



# California Regional Water Quality Control Board

## Central Coast Region



Linda S. Adams  
Agency Secretary

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Arnold Schwarzenegger  
Governor

February 17, 2009

Mr. Mike Hoover  
2290 Homestead Road  
Templeton, CA 93465

Dear Mr. Hoover:

### ADOPTION OF WASTE DISCHARGE REQUIREMENTS ORDER NUMBER R3-2009-0001 FOR THE CHICAGO GRADE CLASS III LANDFILL; SAN LUIS OBISPO COUNTY

Enclosed is a signed copy of Waste Discharge Requirements Order No. R3-2009-0001, and Monitoring and Reporting Program No. R3-2009-0001 (collectively, "Order") that were adopted by the Central Coast Water Board at its February 5, 2009 meeting.

Water Board staff have also posted a copy of the Order on our Website for other interested parties to view and print should they wish to do so. The Order is available at the following Web address:

[http://www.waterboards.ca.gov/centralcoast/board\\_decisions/adopted\\_orders/index.shtml](http://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/index.shtml)

If you have questions please contact **Dean Thomas at 805-549-3690.**

Sincerely,

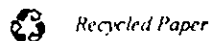
Roger W. Briggs  
Executive Officer

Enclosure:  
Order No. R3-2009-0001

S:\Land Disposal\Land Disposal Facilities\PERMITTED SITES\Chicago Grade\WDR & MRP 2009-0001\WDR R3-2009-0001 Transmittal Letter.doc

cc:  
(without enclosure)

***California Environmental Protection Agency***



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**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906**

**WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2009-0001**

Waste Discharger Identification No. 3400300001

Adopted at the February 5, 2009 Board Meeting

**FOR**

**CHICAGO GRADE CLASS III LANDFILL  
SAN LUIS OBISPO COUNTY**

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

**LANDFILL OWNER AND LOCATION**

1. The Chicago Grade Landfill and Recycling, LLC owns the Chicago Grade Class III Landfill (hereafter "Landfill"). Chicago Grade Landfill, Inc. operates the Landfill. Chicago Grade Landfill and Recycling, LLC and Chicago Grade Landfill, Inc. are collectively referred to as "Discharger." Mr. Michael Hoover (51% owner), Mr. William Underwood (24.5% owner) and Mr. and Mrs. Craig Palonen (24.5% owner) are the co-owners of both the Chicago Grade Landfill and Recycling, LLC and Chicago Grade Landfill, Inc.
2. The Landfill is located approximately four miles northeast of the City of Atascadero, San Luis Obispo County, at 2290 Homestead Road, see Figures 1 and 2. The Landfill is approximately one and one-half mile east of the Salinas River.
3. The Landfill is in Section 1, Township 8 South, Range 12 East, Mount Diablo Base & Meridian. The Landfill includes 142.6 acres with assessor's parcel numbers (APN) 034-212-005 and 45.4 acres with APN 034-212-006. Both parcels are owned by the Discharger.

**PURPOSE OF ORDER**

4. The Discharger is currently regulated by Waste Discharge Requirements Order No. R3-2004-0002 (hereafter "Order No. R3-2004-0002"). The purpose of Waste Discharge Requirements Order No. R3-2009-0001 (hereafter "Order" or "Order No. R3-2009-0001") is to revise and update requirements for discharging waste to the Landfill.
5. Order No. R3-2009-0001 adopted on February 5, 2009, replaces Order No. R3-2004-0002, adopted on May 14, 2004.

6. The Discharger submitted a Joint Technical Document (JTD) in April 2007 in support of a proposed lateral and vertical expansion of the landfill.
7. Order No. R3-2009-0001 includes the following key elements:
  - a. Specifications for disposal of treated wood waste.
  - b. Compliance review of the landfill facility.
  - c. Description of Landfill operations including waste management unit construction.
  - d. Update to reflect the Discharger's proposed vertical and 38-acre lateral expansion totaling 76.4-acres of permitted waste disposal area (Figure 2), and the expansion of the facility from 45.4 acres to 188 acres. The lateral expansion is located east and north of the current waste footprint.
  - e. Updated groundwater monitoring information, including analytical results and new detection monitoring wells.
8. The Discharger will design, construct, and operate the Landfill expansion pursuant to California Code of Regulations (CCR) Title 27, Solid Waste (hereafter "Title 27") effective July 18, 1997, and pursuant to Code of Federal Regulations Title 40, Part 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule, as promulgated on October 9, 1991 (hereafter "40 CFR 258").

#### LANDFILL DESCRIPTION AND HISTORY

9. The Landfill's property boundary ("waste management facility," as defined in Title 27) encompasses approximately 188-acres. The current waste footprint occupies about 34 acres. Existing waste modules (Modules 1, 2, and 3) and proposed future waste modules (Modules 4, 6, and 7 [Module 5 will not be developed]) will cover approximately 76.4-acres, as indicated on Figure 2. The future waste management unit is slightly larger than the area encompassing Modules 1 through 4, 6, and 7 to accommodate the drainage control system. Title 27 §20164 defines a "waste management unit" as an area of land, or a portion of a waste management facility, at which waste is discharged. The term includes containment features and ancillary features for precipitation and drainage control and for monitoring. For the Landfill, the waste management unit includes the disposal area, stormwater conveyance ditches and culverts, and sediment retention basins.
10. Approximately 22 acres of the facility (Module 1) are unlined (pre-Subtitle D regulations). Module 2 is a Subtitle D-composite-lined, 2.5-acre expansion west of Module 1. During construction of Module 2, the Discharger placed a plastic liner and leachate collection and removal system (LCRS) over the top of 3 acres of existing waste in Module 1. In March 2006, Water Board staff approved the completed construction of composite-lined Module 3, which began receiving waste shortly thereafter. A proposed 37.8-acre lateral expansion to the permitted disposal area (Modules 6 and 7) extends the estimated remaining life of the Landfill by 35 years to 2042, and increases the Landfill's waste capacity by 5.6 million cubic yards (3.9 million tons), for a total remaining capacity of 8.8 million cubic yards (as of April 2008).

11. Located in the northeast corner of the waste management facility is a 4.5-acre recycle area (Figure 2), which includes tire shredding, metals processing, and wood-waste grinding.
12. Land use within a one-quarter mile radius of the Landfill consists primarily of low-density rural residential usage, agricultural use (cattle grazing) and unimproved watershed areas. Several single-family residences, along with associated domestic water supply wells, are located along Homestead Road west of the Landfill, with the closest being approximately 1,500 feet away.
13. The average annual precipitation is about 19.8 inches, based on rainfall data collected at the Landfill from January 1995 to April 2008. Most precipitation occurs from November to April. The estimated reference evapotranspiration rate for Atascadero is 52 inches and occurs mainly from April to October.
14. The Landfill began operations in 1970. The method of discharge is canyon excavation, followed by area fill and cover. As of April 2008, the Landfill holds an estimated total amount of waste in Modules 1, 2, and 3 of approximately 1.27 million tons (1.8 million cubic yards, at 0.7 tons per cubic yard).

#### CLASSIFICATION AND WASTE TYPE

15. The Landfill is classified by the Water Board as a Class III waste management unit, approved for discharge of Nonhazardous Municipal Solid Waste, pursuant to Title 27 §20200.
16. The waste type allowed to be discharged at a Class III landfill, per Title 27 §20220, is generally limited to "Nonhazardous Solid Waste", defined as:

"All putrescible and nonputrescible solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction waste, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded waste (whether of solid or semi-solid consistency); provided that such wastes do not contain waste which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of water of the state (i.e., designated waste)."
17. Wastes received at the Landfill include non-hazardous residential curbside waste, commercial and industrial waste, demolition/construction debris, and used tires, suitable for disposal at a Class III landfill. The Landfill separates and recycles tires, appliances, scrap metal, wood waste, and green waste.

#### GEOLOGY/HYDROGEOLOGY

18. **Setting** – The Landfill is located in the hills on the east side of the Salinas River Valley. The Landfill is sited on the east side of a small north-south trending canyon, which merges immediately north of the Landfill with a larger east-west trending unnamed

canyon. Drainage from the unnamed canyon is westerly to the Salinas River, located approximately one mile west of the Landfill.

19. **Topography** – The Landfill occurs at elevations between 1,000 to 1,500 feet above mean sea level (MSL), in moderately to steeply rolling hills east of Atascadero (Figure 1).

20. **Stratigraphy** – Geologic units exposed at the landfill include the Monterey Formation, Paso Robles Formation, and the Quaternary-age alluvium. The Paso Robles Formation unconformably overlies the Monterey Formation, with a planar contact surface (elevation of approximately 1,100 feet MSL) that dips at a gradient of three to four percent towards the northeast. The Miocene age Monterey Formation consists primarily of fractured siliceous mudstone and shale of marine origin. Site exposures indicate that the Monterey Formation generally dips northward and is locally folded.

The Paso Formation is locally absent in the western landfill area and up to 300 feet thick at the eastern margin of the Landfill. The Paso Formation chiefly consists of claystone with lesser amounts of conglomerate and gravel. Alluvial deposits exist in the active drainage channels and consist of unconsolidated mixtures of cobbles, sand and silt derived from the local bedrock.

21. **Faulting** – The Landfill is located one mile east of the Rinconada fault. The Hosgri (magnitude 7.3 to 8.0) and San Andreas faults (magnitude 8.25 to 8.5) are located 24 miles west and east of the Landfill, respectively. The Rinconada fault, located about one-mile west of the Landfill, juxtaposes the Monterey shale to the east against the Paso Robles formation to the west. The Discharger estimates that the Rinconada fault has a maximum magnitude of 7.3, potentially resulting in a peak horizontal ground acceleration at the Landfill of 0.36 times the acceleration of gravity (g). There are two small north-south trending faults located through Modules 3 and 4. The Discharger estimates that these two small faults have been inactive for about 50,000 years and are likely related to the Rinconada fault. No known Holocene faults are located within 200 feet of the Landfill.

22. **Hydrogeology** – In areas surrounding the Landfill, the main groundwater-producing stratigraphic units are the alluvium and the Paso Robles Formation; however, these units are generally unsaturated beneath the Landfill. Rather, first encountered groundwater occurs in the Monterey Formation (under confined conditions) beneath the site. First encountered groundwater is between 40 and greater than 200 feet below ground surface beneath the facility. The potentiometric surface is between 25 and 100 feet below ground surface in the western edge of the waste management unit, and generally slopes towards the west at a gradient of .001 to .016 foot per foot. However, the potentiometric surface occasionally reverses gradient to the east, in response to rainfall infiltration, indicating that the Landfill is located over a groundwater divide. The Discharger estimates a groundwater seepage velocity of between four and 15 feet per year.

