Attachment N

Closure and Post-Closure Plans

9. PRELIMINARY CLOSURE AND POST-CLOSURE PLANS

The Preliminary Closure Plan and Post-Closure Maintenance Plan contained in this JTD have been prepared for Sunshine Canyon County Extension Landfill in compliance with California Code of Regulations, Title 27, Sections 21769 through 21865. (Hereinafter, "27 CCR 21769", etc.) They revise and replace the existing approved Preliminary Closure / Post-Closure Plan dated March 21, 1991.

9.1 Closure Plan Overview

9.1.1 Estimated Closure Date

As documented in Section 4.3 of this JTD, the earliest closure date of Sunshine Canyon County Extension Landfill is estimated to be 2013 assuming refuse is disposed of as discussed in Section 4.3. The life of the site would be increased due to settlement effects and to the extent disposal volumes are less than the projected levels.

9.1.2 Maximum Extent of Site Requiring Closure at One Time

Based on current cell construction and fill phasing plans, the entire 161.5 acres of the design waste footprint would be developed and in use either for waste disposal or soil stockpiling during the latter part of the site's life. No partial closure is contemplated for the site.

9.1.3 Proposed Post-Closure Uses

The Sunshine Canyon Landfill property will be maintained as open space during the closure and the 30-year post-closure maintenance period. No definitive plans have been proposed for use of the site after completion of the post-closure maintenance period. Any future development of the site would be consistent with County General Plan elements and zoning requirements in effect at the time.

9.2 Closure Activities

9.2.1 Site Security and Structure Removal

Unauthorized access to the site will be prevented throughout the closure and post-closure period by maintenance of perimeter security fencing and by the steep terrain surrounding the site.

As part of closure construction, structures and facilities not required for post-closure maintenance or environmental monitoring programs will be demolished or removed. Areas where structures are removed will be graded and returned to a natural state.

9.2.2 Final Cover and Grading

Figure 9-1 shows the conceptual proposed final refuse grades of the County Extension Landfill, including four feet of final cover soil. The final site contours provide a maximum elevation of 1,904 feet above mean sea level and a minimum slope of 3% on the top deck, in conformance with 27 CCR 21090(b)(A) Drawings to be prepared for the Final Closure Plan pursuant to 27 CCR 21800 will include details of side slopes graded to slopes of 2.5:1 to 3:1 horizontal: vertical, with 15-foot wide benches every 50 vertical feet in conformance with 27 CCR 21090(a)[14].

Unless an alternative final cover is proposed in the Final Closure Plan, a prescriptive final cover will be constructed on the Sunshine Canyon County Extension Landfill. As prescribed in 27 CCR 21090, this cover will consist of the following layers, from bottom to top:

- A foundation layer consisting of a minimum of two feet of on-site soil, compacted to 90 percent of maximum density at optimum moisture content;

- A low hydraulic conductivity layer, consisting of a minimum of 1 foot of soil compacted to attain a hydraulic conductivity of not more than 1×10^{-6} cm/sec, plus additional materials or components as needed to achieve a hydraulic conductivity equal to or less than that of the bottom liner system in the landfill.

- An erosion-resistant layer consisting of a minimum of 12 inches of soil suitable for sustaining native or other suitable vegetation that requires minimum irrigation or maintenance and will prevent surface erosion.

The proposed final cover system design is illustrated in the cross-section drawing of Figure 9-2. In accordance with normal engineering practice, all soil layers are specified for construction with a minimum thickness and a maximum tolerance, typically of two inches. Thus, the low hydraulic conductivity layer and erosion resistant (vegetative) layer would have a minimum thickness of 12 inches and a maximum thickness of 14 inches. An exception to this thickness would be on drainage benches and roads, which would have three (3) feet of vegetative cover in order to protect the underlying geomembrane. Specific information on the materials and methods of constructing the final cover follow.

Foundation Layer

The two-foot-thick foundation layer will be constructed using on-site soils. Based on requirements that all areas that are inactive for 180 days must receive intermediate cover least much of the site will already have 12 inches of soil in place. An additional 12 inches of soil will be added to the in-place interim cover to satisfy the 2-foot foundation layer requirement.

