

Joint Technical Document

Volume I

Sunshine Canyon City/County Landfill
Los Angeles County, California

November 2007

Revised February 2008

Revised May 2008

Prepared For:

Browning Ferris Industries
of California, Inc.
14747 San Fernando Road
Sylmar, California 91342

Prepared By:

BRYAN A. STIRRAT & ASSOCIATES, INC.
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SECTION A.2

PROPOSED LANDFILL DEVELOPMENT DESCRIPTION

A.2 PROPOSED LANDFILL DEVELOPMENT DESCRIPTION

A.2.1 PROPOSED LANDFILL DESIGN AND DEVELOPMENT

A.2.1.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The County of Los Angeles Department of Regional Planning and the Board of Supervisors (Lead Agency) certified the adequacy of the Final EIR (SCH 89071210: 1993), and that it had reviewed and considered the Final EIR in reaching its decision on approving landfill operations in portions of Sunshine Canyon located in Los Angeles County. The CEQA process culminated in the issuance of the 1993 Conditional Use Permit (CUP). Board of Supervisors approval and the supporting Final EIR envisioned that disposal operations would eventually cross back into City portion of the canyon, and that the City and County operations would be combined into a single landfill.

The City of Los Angeles Planning Commission and City Council (Lead Agency) certified the adequacy of the Final SEIR (SCH 92041053: 1999), and certified that it has reviewed and considered the Final SEIR in reaching its decision on approving City Landfill Unit 2. Certification was provided by Los Angeles City Council Resolution. Subsequent to the Los Angeles City Council Resolution, a Notice of Determination (NOD) was filed with the Los Angeles County Clerk. The SEIR, and the County EIR which was incorporated by reference, reviewed all environmental impacts associated with the development of a consolidated SCL.

The County of Los Angeles Department of Regional Planning (Lead Agency) prepared an Addendum (October 2004) to the FEIR and SEIR, and certified that it had reviewed and considered the FEIR, SEIR, and Addendum in reaching its decision on approving the replacement CUP issued in February 2007 for the City and County Landfill Consolidation. The Addendum to the County Final EIR and City SEIR was prepared to describe the CUP revisions, relevant background information, and the basis for the conclusion that there has been no substantial change to the project or to the environmental impacts analyzed.

A.2.1.2 PROPOSED DESIGN FEATURES

The SCL project will include the following landfill design components consistent with existing CEQA documentation and local land use entitlements:

- Consolidation of the permitted SCL City and County refuse footprints by infilling the areas between the existing footprints consistent with the currently approved City Zone Change and County replacement CUP refuse boundaries. This consolidation would more efficiently utilize the existing landfills while avoiding any expansion into the surrounding undisturbed terrain, resulting in increased gross airspace capacity (for liner systems, LCRS/Operations layer, refuse, daily/intermediate cover and final cover) of approximately 90.24 mcy for a total gross airspace capacity of approximately 140.94 mcy.
- A maximum build-out elevation of up to 2,004 feet above mean sea level (MSL) (including final cover).
- An extension of the site life from the current estimated closure dates for the SCL City (2010) and SCL County (2013) to approximately 2037 which is consistent with the replacement CUP. The remaining total net airspace capacity for the site with the project is approximately 111.24 mcy (for refuse and daily/intermediate cover) as of October 31, 2007.
- The area utilized for landfilling from the perspective of the current solid waste facility permits will increase from 246 acres (84 in SCL City and 162 in SCL County) to 375 acres (195 in SCL City and 180 in SCL County). The 195 acre figure includes the 12-acre 500 foot setback area to the north which will consist of soil fill only with no MSW. When this is taken into account the disposal area in the City is actually 183 acres which is within the 194 acres allowed by the City Zone Change and replacement CUP for a total disposal acreage of 363 acres.
- A unified phasing plan is proposed that optimizes soil management while complying with phasing requirements of the City Zone Change.
- A new realigned entrance road, a new scale facility and other ancillary facilities are proposed that will provide state-of-the-art services for landfill users throughout the SCL active site life.

A.2.2 PROPOSED LANDFILL OPERATIONS

The following proposed operational changes are proposed for the SCL ongoing disposal activities:

- Consolidation of the two existing working faces into one that will result in more efficient use of equipment, fuel, and overall lowering of associated emissions.
- Combining of the current daily inflow of waste from the two landfills (5,500 maximum tons per day (tpd) and 30,000 tons per week (tpw) for the SCL City and 6,600 tpd and 36,000 tpw for the SCL County) into one daily maximum of 12,100 tpd and 66,000 tpw.
- Combining of the current weekly inflow of inert/beneficial use material from the two landfills (3,000 tons per week (tpw) for the SCL City and 3,600 tpw for the SCL County) into a weekly maximum of 6,600 tons.

A.2.3 PRELIMINARY CLOSURE AND POST-CLOSURE MAINTENANCE PLAN (PCPMP)

This JTD integrates a PCPMP element prepared in accordance with current regulations and included as Parts E and F of this document.

A separate Final Closure Plan will be prepared and submitted to the appropriate regulatory agencies (i.e., LEA, CIWMB and RWQCB) two years prior to the anticipated closure date for any portion thereof or the entire landfill. A separate discretionary action and CEQA review and clearance for closure activities will be required prior to approval of the Final Closure Plan.

SECTION B.1

**GENERAL DESCRIPTION
(27 CCR, SECTION 21600(b)(1)(A))**

B.1 GENERAL DESCRIPTION **(27 CCR, SECTION 21600(b)(1)(A))**

B.1.1 INTRODUCTION

SCL City & SCL County operate as Class III waste disposal sites in accordance with applicable local, State and Federal regulations. Part B of this JTD presents information regarding an overview of the facilities, waste management unit classification and siting, operating criteria, cover materials, handling, controls and regulatory approvals. This Part B satisfies the regulatory requirements for this information contained in 27 CCR, Section 21600.

Tables 1 and 2 provide cross-reference information to locate the appropriate sections in Part B which best correspond to the specific regulatory requirements for this permitting document under 27 CCR.

