CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. R6V-2012-0042
WDID NO. 6B191112004

WASTE DISCHARGE REQUIREMENTS
FOR

ANTELOPE VALLEY PUBLIC LANDFILL

Los Angeles County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

   Antelope Valley Recycling and Disposal Facility, Inc., a wholly-owned subsidiary of Waste Management, is currently the owner/operator of the Antelope Valley Public Landfill. For the purpose of this Water Board Order (Order), Waste Management is referred to as the "Discharger."

2. Landfill

   The Discharger has operated two municipal solid waste landfills (Class III) at 1200 West City Ranch Road, Palmdale. These landfills, Antelope Valley Public Landfill I (WDID No. 6B190335001) and Antelope Valley Public Landfill II (WDID No. 6B199402002), have operated under separate Waste Discharge Requirements (WDRs) as described in Finding No. 3.

   For the purposes of this Order, Antelope Valley Public Landfill I is referred to as Unit I and Antelope Valley Public Landfill II is referred to as Unit II, and the consolidated and expanded unit permitted under this Order is referred to as the "Landfill" (WDID No. 6B191112004). The Landfill includes Unit I, Unit II, and an 11-acre expansion that will bridge the area between the two units.

3. Order History

Board Order No.	Date Adopted	Description
Unit I (WDID No. 6B190335001)		
6-84-52	05/11/1984	Established WDRs for Landfill I
6-93-100-16	09/09/1993	Amended the WDRs to incorporate the requirements of 40 Code of Federal Regulations parts 257 and 258 (Subtitle D) as implemented in California under State Water Resources Control Board Resolution No. 93-62.

Board Order No.	Date Adopted	Description
6-95-119	11/09/1995	Revised WDRs to require Discharger to achieve compliance with revised requirements California Code Regulations (CCR), title 23.
6-95-119A1	01/08/1998	Documented and accepted the liner design for Phase 4 of Unit I.
6-95-119A2	10/10/2001	Documented and accepted a modified liner design for Phase 4 of Unit I.
Unit II (WDID No. 6B199402002)		
6-95-1	01/12/1995	Established new WDRs for new Unit II.

4. Reason for Action

The Water Board is adopting these WDRs in response to a Report of Waste Discharge, which proposed a lateral expansion into the 11-acre area that separates Unit I from Unit II and the reconfiguration of the two units as a single landfill.

5. Report of Waste Discharge

In October 2010, the Discharger submitted a Report of Waste Discharge (RWD) in the form of a Joint Technical Document (JTD), which is considered equivalent to a RWD. The RWD/JTD proposed a horizontal expansion and reconfiguration of Unit I and Unit II as a single landfill. Water Board staff determined the report was incomplete and issued a letter in November 2010 requesting additional information from the Discharger. In response to this letter, the Discharger submitted the revised RWD/JTD in December 2011. The revised RWD/JTD was distributed to the California Department of Resources Recycling and Recovery (CalRecycle) and Los Angeles County Department of Public Health, the Local Enforcement Agency.

6. Landfill Location and Landowner

The Landfill is located on 185 acres in the southern portion of the City of Palmdale as shown on Attachment A, which is made part of this order. The Landfill's street address is 1200 West City Ranch Road and is approximately 0.5 mile west of State Highway 14. The Landfill is located in the NW ¼ of Section 33, T6N, R12W, San Bernardino Meridian (latitude 34°34´N and longitude 119°09´W) and includes Los Angeles County assessor parcel numbers: 3004-013009, 3004-013010, 3004-013011. The Discharger is the owner of the land upon which the Landfill is located.

7. Description of the Existing Landfill

Landfill operations at this location began in 1956. Until April 2007, all wastes were disposed in Unit I as shown in Attachment B, which is made part of this Order. Most of Unit I is a canyon-type landfill that was constructed by cut and cover operations for areas below grade and filling above natural grade. Unit I was constructed in four phases on 57 acres. Phases 1, 2, and 3 are unlined portions of Unit I. Phase 4 is a lined portion of Unit I constructed adjacent to Phases 1, 2, and 3. Phase 4 was constructed and filled in accordance to Board Orders 6-95-119A1 and 6-95-110A2. Unit I has a total capacity of approximately 7,400,000 cubic yards and a remaining capacity of approximately 100,000 cubic yards.

In April 2007, the Discharger stopped accepting waste in Unit I and began accepting waste in Unit II in accordance with Board Order 6-95-1. All portions of Unit II are lined. Unit II has a total area of 57 acres, a total capacity of approximately 9,200,000 cubic yards, and a remaining capacity of approximately 8,000,000 cubic yards. The footprints of Units I and II and the Landfill are shown in Attachment B.

8. Waste Classification

The Landfill receives nonhazardous solid waste and other special wastes (treated auto shredder waste, non-hazardous and non-designated contaminated soils, treated wood waste, non-friable asbestos containing materials) from the City of Palmdale and nearby communities. Nonhazardous solid waste is defined in CCR, title 27, sections 20220. The other special wastes are discussed in Findings 11 through 16.

9. Waste Management Unit Classification

Pursuant to CCR, title 27, section 20260, the Landfill is classified as a Class III waste management unit. The waste is defined as municipal solid waste (MSW) in Subtitle D.

10. Cover Material

As defined in CCR, title 27, section 20164, cover material means soils/earthen materials or alternative materials used in covering compacted solids wastes in a disposal site. Cover material may serve as daily, intermediate or final cover. "Alternative daily cover" (ADC) means cover material other than at least six inches of earthen material, placed on the surface of the active face at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging. "Daily cover material" includes that cover material placed on the entire surface of the active face at least at the end of each operation day in order to control vectors, fire, odors, blowing litter and scavenging. "Final cover material" means cover material that represents the permanently exposed final surface of a fill. "Intermediate cover material" means cover

material placed on all fill surfaces where additional cells are not to be constructed for 180 days or more to control vectors, fires, odors, blowing litter, scavenging, and drainage.

11. Alternative Daily Covers

ADCs are utilized at the Landfill. Currently, tarps, curbside greenwaste, processed construction and demolition material, non-hazardous/non-designated contaminated soil, treated auto shredder waste (TASW), and dried drinking water treatment sludge are approved for ADC at the Landfill.

Pursuant to CCR, title 27, section 20690(b), all types of alternative daily cover must be approved by the local enforcement agency (LEA), prior to use at the Landfill as consistent with CCR, title 27, section 21570 through section 21686. Proposed uses of alternative daily cover materials potentially require site specific demonstration projects approved by the LEA with concurrence by CalRecycle to establish suitability as daily cover. However, site specific demonstration projects are not required for the following materials used as specified and in accordance with CCR, title 27, section 20690(a):

a. contaminated sediment, dredge spoils, foundry sands, energy resource exploration and production wastes;
b. geosynthetic fabric or panel products (blankets):
c. foam products;
d. processed green material;
e. sludge and sludge-derived materials;
f. ash and cement kiln dust materials;
g. treated auto shredder waste;
h. compost materials;
i. processed construction and demolition wastes and materials;
j. shredded tires; and
k. spray applied cementitious products

Water quality protection requirements for cover materials are contained in CCR, title 27, section 20705(e) as follows:

Limitations on Cover Materials — Except for reusable covers that are never incorporated into the landfill, daily and intermediate cover shall only consist of materials:

a. Match Landfill Classification — which meet the classification criteria for wastes that can be discharged to that landfill. Therefore, a material that would be classified as a designated waste cannot be utilized for daily or intermediate cover at a Class III landfill unless that material is approved for discharge (as a waste) to that landfill pursuant to CCR, title 27, section 20200(a)(1); and

b. Composition — whose constituents (other than water) and foreseeable breakdown byproducts, under the chemical (including biochemical) and temperature conditions which it is likely to encounter within the landfill, either:

i. for non-composite lined portions of the landfill, are mobilizable only at concentrations which would not adversely affect beneficial uses of waters of the State, in the event of a release; or
ii. for composite-lined portions of the landfill, are listed as constituents of concern in the landfill's water quality protection standard, created pursuant to CCR, title 27, section 20395.

12. Treated Auto Shredder Waste

Treated (stabilized) auto shredder waste is any non-recyclable waste from the shredding of automobile bodies (from which batteries, mufflers, mercury switches, and exhaust pipes have been removed), household appliances, and sheet metal. The Discharger proposes to use TASW as ADC in the lined portion of the Landfill. The Discharger may occasionally dispose of TASW in the lined portion of the Landfill. TASW from certain authorized facilities, under a waiver issued by Department of Toxic Substances Control (DTSC), and managed pursuant to CCR, title 22, section 66260.200(f), and DTSC Policy and Procedure No. 88-6, may be managed as non-hazardous waste. This Order establishes discharge concentration limits for certain constituents found in TASW.

13. Treated Wood Waste

The Discharger proposes to discharge treated wood waste at the Landfill. CCR title 22 defines "Treated wood" to mean wood that has been treated with 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 (FIFRA, 7 U.S.Code, section 136 and following). This may include but is not limited to waste wood that has been treated with chromated copper arsenate (CCA), pentachlorophenol, creosote, acid copper chromate (ACC), ammoniacal copper arsenate (ACA), ammoniacal copper zinc arsenate (ACZA), or chromated zinc chloride (CZC).

14. Treated Wood Waste Specifications

Findings and specifications in these WDRs apply only to treated wood waste that is a California hazardous waste, solely due to the presence of a preservative in the wood, and is not subject to regulation as a hazardous waste under the federal act. Treated wood that is not a California hazardous waste can be handled as construction and demolition debris or MSW, as appropriate, and the limitations and prohibitions for its handling as a California hazardous waste as specified in these WDRs do not apply.

15. Treated Wood Waste Disposal

CCR, title 22, section 67386.11 allows treated wood waste to be disposed in a composite-lined portion of a MSW landfill that is regulated by WDRs issued pursuant to the California Water Code provided that the landfill:

a. Comply with the prohibitions in CCR, title 22, section 67386.3, which are:

i. Treated wood waste shall not be burned, scavenged, commingled with other waste prior to disposal, stored in contact with the ground, recycled without treatment (except as in iii, below), treated except in compliance with Section 67386.10, or disposed to land except in compliance with Section 67386.11.

ii. Any label or mark that identifies the wood and treated wood waste shall not be removed, defaced, or destroyed.

iii. Treated wood waste many be recycled only by reuse when all of the following apply:

- Reuse is onsite.
- Reuse is consistent with FIFRA approved use of the preservative.
- Prior to reuse, treated wood waste is handled in compliance with CCR, title 22, division 4.5, chapter 34.

b. Ensure treated wood waste is managed at the landfill according to CCR, title 22, division 4.5, chapter 34 prior to disposal.

c. Monitor the landfill for a release and if a verified release is detected from the unit where treated wood is disposed, the disposal of treated wood will be terminated at the unit with the verified release until corrective action ceases the release.

d. Handle treated wood waste in a manner consistent with the applicable sections of the California Occupational Safety and Health Act of 1973.

16. Contaminated Soils and Related Wastes

Soils contaminated with moderate concentrations of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organochlorine pesticides, polychlorinated biphenyls (PCBs), and California Assessment Manual (CAM) metals,are wastes as defined in California Water Code (CWC) section 13050 and are required to be regulated under waste discharge requirements pursuant to CWC section 13263(a). The discharge of such wastes to land could affect the quality of the waters of the State if not properly

managed. This Order sets forth requirements to ensure that discharge of such wastes does not affect the quality of waters of the state.

The Discharger proposes to accept non-hazardous and non-designated contaminated soils for on-site beneficial use (daily or intermediate cover, berms, maintenance of tipping deck, roads) and for disposal. This Order prescribes discharge criteria for contaminated soils beneficially used on-site and disposed in the lined portion of the landfill.

Pursuant to CCR, title 27, section 20686, beneficial reuse of solid wastes at the Landfill shall include, but not be limited to, the following: alternative daily cover, alternative intermediate cover, final cover foundation layer, liner operations layer, leachate and landfill gas collection system, construction fill, road base, wet weather operations pads and access roads, and soil amendments for erosion control and landscaping. This Order specifies criteria for the beneficial reuse of materials at the Landfill.

17. Non-Friable Asbestos Containing Materials

Non-friable asbestos containing material (ACM) is any material containing more than one percent (1%) asbestos that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure. The Discharger accepts only non-friable ACM for disposal. Friable asbestos must be managed as a non-RCRA hazardous waste as regulated by CCR, title 22, section 66261.24.

18. Designated Waste

Designated waste is defined in the California Water Code, section 13173, as either of the following:

a. Hazardous waste that has been granted a variance from hazardous waste management requirements pursuant to Section 25143 of the Health and Safety Code.

b. Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan.

