

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**BOARD ORDER NO. R6V-2004-0027
WDID NO. 6B360304025**

REVISED WASTE DISCHARGE REQUIREMENTS

FOR

VICTORVILLE SANITARY LANDFILL

_____ San Bernardino County _____

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

1. Discharger

The County of San Bernardino owns and operates the Victorville Sanitary Landfill (VSL). In February 2004, the San Bernardino County Department of Public Work, Solid Waste Management Division, submitted a Joint Technical Document (JTD) for the VSL expansion project. The JTD, as revised in March 2004, represents the necessary information to constitute a complete Report of Waste Discharge (ROWD) for the VSL expansion project. For the purposes of this Regional Board Order (Order), San Bernardino County is referred to as the “Discharger.”

2. Facility

For the purposes of this Order, the VSL is referred to as the “Facility.” The Facility is an active Class III solid waste management unit.

3. Order History

On November 14, 1985, the Regional Board adopted Waste Discharge Requirements (WDRs) for the Facility with Board Order No. 6-85-135. The WDRs were revised on September 14, 1995 with Board Order No. 6-95-106, which was amended by Board Order No. 6-95-106A1 adopted September 5, 1996 and Board Order No. 6-95-106A2 adopted July 17, 1997.

4. Reason for Action

The Regional Board is revising WDRs at this time to provide WDRs for the proposed VSL expansion project, to extend the life of the Facility, to update the Monitoring and Reporting Program, and to incorporate provisions of Title 27, California Code of Regulations (CCR) and Code of Federal Regulations (CFR) Title 40, Parts 257 and 258 (40 CFR 257 and 258).

5. Facility Location

The Facility is located in San Bernardino County in the High Desert Region of the Victor Valley. The Facility address is 18600 Stoddard Wells Road which is located approximately four miles north of the City of Victorville, just west of Interstate 15, within Section 23, T6N, R4W, San Bernardino Baseline and Meridian, as shown in Attachments "A" and "B."

6. Facility Description

The Facility originally began as a burn and cover site in 1955 and was converted into a solid waste management unit in 1975. The existing Facility consists of 80 acres with 67 acres currently being used as a solid waste landfill. The existing landfill is unlined and does not have a leachate collection and removal system (LCRS). Seven acres were previously used as unlined septage drying ponds and six acres have historically been used to provide daily/intermediate soil cover borrow. Borrow material is currently excavated from an adjoining 37.5-acres (formerly leased from the Bureau of Land Management) to the east of the former borrow area.

In 1998, the Facility ceased accepting liquid waste at the septage drying ponds and closure activities were initiated. Soils beneath the ponds were bio-remediated to acceptable levels and used as daily cover material in the solid waste landfill. In September 2000, the liquid waste surface impoundments that were used for septage disposal were clean closed in compliance with 27 CCR, Section 21400 and Regional Board requirements. These former septage-drying ponds will be lined using a prescriptive liner system and used as the first landfill expansion area (i.e., Expansion Phase 1A) outside the existing 67-acre landfill footprint.

The proposed expansion project would increase the existing landfill refuse footprint from a permitted 67 acres to approximately 341 acres within a 490-acre property boundary. (The County of San Bernardino purchased 410 acres from the Bureau of Land Management for the VSL Expansion Project.) The proposed VSL Expansion Project also increases the permitted elevation of the landfill from 3,130 feet above mean sea level (amsl) to 3,180 feet amsl. Proposed site useful life will increase from five years to 55 years as a result of the VSL Expansion Project. Expected final closure will occur in 2059.

Pursuant to 27 CCR, the VSL landfill expansion areas will be constructed with a multi-layer liner and LCRS. The base liner system on the flat bottom portion of the expansion area will include (from top to bottom): 1) two-foot thick protective soil cover; 2) non-woven geotextile; 3) a maximum one-foot thick LCRS drainage gravel; 4) non-woven cushion geotextile; 5) 60-mil thick, double-sided textured, high density polyethylene (HDPE) geomembrane; 6) a two-foot thick compacted clay layer with permeability less than 1×10^{-7} centimeters per second or equivalent geosynthetic clay liner (GCL); and 7) prepared subgrade. On the slopes, the liner system will be the same as on the flat bottom except that: 1) the LCRS drainage material will not be constructed and 2) the HDPE geomembrane will be textured on one side only with the textured side placed facing down in contact with the low-permeability compacted layer (or approved equivalent GCL).

The LCRS above the liner is designed to collect and convey leachate that may be generated within the refuse prism. The general LCRS design will consist of a maximum one-foot thick gravel drainage blanket (item 3 in liner description above) constructed immediately above the liner in the bottom liner areas. A network of leachate collection pipes placed within the gravel drainage blanket will convey accumulated fluid by gravity to designated low point sump areas within each phase of development. Sump pumps will transfer leachate to storage tanks.

The LCRS design over slope liner areas consists of gravel pipe collectors wrapped with a geotextile filter fabric placed on interior benches along the slopes. Leachate from slope liner areas will flow by gravity to the LCRS main piping system.

The LCRS main piping system will be underlain with an underdrain system (below the main line) consisting of a lined gravel trench and collection pipe. (Attachment "C") The system is capable of collection and removal of any leachate that leaks through the liner in the vicinity of the main piping system. The underdrain system can also serve as monitoring points for leachate that may escape the liner system. Monitoring results that indicate leachate has penetrated the liner system and has migrated into the underdrain system would represent the earliest possible warning that the liner has a leak.

The VSL will include intermediate covers in accordance with 27 CCR, Section 207000. A minimum one-foot thick layer of suitable cover material will be placed over the top, side slopes and working face of the advancing lift, refuse cell or portions of the disposal area where no additional refuse is to be deposited within 180 days. An intermediate cover is defined in 27 CCR, Section 20164, as 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.

A landfill gas control/recovery system was constructed on the existing landfill footprint in June 2003 and was put into service on November 6, 2003. The existing landfill gas system plan is shown in Attachment "D1." The landfill gas control system consists of a series of gas collection wells interconnected by aboveground laterals (pipes) and a main header pipe connected to a flare station. The system has a centrifugal blower designed to create a vacuum to pull landfill gas to the flare for destruction. The gas control/recovery system will expand as the landfill is developed to provide ongoing control of landfill gas. A conceptual layout for the landfill gas control/recovery system based on the anticipated final configuration of the landfill is presented in Attachment "D2."

The current perimeter gas migration monitoring system consists of two probes. This system will be upgraded to comply with 27 CCR, Section 20925 requirements for installation of monitoring points at intervals of no less than 1,000 feet along the landfill perimeter as the proposed expansion areas are developed. The conceptual locations of future probe installation is shown in Attachment "D2."

The Preliminary Closure and Post-Closure Maintenance Plan submitted with the ROWD specifies that closure of the VSL will include a final cover system in accordance with state and federal prescriptive design standards including: a minimum two-foot thick foundation layer of soil, a barrier layer consisting of a synthetic cover (i.e., a 60-mil LLDPE geomembrane; a geocomposite drainage layer placed in one-foot strips, 10 feet on center; and a two-foot layer of soil suitable to support vegetation cover. An alternative to the prescriptive final cover system may be considered at a later time pursuant to 40 CFR 258.60.

7. Landfill Construction Phasing

Incremental landfill phase configurations are based on the fill sequencing anticipated over the life of the landfill. Phase 1A development may begin as early as 2006 depending on actual refuse flow rates. Until this time landfilling will continue to occur on the existing unlined 67-acre refuse footprint up to the final fill grades. Development of Phase 1B would begin prior to completion of waste filling operations in the Phase 1A area and is proposed to be carried out in six construction sequences. The Phase 1B area will be divided in half, longitudinally, and in thirds, laterally, yielding six construction sequences for excavation and liner construction. Construction of the Phase 2 expansion area is anticipated to begin prior to the completion of the Phase 1B area. Phase 2 is proposed to be carried out in four construction sequences by dividing the area in half both longitudinally and laterally. Phase 3 will be the final development at VSL and will begin prior to completion of waste filling operations in Phase 2. Phase 3 will be carried out in four construction sequences by dividing the area in half both longitudinally and laterally.

8. Authorized Disposal Sites

The 341-acre landfill footprint shown in Attachment "B" is the only authorized disposal site for the authorized wastes described in Finding No. 9. The only authorized off-site disposal sites for leachate are the Adelanto Wastewater Treatment Plant and the Victor Valley Wastewater Treatment Plant.

9. Waste Description

The wastes that may be disposed of at the VSL consist of non-hazardous solid wastes and inert wastes classified in accordance with 27 CCR, Sections 20220 and 20230 (Class III wastes). The definition of non-hazardous solid waste as included in 27 CCR includes all putrescible and non-putrescible solid and semi-solid wastes such as household refuse, paper, ashes, commercial wastes, industrial wastes, construction and demolition wastes, discarded home and industrial appliances, agricultural wastes, animal solids and other solid or semi-solid waste, provided that such wastes do not contain wastes that must be managed as hazardous wastes, or wastes that contain soluble pollutants in concentrations which may exceed applicable water quality objectives or could cause degradation of the waters of the State.

Disposal of designated wastes, Class I wastes, and Class II wastes at the VSL is not authorized.

10. Waste Inflow Rates, Site Capacity, and Site Life

The total remaining site capacity for the current 67-acre refuse footprint is 2.4 million cubic yards (mcy). Assuming an in-place refuse density of 1,200 lbs. per cubic yard, the current site life is approximately five years without the proposed VSL Expansion Project.

The total site capacity (gross air space) for the proposed landfill expansion project (including the vertical expansion over the current 67-acre refuse footprint) is 85.65 mcy. The net airspace (less liner and final cover) is 81.13 mcy. The refuse air space (less daily and intermediate cover at a 3:1 refuse to cover rate) is 57.4 mcy based on a refuse density of 1,200 lbs. per cubic yard.

The inflow rate to the VSL is anticipated to begin at approximately 795 tons per day (tpd) based on 2003 tonnage records and is projected to increase 2.7% per year based on historic and projected population growth in Victor Valley. The inflow rate is anticipated to be approximately 884 tpd in five years. The maximum inflow rate of waste at the site will be 1,600 tpd.

The projected site life for landfill with the proposed VSL Expansion Project (including both the current and expansion footprint) is calculated to be 55 years or until 2059.

11. Site Geology

The VSL is located in the south-central Mojave Desert Geomorphic Province of southern California. The Mojave Desert is crossed by numerous northwest-trending faults, many of which are classified by the California Geological Survey as active or potentially active. The Helendale fault is located about seven miles northeast of the landfill and is the nearest active fault. The active San Andreas Fault is located about 25 miles to the southwest of the site, and the active North Frontal fault system is located approximately 12 miles south of the landfill.

Compression between northwest-trending faults has resulted in uplift of small mountain ranges that trend parallel to the faults. The intervening valleys are usually filled with coarse alluvial sediments with rare lacustrine and eolian deposits. Most of these valleys ultimately drain toward the Mojave River, the main drainage course in the south-central portion of the Mojave Desert. The Mojave River is two miles east of the Facility.

The VSL is situated on a southwest-draining bajada consisting of coarse-grained alluvial fan deposits (fanglomerate). The fanglomerate is composed predominantly of mudflow deposits and fluvial channel deposits incorporating clastic debris from the surrounding mountains. The thickness of the fanglomerate below the site varies from about 85 to about 275 feet based on boring logs from monitoring wells and exploratory borings. Where exposed in the landfill borrow pit and in side walls of arroyos, bedding within the fanglomerate trends approximately 60 to 70 degrees east of north and dips approximately seven to ten degrees to the southeast. In addition to bedding planes, tabular zones of calcium salts and carbonates are found throughout the fanglomerate and these structures are grossly parallel to the poorly

developed bedding. An angular unconformity separates the fanglomerate from the underlying igneous bedrock (fractured quartz monzonite). The unconformity dips more steeply than the fanglomerate bedding planes, and the contact between the two units is highly irregular as evidenced by the numerous bedrock outcroppings observed throughout the basin. No known or postulated faults have been documented at or trending near the site.

12. Site Hydrogeology and Ground Water Monitoring Systems

Ground water generally flows in a southeasterly direction under the site with a gradient that decreases from 0.17 vertical feet per horizontal feet (ft/ft) in the northwest to 0.05 ft/ft in the southeast. Ground water beneath the site flows under unconfined to semi-confined condition in the older alluvium and fractured quartz monzonite bedrock at depths ranging from 100 feet below the ground surface at well VSL-4 (northwest portion of site) to approximately 206 feet below the ground surface at well VSL-17 (southeast portion of site). Locations of the ground water monitoring wells are shown in Attachment "E." Wells VSL-1, VSL-4, VSL-14, and VSL-15 are upgradient of the Facility and future expansion areas. All other wells are downgradient.

The ground water elevation data from wells constructed along the southeastern property border suggest that the ground water flow direction changes from a southeasterly direction to a southwesterly direction, and this directional change roughly coincides with the surface expression of Bell Mountain Wash. This change in groundwater direction is not currently well characterized and this Order requires the Discharger to submit a report characterizing the rate and direction of ground water flow in this area.

Ground water monitoring wells were first constructed at the site in 1988, when wells VSL-1, VSL-2, and VSL-3 were installed as part of the Solid Waste Assessment Test (SWAT) program investigation. Impacts to ground water were identified during the SWAT, requiring installation of additional wells as part of ongoing Evaluation Monitoring Program (EMP) investigations. In 1990, well VSL-4 was constructed upgradient of the landfill, and well VSL-5 was constructed at the downgradient edge of the septage ponds. In 1992, well VSL-6 was constructed at the southern edge of the existing landfill property as a point-of-compliance well. In 1995, well VSL-7 was constructed at the downgradient edge of the septage ponds to further characterize water quality impacts from the ponds. Well VSL-8 was constructed in 1996 as a point-of-compliance monitoring well along the downgradient edge of the landfill. Well VSL-9 was also constructed in 1996 to further characterize water quality impacts adjacent to the septage ponds. Wells VSL-10, VSL-11, VSL-12, VSL-13, VSL-14, VSL-15, VSL-16, and VSL-17 were constructed around the proposed expansion areas in 2000 to accommodate future groundwater monitoring requirements.