B.1.2 FACILITY OVERVIEW (27 CCR, SECTION 21600(b)(1)(A))

SCL is located at 14747 San Fernando Road; part of the landfill is located in the City of Los Angeles and the other in an unincorporated area of Los Angeles County (see Figure 1). Currently there are two landfills permitted within Sunshine Canyon. The SCL City site includes a permitted area of approximately 494 acres and the SCL County site includes approximately 542 acres (see Figure 2). These sites are located in the northern edge of the San Fernando Valley. SCL City SWFP currently allows disposal on 84 acres. The SCL County SWFP currently permits disposal on 162 acres. This JTD presents information to combine the City and County landfills under one SWFP which will result in a single landfill footprint being developed in Sunshine Canyon ultimately encompassing approximately ~~375379~~ acres within a total permitted area of 1,036 acres. The proposed facility is within the parameters approved in the County CUP Exhibit A-2.

Located within the City portion of the project site are two fill areas that are classified as "inactive" known as Unit 1. These fill areas occupy approximately 205 acres and have a total waste placement of approximately 25 million tons.

The largest fill area occupies approximately 184 acres and is located near the southwest perimeter of this portion of the project site and ceased landfilling operations and refuse placement in September 1991. The smaller fill area is located north of the existing access road and occupies approximately 21 acres. The City portion of the proposed landfill partially overlays approximately 77 acres of these inactive areas. The remaining 128 acres will not have any more waste placed on it.

The property boundaries of the landfill facility are roughly aligned with the ridge lines of the canyon. Pre-landfill and existing site topography is shown on Figures 2 and 3, respectively.

Both sites are operated in accordance with State Minimum Standards for a Class III disposal facility as established by the State Water Resources Control Board (SWRCB) and the CIWMB. The site accepts mixed municipal refuse that is classified as nonhazardous MSW and inert waste, as defined by 27 CCR, Sections 20220 and 20230. No liquid or hazardous waste has knowingly been accepted at either site.

SCL City Units 1 & 2

The inactive City Landfill Unit 1 was operated as a MSW landfill starting in 1958, i.e., before either modern waste disposal practices were developed or formal containment systems were required. The current SCL City Unit 2 SWFP allows the site to receive a maximum of 5,500 tons per day (tpd) or a total of 30,000 tons per week (tpw) of MSW; it is also allowed to receive 3,000 tpd of nonhazardous inert/exempt material. To date, lined phases of development for Phase I of SCL City Unit 2 has been limited to Cell A. The containment system in Phase I is a double composite liner as specified in Section C.2.3.

SCL County Extension

The existing SCL County SWFP allows the site to receive a maximum of 6,600 tons per day (tpd) or a total of 36,000 tons per week (tpw) of MSW. It is also allowed to receive 3,600 tpd of nonhazardous inert/exempt material. To date,

liner phases of development for SCL County have been completed in Phases I, II, II-C, III-A, III-B, III-C, IV-A Part 1-3, and IV-B Part 1.

SCL City/County Consolidation

The proposed design and operational changes which serve as the basis for requesting a revised SWFP and amended WDRs for the City/County Landfill Consolidation project are summarized in Section A.2. The major phases of development for SCL are proposed to include five major phases (including various sub-phases). A discussion of proposed landfill phasing is included in Section C.3.9.

B.1.2.1 FACILITY OWNER/OPERATOR

SCL City and County are owned and operated by Browning Ferris Industries of California, Inc. (BFI). BFI is a wholly owned subsidiary of Allied Waste Industries, Inc.

B.1.2.2 OPERATIONS CYCLE (27 CCR, Section 21600(b)(1)(A))

The daily operations cycle at SCL consists of waste acceptance and unloading (regulated under a load checking program, further discussed in Section B.6.4.1), spreading and compaction; and daily cover. These procedures are discussed in detail throughout this JTD.

B.1.3 SITE PLAN (27 CCR, SECTION 21600(b)(1)(B))

The Site Plan for SCL is presented on Figure 2, which presents the permitted facility boundaries and topography (as of October 19, 2006) comprising the total permitted acreage of the site (1,036 acres). Fill sequencing (phasing) is also presented in Figures 4 and 5 for the existing County and City disposal areas, respectively. Incremental fill phasing limits for proposed disposal areas are shown on Figure 6. Pre-landfill site topography is shown on Figure 3. The vertical limits of the site are shown on the Final Grading Plan presented as Figure 7. The maximum elevation is 2,004 feet above msl.

B.1.4 HOURS (27 CCR, SECTION 21600(b)(1)(C))

SCL City and County operate year-round, six days a week, Monday through Saturday, except for five major holidays (e.g., New Year's Day, Independence Day, Labor Day, Thanksgiving and Christmas). The facility may receive solid waste and beneficial use materials only between the hours of 6:00 a.m. (scales open) to 6:00 p.m., Monday through Friday, and 7:00 a.m. to 2:00 p.m. on Saturday, except that Saturday hours may be extended until 6:00 p.m. if necessary to accommodate post-holiday disposal requirements, where there was limited or no trash pick-up on the holiday. The landfill entrance gate at San Fernando Road may be open at 5:00 a.m., Monday through Friday, and 6:00 a.m. on Saturday, except that the entrance gate may open earlier if necessary to allow on-site queuing of vehicles to accommodate post-holiday disposal requirements, where there was limited or no trash pick-up on the holiday.

Notwithstanding the forgoing, solid waste and beneficial use materials may be received at other times than those just described, except on Sundays, if the EA determines that extended hours are necessary for the preservation of public health and safety. Other landfill operations, such as site maintenance, the application of cover and waste processing will be conducted between the hours of 6:00 a.m. and 9:00 p.m., Monday through Saturday. Equipment maintenance will be conducted from 6:00 a.m. to 9:00 p.m., Monday through Saturday. The facility is closed on Sundays. Environmental control systems such as; gas collection and control and leachate collection and treatment require 24 hour/day access in order to ensure continuous operations and are therefore exempt from the waste acceptance hours. Emergency operation, equipment repairs, and mitigation measures necessary to avoid environmental impacts, which cannot be accomplished during the hours stated above, may be performed at any time with prior approval of the LEA. A revision to the SWFP and other appropriate approvals will be pursued if the hours of operation are proposed to change in the future.

SECTION B.2

**WASTE CLASSIFICATION AND MANAGEMENT (WASTE TYPES/VOLUMES)
(27 CCR, SECTION 21600(b)(2)/(b)(2)(A))**

B.2 WASTE CLASSIFICATION AND MANAGEMENT
(WASTE TYPES/VOLUMES)
(27 CCR, SECTION 21600(b)(2)/(b)(2)(A))

B.2.1 SERVICE AREA

The approved CUP authorized a service area for jurisdictions within Los Angeles County.

