

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0130

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

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

1. Pestoni Brothers LLC owns, and South Lake Refuse & Recycling (jointly hereafter Discharger) operates the Quackenbush Mountain Resource Recovery and Compost Facility (hereafter facility), a green waste composting facility in Lake County. The Discharger submitted a 7 June 2004 Report of Waste Discharge (RWD) describing the proposed design and operation of this new facility which is to ultimately have capacity for up to 60,000 cubic yards of green waste in place.
2. The facility is located at 16520 Davis Avenue in Clearlake on Quackenbush Mountain. The facility will cover 22 acres in Sections 23, T13N, R7W, MDB&M, corresponding to Assessor's Parcel Numbers (APNs) 010-053-11 and 010-053-31. See Attachment A: Site Location Map, a part of this Order.
3. The facility is proposed to be constructed in phases. The first phase will be 5 acres for compostable materials handling with build out in approximate 5 acres increments to 15.5 acres. The parcel consists of 231 acres, 22 acres of which are to be developed for the facility with 15.5 of those acres utilized for compostable materials handling. Two distinct and separate areas are to be constructed (the "West site" and the "East site") with compostable materials handling operations on the West site only. The West site will also contain a Construction and Demolition Processing Area (hereafter C&D area) of approximately 1.1 acres for processing of construction and demolition debris. See Attachment B: Site Map, a part of this Order. The East site (1.1 acres) will be used for dismantling of mobile homes. This Order contains requirements for each of these areas.
4. The facility will include a storm water runoff retention basin to collect runoff from the compost processing and storage area at the West site. A total of 12.48 acres of compost pad, processing and storage area will drain to the retention basin. The 1.1-acre C&D area will drain directly to surface waters. Design of the retention basin is discussed under "Facility Construction", below.
5. In preparing this Order, the Regional Board has considered the language in the draft tentative general waste discharge requirements (WDRs) for green waste composting facilities that are being considered by the staff of the State Water Resources Control Board (State Board). It is the intention of the Regional Board to be as consistent as possible with the requirements of the draft tentative general WDRs so that if and when they are adopted by the State Board, this facility can apply for

coverage under the general order without significant changes to its requirements. It has been necessary to borrow, and in some cases modify, some of the findings from the draft tentative general WDRs in order to justify the requirements of this Order, and in particular, findings related to waste classification and the applicability of the Title 27, California Code of Regulations (CCR) to a green waste composting facility. It is anticipated that regulation of this facility will be transferred under the general WDRs if and when they are adopted by State Board and the Discharger submits a new RWD for coverage under them. If the State Board and/or the Regional Board ultimately find that Title 27 CCR is applicable to green waste composting facilities, it would likely result in required changes to the containment features and monitoring at this facility.

6. The California Integrated Waste Management Board (CIWMB) has adopted regulations governing the composting of green material, animal material, sewage sludge and municipal solid waste under 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. The CIWMB regulations for green waste composting are administered by the Local Enforcement Agency under a Compostable Materials Handling Facility Permit pending concurrence by the CIWMB.

WASTES AND THEIR CLASSIFICATION

7. The Discharger proposes to accept green waste material for composting including yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood wastes. The proposed waste stream for composting specifically excludes food material, biosolids, mixed solid waste, material processed from commingling collection, wood containing lead-based paint or wood preservative, mixed construction or demolition debris. The Discharger also proposes to accept agricultural commodities including grape pomace waste of up to 13,250 tons per year during October and November only. 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 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 would 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 or designated waste as defined in Title 27. Therefore, normally, composting operations would be regulated under the Title 27 regulations. However, the threat to the beneficial uses of surface water or ground water posed by the proposed green 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 the storm water 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 storm water 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. This Order additionally requires twice annual monitoring of the water in the retention basin.

