

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2009-0063

WASTE DISCHARGE REQUIREMENTS
FOR
PESTONI BROTHERS LLC AND SOUTH LAKE REFUSE & RECYCLING
SOUTH LAKE REFUSE RESOURCE RECOVERY AND COMPOST
FACILITY ON QUACKENBUSH MOUNTAIN
LAKE COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) finds that:

1. Pestoni Brothers LLC owns, and South Lake Refuse & Recycling (jointly hereafter Discharger) operates the South Lake Refuse Resource Recovery and Compost Facility on Quackenbush Mountain (hereafter facility), a composting and construction and demolition debris facility in Lake County. The facility began operating in 2005 under previous Waste Discharge Requirements (WDRs) Order No. R5-2004-0130 following construction of a portion of the Phase 1 area and a lined runoff basin. At full build out, the facility will have in place capacity for up to 60,000 cubic yards of compost and compostable materials. The previous WDRs permitted composting of green waste feedstock only with up to five percent gypsum as an amendment.
2. The facility is located at 16520 Davis Avenue in Clearlake on Quackenbush Mountain as shown in Attachment A, which is incorporated herein and made part of this Order by reference. The facility will cover 22 acres in Section 23, T13N, R7W, MDB&M, corresponding to Assessor's Parcel Numbers 010-053-11 and 010-053-31.
3. On 20 January 2009, the Discharger submitted a November 2008 amended Report of Waste Discharge (RWD) to revise the WDRs to add food waste as a compost feedstock. The amended RWD proposes to compost up to ten percent food waste mixed with green waste as co-collected organic materials from residential, commercial, and agricultural sources using existing windrow composting methods. The amended RWD also proposes to compost food waste from commercial sources and agricultural waste (primarily grape pomace) mixed with green waste using either the Covered Aerated Static Pile Method (CASP Method) and/or the Enclosed Vessel Aerated Static Pile Method (EVASP Method). Additionally, in a 24 April 2009 letter, the Discharger proposed to use the Containerized Aerated Static Pile System Covered with Compost Method (CASPPC Method) for food waste. Finally, the amended RWD also proposes an expansion of the existing construction and demolition debris (C&D) processing area to five acres that would include a 30,000 square foot building. These WDRs and the attached monitoring and reporting program (MRP) have been revised with requirements for the acceptance of food waste feedstock for composting, and to approve the expanded C&D processing area.

4. The Discharger has already obtained an updated Solid Waste Facility Permit (Facility No. 17-AA-0014) for this activity, issued on 29 September 2008. The permit was issued by the Lake County Environmental Health Division who enforces the regulations of the California Integrated Waste Management Board (CIWMB) for composting facilities under 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 requirements necessary, under this Order, for the protection of water quality.
5. The parcel consists of 231 acres, 22 acres of which are to be developed for the facility with 15.35 of those acres utilized for compostable materials handling. The facility is being constructed in phases. The first phase was five acres for compostable materials handling. In Phase 2, the Discharger expanded the operations pad to approximately eight acres, with build out underway to a total of 15.35 acres that includes the area of a lined runoff retention basin. Two distinct and separate areas have been constructed (the "West site" and the "East site") with compostable materials handling operations on the West site only. The West site also contains a C&D processing area, currently 1.1 acres that may be expanded to 5 acres. The Site Map, Attachment B, which is incorporated herein and made part of this Order by reference, show each of these described areas. The East site (1.1 acres), which is yet to be constructed, may be used for dismantling of mobile homes. This Order contains requirements for each of these areas.
6. The facility includes a lined runoff retention basin to collect runoff from the compost processing and storage area at the West site. At full build out, a total of 12.48 acres of compost pad, processing and storage area will drain to the retention basin. The C&D area drains directly to surface waters. Design of the retention basin is discussed under "Facility Construction" in Findings 21 through 23.

WASTES AND THEIR CLASSIFICATION

7. The Discharger proposes to accept green waste material with up to ten percent food waste mixed with green waste as co-collected organic materials from residential, commercial, and agricultural sources using the existing windrow composting method. Green waste material includes yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood wastes. The proposed waste stream for composting specifically excludes biosolids, mixed solid waste, wood containing lead-based paint or wood preservative, and mixed construction or demolition debris. The Discharger also proposes to accept food waste for composting from commercial sources and agricultural waste (primarily grape pomace) mixed with green waste using either covered aerated static pile or enclosed vessel aerated static pile composting methods. Grape pomace waste would be limited to up to 13,250 tons per year. The facility will also accept dry wall of up to 530 tons per year to provide gypsum for an additive to composting at an application rate of no more than 5% on a dry weight basis. Other additives to be mixed with feedstock or active compost will include water, fertilizers, and urea to adjust moisture level, carbon-to-nitrogen ratio, or porosity.