B.2.2 WASTE TYPES

B.2.2.1 GENERAL

The waste types received at SCL consist of non-hazardous residential, commercial, and inert/exempt waste classified in accordance with 27 CCR, Sections 20220 and 20230, defining Class III and inert wastes. The municipal solid waste categories are described as follows:

- Mixed Municipal Solid Wastes (including commercial and residential waste);
- Non-hazardous industrial wastes (except those having high liquid content [>50 percent liquid by weight]); and
- Construction/Demolition wastes that may be disposed of or are beneficially used and not disposed in the landfill; and
- Green Wastes that are beneficially used and not disposed in the landfill.

Typical residential non-hazardous solid waste includes, but is not limited to, household refuse, tree and lawn clippings, leaves and brush, scrap lumber and metal, appliances, furniture, wood chips, plastic containers, newspapers, cardboard and glass containers. Commercial and industrial waste typically includes, but is not limited to, food wastes, paper, corrugated cardboard, plastic, rubber, glass, mixtures of concrete, asphalt, wood, steel, brick and block.

Universal wastes (fluorescent lamps, CRTs, instruments that contain mercury, batteries, and electronics) are prohibited for disposal at the site. SCL also does

not landfill compostable material (other than incidental compostable material mixed with other landfilled loads) as defined in 14 CCR, Section 17850 as "any organic material that when accumulated will become active compost as defined in 14 CCR, Section 17852(a)(1)" nor does SCL accept biosolids, untreated medical waste or friable asbestos.

A Biannual Solid Waste Characterization Study was performed at the SCL during the week of May 21 through May 25, 2007 which identified each type of waste accepted that week and how that waste was transported to the SCL. The results of the study are presented in a report prepared by Eco Telesis International, Inc., dated June 2007. A copy of this report is included in Appendix A.

B.2.2.2 HIGH LIQUID CONTENT WASTES

High liquid content (>50 percent liquid by weight) wastes are not accepted, although the landfill is equipped with a leachate collection and removal system (LCRS). Should any high-liquid content wastes be considered for disposal at the landfill, BFI will notify appropriate authorities for approval prior to acceptance.

B.2.2.3 DESIGNATED WASTES

Designated wastes (as defined by the Porter-Cologne Water Quality Control Act [California Water Code, Division 7], Section 13173) are not accepted at the SCL.

B.2.2.4 OTHER WASTES REQUIRING SPECIAL HANDLING

Wastes with unusual characteristics such as bulky appliances, furniture, catch basin debris, treated medical wastes, etc., may require special handling for proper disposal. A "hard-to-handle" charge for all these loads is levied to offset the cost of "special attention" required, such as:

- special equipment;
- designated unloading area;
- traffic control; and
- thorough inspection.

B.2.2.5 UNIVERSAL WASTES

Pursuant to 22 CCR, Division 4.5, Chapter 23, universal wastes are prohibited for disposal at SCL. Universal waste generally includes the following:

- Batteries (rechargeable, alkaline, carbon-zinc, button-type, small sealed lead-acid);
- Mercury-containing Lamps (fluorescent tubes and bulbs, high-intensity discharge, metal halide, sodium and neon);
- Mercury Thermostats and Thermometers;
- Electronic Devices (CRT and flat-panel televisions and computer monitors, laptop computers, computers (CPUs), printers, VCRs, cell phones, telephones, radios, microwave ovens and other devices containing circuit boards);
- Electrical Switches and Relays containing mercury (some chest freezers, electric space heaters, clothes irons, silent light switches, pre-1972 washing machines);
- Pilot Light Sensors with mercury containing switches (some gas appliances – stoves, ovens, clothes dryers, water heaters, furnaces, space heaters);
- Mercury Gauges (barometers, manometers, blood pressure, vacuum gauges);
- Mercury Added Novelties (singing greeting cards, athletic shoes with flashing lights in sole if made prior to 1997, mercury maze games); and
- Non-Empty Aerosol Cans that contain hazardous materials.

Exclusion policies are conducted in the form of employee training to recognize universal waste and random load checking which is discussed in Section B.6.4. Universal waste removed as part of load checking will be properly stored at the “Recovered Universal Waste Storage Area” co-located with hazardous waste storage from load checks, which is adjacent to the heavy equipment maintenance yard as shown on Figure 8.

B.2.2.6 HAZARDOUS WASTES

The disposal of hazardous wastes, pesticides or any other toxic wastes at SCL is prohibited. Hazardous waste exclusion programs are conducted at SCL.

Section B.6.4 presents information on the random load checking and prohibited waste exclusion programs in effect at SCL.

B.2.2.7 EXEMPT MATERIALS

Up to 6,600 tons per week of total exempt clean soil and waste for beneficial use (e.g., asphalt and processed green material [processed green material contains less than one percent contamination and may include varying proportions of wood waste from urban and other sources and shall be ground, shredded, screened or otherwise processed]) may be accepted at the site. The actual daily rate fluctuates from day to day.

B.2.3 **WASTE DECOMPOSITION PROCESSES/PRODUCTS**
(27 CCR, SECTION 21740(a)(3))

B.2.3.1 GENERAL WASTE DECOMPOSITION PROCESS

Solid waste in landfills undergoes natural, chemical and biological decomposition following disposal. The waste decomposition process works in the following manner: organic waste products undergo aerobic decomposition during storage and transport, after placement in the landfill and until aerobic processes deplete the available oxygen. As oxygen becomes depleted, anaerobic decomposition becomes dominant. The duration of waste decomposition can vary from a few years to over 100 years, depending on the presence and amount of oxygen, refuse moisture content, pH and temperature.

The products of biological decomposition of organic wastes are solids, liquids and gases. Typical primary products of municipal refuse aerobic decomposition are carbon dioxide, water and nitrates. Typical primary products of anaerobic decomposition are methane, carbon dioxide, water, organic acids, nitrogen, ammonia, iron sulfides and hydrogen. Degradation of inorganic waste products occurs primarily through chemical oxidation.

B.2.3.2 FINAL PRODUCTS

Leachate

Leachate is formed by the infiltration of surface water and any free liquids inherent in the waste that migrate through the refuse prism. Limited volumes are anticipated; however, SCL has been designed to minimize leachate formation by reducing potential surface water contact with refuse. The quantity of leachate expected to be generated at the site has been estimated by modeling the water balance in the landfill. The results of the modeling were utilized in the design of the existing and proposed leachate control system described in Sections B.7.1.2 and C.3.5 of this JTD.