[14] 27 CCR 21states in part: "Final cover slopes shall not be steeper than a horizontal to vertical rate of one and three quarters to one, and shall have a minimum of one fifteen-foot wide bench for every fifty feet of vertical height.

To ensure the minimum thickness of 12 inches of interim cover is still in place at the time of final closure and the engineering characteristics of these soils (primarily in-place density) meets the minimum specified in the final cover design (design to be prepared and submitted for regulatory approval 2 years prior to final closure), a program of test pits and density testing will be undertaken. Under this program, the minimum bottom 12 inch thickness of the interim cover will be verified through test pits conducted at a frequency of 1 per 20,000 square feet of final cover area. The thickness of the in-place cover will be measured and logged by a third party CQA representative. Concurrent with the test pit activity, the CQA representative will conduct soil density tests and evaluate soil particle size for compliance with the final cover design and specifications.

Low Hydraulic Conductivity Layer

The low hydraulic conductivity layer will achieve a hydraulic conductivity equal to or less than that of the bottom liner system by use of one foot of low permeability soil, overlain by a geomembrane of very low density polyethylene (VLDPE). The low-permeability soil liner will employ the same off-site clay used for construction of bottom liners at Sunshine Canyon to date. This material has been certified as suitable for achieving hydraulic conductivities well below the maximum 1.0 x 10-6 cm/sec. In the event these materials are not available at the time of closure construction, alternative sources of clay or an alternative design will be proposed

The VLDPE geomembrane will be supplied and installed by qualified geosynthetic materials suppliers under rigorous third-party quality assurance protocols.

Erosion-Resistant Layer

The erosion resistant layer will consist of three elements: a drainage layer, a minimum of one foot of soil, and vegetation. Except on drainage benches and roads, the vegetative soil layer will be a minimum of 12 inches thick, with a maximum of 14 inches. The erosion layer will be a minimum of 3 feet thick on all drainage benches (which typically host access roads as well) and under all access roads located over the top deck of the final cover. This additional thickness will provide additional protection to the underlying geomembrane components of the final cover in areas most likely to see vehicular traffic. Since it will be limited to relatively flat areas with less than 10 percent slope, the additional thickness of the vegetative soil layer on benches and roads will not affect the slope stability of the final cover. The drainage layer, consisting of a geocomposite drainage media, serves to minimize the likelihood of long-term moisture saturation of the vegetative layer, improving the slope stability of the cover system and decreasing the potential for water infiltration through the permeability barrier layers.

The soil used for the erosion layer will be on-site soil, fertilized or amended with organic material as needed to make it suitable for supporting plant growth. The required volume of soil will be supplied from the large surplus projected for the County Extension Landfill.

The final cover will comply with requirements for an erosion-resistant layer by establishing grassy vegetation on the top 1-foot thick soil layer. Pursuant to 27 CCR 21090(a)(3), the plant species selected for the final cover must be shallow-rooted, fast-growing and requiring of minimal irrigation and maintenance. Based on these criteria, BFI has selected the following planting mix as suitable for the particular soils of the site:

Species	Lbs./Acre
Bromus carinatus, Cucamonga Brome	15
Hordeum californicum, California Barley	4
Trifolium hirtum, Hykon Rose Clover	20
Lupinus bicolor, Bicolor Lupine	1
Agrostis alba, Red Top	6
Deschampsia caespitosa, Tufted Hairgrass	2
Trifolium incarnatum, Crimson Clover	6
Vulpia myuros, Zorro Fescue	10
Total	**64**

The seed mixture will be applied by hydroseeding, and supported during its early stages of establishment by temporary irrigation if needed. Any areas where seed fail to germinate or grasses fail to become established will be replanted.

9.2.3 Construction Quality Assurance Methods

All construction activities related to closure will be constructed under a Construction Quality Assurance (CQA) Plan meeting the requirements of 27 CCR 20323 and 20324. The CQA Plan will specify CQA activities to be performed, and the materials and procedures to be used in construction of the final cover and other components of closure. Project-specific CQA plans will be prepared and submitted for approval for each phase of closure construction.

Upon completion of a closure construction project, a certified CQA report will be submitted to the Regional Water Quality Control Board to establish that (1) the work has been performed in compliance with project plans, specifications and the CQA plan; (2) that physical sampling and testing were conducted at the appropriate frequencies according to the CQA Plan; and (3) that the document contains the necessary supporting information.