**SURFACE WATER, STORMWATER, AND GROUNDWATER**

23. The Landfill is located within the Salinas Hydrologic Unit east of, and approximately 400 feet above the Salinas River floodplain. The site is not within the 100-year flood plain, nor are there any designated wetlands on site.
24. Surface water runoff in the general vicinity of the Landfill is predominantly toward the west to southwest. Drainage from the Landfill enters an unnamed ephemeral creek located immediately north of the Landfill, which flows west toward the Salinas River.
25. Runoff above the Landfill is diverted away from waste by "V" ditches and corrugated metal pipes. Surface water runoff from the active landfill area is directed to sedimentation basins located immediately west of Module 2, and north of Module 3 (Figure 2). The overflow from sedimentation basins flows to the unnamed ephemeral creek described above. The basins are designed to retain the first 0.5 inches of rainfall from a storm before discharging to the ephemeral creek.
26. Groundwater quality from the Monterey Formation is generally poor because of its marine origin and associated salt content. Total dissolved solid (TDS) concentrations in groundwater from landfill detection monitoring wells ranges between 760 and 4,000 milligrams per liter (mg/L), with highest TDS occurring closest to the Landfill. The secondary maximum contaminant level for TDS is 500 mg/L. With the exception of dichlorodifluoromethane (Freon), no volatile organic carbon (VOC) compounds are detected in the landfill groundwater monitoring wells. Freon, which has no maximum contaminant level (MCL), has been sporadically detected since 1995 in monitoring well MW-7 at concentrations between 1 and 6 micrograms per liter. Perchlorate has been sporadically detected at concentrations between 3 and 13 micrograms per liter. The California MCL for perchlorate is 6 micrograms per liter. Perchlorate is both a natural and manmade substance and has been detected in a stormwater sample collected upgradient from the land disposal area. Perchlorate has not been detected in leachate collected from lined areas of the Landfill. Constituent of concern (COC) monitoring data indicates elevated levels of metals (arsenic, cadmium, and nickel) and selenium occur sporadically in MW-4 and MW-10. Because of the limited data set and geochemical variability of the Monterey Formation, it is difficult to determine background concentrations for these compounds.
27. East of the Rinconada Fault and in the vicinity of the Landfill, the Discharger has identified about 20 domestic water supply wells, which are completed in the Monterey Formation. There are numerous domestic wells located west of the Rinconada Fault and in the vicinity of the Landfill, which are completed in the older alluvial deposits. Domestic supply wells located to the west of the Rinconada Fault are completed to depths of 300 to 400 feet (elevation 700 to 600 feet above mean sea level) and yield water at 20 to 100 gallons per minute. The Rinconada Fault does not appear to be a significant barrier to groundwater flow.
28. Former upgradient monitoring well MW-5 and monitoring well MW-9b supply water to the landfill (Figure A-1 of the Monitoring and Reporting Program). There is one backup supply well located at the entrance to the Landfill (Office Well).

29. The Landfill is enrolled in the Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities (General Stormwater Permit for Industrial Activities), under State Water Resources Control Board Water Quality Order No. 97-03-DWQ and National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001.
30. The Landfill incorporates four sediment retention basins for purposes of controlling sediment loading from stormwater runoff. Discharges from the basins are monitored under the General Stormwater Permit for Industrial Activities.

### CONTROL SYSTEMS AND MONITORING

31. The landfill gas recovery system currently employs 22 gas extraction wells (GW-12 through GW-34), which includes five new wells installed in January 2007 and installation of a new gas flare system in December 2006. The new gas flare system is capable of operating at 400 cubic feet per minute. Former (dry) groundwater monitoring wells MW-1, -2, and -11 serve as perimeter soil-gas monitoring locations. The gas recovery system controls downward and lateral migration of methane and VOCs associated with landfill gas, and limits the dissolution of landfill gas in groundwater and soil moisture.
32. Monitoring and Reporting Program (hereafter "MRP") No. R3-2009-0001, issued by the Water Board's Executive Officer, requires monitoring and reporting on: groundwater; vadose zone; leachate collection and removal; landfill gas; stormwater drainage; waste intake; rainfall data; and physical site observations. The MRP establishes groundwater monitoring points; monitoring frequency; monitoring parameters; constituents of concern; criteria for sample collection and analyses; methods for analyzing data both statistically and non-statistically; minimum monitoring report content; and, definition of terms.

### BASIN PLAN

33. The Water Quality Control Plan, Central Coast Basin (Basin Plan), was adopted by the Water Board on September 8, 1994, and approved by the State Water Resources Control Board on November 17, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the water quality objectives stated in that Plan.
34. The Basin Plan identifies the following present and anticipated beneficial uses for the unnamed surface water tributaries located adjacent and downstream of the Landfill:
- Municipal and domestic supply
  - Protection of both recreational use and aquatic life
35. Currently, groundwater use in the vicinity of the Landfill is agricultural and domestic water supply. The Basin Plan identifies the following present and anticipated beneficial uses of groundwater in the vicinity of the Landfill:
- Agricultural water supply
  - Municipal and domestic water supply
  - Industrial use



36. The Basin Plan identifies the following present and anticipated beneficial uses for the Salinas River:
- a. Agricultural
  - b. Cold and warm fresh water habitat
  - c. Commercial and sport fishing
  - d. Groundwater recharge
  - e. Industrial Process
  - f. Migration of aquatic organisms
  - g. Municipal and Domestic
  - h. Rare, threatened or endangered species
  - i. Spawning, reproduction and/or early development
  - j. Water contact and non-contact recreation
  - k. Wildlife habitat

### CALIFORNIA ENVIRONMENTAL QUALITY ACT

37. This Order contains prohibitions, discharge specifications, water quality protection standards, and provisions intended to protect the environment by mitigating or avoiding impacts of the project on water quality. The Order addresses both an existing facility and a lateral expansion.

A Mitigated Negative Declaration, which was filed with the State Clearinghouse (SCH #1995071081) and adopted by the Environmental Coordinator's Office of the San Luis Obispo County Building and Planning Department on April 25, 2003, addressed the lateral expansion that includes Modules 3, 4 and 5.

The Discharger removed Module 5 from the development plan as part of the land use permit for Modules 6 and 7. The lateral and vertical expansion that includes Modules 6 and 7 is addressed by a Final Environmental Impact Report (EIR) [State Clearinghouse # 2004071092] and adopted by the San Luis Obispo County Board of Supervisors on February 27, 2007. The Final EIR found potentially significant environmental impacts to soils/geology and water quality that will require the following mitigation measures:

- 1) Geology and Soils Impact: erosion and sedimentation at the proposed ridge fill locations.

Mitigation Measure: The County must review and approve an erosion control and revegetation plan for the ridge fill areas prior to any grading activity, landform alteration, or other earthwork or construction activity outside the 45.4-acre permitted area.

- 2) Water Impact: surface water quality degradation from sedimentation from the proposed expansion area or the proposed ridge-fill area.

Mitigation Measure: The California Integrated Waste Management Board (CIWMB) and the Water Board must review and approve the Discharger's conformance to

detailed erosion control requirements as defined in Title 27 prior to approval of revised Solid Waste Facility Permit by the CIWMB.

3) Water Impact: groundwater quality degradation from accidental release of leachate.

Mitigation Measure: The CIWMB and Water Board must review and approve the Discharger's conformance to detailed landfill liner and leachate control and management requirements as defined in Title 27 prior to approval of a revised Solid Waste Facility Permit by the CIWMB.

If implemented as required in the Final EIR, the above identified mitigation measures will reduce the potential impacts to less-than-significant.

38. The Water board has considered the Mitigated Negative Declaration and the Final EIR adopted by the County of San Luis Obispo and makes the following conclusions. Except as discussed above, all other potential environmental impacts identified in the Final EIR are not within the responsibility and jurisdiction of the Water Board. Those other impacts and mitigation measures do not relate to water quality or pollution or nuisance attendant with discharges of waste. This Order incorporates requirements that satisfy the mitigation measures identified in the Final EIR.

39. Except with respect to the proposed lateral expansion, this Order is for an existing facility and therefore is exempt from provisions of the California Environmental Quality Act (Public Resources Code, §21000, et seq.) in accordance with Title 14, Chapter 3, §15301.

#### GENERAL FINDINGS

40. In accordance with Title 27 §20260(b)(1) and 40 CFR 258.40, the Water Board finds that all new waste management units constructed at the Landfill must have prescriptive composite liners, except for engineered alternatives as provided in Title 27 §20080(b) and 40 CFR 258.40(a)(1) and (c).

41. In accordance with California Water Code section 13263(g), no discharge into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to discharge. All discharges of waste into waters of the state are privileges, not rights. Authorization to discharge waste is conditioned upon the Discharger complying with provisions of Division 7 of the California Water Code and with any more stringent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent nuisance. Compliance with Order No. R3-2009-0001 should assure conditions are met and mitigate any potential changes in water quality attributed to the Landfill.

42. The Landfill meets the criteria of Title 27 and 40 CFR for a Class III landfill suitable to receive non-hazardous solid waste. Order No. R3-2009-0001 implements, but is not limited to, the prescriptive standards and performance goals of Title 27 and 40 CFR.

43. **Antidegradation:** State Water Board Resolution No. 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters in California (Resolution No. 68-16)

requires Regional Water Boards, in regulating the discharge of waste, to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with the maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a Regional Water Board's policies (e.g., quality that exceeds applicable water quality standards). Resolution No. 68-16 also states, in part:

"Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in best practicable treatment and control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained".

44. The discharges regulated by this Order are required to comply with the land disposal regulations contained in Title 27, which are intended to prevent discharges of waste to waters of the state, preventing degradation of waters of the state. The discharge is subject to waste discharge requirements which will result in best practicable treatment or control.
45. This Landfill is regulated under California Solid Waste Facility Permit No. 40-AA-0008, issued August 17, 2008.
46. The Landfill operates its gas extraction system under San Luis Obispo County Air Pollution Control District permit number 547-5. The Discharger is required to renew this permit annually.
47. "Treated wood" means wood that contains a chemical preservative for purposes of protecting the wood against attacks from insects, microorganisms, fungi, and other environmental conditions that can lead to decay of the wood and the chemical preservative is registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code, Sec. 136 and following). This may include but is not limited to waste wood that has been treated with chromated copper arsenate, pentachlorophenol, creosote, acid copper chromate, ammoniacal copper arsenate, ammoniacal copper zinc arsenate, or chromated zinc chloride. Existing law regulates the control of hazardous waste, but exempts from the hazardous waste control laws, wood waste that is exempt from regulation under the federal Resource Conservation and Recovery Act (RCRA) of 1976, as amended if the wood waste is disposed of in a municipal landfill that meets certain requirements imposed pursuant to the Porter-Cologne Water Quality Control Act for the classification of disposal sites, and the Landfill meets other specified requirements outlined in Sections 25143.1.5 and 25150.7 of the Health and Safety Code. Section 25150.8 of the Health and Safety Code also provides that if treated wood waste is accepted by a solid waste landfill that manages and disposes of the treated wood waste in the manner specified, the treated wood waste shall be deemed to be a solid waste, and not a hazardous or designated waste. The Discharger has indicated that all treated wood waste accepted at the facility will be handled and disposed of in accordance with the provisions outlined in Sections 25143.1.5, 25150.7, and 25150.8 of the Health and Safety Code.