19. Proposed Liner System

The Discharger proposes to construct Phase V (future refuse disposal area of Unit II and the lateral expansion) with an engineered composite liner system and leachate collection and recovery system. The liner and leachate collection system will be of

the same designs as used for the existing portions of Unit II and will be constructed to form one continuous system under the Unit II and the lateral expansion.

The engineered alternative liner includes the use of a geosynthetic clay liner (GCL) in lieu of the 2-foot thick, compacted clay liner and the use of a geocomposite as the blanket leachate collection layer. The Discharger provided a demonstration that the GCL was a suitable substitute for a compacted soil liner and that this engineered alternative satisfies the performance criteria contained or referenced in State Water Resources Control Board Resolution No. 93-62 Order III.A.1.b. The Discharger demonstrated the cost of the prescriptive standard is about 30% higher than the engineered alternative. The Discharger also showed the engineered alternative provides superior water quality protection from landfill leachate relative to the prescriptive standard. .

The engineered alternative liner system for the bottom areas of the Landfill will be constructed as described in the RWD/JTD, which includes these components:

- Prepared subgrade,
- geosynthetic clay liner (GCL),
- 60 mil thick, high density polyethylene (HDPE), double sided, textured geomembrane,
- Geocomposite leachate collection layer,
- 2-foot thick protective soil cover.

The engineered alternative liner system for the side slope areas of the Landfill will include these components (as described in the RWD/JTD):

- Prepared subgrade,
- GCL,
- 60 mil thick, HDPE, single sided, textured geomembrane,
- Geocomposite leachate collection layer,
- 2-foot thick protective soil cover.

The leachate collection and recovery system is designed as blanket-type system that completely covers the bottom of the Landfill directly above the liner system. The system is designed to be chemically and physically resistant to the waste and leachate generated by the waste and to function throughout the Landfill's operating life and post-closure period.

20. Water Quality Protection Standard

The Water Quality Protection Standard consists of constituents of concern (COC, including monitoring parameters), concentration limits, monitoring points, and the point of compliance. The standard applies over the active life of the Landfill, closure and post-closure maintenance period, and during any compliance period. The

constituents of concern, monitoring points, and point of compliance are described in Monitoring and Reporting Program (MRP) R6V-2012-PROPOSED, which is attached to and made a part of this Order. The compliance period is specified in II.E of this Order.

21. Data Analysis Methods

Appropriate methods of reviewing monitoring data are necessary for the earliest possible detection of a significant release from the Landfill. This Order includes requirements regarding general methods for statistical and non-statistical data analyses.

22. Detection Monitoring

Pursuant to CCR, title 27, section 20385, the Discharger implements a detection monitoring program for Unit I and Unit II. The monitoring network consists of seven groundwater monitoring wells. However, two wells have been consistently dry. This Order requires the Discharger to propose a subsurface investigation and to modify the monitoring well network based on the results of investigation efforts. To date, the groundwater monitoring data has not indicated a release of pollutants from either Unit I or Unit II into the groundwater.

23. Unsaturated Zone Monitoring

Through previous monitoring at the site, the Discharger has demonstrated that liquid recovery types of unsaturated zone monitoring cannot provide an indication of a release from the unit as soil pore liquid samples were never recovered. The Discharger implements an alternative method (non liquid recovery) of unsaturated zone monitoring pursuant to CCR, title 27, section 20415(d)(4).

24. Evaluation Monitoring

An evaluation monitoring program may be required, pursuant to CCR, title 27, section 20425, to evaluate evidence of a release if detection monitoring and/or verification procedures indicate evidence of release.

25. Corrective Action

A corrective action program to remediate detected releases from the Landfill may be required, pursuant to CCR, title 27, section 20430, if results of the evaluation monitoring program warrant a corrective action program.

26. Site Geology

The Landfill is located at the southern margin of the western Mojave Desert at the base of the Sierra Pelona Mountains. The Sierra Pelona Mountains are part of the Transverse Ranges and have peaks with elevations over 5000 feet mean sea level (MSL); the Landfill is located at an elevation of approximately 3000 feet MSL. The location of the landfill site relative to the mountains is shown in Attachment C.

The geologic units underlying the site, from oldest to youngest, are granitic basement rocks, claystone and sandstone of the Anaverde Formation, and unconsolidated alluvial deposits. The thickness of the Anaverde Formation underlying some portions of the Landfill is over 200 feet thick. The thickness of the alluvial deposits underlying the southern portion of the Landfill is up to 150 feet. The granitic basement rocks are exposed at the surface in the northeast portion of the Landfill. The Anaverde Formation and alluvial deposits are exposed at the surface in all other portions of the Landfill footprint. The claystones of the Anaverde Formation in the vicinity of the Landfill include thin beds of evaporite deposits, which contain gypsum and other evaporite minerals.

The dominant geologic feature near the Landfill is the trace of the San Andreas Fault (SAF). The Landfill is located on the northeast side of a linear valley created by erosion along the zone of weakened rocks caused by repeated movements along the fault. The SAF trace trends approximately parallel and adjacent to the southern boundary of the Landfill as shown in Attachment C. The SAF is a Holocene fault (i.e., ground rupture within the last 11,000 years) that has a history of frequent earthquakes and evidence of repeated surface ruptures. A second Holocene fault is an unnamed fault that is approximately parallel to the SAF, and is located approximately 250 feet north of the northwest corner of the Landfill. Both the SAF and the unnamed fault zone are identified as Alquist-Priolo Special Study Zones by the California Geologic Survey, which means that the surface trace of the fault must be located and mapped relative to certain development projects. New landfills must not be located on Holocene faults.

Two inactive (i.e. no evidence for ground rupture along the fault in the last 11,000 years) faults have been identified as crossing through the Landfill footprint. These faults are the Little Rock Fault and a fault designated as "Fault A." Fault investigations conducted by the Discharger and the prior owner/operator concluded that these fault segments are not active.

27. Seismic and Unstable Area Hazards

Pursuant to CCR, title 27, section 20260, new Class III landfills shall not be located on a known Holocene fault and can be located within areas of potential rapid geologic change only if the Water Board finds that the unit's containment structures are designed, constructed, and maintained to preclude failure. Municipal solid waste landfills are also subject to more-stringent federal requirements regarding unstable

areas, which were adopted by State Water Resources Control Board (State Water Board) Resolution No. 93-62.

Based on the Discharger's investigations and other investigations at the site by the prior owner/operator, the Landfill is not located on a Holocene fault.

The Discharger evaluated the stability of the constructed soil berm and the proposed landfill in light of potential off-fault rupture and distributed displacement from a range of coseismic fault displacement events on the SAF adjacent to the site. The Discharger interpolated the off-fault distributed displacement hazard curves to indicate that for a return period of approximately 1,000 years the expected distributed displacement beneath the landfill embankment is approximately 150 mm to 200 mm for a repeat of the 1857 earthquake (a Moment Magnitude 7.8 earthquake that is the Maximum Credible Earthquake event for the landfill design). An expected distributed displacement of 1000 mm has a return period estimated at approximately 3,000 years for the 1857-type earthquake event. For a given distributed displacement, the return periods increase considerably for the Moment Magnitude 7.46 earthquake that only ruptures the northern and southern Mojave segments.

The Discharger performed both static and seismic slope stability analyses for the landfill, including the liner system and southern berm. The results of the slope stability and seismic deformation analysis indicates that the landfill mass has a static factor of safety in excess of 1.88 with permanent deformations of less than 6 inches. For the landfill cover, the analysis indicate the final cover has a factor of safety in excess of 2.75 with permanent seismic deformation ranging from 24 to 36 inches near the crest of slopes to less than 12 to 24 inches for lower to intermediate portions of the final slopes. The deformations for the liner system are within industry accepted criteria of less than 6-inches. The large permanent seismic deformations for the final cover are considered acceptable since repairs to the monolithic cover are simple and can be completed within short time frames. For the southern berm, the critical sliding surface is a surficial surface along the face of the embankment. This surface represents sloughing along the face of the slope and does not impact the stability of the embankment. An infinite slope stability analysis indicates a static factor of safety of 1.5 for this potential sliding surface. The Discharger also looked at a deeper potential sliding surface that could impact the stability of the waste. This potential sliding surface was a deeper surface through the berm that extended to the edge of the liner system. The yield accelerations for the potential slip surface were computed to be 0.333g. The permanent displacement analysis, using Bray and Travasarou (2007) simplified method, were computed for 16, 50, and 84 percent probabilities of being exceeded (i.e., for media-1σ, median, and median+1σ). The calculations estimated a median seismically induced permanent displacement is approximately 5 inches for the deeper slip surface that extends to edge of the waste. Deeper slip surfaces would have progressively higher yield accelerations and as a result smaller calculated deformations. This magnitude of permanent displacement is acceptable for an earthen berm.

The SAF is roughly parallel to the toe berm and is a minimum 10 meters away. If off-fault rupture occurs beneath the soil berm embankment, these movements may result in horizontal cracks parallel to the slope that propagate to the surface requiring some minor repair. However, the distributed deformations, if any, should not impact the stability of the slope or prevent the berm from providing support to the landfill.

28. Site Hydrogeology

Groundwater at the Landfill appears to be present in the lower portion of the alluvial deposits and the upper portion of the Anaverde Formation. The Discharger has proposed additional investigations to characterize the groundwater in the alluvium and the claystone and how the different geologic units may affect the groundwater's physical or chemical characteristics. These investigation efforts will be implemented as directed by this Order.

The Landfill's monitoring wells are located near the southern boundary of the landfill, where the depth to groundwater in the alluvial deposits and Anaverde Formation ranges from 22 feet to over 85 feet. Groundwater was not encountered in borings in the granitic basement rocks that underlie the northeastern portion of the Landfill. The total depth of the deepest boring in the granitic rocks was 220 feet.

The groundwater flow direction beneath the Landfill is generally to the south toward the SAF, which appears to act as a groundwater barrier. Adjacent to the fault, the direction of groundwater flow is to the southeast, which parallels the fault and follows the drainage of Anaverde Creek. Groundwater depth and quality data indicate that the groundwater on the north (Landfill) side of the fault is isolated from the groundwater on the south side of the fault.

29. Groundwater Quality

Background groundwater quality at the Landfill appears to be poor as compared to drinking water standards. A 1991 report evaluated the groundwater quality in wells in the vicinity of the Landfill. This report stated that elevated levels of calcium, chloride, iron and sulfate were present in local wells. These inorganic constituents are also elevated in the monitoring wells at the Landfill. The presence of these constituents in groundwater at elevated levels is probably the result of the dissolution of the evaporite deposits in the Anaverde Formation. Additionally, manganese and nitrate, which were not discussed in the 1991 report, occur at relatively elevated concentrations in Landfill monitoring wells. The Discharger's statistical analysis of the elevated constituents indicates that these elevated concentrations represent background conditions and are not a result of a discharge from the Landfill.

Groundwater monitoring at the Landfill also reveals a high degree of variability in the concentrations of some constituents, especially in compliance monitoring well,

MW-3, as shown in Table 1.

Table 1: Maximum and Minimum Concentrations of Elevated Constituents in Compliance in Groundwater Samples from Well MW-3

Parameter	Maximum		Minimum		MCL
	mg/L	Date	mg/L	Date	
Calcium	710	Dec 2004	293	Jan 2001	none
Chloride	**3,100**	Sep 2007	150	Mar 2007	250[a]
Iron	**420**	Mar 2009	2.8	Jan 2001	0.3[a]
Manganese	**14**	Mar 2007	**0.07**	Jan 2001	0.05[a]
Nitrate as N	**13**	Apr 2001	<0.5	Jul 2002	10[b]
Sulfate	**9,300**	Mar 2007	**1,330**	Apr 2001	500[a]
TDS	**10,000**	Mar 2007	3,830	Jan 2001	500[a]

Notes: mg/L = milligrams/liter.
Concentrations were compiled from monitoring events from January 2001 to June 2011.
Concentrations above a MCL are shown in bold.
a. Secondary MCL (e.g., taste or order thresholds), b. Primary MCL

30. Groundwater Investigation

The Discharger's groundwater monitoring program suggests that the Landfill has not affected groundwater underlying the site. However, two of the groundwater monitoring wells are consistently dry and the monitoring network may need modifications based on the results of an additional investigation. This Order requires the Discharger to provide a work plan to further investigate the occurrence and quality of groundwater in the Landfill area. Modifications to the groundwater monitoring network based on the results of these investigations may be required by the Executive Officer.