Ground water samples are currently collected from nine wells (VSL-1, VSL-3, VSL-4, VSL-5, VSL-6, VSL-8, VSL-9, VSL-11, and VSL-12) on a quarterly basis pursuant to the EMP. Ground water monitoring will continue with the existing active wells. Some wells will require abandonment as the landfill develops into new phases and additional wells will be required to accommodate the various phases of landfill expansion. Future required changes to the ground water monitoring system are addressed in Monitoring and Reporting Program R6V-2004-0027.

13. Background Ground Water Quality

Background ground water quality data are summarized in the “*Evaluation Monitoring Program Phase II Report*” for the VSL submitted by the Discharger in 2001.

Volatile organic compounds (VOCs) were not detected in representative background samples from wells VSL-1 and VSL-4 during a winter quarter 2001 ground water sampling event. Historically, trace amounts of VOCs have been detected on a few occasions in VSL-1 and VSL-4, but these anomalies were attributed to laboratory or field sampling contamination.

Background levels of inorganic constituents were determined during a winter quarter 2001 ground water sampling event utilizing wells VSL-1, VSL-4, VSL-13, VSL-14, VSL-15, and VSL-16. Inorganic concentrations from this sampling event are consistent with historical results for background wells VSL-1 and VSL-4 and are:

- Sulfate concentrations ranged from 57 milligrams per liter (mg/l) in samples from VSL-1 to 380 mg/l in samples from VSL-16.
- Nitrate as nitrogen concentrations ranged from 0.03 mg/l in samples from VSL-14 to 8.5 mg/l in samples from well VSL-4.
- Total Dissolved Solids (TDS) concentrations ranged from 390 mg/l in samples from well VSL-13 to 760 mg/l in samples from well VSL-16.
- Chloride concentrations ranged from 40 mg/l in samples from VSL-13 and VSL-15 to 120 mg/l in samples from VSL-4.

14. Pollutant Release

A release at the Facility was identified during the Solid Waste Assessment Test (SWAT) in 1987 and subsequent monitoring required by the Regional Board. Results of the SWAT investigation and subsequent monitoring indicate that leachate and gas migration from the former septage drying pond area and landfill gas from the existing landfill are suspected to be the most likely sources of elevated levels chloride, nitrate, total dissolved solids, and VOCs in the ground water. The highest concentrations of elevated constituents have been detected in samples from wells VSL-5, VSL-7, and VSL-9, which are immediately down-gradient of and adjacent to the closed septage impoundments (northwest portion of the site). Lesser ground water impacts have also been identified in samples from wells VSL-3, VSL-6, and VSL-11 (southeast portion of the site).

15. Corrective Action Program

The Discharger has implemented several corrective actions for the known release at the site and is required by this Order to implement additional corrective actions.

Corrective actions for the pollutant release have included to date:

- Disposal of liquid wastes to the former septage disposal ponds ceased in 1998 and clean closure activities commenced.

- Soils beneath the ponds were bio-remediated to acceptable levels and used as cover materials at the existing landfill.
- Clean Closure of the former septage disposal pond area (all wastes removed) was completed in September 2000.
- A landfill gas collection and flare destruction system to address migration of landfill gas was installed at the existing unlined landfill and implemented beginning in November 2003.

The former septage drying pond area will be the first landfill expansion area (Phase 1A) and will include a prescriptive liner system, LCRS, gas monitoring and control system, and prescriptive cover at closure. The existing unlined landfill (sixty-seven acres) will also be closed with a prescriptive cover of the same design as the expansion areas.

In addition to the recently completed corrective actions, the Discharger shall implement Partial Final Closure of the existing landfill and the Phase 1A expansion area (former pond area) when these areas are filled to capacity.

The Facility is currently in compliance with corrective actions initiated by the Regional Board and the Discharger. The full effect of the recent corrective actions has not yet been realized since it takes time for a groundwater system to respond to actions directed at source control. Continued compliance with the EMP will produce the data needed to determine the effectiveness of the corrective actions and whether or not additional corrective actions will be necessary.

16. Receiving Waters

The receiving waters for the Facility are the ground waters of the Upper Mojave River Ground Water Basin (Department of Water Resources Hydrologic Unit No. 6-42).

17. Lahontan Basin Plan

In compliance with the Porter-Cologne Water Quality Control Act, the Regional Board adopted an updated *Water Quality Control Plan for the Lahontan Region* (Basin Plan) that became effective on March 31, 1995. The Basin Plan incorporates SWRCB plans and policies by reference, contains beneficial use designations and water quality objectives (WQOs) for all waters of the Lahontan Region, and provides a strategy for protecting beneficial uses of surface and ground waters throughout the Lahontan Region. The Basin Plan can be accessed on the Internet at <http://r6sweb/R6PM/PDF/BPLAN.PDF>, reviewed at the Regional Board office, or purchased at a nominal cost. This Order implements the Basin Plan, as amended.

18. Beneficial Uses - Ground Water

Designated beneficial uses of ground waters of the Upper Mojave River Ground Water Basin are municipal and domestic supply; agricultural supply; industrial service supply; fresh water replenishment; and aquaculture (MUN, AGR, IND, FRSH, and AQUA, respectively).

19. National Pollutant Discharge Elimination System Permit Requirements for Storm Water

The Discharger must comply with the federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) Permit requirements for discharges of storm water associated with industrial activities and construction activities.

20. California Environmental Quality Act (CEQA)

San Bernardino County, acting as California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et seq.) Lead Agency, prepared a Notice of Preparation (NOP) for the VSL expansion project in September 2002. The NOP provided notification that an Environmental Impact Report (EIR) would be prepared for the project. A Draft EIR was developed in September 2003 to document existing environmental conditions and to evaluate the potentially significant environmental effects that could result from the implementation of the proposed VSL Expansion Project and was circulated for public review. Comments on the Draft EIR were addressed and the Final EIR was completed and certified by San Bernardino County on June 15, 2004.

When an EIR has been prepared for a project, a Responsible Agency shall not approve the project as proposed, pursuant to CEQA Guidelines, Section 15096(g)(2), if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment.

The Regional Board, as a Responsible Agency, has identified additional potentially significant impacts to ground water quality due to the VSL Expansion Project not identified in the EIR (Potentially Significant Impact E, below). Mitigation measures that would substantially lessen or avoid any significant effect the project would have on the environment are specified in Mitigation Measures B and E, below.

A description of potentially significant water quality impacts and associated mitigation measures to reduce project impacts to less than significant are provided below.

- A. Potentially Significant Impact - Construction of the VSL Expansion Project will alter the drainage pattern of the site to minimize storm water drainage through the landfill footprint area. The drainage system will concentrate flows toward the southeast portion of the Facility to a proposed detention basin/de-siltation area, and then discharge into the area's natural drainage. These drainage facilities must be designed to adequately handle intense storm events, prevent flooding within the landfill footprint, and prevent or

eliminate the discharge of sediment-laden waters or waters containing refuse or litter to the natural drainage areas.

Mitigation Measure A1 - The County shall complete a final drainage plan based on the final site and engineering design plans completed for the VSL Expansion Project. The plan will include design drawings of the proposed drainage facilities that would be used to convey storm water around and/or through the site. The plan shall be in conformance with and meet the minimum criteria established by the County of San Bernardino Department of Public Works and the Regional Board for discharge rates, quantities, and locations of facilities. The final drainage plan shall be submitted to the Regional Board for review and acceptance.

Mitigation Measure A2 - Before each rainy season, after each major storm, and on a monthly basis during the rainy season, all drainage facilities shall be inspected and any required maintenance shall be performed to ensure that the drainage channels and de-siltation basin(s) function properly. Any silt removed from within the basins would be dried and used as daily cover material for the landfill. Any loose refuse or litter found on the Facility property or in the drainage ways will be disposed in the landfill.

Level of Significance After Mitigation - Implementing Mitigation Measures A1 and A2 with Regional Board oversight will reduce the potential impact associated with alteration of existing drainage patterns to less than significant levels.

- B. Potentially Significant Impact - Mass grading of the VSL Expansion Project will change the topography of the site and alter the existing flow-paths and natural drainage basins in the project area.

Mitigation Measure B – Prior to disturbing of any water of the U.S., the Discharger shall consult with the U.S. Army Corps of Engineers (ACOE), pursuant to Clean Water Act Section 404 requirements, to determine if an ACOE permit is required. Permit application(s) shall be submitted if any are required, and the Discharger must obtain Clean Water Act Section 401 Water Quality Certification from the Regional Board for any Section 404 permit that is not pre-certified by the State Water Resources Control Board.

Level of Significance After Mitigation - Implementing Mitigation Measure B will ensure impacts to the drainage ways will be less than significant.

- C. Potentially Significant Impact - During storm events, construction activities on the VSL Expansion Project, particularly vegetation removal and grading, may affect the amount of sediment and suspended solids entering the local storm drain system.

Mitigation Measure C1 - Prior to grading in excess of one acre, the Discharger must file with the State Water Resources Control Board a Notice of Intent (NOI) to comply with the National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge for Construction Activity (SWRCB Water Quality Order No. 99-08-DWQ), including a full description of the discharge and a demonstration of compliance with USEPA-specified effluent limits. The Discharger shall prepare a Storm Water Pollution

Prevention Plan (SWPPP) that shall include provisions for treatment of storm water, as necessary, to prevent or eliminate discharge of pollutants in storm water emanating from the project construction areas.

Mitigation Measure C2 - The following mitigation measures must be included as notes on the grading plan and monitored during grading and construction:

- All disturbed areas must be stabilized by approved Best Management Practices (BMPs) to ensure minimal erosion.
- All work performed between October 1 and April 1 shall be done in a manner enabling project stabilization, covering, or other protection from heavy rains or high winds. A County of San Bernardino Solid Waste Management Division Engineer shall review and approve all erosion control plans.
- During construction, temporary berms such as sandbags or gravel dikes must be used to prevent discharge of debris or sediment from the site when there is rainfall or other runoff.

Level of Significance After Mitigation - After implementation of Mitigation Measures C1 and C2, with oversight by the Regional Board, impacts on water quality from construction activity will be reduced to insignificant levels.

- D. Potentially Significant Impact - Leachate from the landfill could potentially migrate into the ground water aquifer. The existing landfill (sixty-seven acres) is currently unlined, with the exception of the surface impoundment area (seven acres in which approximately six acres have been clean-closed). Additional leachate from the proposed expansion could potentially contaminate the underlying ground water aquifer creating a significant impact to water quality.

Mitigation Measure D - The proposed landfill liner system and drainage facilities shall be designed and constructed in conformance with requirements of the Regional Board, California Integrated Waste Management Board and County of San Bernardino, Department of Health Services. This Order requires that the liner system shall be designed and constructed to ensure minimal risks to ground water contamination would occur with the expansion of the landfill.

Level of Significance After Mitigation - After implementation of Mitigation Measure D, potential landfill contamination to ground water due to the VSL Expansion Project would be reduced to a less-than-significant impact.

- E. Potentially Significant Impact - The existing unlined VSL landfill was scheduled to undergo final closure with a prescriptive cover system in approximately five years, the estimated time to fill this area to full capacity, not including proposed expansion of existing capacity. However, the proposed VSL Expansion Project would expand landfill capacity in the unlined area and postpone final closure activities for approximately 50 years until all expansion areas are also filled to capacity. This proposed postponement of the prescriptive cover over the existing unlined landfill area could potentially increase the amount of leachate in the ground water beneath the unlined portion of the landfill

over the 50-year period. An increase in the amount of expected leachate could potentially contribute to degradation of ground water quality.

Mitigation Measure E - This Order requires the Discharger to implement Partial Final Closure of the existing landfill (sixty-seven acres) and the Phase 1A Expansion Area (former septic pond area) when these areas are filled to the expanded final grade and capacity. This Order also requires the Discharger to certify that wastes were not diverted to other landfill expansion areas to postpone Partial Final Closure of the existing unlined landfill and former septic pond area.

Level of Significance After Mitigation - After implementation of the Mitigation Measure E, potential impacts to ground water quality due to the VSL Expansion Project would be reduced to a less-than-significant level.

Pursuant to CEQA Guidelines, Section 15096, Regional Board comments on the EIR are limited to those project activities which are within the Regional Board's expertise or which are required to be carried out or approved by the Regional Board or which will be subject to the exercise of powers by the Regional Board. The Regional Board has not addressed potential environmental impacts of the proposed VSL Expansion Project beyond the Regional Board responsibility and jurisdiction for water quality.

21. Closure and Post-Closure Maintenance

The Dischargers have submitted a Preliminary Closure and Post-Closure Maintenance Plan (PCPCMP) in the ROWD (JTD Parts E and F). As required by 27 CCR, Section 21780 (d)(1), a Final Closure and Post-Closure Maintenance Plan shall be submitted for approval two years prior to the anticipated closure date for the entire landfill or any portion thereof. The plan generally proposes in-place closure of the waste management units and an extended period of site monitoring. The monitoring media include the unsaturated zone, ground water, and final cover materials.

22. Financial Assurance

The Discharger has provided documentation that financial assurance has been developed for closure, post-closure maintenance and potential corrective action requirements.

23. Notification of Interested Parties

The Regional Board has notified the Discharger and interested parties of its intent to adopt revised WDRs for this discharge.

24. Consideration of Public Comments

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

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

I. COMPLIANCE WITH OTHER REGULATIONS AND ORDERS

- A. If the Executive Officer determines that additional closure or corrective action activities are necessary to protect water quality, the Discharger shall submit a corrective action plan or other documentation as ordered by the Executive Officer.
- B. If any applicable regulation or requirements overlap or conflict in any manner, the requirement most protective of water quality shall govern in all cases.
- C. The Discharger shall comply with the federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) Permit requirements for discharges of storm water associated with industrial activities and construction activities. A Storm Water Pollution Prevention Plan (SWPPP) for the proposed VSL expansion project shall be prepared and submitted to the Regional Board. The SWPPP shall contain provisions for collection and removal of sediment and trash from storm water.
- D. The Discharger must comply with the federal Clean Water Act, Section 401 Water Quality Certification for any proposed projects impacting waters of the U.S.

II. DISCHARGE SPECIFICATIONS

The discharge of waste generated within or as a result of the Facility shall not cause, or contribute to, a violation of any applicable receiving water quality objective (WQO) adopted by the Regional Board or the State Water Resources Control Board (SWRCB). The following narrative WQOs apply to all ground waters of the Lahontan Region.

