CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. R7-2009-0003

WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY
FOR MESQUITE REGIONAL LANDFILL
Glamis – Imperial County

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

1. The Mesquite Regional Landfill is approximately 3.5 miles northeast of Glamis, 30 miles northeast of Brawley, 35 miles southeast of the Salton Sea, and 15 miles west of the Arizona border, as shown on Attachment 1, appended hereto as part of this Board Order. The project site encompasses all or parts of Sections 7, 8, 15,16,17,18,19, 20, and 21, and Tract 38 in Township 13 South (T13SJ, Range 19 East (R19E), San Bernardino Baseline and Meridian (SBB&M).

2. The Mesquite Regional Landfill is located at 6330 East Highway 78, Brawley, California 92227 and is owned and operated by County Sanitation District No. 2 of Los Angeles County, whose administrative offices are located at 1955 Workman Mill Road, Whittier, California 90601.

DEFINITIONS

3. The terms used in this document are defined as follows:

   a. **Facility** – The entire parcel of property where Mesquite Regional Landfill operations or related activities are or will be conducted, as shown on Attachment 2.

   b. **Waste Management Facility (WMF)** – The entire parcel of property where waste discharge operations are or will be conducted.

   c. **Waste Management Unit (WMU)** – An area of land or portion of a WMF where waste is or will be discharged. The term includes containment features, ancillary features for precipitation and drainage control, and monitoring.

   d. **Discharger** – The term "Discharger" means any person who discharges waste that could affect the quality of the waters of the state, and includes any person who owns the land or WMU, or who is responsible for the operation of the WMU. Specifically, the term "Discharger" in this order refers to County Sanitation District No. 2 of Los Angeles County. For purposes of this Board Order No. R7- 2009-0003, "discharge" does not mean the intentional discharge of pollutants into waters of the United States.

e. **Contact Water** – Means surface/storm water run off that cannot be diverted from the immediate Working Face or that comes into contact with Municipal Solid Waste (MSW).

f. **Hazardous Waste** – Means a waste, or combination of wastes, as defined in California Code of Regulations (CCRs), Title 22, Section 66261.3.[1]

g. **Landfill Footprint** – Means that area within the project site boundary where the MSW is proposed to be permanently placed or disposed.

h. **Municipal Solid Waste (MSW)** – Means nonhazardous solid waste as defined in Title 23, Section 2523, and Title 27, Section 20200.

i. **Non-Contact Water** – Means surface/storm water that have not come into contact with MSW.

j. **"Operator"** – Means County Sanitation District No. 2 of Los Angeles County.

k. **Phase** – Means, for the purpose of planning, each of the stages of Landfill development identified by the discharger.

l. **Regional Water Board** – Means the California Regional Water Quality Control Board, Colorado River Basin Region.

m. **Right of Way (ROW)** – Means the 150-foot wide and approximately 5-mile long easement granted by the Bureau of Land Management to allow the construction and use of a rail spur connecting the existing Union Pacific Railroad Main Line (UPRR Main Line) to the Mesquite Regional Landfill.

n. **SR 78** – Means California State Highway (or Route) 78 which extends past the project site.

o. **Working Face** – Means that portion of the landfill where waste discharge is occurring prior to the application of daily cover.

4. The Mesquite Regional Landfill is proposed to have a total waste capacity of about 600 million tons, with an approximate total volume of 1.1 billion cubic yards.

5. This Board Order does not apply to federally-owned lands.

6. The Discharger proposes to receive up to 20,000 tons-per-day (tpd) of MSW over an anticipated active life of about 100 years.

7. The Discharger reports that in order to comply with the land use permit the site will not be open to the general public.

[1] Unless otherwise indicated, Title references are to titles set forth in the CCRs.

8. The Mesquite Regional Landfill's Conditional Use Permit allows the facility to operate 24 hours per day and seven days per week.

9. On November 8, 2006, the Discharger submitted a Joint Technical Document (JTD) in compliance with the requirements of Title 27. The most recent updates to the JTD were submitted on December 19, 2008.

BOARD ORDERS

10. In 1995 Waste Discharge Requirements (WDRs) were issued for the Facility under Board Order No. 95-100. The owners of the facility when Order No. 95-100 was issued were Arid Operations and Goldfields Mining Company. Board Order No. R7-2006-0031 amended Board Order No. 95-100 to update the Facility ownership name and address from Arid Operations and Goldfields Mining Company to County Sanitation District No. 2 of Los Angeles County.

11. On June 17, 1993, the State Water Resources Control Board (State Water Board) adopted Resolution No. 93-062: Policy for Regulation of Discharges of MSW. The policy directs each regional water board to revise WDRs for each MSW landfill in its respective region to comply with federal regulations prescribed in Title 40 Code of Federal Regulations (CFRs) Part 258 (40 CFR Part 258).

12. On September 15, 1993, the Regional Water Board adopted Board Order No. 93-071, amending all WDRs for MSW landfills in the Colorado River Basin Region to comply with these federal regulations.