8. The State Water Resources Control Board (State Water Board) has adopted a body of regulations, under Title 27 CCR, consisting of requirements, waste classifications, and waste management unit (Unit) classifications designed to provide protection to the beneficial uses of waters of the state for projects involving the discharge of solid waste to land for treatment, storage, or disposal at landfills, surface impoundments, waste piles, and land treatment units. Under this scheme, a composting operation that does not involve the processing of hazardous constituents may either be exempt from regulation under Title 27 or be a Class II waste pile for the treatment and storage of solid waste.
9. The feedstock and some of the additives for composting are classified as nonhazardous solid waste and some may be a designated waste as defined in Title 27, depending on various factors including site-specific conditions, and the types and volumes of feedstocks and additives used in composting. Composting operations would be regulated under the Title 27 regulations at sites where groundwater could be impacted by compost leachate in the compost pad area or runoff retention basin when leachate contains sufficient concentrations of salts, ammonia, or other constituents. However, based on the site-specific considerations discussed in Finding Nos. 12, 14, and 17 of this Order, the threat to the beneficial uses of surface water or groundwater posed by the proposed green/food waste composting operation is not commensurate with the stringent monitoring, siting, construction, and design standards applicable to a Class II waste pile, under the Title 27 regulations, so long as it meets, and continues to meet, the requirements of this Order. In particular, these requirements include, but are not limited to, the construction of a runoff retention basin that can accommodate runoff from a 25-year, 24-hour storm event to protect surface water; the installation of a synthetic liner in the runoff retention basin to protect groundwater; and the requirements for compaction of the low permeability surface soils in the composting pad areas to minimize downward flow to protect groundwater. Each of these requirements are as proposed in the RWD. The attached MRP additionally requires twice annual monitoring of the water in the retention basin and of the leachate from active compost piles. The Regional Water Board may revise this Order with more stringent requirements if monitoring indicates the threat to water quality is greater than expected. Past monitoring at this particular composting operation has indicated a relatively low threat to water quality compared with other composting operations, which may be due to relatively large amounts of dilution from storm water that flows from unused portions of the drainage area to the retention basin.
10. Under Title 27 CCR, Division 1, Subdivision 1, Chapter 3, Subchapter 2, Article 2, §20200(a)-(a)(1), the State Water Board has declared that “[*For wastes that cannot be discharged directly or indirectly to waters of the state, the waste classification system under Title 27*] shall provide the basis for determining which wastes may be discharged at each class of Unit. Waste classifications are based on an assessment of the potential risk of water quality degradation associated with each category of waste.”

11. Title 27 CCR §20200(a)(1) allows the Regional Water Board to make a finding that, "...a particular waste constituent or combination of constituents presents a lower risk of water quality degradation than indicated by classification according to this article." Based on a review of the Discharger's RWD and on the lower risk to water quality cited in Finding No. 9 of this Order, the Regional Water Board finds, pursuant to Title 27 CCR §20200(a)(1), that the operation is not subject to the Title 27 regulations so long as the operation continues to meet the requirements of this Order.

SITE DESCRIPTION

12. The site is located on top of Quackenbush Mountain above the City of Clearlake, and the site therefore provides significant topographical relief for drainage. The facility drains generally to the west and northwest at 2% grade to a drainage ditch along the west side of the site. The ditch drains to the retention basin. The natural elevation of the site is approximately 2,000 to 2,100 feet above mean sea level (MSL).
13. Land uses within 1,000 feet of the landfill include unclassified vacant land to the north, vacant Bureau of Land Management land to the south, the Eastlake Landfill to the south and east, and the City of Clearlake to the west.

SITE GEOLOGY

14. According to the RWD, the composting area and the hillside slopes are blanketed with about 1.5 to 2 feet of slightly expansive sandy-clay soils that are underlain by boulder-laden clayey and gravelly soils. The clayey surface in the ravine where the retention basin is to be constructed is porous, weak, and compressible to about 3 feet and is also underlain by boulder-laden clayey and gravelly soils.
15. The RWD reports the following soil types that occur within the site boundaries:
 - Sobrante-Guenoc-Hambright Complex – these soils consist of loams and clay loams weathered from basalt. The complex includes rock outcrops with rocks ranging from 1 to 15 feet in diameter. This is the most common soil type on the property occupying the northern two-thirds of the site.
 - Konocti-Hambright Complex and Konocti-Hambright Rock Outcrop Complex – Both consist of gravelly-to-very gravelly loam derived from weathered basalt with extensive rock outcrops.
 - Bally-Phillips-Haploxeralfs Association – Sandy-to-gravelly loam formed in alluvium from mixed sources. This deep, well-drained soil occupies the slopes along the southern third of the property.

PRECIPITATION

16. The facility receives an average of 27 inches of precipitation per year as measured at the Clearlake 4 SE gauge between the years 1954 and 2003. The 25-year, 24-hour

storm event for the site is 6.47 inches based on an isopluvial map created by the National Oceanic and Atmospheric Administration.

GROUNDWATER AND SURFACE WATER

17. The Discharger estimates that groundwater is approximately 200 feet below ground surface (bgs). This information is based on a well boring log for a water well installed by the Discharger approximately 500 feet to the east of the proposed facility where the depth to static groundwater in the well was 113 feet at the time of installation during January 2001. The elevation of ground surface at the well is about 87 feet below the lowest ground elevation at the facility. The boring log indicates subsurface soils are predominantly sandy or gravelly clay to a depth of 188 feet. The direction of groundwater flow is inferred to be north to northwest based on surrounding topography.
18. The beneficial uses of groundwater, as specified in *The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan), are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
19. Surface water from the composting areas drains to a lined runoff retention basin. This Order requires the retention basin to be designed to capture runoff from the composting area that would be expected from at least a 25-year, 24-hour storm event. Surface water from other areas of the facility drains north to an unnamed tributary to Burns Valley Creek that is tributary to Clear Lake.
20. The designated beneficial uses of Clear Lake, as specified in the Basin Plan, are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm fresh water habitat; spawning, reproduction, and/or early development; and wildlife habitat.

FACILITY CONSTRUCTION

21. The RWD contains a 24 May 2004 geotechnical report in Appendix C that has information on engineering properties of site soils and design parameters for construction of site containment features. The report states that the surface and near surface soils are moderately expansive, and that in the composting area they will exhibit a hydraulic conductivity of 1×10^{-5} cm/s when compacted to at least 92% relative compaction with a moisture content at least 2% above optimum per ASTM Method D1557. The report recommends that the one-foot thick soil layer beneath the composting area be compacted to the above specification. This type of pad has already been constructed in the Phase 1 area. The report also states that the "holding pond" (referring to the retention basin) was constructed in late 2004/early 2005 with a single 60-mil high-density polyethylene geomembrane liner. As recommended, this Order requires that the upper one-foot of soil in the composting pad areas be compacted as specified, and that the retention basin be equipped with a synthetic liner. This Order

also requires that a design report be submitted to the Regional Water Board for construction of the composting pad areas that includes a Construction Quality Assurance (CQA) Plan.