A. Receiving Water Limitations for Ground Water

The discharge shall not cause the presence of the following substances or conditions in ground waters of the Upper Mojave River Ground Water Basin.

1. Bacteria, Coliform

In ground waters designated as MUN, the median concentration of coliform organisms over any seven-day period shall be less than 1.1/100 milliliters.

2. Chemical Constituents

Ground water designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the following provisions of Title 22, CCR which are incorporated by reference into this Order: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431 (Flouride), Table 64444-A of Section 64444 (Organic Chemicals), Table 64449-A of Section 64449 (Secondary Maximum Contaminant Levels – Consumer Acceptance Limits), Table 64449-B of Section 64449

(Secondary Maximum Contaminant Levels – Ranges). This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.

Waters designated as AGR shall not contain concentrations of chemical constituents in amounts that adversely affect the water for agricultural purposes.

Ground water shall not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

3. Radioactivity

Ground waters designated as MUN shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of Section 64443 (Radioactivity) of Title 22, CCR which is incorporated by reference into this Order.

4. Taste and Odor

The taste and odor shall not be altered. Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or that adversely affect beneficial uses. For ground waters designated as MUN, at a minimum, concentrations shall not exceed adopted secondary maximum contaminant levels specified in Table 64449-A of Section 64449 (Secondary Maximum Contaminant Levels - Consumer Acceptance Limits), and Table 64449-B of Section 64449 (Secondary Maximum Contaminant Levels - Ranges) of Title 22, CCR which is incorporated by reference into this Order. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.

III. REQUIREMENTS AND PROHIBITIONS

A. General Requirements and Prohibitions

1. The discharge shall not cause a pollution or a threatened pollution, as defined by Section 13050 of the California Water Code.
2. The discharge shall not cause a nuisance as defined in Section 13050 of the California Water Code.
3. Basin Plan prohibitions shall not be violated.

4. The discharge of waste¹ that causes violation of any numeric or narrative WQO contained in the Basin Plan, including the Nondegradation Objective, is prohibited.
5. Where any numeric or narrative WQO contained in the Basin Plan is already being violated, the discharge of waste which causes further degradation or pollution is prohibited.
6. The discharge of any waste or deleterious material in the Upper Mojave Ground Water Basin, which would cause or threaten to cause violation of any WQO contained in the Basin Plan, or otherwise adversely affect or threaten to adversely affect the beneficial uses of water set forth in the Basin Plan, is prohibited.
7. The discharge of solid wastes, leachate, or any other deleterious material to the ground waters of the Upper Mojave Ground Water Basin is prohibited.
8. The discharge of waste except to the authorized disposal site is prohibited.
9. The discharge of waste to the authorized disposal site shall not cause an increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, perched water, groundwater or geologic materials outside of the Point of Compliance (as defined by Title 27 and this Order).
10. The discharge of waste in a manner that does not maintain a five foot soil separation between the wastes and the seasonal high ground water elevation is prohibited.
11. Waste discharged to the disposal site shall have a moisture content of 50 percent or less.
12. No hazardous or designated wastes shall be discharged to the disposal site.
13. The Discharger shall remove and relocate any wastes that are discharged at the Facility in violation of these WDRs. The wastes shall be relocated to a site that is permitted to receive such wastes. All removal and relocation of such wastes shall be coordinated with regulatory agencies including, but not limited to, the Department of Toxics Substances Control, the Integrated Waste Management Board, the County of San Bernardino, and the Regional Board.
14. During periods of precipitation, the disposal site activity shall be confined to the smallest area possible based on the anticipated quantity of wastes and operation procedures.

¹ "Waste" is defined to include any waste or deleterious material including, but not limited to, waste earthen materials (such as soil, sand, clay, rock, or other organic or mineral material) and any other waste as defined in the California Water Code Section 13050 (d).

15. The 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 a recurrence interval of once in 100 years.
16. The surfaces of the disposal site shall be graded and maintained, as needed, to promote lateral runoff of precipitation and to prevent ponding on the areas underlain by waste.
17. 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.
18. To prevent erosion and percolation through the waste, drainage ditches crossing over landfill areas shall be lined with either a synthetic liner or at least a one-foot-thick layer of soil having an in-place hydraulic conductivity of 1×10^{-6} cm/sec or less.
19. Water used over areas underlain by waste within unlined landfill areas shall be limited to the minimum amount necessary for dust control, construction activities, and irrigation of vegetated cover. Water collected in any storm water catchment basin or a site water treatment facility may be used in minimum amounts necessary for dust control, compaction, or irrigation of cover vegetation provided:
 - a. The water does not infiltrate past the vegetation root zones or past a depth where effective evapotranspiration can occur.
 - b. The water does not contain or carry significant concentrations of waste constituents, or produce significant runoff.
20. At closure, all facilities must be closed in accordance with a final Closure Post-Closure Maintenance Plan (CPCMP).
21. Any Partial Final Closure of facilities must be carried out in a manner consistent with the final CPCMP.
22. The structural integrity and effectiveness of all containment structures, including the any landfill cover constructed as a partial final closure measure, shall be maintained as necessary to correct the effects of settlement or other adverse factors.
23. The top layer of any landfill cover constructed on the site must be capable of resisting erosion. All landfill cover areas with visible erosion damage, cracking, exposed waste, lack of vegetation or ponding shall be repaired as soon as practicable after being discovered.

24. The migration of landfill gas from the site shall be controlled, as necessary to ensure that landfill gases and gas condensate are not discharged to surface waters or ground water. Condensate shall be collected and removed from the site except as allowed by 27 CCR, Section 20090(e).
25. Monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained or replaced so that they perform to the design specifications throughout the life of the monitoring program.
26. The concentration limit for each Constituent of Concern shall be defined as that concentration equal to the background value for that constituent.
27. The concentration limits for each Constituent of Concern shall not be exceeded.

B. Specific Requirements for Use of Geosynthetic Clay Liner

The Discharger has proposed the option of using a geosynthetic clay liner (GCL) in lieu of a compacted clay liner (CCL) in the proposed lined expansion areas of the landfill. Due to the lower bearing capacity of GCLs, GCLs are known to be less resistant than CCLs to puncture and thinning, especially during construction and initial placement of refuse. Therefore, the following requirements shall be met if a GCL is to be used in lieu of a CCL:

1. A minimum one-foot thick layer of soil, with permeability less than 1.0×10^{-6} centimeters per second, shall be constructed as a foundation/protective layer beneath the GCL to reduce or eliminate effects of punctures. This foundation/protective layer shall be free of rocks, roots, and other debris that may potentially puncture the GCL.
2. Full-time, third-party quality assurance personnel shall be on-site during all phases of liner construction to perform inspections and careful construction quality control and construction quality assurance (CQC/CQA). The full-time CQC/CQA measures will remain in effect during construction of each new cell until the protective cover soil layer at the top of the liner system is completed. The CQC/CQA measures taken to protect the integrity of the GCL shall be conducted by, or under the supervision of, either a Civil Engineer registered in the State of California or a California Certified Engineering Geologist.
3. During the initial lifts of refuse placement on the liner system, the Discharger shall not dispose of any large heavy or angular objects that may result in concentrated loads that could potentially damage the GCL. Examples of restricted wastes that could potentially damage the GCL include, but are not limited to: construction wastes such as concrete rubble, rebar, and demolished lumber; tree stumps; and major household appliances such as refrigerators, stoves, washers and dryers. Only

waste typical of domestic refuse shall be placed in the initial lifts directly on the liner system. The Discharger shall provide a written policy and instructions explaining the restrictions on wastes allowed in initial lifts for the landfill operator.

C. Water Quality Protection Standard

The Water Quality Protection Standard (Water Standard) for the VSL has multiple objectives:

- 1) to characterize the quality of ground water that has not been affected by a release from the Facility;
- 2) to provide the data needed to evaluate the quality of ground water passing the Point of Compliance;
- 3) to provide the data needed to evaluate extent of the release and the changes in water quality due to the release;
- 4) to provide the data needed to evaluate the effectiveness of corrective actions;
- 5) to provide concurrent detection of a new release from the Facility to the underlying soil and/or ground water; and
- 6) to provide the best assurance of the earliest possible detection of a new release from the Facility.

The Water Standard shall apply during the active life of the Unit, the closure period, the post-closure maintenance period, and during any compliance period. The Facility is active and has been under an Evaluation Monitoring Program (EMP) since 1995.

Corrective action measures have recently been conducted as early implementation of a Corrective Action Program (CAP). These measures were Clean Closure of the former septage drying ponds in 1998 and installation of a landfill gas collection system at the existing unlined landfill in 2003. A concurrent Detection Monitoring Program (DMP) that expands as the landfill footprint expands into new phases is required.

The Discharger has developed an EMP, CAP, and DMP as required by Section 20425, 20430, and 20420, respectively, of Title 27, CCR. The EMP and DMP for the Facility includes monitoring of ground water, vadose zone, leachate, and future landfill cover(s) constructed as partial final closure actions.

Monitoring requirements to determine the effectiveness of the CAP can be the same as those for the EMP as allowed under 27 CCR, Section 20430(d). The EMP may be all or part of existing monitoring systems pursuant to 27 CCR, Section 20425(e)(1). Any monitoring systems currently used for EMP purposes may also be utilized for DMP purposes when the EMP is no longer necessary.

Monitoring and Reporting Program (MRP) No. R6V-2004-0027 maintains the monitoring and reporting requirements for the EMP, CAP, and DMP.

The Water Standard shall consist of the list of constituents of concern, the concentration limits, all Monitoring Points and the Point of Compliance as described in the sections below.

1. Discharge of waste shall not cause the concentration of any monitoring parameter to exceed its respective background value in any monitored media (i.e., soil, or groundwater) at any compliance monitoring point pursuant to MRP No. R6V-2004-0027.
2. The monitoring parameters for ground water, vadose zone, and surface water are listed in MRP No. R6V-2004-0027.
3. The discharge of waste shall not cause a statistically significant difference in water quality over background concentrations or concentration limits for monitoring parameters (per MRP No. R6V-2004-0027) at the Point of Compliance. The concentration limits shall be maintained for as long as the waste poses a threat to water quality.
4. Discharge of waste shall not cause concentrations of chemicals and radionuclides in ground water and surface water down-gradient of the Point of Compliance to exceed the State Department of Health Services current recommended Drinking Water Action Levels or Maximum Contaminant Levels of the CCR Title 22, Division 4, Chapter 15, Article 5.5.
5. Pursuant to CCR Title 27, Section 20405(a), the Point of Compliance for the Facility follows the edge of the landfill's waste disposal area and extends vertically downward through the uppermost aquifer.
6. Monitoring results are subject to the most appropriate statistical or non-statistical test, as required by MRP No. R6V-2004-0027.
7. Under Section 20400(a)(2), Title 27, CCR, the Discharger shall calculate, using a formula-based system, the concentration limits for each monitoring parameter and constituent of concern, which will equal the background value of the constituent as determined pursuant to Section 20415(e)(10)(B), Title 27, CCR. The concentration limit for each man-made organic constituent, which is not proven to have originated from a source other than the Facility, is the laboratory method detection limit for that constituent.
8. The Discharger shall, install groundwater, soil pore liquid, soil pore gas, surface water, and leachate monitoring devices as necessary to comply with this Order.

D. Evaluation Monitoring Program

The Discharger shall establish and maintain an Evaluation Monitoring Program (EMP). A sufficient number of Monitoring Points shall be installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer to represent the quality of ground water passing the Point of Compliance, and at other locations, to evaluate changes in water quality due to the release from the Unit. In addition, background Monitoring Points that represent the quality of ground water that has not been affected by a release from the waste management unit shall be established. The Discharger shall propose a revised EMP whenever there is significant evidence of a new release from the Facility or there is new evidence that the existing EMP is no longer adequately characterizing the extent of a known release. Detailed requirements of the EMP for the VSL are provided in MRP No. R6V-2004-0027

E. Detection Monitoring Program

Concurrent with the EMP for the known release at the Facility, the Discharger shall institute a Detection Monitoring Program (DMP) pursuant to 27 CCR, Section 20385(c) for the expansion areas. The DMP shall include a sufficient number of Monitoring Points established at appropriate locations and depths to yield samples capable of providing assurance of detection of subsequent releases from the Facility. The DMP will be updated as the landfill expands into new phases. Detailed requirements of the DMP for the VSL are provided in MRP No. R6V-2004-0027

IV. PROVISIONS

A. Standard Provisions

The Discharger shall comply with the “Standard Provisions for Waste Discharge Requirements,” dated September 1, 1994 (Attachment “F”), which is hereby made a part of this Order.

B. Period of Responsibility

The Discharger shall have a continuing responsibility for waste containment, monitoring, and to assure protection of usable waters from discharged wastes, gases, and leachate, during the landfill’s active life, closure and post-closure maintenance periods, and during subsequent use of the property for other purposes.

The Discharger is also responsible for correcting any problems, which may arise in the future as a result of the waste discharged. This responsibility continues as long as the waste poses a threat to water quality.

C. Partial Final Closure

This Order requires Partial Final Closure for the existing unlined landfill area and the lined Phase 1A expansion area when these areas are filled to capacity. Partial Final Closure of these areas will include construction a prescriptive final cover system over the top deck and final slope surfaces. Slopes adjacent to active or future phases of development may be partially closed with an intermediate cover until final closure and shall be closed in a manner consistent with the final cover design for final closure of the entire landfill.

The Discharger shall certify at the time of partial final closure that waste was not diverted away from the existing landfill area or Phase 1A expansion area to other expansion areas or landfills to delay filling these areas to capacity resulting in postponement of required Partial Final Closure actions.

For the other landfill expansion areas that will be lined, the Discharger shall to the extent feasible, based on site-specific factors, implement partial and/or partial final closure activities as the site operation progresses, consistent with the closure of the entire site. The Discharge may decide to close Phases 1B, 2 and 3 individually when they are filled to capacity or conduct final closure for these areas at the end of the site life when the entire landfill is filled to capacity.

The approval and implementation of any closure plan for a portion of the landfill shall be subject to the same process and time frames as for the approval and implementation of a closure and post-closure maintenance plan for the entire landfill. Closure of a discrete unit shall not commence until approval of the partial final CPCMP for that discrete unit is approved by the Regional Board Executive Officer.