At a minimum, the CQA Report will include:

- Summaries of construction activities
- Approved contractor submittals
- Monitoring logs and testing data sheets, including sample location plans
- Construction problems and solutions data sheets
- Approved changes from the design, specifications or contract drawings

- Record drawings
- A summary statement certifying compliance with the plans and specifications, signed and sealed by a registered Civil Engineer or Certified Engineering Geologist currently registered to practice in the State of California.

9.2.4 Drainage and Erosion Control

The final cover will be graded to drain surface water to engineered channels and down drain pipes, which will have inlets on the landfill top deck and on drainage benches constructed on side slopes. Drainage swales will be constructed on the top deck to limit uninterrupted flow distances to approximately 700 lf (+/-) and to convey water to the perimeter drainage. Sandbag or rock check dams will be installed in earthen channels and drainage swales to reduce flow velocity and minimize erosion and sediment transport. Erosion control matting, jute mesh or similar material, will be applied to the areas of the final cover with 3:1 slopes prior to the application of hydroseed. The jute mesh will reduce erosion in the early years of postclosure until the vegetative cover is fully established (approximately 2 to 5 years depending upon weather conditions).

With the application of drainage controls and the establishment of a vegetative cover, the final cover will be stable under the anticipated weather conditions to which it will be exposed. Using the widely accepted Universal Soil Loss Equation, the final cover soil loss will average approximately 1.31 tons/acre/year, which is lower than the industry accepted limit of 5 tons/acre/year. Further, this rate of soil loss equates to an average of 0.03 inches per year. Appendix M contains the soil loss calculations.

9.2.5 Landfill Gas Monitoring and Control

Control of landfill gas will be maintained throughout the post-closure maintenance period by construction and operation of a landfill gas collection and treatment system as an extension of the existing system shown in Figure 5-8. Additional wells and collection lines will be added generally in proportion to the additional area and quantity of waste placed in future disposal cells and above existing liners, and will be in place at the time of closure. The system in place at the time of closure will include the well field, piping, flare, and condensate collection/management system (condensate sumps, pumps, etc.). Closure activities will require movement and relocation of existing piping to permit completion of final cover earthwork, for which costs are included in the final closure cost estimate.

Subsurface landfill gas migration will be monitored through a system of gas probes installed around the perimeter of the landfill footprint. These probes must be installed prior to the placement of refuse in any new landfill units and therefore will be in place prior to closure. However, due to the fact that they are presently not in place, in accordance with the direction of CIWMB staff, the costs for installation of the proposed probes must be included in the final closure cost estimate. Upon installation of all required probes, the closure plan and associated cost estimate will be modified and submitted for approval.

Operational and maintenance practices relative to gas monitoring and control are addressed below in the Preliminary Post-Closure Maintenance Plan.

9.2.6 Leachate Monitoring and Control

Leachate management during closure and post-closure will be essentially the same as the existing system described in Section 5.6 and Section 7.2 above. Leachate collection pipes in future cells will conduct liquids to one or several sumps for withdrawal and treatment or reintroduction to the landfill.

9.3 Preliminary Post-Closure Maintenance Plan

The purpose of this section, as provided in 27 CCR 21830(a), is "to provide a basis for the operator to establish an accurate, detailed cost estimate certified for accuracy by a registered civil engineer or certified engineering geologist, enable the CIWMB to assess the reasonableness of the cost estimate, and provide a detailed plan for the inspection, maintenance and monitoring of the landfill during the post-closure maintenance period."

9.3.1 Planned Uses of Property

The Sunshine Canyon Landfill property will be maintained as private open space during the post-closure maintenance period. Public access will be prevented or controlled by maintenance of security fencing and the inaccessible terrain surrounding the site.

9.3.2 Maintenance Procedures

The primary maintenance activities to be implemented during the post-closure maintenance period are the following:

- Maintenance of site security
- Maintenance of final cover
- Maintenance of surface water drainage systems
- Operation and maintenance of the landfill gas control system
- Operation and maintenance of leachate collection and treatment systems

Each of these activities is described below.

Site Security

Gates will be kept locked during times when significant activity is not ongoing at the site. Security fencing will be inspected periodically and repaired or replaced as needed.