22. Installation and monitoring of a groundwater is not required by this Order. This is based on both site specific conditions and the existing and proposed containment systems including:
- Depth to underlying groundwater of approximately 200 feet;
 - Predominantly clay soils to 188 feet bsg;
 - The construction of compacted soil pads in the composting area with hydraulic conductivity of approximately 1×10^{-5} cm/s; and
 - The synthetic geomembrane liner in the runoff retention basin.

The Regional Water Board may require groundwater monitoring and/or additional containment features if monitoring data indicate that the leachate generated from the waste is a greater threat than anticipated.

23. The drainage area from the storage, processing, and composting area to the retention basin is 12.48 acres, including areas yet to be constructed. The Discharger proposed to size the runoff retention basin to capture runoff from the 25-year, 24-hour storm event, which is reported to be 6.47 inches. In the RWD, the Discharger included calculations for rainfall volumes and for sizing the retention basin. The calculations estimate that approximately 18 percent of the rainfall will percolate into the soil. The resulting runoff into the basin from 12.48 acres is calculated to be 5.5 acre-feet of water. The retention basin volume is 18.3 acre-feet with three feet of freeboard. This indicates that the proposed retention basin is roughly three times larger than is necessary to capture the 25-year, 24-hour storm event. A 2 June 2004 "Technical Memorandum" also includes calculations indicating the retention basin is roughly twice the volume needed to contain runoff from an average wet season using average monthly precipitation and evaporation data.
24. This Order requires that the Discharger obtain coverage under the General NPDES Permit for construction activities and submit a Storm Water Pollution Prevention Plan (SWPPP) to the Regional Water Board prior to construction.

OPERATION OF FACILITIES

Composting

25. The Discharger proposes to process up to ten percent food waste mixed with green waste for composting using either the Elongated Windrow Method and/or the Compressed Windrow Method. The two methods differ in the dimensions of the windrows and in the timing and frequency of the turning of the windrows. The total time for each phase of the process is the same between the two methods.

26. The Discharger proposes to process food waste from commercial sources and agricultural waste (primarily grape pomace) mixed with green waste using either the CASP Method, the EVASP Method, and/or the CASPCC Method. The CASP Method combines a waterproof, synthetic fabric cover with a computerized aeration control technology to optimize composting conditions for all types of feedstocks. The impermeable cover eliminates rain percolating through the pile and therefore reduces the total nutrient load found in facility runoff. Proper grading of the site must be maintained to provide limited intrusion of storm water around the edge of the cover. The EVASP Method is similar to the CASP Method, but uses a collapsible, portable bag system. The bags are 10 to 12 feet wide and up to 350 feet long and also eliminate rain percolating through the pile, preventing contact of compost with storm water. The CASPCC Method is similar to the EVASP Method, but uses a containerized aerated static pile system covered with compost material. The food waste is composted in modified debris boxes covered with compost as the bio-filter to control odors.
27. Incoming trucks will be weighed at a scale proposed to be constructed along the road leading to the facility. Trucks arriving at the nearby Eastlake Landfill are directed to the composting facility after a cursory load check. The source separated green and food waste materials delivered to the compost facility will be directed to the receiving area where the facility personnel will conduct a load check upon deposition. Contaminated and non-compostable materials are either returned to the hauler or placed in bins located near the receiving area for appropriate off-site disposal. Green material is processed in a portable grinder in the processing area and deposited directly into the windrows. Materials are composted on the compacted low permeability pad areas constructed as required by this Order. Water from the retention basin is added to the compost to achieve the proper moisture conditions. When the desired level of decomposition has been achieved, the compost materials are moved to the curing areas or left in place until shipment from the site.

C&D Processing and Mobile Home Dismantling

28. The Discharger has proposed to construct (depending on market conditions) a five-acre C&D processing area at the West site that would receive construction and demolition/inert debris for processing. The material would be received at a 30,000 square foot covered building for sorting. Once sorted, the materials would be processed and stored on engineered pads for transportation off-site for reuse or recycling. A portion of this debris would be gypsum wallboard, which is not inert. The wallboard will be placed and stored in covered bins to prevent the formation of leachate. Other waste received in the C&D area will be inert. Any non-inert wastes will be placed in covered bins or inside of the proposed building for appropriate off-site disposal or recycling. Limited C&D processing has been and may be conducted on engineered pads in this area prior to construction of the larger facility.

29. C&D wastes will generally consist of lumber and wood, gypsum wallboard, glass, metal, roofing material, tile, carpet and floor coverings, window coverings, plastic pipe, concrete, fully cured asphalt, brick, slag, ceramics, plaster, clay and clay products.
30. The Discharger has proposed, and may operate (depending upon need) a mobile home dismantling area at the East site that would be used to deconstruct mobile homes in order to recover materials with potential use for recycling. Approximately 60% of the material generated would be transported offsite for recycling. The remainder will be transported offsite for proper disposal. Wallboard and any other non-inert waste will be placed and stored in covered bins or inside of the proposed building. Storm water from both the C&D area and the mobile home dismantling area will drain directly to surface water. This Order requires these areas to be included in the Discharger's SWPPP.

CEQA AND OTHER LEGAL REFERENCES

31. On 23 December 2003, the Lake County Board of Supervisors certified a Negative Declaration for the facility finding that the project will not result in any significant environmental impact. Regional Water Board staff has considered the negative declaration for the composting facility in preparation of these WDRs.
32. On 11 March 2008, the Lake County Community Development Department filed a Notice of Determination and Mitigated Negative Declaration (MND) for the project modifications including expanded hours of operation, retail sales of compost and mulch, collection of post-consumer co-collected food waste, processing of appliances, recycling processing and retail sales of construction and demolition materials, and the construction of a 30,000 square foot building. Lake County has also issued Modification of Use Permit UP 03-12 MMU 06-06 wherein conditions are modified to require implementation of the mitigations in the MND. Regional Water Board staff has considered the MND for the project modifications in preparation of these WDRs and included requirements to mitigate water quality impacts.
33. This Order implements the Basin Plan.
34. Section 13267 of the California Water Code states, in part, "(a) *A regional board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region*" and "(b) (1) *In conducting an investigation..., the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring these reports, the regional board shall provide the person with a written explanation with*

regard to the need for the reports, and shall identify evidence that supports requiring the person to provide the reports.”