D. Post-Closure Maintenance

The Discharger shall maintain waste containment facilities and precipitation and drainage controls, and shall continue to monitor, as appropriate, groundwater, vadose zone, liquid and gas, surface waters, and leachate from the landfill throughout the post-closure monitoring and maintenance period for the entire landfill or any portion thereof that has undergone Partial Final Closure.

E. Closure and Post-Closure Maintenance Plan

The preliminary Closure and Post-Closure Maintenance Plan (CPCMP) shall be updated when there is a substantial change in operations, and the updated preliminary CPCMP shall be prepared by, or under the supervision of, either a Civil Engineer registered in the State of California or a California Certified Engineering Geologist.

This Order requires that the Dischargers review the preliminary CPCMP annually to determine if significant changes in the operation of the Facility warrant an update of the plan, or certify in the annual report that the PCPCMP is adequate.

Pursuant to 27 CCR, Section 21780(c)(3), final CPCMP for landfill shall be submitted to the Regional Board two years prior to the anticipated date of closure. Within five years

of the anticipated date of closure, the Discharger may submit the final CPCMP in lieu of submitting new or updated preliminary CPCMP.

F. Monitoring and Reporting

1. All technical and monitoring reports, including reports of waste discharge, required by this Order are required pursuant to Section 13267 of the California Water Code (CWC).
2. Pursuant to Section 13267(b) of the CWC, the Discharger shall comply with MRP No. R6V-2004-0027, which is hereby made a part of this Order.
3. 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 Monitoring and Reporting Program.
4. The Discharger shall notify Regional Board staff, within 24 hours by telephone and within seven days in writing, of any noncompliance potentially or actually endangering health or the environment. Any noncompliance that threatens the landfill's containment integrity shall be promptly corrected. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment and/or the landfill's integrity (i.e., emergency corrective measures). Corrections initiated prior to Executive Officer approval shall be so stated in the written report. The written report shall contain a description of the noncompliance including exact dates and times or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer or duly authorized representative, may waive the written report on a case by case basis if the oral report provides sufficient information and is received within 24 hours. This provision includes, but is not limited to:
 - a. Violation of a Discharge Prohibition.
 - b. Violation of any Water Quality Protection Standard.
 - c. Slope failure.
 - d. Leachate seep occurring on, or in proximity to, the landfill.
5. The Discharger shall submit a work plan at least 30 days prior to any maintenance activities that could alter existing surface drainage patterns or change existing slope configurations. These activities may include, but are not limited to, significant grading activities, the importation of fill material, the design and installation of soil borings, groundwater monitoring wells and other devices for site investigation and monitoring purposes.

6. Where the Discharger becomes aware that it failed to submit any relevant facts in any report to the Regional Board, the Discharger shall promptly submit such facts or information.
7. A letter of transmittal summarizing the monitoring results shall accompany each report. Such letter shall include a discussion of any violations found since the last report was submitted, and shall describe actions taken or planned for correcting those violations so as to bring the discharge into full compliance with the discharge requirements. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal.
8. Any person signing a document required under this Order shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

9. The Discharger shall amend the landfill's property Title with the County Recorder's Office to identify the use of the property as a solid waste disposal site (i.e., A Notice of Use of Real Property for Landfill Purposes). The Title amendment shall include a notice of location, completion, and closure of solid waste disposal site and will serve to alert potential buyers to the landfill presence. Confirmation and a copy of the Title amendment shall be provided to the Executive Officer **within one year of the effective date of this Order.**

G. Corrective Action for Noncompliance

The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

H. Definitions

The term “discharge of waste” includes seeps, runoff and leachate containing waste that was previously deposited at the landfill. Definitions of undefined terms used in this Order shall be as set forth in CCR, Title 27.

I. Financial Assurance

The Discharger shall maintain adequate financial assurance for closure, post-closure, and corrective action for potential releases. Evidence shall include the total amount of money available in the fund developed by the Discharger. In addition, the Discharger shall annually either provide evidence that the amount of financial assurance is still

adequate or revise the amount of financial assurance by the appropriate amount. An increase may be necessary due to inflation, a change in regulatory requirements, and a change in the approved closure plan, or other unforeseen events.

J. Permit Reopening, Revision, Revocation and Re-Issuance

This Order may be reopened in whole or in part, to address any changes in State or federal plans, policies or regulations that would affect the requirements for the discharges, or to establish effluent limitations, as necessary.

K. Rescission of Waste Discharge Requirements

Board Order No. 6-95-106 is hereby rescinded on the effective date of this Order.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on July 27, 2004.

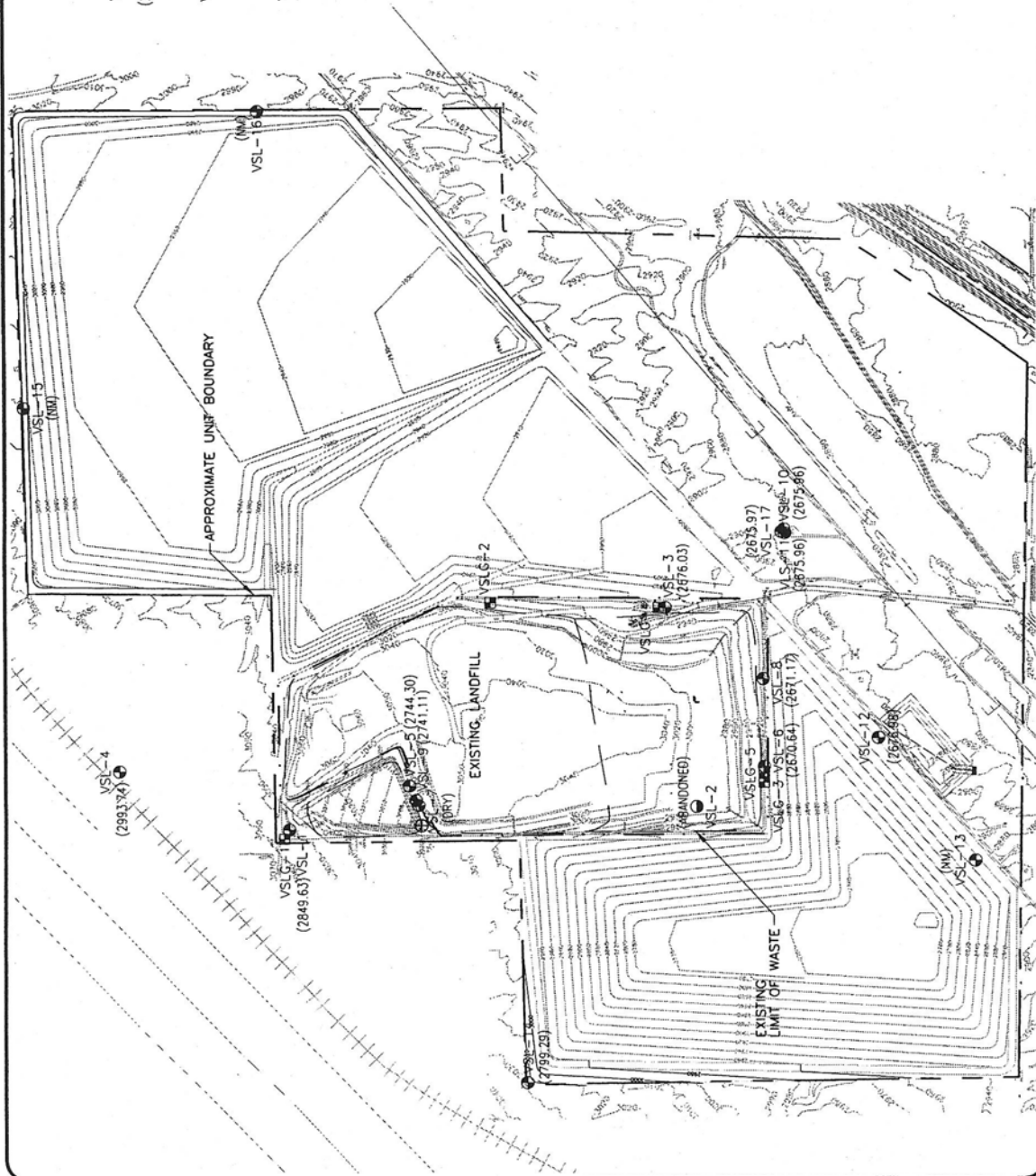
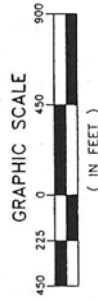
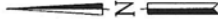
HAROLD J. SINGER
EXECUTIVE OFFICER

- Attachments:
- A. Site Location Map
 - B. Site Vicinity Map
 - C. LCRS Main Piping Underdrain System
 - D1. Existing Gas Collection/Recovery and Monitoring Systems Plan
 - D2. Future Gas Collection/Recovery and Monitoring Systems Plan
 - E. Ground Water Monitoring Well Locations
 - F. Standard Provisions for WDRs

FIGURE 15

EXPLANATION:

- VSL-1
(2849.63)
MONITORING WELL LOCATION AND
GROUNDWATER ELEVATION (FEET ABOVE MSL)
- VSL-2
ABANDONED MONITORING WELL LOCATION
- VSLG-1
SOIL-PORE GAS MONITORING PROBE LOCATION
- ⊕
AUTO STORM WATER RUNOFF SAMPLE
COLLECTION POINT