10. Under Title 27 CCR, Division 1, Subdivision 1, Chapter 3, Subchapter 2, Article 2, §20200(a)-(a)(1), the State Board has declared that “[*For wastes that cannot be discharged directly 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. However, Title 27 CCR §20200(a)(1) allows the Regional 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.” The Title 27 regulations do not provide for a waste pile of lower classification than Class II. However, 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 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 completed facility will drain generally to the west and northwest at 2% grade to a drainage ditch to be constructed along the west side of the site. The ditch will drain 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 are porous, weak and compressible to about 3 feet and are 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-Haploxerafals 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 has estimated that groundwater starts 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, industrial service supply, and industrial process supply.
19. Surface water drainage from the composting areas will drain to a storm water 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 and non-contact water recreation, warm fresh water habitat, warm water spawning, and wildlife habitat.

FACILITY CONSTRUCTION

21. The RWD contains a geotechnical report in Appendix C containing 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 coefficient of permeability of 1×10^{-5} cm/s when compacted to at least 92% relative compaction at the 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. The report also states that the “holding pond” (referring to the retention basin) will have a synthetic liner. As recommended, this Order requires that the upper one-foot of soil in the composting area be compacted as specified, and that the retention basin be equipped with a synthetic liner. This Order also requires that an a design report be submitted to the Regional Board for construction of the composting areas and storm water retention basin that includes a Construction Quality Assurance (CQA) Plan.
22. Installation and monitoring of a groundwater monitoring network is not required by this Order. This is based on both site specific conditions and the containment systems proposed by the Discharger including:
 - depth to underlying groundwater of approximately 200 feet;
 - predominantly clay soils to 188 feet bsg;
 - the proposal to construct compacted soil pads in the composting area with permeability of approximately 1×10^{-5} cm/s; and
 - the proposal to install a synthetic geomembrane in the storm water retention basin.
23. The drainage area from the green waste storage, processing and composting area will be 12.48 acres. The Discharger proposes to size the storm water retention basin to capture runoff from the 25-year, 24-hour storm event 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 5.52 acre-feet. The proposed retention basin volume is 18.34 acre-feet with 3 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 storm water 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 Board prior to construction.

OPERATION OF FACILITIES

25. This Order requires that the Discharger obtain coverage under the General NPDES Permit for

industrial activities and submit a SWPPP to the Regional Board prior to operation of the facility.

Green Waste Composting

26. The Discharger proposes to process green waste for composting using two methods; the Elongated Windrow Method and 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.
27. 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 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 uncompostable 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 in the windrows 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. The total time feedstock remains at the facility is 13 weeks. The average curing time will be approximately 30 days.

C&D Processing and Mobile Home Dismantling

28. The 1.1-acre C&D processing area at the West site will receive construction and demolition/inert debris for processing. Processed material will be stored on an engineered pad for transportation off-site for reuse or recycling. A portion of this debris will 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 for appropriate off-site disposal or recycling.
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 mobile home dismantling area at the East site will be used to deconstruct mobile homes in order to recover materials with potential use for recycling. Approximately 60% of the material generated will 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. 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 Board staff has considered the negative declaration for the composting facility in preparation of these WDRs.
32. This order implements the Basin Plan.
33. Section 13267(b) of California Water Code provides that: "In conducting an investigation specified in subdivision (a), the Regional Board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of discharging, or who proposed to discharge waste outside of its region that could affect the quality of the 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." The technical and monitoring reports required by this Order and the attached Monitoring and Reporting Program No. R5-2004-0130 are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.
34. 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 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.

PROCEDURAL REQUIREMENTS

35. 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.
36. The Regional 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.

37. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
38. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Sections 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812, within 30 days of the date of issuance of this Order. Copies of the laws and regulations applicable to the filing of a petition are available on the Internet at http://www.swrcb.ca.gov/water_laws/index.html and will be provided on request.