35. The technical reports required by this Order and the attached Monitoring and Reporting Program are necessary to assure compliance with these waste discharge requirements. Pestoni Brothers LLC and South Lake Refuse & Recycling are responsible for the discharges of waste at the facility subject to this Order and are, therefore, subject to CWC Section 13267(b).
36. Section 402 of the Clean Water Act [33 U.S.C. §1342(p)] and regulations adopted by the U.S. Environmental Protection Agency (40 CFR §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 Board has adopted a General NPDES Permit for industrial activity (NPDES General Permit No. 97-03-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 Order, obtain coverage and comply with the conditions of that General Permit.
37. This Order requires that the Discharger maintain coverage under the General NPDES Permit for industrial activities and maintain a SWPPP. As of 17 June 2005, the Discharger obtained coverage under the General NPDES Permit for industrial activities and has been assigned WDID No. 5S171019571. The Discharger has also prepared a SWPPP, and submitted a copy to the Regional Water Board.

PROCEDURAL REQUIREMENTS

38. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.
39. The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
40. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
41. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state

holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

IT IS HEREBY ORDERED, pursuant to Sections 13263 and 13267 of the California Water Code, that Order No. R5-2004-0130 is rescinded, and that Pestoni Brothers LLC and South Lake Refuse & Recycling and its agents, assigns and successors, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of wastes defined as "hazardous " at the facility, is prohibited. For the purposes of this Order, the term "hazardous" is as defined in Title 27.
2. The discharge of wastes defined as "designated" (except for feedstock and some additives as cited in Finding No. 9 of this Order) at the facility, is prohibited. For the purposes of this Order, the term "designated" is as defined in Title 27.
3. The discharge of wastes or additives to composting areas that are not listed as acceptable in this Order under Discharge Specification Nos. 7 through 9 is prohibited.
4. The discharge of wastes or additives to composting areas that are listed as not included under Discharge Specification Nos. 7 through 9 is prohibited.
5. Landfilling of any waste at the facility is prohibited.
6. Storage, processing, or composting of green/food waste outside of the storage, processing and composting areas of the West site is prohibited.
7. Storage, processing, or composting of green/food waste at the East site is prohibited.
8. The discharge of liquid waste at the facility, other than runoff or leachate from composting areas to the retention basin, is prohibited.
9. The discharge of wastes containing greater than one percent (>1%) friable asbestos is prohibited.

10. The discharge or storage of drilling mud or biosolids at the facility is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The Discharger shall implement green/food waste composting, processing of construction and demolition debris, and mobile home dismantling in a manner that does not cause, or threaten to cause, a condition of contamination, pollution or nuisance (including odor), as defined in the California Water Code, Section 13050.
2. The discharge of wastes shall not cause water quality degradation.
3. Objectionable odors originating at the facility shall not be perceivable beyond the limits of the facility.
4. Dissolved oxygen in the runoff retention basin shall not be less than 1.0 milligrams per liter.
5. The runoff retention basin shall be managed to prevent the breeding of mosquitoes.
6. Wastes shall only be discharged into, and shall be confined to, Units specifically designed for their containment as described in this Order.
7. The following wastes are acceptable to be received at the facility for processing in the composting areas by elongated or compressed windrow composting methods:

“Green Material” mixed with up to ten percent food waste as co-collected organic materials from residential, commercial, and agricultural sources. “Green Material” includes yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition woodwastes. Co-collected food waste includes fruit, vegetables, breads, cereal, dairy, meat, fish, leftovers and table scraps, coffee grounds, filters, tea bags, food-soiled paper, paper towels, paper plates, paper napkins, pizza boxes, compostable plastic bags, and compostable food services ware. Green material and food waste **does not include** plastic, glass, metal, liquids, biosolids, septage, sludges, waste edible oil, petroleum oil, or grease, mixed solid waste, material processed from commingled collection, wood containing lead-based paint or wood preservative, or mixed construction or mixed demolition debris.

8. The following wastes are acceptable to be received at the facility for processing in the composting areas by the CASP Method, the EVASP Method, or the CASPCC Method:
 - a. Food waste from commercial sources and agricultural waste (primarily grape pomace) mixed with green waste, or food waste covered with compost for the CASPCC Method.

- b. "Agricultural Commodities" means material of plant or animal origin, which result from the production and processing of farm, ranch agriculture, horticulture, aquaculture, silviculture, floriculture, vermiculture, or viticultural products, including grape pomace (not to exceed 13,250 tons per year), orchard and vineyard prunings, and crop residues. Agricultural Commodities **does not include** animal carcasses or parts thereof.
9. The use of additives is allowed, provided that their use and storage does not pose a threat to water quality, and provided that, for additives other than water, such use involves the inclusion of no more than 20% (no more than 5% for gypsum) — on a dry-weight basis — of the initial total feedstock for any given batch of compost. Approved additives include fertilizers (when applied at rates that will be consumed or fixed during the composting process), horse or steer manure, urea, and gypsum. Additives do not include septage or biosolids.
10. Gypsum wallboard and any other non-inert wastes generated in the C&D area of the West site or the mobile home dismantling area of the East site shall be stored in covered bins or inside of a building and shall not be stored on the ground surface or processing pad areas. Bins containing wallboard shall not contain other items or materials that could contaminate the wallboard which is to be used as additive for composting.
11. When full, all storage bins, except those containing wallboard meant for composting additive, shall be removed from the facility in a timely manner and their contents properly disposed of or recycled.
12. The Discharger shall, in a timely manner, remove and relocate any wastes discharged at this facility in violation of this Order. If the Discharger is unable to remove and relocate the waste, the Discharger shall submit a report to the Regional Water Board explaining how the discharge occurred, why the waste cannot be removed, and any updates to the waste acceptance program necessary to prevent re-occurrence. If the waste is a hazardous waste, the Discharger shall immediately notify the California Department of Toxic Substances Control.