31. Site Surface Hydrology and Storm Water Runoff

Anaverde Creek is the primary drainage in the linear valley where the Landfill is located (Attachment C). The creek is an ephemeral stream that only flows during periods of heavy rain. Anaverde Creek follows the trace of the San Andreas Fault, flowing southeast along the southern boundary of the Landfill. Federal Emergency Management Agency (FEMA) maps show that the proposed limits of waste disposal are outside of the 500-year floodplain. The Landfill will not be located within wetland areas of Anaverde Creek.

The Discharger prepared a site-specific study of the potential flooding of Anaverde Creek on the Landfill from both the 100-year FEMA flood (as required by CCR, title 27, section 21750(c)(2) and the 50-year Capital Flood event (as required by the Los Angeles County Department of Public Works). The study showed that existing structures and the proposed project will not be inundated by the 100-year FEMA flood. Localized flooding of parking areas and ancillary facilities may occur during

the Capital Flood. This study also showed localized erosion could occur along the north bank of Anaverde Creek adjacent to the Landfill during a flood event on Anaverde Creek. To control potential erosion, the Discharger has proposed armoring that portion of the creek.

The Discharger also performed an analysis of a 100 year storm event on the Landfill pursuant to CCR, title 27, section 20260(c)). As required by the City of Palmdale Master Drainage Plan, and to prevent hydromodification of the pre-landfill hydrology of Anaverde Creek, the Discharger will expand the existing storm water management system, including the addition of piping, channels and two detention basins, so the runoff from the Landfill will be no more than 85% of the pre-Landfill run-off. The expanded storm water management system will divert all run-on around the Landfill and discharge the storm water to Anaverde Creek at four locations, including the discharge from the two detention basins. Rip-rap armoring will be installed at three discharge locations to minimize scour.

32. Site Topography

The Landfill is located at the base of the northern ridge of the linear valley drained by Anaverde Creek. This ridge separates the valley from the main portion of Antelope Valley. Surface elevations range from approximately 2,800 feet above mean sea level at the property's southeastern corner to 3,200 feet above mean sea level along the northern ridgeline. Topography is shown on Attachment C, which is made part of this Order.

33. Climate

The Landfill is located in a transition area between the semi-arid Los Angeles Basin and the arid Mojave Desert. The area is characterized by low rainfall, moderate humidity, mild winters, and hot summers. Rainfall generally occurs between November and April with an average annual rainfall of 7.6 inches. The average annual evaporation is 84 inches, with a maximum monthly average of 13.6 inches in July and a minimum monthly average of 2.0 inches in January.

34. Land Uses

The City of Palmdale's land-use categories within one mile of the Landfill include residential, industrial, commercial, and public facilities. The nearest building is a Southern California Edison substation, which is located adjacent to the Landfill's eastern boundary. The closest residential unit is approximately 1,300 feet southeast of the limit of waste. There is a minimum 1,000 foot buffer between the Landfill's property boundary and a residential development west and southwest of the Landfill.

35. Landfill Development, Phase V

The next phase of landfill development, Phase V, will be designed and constructed so that Unit I, Unit II, and the expansion area essentially form one unit. The liner and leachate collection and recovery system will be integrated with the existing systems. Potential leachate migration from Phase V will be isolated from the unlined portions of Unit I. Base grading and engineered fill will be constructed to provide a firm foundation capable of supporting landfill structures.

36. Preliminary Closure and Post-closure Maintenance

A primary goal of landfill closure is to minimize the infiltration of water into the waste, thereby minimizing the production of leachate and landfill gas. The goal of post-closure maintenance is to assure that the landfill continues to comply with performance standards until the landfill no longer constitutes a potential threat to water quality. Environmental monitoring systems for groundwater, surface water, leachate, landfill gas will be operated during closure and post-closure periods.

The Preliminary Closure and Post-closure Maintenance Plan (Closure Post-closure Plan) proposes in-place closure of the waste and an extended period of monitoring. The Closure Post-closure Plan proposes an alternative final cover system composed of a compacted, monolithic cover with an average permeability of 1×10^{-5} centimeters/second. The Discharger's preliminary calculations indicate a cover thickness of 3.3 feet is a conservative estimate for cover thickness. The monolithic soil cover will control infiltration into the refuse by storing infiltrating water until it can be removed through evapotranspiration. The final cover will meet or exceed the requirements of CCR, title 27 and is appropriate for an arid climate. The final cover will be installed in accordance with CCR, title 27, section 20324.

This Order requires that the Discharger review the Closure Post-closure Plan annually to determine if significant changes in the operation of the Landfill or site conditions warrant an update of the plan.

37. Financial Assurance

The Discharger is required to obtain and maintain financial assurance instruments to conduct closure activities, post-closure maintenance activities, and corrective action activities pursuant to CCR, title 27, chapter 6. The Discharger has obtained bonds for financial assurance for closure, post closure, and corrective actions for the Landfill, which have been determined to be satisfactory by CalRecyle as of September 2011. This Order requires the Discharger to (a) report the amount of money available in the fund as part of an annual report; (b) demonstrate in an annual report that the amount of financial assurance is adequate, or increase the amount of financial assurance.

38. Receiving Waters

The receiving waters are the surface waters of Anaverde Creek (Lancaster Hydrologic Area 626.50).

39. Groundwater Resources

The site overlies a portion of the Antelope Valley Groundwater Basin (CA. Department of Water Resources Basin No. 6-44). The project as proposed will not purposefully discharge any waste that will degrade groundwater quality.

40. Lahontan Basin Plan

The Water Board adopted a Water Quality Control Plan for the Lahontan Basin (Basin Plan), which became effective on March 31, 1995. This Order implements the Basin Plan.

41. Policy for Maintaining High Quality Waters

State Water Board Resolution No. 68-16 requires the Water Board, in regulating the discharge of waste, to (A) maintain existing high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in water quality less than that described in State or Water Board policies; and (B) require that 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 must meet waste discharge requirements which will result in the best practicable treatment or 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.

Degradation of the quality of the waters of the State by the Discharger is not anticipated or authorized.

42. Beneficial Uses

The present beneficial uses of the groundwater of the Antelope Valley Ground Water Basin are defined in the Basin Plan as:

a. municipal and domestic supply (MUN);
b. agricultural supply (AGR);
c. industrial service supply (IND);
d. freshwater replenishment (FRSH).

Anaverde Creek is included in the basin plan under minor surface water bodies of the Lancaster Hydrologic Area. The beneficial uses of minor surface water bodies of the Lancaster Hydrologic Area are defined in the Basin Plan as:

a. MUN
b. AGR
c. groundwater recharge (GWR)
d. water contact recreation (REC-1)
e. nonwater contact recreation (REC-2)
f. warm fresh water habitat (WARM)
g. wildlife habitat (WILD)

43. Other Considerations and Requirements for Discharge

Pursuant to California Water Code, section 13241, the requirements of this Order take into consideration:

a. Past, present, and probable future beneficial uses of water.
This Order identifies past, present and probable future beneficial uses of water as described in Finding No. 41. The proposed discharge will not adversely affect present or probable future beneficial uses of water.

b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto. Finding Nos.28, 29, 30, and 31 describe the environmental characteristics and quality of water from this hydrographic unit.

c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area. The requirements of this Order will result in protection of water quality.

d. Economic considerations. This Order authorizes the Discharger's proposed actions to expand the Landfill. The Order accepts the Discharger's proposed actions as meeting the best practicable control method for protecting water quality from impacts from the Landfill.

e. The need for developing housing within the region. The Discharger is not responsible for developing housing within the region. This Order provides WDRs for the Facility.

f. The need to develop and use recycled water. There is currently no source of recycled water available to the Discharger. However, leachate and landfill gas condensate are used in accordance to CCR, title 27 requirements for onsite dust control.

44. California Environmental Quality Act

The action to issue WDRs for this Landfill involves provisions of the California Environmental Quality Act (Public Resources Code, section 21000 et seq.) On May 12, 2011, the City of Palmdale Planning Commission certified the Environmental Impact Report (EIR), State Clearing House No. 1990010988, for the Landfill expansion.

The Water Board has considered the EIR and incorporated mitigation measures within its jurisdiction into this Order to mitigate the project's significant impacts that relate to water quality and geotechnical issues under the Water Board's authority in accordance to CCR, title 27. Attachment D, which is made part of this Order, summarizes the EIR's mitigation measures for significant impacts that relate to water quality and geotechnical issues, and the Water Board's findings regarding these measures. This Order will ensure compliance with required mitigation measures.

45. Notification of Interested Parties

The Water Board has notified the Discharger and all known interested agencies and persons of its intent to adopt revised WDRs for the project.

46. Consideration of Interested Parties

The Water Board, in a public meeting held on **June 14, 2012**, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger shall comply with the following:

I. DISCHARGE SPECIFICATIONS

A. Nondegradation

State Water Board Resolution No. 68-16 "Statement of Policy With Respect to Maintaining High Quality of Waters In California," known as the Nondegradation Policy, requires maintenance of existing high quality in surface waters, ground waters, or wetlands. Whenever the existing quality of water is better than the quality of water established in the Basin Plan, such existing quality shall be maintained unless appropriate findings are made under Resolution No. 68-16. The project as proposed will not intentionally discharge any waste that will degrade water quality.

B. Surface Water Discharge Specifications

No wastewater or storm water shall leave the Landfill except as (1) either permitted by a NPDES industrial storm water permit issued in accordance with the federal Clean

Water Act (CWA) and the Porter-Cologne Water Quality Control Act (commencing with the Water Code section 13000) or (2) the Discharger must submit an amended RWD that requests revising this WDR with applicable surface water discharge specifications. The Discharger shall maintain and modify, as necessary, the storm water pollution prevention plan developed for the Landfill.

C. Discharge Limits for TASW

The Discharger must not beneficially reuse or dispose TASW with concentrations of their associated hazardous constituents that exceed the limits listed below by the extract of the waste or treatment residual.

Constituent	Concentration	Units
Cadmium and/or cadmium compounds	1.0	mg/L
Chromium (total) chromium compounds	560	mg/L
Chromium (VI) compounds	5.0	mg/L
Copper and/or copper compounds	25	mg/L
Lead and/or lead compounds	50	mg/L
Mercury and/or mercury compounds	0.2	mg/L
Nickel and/or nickel compounds	20	mg/L
Zinc and/or zinc compounds	250	mg/L
Polychlorinated biphenyl's (PCB's)	5.0	mg/L
Polychlorinated biphenyl's (PCB's)	50	mg/Kg

D. Contaminated Soils Disposal Criteria

Should the Discharger accept contaminated soils at the landfill, the Discharger shall do so in accordance with a Waste Acceptance Criteria Plan accepted by the Executive Officer, to comply with disposal requirements of this Order. The Discharger will prepare a Waste Acceptance Criteria Plan incorporating the following discharge criteria discussed below.

1. Unrestricted Onsite Use of Contaminated Soils

Clean and slightly contaminated soils, for which waste concentrations do not exceed the following threshold criteria, may be disposed of within the lined portion of the Landfill, or beneficially used on the landfill property without restriction.

a. For petroleum hydrocarbon contaminated soils, the threshold concentration is a total petroleum hydrocarbon (TPH) concentration of 10 mg/kg in the gasoline (C4-C12) or diesel (C13-C22) carbon-chain range, or 500 mg/kg in the C23 or greater carbon-chain range.

b. Threshold concentration levels for constituents other than petroleum hydrocarbons must consider the following for unrestricted site use in the development of the WAC Plan:

i. Soils with an average, contaminant-specific concentration that does not exceed a Preliminary Remediation Goal (PRG, http://www.epa.gov/region9/superfund/prg/index.shtml) for residential sites established by the U.S. Environmental Protection Agency (USEPA).

ii. Soils with an average, contaminant-specific concentration that does not exceed a California Human Health Screening Level (CHHSL, *http://www.calepa.ca.gov/brownfields/documents/2005/CHHSLsGuide.pdf*) for residential sites established by the California Environmental Protection Agency (Cal-EPA).

iii. Soils for which a PRG or CHHSL has not been established with an average, contaminant-specific concentration that does not exceed, on a per weight basis (for example, soil results reported in mg/Kg should be compared to an MCL in mg/L), 100 times of maximum contaminant level (MCL) established by the USEPA or the State of California Department of Public Health.

iv. Constituents may naturally occur in soils (e.g., metals) in the area at concentrations above the threshold concentration levels provided above (b.i, b.ii, b.iii). These constituents may be considered for beneficial reuse or disposal. The WAC Plan shall include a method(s) to demonstrate the constituents are naturally occurring and that the levels proposed for acceptance will not result in exceedences of water quality standards in surface or groundwaters.