48. In May 2008, the CIWMB stated that the Discharger has demonstrated availability of financial resources to conduct closure and post closure maintenance activities and an appropriate financial assurance instrument for corrective action for a reasonably foreseeable release at the Landfill. The financial instruments for closure, post closure maintenance, and corrective action are annually adjusted for inflation.
49. Effective March 30, 2009, the Department of Toxic Substances Control (DTSC) repealed conditional authorization letters that allow automobile shredder waste that is subjected to certain treatment requirements to be classified as non-hazardous waste because DTSC's testing and analyses has shown increasing levels of hazardous constituents in the treated shredder waste.
50. On November 13, 2008, the Water Board notified the Discharger and interested agencies and persons of its intent to issue Waste Discharge Requirements for the Landfill, and has provided the opportunity to review a copy of the proposed Order and submit written views and comments.
51. After considering all comments pertaining to this discharge during a public hearing on February 5, 2009, this Order was found consistent with the above findings.

**IT IS HEREBY ORDERED** pursuant to authority in §13263 and §13267 of the California Water Code, the Discharger, its agents, successors, and assigns in maintaining the Chicago Grade Class III Landfill shall comply with the following:

**A. COMPLIANCE WITH OTHER REGULATIONS AND ORDERS**

1. Discharge of waste, operations, and monitoring shall comply with all applicable requirements contained in Title 27 and 40 CFR Parts 257 and 258. If any applicable regulation requirements overlap or conflict in any manner, the most water quality protective requirement shall govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer.
2. The Discharger shall control stormwater runoff releases from the Landfill by complying with all requirements contained in the General Stormwater Permit for Industrial Activities.
3. This Landfill is subject to Water Board's Cleanup and Abatement Order No. R3-2002-0130 "Moratorium on the Disposal of Decommissioned Materials to Class III and Unclassified Waste Management Units" adopted on October 11, 2002.

**B. PROHIBITIONS**

1. Discharge of waste to areas outside the Permitted Disposal Area for the Waste Management Unit as illustrated in Figure 2 is prohibited.
2. Discharge of waste within the "Permitted Disposal Area for Waste Management Unit" is prohibited except as provided in **Specification C.3**.

3. Discharge of hazardous waste or hazardous constituents, except for treated wood waste or waste that is hazardous due only to its asbestos content, is prohibited. Wastes that are prohibited include but are not limited to:
  - a. Radioactive wastes.
  - b. Designated waste.
  - c. Hazard waste, except waste that is hazardous due only to its asbestos content. Asbestos containing greater than one percent friable material is considered hazardous.
  - d. Chemical and biological warfare agents.
  - e. Waste solvents, dry cleaning fluids, paint sludge, pesticides, phenols, brine, and acid and alkaline solutions.
  - f. Oils or other liquid petroleum products.
  - g. Wastes that have the potential to reduce or impair the integrity of containment structures or which, if commingled with other wastes in the unit, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products.
  - h. Wastes that require a higher level of containment than provided by the Landfill.
  - i. Liquid or semi-solid waste containing less than 50 percent solids by weight. This includes landfill leachate and gas condensate, except as allowed by **Specification C. 6**.
4. Discharge of waste or leachate to ponded water, drainageway(s) or waters of the State, including groundwater, is prohibited.
5. Discharge of liquid waste, meaning any waste materials that are determined to contain free liquids through visual inspection, or as defined by Method 9095 (Paint Filter Liquids Test), is prohibited.
6. Discharge of waste within 50 feet of the property line, 100 feet of surface waters, or 100 feet of domestic water supply wells is prohibited.
7. Discharge of automobile shredder waste (Finding No. 49), with the exception of shredded tires for alternative daily cover, is prohibited.

### C. SPECIFICATIONS

1. Discharge of waste shall not cause a condition of pollution or contamination to occur through a statistically significant release of pollutants, contaminants, and/or waste constituents, as indicated by the most appropriate statistical [or non-statistical] data analysis method and retest method described in MRP No. R3-2009-0001.
2. Discharge, collection, and treatment of waste shall not create nuisance, as defined by California Water Code Section 13050(m).
3. The Discharger shall not discharge waste to areas inside the "Permitted Disposal Area for Waste Management Units," which did not receive waste as of April 9, 1994, unless the discharge is to an area equipped with an Executive Officer-approved containment system consisting of a composite liner and LCRS. The liner must consist of the following three components, pursuant to 40 CFR 258 and Title 27 §20340:

- i. Lower Component: a layer of compacted soil that is at least two feet thick that has a hydraulic conductivity of no more than  $1 \times 10^{-7}$  centimeters per second (0.1 feet/year);
  - ii. Upper Component: a synthetic flexible membrane liner at least 40-thousandths of an inch (mil) thick (or at least 60-mils thick if the liner is high-density polyethylene) that is installed in direct and uniform contact with the Lower Component;
  - iii. Leachate Collection and Removal System: The LCRS system must be capable of minimizing head buildup over the liner to less than 30 centimeters in depth. The LCRS must consist of a permeable subdrain layer which covers the bottom of the module and extends as far up the sides as possible, (i.e., blanket type). The LCRS must be of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment and must be designed and operated to function without clogging through the scheduled closure and post closure maintenance period; or,
  - iv. An engineered alternative design that satisfies the performance criteria in 40 CFR 258.40(a)(1) and (c), and satisfies the criteria for an engineered alternative to the Prescriptive Design, as provided by Title 27 §20080(b), where the Discharger receives written concurrence from the Executive Officer that the performance of the alternative composite liner's components, in combination, equal or exceed the waste containment capability of the regulatory Prescriptive Design.
4. The Discharger shall design, construct, and maintain to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage to waste management units, containment structures, and drainage facilities resulting from natural disasters (e.g., floods with a predicted frequency of once in 100 years, the maximum probable earthquake, and severe wind storms).
  5. The Discharger shall prevent formation of a habitat for carriers of pathogenic microorganisms.
  6. Discharge of condensate or leachate shall comply with the following:
    - a. The Discharger may only return liquids to a waste management unit equipped with a containment system that meets or exceeds the performance standard of Title 27, CFR 40 Part 258.40(a)(2), or the standard set in this Order, whichever is more protective of water quality;
    - b. The Discharger must measure liquids by volume and record the volume on a monthly basis. The Discharger shall include the monthly volume records in the monitoring submittals required in MRP No. R3-2009-0001;
    - c. A second containment system sized to hold 100% of the primary containment system holding capacity;
    - d. The Discharger may discharge liquids in compliance with this Order.
    - e. The Discharger may not discharge leachate within 48 hours of any forecasted rain event, during any rain event, or 48-hours after any rain event; and,
    - f. An approved alternate method of leachate disposal (e.g., wastewater treatment plant), that is acceptable to the Executive Officer.
  7. Daily cover shall prevent nuisance and excess leachate generation, and promote lateral runoff of precipitation/surface water away from the active disposal area. Upon Executive

Officer approval, alternative daily cover materials may be utilized. Shredded tires, tarps, and wood chips are approved as daily cover during the dry season (May through October of each year).

8. The Discharger shall stockpile daily cover material during favorable weather to ensure that adequate daily cover material is accessible during inclement weather.
9. The Discharger shall operate the Landfill and configure the final Landfill contours, in conformance with the most recent Executive Officer-approved Operations Plan, and/or Report of Waste Discharge/Joint Technical Document (collectively Plan) except where the Plan conflicts with this Order. The most recently approved Plan is the Discharger's April 2007 "Joint Technical Document." In the event of conflict, this Order shall govern in cases where it is more protective of water quality. Any change to the Plan that may affect compliance with this Order shall be approved in writing by the Executive Officer prior to the change being implemented.
10. The Discharger shall grade and operate all Landfill surfaces and working faces to minimize precipitation/surface water from infiltrating into waste, to prevent ponding of water, and to resist erosion. Erosion rills greater than six inches in depth must be repaired. The Discharger shall provide positive drainage to divert precipitation/surface water runoff from areas containing waste.
11. Pursuant to the General Stormwater Permit for Industrial Activities, the Discharger shall use best management practices to maintain the capacity of stormwater retention facilities and thereby reduce or prevent pollutants in stormwater from discharging into receiving waters to the best available technology standard. Title 27 §20365 requires that the Discharger periodically removes accumulated sediment from the stormwater retention facilities and to empty or otherwise manage the facilities to maintain their capacity.
12. The Discharger shall maintain a minimum of two feet of freeboard in all stormwater/sediment containment basins. Freeboard is defined as the distance between the water surface within the sedimentation basin and the top of the impoundment.
13. The Discharger shall design, construct, and maintain to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage to waste management units, containment structures, and drainage facilities resulting from natural disasters (e.g., floods with a predicted frequency of once in 100 years, the maximum probable earthquake, and severe wind storms).
14. The Discharger shall provide all Landfill areas that have not reached final fill elevation, but will remain inactive over one-year, with an Executive Officer-approved, long-term intermediate cover. The thickness and permeability of the long-term intermediate cover shall be based primarily on site-specific conditions including, but not limited to length of exposure time; volume of underlying material, soil permeability, thickness and composition of existing cover; amount of yearly rainfall; depth to groundwater; beneficial uses of underlying groundwater; site-specific geologic and hydrogeologic conditions; and effectiveness of existing monitoring systems.

15. Wastes containing greater than one percent (>1%) friable asbestos are classified as hazardous under CCR, Title 22. Since such wastes do not pose a threat to water quality, §25143.7 of the Health and Safety Code permits their disposal in any landfill, providing waste discharge requirements specifically permit the discharge. Asbestos may be discharged in the Landfill only if it is handled and disposed of in accordance with §25143.7 of the Health and Safety Code, CCR, Title 14, §17897 "Standards for Handling and Disposal of Asbestos-Containing Waste," and all other applicable Federal, State, and local statutes and regulations.
16. New landfill units and lateral expansions shall not be located in wetlands, as defined in 40 CFR §232.2(r), unless the owner or operator can make demonstrations pursuant to 40 CFR §258.12(a) that the discharge of waste will not cause or contribute to significant degradation of wetlands and associated ecological resources.
17. Wastes discharged in violation of this Order, shall be removed and relocated.
18. "Treated wood" wastes may be discharged, but only to an area equipped with a composite liner and LCRS, and shall be handled in accordance with California Health and Safety Code §25143.1.5 and §250150.7.

#### **D. WATER QUALITY PROTECTION STANDARDS**

1. The discharge of waste shall not cause a statistically significant difference in water quality over background concentrations for proposed Concentration Limits for each Constituent of Concern or Monitoring Parameter (per MRP No. R3-2009-0001) at the Point of Compliance. The Concentration Limits shall be maintained for as long as the waste poses a threat to water quality. Discharge of waste shall not adversely impact the quality of State waters.
2. Pursuant to Title 27 §20405, the Point of Compliance is a vertical surface located at the hydraulically downgradient limit of a waste management unit that extends through the uppermost aquifer underlying the waste management unit.
3. Discharge of waste shall not cause concentrations of chemicals and radionuclides in groundwater to exceed the State Department of Public Health's latest recommended Drinking Water Action Levels or Maximum Contaminant Levels of CCR Title 22, Division 4, Chapter 15, Article 5.5.
4. Discharge of waste shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Water Board or the State Water Resources Control Board.
5. Discharge of waste shall neither cause nor contribute to any surface water impacts.
6. Constituents of Concern and monitoring parameters for groundwater and landfill gas are listed in MRP No. R3-2009-0001. Monitoring points and background monitoring points shall be those specified in MRP No. R3-2009-0001.