IT IS HEREBY ORDERED, pursuant to Sections 13263 and 13267 of the California Water Code 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 green waste composting areas that are not listed in this Order under Discharge Specification Nos. 6 and 7 below, is prohibited.
4. The discharge of wastes or additives to green waste composting areas that are listed as not included under Discharge Specification Nos. 6 and 7 below, is prohibited.
5. Landfilling of any waste at the facility is prohibited.
6. Storage, processing or composting of green waste outside of the green waste storage, processing and composting areas of the West site is prohibited.
7. Storage, processing or composting of green waste at the East site is prohibited.
8. The discharge of liquid waste at the facility, other than storm water 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 of wastes other than storm water runoff from facility areas to the retention basin is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The Discharger shall implement green 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. The storm water retention basin shall be managed to prevent the breeding of mosquitoes.
5. Wastes shall only be discharged into, and shall be confined to, Units specifically designed for their containment as described in this Order.
6. The following wastes are acceptable to be received at the facility for processing in the composting areas:
 - a. "Green Material" including, but not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition woodwastes. Green material **does not include** food material, 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.
 - 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 (during October and November only and provided it will constitute no more than 50% of raw material processed during that period and will not exceed 13,250 tons per year), orchard and vineyard prunings, and crop residues. Agricultural Commodities **does not include** animal carcasses or parts thereof.
7. 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.

8. 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 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.
9. 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.

C. FACILITY SPECIFICATIONS

1. Compost and construction/demolition pads, storage and processing areas and storm water 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 at the 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 Board staff.

A design report shall be submitted pursuant to ¶D.4. prior to construction.

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 water in the retention basin as required by MRP No. R5-2004-0130.
 - 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. A design report submitted pursuant to ¶D.4. prior to construction.
 - 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.
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 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 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 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 Board as required by MRP No. R5-2004-0130.
4. The Discharger shall submit a design report for construction of the compost pad, processing and storage areas and for the storm water 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. The design report shall be submitted prior to construction of the facility.

E. PROVISIONS

1. The Discharger shall comply with these WDRs and the attached MRP No. R5-2004-0130. A violation of the MRP is a violation of these waste discharge requirements.
2. 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.

3. The Discharger shall file a Notice of Intent (NOI) with the State Board for coverage under the General NPDES permit for construction activities (NPDES General Permit No. 99-08-DWQ) prior to construction of the facility, and shall submit a SWPPP to the Regional Board in accordance with the requirements of the General NPDES Permit.
4. The Discharger shall file a NOI with the State Board for coverage under the General NPDES permit for industrial activities (NPDES General Permit No. 97-03-DWQ) prior to operation of the facility, and shall submit a SWPPP to the Regional Board 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.
5. The Discharger shall maintain waste containment facilities and precipitation and drainage control systems, and shall immediately notify the Regional 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.
6. The Discharger shall maintain legible records of the volume of green 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 Board and of State Board at any time during normal business hours.
7. 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 Board.
8. 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.
9. The Regional Board will review this Order periodically and will revise these requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

I, THOMAS R. PINKOS, 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

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QUACKENBUSH MOUNTAIN RESOURCE RECOVERY AND COMPOST FACILITY
GREEN WASTE COMPOSTING FACILITY
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- 14 -

Region, on 10 September 2004.

WLB

THOMAS R. PINKOS, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-0130

FOR
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GREEN WASTE COMPOSTING FACILITY
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 MONITORING

The Discharger shall sample water in the storm water retention basin in accordance with Table 1. Sample collection shall follow standard USEPA protocol.

TABLE 1 –RETENTION BASIN MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Specific Conductance	µmhos/cm	Annually ¹
pH	Number	Annually ¹
Turbidity	Turbidity Units	Annually ¹
Monitoring Parameters		
Ammonia	mg/l	Annually ¹
Biochemical Oxygen Demand	mg/l	Annually ¹
Chemical Oxygen Demand	mg/l	Annually ¹
Entrained Sediment	mg/l	Annually ¹
Nitrate as Nitrogen	mg/l	Annually ¹
Phosphate	mg/l	Annually ¹
Sulfate	mg/l	Annually ¹
Total Dissolved Solids	mg/l	Annually ¹
Total Organic Carbon	mg/l	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 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 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. R5-2004-0130 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 Board.