13. Board Order R7-2009-0003 will update WDRs for the Mesquite Regional Landfill WMF as part of a statewide program to periodically review and revise requirements. Board Order R7-2009-0003 incorporates the laws and regulations set forth in the California Water Code (CWC), and consolidated State Water Board/California Integrated Waste Management Board (CIWMB) Regulations in Title 27, which include the nonhazardous solid waste provisions of Title 23, Chapter 23.

SITE LOCATION

14. The Discharger reports that the Facility occupies approximately 4,250 acres, and the footprint of the WMU is 2,290 acres.

15. The Discharger reports that the Facility will commence operations in 2009. The Discharger reports that the WMU is permitted to accept MSW from Imperial, Los Angeles, Orange, San Bernardino, San Diego, Riverside and Ventura Counties of California.

16. The entire WMU will be lined, will have a leachate collection and removal system (LCRS), and will be in compliance with the landfill design criteria specified in Title 27 of the CCRs (Title 27) and Section 258, Title 40 of the CFRs, which implement the Solid Waste Management Provisions of Subtitle D of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 et seq.).

17. The nearest permanent residences to the Mesquite Regional Landfill are at the Boardman and Glamis Beach Store areas, located 3 and 3.5 miles, respectively, southwest of the Landfill. These facilities serve recreational vehicle visitors who use the Imperial Sand Dunes Recreational Area located approximately six miles to the west. The dunes south of SR 78 are the most intensively used recreational area in the California desert, providing camping and off-road vehicle (ORV) recreation for 30,000 or more recreationists on winter holiday weekends. The dunes north of SR78 are wilderness. Recreation activities are much less common outside the sand dunes areas. Lands surrounding the site have traditionally been used for gravel and gold mining, and are used for rock hounding, scattered site camping, ORV use, target shooting and hunting. Other population centers are Brawley (about 30 miles west of the site) and Palo Verde (about 35 miles east of the site).

18. Land use within a two-mile radius of the Mesquite Regional Landfill, as shown on Attachment 3, is as follows:

    a. The Mesquite Mine is currently conducting open pit gold mining operations about one-half mile north of the site. These operations include the following features and activities:

        i. Three open pit areas (Big Chief, Vista and Rainbow) from which gold-bearing ore and barren rock have been mined since mine startup in 1985, and are planned to continue for another 12 to 15 years.

        ii. A series of barren rock (overburden) piles adjacent to the open pit areas have been and will continue to be used for placement of this material. Alternately, barren rock may also be backfilled into the open pits as economic conditions allow. The barren rock piles are not expected to exceed heights of 300 feet.

        iii. An electric power supply, constructed by Mesquite Gold Mine which was dedicated to the Imperial Irrigation District (IID) including a 92/13.2 KV substation located at the Mesquite Gold Mine.

        iv. Approximately 800 acres of lined heap leach pads where gold is recovered by percolating a dilute cyanide leaching solution through piles of ore. The leached ore is then rinsed with fresh water so that the ore is neutralized to be inert and nonhazardous after gold recovery is completed. The heap leach piles extend to a height of 300 feet.

        v. Lined ditches, piping, sumps and ponds for collecting the gold-bearing leach solution.

        vi. A variety of administration, maintenance and process structures.

        vii. A mine access road from SR 78.

        vii. A water supply system consisting of three 2,500-gallon per minute (gpm) wells approximately three miles south of the mine, with a pipeline to on-site storage tanks and distribution lines to various facilities.

b. The Chocolate Mountains Aerial Gunnery Range (CMAGR) is located approximately one mile to the north of the Mesquite Landfill site, and is used for military aircraft testing and training. The CMAGR is used actively by tactical aircraft for live ordnance delivery.

c. Other federal public domain lands managed by the BLM are located to the west, south and east of the site. These areas are generally undeveloped and unpopulated, and include a BLM multiple use area to the west where the BLM allows small-scale gravel resource mining.

d. A BLM-designated Area of Critical Environmental Concern (ACEC) is located southeast of the landfill site. This area contains cultural and historical sites.

19. The Discharger reports that rail access to the site is by an existing Union Pacific Railroad line located approximately five miles to the southwest of the Mesquite Landfill. From this point, the discharger proposes to construct a rail spur to the site's intermodal facility, as shown on Attachment 4, appended hereto as part of this Board Order.

20. The Discharger reports that motor vehicle access to the Mesquite Regional Landfill and to the Mesquite Mine is presently via SR 78 as shown on Attachment 4.

21. The Mesquite Regional Landfill site is located near the base of the Chocolate Mountains, in the area where these mountains and the Imperial Valley intersect, see Attachment 5, appended hereto as part of this Board Order. The Imperial Valley Sand Dunes are located approximately six miles to the southwest of the site, and the Cargo Muchacho Mountains are about 15 miles to the southeast.