Final Cover

Maintenance activities conducted on the landfill final cover system during the postclosure period will be a direct result of the findings of the periodic inspections carried out as described in this section. Inspection of the final cover system will frequently be conducted concurrently with the inspection of other landfill systems as described in the following sections. Regardless of what inspection is being conducted or what landfill system is being monitored, technicians conducting activities at the closed landfill will be trained to make note and report/document any indications that the final cover system may require maintenance work.

Inspections of the final cover will be geared towards looking for various signs that may indicate a need for maintenance to ensure the ongoing integrity of the final cover system. Such indicators may include but not be limited to the following:

Indicator Description	Potential Indicator for:	Immediate Action Required:	Follow-Up Actions if Necessary:
• cracked/broken/buckled road pavement	• differential settlement resulting in damage to final cover system	• investigate to determine cause of pavement damage and potential impact to final cover system	• if final cover system has been impacted, arrange resources to make necessary repairs. • repair road surface if necessary
• cracked/broken/buckled storm water ditch lining	• differential settlement resulting in damage to final cover system	• investigate to determine cause of ditch lining damage and potential impact to final cover system	• if final cover system has been impacted, arrange resources to make necessary repairs • repair ditch lining if necessary
• landfill gas emissions (detected via SCAQMD Rule 1150.1 monitoring)	• indicates landfill gas emissions which may be indicative to a breach in the final cover system	• investigate to determine if final cover system has been damaged or identify alternative source of gas	• if final cover system has been impacted, arrange resources to make necessary repairs • address gas emission issue as necessary
• landfill gas oxygen and/or nitrogen content	• indicates air intrusion into the gas collection system - which could be the result of damage to well head, piping, or final cover	• investigate to determine source of air intrusion	• if final cover damage is the cause of air intrusion, arrange resources to make necessary repairs • if well or piping damage is source of air intrusion, make necessary repairs
• distressed vegetation	• may indicate landfill gas emissions which may be indicative to a breach in the final cover system	• investigate to determine if gas emissions are present, if so, determine if final cover system has been damaged or identify alternative source of gas	• if final cover system has been impacted, arrange resources to make necessary repairs • re-establish cover vegetation as necessary • address gas emission issue as necessary
• obvious settlement/ponding	• differential settlement resulting in damage to final cover system	• investigate settlement and determine extent of repairs to final cover system required	• regrade final cover to provide adequate fall to maintain positive drainage • re-establish cover vegetation as necessary
• erosion of final cover	• damage to one or more layers of final cover system	• investigate extent of erosion (area affected; layers of final cover system affected), cause of erosion (source of surface water flow), and drainage repairs required	• repair impacted layers of final cover system and make repairs to drainage system to prevent future re-occurrence • re-establish cover vegetation as necessary
• increase in leachate levels	• may indicate be indicative of a breach in the final cover system or problem with leachate removal system	• evaluate quantity increase in leachate levels, compare occurrence with precipitation records, re-inspect final cover for breaches	• ensure leachate removal system is operating properly to maintain leachate head levels at less than 1 foot • if final cover system has been impacted, arrange resources to make necessary repairs • re-establish cover vegetation as necessary

Inspection of the final cover system will be conducted at least once each month with more frequent inspections during the rainy season. During these inspections, the technician will make observations along all roads and drainage benches as well as traverse the top deck of the closed landfill. From the roads and drainage benches, sloped areas with final cover can be observed for indications of possible final cover maintenance needs. If the technician observes indicators of potential impacts to the final cover system on the slopes (i.e. distressed vegetation, erosion, surficial cracks, impacted pavement, impacted ditch lining, etc.), additional inspection will be performed by walking up the slope to the potentially affected area for closer inspection. Traversing of the top deck on foot, at parallel traverses spaced from 25 to 50 feet apart, gives the technician the opportunity to make close inspection of the final cover system condition and observe indicators of necessary maintenance such as surficial cracks, settlement, ponding, gas emissions, etc.

If during the course of an inspection, it is observed that the final cover system requires maintenance, the technician will document the nature of the observation, the extent of the affected area, probable cause, etc. Documentation will be in the form of an inspection log similar to the Figure 9-3, to which a map of the closed landfill would be added to identify the area of concern to be identified and facilitate its location during any maintenance activities. To further facilitate location of an area requiring maintenance, such areas will be marked in the field with wood stakes and ribbon at the time of their identification.