7. The Compliance Period, pursuant to Title 27 §20380(d)(1) and §20410, is estimated to be the year 2072 [based on the Landfill estimated closure date of 2042 plus 30 years, pursuant to 40 CFR 258.61(a)], or until waste discharged at the Landfill no longer poses a threat to water quality, whichever is longer [except as provided by 40 CFR 258.61(b)1].

#### **E. PROVISIONS**

1. Order No. R3-2004-0002 "Waste Discharge Requirements for the Chicago Grade Class III Landfill," adopted by the Water Board on May 14, 2004, is hereby rescinded.
2. The Discharger is responsible for waste containment, monitoring, and correcting any problems resulting from the discharge of waste for as long as the waste poses a threat to water quality.
3. The Discharger shall comply with MRP No. R3-2009-0001, as specified by the Executive Officer.
4. **By October 1 of each year**, the Discharger shall complete all necessary runoff diversion and erosion prevention measures. The Discharger shall complete all necessary construction, maintenance, or repairs of precipitation and drainage control facilities to prevent erosion or Landfill flooding and to prevent surface drainage from contacting or percolating through waste. The Discharger shall repair erosion rills greater than six-inches deep immediately after storm events that cause the erosion, if it is safe to do so.
5. **By November 1 of each year**, the Discharger shall plant and maintain vegetation (as necessary) over all slopes within the entire Landfill area to prevent erosion. The Discharger shall select vegetation that requires a minimum of irrigation and maintenance and a rooting depth not to exceed the vegetative layer thickness. After notifying the Executive Officer, non-hazardous sludge may be utilized as a soil amendment to promote vegetation. Soil amendments and fertilizers (including wastewater sludge) used to establish vegetation shall not exceed the vegetation's agronomic rates (i.e., annual nutrient needs).
6. **By October 1 of each year** and throughout the rainy season of each year, the Discharger shall maintain a compacted soil cover designed and constructed to minimize percolation of precipitation through waste over the entire active Landfill area. The only exception to this specification is the working face. The working face shall be confined to the smallest area practicable based on the anticipated quantity of waste discharged and required by waste management facility operations. Based on site-specific conditions, the Executive Officer may require a specified thickness of soil cover for any portion of the Landfill's active waste management unit prior to the rainy season.
7. Should additional data become available through monitoring or investigation that indicates compliance with this Order is not adequately protective of water quality, the Water Board will review and revise this Order as appropriate.
8. If the Discharger or the Water Board determines, pursuant to Title 27, §20420, that there is evidence of a release from any portion of the Landfill, the Discharger shall immediately

implement the procedures outlined in Title 27 §20380, §20385, §20430, and MRP No. R3-2009-0001.

9. This Order does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under federal, state, or local laws, and does not guarantee a capacity right.
  10. The Water Board shall be allowed, when Landfill staff is on site and without prior notification (note: office access shall be limited to Monday through Friday 8 a.m. to 4 p.m.):
    - a. Entry upon the Landfill area or where records are kept under the conditions of this Order and MRP No. R3-2009-0001.
    - b. Access to copy any records that must be kept under the conditions of this Order and MRP No. R3-2009-0001.
    - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order and MRP No. R3-2009-0001.
    - d. To photograph, sample, and monitor for the purpose of showing compliance with this Order.
- When public health or safety are threatened, Water Board staff shall be allowed access to the Landfill at any time, with or without prior notification or the presence of Landfill staff.
11. The Discharger shall take all reasonable steps to minimize or correct adverse impacts on the environment resulting from non-compliance with this Order.
  12. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
    - a. Violation of any term or condition contained in this Order.
    - b. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts.
    - c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge.
    - d. A material change in character, location, or volume of the waste being discharged to land.
  13. **Two-weeks** prior to constructing each phase of a waste management unit (e.g., preparing foundation, installing liner, installing leachate collection and removal system, placing operations layer, etc.), the Discharger must arrange for a Water Board staff inspection.
  14. Prior to liner or cover construction, a third party (e.g., unrelated to the Discharger, Landfill operator, project designer, contractor) must prepare a Construction Quality Assurance (CQA) Plan. The third party and CQA Plan must be approved by the Executive Officer; the third party must also implement the CQA Plan and provide regular construction progress reports to the Executive Officer.

15. Prior to beginning discharge of waste into any newly constructed waste management unit, the Discharger must receive a final inspection and written approval from the Executive Officer.
16. The Discharger shall obtain and maintain Financial Assurance Instruments (Instruments), which comply with CCR Title 27 (§22207 [Closure Fund], §22212 [Post Closure Fund], and §22220 et seq. [Corrective Action Fund]), and 40 CFR parts 257 and 258. Pursuant to CCR Title 27 §20380(b), the Discharger shall obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases that name the Water Board as beneficiary. As landfill conditions change, and upon the Water Board's request, the Discharger shall submit a report proposing the amount of financial assurance necessary for corrective action for the Executive Officer's review and approval. The Discharger shall demonstrate compliance with all financial instruments to the Water Board at a minimum of a) every five years, or b) when the Discharger submits a revised Joint Technical Document. The next regularly scheduled Joint Technical Document is due **December 16, 2013**.
17. Submit a plan by **June 30, 2009** to evaluate background concentrations and/or potential sources of elevated metals in groundwater [Finding No. 26]. The plan shall include scoping for proposed Module 6 and 7's new detection monitoring well. The new well will provide additional background monitoring data for the Landfill, as such it shall be installed a minimum of one year before Modules 6 and 7 construction commences.
18. Sewage sludge or water treatment sludge with greater than 50% moisture content may be discharged at the Landfill if all of the following criteria are met:
- Sludge shall be discharged only to waste management units that have a leachate collection and removal system designed such that leachate gravity drains to a collection point/sump and is removed through gravity or pumping to a holding tank or sanitary sewer for volume measurement, testing and disposal.
  - A daily minimum solids-to-sludge ratio of 5 to 1, based on weight, shall be maintained when co-disposing (burying) sludge with solid waste.
  - Primary and mixtures of primary and secondary sewage sludge shall contain at least 20 percent solids by weight.
  - Secondary sewage sludge and water treatment sludge shall contain at least 15 percent solids by weight.

## REPORTING

19. All reports shall be signed as follows:
- a. By either a principal executive officer or ranking elected official.
  - b. Their "duly authorized representative."
  - c. A California Registered Civil Engineer or Certified Engineering Geologist must sign engineering reports.

20. Any person signing a report makes the following certification, whether its expressed or implied:
- "I certify under penalty of perjury I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
21. Except for data determined to be confidential under §13267 (b)(2) of the California Water Code, all reports prepared in accordance with this Order shall be available for public inspection at the Water Board office.
22. The Discharger shall submit reports in advance of any planned changes in the permitted Landfill or in an activity, which could potentially or actually result in noncompliance.
23. By **October 1 of each year**, the Discharger shall submit a Wet Weather Preparedness Report (WWPR). The WWPR shall describe compliance with Provisions E.4, E.5, and E.6 above. The report shall also detail preparedness actions taken to ensure discharges to surface or groundwater do not occur during the impending rainy season, and ensure compliance with all other relevant Title 27 and 40 CFR 258 criteria.
24. At least **180-days** prior to construction of a waste management unit the Discharger must submit design plans and a CQA Plan. The Executive Officer will provide comments on the design plans and CQA Plan to the Discharger no later than 90-days after receiving the document. Prior to beginning construction, the Discharger must receive Executive Officer approval on the waste management unit's design and CQA Plan.
25. The Discharger shall notify the Water Board with a written request of any proposed change in ownership or responsibility for construction or operation of the Landfill in accordance with Title 27, §21710 (c)(1). The written request shall be given at least 90-days prior to the effective date of change in ownership or responsibility and shall:
- a. Be accompanied by an amended Report of Waste Discharge and any technical documents that are needed to demonstrate continued compliance with these Waste Discharge Requirements.
  - b. Contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Water Board.
  - c. Contain a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order.
26. Request for change in ownership or responsibility may be approved or disapproved in writing by the Executive Officer. In the event of any change in ownership of this Landfill, the Discharger shall notify the succeeding owner or operator, in writing, of the existence of this Order. A copy of that notification shall be sent to the Executive Officer.

27. The Discharger shall furnish, within a reasonable time, any information the Executive Officer may request to determine compliance with this Order or to determine whether cause exists for modifying or terminating this Order.
28. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources, and San Luis Obispo County, with concurrence of the Executive Officer regarding the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with the MRP No. R3-2009-0001, as required by §13750.5 through §13755 and §13267 of the California Water Code.
29. Should the Discharger discover that it failed to submit any relevant facts or that it submitted incorrect information, it shall promptly submit the missing or corrected information.
30. The Discharger shall notify the Executive Officer, within 24 hours by telephone and within 14 days in writing, of:
- a. Any noncompliance that potentially or actually endangers health or the environment. Reports of noncompliance shall include a description of:
    - i. The reason for non-compliance;
    - ii. A description of the non-compliance, including photo documentation;
    - iii. Schedule of tasks necessary to achieve compliance; and,
    - iv. An estimated date for achieving full compliance.
  - b. Any flooding, equipment failure, slope failure, or other change in Landfill conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures;
  - c. Leachate seep(s) occurring on or in proximity to the Landfill;
  - d. Violation of a discharge prohibition; and,
  - e. Violation of any treatment system's discharge limitation.
31. Reports of compliance or noncompliance with, or any progress reports on, final requirements contained in any compliance schedule shall be submitted within 14-days following each scheduled date. If reporting noncompliance, the report shall include a description of:
- a. The reason for non-compliance.
  - b. A description of the non-compliance.
  - c. Schedule of tasks necessary to achieve compliance.
  - d. An estimated date for achieving full compliance.
32. The Discharger shall promptly correct any noncompliance issue that threatens the Landfill's containment integrity. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment and/or the Landfill's integrity (i.e., emergency corrective measures). For emergency corrective measures, the Discharger shall report details of the corrections made in a written report submitted within seven (7) days of initiating correction.

33. By **December 16, 2013**, the Discharger must submit a Report of Waste Discharge (hereafter "ROWD") pursuant to CCR Title 27 §21710, to the Executive Officer. The ROWD is to be submitted in the form of an addendum to the JTD, in accordance with Title 27 §21585 et al. and meet the following criteria:
- Contain updated information on waste characteristics, geologic and climatologic characteristics of the waste management facility and the surrounding region, installed features, precipitation and drainage controls, and closure and post closure maintenance plans, in accordance with CCR Title 27 §21740, §21750, §21760, and §21769.
  - Include a completed State Water Resources Control Board JTD Index, in accordance with CCR Title 27 §21585(b).
  - Discuss whether, in the Discharger's opinion, there is any portion of this Order that is incorrect, obsolete, or otherwise in need of revision.
  - Include any other technical documents needed to demonstrate continued compliance with this Order and all pertinent State and Federal requirements.
  - Include detailed updated information regarding regulatory considerations, operating provisions, environmental monitoring, and closure and post closure.
34. By **December 16, 2013** or earlier as needed, submit for the Executive Officer's review and approval an updated report on a reasonably foreseeable release, along with adjustments to financial assurances (as necessary).
35. The Discharger shall file with the Water Board a ROWD (in accordance with Provision E. 24 of this Order) or secure a waiver from the Executive Officer at least **120-days** before making any material change or proposed change in the character, location, or volume of the waste being discharged to land.