(909) 860-7777

VICTORVILLE SANITARY LANDFILL

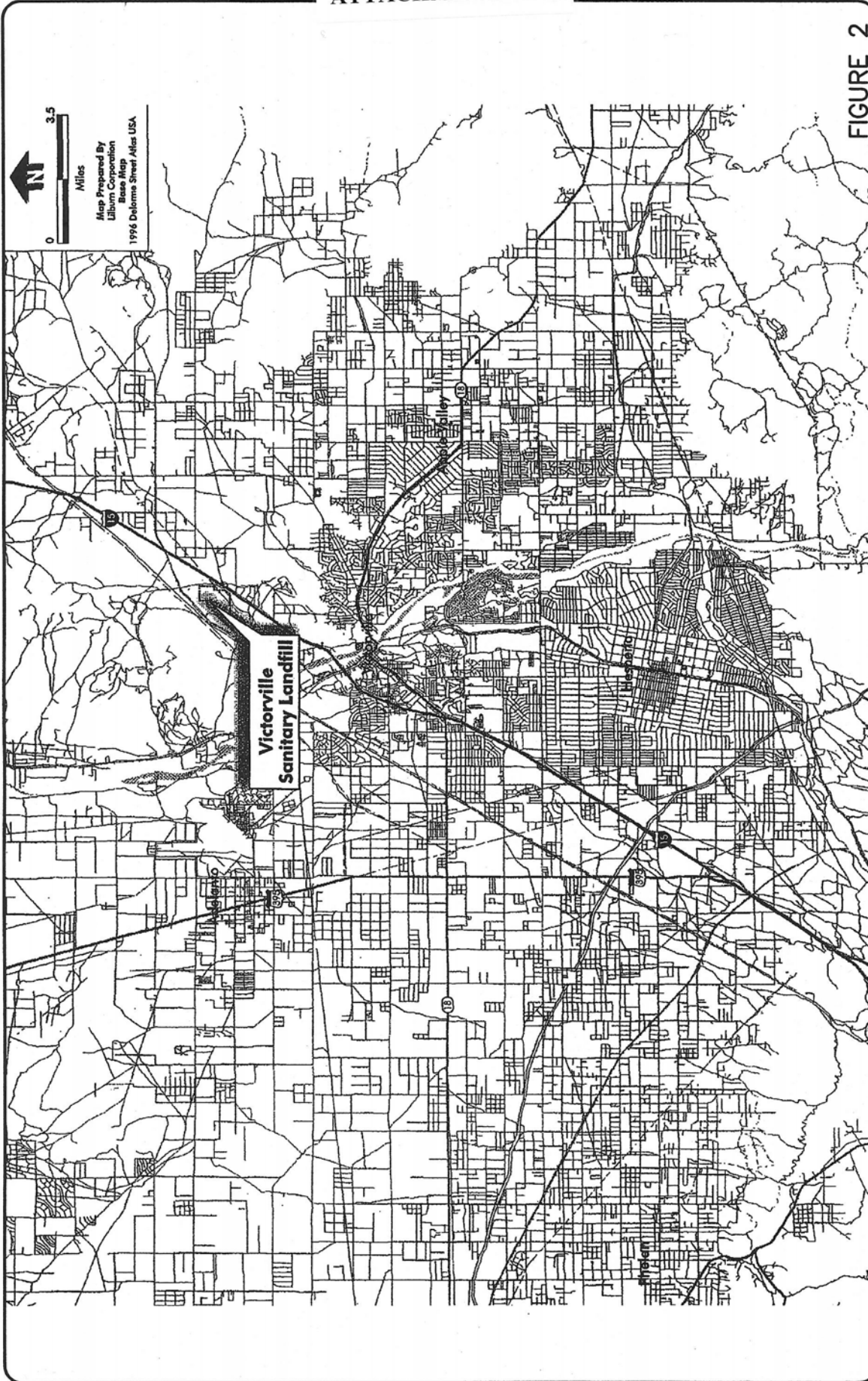
**EXISTING GROUNDWATER/SURFACE
WATER MONITORING SYSTEM**



BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

JOB NO.	2001.1040-100
DATE	3-2004
DRAWN BY	J.P.J.
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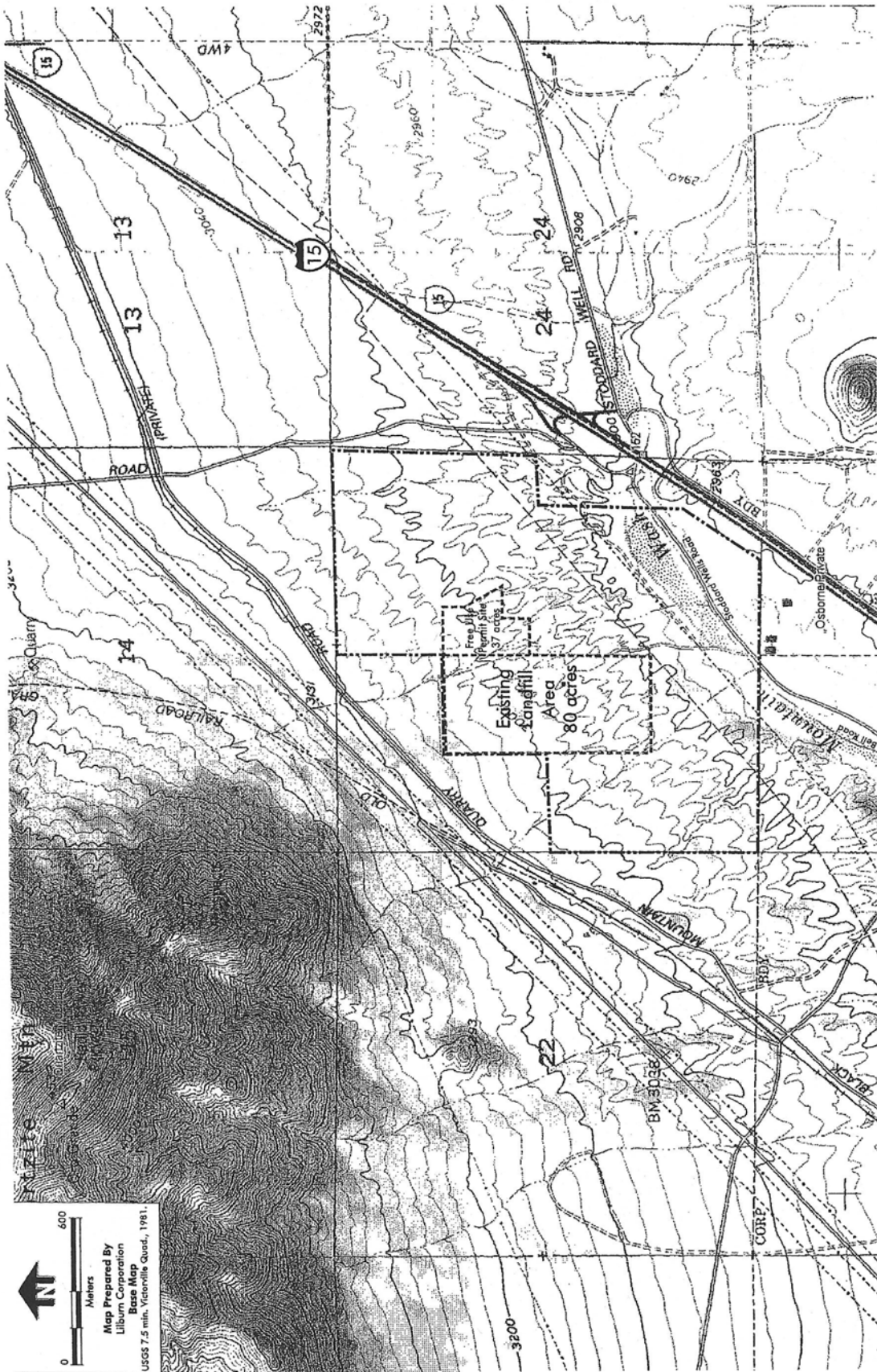
FIGURE 2



	(909) 860-7777 BRYAN A. STIRRAT & ASSOCIATES CIVIL AND ENVIRONMENTAL ENGINEERS 1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765	VICTORVILLE SANITARY LANDFILL	
		SITE LOCATION MAP	
JOB NO. X DATE 2-2004 DRAWN BY C.A.L. FILE NAME: 171809.db			

ATTACHMENT "B"

FIGURE 1



JOB NO. X
 DATE 2-2004
 DRAWN BY C.A.L.
 FILE NAME: 171810db

VICTORVILLE SANITARY LANDFILL

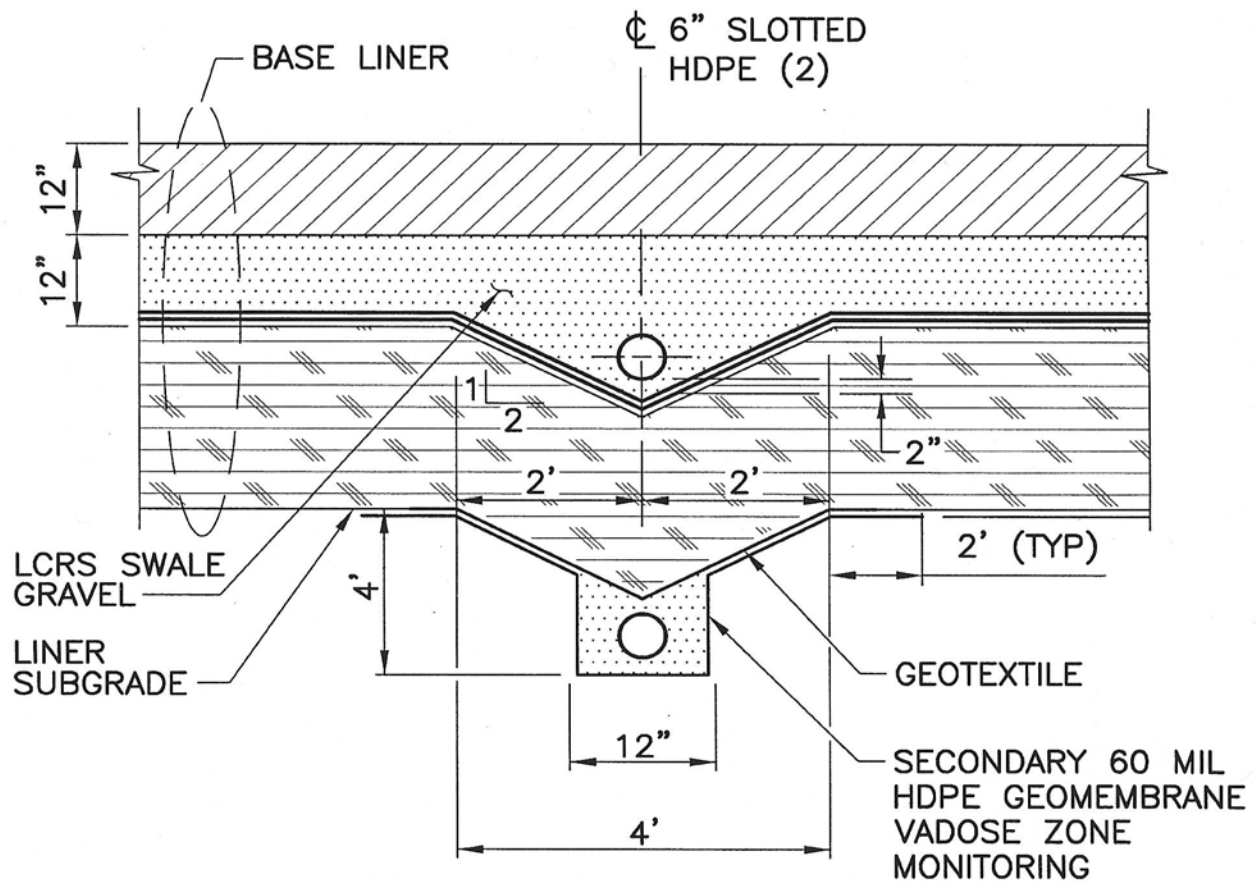
SITE VICINITY MAP

(909) 860-7777



BRYAN A. STIRRAT & ASSOCIATES
 CIVIL AND ENVIRONMENTAL ENGINEERS
 1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

ATTACHMENT "C"



BAS
 (909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
 CIVIL AND ENVIRONMENTAL ENGINEERS
 1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

VICTORVILLE SANITARY LANDFILL
LCRS MAIN PIPING

JOB NO.	2001.104-60
DATE	5-2004
DRAWN BY	J.P.J.
FILE NAME	1718850B

ATTACHMENT "D1"

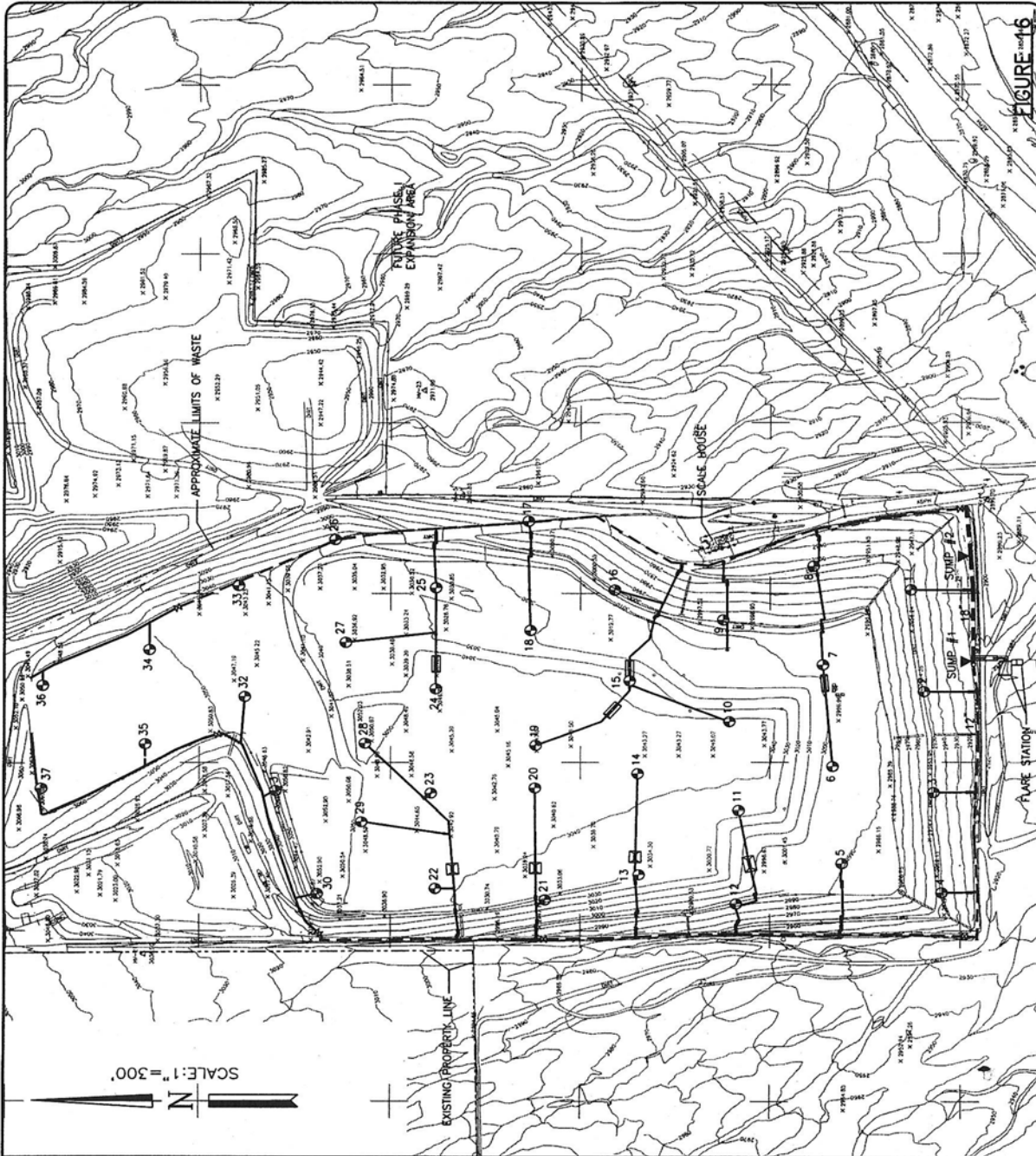


FIGURE 16

LEGEND

- 12" --- EXISTING GAS EXTRACTION HEADER/LATERAL
- 18" --- EXISTING BELOW-GRADE HEADER/LATERAL
- EXISTING GAS EXTRACTION HEADER/LATERAL ON PIPE SUPPORTS
- ⊙ EXISTING VERTICAL GAS EXTRACTION WELL
- ▲ EXISTING CONDENSATE TANK/PUMP STATION
- ⊞ ISOLATION/CONTROL VALVE
- ⊠ ROAD CROSSING
- ◇ REDUCER

(909) 860-7777



BRYAN A. STIRRAT & ASSOCIATES
 CIVIL AND ENVIRONMENTAL ENGINEERS
 1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

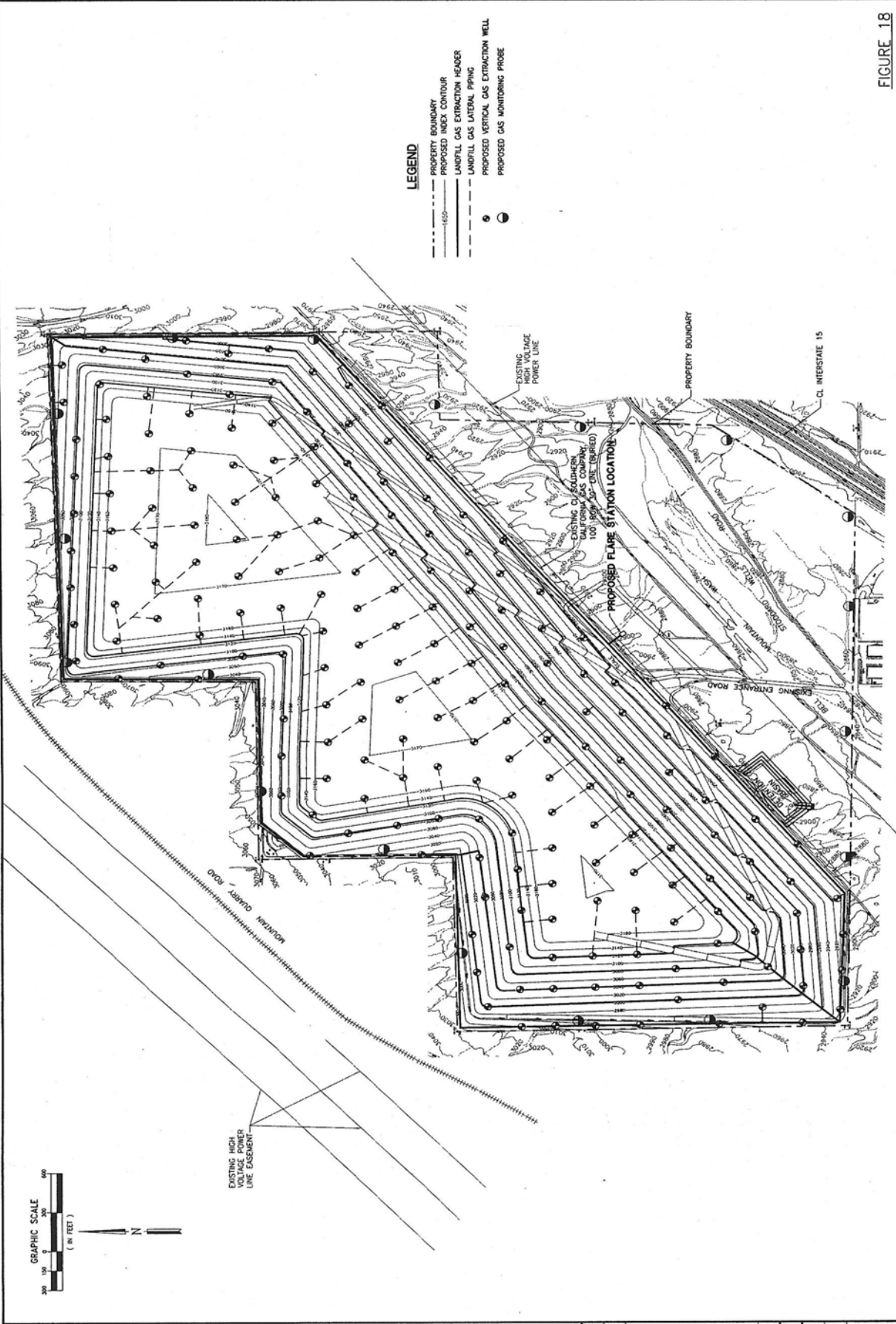
VICTORVILLE SANITARY LANDFILL

EXISTING LANDFILL GAS SYSTEM PLAN

JOB NO. 2003.085
 DATE 01/20/04
 DRAWN BY DCR
 CHECKED BY

ATTACHMENT "D2"