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

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

10 September 2004

Date

WLB

INFORMATION SHEET

ORDER NO. R5-2004-0130
PESTONI BROTHERS LLC AND SOUTH LAKE REFUSE & RECYCLING
QUACKENBUSH MOUNTAIN RESOURCE RECOVERY AND COMPOST FACILITY
GREEN WASTE COMPOSTING FACILITY
LAKE COUNTY

Pestoni Brothers LLC owns, and South Lake Refuse & Recycling (jointly hereafter Discharger) operates the Quackenbush Mountain Resource Recovery and Compost Facility, a green waste composting facility in Lake County. The Discharger submitted a 7 June 2004 Report of Waste Discharge (RWD) describing the proposed design and operation of this new facility which is to ultimately have capacity for up to 60,000 cubic yards of green waste in place. The proposed facility will also process construction and demolition (C&D) debris for recycling and disposal at the nearby Eastlake Landfill. These two operations will be conducted at the West site. A separate area designated as the East site will be used for dismantling of mobile homes for recycling and disposal at the landfill.

As allowed by Water Code Section 13269, the Regional Board formerly regulated green waste composting facilities under Resolution No. 96-031 *Conditional Waiver of Waste Discharge Requirements for Composting Operations* (hereafter the waiver). In 1999, passage of Senate Bill 390 modified Water Code Sections 13269 and 13350 to sunset all existing waivers of waste discharge requirements (WDRs) as of January 1, 2003.

Staff of the State Water Resources Control Board (State Board) have prepared draft tentative general WDRs for green waste composting facilities; however, it is currently under internal review and has not yet been considered for adoption. Since the proposed facility is new, a RWD had not been previously submitted to the Regional Board for coverage under the waiver, and since general WDRs for green waste composting do not yet exist, individual WDRs have been written for this facility. In preparing this Order, the language in the draft tentative general WDRs has been considered. This Order has been written to be as consistent as possible with the requirements of the draft tentative general WDRs so that if and when they are adopted by the State Board, this facility can apply for coverage under the general order without significant changes to its requirements. It has also been necessary to borrow some of the findings from the draft tentative general WDRs in order to justify the requirements of this Order, and in particular, findings related to waste classification and the applicability of the Title 27, California Code of Regulations (CCR) to a green waste composting facility. It is anticipated that regulation of this facility will be transferred under the general WDRs if and when they are adopted by State Board. If the State Board ultimately finds that Title 27 CCR is applicable to green waste composting facilities, then the necessary changes to waste containment features would affect this and all other existing green waste composting facilities similarly.

Some of the requirements of this Order are more stringent than those in the draft tentative general WDRs. This is due to site-specific considerations as well as proposals by the Discharger in the RWD. For instance, the RWD proposes a synthetic liner be installed in the storm water retention