## ENFORCEMENT

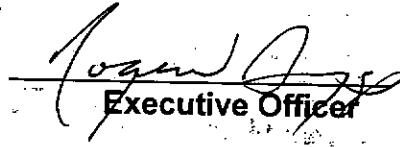
36. The Discharger must comply with all conditions of this Order. Non-compliance violates state law and is grounds for enforcement action or modification of the Order.
37. Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of §13267 of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.
38. The Discharger and any person who violates Waste Discharge Requirements and/or who intentionally or negligently discharges waste or causes or permits waste to be discharged into surface waters or groundwater of the state may be liable for civil and/or criminal remedies, as appropriate, pursuant to §13350, §13385, and §13387 of the California Water Code.

39. Provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
40. The Water Board requires all technical and monitoring reports pursuant to this Order in accordance with §13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to §13268 of the California Water Code.
41. The Discharger must comply with all conditions of these Waste Discharge Requirements. Violations may result in enforcement actions, including Water Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Water Board. (California Water Code §13261, §13267, §13263, §13265, §13268, §13300, §13301, §13304, §13340, §13350).
42. No provision or requirement of Order No. R3-2009-0001 or MRP No. R3-2009-0001 is a limit on the Discharger's responsibility to comply with other federal, state and local laws, regulations, or ordinances.
43. The Discharger shall comply with the following submittal and implementation schedule for all tasks and/or reports required by this Order.

#### REPORT AND IMPLEMENTATION DATE SUMMARY

<u>TASK</u>	<u>IMPLEMENTATION DATE</u>
Runoff diversion and erosion prevention [Provision No. E.4]	October 1, of each year
Vegetation placement over entire Landfill area [Provision No. E.5]	November 1, of each year
Arrange for Water Board Inspection [Provision E.13]	Two-weeks prior to constructing each phase
Wet Weather Preparedness Report [Provision No. E.23]	October 1, of each year
Design Plans and CQA Plan [Provision No. E.24]	180-days prior to construction
ROWD/JTD Amendment [Provision No. E.33]	December 16, 2013
Update Report on Reasonably Foreseeable Release [Provision No. E.34]	December 16, 2013, or sooner, as necessary
Submit a Plan for Evaluating Background Metal Concentrations in Groundwater and Installation of New Monitoring Well [Provision No. E.17]	June 30, 2009

I, **Roger W. Briggs, 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 Coast Region, on February 5, 2009.

  
**Executive Officer**





**Chicago Grade Class III Landfill  
San Luis Obispo County**

**Vicinity Map**

**Figure  
1**





**SYMBOLS**

- Landfill Property Line/Proposed Waste Management Facility Boundary – 188 Acres
- ◆ Drill Hole Core with Total Depth and Year Drilled
- ⊕ Soil Sample Site for Slope Stability
- Landfill Gas Monitoring Well
- ⊕ Paso Robles Formation Groundwater Monitoring Well
- ⊕ Monterey Formation Groundwater Monitoring Well
- ⊕ Gas Extraction Well
- ▲ Lysimeter
- △ Lysimeter – Abandoned
- ⋯ Current Waste Management Unit Boundary – 45.4 Acres
- ▨ Expansion Disposal Area Analyzed by EIR
- ▨ Area of Existing Waste
- ▨ Proposed Permitted Disposal Area (footprint)
- ▨ Proposed Waste Management Unit Boundary – 88.3 Acres



**Figure 2**

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, California 93401-7906

MONITORING AND REPORTING PROGRAM NO. R3-2009-0001  
Waste Discharge Identification No. 3400300001  
Adopted at the February 5, 2009 Board Meeting

FOR  
CHICAGO GRADE CLASS III LANDFILL  
SAN LUIS OBISPO COUNTY

This Monitoring and Reporting Program No. R3-2009-0001 (MRP) is issued by the Regional Water Quality Control Board, Central Coast Region pursuant to California Water Code section 13267. Chicago Grade Landfill and Recycling, LLC owns the Chicago Grade Class III Landfill (hereafter "Landfill"). Chicago Grade Landfill, Inc. operates the Landfill. Chicago Grade Landfill and Recycling, LLC and Chicago Grade Landfill, Inc. are collectively referred to as "Discharger." The Discharger is subject to this MRP because it owns and operates the Landfill. The MRP is required to assure compliance with the Water Code, the applicable state and federal regulations, and the associated Waste Discharge Requirements Order No. R3-2009-0001. Failure to comply with this MRP could subject the Discharger to enforcement actions, including pursuant to California Water Code section 13268.

**PART I: MONITORING AND OBSERVATION SCHEDULE**

Unless otherwise indicated, the Discharger shall report all monitoring and observations as outlined in **Part IV**.

**A. SITE INSPECTIONS**

The Discharger shall inspect the Chicago Grade Class III Landfill (Landfill), in accordance with the following schedule, and record (including photographs, when appropriate) at a minimum, the Standard Observations listed below:

**1. Site Inspection Schedule:**

- a. During the wet season (**October 1 through April 30**), following each storm event that produces onsite stormwater runoff, with inspections performed at least monthly. For purposes of this MRP, a storm event is defined as precipitation producing onsite runoff (surface water flow) capable of creating significant ponding, erosion or other water quality problem. A significant storm event will generally result in greater than 1/2-inch of rain within a 24-hour period, and be separated by a minimum of three days of dry weather.
- b. During the dry season (**May 1 through September 30**), a minimum of one inspection each **three month period**.

## 2. Standard Observations

- a. For the Landfill, this includes inspections at the Waste Management Units (WMUs), along the perimeter of the WMUs and the Recycle Area.
  - i. Whether stormwater drainage ditches and sediment/retention basins contain liquids.
  - ii. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and estimated flow rate (show affected area on map).
  - iii. Presence of odors; characterization, source, and distance from source.
  - iv. Evidence of ponding over the WMUs (show affected area on map).
  - v. Evidence of erosion or exposed waste.
  - vi. Evidence of waste in the drainage system (e.g., ditches and stormwater sediment basins).
  - vii. Inspection of stormwater discharge locations for evidence of non-stormwater discharges during dry season.
  - viii. Integrity of drainage systems during wet season.
- b. For Receiving Waters
  - i. Floating and suspended materials of waste origin; presence or absence, source, and size of affected area.
  - ii. Discoloration and turbidity – description of color, source, and size of affected area.
  - iii. Presence of odors; characterization, source, and distance from source.
  - iv. Evidence of beneficial use – presence of water-associated wildlife.
  - v. Estimated flow rate to the receiving water.
  - vi. Weather Conditions – wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

## B. ADDITIONAL DRAINAGE SYSTEMS INSPECTIONS

1. The Discharger shall inspect all drainage control systems following each onsite runoff-producing storm event and record the following:
  - a. General conditions of the stormwater facilities; and
  - b. Any apparent seepage from the stormwater sediment/retention basins;
  - c. To insure that the terms of the State Water Resources Control Board (State Water Board) Order No. 97-03-DWQ, General Permit No. CAS000001 are properly implemented, document compliance with Storm Water Pollution Prevention Plan;
  - d. Steps taken to correct any problems found during the inspections, as required under Part I of this Monitoring and Reporting Program, and date(s) when corrective action was taken. Include photographic documentation
  - e. Confirm that the Discharger has capped the leachate/stormwater cross-connection between Module 3 and 4 and the leachate line is reconnected once waste has reached the level of the cross-connections.

## C. LEACHATE COLLECTION AND REMOVAL SYSTEMS INSPECTIONS

The Discharger shall inspect all leachate collection and removal systems and record the following information:

1. **Bi-weekly (between October 1 and April 30 of each year)** - leachate containment and collection system integrity, record volume of leachate collected (in gallons) and disposal method used.
2. **Monthly (between May 1 and September 30 of each year)** – after emptying the leachate tank by May 1 of each year, leachate containment and collection system integrity, record volume of leachate collected (in gallons) and disposal method used.
3. **Monthly (between October 1 and April 30 of each year)** - pumping system operational check.
4. **Annually** - Leachate collection and removal system testing and demonstration, as required by Title 27 §20340(d). Report results in the Annual Summary Report required by Monitoring and Reporting Program No. R3-2009-0001 (hereafter "MRP R3-2009-0001"), Part IV.B. The Discharger shall develop results of annual testing in a manner that makes one year's test comparable to previous and subsequent test. The absence or presence of biofouling shall be specifically addressed in the inspection report.
5. All lined Modules will have the location of their respective liners surveyed and markers placed at readily observable locations (e.g., observable by landfill operations staff discharging leachate back to lined modules and by state inspectors).

#### D. RAINFALL DATA

The Discharger shall record the following information from the nearest monitoring station:

1. Total precipitation, in inches, during each **three month period (October through December, January through March, April through June and July through September)**; and.
2. Precipitation, in inches, during the most intense twenty-four hour rainfall event occurring within each contiguous **three month period (October through December, January through March, April through June and July through September)**.
3. Number and date of storms (greater than or equal to 1/2 inch in 24-hours) received during the **three month period**.

#### E. DEWATERED SLUDGE MONITORING

The Discharger shall record the following information for all dewatered sewage and water treatment sludge discharged at the Landfill:

- a. Source and type of sludge [e.g., primary (at least 20% solids by weight) or secondary (at least 15% solids by weight) wastewater, water treatment].
- b. Volume and weight.
- c. Percent moisture.
- d. Location where sludge was discharged (buried) at the Landfill and the waste solids to sludge ratio (at least 5 to 1 waste to sludge) by weight.



## F. ANALYTICAL MONITORING AND MONITORING LOCATIONS

The Discharger shall monitor the Landfill in accordance with the following schedule(s). Monitoring locations are shown on **Figure A-1**. Discharger shall comply with the sampling, analyses, and reporting requirements discussed in Parts II, III, and IV of this monitoring and reporting program.

### 1. Semiannual monitoring periods

The Discharger must measure groundwater levels and collect samples semiannually from the landfill monitoring points during the first quarter (**January 1-March 31**) and third quarter (**July 1-September 30**) of each year. The Discharger shall include the results of the first quarter monitoring event with the first semiannual monitoring report due **April 30**. The Discharger shall include the results of the third quarter monitoring event in the second semiannual monitoring report due **October 31**. The Annual Report is due **April 30**. See "Monitoring Period" defined under "Definition of Terms."

### 2. Monitoring Parameters

The Discharger shall analyze all samples from the Monitoring Points specified in this Monitoring and Reporting Program for the Monitoring Parameters listed in **Table 1**, except as noted.