22. Imperial County can be divided into three distinct geographic regions: (1) a western mountainous area; (2) the Imperial Valley in the center; and (3) an eastern mountain and basin area. At the north end of the Imperial Valley and extending to the northwest out of the County lies the Salton Sea, a saline lake fed by water from the valley irrigation system. The Salton Sea depression constitutes the area with the lowest elevation in Imperial County, about 230 feet below mean sea level. The narrow northwest extension of the Salton Sea depression is referred to as the Coachella Valley in Riverside County. The Coachella Valley and the Imperial Valley together comprise what is known geologically as the Salton Trough. The Coachella/Imperial Valley area has sometimes in the past been referred to as the Colorado Desert, as shown on Attachment 5.

23. The project site is generally flat, gently sloping desert, interrupted by washes which drain infrequent rainfall to the southwest that is prevented from entering the central portion of the Imperial Valley by the Sand Dunes.

24. The Mesquite Regional Landfill site is not located in a 100-year flood plain.

25. Elevations in the project area range from approximately 560 feet above mean sea level (MSL) in the rail spur area to approximately 730 feet above MSL in the landfill footprint area, with the change in elevation being 80 feet per mile. The highest elevation in the region is 2,400 feet above MSL in the Chocolate Mountains, about seven miles to the north.

26. The Discharger reports that there are four major types of soil present at the site: 1) unidentified sandy loam, 2) Chuckwalla Gravelly Loam, 3) Carrizo Very Gravely Coarse Sand, and 4) Carrizo Variant Very Gravely Loamy Sand. All four are low in nutrients and tend to be in thin layers.

27. Soils associated with ephemeral drainage are relatively loose and, therefore, retain the greatest amount of moisture from occasional rainfall. These areas generally support the most substantial plant communities at the project site. The top surface of the higher areas between these drainages generally consists of a relatively dense "desert pavement" that prevents percolation of rainfall into the soil.

Liner and LCRS

28. In 1995, when Order No. 95-100 was issued, Title 23, Chapter 15 of the CCRs (Chapter 15) identified prescriptive standards that Regional Water Boards were to require for discharges of waste to land. Chapter 15 also allowed for approval of engineered alternatives to prescriptive standards as long as the alternatives provided equivalent protection against water quality impairment.

29. Prior to the issuance of Order No. 95-100, Arid Operations (the previous operator) submitted a Report of Waste Discharge (ROWD) for the Facility. The ROWD proposed an engineered alternative liner and LCRS instead of the liner and LCRS prescribed in Chapter 15 and 40 CFR. Appendix H.1 of the ROWD demonstrated that the engineered alternative liner and LCRS would provide equivalent protection against water quality impairment compared to the prescriptive liner and LCRS.

30. Order No. 95-100 approved the engineered alternative liner and LCRS proposed by Arid Operations. Order No. 95-100 also authorized the Executive Officer of the Regional Water Board to approve engineered alternative designs for the liner and LCRS if the alternatives provide equivalent protection to the liner and LCRS approved by Order No. 95-100.

31. The engineered alternative liner and LCRS design authorized by order No. 95-100 is comprised of the following, from top to bottom:

    a. Soil operations layer of unspecified thickness;

    b. Geotextile;

    c. One-foot thick LCRS gravel layer with a hydraulic conductivity of at least $1x10^{-1}$ cm/sec with imbedded 4-inch diameter perforated pipes;

    d. Geotextile;

    e. 60-mil high density polyethylene (HDPE) flexible membrane;

    f. One-foot thick compacted clay layer with a hydraulic conductivity of no more than $1x10^{-6}$ cm/sec;

g. 30-mil very low density polyethylene (VLDPE) flexible membrane;

h. Beneath the flow lines of the liner, a twenty-foot wide secondary LCRS strip comprised of the following:

1. Geotextile;

2. Geogrid drainage layer with an unspecified hydraulic conductivity;

3. Geotextile;

4. 30-mil VLDPE flexible membrane;

i. One-foot thick foundation layer.

32. Because Title 27 incorporated the provisions of Title 23, Chapter 15, pertaining to the management of nonhazardous solid waste, Title 27 also identifies prescriptive standards that Regional Water Boards are to require for discharges of waste to land. Accordingly, Title 27 also allows for the approval of engineered alternatives to prescriptive standards as long as the alternatives provide equivalent protection against water quality impairment.

33. The current Discharger identified concerns to the Executive Officer of the Regional Water Board related to the constructability and performance of the engineered alternative liner authorized in Order No. 95-100. On February 5, 2007 the Discharger provided to the Executive Officer of the Regional Water Board a written proposal to change the liner design to an engineered alternative that addressed the constructability and performance concerns. The Discharger provided the Executive Officer of the Regional Water Board with a report signed and sealed by a Registered Engineer demonstrating that the proposed engineered alternative liner and LCRS provided equivalent protection to the liner and LCRS approved by Order No. 95-100.

