources such as curbside waste collection may be contaminated with trash, plastics, glass, metals, pet waste, and other materials. If not conducted appropriately, the application of uncomposted organic materials to land may impact surface water and groundwater. Land

application of uncomposted organic materials is considered a discharge of waste to land and as such, it is subject to the requirements of the Water Code. The Irrigated Lands Regulatory Program (ILRP) regulates discharges to irrigated agricultural lands. The Water Boards implement the ILRP by issuing WDRs or conditional waivers of WDRs to growers. The application of green waste to agricultural lands must be accounted for in a grower's nutrient management plan. The WDRs and waivers require implementation of best management practices and contain conditions requiring water quality monitoring of receiving waters and corrective action when impairment is found.

Stakeholders expressed concern that the increased costs of producing compost due to meeting the requirements in the Composting General Order would create an incentive to directly land apply organic materials. State Water Board staff have been working in close coordination with representatives from CalRecycle and LEAs on issues associated with land application and organic materials diversion. Water Board staff have been meeting regularly with representatives from these agencies since 2012 to discuss organic materials management issues, and currently meet at least monthly with CalRecycle staff for organics touch base meetings and interagency waste work group meetings in addition to land application coordination meetings. In response to stakeholder concerns about land application, State Water Board staff conducted joint education and outreach meetings with Water Board's Office of Enforcement and CalRecycle staff. Information presented included CalRecycle and Water Boards' regulations, authority and enforcement mechanisms, what land application is, the potential environmental and water quality impacts from the land application of organic material, and how permits may be obtained. The first phase of education and outreach, beginning in January 2016, involved joint training for Regional Water Board and LEA staff in addition to presentations at five LEA roundtables across the state. State Water Board staff also published an informational pamphlet for distribution to attendees, and made it available on the Water Board's compost webpage. A hyperlink to the CalEPA Environmental Complaint System was also included on the Water Board's compost webpage. The second phase involved delivering the same message to the regulated community and other involved/interested parties. In April 2016, a joint presentation was given by CalRecycle and State Water Board staff at the Solid Waste Association of North America (SWANA) conference to convey information about composting and land application regulations. In further coordination with CalRecycle, State Water Board staff hosted two education and outreach stakeholder meetings regarding land application of compostable materials in conjunction with State Water Board performance measure outreach events on June 14, 2016 in Sacramento and June 23, 2016 in Riverside. The combined attendance for the June land application meetings was approximately 150 representatives including academia, state agency staff, and industry stakeholders. In April 2017, CalRecycle and Water Board staff collaborated on a land application learning station at CalRecycle's Technical Training Series in Long Beach.

As a result of this outreach program, State Water Board staff were notified of several land application locations with potential water quality issues. Some of the sites were known and investigations and enforcement actions are ongoing. Preliminary investigations revealed that land application activities have been occurring for nearly a decade, prior to the development of the Composting General Order. Water Board staff will continue collaboration with CalRecycle and LEA staff on land application and enforcement issues.

4.4 MANURE MANAGEMENT

California's agriculture contributes significantly to both the state economy and commodity export. The Central Valley is one of the largest agricultural regions in California and is one of the world's most productive agricultural areas. In addition to crop production, agricultural operations include animals, such as chickens, cows, sheep, goats, and pigs. Many of these operations are known as Confined Animal Facilities, which are farms or ranches, including dairies, where livestock are held for a significant part of the time and are provided food, as opposed to grazing. These operations produce large quantities of manure that must be managed appropriately to prevent water quality impairment. Materials such as manure pose a higher threat to water quality due to concentrations of constituents such as pathogens, nitrates, and salts.

In order to reduce impacts to water quality from manure, the Central Valley Regional Water Board provides oversight of Confined Animal Facilities primarily by a comprehensive Dairy General Order, adopted in 2013, which includes requirements for corrals, production areas, ponds, and land application areas. New dairies, or dairies that have expanded since 2013, are subject to individual orders with the same requirements. Additionally, the Central Valley Regional Water Board developed general WDRs to provide requirements for poultry facilities through the Poultry General Order, adopted December 5, 2016. The Central Valley Regional Water Board also developed general WDRs applicable to dairy feedlots in the Confined Bovine Feeding Operations General Order, adopted June 8, 2017.

At agricultural operations, a variety of methods are used to manage manure, including land spreading, anaerobic digestion, and composting. Stakeholders have expressed concern that the requirements of the Composting General Order are cost-prohibitive to compost manure on farms. The applicability of the Composting General Order to manure composting depends on the use of manure in the composting process. If used as an additive (up to 10% of the total volume), manure may be acceptable at a Tier I facility. Tier I facilities are not required to have improved working surfaces or ponds; limiting higher threat additive materials to 10% is necessary to be protective of water quality. Tier II facilities are constructed and operated to be more protective of water quality, and therefore manure is an acceptable feedstock at a Tier II facility. However, if manure is composted in a manner that meets the Water Board specifications for Agricultural Composting, operations within a fully enclosed vessel, operations with less than 500 cubic yards at any given time of allowable materials, or operations less than 5,000 cubic yards of allowable materials managed to cover materials during storm events and prevent the production of leachate, those activities may be exempt from the requirements of the Composting General Order. Composting operations conducted in a manner other than those defined in the Composting General Order or as exempted may be subject to individual waste discharge requirements issued by the Regional Water Boards. Frequently asked questions addressing manure composting under the Composting General Order are available on the Water Board's compost webpage.