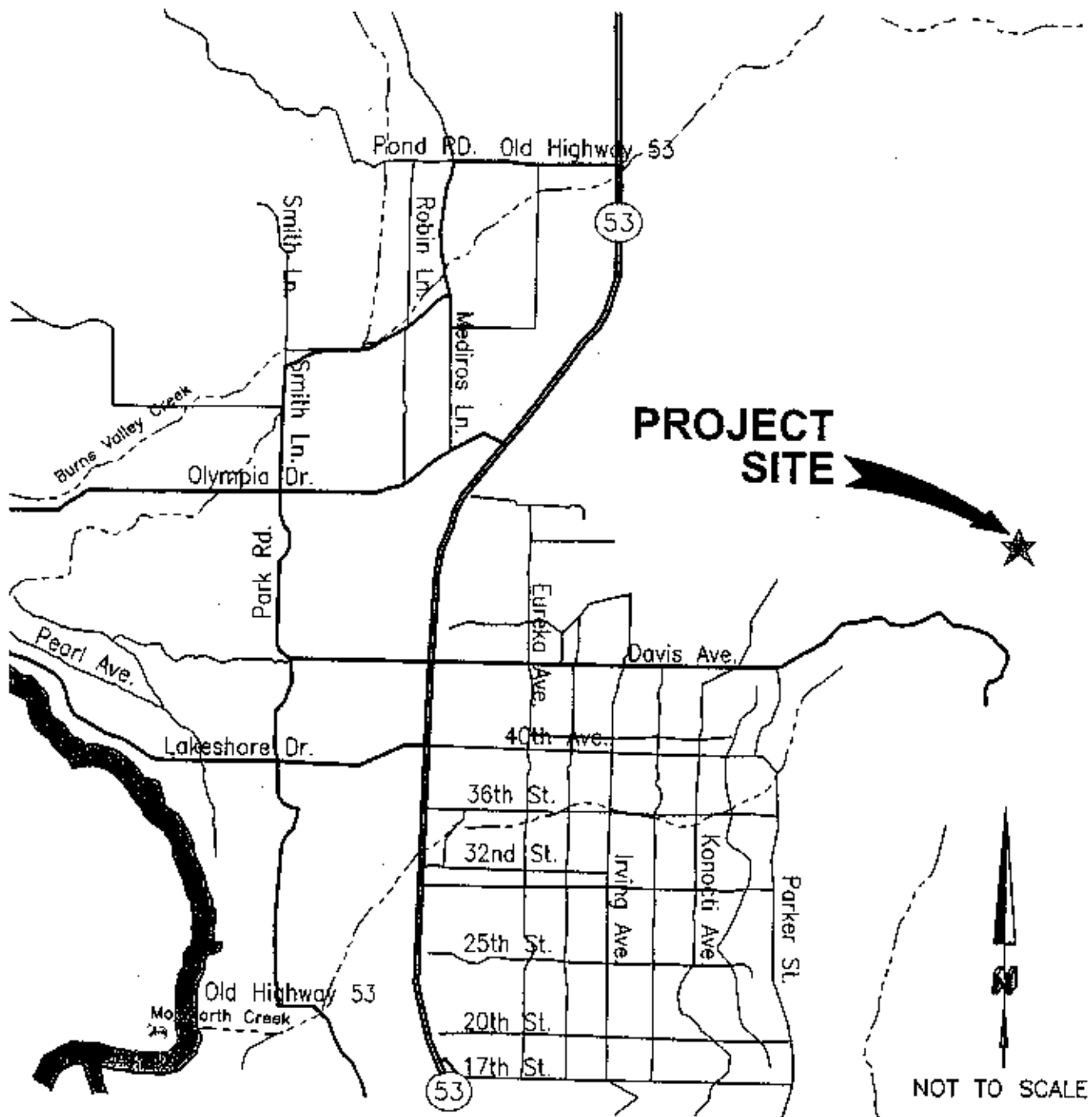
basin. This was a design consideration that followed from a geotechnical soils study of the facility. Another requirement is for the Discharger to monitor the storm water retention basin for sulfate. This requirement is necessary due the Discharger's proposal to add gypsum from wallboard to the compost. The Order requires that the storm water retention basin be large enough to accommodate runoff from a 25-year, 24-hour storm event. The proposed basin will be roughly three times larger than this.

The Order includes requirements for all areas of the proposed facility including the green waste composting, processing and storage areas, the C&D processing area, and the mobile home dismantling area. Since only the green waste composting, processing and storage areas drain to the storm water retention basin, the Order requires all non-inert wastes, including the gypsum wallboard, to be placed in covered metal bins so the waste is not exposed to storm water. Surface water from other areas of the facility drains north to an unnamed tributary to Burns Valley Creek that is tributary to Clear Lake. The Order also requires the Discharger to obtain coverage under the general NPDES permit for discharges of storm water associated with industrial facilities, and to prepare a Storm Water Pollution Prevention Plan.