34. The liner and LCRS proposed by the Discharger is comprised of the following, from top to bottom:

a. Three-feet of soil operations layer;

b. Geotextile;

c. One-foot thick LCRS gravel layer with a hydraulic conductivity of at least 1 cm/sec;

d. Geotextile;

e. 60-mil HDPE flexible membrane;

f. Geosynthetic clay liner with a hydraulic conductivity of no more than $5x10^{-9}$ cm/sec;

g. 60-mil HDPE flexible membrane;

h. Beneath the flow lines of the liner, a forty foot wide secondary LCRS strip comprised of the following:

1. Geotextile;

2. Six-inch thick LCRS gravel layer with a hydraulic conductivity of at least 1 cm/sec;

3. Geotextile; and

4. 60-mil HDPE flexible membrane.

35. Consistent with the authority provided in Order No. 95-100, on February 16, 2007 the Executive Officer of the Regional Water Board sent the Discharger a letter conditionally approving the Discharger's proposed engineered alternative liner and LCRS subject to the submittal of a design report providing technical information required for all liner designs as specified in Order No. 95-100.

36. On June 20, 2007, the Discharger submitted to the Executive Officer of the Regional Water Board a design report containing the required technical information regarding the liner design as specified in Order No. 95-100.

Geology

37. The Site is located in eastern Imperial County at the eastern margin of the Colorado Desert Physiographic Province, near the top of the eastern margin of the Salton Trough and approximately 2 miles to the west of the Chocolate Mountains. The Chocolate Mountains and adjacent mountain ranges of the Cargo Muchacho, Picacho, and Palo Verde Mountains form the physiographically elevated topography around the landfill. In contrast, the Salton Sea represents the topographically lowest portion of the Colorado Desert Physiographic Province in the Salton Trough and is located approximately 35 miles to the southeast of the site. The landfill itself is underlain by a gentle, southwest-sloping alluvial piedmont fan surface that extends from the Chocolate Mountains towards the southwest.

38. Lithologic rock units encountered in the subsurface beneath Mesquite Regional Landfill consist from stratigraphic bottom to top of Jurassic-aged (~208 to 144 million years old) mafic gneiss, hornblende biotite gneiss, biotite gneiss, and muscovite schist. A coarse-grained, pegmatitic muscovite-bearing granite intrudes the lower and middle units of the biotite gneiss and muscovite gneiss in the form of dikes and sills. Miocene-aged (~23.7 to 5.3 million years old) conglomerate sedimentary rocks of the Bear Canyon Conglomerate nonconformably overlie the older metamorphic and intrusive rocks. A thin veneer of Quaternary and recent alluvial fan sediments cap most of the area.

Seismicity

39. The East Mesa, Imperial and San Andreas faults were identified as the principal active faults in the area of the Mesquite Regional Landfill. The East Mesa fault is located approximately 9 miles west, the Imperial fault is located approximately 31 miles southwest, and the San Andreas fault is located approximately 46 miles northwest of the site.

Groundwater

40. Preliminary findings indicate that groundwater beneath the landfill occurs within four aquifers: a relatively "shallow" aquifer at an average depth of approximately 300 feet below the ground surface (bgs), a relatively deep aquifer at an average depth of approximately 500 feet bgs, a southwestern perched aquifer at an average depth of approximately 358 feet bgs and a northwestern perched aquifer at an average depth of approximately 140 feet bgs. Locally, groundwater was also encountered within a fault zone at a depth of approximately 312 feet bgs.

41. Preliminary findings indicate that within the "shallow" aquifer groundwater flows to the southwest at average linear velocities ranging from 0.03 ft/d to 0.08 ft/d. Preliminary findings indicate that deep groundwater flows to the southeast at average linear flow velocities ranging from 0.002 ft/d to 0.006 ft/d. Within the southwestern perched aquifer groundwater flows to the north-northwest at average linear velocities ranging from 0.22 ft/d to 0.56 ft/d. Groundwater flow velocities within the northeastern perched aquifer and the fault zone are not known. Groundwater within the fault zone flows in a southeasterly direction. Additional groundwater monitoring wells are needed to adequately define groundwater beneath the landfill.

42. An updated groundwater monitoring plan is required to be submitted prior to construction and approval of additional cells at the site.

43. The following anthropogenic constituents were quantified (i.e., measured at levels greater than the PQL) in groundwater during background water quality monitoring that occurred for several years prior to commencement of solid waste disposal operations at the landfill: 1,4-dioxane, 4-methyl-2-pentanone, acetone, allyl chloride, bromoform, chloroform, chloromethane, cyanide, diethylhexyl phthalate, dimethoate, isobutyl alcohol, methylene chloride, n-nitrosodimethylamine, p-dichlorobenzene, perchlorate, tetrachloroethylene, toluene and vinyl chloride. In addition, the following anthropogenic constituents were detected at trace levels (i.e. greater than the MDL, but below the PQL): 1,1-dichloroethene, 1,2,3-trichloropropane, 1,2-dichloroethane, 2-hexanone, acetonitrile, benzene, benzyl alcohol, bromodichloromethane, butylbenzyl phthalate, carbon disulfide, chlorobenzene, chloroethane, cis-1,2-dichloroethylene, dibromochloromethane, diethyl phthalate, di-n-butyl phthalate, ethyl benzene, lindane, m+p-xylene, methyl iodide, methylene bromide, o-dichlorobenzene, phenol, and styrene.