C. FACILITY SPECIFICATIONS

1. Compost and construction/demolition pads, storage and processing areas and runoff retention basins shall be designed and constructed under the direct supervision of a California registered civil engineer, or a certified engineering geologist, and shall be certified by that individual as meeting the requirements of this Order prior to waste discharge.
2. **Pad Throughflow Control** — The soil in the upper one foot of the composting, feedstock, and storage pad areas shall be compacted to at least 92% relative compaction with a moisture content at least 2% above optimum per ASTM Method

D1557, and shall have and maintain a minimal permeability relative to the downward movement of applied, produced, and precipitated waters by virtue of an effective combination of any of the following factors:

- a. The depth, composition, and degree of compaction of the pad;
- b. The judicious use of applied water to control dust and facilitate continued compaction of the pad portions between the compost and storage piles;
- c. The use of heavy equipment on the areas described in ¶C.2.b.;
- d. Shifting the location of the compost and storage piles, at least annually, to facilitate and maintain compaction of the areas they cover;
- e. Methods of limiting applied water to minimize free drainage of leachate from the piles;
- f. Methods of assuring that no compost pile, feedstock pile, or additive pile produces free drainage (i.e., releases leachate) in response to precipitation events, despite foreseeable antecedent moisture conditions; and/or
- g. Other effective measures proposed by the Discharger and approved by Regional Water Board staff.

A design report shall be submitted pursuant to ¶D.4. prior to construction of compost pad areas.

3. **Run-On And Run-Off Control.**

- a. Facility run-off water shall not adversely affect the beneficial uses of any downstream water bodies.
- b. **Monitoring** — The Discharger shall monitor leachate and water in the retention basin as required by MRP No. R5-2009-0063.
- c. **Retention Basin** — The retention basin shall be equipped with a synthetic liner and shall be designed and operated to minimize the downward percolation of constituents, if any, expected to be present at concentrations exceeding water quality objectives for the underlying ground water, as identified in the Basin Plan.
- d. **Other Ponding** — The Discharger shall design, construct, and maintain the pad to prevent, to the greatest extent possible, ponding (except at the retention basin), infiltration, inundation, erosion, slope failure, and washout.
- e. **Pad Slope** — All portions of the pad or pads shall have a minimum of one percent (1%) slope.
- f. **Surface Flow Conveyance** — The Discharger shall maintain an effective run-on control system (which prevents exterior surface flow from entering the facility property) and, for the entire composting area, a run-off control system (which

collects all surface flow within that portion of the facility). The Discharger shall design, construct, and maintain these systems:

- i. To withstand the site-specific maximum peak flow from a 25-year, 10-minute storm;
- ii. For the retention basin, to accommodate the maximum storage requirement for a 25-year, 24 hour storm; and
- iii. For a run-off control system that relies upon evaporation, to accommodate at least twice the mean annual facility runoff, given consideration of expected water use and evaporation during the wet season.

Low-flow channels that convey leachate to the lined retention basin following precipitation events shall be constructed of concrete or similarly impermeable material to prevent percolation of leachate into the soil.

4. The Discharger shall maintain containment and control structures (e.g., berms, the pad, surface impoundment, and run-on/run-off control structures) in good working order whenever there is waste (stored or being composted) or finished compost at the facility.
5. By **1 November** of each year, the Discharger shall conduct an annual inspection 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. All wet weather preparations shall be completed by **1 December** of each year. The Discharger shall include a synopsis of these preparations in the Annual Report required under ¶D.3. of this Order.
6. The Discharger shall allow Regional Water Board staff to:
 - a. Enter the facility during normal working hours;
 - b. Copy any record relating to the design or operation of the facility;
 - c. Sample any waste, additives, discharge, run-on or run-off; and
 - d. Take recordings, photographs, or videotapes of the facility and its operation.
7. 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 this Order. If visible leachate, ponding, cracking, or subsidence of surfaces is observed, the discharger shall immediately take necessary measures to maintain the Facility Specifications in this section, shall notify the Regional Water Board pursuant to ¶D.2., and shall include in the Annual Report under ¶D.3. a description of the damage, its location and extent, the date observed, and the date and nature of repair.

8. At closure, all wastes, residual wastes and adjacent natural geologic materials contaminated by wastes, shall be completely removed from the facility. Closure shall be conducted under the direct supervision of a California registered civil engineer or a certified engineering geologist.

D. REQUIRED REPORTS AND NOTICES

1. At least 30 days prior to terminating operations or to initiating any change in the facility, its location, its ownership, its operations, or the waste being processed, the Discharger shall submit a RWD amendment proposing and substantiating such change.
2. Upon the occurrence of any event that could threaten public health, create a nuisance, threaten surface or ground water quality, or otherwise result in a violation of this Order, the Discharger shall verbally notify the Regional Water Board within 24 hours of the event, and follow-up the verbal notification with written documentation of the event within 14 calendar days of the incident.
3. By **1 May** of each year, the Discharger shall submit an Annual Report to the Regional Water Board as required by MRP No. R5-2009-0063.
4. The Discharger shall submit a design report for construction of the compost pad, processing and storage areas and for the runoff retention basin for Executive Officer Approval prior to constructing these facilities. The design report shall include liner material and thickness, and a CQA Plan to ensure proper testing and quality assurance of liner materials and compacted soil pads.