Landfill Gas

Gas composition in a landfill varies, depending on the types of wastes and conditions that occur during decomposition. The typical landfill gas composition for SCL is shown on Table 3.

Projected and existing landfill gas generation information is utilized in the design of the landfill gas collection and control systems for SCL. The landfill gas generation projections based on the new Phasing Plans (Figure 6) refuse volumes are included in Appendix B. The gas control and monitoring system for SCL is discussed in Sections B.7.2 and C.3.7.

B.2.4 WASTE VOLUMES/DAILY INFLOW RATES

The SCL is permitted to receive up to 12,100 tpd and 66,000 tons/week of MSW for disposal. If MSW for disposal is less than 12,100 tpd beneficial use materials (i.e., exempt materials such as green waste and inerts) may be received instead at up to 6,600 tons per week. A total of 72,600 tpw maximum (includes MSW and inert/exempt) are permitted at the SCL.

BFI reported disposal volumes received and disposed at the SCL for the period 2004 to 2006 as follows:

<u>Year</u>	<u>City</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>Combined</u>	<u>%</u>	<u>Avg. TPD</u>
2004	-	0.00%	1,762,317	100.00%	1,762,317	100.00%	5,759
2005	571,187	28.82%	1,410,658	71.18%	1,981,845	100.00%	6,476
2006	1,284,861	60.46%	840,175	39.54%	2,125,036	100.00%	6,944

The projected waste flow for the SCL is as follows:

- 8,000 tpd for 2007
- 8,500 tpd for 2008
- 9,000 tpd thereafter

SECTION B.3

**WASTE MANAGEMENT UNIT CLASSIFICATION & SITING
(27 CCR, SECTION 21600(b)(3))**

B.3 WASTE MANAGEMENT UNIT CLASSIFICATION AND SITING **(27 CCR, SECTION 21600(b)(3))**

B.3.1 AIRPORT SAFETY (27 CCR, SECTION 21600(b)(3)(A))

In accordance with Subtitle D, Subpart B, Airport Safety of 40 CFR, Part 258.10, and 27 CCR, Section 20270, owners/operators of landfills (existing and proposed) are required to demonstrate that a landfill's design and operations will not pose a bird threat to any airport. This regulation does not apply to SCL since the landfill is not located within 10,000 feet of an airport runway used by turbojet aircraft or within 5,000 feet of an airport runway used by piston-type aircraft.

The Van Nuys Airport is located approximately 7 miles from the southern perimeter boundary of the SCL. Whiteman Air Park, a small general aviation airport in Pacoima, is located 6.6 miles away. The distance between the landfill and these airports exceeds the specified distance of 5 miles provided in 27 CCR 21600(b)(3)(A). The landfill will not pose a bird hazard to either incoming or outbound commercial or general aviation aircraft that utilize either airport.

B.3.2 VOLUMETRIC CAPACITY (27 CCR, SECTION 21600(b)(3)(B))

The total proposed gross airspace for the SCL is 140.9141.2 mcy. Approximately 22.9 mcy of combined gross airspace has been consumed by refuse, liner and cover materials at SCL City and SCL County as of 10/19/06. The consolidated project will provide a remaining gross airspace volume of approximately 118.3 mcy. This volume is calculated as the difference between the latest topographic map of the site (dated 10/19/06) and the future liner grades versus the final grading plan (see Figures 9 and 7), which is 117.58 mcy, plus approximately .5 mcy for liner systems. Table 23 includes a summary of the current permitted capacities at the SCL County and SCL City, capacity used to date and additional capacity proposed. Appendix C includes the capacity back-up calculations.

B.3.3 SITE LIFE ESTIMATE (27 CCR, SECTION 21600(b)(3)(C))

B.3.3.1 SITE LIFE CALCULATIONS

In order to calculate the site life for SCL, the following criteria was utilized:

- Remaining Gross Airspace Capacity (with refuse, LCRS and operations layer, daily/intermediate cover and final cover) 115.26 mcy (as of 10/31/07; see Appendix C for calculation of capacity consumed between 10/19/06 and 10/31/07);
- Remaining Net Airspace Capacity as of 10/31/07 - 111.26 mcy (115.26 mcy less .5 mcy of liner, 1.1 mcy of LCRS and operations layer, and 2.4 mcy of final cover);
- Waste to Cover Ratio: 5:1; and
- In-Place Density: 1,600 lbs/cy (an estimate of the average density over the life of the landfill which takes settlement into account).

Based on the above criteria and utilizing average daily refuse inflow rates of 8,000 tpd for 2007, 8,500 tpd for 2008 and 9,000 tpd thereafter (based on a 5.3 day week), the entire SCL (including the existing fill areas and proposed fill areas) will have a projected site life of approximately 30 years from October 31, 2007. Based on these calculations (see Appendix C), the estimated closure date of SCL is ~~October~~November, 2037. The site life was also calculated based on the SCL accepting 12,100 tpd continuously from January 1, 2009. This resulted in a projected site life of 22.67 years from October 31, 2007 and an estimated closure date of ~~June~~July 2030.

B.3.3.2 FACTORS AFFECTING SITE LIFE

Many factors can affect the ultimate site life of a given landfill, including variations in waste type, compaction rates, the use of alternative daily covers and the annual tonnage delivered to the landfill. In addition, the long-term landfill settlement can also have a great impact on site life. The total effects of settlement will depend on various factors or processes such as the types of refuse placed and their corresponding moisture content, the refuse placement density, consolidation of the refuse under loads imposed by overlying fill, and biological and chemical decomposition. It is estimated that much of this total

settlement will occur during the operating life of the landfill and will be accounted for in periodic topographic surveys.

B.3.4 SITE LOCATION (27 CCR, SECTION 21600(b)(3)(D))

SCL is located in Sylmar (a Community of the City of Los Angeles) at 14747 San Fernando Road as shown on Figure 1. Part of the landfill is in an unincorporated area of Los Angeles County. Access to SCL is via the main entrance located on San Fernando Road. Access to the site is controlled by the front gate which is locked during hours of closure.