44. The Discharger has demonstrated that the laboratory methods for determining trace values do not provide reasonable assurance that the constituent is present in the sample (i.e., the trace determinations described in the previous finding may be false detections). Therefore, the Monitoring and Reporting Program No. R7-2009-0003 has been prepared to consider only quantified results as detections for the purpose of identifying a release

from the landfill. The quantitation limits are required to be the lowest achievable and conform to the requirements for determining Minimum Levels/Reporting Levels as described in the State Water Resources Control Board's Policy for *Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (also known as the State Implementation Policy or SIP).

Basin Plan

45. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on November 17, 1993, and designates the beneficial uses of ground and surface waters in this Region.

46. The Facility is located in the Amos-Ogilby Hydrologic Basin as shown on Attachment 6, appended hereto as part of this Board Order. The beneficial use of groundwater in the Amos-Ogilby Hydrologic Unit is Municipal Supply (MUN).

Surface Water

47. There are no perennial surface water features at the Facility. The closest perennial surface water feature is the Coachella Canal, located 15 miles southwest of the site and one mile west of the Algodones Dunes.

48. The facility is not located in a 100-year flood plain.

Climate

49. The climate of the region is arid. climatological data were obtained from measurements taken at the Mesquite Gold Mine and three U. S. Weather Bureau stations located at El Centro, Blythe, and Yuma. These data indicate that during 1980 to 1992, the maximum and minimum rainfall in the area were 10 inches and 1 inch, respectively, with an average annual rainfall of about 4 inches, and a mean annual pan evaporation rate of about 100 inches.

50. The wind direction follows two patterns:

    a. From late fall to early spring, prevailing winds are from the west and northwest. Most of these winds originate in the Los Angeles basin area, enter the Coachella Valley and travel southeasterly through the Salton Sea Trough. The humidity is generally the lowest under these conditions.

    b. Summer weather patterns are often dominated by an intense, heat-induced low-pressure area that forms over the hot interior deserts, drawing air from the Gulf of California (southeast of the site) and northern portion of Mexico. The humidity is generally the highest during these conditions.

Storm Water

51. Federal regulations for storm water discharges were promulgated by the U. S. Environmental Protection Agency on November 16, 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge into waters of the United States storm water associated with industrial activity to obtain NPDES permits and to implement Best Conventional Pollutant Technology (BCT) to reduce or eliminate industrial storm water pollution.

52. The State Water Resources Control Board adopted Order No. 91-13-DWQ (General Permit No. CAS000001), as amended by Water Quality Order No. 97-03-DWQ, specifying WDRs for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit.

53. Precipitation run-off from the Facility, which occasionally occurs in several small, dry washes that traverse the site, infiltrates the loose soils of the wash bottoms and evaporates. During storm events, excess flows from these washes terminate at the Algodones Dunes.

54. Because precipitation run-off from the Facility does not enter any waters of the United States, the Site is not subject to the federal storm water regulations or the State Water Board's General Permit for storm water discharges associated with industrial activity.

Final Cover

55. Prior to the issuance of Order No. 95-100, Arid Operations (the previous operator) submitted a Report of Waste Discharge (ROWD) for the Facility. The ROWD proposed alternative final cover for the landfill. The engineered alternative final cover for the landfill was approved, as documented in Finding 78 and Specification B.15 of Order No. 95-100 and consists of wide stability berms (at least 7 feet between the surface of the side slope and MSW) for the slide slope areas and a layered soil and flexible membrane liner (FML) system for the top deck, as shown on Attachment 7.

CEQA

56. The action to update the WDRs for the existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA) (Cal. Pub. Resources Code, § 21000 et seq.) in accordance with the categorical exemption specified in CCR, Title 14, Section 15301, which governs the operation of an existing Facility involving negligible or no expansion of use beyond that previously existing.

Notification

57. The Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for said discharge and has provided them with an opportunity for a public meeting, and an opportunity to submit comments.

58. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED that Board Order No. 95-100 be rescinded, except for enforcement purposes, and in order to meet the provisions contained in Division 7 of the CWC, the solid waste management provisions in Subtitle D of RCRA, and regulations adopted thereunder, and the provisions of the federal Clean Water Act, and regulations adopted thereunder, the Discharger shall comply with the following in the discharge of waste:

A. SPECIFICATIONS

1. The treatment or disposal of wastes at this Facility shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the CWC.

2. The Facility shall be protected from washout, or erosion of wastes or cover material, and from inundation due to rainfall.

3. Drainage structures for the Facility shall be designed to control runoff from a 100-year, 24-hour storm event.

4. The Discharger shall implement a self-monitoring and reporting program to detect at the earliest opportunity any unauthorized discharge of waste constituents from the WMU, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste from the WMU.