E. PROVISIONS

1. The Discharger shall comply with these WDRs and the attached MRP No. R5-2009-0063, and any revisions thereto as ordered by the Executive Officer. A violation of the MRP is a violation of these waste discharge requirements.
2. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referred to as "Standard Provision(s)."
3. The Discharger shall submit reports required by this Order pursuant to Section 13267 of the California Water Code. Failure to submit the reports by the due dates shown may lead to enforcement action pursuant to Section 13268.
4. The Discharger shall file a Notice of Intent (NOI) with the State Water Board for coverage under the General NPDES permit for construction activities (NPDES General Permit No. 99-08-DWQ) prior to construction at the facility, and shall

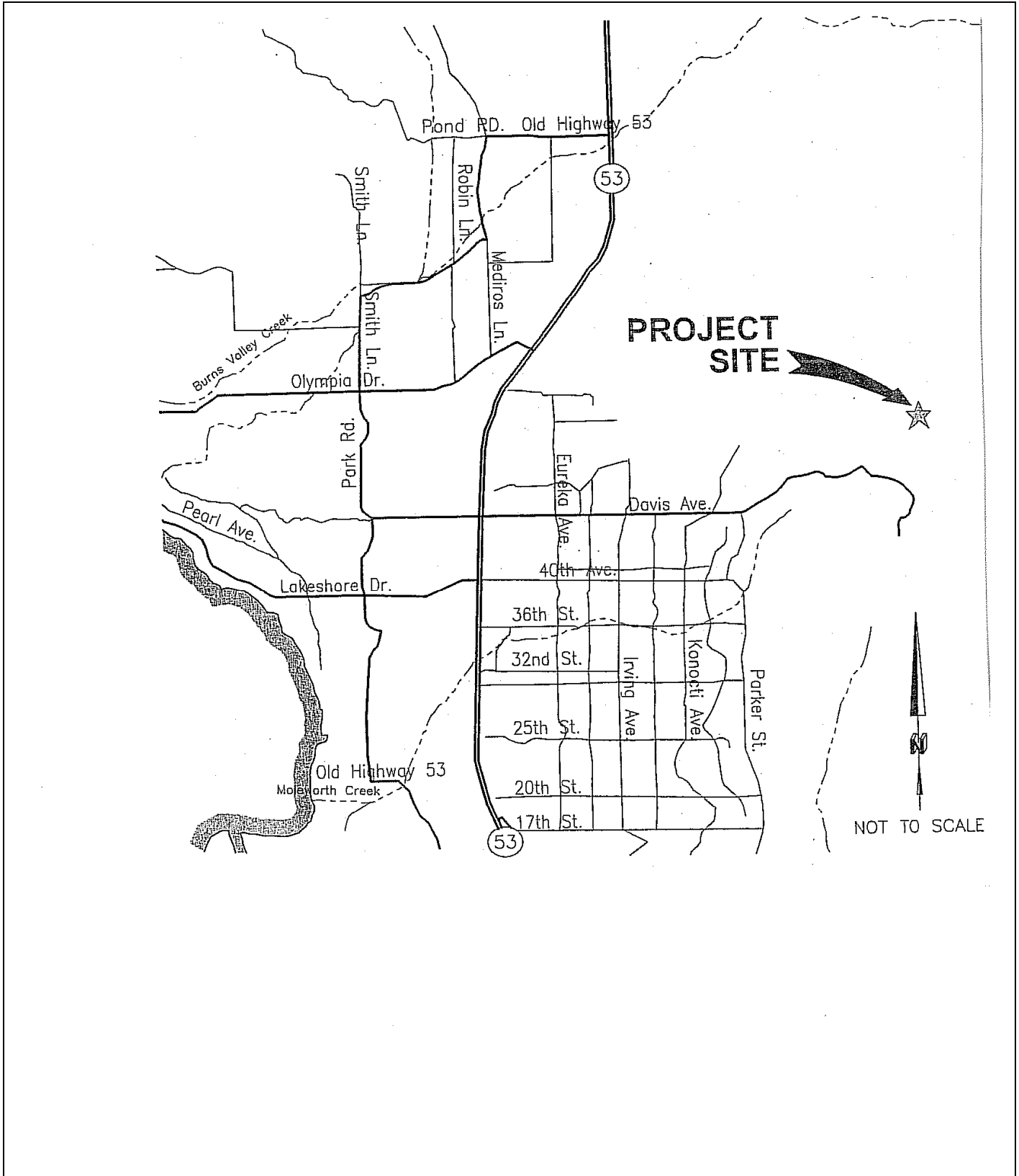
submit a SWPPP to the Regional Water Board in accordance with the requirements of the General NPDES Permit.

5. The Discharger shall maintain coverage under the General NPDES permit for industrial activities (NPDES General Permit No. 97-03-DWQ), and shall maintain a SWPPP in accordance with the requirements of the General NPDES Permit. The SWPPP shall include all information, plans, and practices required by the General NPDES Permit and shall be inclusive of all operations being conducted at both the West site and the East site of the facility.
6. The Discharger shall maintain waste containment facilities and precipitation and drainage control systems, and shall immediately notify the Regional Water Board of any flooding equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste or leachate containment facilities or of precipitation and drainage control structures.
7. The Discharger shall maintain legible records of the volume of green/food waste discharged at the facility and the manner and location of discharge. Such records shall be maintained at the facility or the facility's administration office until the completion of site closure. These records shall be available for review by representatives of the Regional Water Board and of State Water Board at any time during normal business hours.
8. In the event of any change in ownership of this waste management facility, the Discharger shall notify the succeeding owner or operator in writing of the existence of this Order prior to the change in ownership. A copy of that notification shall be sent to the Regional Water Board.
9. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
10. The Regional Water Board will review this Order periodically and will revise these requirements when necessary.

I, PAMELA C. CREEDON, 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, Central Valley Region, on 12 June 2009.