FIGURE 18



LEGEND

- PROPERTY BOUNDARY
- - - PROPOSED INNER CONTOUR
- - - LANDFILL GAS EXTRACTION HEADER
- - - LANDFILL GAS LATERAL PIPING
- PROPOSED VERTICAL GAS EXTRACTION WELL
- PROPOSED GAS MONITORING PROBE

PLANS PREPARED BY

DAE
 BRYAN A. STIBRAK & ASSOCIATES
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
 10000 BIRCHMOUNT ROAD, SUITE 100
 DANA POINT, CALIFORNIA 92629
 (949) 864-7777

COUNTY OF SAN BERNARDINO
 DEPARTMENT OF PUBLIC WORKS

DESIGNED BY: T.E.N. R.M.G.
 RECOMMENDED / APPROVED BY: [Signature]
 SUBMITTED BY: [Signature]
 DATE: [Date]

DATE: [Date]
 DIRECTOR OF PUBLIC WORKS: [Signature]

VICTORVILLE SANITARY LANDFILL
 FINAL LFCS CONTROL SYSTEM PLAN

CL. NO. / FILE NAME: [Blank]
 SCALE: AS SHOWN
 SHEET NO. / TOTAL SHEETS: [Blank] / [Blank]

NO.	CHANGES	REVISION NUMBER	DATE

FIELD CHANGES

DATE: [Blank] TIME: [Blank] DRAWN BY: [Blank] CHECKED BY: [Blank] DATE: [Blank]

ATTACHMENT F

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;
- 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 at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The owner(s) of, and discharger upon, property subject to waste discharge requirements shall be considered to have a continuing responsibility for ensuring compliance with applicable waste discharge requirements in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the waste discharge requirements shall be reported to the Regional Board. Notification of applicable waste discharge requirements 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 waste discharge requirements, 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 (\$1000) for each day of violation.
- f. If the discharger becomes aware that their waste discharge requirements 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 waste discharge requirements be rescinded.

3. Right to Revise Waste Discharge Requirements

The Board reserves the privilege of changing all or any portion of the waste discharge requirements 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 waste discharge requirements may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and reissuance, or modification.

5. Duty to Mitigate

The discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the waste discharge requirements 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 waste discharge requirements. 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 waste discharge requirements.

7. Waste Discharge Requirement Actions

The waste discharge requirements 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 reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the waste discharge requirements conditions.

8. Property Rights

The waste discharge requirements 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 waste discharge requirements including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the waste discharge requirements shall kept and maintained by the discharger and be available at all times to operating personnel.

11. Severability

Provisions of the waste discharge requirements 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 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.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. R6V-2004-0027
WDID NO. 6B360304025

FOR

VICTORVILLE SANITARY LANDFILL

San Bernardino County

I. WATER QUALITY PROTECTION STANDARD

A. Evaluation Monitoring Program and Concurrent Detection Monitoring Program

The Discharger has developed an EMP and DMP to meet the objectives of this monitoring and reporting program. Monitoring and reporting requirements for ground water, vadose zone, leachate, and gas at the Facility are provided below.

1. Ground Water

a. Ground Water Monitoring System

Locations of ground water monitor stations are shown in Attachment "1." Ground water monitoring wells were first constructed at the site in 1988, when wells VSL-1, VSL-2, and VSL-3 were installed as part of the Solid Waste Assessment Test (SWAT) program investigation. Impacts to ground water were identified during the SWAT, requiring installation of additional wells as part of ongoing Evaluation Monitoring Program (EMP) investigations. In 1990, well VSL-4 was constructed upgradient of the landfill, and well VSL-5 was constructed at the downgradient edge of the septage ponds. In 1992, well VSL-6 was constructed at the southern edge of the existing landfill property as a point-of-compliance well. In 1995, well VSL-7 was constructed at the downgradient edge of the septage ponds to further characterize water quality impacts from the ponds. Well VSL-8 was constructed in 1996 as a point-of-compliance monitoring well along the downgradient edge of the landfill. Well VSL-9 was also constructed in 1996 to further characterize water quality impacts adjacent to the septage ponds. Wells VSL-10, VSL-11, VSL-12, VSL-13, VSL-14, VSL-15, VSL-16, and VSL-17 were constructed around the proposed expansion areas in 2000 to accommodate future groundwater monitoring requirements.

Ground water samples are currently collected from nine wells (VSL-1, VSL-3, VSL-4, VSL-5, VSL-6, VSL-8, VSL-9, VSL-11, and VSL-12) on a quarterly basis pursuant to the EMP. Ground water monitoring will continue with the existing active wells. Some wells will require abandonment as the landfill develops into new phases and additional wells will be required to accommodate the various phases of landfill expansion.

Future required changes to the ground water monitoring system are:

Changes to Accommodate Phase 1 Development

The Phase 1 development will expand the landfill into the area formerly occupied by the septage ponds and into an area immediately east of the existing landfill footprint. As the septage pond area (Phase 1A) is developed, wells VSL-5, VSL-7, and VSL-9 shall be properly abandoned. Wells VSL-1 and VSL-4 serve as adequate background monitoring points, and wells VSL-10 and VSL-11 will be utilized as downgradient monitoring wells. Well VSL-18 shall be constructed in 2005 and will also serve as a downgradient well to Phase 1 development areas.

Well VSL-3 shall be abandoned by October 15, 2005 to accommodate landfill expansion in Phase 1. A replacement well is not necessary, since the point of compliance previously monitored by VSL-3 will be adequately monitored by wells VSL-10, VSL-11, and VSL-18. **Well VSL-7 shall be abandoned by October 15, 2005** since it has been dry since 2000 and is no longer useful.

Changes to Accommodate Phase 2 Development

Refuse fill operations are scheduled to begin in Phase 2 by 2020. **At least one year prior to Phase 2 waste discharge** wells VSL-15 and VSL-16 shall be incorporated in the monitoring program. Well VSL-19 shall be constructed along the southeastern edge of Phase 2, northeasterly of VSL-18, and incorporated in the monitoring program **at least one year prior to the start of Phase 2 waste discharge**.

Changes to Accommodate Phase 3 Development

At least one year prior to Phase 3 waste discharge wells VSL-13 and VSL-14 shall be incorporated in the ground water monitoring program. Well VSL-20 shall be constructed and incorporated in the monitoring program **at least one year prior to start of Phase 3 waste discharge**. Point-of-compliance monitoring of Phase 3 is adequately served by wells VSL-12, VSL-13, and VSL-20.

As the Phase 3 landfill develops, wells VSL-6 and VSL-8 shall be abandoned. After abandonment, the previous point-of-compliance monitoring served by VSL-6 and VSL-8 will be accomplished by wells VSL-10, VSL-11, and VSL-12.

Changes to Accommodate Characterization of Ground Water Flow

By July 14, 2005, at least two piezometers shall be installed adjacent to Stoddard Wells Road to define the groundwater "trough" postulated to exist north of, and parallel to, Bell Mountain Wash.

Ground water elevation data obtained from these two piezometers and other site monitoring wells (including well VSL-18 to be constructed in 2005) will be used to characterize ground water flow direction and rate at the southeast portion of the site.

b. Monitoring Points and Points of Compliance

The existing ground water monitoring points are shown in Attachment “1” and described in the table in Attachment “2.” The purpose and general locations of future monitoring wells to be constructed are also provided in the table.

c. Monitoring Parameters and Constituents of Concern; Monitoring Frequency

Ground water shall be sampled **quarterly** and analyzed for the routine monitoring parameters listed below.

<u>Parameter</u>	<u>USEPA Method¹</u>	<u>Units²</u>
pH	Field	pH units
Temperature	Field	°F or °C
Specific Conductance	Field	µmhos/cm
Dissolved Oxygen	Field	mg/l
Total Dissolved Solids	160	mg/l
Chloride	300	mg/l
Sulfate	300	mg/l
Nitrate as Nitrogen	9200	mg/l
Volatile Organic Compounds ³	8260	µg/l

(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.

(2) µmhos/cm - micro-mhos per centimeter; mg/l – milligrams per liter; µg/l - micrograms per liter.

(3) 47 volatile organic compounds listed in 40 CFR 258 Appendix I.

Ground water samples shall be sampled and analyzed for the following Constituents of Concern **once every five years:**

<u>Parameter</u>	<u>USEPA Method¹</u>	<u>Units²</u>
Antimony	7062	mg/l
Arsenic	7062	mg/l
Barium	6010	mg/l
Beryllium	6010	mg/l
Cadmium	7131	mg/l

(Table continued on next page.)

<u>Parameter</u>	<u>USEPA Method¹</u>	<u>Units²</u>
Cobalt	6010	mg/l
Chromium	6010	mg/l
Copper	6010	mg/l
Cyanide	9010	mg/l
Lead	7421	mg/l
Mercury	7471	mg/l
Nickel	7521	mg/l
Selenium	7742	mg/l
Silver	6010	mg/l
Sulfide	9030	mg/l
Thallium	7841	mg/l
Tin	6010	mg/l
Vanadium	6010	mg/l
Zinc	6010	mg/l
Semivolatile Organic Compounds	8270	µg/l
Polychlorinated Biphenyls	8082	µg/l
Chlorinated Herbicides	8151	µg/l
Organochlorine Pesticides	8081	µg/l
Organophosphorus Pesticides	8141	µg/l

(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.

(2) mg/l – milligrams per liter; µg/l - micrograms per liter.

c. Aquifer Characteristics

Each quarter, the parameters listed below shall be measured, calculated, and reported in tabular or graphical form for the entire ground water monitoring system.

<u>Parameter</u>	<u>Units</u>
Depth to Ground Water	feet (below ground surface)
Slope of Ground Water Gradient	feet/feet
Static Water Elevation	feet (above mean sea level)
Direction of Ground Water Gradient	Degrees
Velocity of Ground Water Flow	feet/year
Piezometric Contours of Uppermost Aquifer	feet

Each time a monitoring well is sampled, ground water elevations shall be measured prior to purging wells. Ground water elevation and depth measurements utilized for ground water direction calculations shall be taken at all wells and piezometers used for such determinations within a period of time short enough to avoid temporal variations in ground water elevation that could prejudice the flow direction determination.

d. Well Purging

Ground water samples shall be collected only after at least three volumes of water in the well casing have been removed and temperature, specific conductivity, and pH measurements of the water in the well have stabilized to approximately $\pm 10\%$ for each successive well volume removed. The measurements of temperature, electrical conductivity and pH during purging shall be reported with the results of ground water analyses. The well casing diameter, well depth, groundwater level, volume of water in the well casing, and total volume purged shall be reported with the results of ground water analyses.

The Discharger may submit alternate procedures to the Regional Board for low-flow sampling or micro-purge sampling and request approval from the Executive Officer to use the alternate procedures.

3. Vadose Zone Monitoring

a. Monitoring Points

i. Vadose Zone Gas

The vadose zone beneath the VSL is currently monitored by a system of five multi-depth soil-pore gas monitoring stations (VSLG-1 through VSLG-5). Locations of the gas monitoring stations are shown in Attachment "1." Each station is equipped with up to three probes at depths ranging from 60 to 240 feet below ground surface.

Future required changes to the vadose zone gas monitoring system are addressed below.

Changes to Accommodate Phase 1B Development

The Phase 1B development will expand the landfill over the current locations of VSLG-2 and VSLG-4. If the EMP is still active at the time of Phase 1B development, the monitoring capabilities of VSLG-2 and VSLG-4 may need to be replaced near the boundary of the expanded landfill footprint. If the Discharger demonstrates that the monitoring objectives of VSLG-2 and VSLG-4 have been met and they are no longer necessary, they may be abandoned without replacement.

Changes to Accommodate Phase 3 Development

The Phase 3 development will expand the landfill over the current locations of VSLG-3 and VSLG-5. If the EMP is still active at the time of Phase 1B development, the monitoring capabilities of VSLG-3 and VSLG-5 may need to be replaced near the boundary of the expanded landfill footprint.