5. Wastes shall not be discharged to any ground surface that is less than five (5) feet above the highest anticipated groundwater level.

6. The Discharger shall provide interim cover to the discharged waste as follows:

    a. Daily cover – a minimum of six (6) inches of compacted soil, or alternative material, placed over the exposed waste at least once in every 24 hours.

    b. Intermediate cover – a minimum of twelve (12) inches of compacted soil, or equivalent, placed over waste areas that are inactive for more than 180 days. Existing daily cover may be used as part of the intermediate cover.

7. The intermediate and daily covers for the WMU shall:

    a. Control disease vectors pursuant to 40 CFR Section 258.22;

    b. Minimize infiltration into the WMU;

    c. Control erosion, and convey run-off to the storm water management system at manageable, non-scouring flow rates; and

    d. Minimize the potential for windblown litter and particulates.

8. Any alternative materials used for daily or intermediate cover that have a different characteristic and thickness than the requirements of Specifications 6 and 7, above, of this Board Order shall be approved by the Regional Water Board Executive Officer prior to use. The Discharger shall demonstrate that the alternative material and thickness will not present a threat to the environment or water quality.

9. Adequate measures shall be taken to ensure that flood or surface drainage waters do not erode or otherwise render portions of the Facility inoperable.

10. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through wastes discharged at this Facility. Storm water drainage ditches shall be constructed to ensure that all surface water runoff that does not come in contact with the WMU is diverted away from the disposal area, such that it does not contact the waste or leachate.

11. The exterior surfaces of the WMU - daily, intermediate, and final cover- shall be graded and maintained to promote lateral run-off of precipitation, and to prevent ponding.

12. The Discharger shall follow the Water Quality Protection Standard (WQPS) for detection monitoring established by the Regional Water Board in this Board Order pursuant to Title 27, Section 20390. The WQPS for this Facility is as follows (monitoring terms are defined in Part 1 of the attached Monitoring and Reporting Program No. R7-2009-0003 and revisions thereto, hereby incorporated by reference):

    a. The Discharger shall test for the monitoring parameters, and Constituents of Concern (COCs) listed in Monitoring and Reporting Program No. R7-2009-0003, and revisions thereto, for any samples taken from water bearing media (i.e., groundwater, surface water, and liquids in the unsaturated zone).

    b. Concentration Limits – The concentration limits for each monitoring point assigned to a detection monitoring program (Monitoring and Reporting Program Part II), and the concentration limit for each Constituent of Concern (or monitoring parameter) shall be the background value.

    c. Monitoring points and background monitoring points for detection monitoring shall be those listed in Part II of the attached Monitoring and Reporting Program No. R7-2009-0003, and any revised Monitoring and Reporting Program approved by the Regional Water Board Executive Officer.

    d. The point of compliance is the three-dimensional boundary of the waste management unit.

    e. Compliance period – Each time the WQPS is violated (i.e., a release is discovered), the Facility shall begin a compliance period on the date the Regional Water Board directs the Discharger to begin an Evaluation Monitoring Program (EMP). If the Discharger's Corrective Action Program (CAP) has not achieved compliance with the

WQPS by the scheduled end of the compliance period, the compliance period is automatically extended until the Facility has been in continuous compliance for at least three (3) consecutive years.

13. The Discharger shall report Monitoring parameters from the constituents listed in Monitoring and Reporting Program No. R7-2009-0003, and future revisions thereto. These monitoring parameters are subject to the most appropriate statistical or non-statistical tests under Monitoring and Reporting Program No. R7 2009-0003, Part III A, and any revised Monitoring and Reporting Program approved by the Regional Water Board Executive Officer.

14. The secondary LCRS portion of the liner system (see Finding 34) is a redundant system to prevent a release from the landfill, while acting as a monitoring system for soil pore liquids.

15. For any future expansion, the Discharger shall install additional groundwater, soil-pore liquid, or leachate monitoring devices to comply with Monitoring and Reporting Program No. R7-2009-0003 and revisions thereto. The Discharger shall submit the plan for these installations to the Regional Water Board Executive Officer 120 days prior to construction.

16. Methane, carbon dioxide and other landfill gases shall be adequately vented, removed from each WMU at the Facility, or otherwise controlled to prevent explosions, underground fires, nuisance conditions, or groundwater degradation due to gas migration through the vadose zone.

17. A periodic load-checking program shall be implemented to ensure hazardous waste is not discharged at this Facility. The program must be submitted to the Regional Water Board Executive Officer for approval. At a minimum, the program shall include:

    a. Randomly checking loads for hazardous wastes;
    b. A description of the training program for on-site personnel;
    c. Record keeping and a reporting program;
    d. A program implementation schedule; and
    e. Disposal options for waste found in violation of this Board Order.

    Within 90 days of discovery, hazardous wastes shall be properly manifested and transported off-site for disposal at a facility permitted to receive this waste stream.