2. Criteria for Beneficial Use of Contaminated Soils in the Landfill

Soils that exceed the criteria for unrestricted onsite beneficial use (I.D.1 above) and meet the following criteria may be beneficially reused or disposed only in lined portions of the Landfill.

a. Soils contaminated with an average concentration higher than 500 mg/kg in the C4-C12 carbon-chain range, or 1,000 mg/kg in the C13-C22 carbon-chain range, or an average TPH concentration higher than 50,000 mg/kg

b. In the development of the WAC Plan, threshold concentration levels for constituents other than petroleum hydrocarbons must consider the following for beneficial use within the Landfill:

i. Soils with an average, contaminant-specific concentration that does not exceed a PRG for industrial sites established by the USEPA.

ii. Soils with an average, contaminant-specific concentration that does not exceed a CHHSL for industrial sites established by the Cal-EPA.

iii. Constituents that naturally occur in soils (e.g., metals) in the area at concentrations above the threshold concentration levels provided above (b.i and b.ii) may be considered for beneficial reuse or disposal in the lined portions of the Landfill. The WAC Plan shall include a method(s) to demonstrate the constituents are naturally occurring and that the levels proposed for acceptance will not result in exceedences of water quality standards in surface or groundwaters surrounding the landfill.

3. Criteria for Disposal of Contaminated Soils to the Lined Landfill

Soils contaminated with TPH, VOCs, SVOCs, organochlorine pesticides, PCBs, or CAM metals at concentrations greater than concentrations established for restricted onsite use (I.D.2 above) may be disposed in the lined portion of the Landfill if the Discharger determines, pursuant to approval by the Executive Officer, that the contaminated soils are not classified as designated waste. To satisfy this requirement, a discharger shall develop waste acceptance criteria, consistent with *The Designated Level Methodology for Waste Classification and Cleanup Level Determination*[1] or alternative methodology accepted by the Executive Officer. Factors to be considered in developing waste acceptance criteria include:

a. Water quality objectives – Consistent with the Basin Plan's municipal and domestic supply beneficial uses for groundwater resources in the Region, the Discharger shall use the most stringent Basin Plan objectives, as the water quality objective;
b. A leakage flow rate based on landfill-specific design criteria;
c. A groundwater flow rate based on landfill-specific hydro-geologic conditions;
d. Equilibrium partitioning of waste constituents between leachate and soils; and
e. Equilibrium partitioning of waste constituents between leachate and groundwater with consideration for dilution attenuation.

[1] A report developed by the staff of the Central Valley Regional Water Board presenting a waste classification system from a water quality perspective. Reference information can be found at http://www.swrcb.ca.gov/rwqcb5/plans-policies/guidance/dlm.pdf.

II. REQUIREMENTS AND PROHIBITIONS

A. General

1. The discharge or the beneficial reuse of waste shall not:

   a. cause groundwaters or surface waters to exceed the water quality objectives as established in the Basin Plan or other applicable State Water Board Water Quality Control Plans, or to cause surface water to exceed applicable California Toxic Rule or National Toxic Rule water quality criteria. This prohibition does not alleviate the requirement to maintain the functionality and integrity of the liner and LCRS pursuant to the prescribed standard in Order II.H.2

   b. cause pollution, contamination, or nuisance as defined in California Water Code section 13050 or adversely affect beneficial uses of ground or surface water as established in the Basin Plan;

   c. cause the occurrence of coliform or pathogenic organisms in groundwaters

   d. cause the occurrence of objectionable tastes and odors in groundwaters

   e. cause the presence of toxic or radioactive materials in groundwater

2. The discharge of hazardous waste or designated waste is prohibited.

3. The discharge of solid wastes, leachate, or any other deleterious material to groundwaters of the Antelope Valley Groundwater Basin is prohibited.

4. The landfill disposal site shall be protected from inundation, washout, or erosion of wastes and erosion of covering materials resulting from a storm or a flood having recurrence interval of once in 100 years.

5. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through solid wastes discharged at the site.

6. The exterior surfaces of the disposal site shall be graded to promote lateral runoff of precipitation and to prevent ponding.

7. Water and leachate used for dust control operations shall be limited to a minimal amount. A "minimal amount" is defined as that amount which will not result in runoff.

8. Leachate may be recirculated back into the lined operational working areas or utilized for dust control over the lined areas of the Landfill, consistent with CCR, title 27, Section 20340(g).

9. The Discharger shall remove and relocate any waste that is or has been discharged at the closed disposal site in violation of these requirements.

10. At any given time, the concentration limit for each constituent of concern shall be equal to the background value of that constituent.

11. The concentration limits for each constituent of concern shall not be exceeded.

12. Any discharge that causes violation of any narrative water quality objective contained in the Basin Plan, including the Nondegradation Objective, is prohibited.

13. Any discharge that causes violation of any numeric water quality objective contained in the Basin Plan is prohibited.

14. Where any numeric or narrative water quality objective or receiving waters limit contained in the Basin Plan is already being violated, any discharge that causes further degradation or pollution is prohibited.

15. At closure, all facilities shall be closed in accordance with a final Closure Post-closure Plan accepted by the Water Board.

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

17. Pursuant to CCR, title 27, section 21090, subdivision (a)(4)(C), the Discharger shall repair, in a timely manner, any breach or other cover problem discovered during the periodic inspection of the Landfill cover. Repairs to the upper soil cover material shall follow a construction quality assurance plan, as required in CCR, title 27, section 20323 and defined in CCR, title 27, section 20324 and as specified in the final Closure Post-closure Plan.

18. Pursuant to CCR, title 27, section 20324, the Discharger is required to carry out the construction of the final cover in accordance with a construction quality assurance plan certified by an appropriately registered professional. If the Water Board finds that any construction of the final cover system was undertaken in the absence of the construction quality assurance plan that satisfies the requirements of Cal. Code Reg., title 27, section 20324, the Water Board shall require the Discharger to undertake any corrective construction needed to achieve such compliance.

19. The Discharger must maintain onsite a copy of the non-hazardous waste classification granted by the DTSC for each generator of TASW.

20. The discharge of treated auto shredder wastes at the lined Landfill facility is prohibited if DTSC makes the determination that this material requires management at a Class I facility or if the Discharger fails to obtain a non-hazardous waste classification from DTSC for TASW. The discharge of untreated auto shredder waste is prohibited. Discharge of TASW to the unlined Landfill is prohibited.

21. Soils contaminated with an average concentration higher than 1,000 mg/kg in the C4-C12 carbon-chain range, or 10,000 mg/kg in the C13-C22 carbon-chain range, or an average TPH concentration higher than 50,000 mg/kg, shall not be reused onsite or discharged at the Landfill.

22. The disposal or reuse of contaminated soils or related wastes at the Landfill shall not violate requirements of the local air quality regulations.

23. The discharge of contaminated soils to surface drainage courses is prohibited.

24. Soils exceeding the criteria established in Order I.D.2 and meeting the criteria in Order I.D.3 may not be stockpiled for future use.

B. Detection Monitoring Program

The Discharger shall maintain a detection monitoring program as required in CCR, title 27, section 20420.

C. Evaluation Monitoring Program

The Discharger shall initiate an evaluation monitoring program when required pursuant to CCR, title 27, section 20425. The Discharger shall maintain the evaluation monitoring program as required in CCR, title 27, section 20425 or until a corrective action program is implemented.

D. Corrective Action Program

The Discharger shall institute a corrective action program when required pursuant to Cal. Code Reg., title 27, section 20430.

E. Compliance Period

The compliance period for the Landfill shall be the number of years equal to the active life of the Unit plus the closure period. The compliance period is the minimum period during which the Discharger shall conduct a water quality monitoring program subsequent to a release from the Landfill. The compliance period shall begin anew each time the Discharger initiates an evaluation monitoring program.

F. Data Evaluation

In order to determine if any releases have occurred from the Landfill, evaluation of data will be conducted using statistical and non-statistical methods as described below.

1. Statistical Analyses for Inorganic Parameters

The Discharger shall conduct statistical analyses on inorganic groundwater data. For detection monitoring, the Discharger shall use statistical methods to analyze inorganic detection monitoring parameters and inorganic COC parameters. The Discharger shall use the 2009 USEPA Guidance, "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance" (Unified Guidance) to select the statistical test to use for comparing detection monitoring well data to background monitoring data. All statistical methods and programs proposed by the Discharger are subject to the Executive Officer's acceptance.

2. Non-statistical Analysis for Organic Constituents of Concern

To provide the best assurance of the earliest possible detection of a release of non-naturally occurring waste constituents from the Landfill, this Order specifies a non-statistical method for the evaluation of organic monitoring data.

The specified non-statistical method for evaluation of organic monitoring data provides two criteria (or triggers) for making the determination that there has been an initial indication of a release of non-naturally occurring waste constituents from the Landfill. The presence of two non-naturally occurring waste constituents above their respective method detection limits (MDLs), or one non-naturally occurring waste constituent detected above its practical quantitation limit (PQL), indicates that a release of waste from the Landfill may have occurred (see Attachment 3 of MRP R6V-2012-0042 for definitions of MDL and PQL). Following an indication of a release, verification testing will be conducted to determine whether there has been a release from the Landfill, if there is a source of the detected constituents other than the Landfill, or if the detection was a false detection. Although the detection of one non-naturally occurring waste constituent above the MDL is sufficient to provide for the earliest possible detection of a release, the detection of two non-naturally occurring waste constituents above the MDL as a trigger is appropriate

due to the higher risk of false-positive analytical results and the corresponding increase in sampling and analytical expenses from the use of one non-naturally occurring waste constituent above its MDL as a trigger.

3. Verification Procedures

a. The Discharger shall immediately initiate verification procedures as specified below whenever there is a determination by the Discharger or the Executive Officer that there is statistical or non-statistical evidence of a release. If the Discharger declines the opportunity to conduct verification procedures, the Discharger shall submit a technical report as described in this Order.

b. The verification procedure shall only be performed for the constituent(s) that has shown initial evidence of a release, and shall be performed for those monitoring points at which a release is indicated.

c. The Discharger shall either conduct a composite retest using data from the initial sampling event with all data obtained from the resampling event or shall conduct a discrete retest in which only data obtained from the resampling event shall be analyzed in order to verify evidence of a release.

d. The Discharger shall report to the Water Board by certified mail (or other delivery service with delivery confirmation) the results of the verification procedure, as well as all concentration data collected for use in the retest, within seven days of the last laboratory analysis.

e. The Discharger shall determine, within 45 days after completion of verification sampling, whether there is statistically significant evidence of a release from the Landfill at each monitoring point. If there is statistically significant evidence of a release, the Discharger shall immediately notify the Water Board by certified mail (or other delivery service with delivery confirmation). The Executive Officer may make an independent finding that there is statistical evidence of a release.

f. If the Discharger or Executive Officer verifies evidence of a release, the Discharger is required to submit, within 90 days of a determination that there is or was a release, a technical report pursuant to California Water Code, section 13267(b). The report shall propose an evaluation monitoring program OR make a demonstration to the Water Board that there is a source other than the Landfill that caused evidence of a release.

4. Technical Report Without Verification Procedures

   If the Discharger chooses not to initiate verification procedures, a technical report shall be submitted pursuant to California Water Code, section 13267(b). The report shall propose an evaluation monitoring program or make a demonstration that the release did not originate from the Landfill.

5. General Non-statistical Methods

   Evaluation of data will be conducted using non-statistical methods to determine if any new releases from the Landfill have occurred. Non-statistical analysis shall be as follows.

   a. Physical Evidence: The Discharger shall determine whether there is significant physical evidence of a release from the Landfill. Significant physical evidence may include unexplained volumetric changes in the Landfill, unexplained stress in biological communities, unexplained changes in soil characteristics, visible signs of leachate migration, and unexplained water table mounding beneath or adjacent to the Landfill, or any other change in the environment that could reasonably be expected to be the result of a release from the Landfill. Each semiannual report shall comment on the absence or presence of physical evidence of a release.

   b. Time Series Plots: Each semiannual report shall include time series plots for groundwater monitoring parameters. Time series plots are not required for parameters that have never been detected above their reporting limit (as specified by the applicable USEPA Method) or if there are less than four quarters of data. Evidence of a release may include trends of increasing concentrations of one or more constituent over time.

G. Landfill Specifications

1. The Discharger shall, in a timely manner, remove and relocate any wastes discharged at this Landfill in violation of this Order. If the Discharger is unable to remove and relocate the waste, the Discharger shall submit a report to the Water Board explaining how the discharge occurred, why the waste cannot be removed, and any updates to the waste acceptance program necessary to prevent re-occurrence.
2. Waste filling at landfill modules shall be conducted in accordance with a fill plan demonstrating that all temporary refuse fill slopes will be stable under static conditions.
3. The Discharger shall immediately notify the Water Board of any flooding, unpermitted discharge of waste off-site, equipment failure, slope failure, or other

change in site conditions which could impair the integrity of waste or leachate containment facilities or precipitation and drainage control structures.