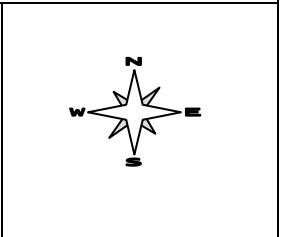
PAMELA C. CREEDON, Executive Officer

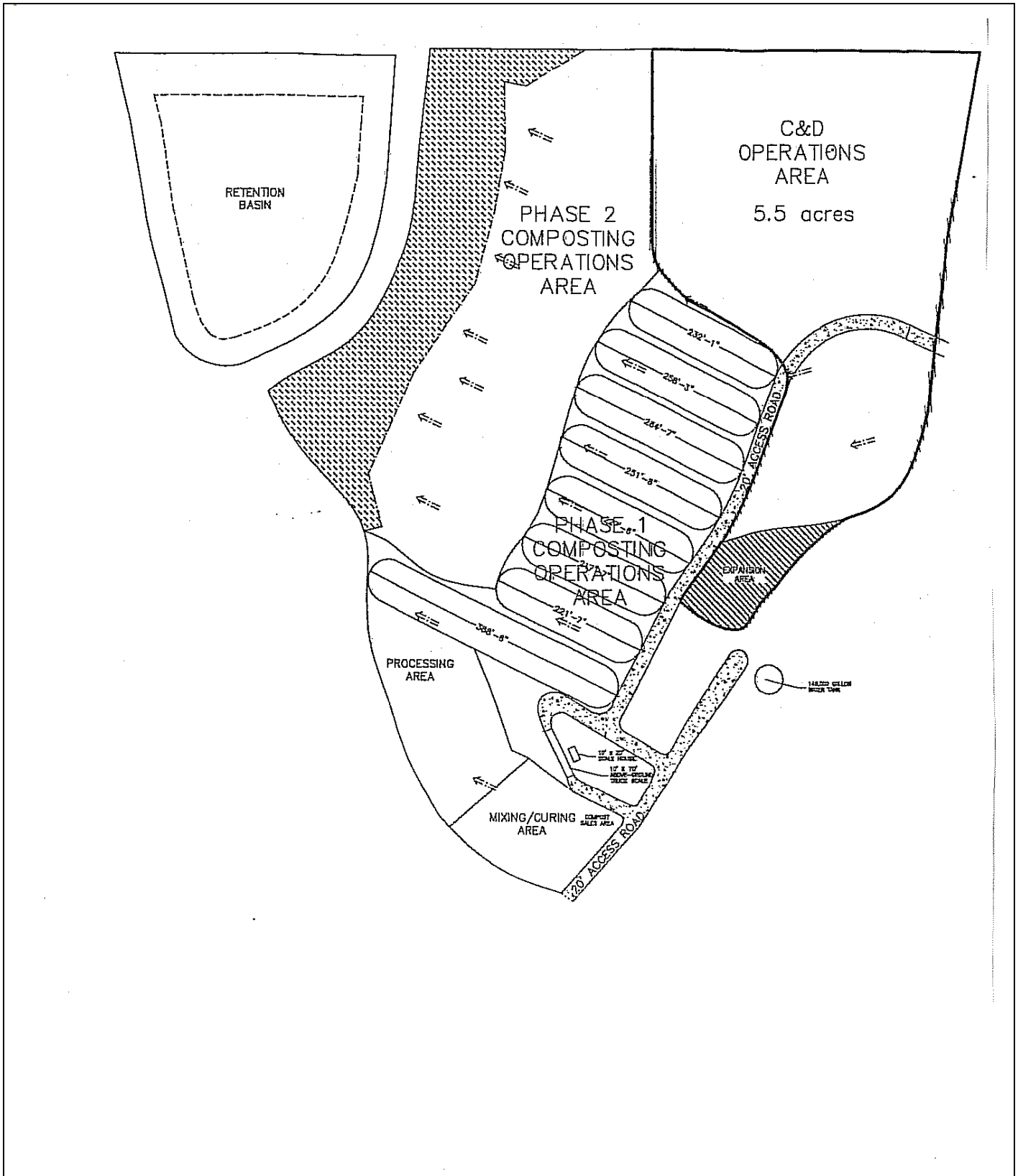
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Drawing Reference:
Revised Report of Waste
Discharge, Edgar & Associates,
Inc., November 2008, Figure 1

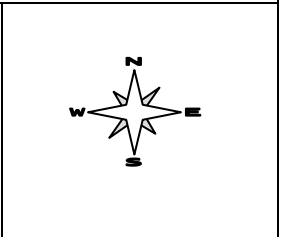
**SITE LOCATION MAP
SOUTH LAKE REFUSE RESOURCE
RECOVERY AND COMPOST FACILITY
LAKE COUNTY**





Drawing Reference:
Revised Report of Waste
Discharge, Edgar & Associates,
Inc., November 2008, Figure 5

SITE MAP
SOUTH LAKE REFUSE RESOURCE
RECOVERY AND COMPOST FACILITY
LAKE COUNTY



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2009-0063

FOR
PESTONI BROTHERS LLC AND SOUTH LAKE REFUSE & RECYCLING
SOUTH LAKE REFUSE RESOURCE RECOVERY AND COMPOST
FACILITY ON QUACKENBUSH MOUNTAIN
LAKE COUNTY

The Discharger shall submit reports required by this Monitoring and Reporting Program (MRP) and the applicable portions of the Standard Provisions and Reporting Requirements dated 1 March 1991 pursuant to Section 13267 of the California Water Code. Failure to submit the required reports can result in the imposition of civil monetary liability. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

RETENTION BASIN AND LEACHATE MONITORING

The Discharger shall sample water in the runoff retention basin and leachate from the compost windrows in accordance with Table 1. Leachate samples shall be collected from a low-flow channel that conveys leachate to the retention basin within two days following a significant precipitation event. Sample collection shall follow standard USEPA protocol.

TABLE 1 –RETENTION BASIN AND LEACHATE MONITORING PROGRAM		
<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Specific Conductance	µmhos/cm	Twice Annually ¹
pH	Number	Twice Annually ¹
Dissolved Oxygen	mg/L	Twice Annually ¹
Turbidity	Turbidity Units	Twice Annually ¹
Monitoring Parameters		
Ammonia as Nitrogen	mg/L	Twice Annually ¹
Biochemical Oxygen Demand	mg/L	Twice Annually ¹
Chloride	mg/L	Twice Annually ¹
Nitrate as Nitrogen	mg/L	Twice Annually ¹
Phosphate	mg/L	Twice Annually ¹
Sulfate	mg/L	Twice Annually ¹
Total Dissolved Solids	mg/L	Twice Annually ¹
Total Fixed Dissolved Solids	mg/L	Twice Annually ¹
Total Organic Carbon	mg/L	Twice Annually ¹
¹ Two samples shall be collected between 1 December and 28 February of each year that are at least one month apart.		