**Table 1 Monitoring Parameters**

Parameter	USEPA Method <sup>1</sup>	Units <sup>2</sup>
Chloride	300.0	mg/L
Total Alkalinity	SM 2320B	mg/L
Dissolved Oxygen <sup>3</sup>	Field	mg/L
Electrical Conductivity <sup>3</sup>	Field	µmhos/cm
Manganese <sup>4</sup>	6010B	mg/L
Iron <sup>4</sup>	6010B	mg/L
Chromium <sup>4,5</sup>	6010B	mg/L
Nickel <sup>4,5</sup>	6010B	mg/L
Cadmium <sup>4,5</sup>	6010B	mg/L
Selenium <sup>4,5</sup>	7740	mg/L
Nitrate as Nitrogen	300.0	mg/L
Perchlorate <sup>6</sup>	314.0	µg/L
pH <sup>3</sup>	Field	pH Units
Sodium <sup>4</sup>	6010B	mg/L
Sulfate	300.0	mg/L
Temperature <sup>3</sup>	Field	°F/C
Total Dissolved Solids	160.1	mg/L

Total Petroleum Hydrocarbons	8015 CA Modified	mg/L
Turbidity <sup>3</sup>	Field	NTU
VOC <sub>water</sub> <sup>7</sup>	8260B	µg/L

## Footnotes:

- <sup>1</sup> USEPA – United States Environmental Protection Agency. Upon receiving prior acceptance by the Central Coast Water Board Executive Officer, equivalent analytical method can be used
- <sup>2</sup> mg/L – milligrams per liter; µmhos/cm – micromillihos per centimeter; °F/C – degrees Fahrenheit/Centigrade; NTU – nephelometric turbidity units; µg/L – micrograms per liter
- <sup>3</sup> These are field parameters as defined by California Code of Regulations (CCR) Title 27 §20415(e) 13. These must be tracked in a summary table in the monitoring report but development of concentration limits per CCR Title 27 §20390 and §20400 et al is not required.
- <sup>4</sup> Field filter before conducting metal analyses.
- <sup>5</sup> These may be discontinued after determining background concentrations/source to satisfaction of Executive Officer.
- <sup>6</sup> For MW-10 only. Discharger may request discontinuing analysis if this parameter is not detected in at least three consecutive monitoring events.
- <sup>7</sup> The VOC<sub>water</sub> Monitoring Parameter includes all volatile organic compounds (VOCs) detectable using USEPA Method 8260B, including at least all 47 organic constituents listed in Appendix I to 40 CFR, 258 (Subtitle D), methyl tertiary butyl ether (MTBE), and all unidentified peaks.

For purposes of evaluating landfill hydrogeologic conditions, monitoring locations must have samples collected from a minimum of two seasonally different monitoring events analyzed for general minerals and metals (to include, at a minimum: chloride, total alkalinity, sulfate, nitrate, sodium, potassium, magnesium, and calcium).

### 3. Description of Monitoring Points

- a. **Groundwater:** Groundwater Detection Monitoring Points (hereafter “DMP”) for this Landfill are described as follows (see Figure 1):
  - Wells MW-4, -7, and -10 shall serve as DMPs.
  - Well MW-9b and a new monitoring well for proposed Modules 6 and 7 shall serve as background monitoring points (the new well only until Modules 6 and 7 are operational).
  - Domestic/irrigation supply well (Office Well) shall serve as a downgradient monitoring point.
  - The Module 3 underdrain shall serve as a DMP monitoring location.
- b. **Vadose Zone:** The Discharger shall monitor the vadose zone using soil gas monitoring probes MW-1, MW-2, and MW-11 (See Analytical Monitoring and Monitoring Locations F.7 below).
- c. **Surface Water:** At the outfall of each retention/sediment basin (SW-1, SW-2, SW-3, and SW-4 [Figure A-1]), or where stormwater exits the facility boundary.

- d. **Landfill Gas:** The Discharger shall perform landfill gas monitoring from perimeter soil-gas probes MW-1, -2 and -11. See Analytical Monitoring and Monitoring Locations F.7 below for landfill gas monitoring period and monitoring parameters.
- e. **Landfill Leachate:** Annually, the Discharger shall collect samples from each leachate tank.

#### 4. Monitoring Frequency

The Discharger must conduct sampling and analyses of all DMPs at least once during each Monitoring Period listed in **Table 2**.

**Table 2 Monitoring Points and Frequencies** <sup>(a)</sup>

Detection Monitoring Point	Monitoring Purpose and Frequency <sup>(b)</sup>			
	Stormwater Parameters	Monitoring Parameters	Water Levels	COCs <sup>(c)</sup>
DMP No.				
MW-4	NA	Semiannual	Semiannual	Every 5 years
MW-7	NA	Semiannual	Semiannual	Every 5 years
MW-9b	NA	Semiannual	Semiannual	Every 5 years
MW-10	NA	Semiannual	Semiannual	Every 5 years
Office Well	NA	Every 5 years	Semiannual	Every 5 years
Module 3 Underdrain	NA	Semiannual	NA	Every 5 years
Module 6&7 Monitoring Well	NA	Semiannual	Semiannual	Every 5 years
Leachate	NA	Annual	NA	Every 5 years
Stormwater <sup>(d)</sup>	Annual	NA	NA	NA

Footnotes for Table 2:

- (a) For all **new** Monitoring Points, the Discharger shall conduct quarterly monitoring for four consecutive quarters starting from the date first sampled. After completing the initial quarterly samples, monitor semiannually, except as provided under Part III C.
- (b) Monitoring Frequency: NA - not applicable. See "Monitoring Period" under Part V-Definition of Terms, except as provided under Part III C.
- (c) COCs are sampled once every five years as discussed in Part I F.5, except as provided under Part III C.
- (d) The Discharger must collect and analyze samples as specified Part I F.6 of this Monitoring and Reporting Program.

#### 5. Constituents of Concern Monitoring

Constituents of Concern (COC) are listed in **Table 3**, and either directly include or include by reference all constituents listed in Appendix II in 40 CFR, Part 258. The Discharger shall collect and analyze samples for COCs **once every five years** at each of the site's DMPs. If there is an indication of release (**Part IV.C.4**), then the Discharger is also required to monitor for COCs. The Discharger shall monitor for COCs every five years, alternating between sampling in the spring of one year and the fall of the fifth year. The next COC sampling event is **in the fall of 2011**. Within three months of installing a DMP, the Discharger shall collect and analyze samples for COCs from that DMP.



Table 3 Constituents of Concern <sup>(1)</sup>

Constituents	USEPA Method	Units
Antimony	6010B	µg/L
Arsenic	6010B	µg/L
Barium	6010B	µg/L
Beryllium	6010B	µg/L
Cadmium	6010B	µg/L
Chromium	6010B	µg/L
Cobalt	6010B	µg/L
Copper	6010B	µg/L
Cyanide	335.4	µg/L
Lead	6010B	µg/L
Mercury	7470A	µg/L
Nickel	6010B	µg/L
Selenium	7740	µg/L
Silver	6010B	µg/L
Sulfide	376.2	µg/L
Thallium	6010B	µg/L
Tin	6010B	µg/L
Vanadium	6010B	µg/L
Zinc	6010B	µg/L
Chlorophenoxy Herbicides	8150	µg/L
Nonhalogenated Volatiles	8015	µg/L
Organochlorine Pesticides and PCBs	8080	µg/L
Organophosphorous Pesticides	8041A	µg/L
Chlorinated Herbicides	8151A	µg/L
Phthalate Esters	8060	µg/L
Perchlorate	314.0	µg/L
Phenols	8040	µg/L
Semi-Volatile Organic Compounds	8270C	µg/L
Volatile Organic Compounds	8260B	µg/L

<sup>(1)</sup> The Discharger shall analyze for all constituents using the USEPA analytical methods indicated above, including MTBE and all constituents listed in Appendix II to 40 CFR, Part 258 (Subtitle D). Metals shall be field filtered before laboratory analysis.

#### 6. Surface Water Monitoring

Annually, collect two stormwater samples pursuant to State Water Board Order No. 97-03-DWQ, General Permit No. CAS000001, as follows:

- Within one hour of the first storm event of the wet season (October 1 through April 30) and within normal business hours.
- During at least one other storm event of the wet season, following a minimum of three working days without a stormwater discharge from the first storm event.

A storm event is an event that produces discharge from the sediment retention basin(s) to waters of the state. Collect (unfiltered) samples when there is a discharge from the stormwater sediment basins at the locations specified under Part I F.3.c of this Monitoring and Reporting Program, and analyze for constituents listed in **Table 4**.

**Table 4 Stormwater Monitoring Parameters**

Parameter	USEPA Method	Units
Specific Conductance	120.1	µS/cm
Nitrate & Nitrite as Nitrogen (30-day holding time)	300.0	mg/L
pH	Field	pH Units
Total Organic Carbon	9060	mg/L
Total Suspended Solids	160.2	mg/L
Iron (filtered and unfiltered)	6010B	mg/L

Annually, collect a sediment sample from within each of the stormwater sediment basins, and analyze for the metals listed in §64431, CCR Title 22, Division 4, Chapter 15, Article 4. Sediment sampling is not required if the Discharger removes each basins' accumulated sediments prior to October 1 of each year and discharges the sediments into the Landfill's lined waste management units.

#### 7. Landfill Gas Collection System

Monitor gas monitoring probes MW-1, MW-2 and MW-11 semiannually for methane, carbon dioxide, oxygen, and volatile organic constituents using field meters per California Integrated Waste Management Board requirements for perimeter monitoring. Test for volatile organic compounds annually using method Toxic Organic Compound-14 method (TO-14) or equivalent. Submit monitoring results to the Central Coast Water Board in semiannual reports and include information specified in Title 27, §20934.

#### 8. Groundwater Flow Rate and Direction

The Discharger shall measure the depth to water in each DMP groundwater well at least semiannually as indicated in Table 2, including the times of expected highest and lowest elevations of the water level. The Discharger shall also determine horizontal gradients, groundwater flow rate, and flow direction for each respective groundwater body.

#### 9. Sample Procurement Limitation

For any given monitored medium, the Discharger shall collect samples from Monitoring Points within a span not exceeding 30 days within a given Monitoring Period and collect samples in a manner that ensures sample independence to the greatest extent feasible.