4. The Discharger shall maintain in good working order any Landfill control system or monitoring device installed to achieve compliance with the waste discharge requirements.
5. Storm water run-off within the Landfill shall either be contained on-site or be discharged in accordance with applicable storm water regulations. Stormwater will be kept from running on-site, and will be diverted around the Landfill to Anaverde Creek.

H. Construction Specifications

1. Geologic maps shall be prepared by a California Registered Professional Geologist for each excavation sub-phase as the Landfill is developed. The geologic data shall be used to reevaluate each excavation phase with respect to the potential for active faulting and slope instability. If potential hazards or constraints are recognized, the design engineer shall evaluate the conditions and, if necessary, incorporate modifications to liner design and/or placement of future landfill cells to ensure that any potential impacts to liner integrity or underlying groundwater quality are less than significant.

   a. **At least 14 days, and not more than 30 days, prior to excavation**, the Discharger shall notify the Water Board of the planned excavation schedule.

   b. If potential hazards or constraints, including but not limited to potential Holocene faulting, are identified during geologic mapping, **the Discharger shall notify the Water Board within 24 hours** and provide prompt access to the excavation.

   c. The Discharger shall submit geologic maps and a summary letter on the geologic mapping of the sub-phase excavation with the construction quality assurance report **within 45 days of completion of construction**.

2. The Discharger proposes to construct Phase V with an engineered alternative composite liner system (Finding 19) and leachate collection and recovery system. The Discharger must construct the liner system and leachate collection and recovery system in accordance to the construction details of the revised RWD/JTD. Base grading and engineered fill must be constructed to provide a firm foundation capable of supporting landfill structures. The leachate collection and recovery system shall be designed as blanket-type system that completely covers the bottom of the Landfill directly above the liner system. The system shall be designed to be chemically and physically resistant to the waste and leachate generated by the waste and to function throughout the Landfill's operating life and post-closure period.

3. A third party, independent of both the Discharger and the construction contractor, shall perform all of the construction quality assurance monitoring and testing during the construction of a liner system and leachate collection and recovery system.

4. The Discharger shall install a leak detection system under the Phase V sump for the leachate collection and recovery system as described in the revised RWD/JTD.

5. The Discharger shall, at all times, adhere to the engineering plans, specifications, and technical reports submitted with the complete RWD/JTD and all requirements contained within this Order.

6. Construction shall proceed only after all applicable construction quality assurance plans have been reviewed and accepted by the Executive Officer pursuant to CCR, title 27, section 20324.

III. PROVISIONS

A. Rescission of Waste Discharge Requirements

Board Order Nos. 6-84-52, 6-93-100-16, 6-95-119, 6-95-119A1, 6-95-119A2 and 6-95-1 are hereby rescinded, except for enforcement purposes.

B. Standard Provisions

The Discharger shall comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, in Attachment E, which is made part of this Order.

C. Monitoring and Reporting

1. Pursuant to the California Water Code, section 13267(b), the Discharger shall comply with the MRP R6V-2012-0042 or as specified by the Executive Officer.

2. The Discharger shall comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of the MRP R6V-2012-0042.

D. Five-Year Constituent of Concern Monitoring Program

Pursuant to CCR, title 27, 20420(g) every five years the Discharger shall sample all groundwater monitoring points for specified COC from 40 Code of Federal Regulations Part 258, Appendix II. The specific analyses are summarized in Attachment 2 of MRP R6V-2012-0042. The first five-year COC sampling event shall take place in 2016. The Five-Year COC Report shall be submitted no later than **45**

days following the monitoring period. For reporting in annual reports, if no samples were collected during the reporting period, the year the last samples were collected and the year for the next required sampling will be identified in the report.

E. Closure Post-closure Plan

The Preliminary Closure Post-closure Plan shall be updated if there is a substantial change in operations or site conditions. The Discharger shall submit a report indicating conformance with existing operations and site conditions in each Annual Report in accordance to the schedule included in III.L of this Order.

Pursuant to CCR, title 27, section 21780, a final Closure and Post-closure monitoring plan shall be submitted two years prior to the anticipated date of closure for any or all parts of the Landfill.

F. Financial Assurance

Included with the **Annual Report every year** the Discharger shall submit an annual financial assurance report to the Water Board. This report shall summarize the amount of money available in the fund for closure, post-closure and corrective action. This report should also provide a demonstration that the amount of financial assurance is adequate, or the need to increase the amount of financial assurance.

An increase may be necessary due to inflation, a change in regulatory requirements, a change in the Closure Post-closure Plan, or other unforeseen events. An increase may be necessary due to lateral expansion accepted by this Order. Each Financial Assurance Instrument(s) shall be updated and maintained accordingly and submitted to the Water Board annually, beginning on **March 30, 2013.**

The report must reference the most recent plans that form the basis of cost estimates. A detailed evaluation of those costs must be made. A signed statement must be provided, under perjury, by an official of the agency that the costs are adequate.

G. Unscheduled Reports To Be Filed With The Water Board

1. Notice of Tentative Release

   Should the statistical or non-statistical data analysis indicate, for a given COC, that a new release is tentatively identified, the Discharger shall:

   a. **Immediately notify the Water Board verbally** as to the monitoring points and COC involved.

   b. Provide **written notification by certified mail (or other delivery service with delivery confirmation) within seven days of such determination** pursuant

to CCR, title 27, section 20420. The notification should indicate the Discharger's intent to conduct verification sampling, initiate evaluation monitoring procedures, or demonstrate that a source other than the Landfill is responsible for the release. The notification should include a map showing the location(s) of release, an estimate of the flow rate (if available), a description of the nature of the discharge (e.g., all-pertinent observations and analyses), and corrective measures underway or proposed.

c. If the Discharger chooses to attempt to demonstrate that a source other than the Landfill is responsible for the indication of a release, the Discharger shall submit a supporting technical report within **90 days of detection of the release**.

2. Evaluation Monitoring Program

The Discharger shall, **within 90 days of verifying a release**, submit a technical report pursuant to Section 13267(b) of the California Water Code proposing an evaluation monitoring program. If the Discharger decides not to conduct verification procedures, or decides not to make a demonstration that a source other than the Landfill is responsible for the new release, the new release will be considered verified.

3. Engineering Feasibility Study Report

The Discharger shall, **within 180 days of verifying a new release**, submit a preliminary engineering feasibility study pursuant to CCR, title 27, section 20420 to preliminarily propose methods for corrective action.

4. Treated Auto Shredder Waste Sampling and Analysis Plan

Prior to the use of TASW as ADC or accepting TASW for disposal, the Discharger shall submit a sampling and analysis plan (TASW SAP) for acceptance by the Executive Officer. The TASW SAP should provide sampling and analysis methods to demonstrate the TASW used as ADC meets the requirements in section I.C of this order. The TASW SAP shall also describe the anticipated proportion of TASW accepted for disposal and for ADC, and how this will be tracked and reported.

5. Waste Acceptance Criteria

Prior to accepting contaminated soils, the discharger shall submit, for approval of the Executive Officer, a plan for implementing a Waste Acceptance Criteria plan, as described in Section I.D that complies with requirements of this Order. The plan should identify personnel responsible for implementation, procedures for approving soil profiling information including testing procedures for waste

constituents accepted at the landfill, site-specific threshold levels for all appropriate wastes accepted for disposal or reuse, methods and locations for managing (including best management practices) stockpiled contaminated soils, and any other technical information required by the Executive Officer. Subsequently, the plan should be routinely updated by the discharger to accommodate any proposed revisions, or as directed by the Executive Officer.

6. Anaverde Creek Erosion Control

The Discharger is required to file with the Water Board a report of waste discharge for proposed discharges to waters of the State, which would include discharges required as part of armoring Anaverde Creek. The report of waste discharge must fully describe the proposed discharge and be filed with the Water Board **at least 140 days before the discharge occurs**.

H. Groundwater Investigation Workplan

By July 31, 2012, the Discharger shall submit a workplan for Executive Officer acceptance that proposes investigative activities to fill critical data gaps in the groundwater conceptual site model. At a minimum, the workplan shall propose an investigation to address the following data gaps:

- Determine the well construction of MW-2A.
- Characterize the quality of groundwater in the alluvium and in the underlying bedrock.
- Determine if the alluvium and underlying bedrock are separate saturated units.
- If multiple saturated zones are present, is there hydraulic connection between the units? What is the depth and thickness of saturated alluvium overlying bedrock at the downgradient facility boundary?
- Are there preferential flow paths in the saturated unit(s) at the point of compliance?
- Evaluate the effectiveness of the existing monitoring wells for the purpose of compliance monitoring.
- Evaluate factors contributing to the large temporal variability of COC in existing groundwater monitoring wells.

Pursuant to CCR, title 27, section 20415(e)(2), all monitoring wells and all other borings (including but not limited to gas monitoring wells) drilled to satisfy the requirements of this MRP shall be drilled by a licensed drilling contractor (or by a drilling crew under the direct supervision of the design engineer or engineering geologist), and shall be logged during drilling under the direct supervision of a person who is a California Professional Geologist or licensed civil engineer, who has expertise in stratigraphic well logging.

The Discharger shall implement the workplan **within 60 days after the Executive Officer accepts the workplan**. Based on the results of this investigation, the Discharger must submit proposed modifications to the existing groundwater monitoring program, including new groundwater monitoring wells to replace the consistently dry wells and any other modifications necessary to establish a groundwater monitoring network capable of detecting a release from the landfill, **within 60 days of the completion of the investigative effort**.

I. Significant Earthquake Event

In the event of an earthquake with a Richter magnitude of 3.7 or greater within 100 miles of the Landfill, the Discharger shall notify the Water Board **within 24 hours** of any physical damages to the containment features. The Discharger shall closely examine the Landfill cover, vegetative cover, slope conditions, drainage control system, and surface grading for signs of cracking or depressed/settled areas, following an earthquake. If cracking or depressed areas of the cover is identified, the Discharger shall repair the cover, depressed area, or damaged areas within 30 days from the earthquake date and provide the Water Board of documentation of these actions.

J. Electronic Submittal of Information

Pursuant to Calif. Code Regs., title 23, section 3890, the Discharger shall submit reports, including soil, vapor, and water data, prepared for the purpose of subsurface investigation or remediation of a discharge of waste to land subject to Division 2 of title 27 electronically over the internet to the State Water Board's Geotracker system. This requirement is in addition to, and not superseded by, any other applicable reporting requirement. The electronic submittal of documents to the Geotracker system is an acceptable method for the Discharger to meet reporting deadlines except where other methods are specified in this Order (e.g. Notice of Tentative Release).

K. Summary of Recurring Reports

Report	Period	Submittal Date
First Semi-Annual Monitoring Report	Jan 1 – Jun 30	Aug 15 of each year
Second Semi-Annual Monitoring Report	Jul 1 – Dec 31	Feb 15 of each year
Annual Report	Jan 1- Dec 31	March 30 of each year
Closure Post-closure Plan Update (can be included with the Annual Report)	Jan 1 – Dec 31	March 30 of each year
Financial Assurance Report (can be included with the Annual Report)	Jan 1 – Dec 31	March 30 of each year
Five-year COC Monitoring Report	5 years as specified in III.D of this Order.	45 days after the end of the monitoring period