B.3.5 LAND USE (27 CCR SECTION 21600(b)(3)(E))

Figures 10, 11 and 12 depict the land use designations for the SCL site and surrounding area. Land use in the area of SCL is discussed in detail in Section D.1.3. There are two habitable structures within 1,000 feet of the site facility boundary (see Figures 10 and 12).

B.3.6 END USE OF SITE

The proposed post-closure end use for SCL City/County Consolidation is open space. This end use may change in response to public needs at the time the landfill is closed. A Final Closure Plan describing the final cover and landscape plan will be prepared and submitted to the appropriate regulatory agencies (e.g., CIWMB, LEA and RWQCB) two years prior to the anticipated closure date. A separate discretionary action and CEQA review and clearance will be required prior to approval of the final closure plan. As required by [Q] Condition B.7.c of the Amended Zone Change Ordinance [Los Angeles City, 1999], upon completion of the post-closure period, BFI will contact "... *the City Department of Recreation and Parks and the Santa Monica Mountains Conservancy for their consideration of the site as parkland.*" However, any future development of the project site would be consistent with City and County General Plan elements and zoning requirements.

B.3.7 ANCILLARY FACILITIES (27 CCR, SECTION 21600(b)(3)(F))

SCL City

Existing ancillary facilities (e.g., the administration office, caretaker trailer, and heavy equipment maintenance area) and certain environmental protection and control systems (e.g., leachate treatment facility) for the SCL County are used for SCL City operations with the exception of the haul road and scales. Figure 8 shows the existing location of these facilities.

SCL County

SCL County has the following facilities to support its daily operations: access and haul roads, sanitary facilities, scalehouse, office and employee support facilities, maintenance facility, leachate treatment facility, control building, LEA office trailer, caretaker's residence, utilities, green waste operation, and recyclable materials dropoff facility.

SCL City/County Consolidation

As the site is developed, ancillary facilities will primarily be relocated to the soil fill area north of the City Landfill Unit 1 as shown on Figure 13. As necessitated by local codes and ordinances, regulatory agency approvals will be obtained prior to relocation or construction of replacement facilities.

The following sections describe the SCL facilities and their locations. Figure 13, Proposed Site Facilities Plan, shows the proposed locations of these facilities. Environmental control/protection facilities, such as the gas and groundwater monitoring systems and surface water drainage control systems, are described in Sections B.7 and Part C.

B.3.7.1 ACCESS ROADS

The current access road to SCL City and SCL County is a two-lane all weather access road from the entrance gate at San Fernando Road which splits into two

roads leading to the two scalehouses. The access road is inaccessible to public vehicles once the gate is closed.

Access to active disposal areas is provided by haul roads leading from the scale house. These access roads are:

- suitable for travel by waste trucks, emergency vehicles, and landfill construction and operation vehicles;
- constructed with a width of approximately 35 feet, and a maximum grade of approximately 7 percent for dirt roads and 8 percent for paved roads;
- constructed using durable road material (e.g., broken asphalt and concrete, asphaltic concrete and road base aggregate) for all-weather use; and
- watered to control dust during dry periods.

The future access road will traverse up the eastern edge of the landfill leading to the new scalehouse and administration complex (Figures 13 and 14). Effective speed bumps will be placed and maintained at critical locations along the access road. Internal onsite haul roads are utilized by operations' staff as well as customers, consultants and outside construction contractors. The alignment and locations of onsite internal roads changes as the landfill develops to accommodate site needs. Water trucks are used to minimize dust generated by vehicles on the internal roads in accordance with SCAQMD Rule 403. Roadways are constructed to wet weather disposal areas to provide all weather access to the active face unloading area during rainy periods. The future access road will also be inaccessible to public vehicles once the gate is closed.

B.3.7.2 SCALE AREAS

SCL City

There are two (2) inbound scales, one outbound scale and a scale house serving the SCL City. Approximate locations of these facilities are shown on Figure 8.

SCL County

The scales area for SCL County is located at the northern end of the Access

Road as shown on Figure 8. The scalehouse controls four (4) inbound scales and one (1) outbound scale. The City and County scale facilities are sufficient to handle the maximum permitted waste disposal rate for the combined operation.

SCL City/County Consolidation

Future scales for the SCL will be located at the new entrance facility north of the City Landfill, Unit 1. Approximately 6 to 8 scales will be installed and operated, depending on the selected scale operating system and its efficiency.

B.3.7.3 IDENTIFICATION/ENTRY SIGNS

Signs are posted at the SCL in compliance with 27 CCR, Section 20520. A sign is posted at the landfill entry gate at the southern end of the Access Road. The sign includes the hours of operation. In addition, signs indicating schedules of charges and waste types accepted and not accepted are also posted at the fee collection booths prior to entrance to the active disposal area.

B.3.7.4 UTILITIES

The onsite utility sources include electrical power, potable water and telephones. A septic tank and leach field system is in place for domestic sewage. Future domestic sewage produced in conjunction with the relocated administration and scale complex will be handled by septic system or other alternate means as approved by pertinent regulatory agencies.

B.3.7.5 HEAVY EQUIPMENT MAINTENANCE AREA

SCL City

The existing equipment maintenance facilities for SCL City are located as shown on Figure 8.

The equipment maintenance facilities typically consist of portable, metal structures. Temporary containment is provided for the equipment maintenance

facilities, which may include concrete pads, geosynthetic materials (e.g., geomembrane) and/or compacted soil berms.

SCL County

An area has been set aside for equipment maintenance currently located in an undeveloped area of the southwest portion of the SCL County landfill footprint as shown on Figure 8.

SCL City/County Consolidation

The equipment maintenance facilities will be consolidated into one area as shown on Figure 13.

B.3.7.6 SITE OFFICE FACILITIES

Existing

The SCL City shares the following office facilities described for SCL County. The existing modular trailer units provide administrative office space for landfill employees and provide lunchroom and locker storage space for personnel assigned to the facility, such as the designated EA inspector. Housing facilities are also provided to the on-site resident caretaker. Employee parking is provided at or near each facility in accordance with applicable requirements. An office is provided near the leachate treatment plant and control building for on-site LEA personnel. The current shared crew quarters consist of a modular unit equipped with a lunch area, lockers, showers and sanitary facilities for the operations crew.

Proposed

A new site office complex with essentially the same functions listed above will be provided near the proposed scales as shown on Figures 13 and 14.