**PART II: SAMPLE COLLECTION AND ANALYSIS****A. SAMPLING AND ANALYTICAL METHODS**

The Discharger shall collect, store, and analyze samples according to the most recent version of Standard USEPA methods (USEPA publication "SW-846"), and in accordance with a sampling and analysis plan approved by the Central Coast Water Board's Executive Officer. A laboratory certified for these analyses by the State of California Environmental Laboratory Program shall perform all water analyses and they must identify the specific methods of analysis. The director of the laboratory whose name appears in the certification shall supervise all analytical work in his/her laboratory and shall sign reports of such work submitted to the Central Coast Water Board. In addition, the Discharger is responsible for seeing that the laboratory analysis of samples from Monitoring Points meets the following restrictions:

1. The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., trace) in historical data for that medium, the analytical method having the lowest Method Detection Limit (MDL) shall be selected.
2. Trace results (results falling between the MDL and the Practical Quantitation Limit [PQL]) shall be reported as such.
3. The laboratory shall derive MDLs and PQLs for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits are defined in Part V and shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. If the laboratory suspects that, due to a change in matrix or their effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived values, the results shall be flagged accordingly, and an estimate of the limit actually achieved shall be included.
4. Report Quality Assurance and Quality Control (QA/QC) data along with the sample results to which it applies. Also report sample results that are unadjusted for blank results or spike recovery. The QA/QC data submittal shall include:
  - a. Method, equipment, and analytical detection limits;
  - b. Recovery rates, an explanation for any recovery rate that is outside the USEPA-specified recovery rate;
  - c. Results of equipment and method blanks;
  - d. Results of spiked and surrogate samples;
  - e. Frequency of quality control analysis;
  - f. Chain of custody logs, and;
  - g. Name and qualifications of the person(s) performing the analyses.

5. Report and flag (for easy reference) QA/QC analytical results involving detection of common laboratory contaminants in associated samples.
6. Identify, quantify, and report, to a reasonable extent, non-targeted chromatographic peaks. Perform second column or second method confirmation procedures when significant unknown peaks are encountered in attempt to identify and more accurately quantify the unknown analyte(s).

## B. CONCENTRATION LIMIT DETERMINATION

1. For the purpose of establishing Concentration Limits for COC and Monitoring Parameters detected in greater than ten percent of a medium's samples, the Discharger shall:
  - a. Statistically analyze existing monitoring data (Part III), and propose, to the Executive Officer, statistically derived Concentration Limits for each COC and each Monitoring Parameter at each Monitoring Point for which sufficient data exist;
  - b. In cases where sufficient data for statistically determining Concentration Limits do not exist the Discharger shall collect samples and analyze for COC and Monitoring Parameter(s) which require additional data. Once sufficient data are obtained the Discharger shall submit proposed Concentration Limit(s) to the Executive Officer for approval. This procedure shall take no longer than two calendar years;
  - c. Sample and analyze new Monitoring Points, including any added by this Order, until sufficient data are available to establish a proposed Concentration Limit for all COC and Monitoring Parameters. Once sufficient data are obtained the Discharger shall submit the proposed Concentration Limit(s) to the Executive Officer for approval. This procedure shall take no longer than two calendar years.
2. Once established, review concentration limits a minimum of annually. Propose new concentration limits, when appropriate.

## C. RECORD MAINTENANCE

The Discharger shall maintain records in accordance with CCR Title 27 §21720(f) and 40 CFR 258.29, including maintenance and retention of analytical records for a minimum of five years by the Discharger or laboratory. The Discharger shall extend the period of retention during the course of any unresolved litigation or when requested by the Executive Officer. Such records shall show the following of each sample:

1. Identification of sample, Monitoring Point from which sample was taken, and individual who obtained the sample;
2. Date and time of sampling;
3. Date and time that analyses were started and completed, and the name of personnel performing each analysis;
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;

5. Results of analyses, and MDL and PQL for each analysis; and
6. A complete chain of custody log.

### **PART III: STATISTICAL AND NON-STATISTICAL ANALYSIS OF DATA**

#### **A. STATISTICAL ANALYSIS**

For Detection Monitoring, the Discharger shall use statistical methods to analyze COC and Monitoring Parameters that exhibit concentrations that equal or exceed their respective MDL in at least ten percent of applicable historical samples. The Discharger may propose and use any statistical method that meets the requirements of CFR Title 27, §20415(e)(7). All statistical methods and programs proposed by the Discharger are subject to Executive Officer approval.

#### **B. NON-STATISTICAL METHOD**

For Detection Monitoring, the Discharger shall use the following non-statistical method for analyzing constituents which are detected in less than 10% of applicable historical samples. This method involves a two-step process:

1. For constituents that this method applies, compile a specific list of those constituents, which exceed their respective MDL. The Discharger shall compile the list of constituents based on either data from a single sample, or in cases of multiple independent samples, from the sample which contains the largest number of constituents.
2. Evaluate whether the listed constituents meet either of two possible triggering conditions. Either the list from a single well contains two or more constituents, or contains one constituent, which equals or exceeds its PQL. If either condition is met, the Discharger shall conclude that a release is tentatively indicated and shall immediately implement the appropriate re-test procedure under Part III.C.

#### **C. RE-TEST PROCEDURE**

1. In the event that the Discharger concludes that a release has been tentatively indicated, the Discharger shall carry out the reporting requirements of Part IV.C.2 and, within 30 days of receipt of analytical results, collect two new suites of samples for the indicated COC or Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per Monitoring Point as were used for the initial test.
2. Analyze each of the two suites of re-test analytical results using the same statistical method (or non-statistical comparison) that provided the tentative indication of a release. If the test results of either (or both) of the re-tested data suites confirm the original indication, the Discharger shall conclude that a release has been discovered and shall carry out the requirements of Part IV.C.

3. Re-tests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the COC or Monitoring Parameter(s) which triggered the indication. When an analyte of the VOC composite parameter is re-tested, report the results of the entire VOC composite.

## PART IV: REPORTING

### A. MONITORING REPORT

The Discharger shall submit a Monitoring Report semiannually by **April 30 and October 31** of each year. Submit the Monitoring Reports in an electronic format, with transmittal letter, text, tables, figures, laboratory analytical data, and appendices in PDF format (one PDF for the entire report). The Discharger is required to upload the full Monitoring Report into Geotracker, as stipulated by California State law. The Monitoring Report shall address all facts of the Landfill's monitoring. The Monitoring Report shall include, but should not be limited to the following:

1. Letter of Transmittal

A letter transmitting the essential points shall accompany each report. The letter shall include a discussion of violations caused by the Landfill since submittal of the last such report. If the Discharger has not observed any new violations since the last submittal, the Discharger shall state this in the transmittal letter. Both the Monitoring Report and the transmittal letter shall be signed by: for private facilities, a principal executive officer at the level of vice president; for public agencies, the director of the agency. Upon Water Board Executive Officer approval, the cited signature can be by a California Registered Civil Engineer or Certified Engineering Geologist who has been given signing authority by the cited signatories. The transmittal letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

2. Compliance Summary

The Summary shall contain at least:

- a. Discussion of compliance with concentration limits. Release indications and any corrective actions taken.
- b. For each monitored groundwater body, calculate groundwater velocity.

3. Graphical Presentation of Data

For each Monitoring Point in each medium, submit, in graphical format, the complete history of laboratory analytical data. Graphs shall effectively illustrate trends and/or variations in the laboratory analytical data. Each graph shall plot a single constituent concentration over time at one (for intra-well comparison) or more (for inter-well comparisons) monitoring points in a single medium. Where applicable, include Maximum Contaminant Levels (MCLs) and/or concentration limits along with graphs of constituent concentrations. When multiple samples are taken, graphs shall plot each datum, rather than plotting mean values.

The Discharger shall also determine horizontal gradients, groundwater flow rate, and flow direction for each respective groundwater body. Present this data on a figure that depicts groundwater contours and flow directions as well as gradient. Include one figure for each water level measuring period with the semiannual monitoring report.

4. Corrective Action Summary

Discuss significant aspects of any corrective action measures conducted during the Monitoring Period and the status of any ongoing corrective action efforts, including constituent trend analysis. Calculate pollutant load removed from the sites impacted media by mass (water, gas, leachate) removal system(s). Base the mass removal calculations on actual analytical data as required by Part I.E. Present discussion and indications, relating mass removal data to the violation the corrective action is addressing.

5. Laboratory Results

Summarize and report laboratory results and statements demonstrating compliance with Part II. Include results of analyses performed at the landfill that are outside of the requirements of this Monitoring and Reporting Program.

6. Sampling Summary

- a. For each Monitoring Point addressed by the report, a description of: 1) the method and time of water level measurement; 2) the method of purging and purge rate and well recovery time; and 3) field parameter readings.
- b. For each Monitoring Point addressed by the report, a description of the type of sampling device used, its placement for sampling, and a description of the sampling procedure (number of samples, field blanks, travel blanks, and duplicate samples taken; the date and time of sampling; the name and qualification of the person actually taking the samples; description of any anomalies).

7. Leachate Collection and Detection Systems

A summary of the total volume of leachate collected each month since the previous Monitoring Report for both the leachate collection and leachate detection systems. Also include fluid level measurements in leachate collection and recovery system (LCRS) along with transducer calibration records. Tabulate and graph the LCRS fluid level measurements and fluid volumes in the semiannual reports.

8. Standard Observations

A summary of Standard Observations (Part V) made during the Monitoring Period.

9. Map(s)

The base map for the Monitoring Report shall consist of a current aerial photograph or include relative topographical features, along with Monitoring Points and features of the landfill facility.

## **B. ANNUAL SUMMARY REPORT**

The Discharger shall submit an annual report to the Central Coast Water Board covering the previous monitoring year. The annual Monitoring Period ends on

December 31 each year. Submit this Annual Summary Report no later than April 30 of each year. The Discharger may combine the Annual Summary Report with the Second Semiannual Monitoring Report of the year. The annual report must include the information outlined above and the following:

1. Discussion

Include a comprehensive discussion of the compliance record as it relates to Waste Discharge Requirements Order No. R3-2009-0001, a review of the past year's significant monitoring system and operational changes, a summary of corrective action results and milestones, and a review of construction projects, with water quality significance, completed or commenced in the past year or planned for the up-coming year.

2. Statistical Limit Review

The Discharger shall review the statistically derived concentration limits a minimum of annually and revise them as necessary. The Discharger shall discuss data collected during the past year and consider for inclusion in, and determination of, proposed limits for the coming year. For statistical limits that are changed from the previous year, include a comprehensive discussion of the proposed limit for Executive Officer review and consideration.

3. Analytical Data

Complete historical analytical data presented in tabular form in Excel™ format or in another file format acceptable to the Executive Officer.

4. Leachate Collection and Detection System

The Discharger shall submit the results of the annual leachate collection and leachate detection system testing, as required by Part I.F. Submit annually testing that shows the leachate is non-hazardous, if leachate is used for dust control.

5. Map(s)

A map, or set of maps, that indicate(s) the type of cover material in place (final, long-term intermediate, or intermediate) over inactive and completed areas.

## C. CONTINGENCY RESPONSE

1. Leachate Seep

The Discharger shall, within 24 hours, report by telephone concerning the discovery of previously unreported seepage from the disposal area. File a written report with the Water Board within seven days, containing at least the following information:

- a. A map showing the location(s) of seepage along with photographic documentation;
- b. An estimate of the flow rate;
- c. Location of sample(s) collected for laboratory analysis, as appropriate;
- d. A description of the nature of the discharge (e.g. pertinent observations and analysis); and
- e. A summary of corrective measures both taken and proposed.