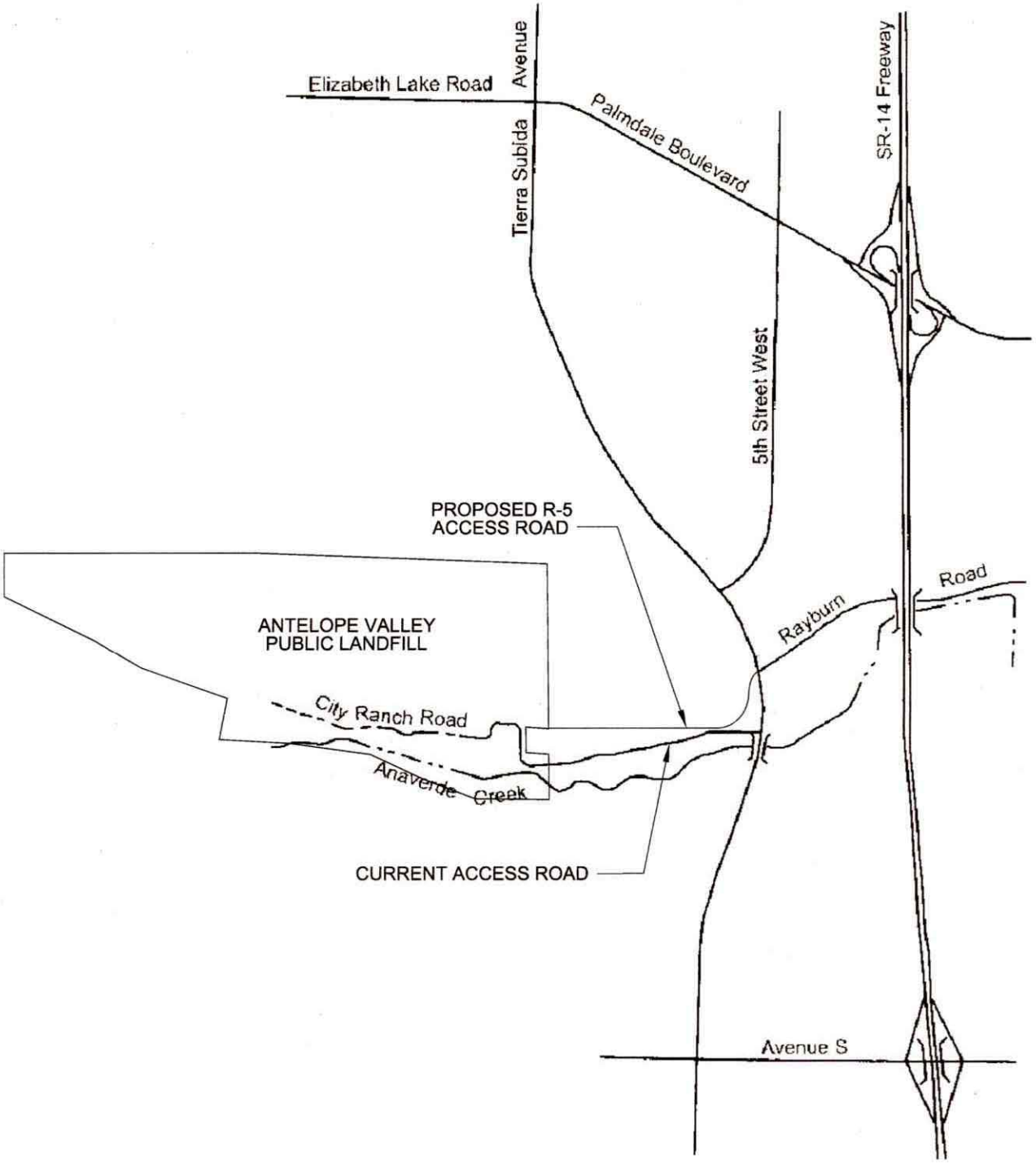
L. Summary of Other Required Reports

Report	Comment
Construction Quality Assurance Report	Within 45 days of completion of construction (see II.H.1.c)
Notice Of Tentative Release	(see III.G.1)
Evaluation Monitoring Program	(see III.G.2)
Engineering Feasibility Study Report	(see III.G.3)
Treated Auto Shredder Waste Sampling and Analysis Plan	Prior to accepting TASW (see III.G.4)
Waste Acceptance Criteria Plan	Prior to accepting contaminated soils (see III.G.5)
Report of Waste Discharge for work in Anaverde Creek	At least 140 days prior to discharge (see III.G.6)
Groundwater Investigation Workplan	Due July 31, 2012 (see III.H)

I, Patricia Zwarts Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by California Regional Water Quality Control Board, Lahontan Region, on June 14, 2012.

PATRICIA ZWARTS KOUYOUMDJIAN
EXECUTIVE OFFICER

Attachments:
A. Site Location Map
B. Landfill Footprint
C. Surrounding Site Topography
D. Summary of Relevant EIR Mitigation Measures
E. Standard Provisions for Waste Discharge Requirements



NOT TO SCALE

Golder Associates	Project No.: 053-1938	Date: July 2006
	Drawn by: KJK	Checked by: SGS

WDR ATTACHMENT A

SITE LOCATION MAP

ANTELOPE VALLEY LANDFILL
PALMDALE, CALIFORNIA

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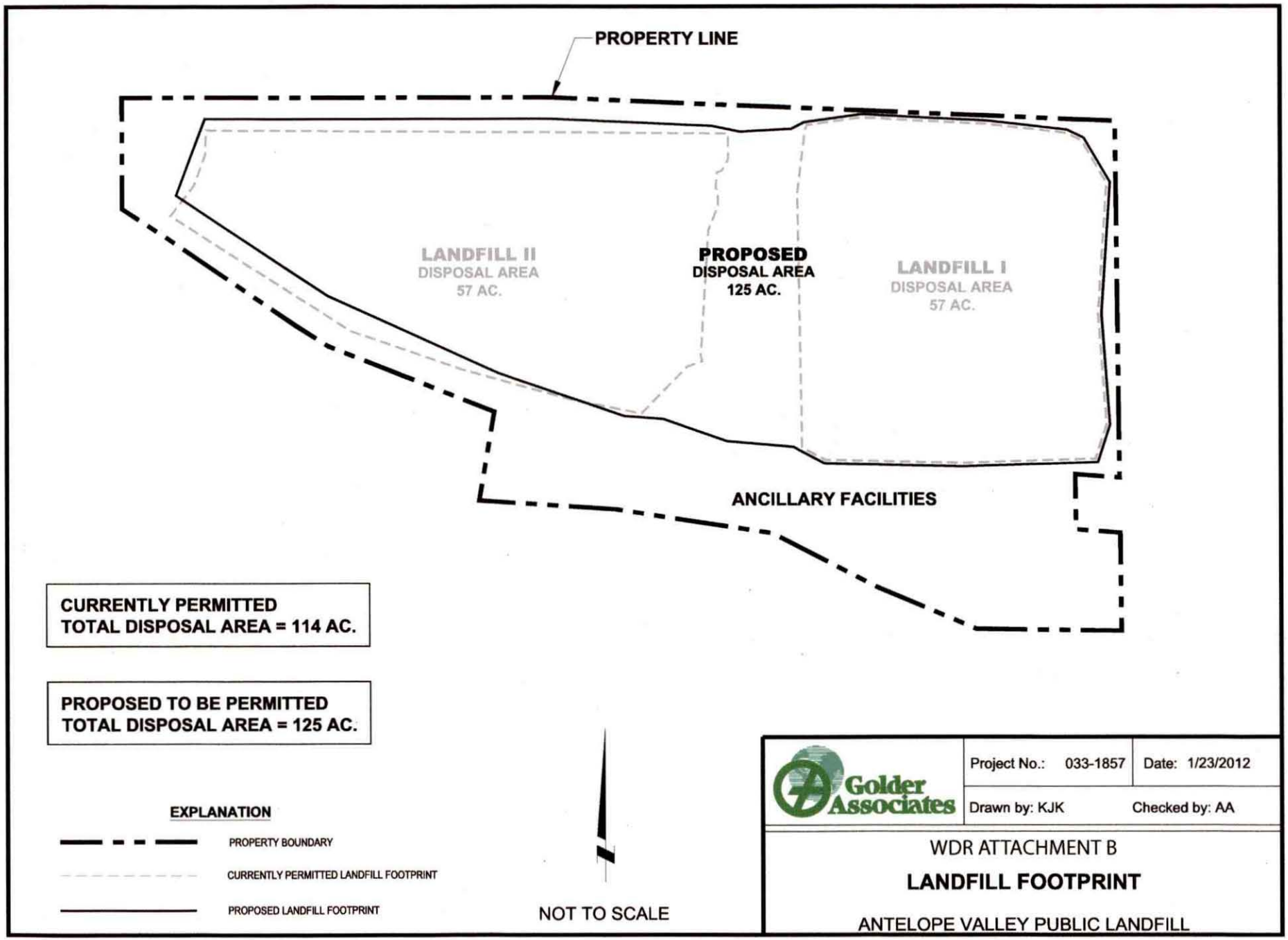

PROPERTY LINE
LANDFILL II
DISPOSAL AREA
57 AC.
PROPOSED
DISPOSAL AREA
125 AC.
LANDFILL I
DISPOSAL AREA
57 AC.
ANCILLARY FACILITIES
CURRENTLY PERMITTED
TOTAL DISPOSAL AREA = 114 AC.
PROPOSED TO BE PERMITTED
TOTAL DISPOSAL AREA = 125 AC.
EXPLANATION
PROPERTY BOUNDARY
CURRENTLY PERMITTED LANDFILL FOOTPRINT
PROPOSED LANDFILL FOOTPRINT
NOT TO SCALE
Golder Associates
Project No.: 033-1857
Date: 1/23/2012
Drawn by: KJK
Checked by: AA
WDR ATTACHMENT B
LANDFILL FOOTPRINT
ANTELOPE VALLEY PUBLIC LANDFILL

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. R6V-2012-0042
WDID NO. 6B191112004

FOR

ANTELOPE VALLEY PUBLIC LANDFILL

Los Angeles County

I. GENERAL

The Discharger previously conducted monitoring and reporting for the Antelope Valley Public Landfill (Landfill) under two separate permits: Water Board Order 6-95-1 and Water Board Order 6-95-119. This Monitoring and Reporting Program (MRP) replaces the prior requirements in accordance with Water Board Order R6V-2012-0042 (Order).

II. WATER QUALITY PROTECTION STANDARD

The Water Board is required to establish a Water Quality Protection Standard for Antelope Valley Public Landfill (Landfill) pursuant to CCR, title 27, section 20390. The Water Quality Protection Standard consists of a list of constituents of concern, concentration limits, points of compliance, and all monitoring points. This Water Quality Protection Standard shall apply during the active life of the unit, the closure period, the post-closure maintenance period, and during any compliance period.

With the Executive Officer's acceptance, the Water Quality Protection Standard may be revised based on the results of the investigative efforts directed under the Order and/or subsequent investigative efforts and monitoring.

III. MONITORING

A. Discharge

The following information on wastes discharged to the Landfill shall be monitored and reported semiannually:

- Volume of solid waste (in-place compacted volume in cubic yards) discharged to the disposal site for each quarter of the monitoring period.
- The percent of the total landfill volume used for solid waste disposal, including waste disposed during each quarter of the monitoring period.
- Report the quantity of TASW used as alternative daily cover (ADC) or disposed in the Landfill, and the number of loads delivered by the TASW generators, each calendar month. Copies of all analytical results of TASW

accepted at the Landfill and any other reporting requirements described in the accepted TASW SAP or TASW SAP-acceptance letter shall be maintained on site.

- Report the quantity of contaminated soil accepted for beneficial use or disposed in the Landfill each calendar month. Report the quantity of contaminated soil accepted for disposal each calendar month. Copies of all analytical results of contaminated soil accepted at the Landfill and any other requirements outlined in the Waste Acceptance Criteria (WAC) Plan or WAC Plan-acceptance letter shall be maintained on site. The Discharger shall clearly organize the results to show which soil was accepted for disposal in the Landfill, and which soil was beneficially reused.
- A summary of results, including comments, describing the effectiveness of the hazardous waste load check program.

B. Groundwater

There are six downgradient monitoring wells at the Landfill: MW-2A, MW-3, MW-4, MW-5A, MW-6, and JHK-1. These wells have several deficiencies as compliance monitoring points, including:

- Since 1995, JHK-1 has only contained enough water to sample during one monitoring event.
- MW-5A has not contained enough water to sample since shortly after it was installed in 2007.
- There is neither a boring log nor well construction details for MW-2A.
- The screened interval for MW-3 is excessively long (i.e., 63 feet).

A seventh well, MW-1, is currently considered an upgradient well. MW-1 is located 200 feet west of the Landfill footprint and is crossgradient to the landfill relative to the groundwater flow direction. To date, the Discharger has not placed waste in this portion of the Landfill. The waste is currently approximately 1,000 feet from MW-1. When waste is disposed in this portion of the Landfill, the Discharger must reevaluate whether MW-1 will continue to serve as an upgradient well. Attachment 1 shows the location of the monitoring wells.

The Discharger requested that groundwater detection monitoring be conducted on a semi-annual basis. The Discharger may request the Executive Officer to amend this MRP based on the results of the groundwater investigation required by Order R6V-2012-0042.

1. Point of Compliance and Monitoring Points

The point of compliance, as defined in CCR, title 27, section 20405(a), is a vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the Unit. The point of compliance is monitored by the existing monitoring wells (MW-2A, MW-3,

MW-4, MW-5A, MW-6, and JHK-1). Additional and/or replacement wells shall be added based on the results of investigative efforts as directed in this MRP and the results of subsequent investigation or monitoring.

2. Field Parameters and Aquifer Characteristics

The field parameters in Attachment 2 shall be measured **quarterly** and reported in tabular form **semiannually**. The Discharger shall calculate and report the groundwater gradient and include a figure in the semiannual and annual reports illustrating the following groundwater calculations:

- Groundwater elevation contours (feet above mean sea level).
- Groundwater flow direction.