B.3.7.7 HAZARDOUS MATERIALS STORAGE AREA

During random load-checks, unacceptable wastes, that are safe to handle and the hauler is not identified, will be removed from the waste stream and placed in a temporary sealed hazardous material storage bin located close to the working face. Once a day, or as often as required, unacceptable waste from the temporary storage (satellite accumulation) location will be transferred by trained personnel to a sealed holding bin that is currently located adjacent to the heavy equipment maintenance yard (Figure 8). Hazardous materials will subsequently be consolidated in "lab packs" by a licensed hazardous waste transporter and removed off-site for proper disposal. As landfill development and operations dictate, the hazardous waste storage facility will be relocated on-site. Hazardous waste will not be stored on-site for a period longer than 90 days.

B.3.7.8 FLARE STATION

SCL City

The existing flare station, located within the City landfill property (Flare Station No.1, Figure 8), is enclosed in a well-secured, fenced area of approximately 0.5 acre. The flare, with a permitted combustion capacity of 105 million btu/hour, is equipped with a process skid that includes three Lampson blowers, liquid knock-outs and associated control. The gas flaring system contains automatic shutdown and alarm systems and automatic combustion, air-regulating, and temperature controllers. Emissions from the combustion process are released into the atmosphere in compliance with SCAQMD regulations.

SCL County

Landfill gas from the County Extension Landfill is incinerated in two flare stations, designated Flare Station No. 3 and Flare Station No. 8, each with a permitted combustion capacity of 105 million btu/hour. Flare Station No. 3 is located on a ridge southwest of the SCL County footprint, and Flare Station No. 8 is located on the ridge north of the SCL County footprint, as depicted on Figure 8.

SCL City/County Consolidation

The flare facilities will be expanded, as needed, as the landfill is developed to provide ongoing landfill gas control within the performance criteria established and mandated by the SCAQMD and State and Federal regulations. Additional information on future flare locations is provided in Section C. An energy facility is also being contemplated for the beneficial use of landfill gas generated and collected at the site. The proposed location is shown on Figure 13.

B.3.7.9 LIQUIDS COLLECTION

SCL City

The leachate control and recovery system (LCRS) consists of a free draining sand or gravel layer and a network of leachate collection pipes that are part of the composite liner system. The drainage layer consists of either granular coarse sand or pea gravel with permeability greater than 1×10^{-2} cm/sec. The leachate piping system is composed of a dendritic system of pipes connected to trunk lines which carry the leachate towards a collection sump located in the eastern portion of the base of Phase I of City Landfill Unit 2 (Figure 15). A sideslope riser with dedicated leachate pump was installed as part of the construction of the leachate sump. Collected leachate is pumped up through the side slope riser and conveyed to the leachate treatment facility either by truck or pipeline where it is treated and either discharged to the sewer system or used for dust control on lined areas of the facility. A typical cross section of a permanent leachate collection sump for the SCL City is shown on Figure 16.

SCL County

The LCRS consists of a free draining sand or gravel layer and a network of leachate collection pipes that are part of the composite liner system. The drainage layer consists of either granular coarse sand or pea gravel with permeability greater than 1×10^{-2} cm/sec. The leachate piping system is composed of a dendritic system of pipes connected to trunk lines which carry the leachate towards a collection sump located at the southeast corners of SCL

County (Figure 15). Under present conditions, leachate collected in the sump of the LCRS is transferred by tank truck or a direct pipeline to a storage tank at the leachate treatment facility (Figure 8).

SCL City/County Consolidation

Leachate collection systems will continue to be developed as part of the consolidated SCL as detailed in Section C.3.5 and Figures 15 and 24. Leachate collected in sumps of the SCL is transferred by tank truck or a direct pipeline to a storage tank at the leachate treatment facility. The leachate volume and its characteristics are monitored at the storage tank by periodic sampling and analysis.

The leachate/condensate handling and treatment system treats volatile and semi-volatile organic compounds and reduces total toxic organic compounds to meet the requirements for discharge to the sanitary sewer. Treatment processes consist primarily of air strippers and a carbon adsorption unit to remove organic compounds, and chlorination to reduce concentrations of sulfides. Three 50,000 gallon storage tanks and various pumps, filters and piping are used to manage the flow of various liquids through the facility. As the landfill is developed the leachate/condensate handling and treatment facility will be relocated near the main entrance to the site (Figure 13)

In accordance with RWQCB Order No. R4-2007-0023 for the County Extension portion of the SCL, collected leachate from the County Extension portion of the SCL may be discharged into the landfill mass in areas that are equipped with a double composite liner system (see Appendix D).

B.3.7.10 FUELING AREA

~~The heavy equipment is fueled via the wet hose method by either BFI owned service/fuel vehicles or by third party fuel trucks. Dispensers and storage tanks for diesel and other fuels are located adjacent to the paved road between the county scalehouse and administration building. The fueling facilities were constructed pursuant to permits issued by the Los Angeles County Fire Department and SCAQMD. Diesel fuel is stored in an underground double~~

walled fiberglass tanks with a capacity of 10,000 gallons. These facilities will be replaced by above-ground tanks located at the proposed heavy equipment maintenance area (Figure 13) when the cell in this area is constructed. Alternatively, the heavy equipment may be wet hosed directly in the future by third party fuel trucks. A liquid natural gas or other alternative storage tank and dispenser may also be installed at either the future equipment area or near the front entrance for use by refuse vehicles utilizing the landfill.

B.3.7.11 GREEN WASTE OPERATION

SCL City does not currently receive green waste. SCL County currently receives green waste (yard and tree trimmings), primarily from local residents and small contractors. The material is stored temporarily and either shipped off-site to a commercial green waste processor or stored until a portable grinder is brought in for processing. In the latter case, the product is then utilized for landfill beneficial use purposes such as ADC or erosion control. The site does not accept green waste loads for disposal in the landfill.

In the future, a designated area will be set aside on the site for processing green waste, tree trimmings and scrap wood from landscapers and self haul clients which qualify as clean green waste. This facility will be located in a suitable location on an inactive deck area. As described in the Greenwaste Processing Operations Plan (Appendix E), the green waste processing facility will be designed to recycle up to 800 tons per day of green and wood waste for use as alternate daily cover (ADC), erosion control, soil amendment, visual mitigation material, wet weather decking, or mulch on the site, or for shipment off-site for use as fuel or compost and mulch feedstock.