If the Discharger demonstrates that the monitoring objectives of VSLG-3 and VSLG-5 have been met and they are no longer necessary, they may be abandoned without replacement.

ii. Vadose Zone Liquid

As part of the proposed landfill expansion, seepage collection systems (underdrains) will be installed beneath the LCRS main piping systems. The underdrain piping systems will have sampling ports separate from leachate sampling ports at the outfall from the leachate sumps as well as storage tanks for each phase (i.e., Phases 1A, 1B, 2, and 3).

b. Monitoring Parameters and Constituents of Concern; Monitoring Frequency

Gas samples shall be sampled **quarterly** and analyzed for methane, carbon dioxide, oxygen, and nitrogen. Testing for volatile organic compounds shall be performed **annually** using method TO-14 and only at monitoring points where methane is detected above its lower explosive limit (LEL). In the event that methane is measured above its LEL at more than one probe in a monitoring station, a sample for VOC analysis will be collected only from the probe with the highest methane concentration. Monitoring results shall be included in the quarterly monitoring reports and include information specified in Title 27, Section 20934.

Vadose zone liquid samples shall be **quarterly** sampled and analyzed for these routine monitoring parameters:

Parameter	USEPA Method ¹	Units ²
pH	Field	pH units
Specific Conductance	Field	µmhos/cm
Total Dissolved Solids	160	mg/l
Chloride	300	mg/l
Sulfate	300	mg/l
Nitrate as Nitrogen	9200	mg/l
Volatile Organic Compounds ³	8260	µg/l

(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.

(2) µmhos/cm - micro-mhos per centimeter; mg/l – milligrams per liter; µg/l - micrograms per liter.

(3) 47 volatile organic compounds listed in 40 CFR 258 Appendix I.

Vadose zone liquid samples shall be sampled and analyzed for the following Constituents of Concern **once every five years**:

Parameter	USEPA Method ¹	Units ²
Antimony	7062	mg/l
Arsenic	7062	mg/l
Barium	6010	mg/l
Beryllium	6010	mg/l
Cadmium	7131	mg/l
Cobalt	6010	mg/l
Chromium	6010	mg/l
Copper	6010	mg/l
Cyanide	9010	mg/l
Lead	7421	mg/l
Mercury	7471	mg/l
Nickel	7521	mg/l
Selenium	7742	mg/l
Silver	6010	mg/l
Sulfide	9030	mg/l
Thallium	7841	mg/l
Tin	6010	mg/l
Vanadium	6010	mg/l
Zinc	6010	mg/l
Semivolatile Organic Compounds	8270	µg/l
Polychlorinated Biphenyls	8082	µg/l
Chlorinated Herbicides	8151	µg/l
Organochlorine Pesticides	8081	µg/l
Organophosphorus Pesticides	8141	µg/l

(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.

(2) mg/l – milligrams per liter; µg/l - micrograms per liter.

3. Leachate Monitoring

Leachate will be collected from three above ground storage tanks and used for dust control or transported to either the Adelanto Wastewater Treatment Plant or the Victor Valley Wastewater Treatment Plant for treatment and disposal. Each phase of development will have a separate sump with the exception of the Phase 1A area that can be accessed for sampling. Liquids will be pumped from the Phase 1B, 2, and 3 sumps into one of two above ground storage tanks. A third above ground storage tanks will be used to collect any liquids from the Phase 1A area. The Phase 1A LCRS is a gravity-drain system that does not need or include a sump.

a. Monitoring Points

The existing landfill is not underlain by a composite liner system and does not have a leachate collection system. As a result, leachate sampling is not currently conducted at the existing VSL. Leachate sampling and analysis shall be conducted at all expansion areas (i.e., 1A, 1B, 2, and 3).

Leachate sampling shall be sufficient to determine the amount of leachate generated, discharged for dust control, and transported off-site for treatment and disposal.

b. Monitoring Parameters and Constituents of Concern; Monitoring Frequency

Field measurements will include pH and the amount of leachate generated and discharged as dust control or transported for treatment and disposal. Leachate flow will be monitored with a meter, or estimated by the number of hours that a pump is operating and its pumping capacity, and reported in gallons per month.

Leachate shall be sampled **semi-annually** (October and April) and analyzed for the following routine monitoring parameters. The analyses in October shall include all parameters listed below. The retest in April need only include parameters with measurable concentrations in the previous October sampling and analysis results.

<u>Parameter</u>	<u>USEPA Method¹</u>	<u>Units²</u>
pH	Field	pH units
Specific Conductance	Field	µmhos/cm
Total Dissolved Solids	160	mg/l
Chloride	300	mg/l
Sulfate	300	mg/l
Nitrate as Nitrogen	9200	mg/l
Volatile Organic Compounds ³	8260	µg/l

-
- (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.
 - (2) µmhos/cm - micro-mhos per centimeter; mg/l – milligrams per liter; µg/l - micrograms per liter.
 - (3) 47 volatile organic compounds listed in 40 CFR 258 Appendix I.

Leachate samples shall be sampled and analyzed for these Constituents of Concern **once every five years**:

<u>Parameter</u>	<u>USEPA Method¹</u>	<u>Units²</u>
Antimony	7062	mg/l
Arsenic	7062	mg/l
Barium	6010	mg/l
Beryllium	6010	mg/l
Cadmium	7131	mg/l
Cobalt	6010	mg/l
Chromium	6010	mg/l

(Table continued on next page.)

Parameter	USEPA Method ¹	Units ²
Copper	6010	mg/l
Cyanide	9010	mg/l
Lead	7421	mg/l
Mercury	7471	mg/l
Nickel	7521	mg/l
Selenium	7742	mg/l
Silver	6010	mg/l
Sulfide	9030	mg/l
Thallium	7841	mg/l
Tin	6010	mg/l
Vanadium	6010	mg/l
Zinc	6010	mg/l
Semivolatile Organic Compounds	8270	µg/l
Polychlorinated Biphenyls	8082	µg/l
Chlorinated Herbicides	8151	µg/l
Organochlorine Pesticides	8081	µg/l
Organophosphorus Pesticides	8141	µg/l

(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.

(2) mg/l – milligrams per liter; µg/l - micrograms per liter.

4. Cover Monitoring

The Discharger shall **semi-annually** inspect the condition of any cover system constructed as partial final closure of a discrete unit of the Facility. The purpose of this inspection is to ensure the integrity of the cover and evaluate the cover's capability to promote runoff, prevent erosion, and prevent ponding. Pursuant to Section 21090, Title 27, CCR, the elements addressed in this inspection shall include the items on the following list a through e. **Once every five years** an assessment shall be conducted to address item f, below.

- a. areas of vegetative cover, if any, requiring replanting;
- b. eroded portions of the erosion-resistant layer requiring regrading, repair, or (for areas where the problem persistently reoccurs) increase erosion resistance;
- c. eroded portions of the low-hydraulic-conductivity layer needing repair or replacement;
- d. areas lacking free drainage;
- e. areas damaged by equipment operation; and
- f. localized areas identified in the five-year iso-settlement survey as having sustained repeated or severe differential settlement.

III. SAMPLING AND ANALYSIS

The Discharger is responsible for ensuring that the laboratory analysis of all samples from all Monitoring Points meets the following requirements:

A. Method Selection

The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., "trace") in historical data for that medium, the SW-846 analytical method having the lowest Method Detection Limit (MDL) shall be selected from among those methods which would provide valid results in light of any Matrix Effects involved.

A Matrix Effect is any increase in the Method Detection Limit or Practical Quantitation Limit for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample being analyzed.

B. Trace Results

Results falling between the MDL and the Practical Quantitation Limit (PQL) shall be reported as "trace," and shall be accompanied by both the (nominal or estimated) MDL and PQL values for that analytical run. The PQL is the lowest acceptable calibration standard (acceptable as defined for a linear response or by actual curve fitting) times the sample extract dilution factor times any additional factors to account for Matrix Effect. The PQL shall reflect the quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. PQLs reported by the laboratory shall not simply be re-stated from USEPA analytical method manuals. Laboratory derived PQLs are expected to closely agree with published USEPA estimated quantitation limits (EQLs).

C. Estimated MDL and PQL

The MDL and PQL shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly and an estimate of the detection limit and/or quantitation limit actually achieved shall be included.

D. Quality Assurance/Quality Control (QA/QC) Data

All QA/QC data shall be reported along with the sample result to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include the following information:

1. Method, equipment, and analytical detection limits.
2. Recovery rates and an explanation for any recovery rate that is outside the USEPA specified recovery rate.

3. Results of equipment and method blanks.
4. Results of spiked or surrogate samples.
5. Frequency of quality control analysis.
6. Chain of custody logs.
7. Name and qualifications of the person(s) performing the analysis.

E. Laboratory Records

Water quality records shall be maintained by the Discharger, and retained for a minimum period of 30 years. The period of retention shall be extended during the course of any unresolved litigation or when requested by the Executive Officer. Such records shall show the following for each sample:

1. Identity of sample and of the actual monitoring point designation from which it was taken, along with the identity of the individual who obtained the sample.
2. Date and time of sampling.
3. Date and time of analysis were started and completed, and the name of personnel performing each analysis.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
5. Chromatographs and calculation of results.
6. A complete chain of custody logs.
7. Results of analysis, and the MDL and PQL for each analysis.

F. Release Indication and Re-Test Procedure

An exceeded concentration limit is an indication of release. In cases where the MDL is the concentration limit, at least two MDLs or a single PQL excursion at a single monitoring point indicates a release. If a release is indicated, the Re-Test Procedure shall immediately be carried out:

1. In the event the Discharger concludes that a release has been tentatively indicated, the Discharger shall carry out the appropriate reporting requirements and, within 30 days of receipt of analytical results, collect two new sets of samples for the indicated Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per Monitoring Point as were used for the initial test.
2. Analyze each of the two suites of re-test analytical results using the same statistical method (or non-statistical comparison) that provided the tentative indication of a release. If the test results of either (or both) of the re-tested data suites confirm the original indication, the Discharger shall conclude that a release has been discovered and shall carry out the appropriate requirements.
3. Re-tests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the Monitoring Parameter(s) which triggered the indication. When a VOC analyte is re-tested the results of the entire VOC test method analyzed shall be reported.

IV. DATA EVALUATION METHODS

- A. Water quality monitoring data shall be analyzed either by direct comparison trend analysis (historical graphs of monitoring data) or by intrawell statistical analysis.
- B. When calculating threshold limits using the intrawell method, there is potential for upward creep of the threshold limit if the measured values are rising over time and are also included in the new calculations of a threshold limit. Therefore, new data shall be compared to a baseline derived from the first eight data points (minimum) for that location when utilizing intrawell statistical analysis.
- C. If a constituent has not been detected in up- or down-gradient samples in the past, but begins to be detected in the down-gradient samples, direct comparison indicates a possible leak (confirmation samples must be taken to determine whether or not a leak is, in fact, occurring). Where detectable levels of a given constituent have been noted in up or down-gradient wells, statistical tolerance intervals shall be calculated, and statistical analysis shall be used on further sampling data. The tolerance intervals shall be recalculated twice per year.
- D. Data analysis for a given constituent at a given monitoring point should include a comparison both to the past constituent levels at that monitoring point, and to the constituent levels at the background (up-gradient) monitoring points.
- E. In the event that the Discharger concludes that a release has been tentatively indicated, the Discharger shall, within 30 days of this indication, collect two new suites of samples for the indicated Constituent(s) of Concern or Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per suite as were used for the initial test. Resampling of the background Monitoring Points is optional. As soon as the data is available, the Discharger shall rerun the statistical method (or non-statistical comparison) separately upon each suite of retest data. For any indicated Monitoring Parameter or Constituent of concern at an affected Monitoring Point, if the test results of either (or both) of the retest data suites confirms the original indication, the Discharger shall conclude that a release has been discovered. All retests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the Constituent of Concern or Monitoring Parameter which triggered the indication.

V. REPORTING

A. Monitoring Reports

1. General Provisions

- a. 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 Monitoring and Reporting Program (Attachment 3).

- b. All monitoring reports submitted to the Regional Board shall be transmitted using the cover letter form in Attachment 4. An electronic copy of the cover letter form can be downloaded at:

<http://www.swrcb.ca.gov/rwqcb6/AvailDocs.htm>

- c. A letter of transmittal summarizing the monitoring results shall accompany each report. Such letter shall include a discussion of any violations found since the last report was submitted, and shall describe actions taken or planned for correcting those violations so as to bring the discharge into full compliance with the discharge requirements. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal.

2. Submittal Periods

Monitoring reports submitted to the Regional Board, including all the information required to be obtained during the preceding monitoring period as specified in sections II and III, above, shall be **quarterly** submitted in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - March	April 30
April - June	July 31
July - September	October 31
October - December	January 31

3. Annual Report

By **January 31** of each year, the Discharger shall submit an annual report to the Regional Board with the following information:

- a. Graphical and tabular data for the monitoring data obtained for the previous year including time series graphs with new and historical data for trend analysis. Format for tabular data should be designed for ease of review. Specifically, the Water Standard for each constituent at each station shall be listed immediately adjacent to the measured concentration of that constituent at that station, so the values can be compared directly.
- b. A review of the closure plan and certification that it is still adequate.
- c. The Discharger shall annually submit evidence that adequate financial assurance as described in the WDRs has been provided. Evidence may include a copy of the renewed financial instrument or a copy of the receipt for payment of the financial instrument. In addition, the Discharger shall either provide information that the amount of financial assurance is adequate or revise the amount of financial assurance by the appropriate amount.

- d. Statements addressing the schedule for monitoring activities required at five-year intervals (e.g., five-year sampling and analysis of constituents of concern and five-year iso-settlement survey). State when these activities were last performed. State the schedule when these activities are to be performed next.

B. Notification Requirements

1. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources and the Executive Officer regarding the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this monitoring program, as required by Sections 13750.5 through 13755 and Section 13267 of the CWC.
2. Should the initial statistical or non-statistical data comparison indicate that a release is tentatively identified, the Discharger shall;
 - a. Within 24 hours, notify their designated Regional Board staff contact verbally as to the Monitoring Point(s) and constituent(s) or parameter(s) involved;
 - b. Provide written, notification by certified mail within seven days of such determination; and
 - c. Either or the following:
 - i. Shall carry out a Re-Test Procedure. If the re-test confirms the existence of a release or the Discharger fails to perform the re-test, the Discharger shall perform the appropriate Release Discover Response.

In any case, the Discharger shall inform the Regional Board of the re-test outcome within 24 hours of results becoming available, following up with written results submitted by certified mail within seven days.

- ii. Make a determination, in accordance with Title 27, Section 20420(k)(7), that a source other than the landfill site caused the release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in the ground water, surface water, or the unsaturated zone.