4.5 CALIFORNIA HEALTHY SOILS INITIATIVE

The California Department of Food and Agriculture (CDFA) is the lead on California's Healthy Soils Initiative, in collaboration with state agencies and departments, to promote the

development of healthy soils on California's agricultural lands. Health of agricultural soil relates to its ability to build and retain adequate soil organic matter through the activity of plants and soil organisms. Soils with adequate soil organic matter have the capacity to function as vital living ecosystems that sustain and produce food for plants, animals, and humans, and increase carbon sequestration and reduce overall greenhouse gas emissions. An important connection between healthy soils and the streamlined permitting of composting facilities provided through the Composting General Order is that compost can be used to increase soil organic matter and contribute to soil health when properly applied.

State Water Board staff are continually engaged in the California Healthy Soils Initiative. State Water Board staff have met with staff from CDFA, CalRecycle, CalEPA, CARB, Department of Pesticide Regulation, and the California Natural Resources Agency at more than twenty interagency meetings from the autumn of 2015 to the present. Meetings include the Environmental Farming Act Science Advisory Panel, California Agriculture Partnership Forum, workgroups associated with Assembly Bill No. 1045 (Irwin; Organic waste: composting. 2015–2016 Reg. Sess.; Stats. 2015, ch. 596), the California Roundtable on Agriculture and the Environment, monthly Healthy Soils Interagency Meetings, and public meetings for the Healthy Soils Initiative.

5. SUMMARY

The application of compost is one of several sustainability practices promoted by California's Healthy Soils Initiative. Compost helps retain soil moisture, provides nutrients, and may reduce irrigation needs and runoff potential. The Composting General Order was adopted to provide an efficient regulatory mechanism to support diversion of organics from landfills while requiring necessary protective water quality measures. With several goals for diversion of organic materials from landfills, composting operations are critical in supporting both diversion goals and the Healthy Soils Initiative. Although compost is a beneficial product, composting operations may pose a threat to water quality through the discharge of leachate or wastewater with high concentrations of nitrogen, phosphorus, metals, and pathogens. Therefore, the State Water Board adopted the Composting General Order to provide statewide requirements for the protection of water quality.

The Composting General Order was developed concurrent with CalRecycle's implementation of the diversion of organic materials from landfills and in support of the Healthy Soils Initiative; with the primary goals of providing statewide consistency and minimum standards for water quality protection. Stakeholders were concerned that implementing the Composting General Order would have potential impacts on the statewide composting infrastructure, as well as the attainment of legislative mandates for waste diversion. Most of the comments focused on the timing and costs of compliance, the ability of the composting facilities to construct the required protection measures, and the diversion of organic material away from composting facilities to related activities with different requirements such as chip and grind facilities and direct application of uncomposted materials to land. In order to address these concerns, State Water Board staff met with industry stakeholders to develop performance measures. The performance measures included reporting requirements for enrollment in the Composting General Order and collaborating with other agencies to ensure consistent and transparent communication and regulations.

Upon evaluation, the process for enrolling under the Composting General Order is a much more efficient process than developing individual waste discharge requirements for a facility. Additionally, most of the facilities responsible for composting organic material have either enrolled or are in the process of enrolling under the Composting General Order, are operating pursuant to individual waste discharge requirements, or are operating pursuant to a conditional waiver of waste discharge requirements. Through education and outreach activities, State Water Board staff became aware of land application activities that were previously unknown to the state. Some of these activities have been occurring for years prior to the development of the Composting General Order, but State Water Board staff are collaborating with other agencies for further investigation. State Water Board staff continue to meet with other agencies and interested stakeholders on topics such as organics management, Healthy Soils, responsible agriculture, and tracking of organic material through diversion efforts to ensure transparency and collaborative communication. State Water Board staff intend to periodically update this report to reflect current activities related to organic materials management and the Composting General Order.

APPENDIX A – GLOSSARY OF TERMS

Annual Fees – fees assessed to a person discharging or proposing to discharge waste that could affect the quality of the waters of the state, other than into a community sewer system. (Wat. Code, § 13260)

Beneficial Uses - potential uses of waters of the state to be protected against quality degradation. Beneficial uses include but are not limited to domestic, municipal, agricultural and industrial supply, power generation, recreation, aesthetic enjoyment, navigation, and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. (Wat. Code, § 13050)

Composting - Composting is the biological decomposition of organic materials by microorganisms under controlled aerobic conditions to create a product (e.g., soil amendment or soil blend). Compostable materials comprise a wide range of material types: grass, leaves, branches, prunings, stumps, wood waste, agricultural materials, manure, food, and biosolids.