3. Constituents of Concern (COC)

COC include all the waste constituents, their reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the waste management unit. COC are described in CCR, title 27, section 20395(b) as those inorganic and organic elements and compounds listed in Appendix II of 40 Code of Federal Regulations Part 258 and as referenced in State Water Resources Control Board Resolution 93-62. The specific COC analytical methods for the Landfill are summarized in Attachment 2; the required individual constituents are listed in 40 Code of Federal Regulations, Part 258, Appendix II.

The Discharger shall monitor all COC **once every five years** at each of the site's groundwater monitoring points. Monitoring points incorporated into the detection monitoring program after implementation of this MRP shall be sampled and analyzed for all COC within three months after installation.

4. Monitoring Parameters

As defined in CCR, title 27, section 20164, monitoring parameters are COC that are the waste constituents, reaction products, hazardous constituents, and physical parameters that provide a reliable indication of a release from the Landfill. . The Discharger shall analyze all samples from all groundwater monitoring points specified under III.B.1 for the detection and supplemental monitoring parameters designated in Attachment 2. Groundwater sampling for the supplemental and detection monitoring parameters will be conducted **quarterly** (every three months) and reported **semiannually**.

5. Concentration Limits

Concentration limits are intended to reflect background water quality conditions. In accordance with the options identified in CCR, title 27, the Discharger will use the following methodologies to determine concentration limits.

a. Inorganic Constituents

The Discharger is using an intrawell statistical data analysis method to develop inorganic concentrations limits for specific COC as required in the prior MRPs, No. 6-95-1 and No. 6-95-119. The current concentration limits are included in the Report of Waste Discharge.

The Discharger shall develop new concentrations limits for each groundwater monitoring compliance point and each inorganic COC and detection monitoring parameter listed in Attachment 2 of this MRP. The Discharger will follow the data evaluation methods specified in the Order. The Discharger shall submit these concentrations limits for acceptance by the Executive Officer in the **2012 Annual Report**.

The Discharger shall revise the concentration limits based on additional monitoring data **every two years**. The Discharger will submit the revisions for acceptance by the Executive Officer in the **annual report for even years**.

b. Organic Constituents:

In order to provide the best assurance of the earliest possible detection of a release of non-naturally occurring waste constituents from the Landfill, the Discharger shall use a non-statistical method for the evaluation of organic monitoring data as specified in the Order.

C. Leachate Monitoring

Fluid from the leachate collection and recovery system is sampled and analyzed to characterize potential source chemistry. The Discharger shall monitor leachate for the field parameters, COC, detection monitoring, and supplemental monitoring parameters listed in Attachment 2.

Fluid in the riser pipes at the collection sumps will constitute the leachate monitoring points. The leachate monitoring system consists of two monitoring points:

- The leachate collection and recovery system sump for Phase IV, the lined portion of Unit I,

- The leachate collection and recovery system for Unit II.

The leachate monitoring points will be inspected quarterly for the presence of fluid and sampled at least annually if leachate is present. The presence or absence of leachate observed during each quarter shall be noted in the semi-annual monitoring reports.

D. Unsaturated Zone

Unsaturated monitoring at the Landfill consists of the monitoring of 11 perimeter probe locations as shown in Attachment 1. Landfill gas migration in the unsaturated zone is monitored under the jurisdiction of the Antelope Valley Air Quality Management District, CalRecycle, and the local enforcement agency. Quarterly monitoring and reporting for all perimeter probes are completed for these agencies. These data, in conjunction with data from the leak detection sump (described below), will be used to satisfy the Water Board unsaturated zone monitoring requirements. Semi-annual monitoring reports will include a summary and copy of the quarterly perimeter gas monitoring reports.

Monitoring parameters for the perimeter probes shall, at minimum, consist of field measurements of vacuum pressure, methane, carbon dioxide, and oxygen. For any soil gas monitoring point with a gas concentration exceeding 5 percent methane, a sample will be collected for laboratory analysis of volatile organic compounds by USEPA Method TO-14 or TO-15, and fixed gases by method ASTM D1946 or other equivalent method. If all methane concentrations are below 5 percent during a quarterly sampling event, the soil gas location with the highest field methane measurement will be selected for laboratory analysis. If no methane is detected during the semiannual field monitoring, no laboratory sample collection will be required.

Additionally, a leak detection sump will be installed beneath the permanent leachate collection and recovery sump during construction of the landfill expansion. After installation, this sump will be included as a monitoring point for the unsaturated zone.

The unsaturated zone monitoring frequency for the presence of liquid in the leak detection sump is quarterly. If a fluid sample can be recovered from the leak detection sump, a sample shall be collected and analyzed for COCs included in Attachment 2. Following initial sampling of fluids from the leak detection sump, fluids shall be sampled on a quarterly basis for the Detection Monitoring Parameters and all detected COC until the leak is repaired and/or the leak detection sump goes dry. The discharger may initiate a demonstration to determine the source and nature of the fluids detected within the leak detection sump. Should it be determined that the cause of the fluids in the leak detection sump be due to a source other than leachate, the Discharger may propose an alternative monitoring program for the sampling location.

E. Storm Water Monitoring

Anaverde Creek is an intermittent stream along the southern boundary of the Landfill. Storm water runoff is the only surface water discharge from the landfill property to the creek.

The Discharger has prepared a Storm Water Pollution Prevention Plan (SWPPP) and manages a storm water discharge monitoring program in compliance with the State Water Board's NPDES general permit for storm water discharges associated with industrial activities (Order No. 97-03-DWQ).

IV. SAMPLING AND ANALYTICAL METHODS

Groundwater samples shall be collected in accordance with the California Environmental Protection Agency (Cal/EPA) guidance document, *Representative Sampling of Groundwater for Hazardous Substances, revised February 2008* (*http://www.dtsc.ca.gov/SiteCleanup/upload/SMP_Representative_Sampling_GroundWater.pdf*) or the most recent version of appropriate USEPA methods and in accordance with a sampling and analysis plan accepted by the Executive Offficer. Groundwater monitoring field parameters and their associated stability criteria from the Cal/EPA guidance document are summarized below:

Parameter	**Stability Criteria**
Temperature	+/- 3% (min.+/- 0.2 °C)
pH	+/- 0.1
Specific electrical conductance	+/- 3 %

All water analyses required in this MRP must be performed by a laboratory certified by the State of California Environmental Laboratory Accreditation Program for the analysis performed, or a laboratory accepted by the Executive Officer. All reporting of laboratory results must identify the specific methods of analysis. All reporting of analytical data shall be performed in accordance with the definitions and protocols contained in Attachment 3 of this MRP.

V. REPORTING

A. General Provisions

1. The Discharger shall comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of this MRP (Attachment 4).

2. The Discharger shall arrange all reported data in tabular format. The data shall be summarized to clearly illustrate whether the Landfill is operating in compliance with this MRP.
3. The results of any analysis taken more frequently than required for the parameters and locations specified in this MRP shall be submitted to the Water Board in the next monitoring report.
4. The Discharger must attach a Monitoring Report Certification Form (Attachment 5) or equivalent to any monitoring report provided to the Water Board. The certification form must clearly identify the facility, a site contact, the type of report being submitted, any violations of this MRP and of the Waste Discharge Requirements for the Landfill, and any corrective action taken or planned.
5. The monitoring and reporting required by this program becomes effective on the first day of month after the MRP's signature date. The monitoring and reporting prescribed in MRP No. 95-1 and MRP No. 95-119 applies to all data collected before the first day of the month after this MRP's signature date.
6. The Discharger shall furnish to the Water Board within a reasonable time, any information which the Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this MRP or to determine compliance with the MRP (California Water Code, section 13267). Upon request, the Discharger shall also furnish to the Water Board copies of records required to be kept by this MRP.

B. Scheduled Reports

1. Semi-annual Monitoring Reports

Semi-annual monitoring reports shall be submitted to the Water Board in accordance to the schedule specified in the Order. The semiannual monitoring reports shall include a discussion of groundwater monitoring results, specifically:

a. If a sample cannot be obtained from any specified well, the Discharger shall include an explanation of the cause of the problem and describe how the monitoring deficiency will be corrected.
b. If a required sample cannot be obtained from a well for four consecutive quarterly monitoring events, the Discharger shall propose corrective actions that address the current and anticipated data needs for the groundwater monitoring program and provide a schedule for implementation of the corrective action. The proposed corrective action shall be submitted to the Water Board within 60 days after the end of the monitoring period of the fourth missed sample.
c. A summary of the compliance record and corrective actions needed or taken to bring the discharge into full compliance with this MRP shall be be included in each report.

2. Annual Reports

An annual monitoring report, which can be inclusive of the second semiannual monitoring results, shall be submitted to the Water Board in accordance to the schedule specified in the Order. The report must contain the following:

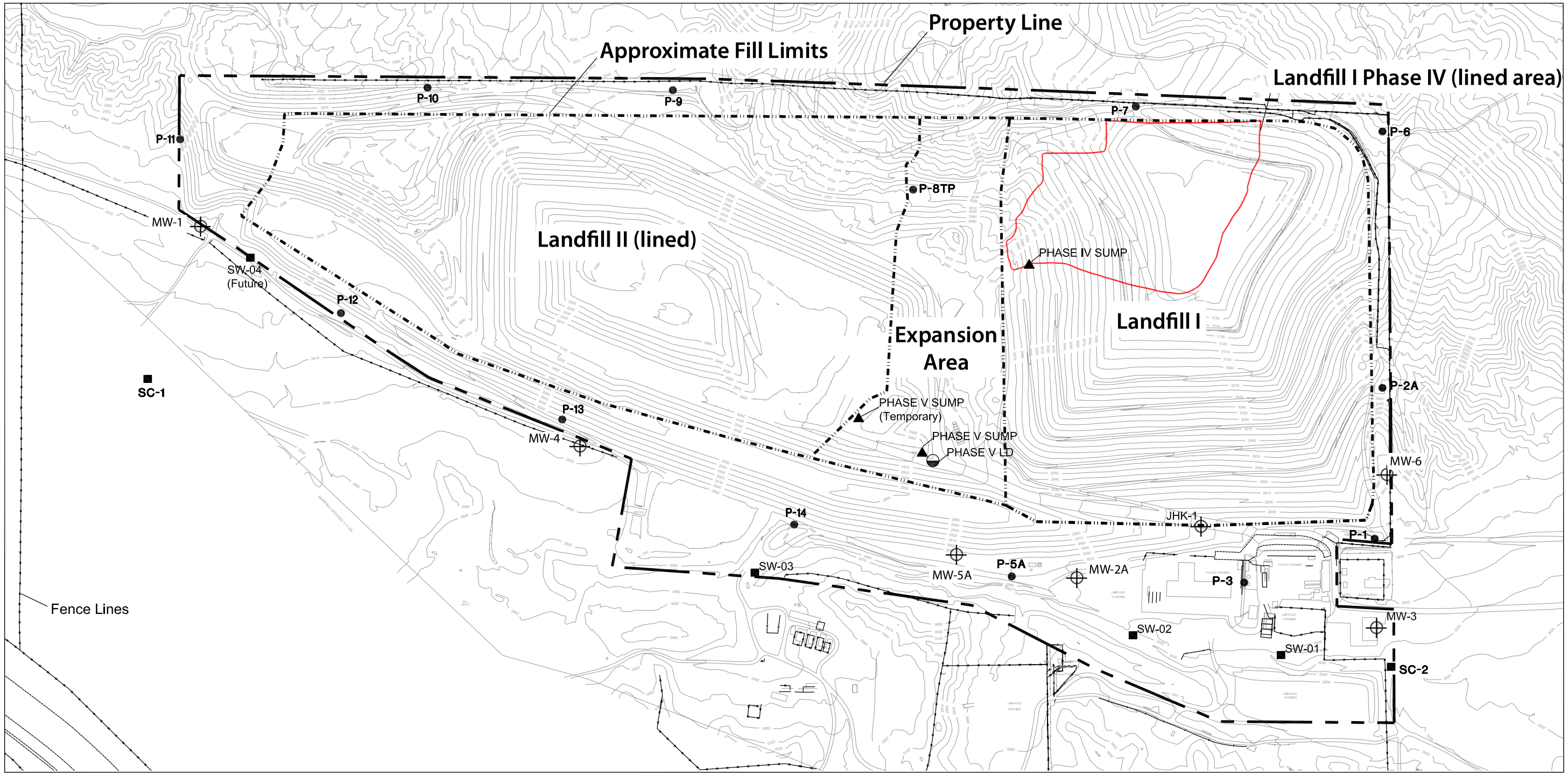
a. Tabulation and time series data plots of the past ten years of data.

b. An evaluation of the monitoring program and proposed modifications necessary to improve the monitoring program.

c. Even year annual reports shall contain proposed revisions to the concentration limits as described in III.B.5 of this MRP.