C. Contingency Response/Reporting

1. Leachate Seep

The Discharger shall within 24 hours report by telephone concerning the discovery of any previously unreported seepage from the landfill disposal area.

A written report shall be filed with the Regional Board within seven days, containing at least the following information:

- a. Map - a map showing the location(s) of seepage.
- b. Flow rate - an estimate of the flow rate.
- c. Description - a description of the nature of the discharge (e.g., all pertinent observations and analysis).
- d. Sample location - location(s) of sample(s) collected for laboratory analysis, as appropriate.
- e. Corrective measures - approved (or proposed for consideration) by the Executive Officer.

2. Physical Evidence of a Release

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

- a. Within seven days, notify the Regional Board of this fact by certified mail (or acknowledge the Regional Board's determination).
- b. Carry out the appropriate Release Discovery Response for all potentially affected monitored media.
- c. Carry out any additional investigations stipulated in writing by the Executive Officer for the purpose of identifying the cause of the indication.

3. Release Discovery Response

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

- a. If this conclusion is not based upon monitoring for all Monitoring Parameters the Discharger shall, within 30-days, sample for all Monitoring Parameters at all Monitoring Points in the affected medium and submit them for analysis. Within seven days of receiving the laboratory results, the Discharger shall notify the Executive Officer, by certified mail, of the concentration of all Monitoring Parameters at each Monitoring Point in the affected medium. This notification shall include a synopsis showing, for each Monitoring Point, those constituents that exhibit an unusually high concentration.

- b. The Discharger shall, within 90 days of discovering the release, submit an Amended Report of Waste Discharge proposing an Evaluation Monitoring and Reporting Program that;
 - i. Meets the requirements of Title 27, Sections 20420 and 20425.
 - ii. Commits to install at least one monitoring well at the facility boundary directly down-gradient of the center of the release, if a monitoring well does not already exist at that location.
 - c. The Discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study meeting the requirements of Title 27, Section 20430.
 - d. The Discharger shall immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that the Discharger can meet the requirements of Title 27, Section 20425 to submit a delineation report within 90 days of when the Executive Officer directs the Discharger to begin the Evaluation Monitoring and Reporting Program.
4. Release Beyond Facility Boundary

Any time the Discharger concludes (or the Executive Officer directs the Discharger to conclude) that a liquid- or gaseous-phase release from the landfill site has proceeded beyond the facility boundary, the Discharger shall notify all persons who either own or reside upon land that overlies any part of the plume (Affected Persons):

- a. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release.
- b. Subsequent to initial notification, the Discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been a material change in the nature and extent of the release.
- c. Annually, the Discharger shall notify Affected Persons concerning the status of the release and corrective action.
- d. Each time the Discharger sends a notification to Affected Persons (under a. or b., above), the Discharger shall, with seven days of sending such notification, provide the Regional Board with both a copy of the notification and a current mailing list of Affected Persons. In the case of annual notification to Affected Persons (c. above), notification to the Regional Board is via the Annual Report.

- e. All notifications to all Affected Persons shall include (at a minimum) the following information:
 - i. A summary of the release and corrective action information.
 - ii. Contact information (i.e., Regional Board, City, County Environmental Health Department).
 - iii. The results of the most recent monitoring data and its availability.

D. Compliance Schedule for Reporting on Monitoring System Modifications

The following table contains a compliance schedule for modification to the ground water and vadose zone monitoring systems.

Modifications to Ground Water and Vadose Zone Monitoring Systems	Schedule
A minimum of two piezometers (e.g., BMWP-1 and BMWP-2) shall be constructed in Bell Mt. Wash area to characterize ground water trough.	By July 14, 2005
VSL-18 shall be constructed and incorporated into the monitoring program.	When BMWP-1 and BMWP-2 are constructed as part of the ground water trough investigation in 2005.
VSL-3 and VSL-7 shall be abandoned.	By October 15, 2005
VSLG-2 and VSLG-4 shall be abandoned and replaced, if necessary.	When Phase 1B is developed.
VSL-15 and VSL-16 shall be incorporated into monitoring program.	At least one year prior to Phase 2 waste discharge.
VSL-19 shall be constructed and incorporated into the monitoring program	At least one year prior to Phase 2 waste discharge.
VSL-13 and VSI-14 shall be incorporated into the monitoring program.	At least one year prior to Phase 3 waste discharge.
Table continued on next page.	

Modifications to Ground Water and Vadose Zone Monitoring Systems	Schedule
VSL-20 shall be constructed and incorporated into the monitoring program.	At least one year prior to Phase 3 waste discharge.
VSL-6 and VSL-8 shall be abandoned.	Within one year prior to Phase 3 waste discharge.
VSLG-3 and VSLG-5 shall be abandoned and replaced, if necessary.	Within one year prior to Phase 3 waste discharge.

E. Compliance Schedule for the Final Drainage Plan

A draft Final Drainage Plan for the VSL Expansion Project shall be submitted to the Regional Board Executive Officer for review at least **90 days prior to the commencement of the VSL Expansion Project.** The plan will be considered accepted if the Regional Board does not comment within 30 days, or shall be revised in response to Regional Board comments, and a Final Drainage Plan shall be submitted to the Regional Board Executive Officer for acceptance **30 days prior to the commencement of the VSL Expansion Project.**

F. Compliance Schedule for Certification of Earliest Possible Partial Final Closure

The Discharger shall certify at the time of partial final closure of the existing unlined landfill and the Phase 1A Expansion Area that waste was not diverted away from these areas to other expansion areas or landfills to delay filling these areas to capacity resulting in postponement of required Partial Final Closure actions.

VI. MODIFICATIONS

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

Ordered by: _____ Dated: _____
HAROLD J. SINGER
EXECUTIVE OFFICER

- Attachment 1: Ground Water Monitoring Station Locations
- Attachment 2: Ground Water Monitoring Wells
- Attachment 3: General Provisions for Monitoring and Reporting
- Attachment 4: Transmittal Cover Letter Form

EXPLANATION:

- VSL-1 (2849.63) MONITORING WELL LOCATION AND GROUNDWATER ELEVATION (FEET ABOVE MSL)
- VSL-2 ABANDONED MONITORING WELL LOCATION
- VSLG-1 SOIL-PORE GAS MONITORING PROBE LOCATION
- ⊕ AUTO STORM WATER RUNOFF SAMPLE COLLECTION POINT

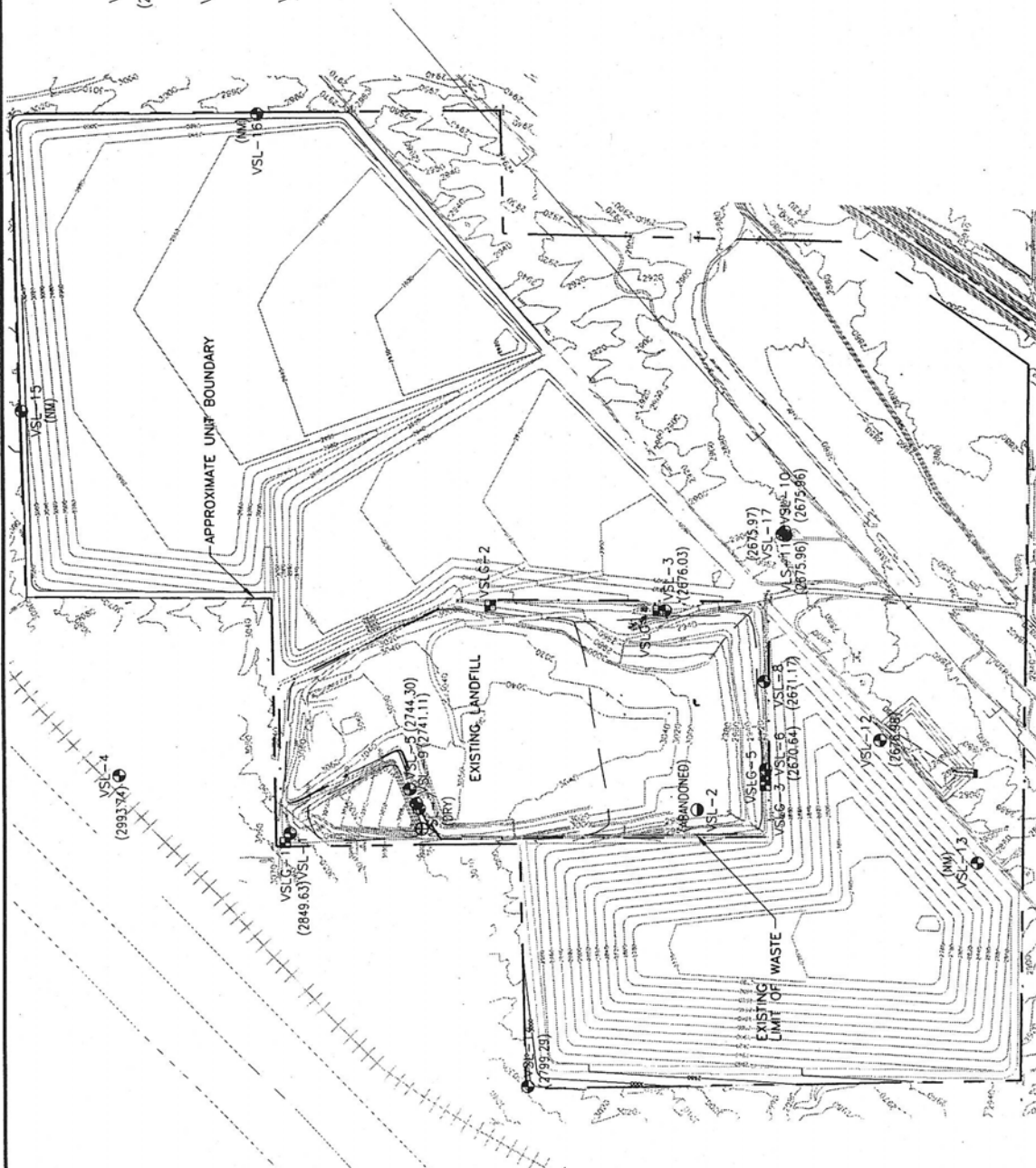


FIGURE 15

<p>BAS BRYAN A. STIRRAT & ASSOCIATES CIVIL AND ENVIRONMENTAL ENGINEERS 1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765</p>	<p>VICTORVILLE SANITARY LANDFILL</p>	
	<p>EXISTING GROUNDWATER/SURFACE WATER MONITORING SYSTEM</p>	
<p>(909) 860-7777</p>	<p>JOB NO. 2001.1040-100</p>	<p>DATE 3-2004</p>
	<p>DRAWN BY J.P.J.</p>	<p>FILE NAME: 171851DB.DWG</p>

Attachment "2"

VSL Ground Water Monitoring Wells

Well Name	Year Constructed	Year Incorporated	Screened Interval Depth (ft)	Use	Position
VSL-1	1988	1988	180-230	Background, EMP	Upgradient of existing landfill
VSL-2	1988	1988	350-410	Abandoned in 1992	
VSL-3	1988	1988	230-290	Point of Compliance, EMP	Downgradient of existing landfill
VSL-4	1990	1990	190-250	Background, EMP	Upgradient of existing landfill and Phases 1B & 2
VSL-5	1990	1990	220-280	Septage Monitoring, EMP	Downgradient - within proposed landfill footprint
VSL-6	1992	1992	217-282	Point of Compliance, EMP	Downgradient of existing landfill - within proposed landfill footprint
VSL-7	1995	1995	227-267	Septage Monitoring, EMP (dry since 2000)	Downgradient - within proposed landfill footprint
VSL-8	1996	1996	260-290	Point of Compliance, EMP	Downgradient of existing landfill - within proposed landfill footprint
VSL-9	1996	1996	272-292	Septage Monitoring, EMP	Downgradient - within proposed landfill footprint
VSL-10	2000	2005	239-269	Point of Compliance, EMP	Downgradient of existing landfill
VSL-11	2000	2000	336-366	Point of Compliance, EMP	Downgradient of existing landfill
VSL-12	2000	2000	203-233	Point of Compliance, EMP	Downgradient of existing landfill and Phase 3
VSL-13	2000	2034	205-215, 228-238	Piezometer until 2034, Point of Compliance for DMP Phase 3	Downgradient of Phase 3
VSL-14	2000	2034	239-269	Piezometer until 2034, Background for DMP Phase 3	Upgradient of Phase 3

table continued on next page

Well Name	Year Constructed	Year Incorporated	Screened Interval Depth (ft)	Use	Position
VSL-15	2000	2019	233-263	Piezometer until 2019, Background for DMP Phase 2	Upgradient of Phase 2
VSL-16	2000	2019	285-315	Piezometer until 2019, Point of Compliance for DMP Phase 2	Downgradient of Phase 2
VSL-17	2000	2000	237-267	EMP Piezometer	Downgradient of existing landfill and Phase 1A
VSL-18	2005	2005	TBD	Point of Compliance for DMP Phase 1B	Downgradient, SE of Phase 1B center
VSL-19	2019	2019	TBD	Point of Compliance for DMP Phase 2	Downgradient, SE of Phase 2 center
VSL-20	2034	2034	TBD	Point of Compliance for DMP Phase 3	Downgradient, SW corner of Phase 3
BMWP-1	2005	2005	TBD	EMP Piezometer	Bell Mt. Wash area
BMWP-2	2005	2005	TBD	EMP Piezometer	Bell Mt. Wash area

ATTACHMENT 3

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 Health Services or a laboratory approved by the Regional 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 Regional 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 Regional 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 Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the 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 Regional 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 under Section 13268 of the Water Code.

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file: general pro mrp

Date _____

California Regional Water Quality Control Board
Lahontan Region
15428 Civic Drive, Suite 100
Victorville, CA 92392

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)? (Please check one): _____ **NO** _____ **YES***

***If YES is marked complete a-g (Attach Additional information as necessary)**

a) Brief Description of Violation: _____

b) Section(s) of WDRs/NPDES

Permit Violated:

c) Reported Value(s) or Volume:

**d) WDRs/NPDES
Limit/Condition:**

**e) Date(s) and Duration of
Violation(s):**

f) Explanation of Cause(s):

g) Corrective Action(s)
(Specify actions taken and a schedule
for actions to be taken)

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,

Signature: _____

Name: _____

Title: _____