The actual extent of necessary maintenance work will be determined on a case by case basis and the necessary resources procured to make timely and complete repairs. The actual nature and extent of the repairs will be assessed in the field and then executed. When maintenance activities require heavy equipment to operate on portions of the final cover beyond the confines of a drainage bench or access road, the equipment utilized will be limited to low ground pressure (LGP) track-type equipment to ensure protection of the underlying geomembrane. Completed maintenance activities will be documented, retained in the official closure file, and incorporated into agency reports as required.

Surface Water Drainage Systems and Erosion Control

Drainage channels, sedimentation basins and related structures will be inspected annually during the period August-October, to determine maintenance requirements. Based on the inspection, channels and basins will be cleared of debris or sediment, repaired and improved as needed. In addition, the drainage system will be inspected throughout the rainy season during or following significant rainstorms, to verify that they are functioning as designed to manage surface water runoff.

Erosion control will be minimized through maintenance of the surface water drainage system and maintenance of the vegetative cover. Acknowledging that establishment of the vegetative cover will take some time, the postclosure estimate includes a higher cost for re-vegetating areas of the final cover for the first 5 years of the postclosure period, with a reduced cost for the remaining 25 years.

Landfill Gas Control System

The landfill gas collection and combustion system will be inspected, maintained and operated throughout the post-closure maintenance period, until gas generation has ceased. Operations of the gas blower and flare systems will be monitored on a daily basis, either by on-site personnel or by remote telemetry. Complete inspections of all above-ground system components will be conducted on a monthly basis to detect any significant leaks or other physical problems with piping, condensate collection/management equipment, blowers or flares. Problems identified in these inspections will be documented and provisions made for their repair; costs for which are included in the postclosure cost estimate.

A comprehensive system review will be conducted annually, including vacuum, flow and gas quality testing of each well and the balancing of the system to adjust to changing conditions as gas generation rates change from year to year in different parts of the site.

During the monthly system inspection previously noted, the landfill gas entering the flare (and/or the energy recovery system if such a system is installed) will be monitored for oxygen and nitrogen content. If the percentage of these gases are materially higher than the prior month's reading or the oxygen content exceeds the NSPS limit of 5%, it is indicative of air intrusion into the waste. Air intrusion could be caused by a number of possibilities such as a damaged well head, damaged piping (above or below ground), excessive vacuum at one or more wells, and/or a breach in the final cover system. In the event of such an increase in oxygen and/or nitrogen content, the system inspection will be expanded to determine the cause and location of the increase. This will entail monitoring of landfill gas quality in a step-by-step process, moving from the main header into the flare and monitoring each branch of the piping system until the location of the excessive oxygen and/or nitrogen can be determined. Once a section of the collection pipe system has been isolated, each well feeding that section and the intervening lateral pipe will be monitored for oxygen and nitrogen until the source is identified. Corrective actions would be determined generally as follows:

- If it is determined that a damaged section of pipe is the cause, then the corrective action will be to repair the damaged section of pipe.
- If a well(s) is determined to be overpulling and causing air intrusion around the well casing, then the corrective action will be to reduce flow to the well(s) to eliminate such intrusion and/or improve the seal around the well casing.
- If such actions do not remedy the problem and no pipe damage is found, then the area which has been identified as the source of the problem will be inspected for a possible breach in the final cover which might allow air intrusion to occur. This inspection will entail a more exhaustive visual inspection of the landfill surface, such as inspectors walking in parallel traverses spaced at 10 to 20 feet apart, and will include surface monitoring for gas emissions.
- If damage to the final cover is suspected, and all other likely sources have been eliminated, then the landfill gas collection system will be isolated and vacuum reduced/removed. With the reduction/removal of vacuum to the suspect area, landfill gas

will emit from locations where the final cover has been damaged. Therefore, locations identified as emitting landfill gas in excess of 500 ppm will be evaluated to determine if damage to the final cover is the source of the gas. If such a determination is made, then maintenance work will be conducted to repair such damage and the gas collection system returned to its normal status.