2. Initial Release Indication Response

Should the initial statistical or non-statistical comparison (under Part III. A or B) indicate that a new release is tentatively identified, the Discharger shall:

- a. Within 24 hours, notify the Central Coast Water Board verbally or by email as to the Monitoring Point(s) and constituent(s) or parameter(s) involved;
- b. Provide written notification by certified mail within seven days of such determination; and,
- c. Either of the following:
  - i. Carry out a discrete re-test in accordance with Part III.C. If the re-test confirms the existence of a release or the Discharger fails to perform the re-test, the Discharger shall carry out the requirements of Part IV.C.4. In any case, the Discharger shall inform the Central Coast Water Board of the re-test outcome within 24 hours of results becoming available, following up with written results submitted by certified mail within seven days, or;
  - ii. Make a determination, in accordance with Title 27, §20420(k)(7), that a source other than the waste management unit caused the release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in the groundwater, surface water, or the unsaturated zone.

3. Physical Evidence of a Release

If either the Discharger or the Executive Officer determines that there is significant physical evidence of a new release pursuant to Title 27, §20385(a)(3), the Discharger shall conclude that a release has been discovered and shall:

- a. Within seven days notify the Executive Officer of this fact by certified mail (or acknowledge the Executive Officer's determination);
- b. Carry out the requirements of Part IV.C.4. for potentially-affected medium; and
- c. Carry out any additional investigations stipulated in writing by the Executive Officer for the purpose of identifying the cause of the indication.

4. Release Discovery Response

If the Discharger concludes that a new release has been discovered the following steps shall be carried out:

- a. If this conclusion is not based upon monitoring for COC, the Discharger shall sample for COC at Monitoring Points in the affected medium. Within seven days of receiving the laboratory analytical results, the Discharger shall notify the Executive Officer, by certified mail, of the concentration of COC at each Monitoring Point. This notification shall include a synopsis showing, for each Monitoring Point, those constituents that exhibit an unusually high concentration;
- b. The Discharger shall, within 90 days of discovering the release, submit to the Executive Officer a Revised Report of Waste Discharge proposing an Evaluation Monitoring and Reporting Program that:
  - (1) meets the requirements of Title 27, §20420 and §20425; and
  - (2) satisfies the requirements of 40 CFR §258.55(g)(1)(ii) by committing to install at least one monitoring well directly downgradient of the center of the release;
- c. The Discharger shall, within 180 days of discovering the release, submit to the Executive Officer a preliminary engineering feasibility study meeting the requirements of Title 27, §20420; and
- d. The Discharger shall immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that

the Discharger can meet the requirements of Title 27, §20425 to submit a delineation report within 90 days of when the Executive Officer directs the Discharger to begin the Evaluation Monitoring Program.

5. Release Beyond Facility Boundary

Any time the Discharger or the Executive Officer concludes that a release from the Landfill has proceeded beyond the facility boundary, the Discharger shall notify persons who either own or reside upon the land that directly overlies any part of the plume and are immediately downgradient of the plume (Affected Persons).

- a. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release.
- b. Subsequent to initial notification, the Discharger shall provide updates to Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
- c. Each time the Discharger sends a notification to Affected Persons (under a. or b. above), the Discharger shall, within seven days of sending such notification, provide the Executive Officer with both a copy of the notification and a current mailing list of Affected Persons.

## **PART V: DEFINITION OF TERMS**

### **A. AFFECTED PERSONS**

Individuals who either own or reside upon the land which directly overlies any part of that portion of a gas or liquid phase release that may have migrated beyond the facility boundary.

### **B. CONCENTRATION LIMITS**

The Concentration Limit for any given COC or Monitoring Parameter in a given monitored medium shall be either:

1. The constituent's statistically determined background value or interval limit, established using an Executive Officer approved method (Part III); or
2. In cases where the constituent's MDL is exceeded in less than 10% of historical samples, the MDL is the concentration limit defined in **Part II. A.1.**

### **C. CONSTITUENTS OF CONCERN (COC)**

An extensive list of constituents likely to be present in a typical municipal solid waste landfill. The COC for this landfill are listed in **Table 3.**

### **D. MATRIX EFFECT**

Any increase in the MDL or PQL for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample being analyzed.

### **E. METHOD DETECTION LIMIT (MDL)**

The lowest concentration at which a given laboratory, using a given analytical method to detect a given constituent, can differentiate with 99% reliability, between a sample which contains the constituent and one which does not. The MDL shall reflect the

detection capabilities of the specific analytical procedure and equipment used by the laboratory.

#### **F. MONITORED MEDIUM**

Those media that are monitored pursuant to this Monitoring and Reporting Program (groundwater, surface water, liquid, leachate, gas condensate, and other as specified).

#### **G. MONITORING PARAMETERS**

A short list of constituents and parameters used for the majority of monitoring activities. The Monitoring Parameters for this Landfill are listed in **Part I. F.**

#### **H. MONITORING PERIOD (frequency)**

The duration of time, during which a sampling event must occur. The Monitoring Period for the various media and programs is specified in **Part I.F.** The due date for any given report will be 30 days after the end of its Monitoring Period, unless otherwise stated.

#### **I. PRACTICAL QUANTITATION LIMIT (PQL)**

The lowest acceptable calibration standard (acceptable as defined for a linear response or by actual curve fitting) times the sample extract dilution factor times any additional factors to account for Matrix Effect. The PQL shall reflect the quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. PQLs reported by the laboratory shall not simply be restated from USEPA analytical method manuals. Laboratory derived PQLs are expected to closely agree with published USEPA estimated quantitation limits (EQL).

#### **J. RECEIVING WATERS**

Any surface water, which actually or potentially receives surface or groundwater, which pass over, through, or under waste materials or contaminated soils.

#### **K. STANDARD OBSERVATIONS**

##### **1. For Receiving Waters:**

- a. Floating and suspended materials of waste origin; presence or absence, source, and size of affected area.
- b. Discoloration and turbidity - description of color, source, and size of affected area.
- c. Presence of odors; characterization, source, and distance of travel from source.
- d. Evidence of beneficial use - presence of water-associated wildlife; and
- e. Flow rate to the receiving water.
- f. Weather Conditions - wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

##### **2. For the Landfill:**

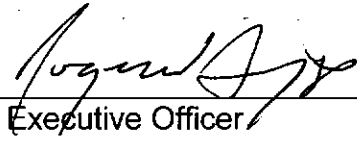
- a. Whether stormwater drainage ditches and stormwater sediment basins contain liquids;
- b. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and estimated flow rate (show affected area on map).;
- c. Presence of odors; characterization, source and distance from source;
- d. Evidence of ponding over the WMUs (show affected area on map);
- e. Evidence of erosion or of exposed waste;
- f. Evidence of waste in the drainage system (e.g., ditches and stormwater sediment

- basins);
- g. Inspection of stormwater discharge locations for evidence of non-stormwater discharges during dry season; and
- h. Integrity of drainage systems during wet season.

**L. VOLATILE ORGANIC COMPOUND (VOC) COMPOSITE MONITORING PARAMETER (VOC composite)**

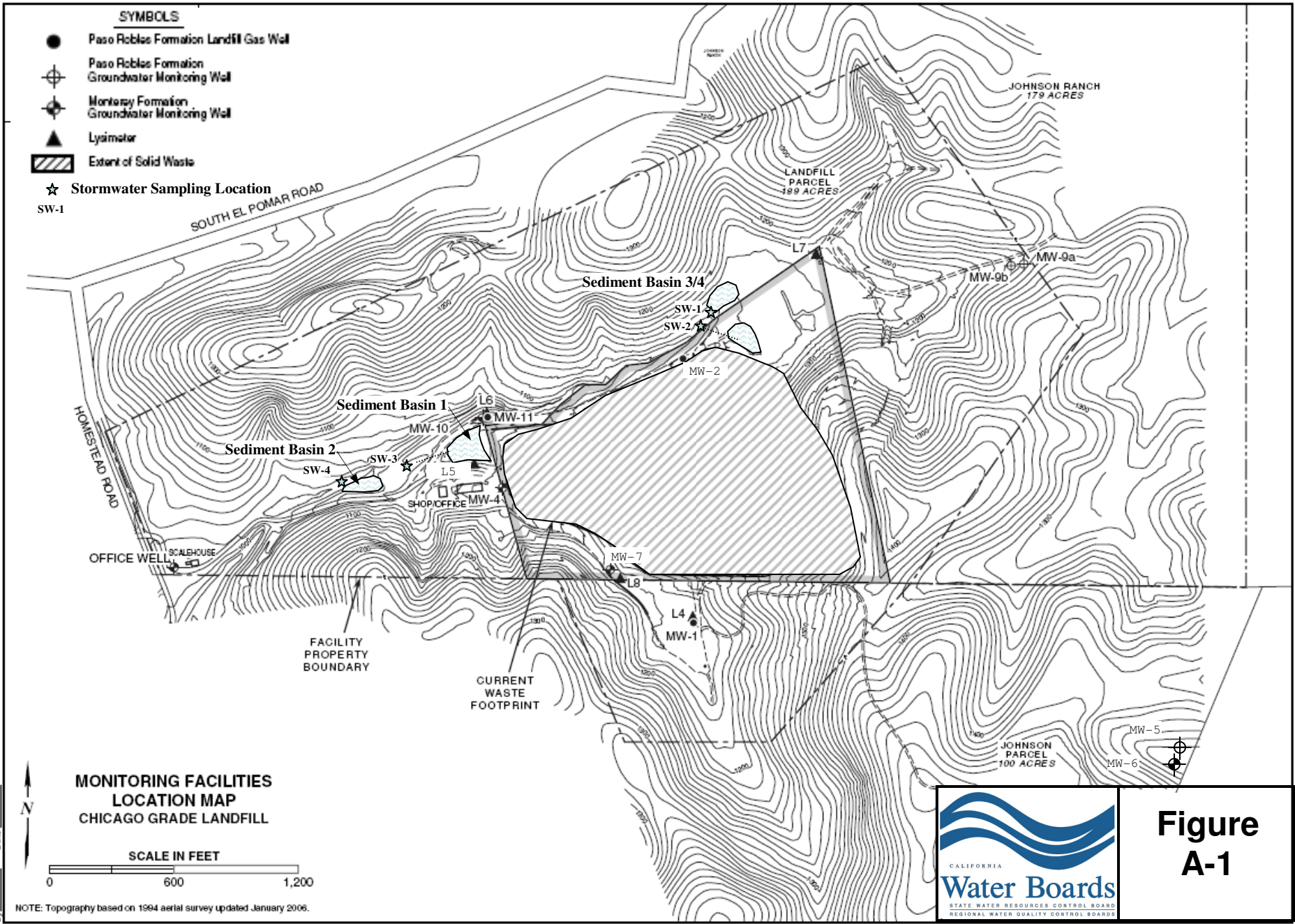
VOC composite is a composite parameter that encompasses a variety of VOCs. The constituents addressed by the VOC composite Monitoring Parameter includes all VOCs detectable using USEPA Methods 8260B (water) and TO-14 (gas) or equivalent.

ORDERED BY:

  
Executive Officer

2/7/09  
Date

Figure: Figure A-1 Monitoring Point Location Map



**Figure  
A-1**