18. To minimize potential pollution to surface waters by windblown litter and particulates from this Facility, the Discharger shall:

    a. Compact MSW into the working face of the WMU as soon as practicable and promptly cover waste with daily cover. At no time shall discharged waste remain uncovered for a period greater than 24 hours.

b. Utilize a minimum of six (6) inches of compacted soil for daily cover. The Regional Water Board Executive Officer may approve alternatives that provide equivalent or better protection.

c. Implement a litter collection and disposal program to manage wind blown litter discharged on-site, and to adjacent off-site areas. This program shall include provisions to inspect and remove litter from site fencing following high wind events.

d. Inspect fencing around active areas of the landfill and report the results of the inspections as required in Monitoring and Reporting Program No. R7-2009-0003. A standard of "zero" escape of litter from the permitted Facility shall be established through the use of control systems, and collection of escaped litter from the working face.

19. The Discharger shall remove and relocate any waste that is discharged at this Facility in violation of these requirements.

20. The Discharger shall maintain visible monuments identifying the boundary of each active area, and the entire WMU where waste has been placed.

21. Public contact with MSW and/or leachate shall be prevented through fences, signs and other appropriate alternatives.

22. Waste shall be confined to the landfill footprint as described on Attachment 2, Site Map.

23. Waters used for dust control and fire suppression shall be limited to amounts necessary for these purposes to minimize the potential for infiltration into the WMU.

24. If there is a "statistically significant evidence of a release" from the WMU, as defined in Title 27, Section 20425, the Discharger shall implement an evaluation monitoring program, in accordance with Part I.E.3d of the attached Monitoring and Reporting Program No. R7-2009-0003 and future revisions thereto.

25. For any future expansion, the Discharger shall install a liner/LCRS system consistent with Finding 34, or as approved by the Executive Officer.

26. Final cover for the landfill shall be consistent with Finding 55 and Attachment 7, or an alternative system approved by the Executive Officer pursuant to Title 27, Section 21090.

B. PROHIBITIONS

1. The discharge of waste to land not owned by the Discharger, or to areas outside the WMU, is prohibited.

2. The discharge of the following wastes, as defined in Chapter 3 of Title 27 (commencing with Section 20200), is prohibited:

    a. Hazardous waste, as defined in CCR, Title 22, Section 66261, except for waste that is hazardous due to friable asbestos content;

    b. Designated waste;

    c. Liquid waste (moisture content more than 50%);

    d. Recyclable White goods (i.e. large intact household appliances);

    e. Infectious wastes;

    f. Geothermal wastes;

    g. Incinerator ash, unless approved by the Regional Water Board Executive Officer and allowed by California regulations;

    h. Radioactive waste; and

    i. Sewage sludge from a wastewater treatment plant that does not contain at least 20 percent solids (by weight) if primary sludge or 15 percent solids if secondary sludge or a mixture of primary and secondary sludge (Title 27 Section 20220.c).

3. The Discharger shall neither cause nor contribute to the following conditions:

    a. Contamination or pollution of groundwater via the release of waste constituents in either liquid or gaseous phase.

    b. An increase in concentrations of waste constituents in soil-pore gas, soil-pore liquid, soil or other geologic material outside the WMU, if such waste constituents could migrate to waters of the State, in either liquid or gaseous phase, and cause contamination, pollution, or nuisance.

4. The discharge of waste to surface water, surface water drainage courses, or to groundwater is prohibited.

5. The discharge of waste that facilitates erosion or decay, or otherwise reduces or impairs the integrity of containment structures is prohibited.

6. The discharge of waste, which, when mixed or commingled with other landfill wastes may create heat or pressure, fire or explosion, toxic by-products, or other chemical reactions, that: (1) impairs the integrity of the containment structure or (2) generates products requiring a higher level of containment than provided by this WMU, is prohibited.

C. PROVISIONS

1. The Discharger shall comply with all applicable regulations of Title 27 and implementing regulations of RCRA Subtitle D that are not specifically referred to in this Board Order.

2. The Discharger shall comply with all Specifications, Prohibitions, and Provisions of this Board Order immediately upon adoption.

3. This Board Order does not authorize violation of any federal, state, or local laws or regulations.

4. The Discharger is the responsible party for the WDRs, and Monitoring and Reporting Program No. R7-2009-0003, and revisions thereto, and must comply with all conditions of this Board Order. Noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act (Cal. Water Code § 13000 et seq.), and is grounds for enforcement action, which may include Regional Water Board or court orders that require corrective action, impose civil monetary liability, or modification or revocation of these WDRs.

5. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board Executive Officer.

6. This Board Order does not convey property rights or exclusive privileges, nor does it authorize injury to private property, invasion of personal rights, or infringement of federal, state, or local laws.

7. The Regional Water Board considers the Discharger the responsible party for correcting any problems that may arise in the future as a result of this waste discharge.

8. The Discharger shall comply with Monitoring and Reporting Program No. R7-2009-0003, and future revisions thereto, as specified by the Regional Water Board Executive Officer.