Landfill Gas Monitoring

Perimeter monitoring probes will be monitored for the presence of landfill gas on a monthly basis. Landfill gas surface emissions monitoring will be conducted as required under the applicable sections of the AQMD Rule 1150.1 and the site specific Rule 1150.1 Monitoring Plan.

Leachate Collection and Treatment Systems

Once the final cover is installed, it is expected that leachate generation rates will decrease to a low rate that remains relatively constant during the year. Leachate in the collection sump will be checked on a regular basis, and pumped out as needed to maintain less than one foot of liquid head above the liner. If approved by the RWQCB, leachate removed from the sump will be reintroduced to the landfill by horizontal trenches or vertical wells constructed below the final cover. Otherwise, leachate will be transferred to the on-site treatment plant for processing prior to discharge to the City sanitary sewer.

In addition to checking and transferring leachate, maintenance activities will include regular inspection and maintenance of the treatment facility, with frequency depending on the quantity of leachate being produced.

Subdrain Liquid Management

If the RWQCB determines that subdrain liquids require ongoing collection and management following closure of the site, BFI will maintain and operate a system to collect, store and use the liquids on site. Based on current monitoring results, it is anticipated that any subdrain water required to be collected (as opposed to being discharged to the surface water system) will be suitable for irrigation of cover vegetation, with discharge to sanitary sewer as a backup method as at present.

9.4 Cost Estimates

9.4.1 Preliminary Closure Cost Estimate

Table 9-1 summarizes the estimated cost of closing 161.5 acres of the Sunshine Canyon County Extension Landfill. The estimate includes costs associated with final cover, revegetation, drainage controls, and monitoring systems. Appendix I contains the detailed analysis cost analysis used to estimate closure costs. Table 9-1 and Appendix I will be revised from time to time as required if the projected closure date changes or there are changes in the approved financial mechanism used to fund closure.

9.4.2 Preliminary Post-Closure Cost Estimate

Table 9-1 and Appendix I also document the estimated cost of post-closure maintenance and care for Sunshine Canyon Landfill, based on maintenance of 161.5 acres of closed landfill for 30 years. The estimate includes costs to maintain final cover and vegetation, operate and maintain leachate and landfill gas collections systems, maintain surface water management systems, and conduct all required monitoring and reporting activities. Final cover maintenance costs include repairs to the vegetative soil layer. Stability analysis results indicate damage to the geomembrane component of the final cover system is unlikely.

The cost estimate will be revised from time to time to reflect changes in the closure or post-closure plans, and to adjust costs for inflation.

9.5 Financial Assurance

In conformance with 27 CCR 22205(a) and 22210(a), BFI has submitted to the CIWMB the required closure and post-closure financial responsibility documents for Sunshine Canyon County Extension Landfill. The documents demonstrate the availability of financial resources for a third party to conduct the closure and post-closure activities described in this JTD. For the period July 15, 2005 to July 15, 2006, BFI has documented the existence of bonds in the following amounts applicable to the County Extension Landfill:

Closure	$23,591,089
Post-Closure	$20,827,275

The bonded amounts are based on estimates contained in the most currently approved Preliminary Closure and Post-Closure Plan dated March 2001, as adjusted for annual inflation.

Upon approval of the present JTD and Preliminary Closure Plan, BFI will obtain new or supplemental bonds to provide financial assurance in the amounts of the cost estimates for closure and post-closure of the expanded waste footprint, as presented in Table 9-1.

Table 9-1
SUNSHINE CANYON COUNTY EXTENSION LANDFILL
PRELIMINARY CLOSURE / POST-CLOSURE COSTS

SUMMARY

Closure

Final Cover	$ 18,317,840
Landfill Gas Collection and Monitoring System	$ 874,900
Groundwater Monitoring System	$ -
Final Cover Surface Water Management	$ 466,500
Facility Security	$ -
Subtotal Closure	$ 19,659,240
Subtotal x 20% Contingency Costs	$ 3,931,848
Total Closure Cost	**$ 23,591,089**