The proposed green waste facility is composed of four areas:

- Tipping area, where loads are deposited after being received at the landfill scales. Green waste, tree trimmings and scrap wood are placed in separate piles. These areas may be combined if the wood materials are similar.
- Processing area, where material is ground and screened to produce appropriately sized product for the intended application

- Finished product stockpile where processed material is stored prior to loading into trucks for transport to areas for usage on-site or to off-site markets.
- Loadout area where trucks are loaded for transport to areas for usage on-site or to off-site markets.

The site will be graded for positive control of surface water runoff, which will be directed to an appropriate drainage channel. A perimeter road around the entire facility provides access for customers, delivery vehicles and emergency vehicles if needed.

In order to minimize potential for generation of odors or spontaneous combustion, curbside green waste will be processed within one working day of receipt, and removed from the finished product stockpile within 2 to 4 days after arrival. Tree trimmings and scrap wood will be processed and removed from the facility within 3 to 7 days of arrival. If the material cannot be processed, it will be moved off-site. In the event of equipment breakdown, thereby causing a delay in green waste processing, the LEA will be notified. Equipment repairs, as needed, will be expedited. If required, rental equipment will be brought in to handle the incoming green waste.

Stockpiles will be limited to approximately 10 feet in height, and will be monitored for temperature increases twice per operating day. Piles will be turned as needed to keep internal pile temperatures from exceeding 122 degrees Fahrenheit. A log of the temperature readings will be kept available at the site for review during normal business hours.

In the event a fire should occur, the green waste facility's water truck will be available for immediate response at the facility, as will the landfill's three water trucks and one water pull. Piles will be separated by 12-foot, minimum, roadways to allow full access for fire fighting equipment and personnel.

Employees at the processing facility will be subject to the same safety and training requirements as other landfill employees. During the green waste operations at least one employee, trained in hazardous waste recognition, will be on duty at the green waste processing facility.

Approvals will be obtained from all appropriate agencies prior to operating the green waste processing facility. Additional details of the green waste processing facility are included in Appendix E. The Greenwaste Processing Operations Plan provided in this JTD was originally prepared for the SCL County; however, it is now applicable to the combined facility.

B.3.7.12 RECYCLABLE MATERIALS DROPOFF FACILITY AND OTHER RECYCLING ACTIVITIES

Bins are currently provided near the green waste area for customers to deposit source-separated recyclable glass, metal or paper materials. Customers are also allowed to deposit waste oil in storage tanks at this location. Customers will not be allowed to deposit recyclables or waste oil without supervision by BFI employees. As the landfill develops, these facilities will be relocated to the future office and scale area north of the City Landfill.

Inert Construction/Demolition waste (concrete and asphalt) is beneficially re-used for wet weather decks, all-weather access roads and other site construction activities such as rip-rap or channel erosion protection. The operations are generally located near the working area and are moved as the landfill develops to follow the movement of the working area. Materials are deposited and then processed with on-site equipment (e.g. dozers and compactors) and incorporated as needed into the deck, road or other construction activity. Infeed material may be stockpiled for extended periods before being processed depending on the time of year and the need for construction materials.

Other recycling activities are anticipated in support of the SCL. Anticipated activities include the following: California Redemption Value (CRV) buy-back center, public direct haul waste convenience center, and as markets allow, other construction/demolition waste recycling activities. As necessary, the LEA and other regulatory approvals will be obtained prior to operation (such as equipment permits from SCAQMD).

B.3.7.13 NURSERY

The nursery, which currently encompasses approximately 2 acres, is located within the currently fenced area of the 100-acre buffer area (Figure 8). The nursery includes a greenhouse and shade house area that is utilized for the germination of native tree seed stock (e.g., coast live oak, canyon live oak, big-cone Douglas fir, sycamore, maple, and black walnut trees) and native vegetation gathered in and around the Sunshine Canyon Landfill area. Once germinated, these species are used as part of re-vegetation programs at SCL.

B.3.7.14 TRASH ROLL OFF BOXES

Empty spare bins and roll-off containers, which are related to landfilling activities only, are stored on-site in areas that are conveniently accessible and will not interfere with operations, such as inactive portions of the current operating areas (areas with final cover will not be utilized for bin/roll-off box storage). The location may vary as the landfill operations advance. The box storage does not affect traffic because the roll-off trucks come in full and dump and then switch out the empty box for a different size box. Therefore, all trips are landfill related.

SECTION B.7

**CONTROLS
(27 CCR, SECTION 21600(b)(8))**

B.7 CONTROLS (27 CCR, SECTION 21600(b)(8))

B.7.1 NUISANCE CONTROL (27 CCR, SECTION 21600(b)(8)(A))

The following sections describe those measures established by BFI to eliminate and/or minimize those nuisances associated with the operation of SCL to meet the intent of 27 CCR, Section 21600(b)(8)(A).

B.7.1.1 FIRE CONTROL (27 CCR, SECTION 21600(b)(8)(B))

Fire prevention and control programs at the SCL address three principal types of potential fire emergencies: fire in the waste; brush fires; and structure fires. In all cases, landfill personnel and equipment are first responders, with secondary support from the Los Angeles County Fire Department which has its nearest station on San Fernando Road in Newhall.

On-site fire fighting resources include landfill equipment—water trucks, dozers, scrapers and other equipment, the 100,000 gallon and 265,000 gallon water storage tanks, and the on-site water distribution system. Two water truck fill stations are provided, one on the County portion of the site and one on the City portion of the landfill. Fire hydrants are placed at minimum 1000-foot intervals along the main access road.

The water supply system and other on-site resources and programs at the site maintain compliance with applicable conditions of the County CUP, including:

Condition 52:

Landfill gas flares shall be below the adjacent interior ridges (unless otherwise required by the South Coast Air Quality Management District) and the flames shall be totally contained within the stack. Flame arrestors shall be provided to the satisfaction of the County Forester and Fire Warden.

Condition 54:

The permittee shall maintain onsite fire response capabilities, construct access roads, provide water tanks, water mains, fire hydrants and fire flows and perform brush clearance to the satisfaction of the County Forester and Fire Warden.

Condition 55:

All onsite fuel storage tanks shall be installed and necessary containment and air quality controls for the tanks provided, in accordance with the requirements of the County Forester and Fire Warden, the County Department of Public Works, the Regional Water Quality Control Board, and the South Coast Air Quality Management District.