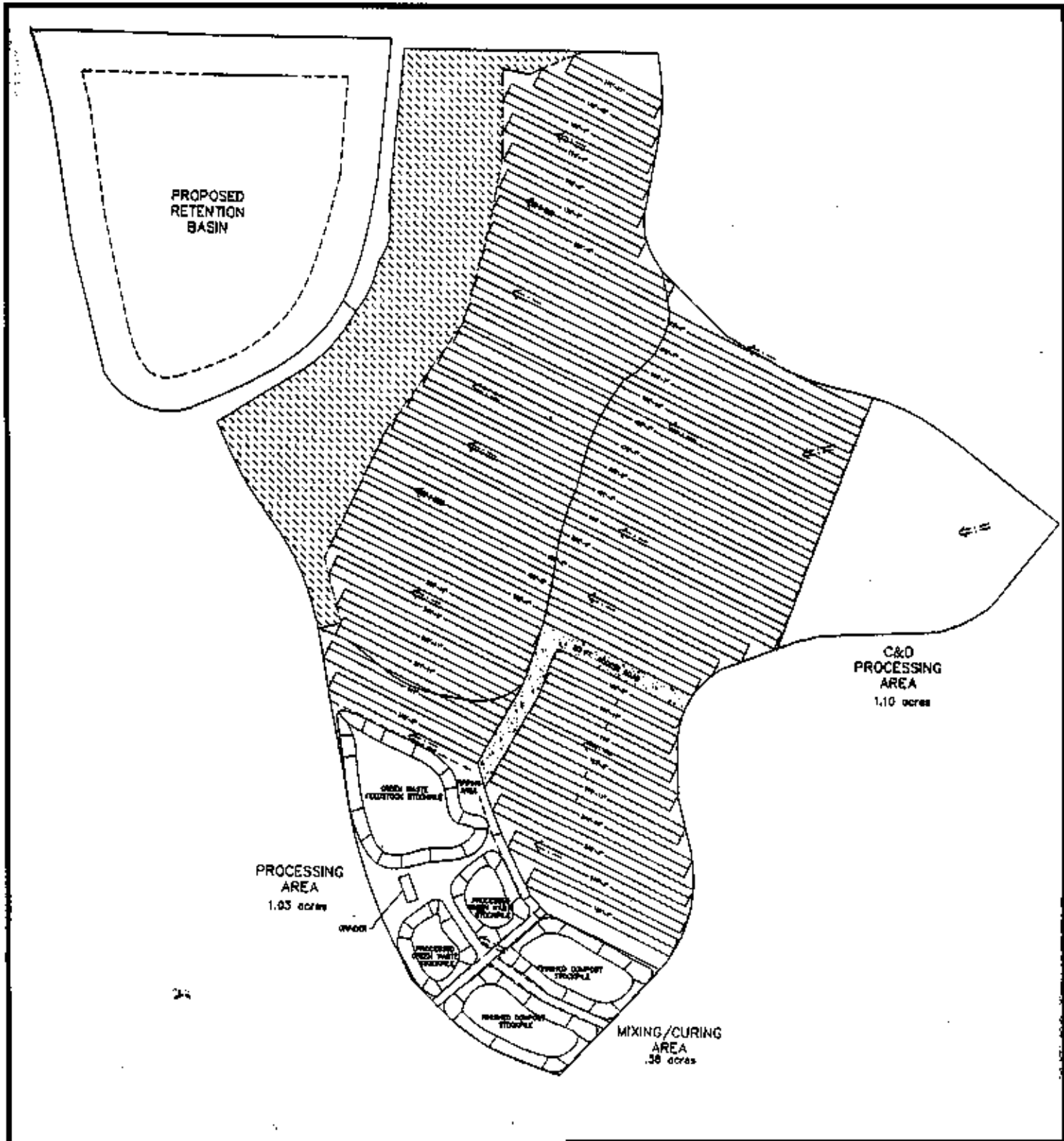
Green waste composting will be conducted on engineered pad compacted to 92% of maximum dry density. The geotechnical study indicates that the onsite surface and near surface soil will exhibit permeabilities of 1×10^{-5} cm/s or less at this compaction.

The Discharger proposes to process green waste for composting using two methods; the Elongated Windrow Method and 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. 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 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 uncompostable 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 in the windrows will be composted on the compacted low permeability pad areas constructed as required by this Order. 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. The total time feedstock remains at the facility is 13 weeks. The average curing time will be approximately 30 days.

WLB
10 September 2004



Attachment A
Site Location Map
Quackenbush Mt. Composting
Lake County



Scale: 1 Inch = 155 feet



Attachment B
 Site Map
 Quackenbush Mt. Composting
 Lake County
 Waste Discharge Requirements Order No. R5-2004-0130

Source: 7 June 2004 Report of Waste Discharge; Figure 6