9. The Discharger shall ensure that all Facility operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the Facility at all times.

10. The Discharger shall allow the Regional Water Board, or any authorized representative, upon presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the premises regulated by this Board Order, or the place where records are kept under the conditions of this Board Order;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Board Order;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this Board Order; and

d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the CWC, any substances or parameters at this Facility.

11. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control installed or used by the Discharger to achieve compliance with this Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires backup or auxiliary facilities, or similar systems installed by the Discharger when necessary to achieve compliance with the conditions of this Board Order.

12. Adequate measures shall be taken to ensure unauthorized persons are effectively excluded from contacting the waste or disposal facilities at the Facility.

13. The Discharger shall immediately notify the Regional Water Board of any flooding, slope failure or change in site conditions that may impair the integrity of waste containment, or precipitation and drainage control structures.

14. The Discharger shall maintain a legible record, using a reporting form approved by the Regional Water Board Executive Officer, of the volume and weight (in tons) of MSW received at this Facility, and the manner and location of disposal.

15. Two years prior to the anticipated closure of the Facility or any portions thereof, the Discharger shall submit, for review and approval by the Regional Water Board Executive Officer, a closure and post-closure maintenance plan in accordance with Section 21769 of Title 27.

16. The closure plan shall include:

a. Facility location map;
b. Topographic maps;
c. Maximum extent of closures;
d. Current monitoring and control systems;
e. Land uses;
f. Estimated closure date and schedule;
g. General closure description;
h. Other special requirements;
i. Revised closure cost estimates (if appropriate); and
j. Any other applicable requirements as specified in Title 27.

17. The post-closure maintenance plan shall include:

    a. Security and fencing;
    b. Survey monuments;
    c. Final Cover;
    d. Storm water management system;
    e. Active gas extraction system, if necessary;
    f. Vadose zone soil-pore gas monitoring system, if necessary;
    g. Groundwater quality monitoring system; and
    h. Any other applicable requirements as specified in Title 27.

18. The Discharger shall submit a detailed post-earthquake inspection and corrective action plan for implementation immediately following an earthquake that generates significant ground shaking, i.e., Modified Mercalli Intensity V or greater, at or near the Facility. The Plan shall address damage to and corrective measures for: containment structures; leachate control and storm water management systems; wells and equipment to monitor groundwater and landfill gas, and any other system/structure potentially impacted by static and seismic deformations of the WMU. The Discharger shall notify the Regional Water Board Executive Officer immediately of damage to the Facility due to an earthquake, and provide a post-earthquake inspection report within fifteen (15) working days.

19. Unless otherwise approved by the Regional Water Board Executive Officer, all water quality monitoring analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be preformed in accordance with the latest edition of "Guidance Establishing Test Procedures for Analysis of Pollutants", promulgated by the U.S. Environmental Protection Agency.

20. The Discharger shall furnish, under the penalty of perjury, technical monitoring program reports, submitted in accordance with the specifications requested by the Regional Water Board Executive Officer. Such specifications are subject to periodic revision as may be warranted.

21. This Board Order is subject to Regional Water Board review and update to comply with a change in state or federal law or a material change in the character of the discharge.

22. At any time, the Discharger may file a written request to the Regional Water Board Executive Officer to propose modifications to the Monitoring and Reporting Program. The request shall include supporting documents, and may address modifications to any of the following:

    a. Statistical method, non-statistical method, or retest method used for a given constituent or parameter;

    b. Method for determining background for a given constituent or parameter;

c. Method for displaying annual data plots;

d. Analytical method to test a given constituent or parameter;

e. Media monitored (e.g., the addition of soil-pore gas to media being monitored);

f. Number or placement of monitoring points or background monitoring points for a monitored medium; or

g. Any aspect of monitoring or Quality Assurance/ Quality Control (QA/QC). After reviewing the subject modification request, the Regional Water Board Executive Officer may approve and incorporate the proposed modifications (along with any necessary changes) into the Monitoring and Reporting Program, or may reject the proposed modifications. The Executive Officer shall specify the reasons for the rejection. The Discharger shall implement the approved modifications in the Monitoring and Reporting Program upon receipt of a revised Monitoring and Reporting Program that incorporates these modifications.

23. The Discharger shall submit to the Regional Water Board, and to the California Integrated Waste Management Board (CIWMB), if required, evidence of Financial Assurance for Closure and Post-Closure Maintenance pursuant to Section 20950 of Title 27.

24. Financial assurance for post-closure maintenance shall be determined by the CIWMB in accordance with regulation. The post-closure maintenance period shall extend at least thirty (30) years after completion of closure for the entire Facility, and extend as long as wastes pose a threat to water quality.

25. Pursuant to Title 27, Section 20380(b), within 180 days of adoption of this Board Order the Discharger shall submit to the Regional Water Board Executive Officer assurance of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the Facility.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 18, 2009.

ROBERT PERDUE
Executive Officer