Ordered by: _____
PATRICIA ZWARTS-KOUYOUMDJIAN
EXECUTIVE OFFICER

Attachments: 1 – Monitoring Point Locations
2 – Water Quality Monitoring Summary
3 – Definitions and Reporting Protocol for Analytical Data
4 – General Provisions for Monitoring and Reporting
5 – Monitoring Report Certification Form



LEGEND

- Groundwater Monitoring Wells
- Unsaturated Zone - Perimeter Gas Probes regulated by AVAQMD, Calrecycle, and Local LEA
- Future Unsaturated Zone Location - Phase V LD
- Leachate
- Stormwater regulated by CA NPDES General Permit.

Media Type	Monitoring Locations
Groundwater	MW-1, MW-2A, MW-3, MW-4, MW-5A, MW-6, and JHK-1
Unsaturated Zone - Gas	P-1, P-2A, P-3, P-5A, P-6 through P-14
Unsaturated Zone - Leak Detection	Phase V LD (Future)
Leachate	Phase IV Sump and Phase V Sump (Temporary and Future)
Stormwater	SW-01, SW-02, SW-03, SW-04 (Future), SC-1, and SC-2

N

GRAPHIC SCALE

0 400 800

SCALE IN FEET

MRP ATTACHMENT 1
MONITORING POINT LOCATIONS

EXISTING TOPOGRAPHIC PLAN IS FURNISHED BY WALKER AND ASSOCIATES. THE TOPOGRAPHY DATA IS BASED ON JANUARY 11, 2009 AERIAL PHOTOGRAPHY.

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ATTACHMENT 2
Water Quality Monitoring Summary
Monitoring and Reporting Program
Antelope Valley Public Landfill

Parameters	Units	USEPA Method[1]	Sampling Frequency	Reporting Frequency
Field Parameters[2]				
Depth to groundwater	feet below reference point		Quarterly	Semiannually
Electric conductivity	micromhos/cm	120.1	Quarterly	Semiannually
pH	pH units	150.1	Quarterly	Semiannually
Temperature	degrees F or C	170.1	Quarterly	Semiannually
Turbidity	NTUs	180.1	Quarterly	Semiannually
Constituents of Concern (COC)				
Inorganics, total[3]	micrograms/liter		5 year	5 year
Volatile Organic	micrograms/liter	8260	5 year	5 year
Semivolatile Organic	micrograms/liter	8270	5 year	5 year
PCBs and Pesticides[4]	micrograms/liter	8082/8081	5 year	5 year
Chlorinated Herbicides[4]	micrograms/liter	8151	5 year	5 year
Organophosphorus Pesticides[4]	micrograms/liter	8141	5 year	5 year
Detection Monitoring Parameters (for statistical and non-statistical evaluation)				
Bicarbonate alkalinity	milligrams/liter	2320B	Quarterly	Semiannually
Total organic carbon	milligrams/liter	5310B	Quarterly	Semiannually
Barium	milligrams/liter	200.7/6010B	Quarterly	Semiannually
Volatile organic compounds[5]	micrograms/liter	8260B	Quarterly	Semiannually
Supplemental Monitoring Parameters (not subjected to statistical analysis)				
Chloride	milligrams/liter	300.0	Quarterly	Semiannually
Nitrate as N	milligrams/liter	353.2/300.0	Quarterly	Semiannually
Sulfate	milligrams/liter	D516-02/300.0	Quarterly	Semiannually
Total dissolved solids	milligrams/liter	2540C	Quarterly	Semiannually
pH	milligrams/liter	4500-HB	Quarterly	Semiannually
Calcium	milligrams/liter	200.7/6010B	Quarterly	Semiannually
Magnesium	milligrams/liter	200.7/6010B	Quarterly	Semiannually
Potassium	milligrams/liter	200.7/6010B	Quarterly	Semiannually
Sodium	milligrams/liter	200.7/6010B	Quarterly	Semiannually

[1] The Discharger shall analyze for all constituents using the United States Environmental Protection Agency (USEPA) analytical methods indicated or the most recently approved SW-846 USEPA method or other equivalent USEPA method. An alternate may be proposed and used if acceptable to the Executive Officer.

[2] Field parameters apply to groundwater samples.

[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, cyanide, lead, mercury, nickel, selenium, silver, sulfide, thallium, tin, vanadium, and zinc.

[4] As defined in Appendix II, 40 CFR, part 258.

[5] As defined in Appendix I, 40 CFR, part 258.

ATTACHMENT 3
Definitions and Reporting Protocol for Analytical Data
Monitoring and Reporting Program
Antelope Valley Public Landfill

1. Definitions

Median - The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = ($X_{n/2}$ + $X_{(n/2)+1}$)/2 (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL) - MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in Code of Federal Regulations, Title 40, Part 136, Attachment D, revised as of July 3, 1999.

Minimum Level (ML) - ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Not Detected (ND) - Sample results that are less than the laboratory's MDL.

Reporting Level (RL) - RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this MRP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

2. General

Analytical method for each constituent shall be selected to provide the reporting limits specified in this MRP.

3. Reporting Protocols

The Discharger shall report the applicable reported ML and the current MDL with each sample result. The Discharger shall report the results of analytical determinations using the following reporting protocols.

a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

d. The Discharger is to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

e. When determining an average of more than one analytical result, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure.

   i. The data set shall be ranked from low to high, ranking the reported ND determinations the lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

   ii. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

4. <u>N-nitrosodimethylamine (NDMA)</u>

For NDMA analyses, the Discharger is considered to be in compliance with requirements pertaining to the method of laboratory analysis (contained in Provision 1.a., 1.b, and 1.c of General Provisions for Monitoring and Reporting (Attachment 4), if the discharger uses a modified USEPA method (e.g., Method 1625) in order to achieve a reporting limit of 0.002 µg/L.

ATTACHMENT 4

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

a. All analyses shall be performed in accordance with the current edition(s) of the following documents:

i. Standard Methods for the Examination of Water and Wastewater
ii. Methods for Chemical Analysis of Water and Wastes, EPA

b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Public Health or a laboratory approved by the Water Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.

c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Water Board prior to use.

d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.

e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.

f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.

g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Water Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

a. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.

b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Water Board.

c. The discharger shall provide a brief summary of any operational problems and maintenance activities to the Water Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.

d. Monitoring reports shall be signed by:

i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

ii. In the case of a partnership, by a general partner;

iii. In the case of a sole proprietorship,by the proprietor; or

iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

e. Monitoring reports are to include the following:

i. Name and telephone number of individual who can answer questions about the report.

ii. The Monitoring and Reporting Program Number.

iii. WDID Number.

f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Water Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars ($1,000) for each day of violation.

ATTACHMENT 5

Monitoring Report Certification Form
Monitoring and Reporting Program
Antelope Valley Public Landfill

Date _____

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Facility Name: _____

_____

Address: _____

_____

_____

_____

Contact Person: _____

Job Title: _____

Phone: _____

Email: _____

WDR/NPDES Order Number: _____

WDID Number: _____

Type of Report (circle one): **Monthly Quarterly Semi-Annual Annual Other**

Month(s) (circle applicable month(s)*: **JAN FEB MAR APR MAY JUN**

JUL AUG SEP OCT NOV DEC

***annual Reports** (circle the first month of the reporting period)

Year: _____

Violation(s) (Place an X by the appropriate choice):

_____ **NO** (there are no violations to report) _____ **YES***

If* **YES *is marked complete a-g*

a) Parameter(s) in Violation: _____

_____

_____

_____

_____

b) Section(s) of WDRs/NPDES Permit Violated: _____

_____

c) Reported Value(s)

d) WDRs/NPDES Limit/Condition:

e) Dates of Violation(s)
(reference additional information as needed):

f) Explanation of Cause(s)
(attach additional information as needed):

g) Corrective Action(s) – Specify Actions taken and a Schedule for Actions to be taken
(attach additional information as needed)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact _____at the number provided above.

Sincerely,

Name: _____

Title: _____

ATTACHMENT D
SUMMARY OF RELEVANT FEIR MITIGATION MEASURES

Earth Resources Impacts	Impact Reduced to Less Than Significant By Mitigation Measures	Water Board Analysis and Findings
Earthquake Ground Shaking	The proposed landfill expansion and all ancillary support facilities will be designed in accordance with 27 CCR Seismic requirements. **Mitigation Measure 4.1-1**: Prior to issuance of the Waste Discharge Requirements (WDRs) and approval of the Joint Technical Document (JTD) for the project by the Lahontan Regional Water Quality Control Board, the proposed design and supporting engineering analysis of the landfill's containment structures shall be reviewed and approved by the RWQCB to ensure the design complies with State regulations pursuant to CCR, Title 27, Division 2. The applicant shall demonstrate to RWQCB satisfaction that the landfill liner and leachate collection system have been designed to preclude failure and will resist the maximum seismic shaking expected at the site based on risk assessment. Further, the design shall demonstrate that the final slopes will be stable under both static and dynamic conditions to protect public health and safety and prevent damage to the facility such that no significant impact to the environment will occur. The Liner design as proposed in Appendix B of the EIR shall be modified or refined if necessary based on final engineering analysis and review by the RWQCB to ensure that the approved landfill design will mitigate impacts to less than significant level. The landfill containment structures shall be constructed as approved by the RWQCB. During on-going landfill construction, geologic mapping of rock and soil exposed in future excavations shall be completed. Information on rock type and any exposed folds, fractures and folds will be collected. Permanent cut slopes shall be observed by a qualified geologist to check for adverse bedding, joint patterns, or other geologic features that may impact the approved landfill design. Where necessary, the permanent cut slopes shall be constructed to ensure their stability. The geologic maps will be included with the construction reports for each portion of the constructed landfill. The reports will be submitted to the LEA and Lahontan RWQCB.	**Mitigation Measure 4.1-1**: Changes have been required in, or incorporated into the project to avoid or substantially lessen the potential significant environmental effect as identified in the final EIR.

Earth Resources Impacts	**Impact Reduced to Less Than Significant By Mitigation Measures**	**Water Board Analysis and Findings**
Earthquake Ground Shaking	**Mitigation Measure 4.1-2**: Earth moving operations shall be observed, and the placement of fill shall be tested by a qualified geotechnical engineer during ongoing landfill operations. Observation and testing will ensure fill placement are consistent with the approved landfill design.	**Mitigation Measure 4.1-2**: Changes have been required in, or incorporated into the project to avoid or substantially lessen the potential significant environmental effect as identified in the final EIR.
Hydrology and Water Quality Impact	**Impact Reduced to Less Than Significant By Mitigation Measures**	**Water Board Analysis and Findings**
Scour/Erosion of Creek	**Mitigation Measure 4.3-1**: The final design for the Anaverde Creek Scour Protection System shall be developed by a qualified engineer to comply with the City of Palmdale engineering design requirements. The construction of the approved Scour Protection System shall be completed in conjunction with Landfill II and the wedge expansion in accordance with the CUP Conditions of Approval.	**Mitigation Measure 4.1-1**: Changes have been required in, or incorporated into the project to avoid or substantially lessen the potential significant environmental effect as identified in the final EIR. The Discharger is required to obtain a 401 permit for Waters of the U.S. or WDRs for Waters of the State

ATTACHMENT E

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

STANDARD PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

a. to enter upon premises in which an effluent source is located or in which any required records are kept;

b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements (WDRs);

c. to inspect monitoring equipment or records; and

d. to sample any discharge.

2. Reporting Requirements

a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.

b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board. Any such proposal shall be reported to the Regional Board at least 120 days in advance of implementation. This shall include, but not be limited to, all significant soil disturbances.

c. The Owners/Discharger of property subject to WDRs shall be considered to have a continuing responsibility for ensuring compliance with applicable WDRs in the operations or use of the owned property. Any change in the ownership and/or operation of property subject to the WDRs shall be reported to the Regional Board. Notification of applicable WDRs shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.

d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing, and correct that information.

e. Reports required by the WDRs, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars ($1,000) for each day of violation.

f. If the Discharger becomes aware that their WDRs (or permit) are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their WDRs (or permit) be rescinded.

3. Right to Revise WDRs

The Regional Board reserves the privilege of changing all or any portion of the WDRs upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDRs may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDRs which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.

7. Waste Discharge Requirement Actions

The WDRs may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDRs conditions.

8. Property Rights

The WDRs do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDRs including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDRs shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDRs are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.

b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.