Post-Closure Monitoring and Maintenance - Annual Cost

Final Cover Maintenance	$ 86,805
Liquids Management	$ 202,300
Landfill Gas Management	$ 252,638
Landfill Gas, Unsaturade Zone, & Groundwater Monitoring	$ 116,800
Drainage Maintenance	$ 20,000
Security Maintenance	$ 1,000
Inspection	$ 14,700
Subtotal - Annual Monitoring and Maintenance	$ 694,243
Subtotal x 30 years	**$ 20,827,275**
TOTAL CLOSURE AND POST-CLOSURE COST	**$ 44,418,364**

GRAPHIC SCALE 1"=500'

0 500 1000 1500

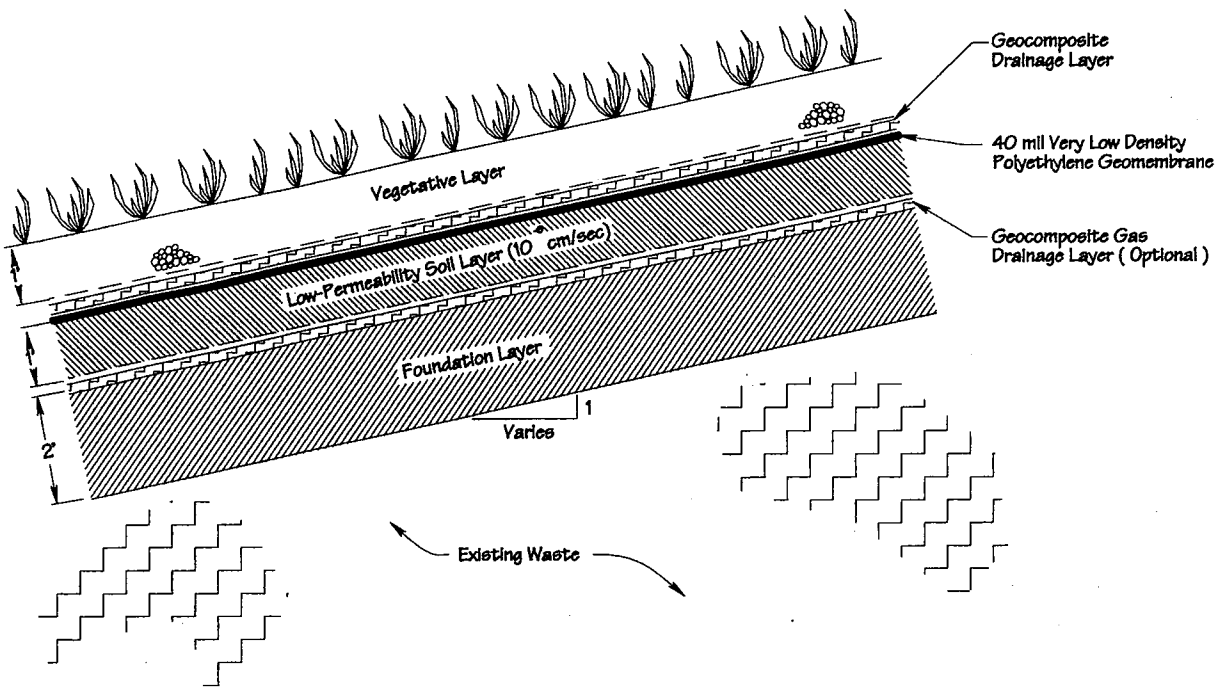
Legend:

- Planned Liner Limits - CUP Exhibit "A"
- Liner Limits Increase - CUP Exhibit "A" (Alternate)
- Final Waste Grades (include 4 ft of Final Cover)
- Existing Grades as of 12/12/05
- Property Boundary
- Proposed Soil Buttress grades

County of Los Angeles

City of Los Angeles

A-MEHR, INC.	FILENAME: JTD Figures
22016 Mill Creek Drive, Laguna Hills California 92653 (949) 206-0127	DRAWN: RM
Sunshine Canyon County Extension Landfill	CHECKED: AM
Joint Technical Document	DATE: Jan 200
Final Grading Plan	FIGURE:
Topography Grades as of 12/12/05	9-1



Final Cover System

A-MEHR, INC.	FILENAME: JTD Figures
	DRAWN: RM
Sunshine Canyon County Extension Landfill	CHECKED: AM
Joint Technical Document	DATE: Jan 2006
Final Cover Cross-Section	FIGURE: 9-2