REPORTING

The Discharger shall report field and laboratory test results in annual monitoring reports. The Discharger shall submit the annual monitoring reports to the Regional Water Board by **1 May** of each year. The Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. A discussion of the monitoring results shall precede the tabular summaries.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional engineer or geologist (or their subordinate) and signed, and if required stamped, by the registered professional.

Each annual report is to include the following information:

- (a) a summary of the facility's overall state of compliance with Waste Discharge Requirements (WDRs) Order No. R5-2009-0063 during the prior year;
- (b) tabulated **cumulative** monitoring data;
- (c) a copy of the laboratory analytical reports and chain of custody; and
- (d) a discussion of any events that threatened public health, created a nuisance, threatened surface or ground water quality, or otherwise resulted in a violation of this Order addressed during the prior year, under ¶D.2. of the WDRs, together with the Discharger's response to each such event.

The results of any monitoring done more frequently than required at the locations specified in the MRP shall also be reported to the Regional Water Board.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

12 June 2009

Date

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INFORMATION SHEET

ORDER NO. R5-2009-0063
PESTONI BROTHERS LLC AND SOUTH LAKE REFUSE & RECYCLING
SOUTH LAKE REFUSE RESOURCE RECOVERY AND COMPOST
FACILITY ON QUACKENBUSH MOUNTAIN
LAKE COUNTY

Pestoni Brothers LLC owns, and South Lake Refuse & Recycling (jointly hereafter Discharger) operates the South Lake Refuse Resource Recovery and Compost Facility on Quackenbush Mountain in Lake County. The Discharger submitted a November 2008 amended Report of Waste Discharge (RWD) to revise the waste discharge requirements (WDRs) to allow composting of up to ten percent food waste mixed with green waste as co-collected organic materials from residential, commercial, and agricultural sources using existing windrow composting methods. The Discharger also proposed to compost food waste from commercial sources and agricultural waste (primarily grape pomace) mixed with green waste using either Covered Aerated Static Pile Method (CASP Method) or the Enclosed Vessel Aerated Static Pile Method (EVASP Method). The major changes are that the facility did not formerly accept food waste, and did not formerly conduct composting using either the CASP Method or the EVASP Method. Additionally, in a 24 April 2009 letter, the Discharger proposed to use the Containerized Aerated Static Pile System Covered with Compost Method (CASPPC Method) for food waste. The revised RWD also proposes an expansion of the existing construction and demolition debris (C&D) processing area to five acres that would include a 30,000 square foot building.

The facility is to ultimately have capacity for up to 60,000 cubic yards of feedstock and compost in place. The Order includes requirements for all areas of the proposed facility including the composting, processing, and storage areas, the C&D processing area, and a potential future mobile home dismantling area. The composting area drains to a lined runoff retention basin. Since only the green/food waste composting, processing, and storage areas drain to the runoff retention basin, the Order requires all non-inert wastes, including the gypsum wallboard, to be placed in covered bins or inside of buildings so the waste is not exposed to storm water. The Order also requires the Discharger to maintain coverage under the general NPDES permit for discharges of storm water associated with industrial facilities, and to prepare a Storm Water Pollution Prevention Plan, which the Discharger has done.

Green/food waste composting is conducted on engineered pads compacted to 92% of maximum dry density. The geotechnical study indicates that the onsite surface and near surface soil will exhibit hydraulic conductivities of 1×10^{-5} cm/s or less at this compaction. The runoff retention basin is lined with a 60-mil geosynthetic liner to prevent percolation of the stored runoff and leachate into the ground and underlying groundwater. These site-specific requirements (that are less stringent than would be required under Title 27, California Code of Regulations) are based on a depth to groundwater of approximately 200 feet, sandy clay soils, and substantial topographic relief allowing for good drainage from

the pads to the runoff basin. Further details on regulatory requirements for this facility are provided in Finding Nos. 8 through 11 of the WDRs.

The Discharger proposes to process food waste from commercial sources and agricultural waste (primarily grape pomace) mixed with green waste using either CASP Method, the EVASP Method and/or the CASPCC Method. The CASP Method combines a waterproof, synthetic fabric cover with a computerized aeration control technology to optimize composting conditions for all types of feedstocks. The impermeable cover eliminates rain percolating through the pile and therefore reduces the total nutrient found in facility runoff. Proper grading of the site must be maintained to provide limited intrusion of storm water around the edge of the cover. The EVASP Method is similar to the CASP Method, but uses a collapsible, portable bag system. The bags are 10 to 12 feet wide and up to 350 feet long and also eliminate rain percolating through the pile, and prevents contact of compost with storm water. The CASPCC Method is similar to the EVASP Method, but uses a containerized aerated static pile system covered with compost material. The food waste is composted in modified debris boxes covered with compost as the bio-filter to control odors.

Incoming trucks will be received and weighed at a scale to be constructed along the road leading to the facility. Trucks arriving at the nearby Eastlake Landfill and will be directed to the composting facility after a cursory load check. The source separated green and food waste materials delivered to the compost facility will be directed to the receiving area where the facility personnel will conduct a load check upon deposition. Contaminated and non-compostable materials will either be returned to the hauler or placed in bins located near the receiving area for appropriate off-site disposal. Green material will be processed in a portable grinder in the processing area and deposited directly into the windrows. Materials will be composted on the compacted low permeability pad areas constructed as required by this Order. Water from the retention basin will be added to the compost to achieve the proper moisture conditions. When the desired level of decomposition has been achieved, the compost materials will be moved to the curing areas or left in place until shipment from the site.

Surface water drainage from the composting areas drains to a lined runoff retention basin. This Order requires the retention basin to be designed to capture runoff from the composting area that would be expected from at least a 25-year, 24-hour storm event. Surface water from other areas of the facility drains north to an unnamed tributary to Burns Valley Creek that is tributary to Clear Lake.

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