Discharger – any person who discharges waste that 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 unit. (Cal. Code Regs., tit. 27, § 20164)

Fee Schedule –the basis for annual fees for the Water Boards. The fee schedule is updated each fiscal year. (Cal. Code Regs. tit. 23, § 2200)

General WDRs – a regulatory order that pertains to a group of waste management units that employ similar operations, waste types, and treatment standards. (Wat. Code, § 13263, subd. (i))

GeoTracker – an internet-accessible database system used by the Water Boards and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. GeoTracker consists of a relational database, on-line compliance reporting features, a geographical information system (GIS) interface, and other features utilized to input, manage, or access compliance and regulatory tracking data. (Cal. Code Regs., tit. 23, §§ 3891–3895)

Groundwater – water below the land surface that is at or above atmospheric pressure. (Cal. Code Regs., tit. 27, § 20164)

Leachate – any liquid formed by drainage of liquids from waste or the percolation of liquid through waste, including any dissolved or suspended constituents extracted from waste. (Cal. Code Regs., tit. 27, § 20164)

Liner – a continuous layer of natural or artificial material, a continuous membrane of flexible artificial material, or a continuous composite layer consisting of a membrane of flexible artificial material directly overlying a layer of engineered natural material. The liner is installed beneath or on the sides of a waste management unit and acts as a barrier to both vertical or lateral fluid movement (Cal. Code Regs., tit. 27, § 20164)

Operator – the person(s) responsible for the overall operation of a facility or part of a facility. (40 C.F.R., § 258 (1996))

Owner – the person(s) who owns a facility or part of a facility. (40 C.F.R. § 258 (1996))

POTWs – publicly owned treatment works, i.e. wastewater treatment facilities

Threat to Water Quality (TTWQ) – a rating used to determine the relative threat of discharges of waste that could cause the degradation, impairment, or long-term loss of a designated beneficial use of the receiving water. (Cal. Code Regs., tit. 23, § 2200)

Waiver – a regulatory order that may be issued in lieu of WDRs to a disposal site that is in compliance with its Basin Plan. Requirements for WDRs may be waived by the Regional Board if it determines that the waiver is consistent with any applicable water quality control plan and is in the public interest. (Wat. Code, § 13269)

Waste Discharge Requirements (WDRs) – a formal set of requirements prescribed and adopted by the Regional Boards as to the nature of the proposed discharge, existing discharge, or material change in an existing discharge, with relation to conditions existing in the disposal area or receiving waters up, or into which, the discharge is proposed. The requirements implement any relevant water quality control plans that have been adopted, and take into consideration the beneficial uses. (Wat. Code, § 13263; Cal. Code Regs., tit. 27, § 21720).

Waters of the State – any surface water or groundwater, including saline waters, within the boundaries of the state (Wat. Code, § 13050).

LIST OF ACRONYMS AND ABBREVIATIONS

<i>CalEPA</i>	<i>California Environmental Protection Agency</i>
<i>CDFA</i>	<i>California Department of Food and Agriculture</i>
<i>CPLX</i>	<i>Complexity</i>
<i>EIR</i>	<i>Environmental Impact Report</i>
<i>ILRP</i>	<i>Irrigated Lands Regulatory Program</i>
<i>LEA</i>	<i>Local Enforcement Agency</i>
<i>MRP</i>	<i>Monitoring and Reporting Program</i>
<i>NOA</i>	<i>Notice of Applicability</i>
<i>NOI</i>	<i>Notice of Intent</i>
<i>NONA</i>	<i>Notice of Non-Applicability</i>
<i>NPDES</i>	<i>National Pollutant Discharge Elimination System</i>
<i>Regional Water Board</i>	<i>Regional Water Quality Control Board</i>
<i>ROWD</i>	<i>Report of Waste Discharge</i>
<i>State Water Board</i>	<i>State Water Resources Control Board</i>
<i>SWB</i>	<i>State Water Board</i>
<i>Title 27</i>	<i>California Code of Regulations, title 27</i>
<i>TTWQ</i>	<i>Threat to Water Quality</i>
<i>WDRs</i>	<i>Waste Discharge Requirements</i>

APPENDIX B – THREAT TO WATER QUALITY AND COMPLEXITY

The following is an excerpt from California Code of Regulations, Title 23, Division 3, Chapter 9, Article 1, §2200(a)(1).

Threat to water quality (TTWQ)* and complexity (CPLX) of the discharge is assigned by the Regional Board in accordance with the following definitions:

THREAT TO WATER QUALITY

Category “1” – Those discharges of waste that could cause the long-term loss of a designated beneficial use of the receiving water. Examples of long-term loss of a beneficial use include the loss of drinking water supply, the closure of an area used for water contact recreation, or the posting of an area used for spawning or growth of aquatic resources, including shellfish and migratory fish.

Category “2” – Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance.

Category “3” – Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.

COMPLEXITY

Category “A” – Any discharge of toxic wastes; any small volume discharge containing toxic waste; any facility having numerous discharge points and ground-water monitoring; or any Class 1 waste management unit.

Category “B” – Any discharger not included in Category A that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or any Class 2 or Class 3 waste management units.

Category “C” – Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.

* In assigning a category for TTWQ, a regional board should consider duration, frequency, seasonality, and other factors that might limit the impact of the discharge.