All landfill personnel are provided with fire prevention/response training, including the location and use of fire extinguishers provided throughout the site to extinguish small fires. Emergency telephone numbers and instructions are posted inside all buildings. All fire incidents will be entered in the site's Special Occurrences Log.

Procedures specific to each potential type of fire emergency are discussed below.

Waste Fires:

Waste fires are most frequently caused by refuse that has caught fire inside a collection or transfer truck. When such occasions are detected before the load is dumped, the vehicle is directed to an isolated area where it is dumped and the fire extinguished using dirt and/or water trucks. If burning or smoldering material is noticed after a load is discharged at the active face, the material is immediately separated from the other material by dozers or compactors, pushed to a soil-covered area, and the fire extinguished with dirt and/or water.

Subsurface waste fires will be countered by the following measures:

- inspection of the affected area and removal of potentially ignitable vegetation or other materials;

- shutting down all LFG extraction wells in the vicinity of the affected area;
- evaluating the extent of the affected area by identifying areas of rapid settlement, large surface cracks with smoke or water vapor emissions, or by probing the soil with temperature probes;
- watering the waste mass if the fire appears to be near the surface;
- capping the area with additional compacted on-site soils; and
- other alternative methods as needed.

The County Fire Department may be notified, at the option of the Site Manager, when on-site fire response measures are initiated.

Local Brush Fires:

BFI will minimize the potential for brush fires by clearing all brush within 100 feet of landfill operating areas. In the event of an on-site brush fire, the Fire Department will immediately be notified, and landfill equipment will be diverted as needed to construct fire breaks and otherwise attempt to control the fire and prevent its spread. BFI will also make its equipment available to the Fire Department, if requested, to combat off-site brush fires in the vicinity of the landfill. In all cases, however, landfill personnel will be instructed to avoid placing themselves or their equipment in hazardous or dangerous situations suitable only for fully trained professional fire fighters.

Helicopter pads are available at the SCL (City side) for use in emergency situations only (see Figure 13). The expected use of these pads is the Los Angeles City and County Fire Department Air Operations Section who ~~has~~have requested the pads for use in supporting local fire fighting efforts.

Landfill Operating Procedures for Helicopter Pad Area:

- 1 Notify the City LEA that we have observed the helicopter pads in use.
- 2 Send water trucks to the helicopter pad to wet down the pad during the pad and area usage.
- 4 Record the approximate start and stop time of the pad usage in the Special Occurrence Log for the site.
- 5 Allow a breakable lock on front gate for Fire Department use.

- 6 Allow access to site water, if available, for the fire department to fill the ~~planes~~helicopter/use.

Regional Brush and Forest Fires

In the event of a major regional wildfire that potentially could threaten the landfill, BFI will take the following measures:

- Site management will establish and maintain contact with fire authorities to determine the potential for the site being impacted by the fire.
- If site management, in consultation with fire authorities, determines there is a significant threat of fire or extreme smoke impacting the site during the present working day, the following actions will be taken to close the site:
 1. The scalehouse will stop accepting waste, and major customers will be informed that the site is closed.
 2. Management will ensure that critical site records are secured in fireproof safes or are removed from the site.
 3. Personnel will be released from the site at the discretion of supervisors. In the event of a sudden or unexpected appearance of the wildfire at the site, emergency evacuation procedures will be followed.
 4. In the event of an emergency evacuation, all employees will report to their direct supervisor before leaving the site. Supervisors will verify that all employees are accounted for, and report to site management at the main administrative office or other location. In extreme cases where all employees must leave the administrative area, site management will meet with supervisors at the front gate near San Fernando Road to ensure that all employees have safely left the site.
- If site management, in consultation with fire authorities, determines there is a credible threat of fire or extreme smoke impacting the site during the following night or day, the above procedures will be implemented at the end of the present working day. The site will remain closed on the following day unless site management, in consultation with fire authorities, determines the threat of impact by the fire has been reduced to an acceptable level.

Structure Fires:

In the event of a structure fire, the building and any adjacent structures will immediately be evacuated and the Fire Department called, in conformance with the site's Emergency Response Contingency Plan (Appendix F). On-site personnel

efforts will be limited to use of fire extinguishers for small incidents; otherwise structural fires will be managed solely by Fire Department equipment and personnel. Illuminated exit signs and diagrams showing evacuation routes are posted in buildings.

B.7.1.2 LEACHATE (27 CCR, SECTION 21600(b)(8)(C))

Leachate is generated when water passing through the refuse reacts chemically and biologically with refuse contents. Potential sources of water for leachate formation at SCL include infiltration of rainfall, surface water from surrounding areas draining into the landfill and/or water contained within the solid waste in the landfill. The composition of leachate is highly dependent upon the wastes contained in the landfill and varies significantly within a landfill over time. The leachate management system for SCL is intended to prevent or minimize leachate generation, contain and collect generated leachate, and reclaim or dispose of wastewater collected in the leachate control system. The expansion areas will have a LCRS installed similar to that in the existing lined areas of the landfill.

B.7.1.2.1 LEACHATE HANDLING SYSTEMS

SCL City

The LCRS consists of a 12-in. (300-mm) thick granular drainage layer, with a hydraulic conductivity of at least 1 cm/s, in the floor area and a geocomposite layer on side-slopes, and perforated HDPE collection pipes placed over the composite liner. The LCRS is designed to collect and convey the leachate toward leachate sumps where it is pumped through solid HDPE leachate transmission pipelines to storage tanks located at the leachate treatment facility. The LCRS is sloped toward the sumps to promote positive drainage and prevent ponding. The LCRS is designed and engineered to withstand the potential effects of seismic events without leakage. The flow capacity of the pipeline exceeds anticipated leachate flow rates. As required by Title 27, the SCL City LCRS is tested annually.

SCL County Phases I-III Liner Systems

The LCRS constructed for Phases I, II, II-C, III-A and III-B was constructed using the following approved components:

On the base or floor on top of liner (listed from bottom to top):

- 1 ft. of granular drainage media (gravel)
- 10-ounce per square yard filter geotextile

On side slopes on top of liner (listed from bottom to top):

- Geonet, synthetic drainage media
- 10-ounce per square yard filter geotextile

SCL County Phase IV Liner and Leachate Collection Systems

The LCRS in Phase IV contain the following components:

On the base or floor on top of liner (listed from bottom to top):

- 16-ounce per square yard non-woven geotextile
- 1 ft. of granular drainage media (gravel)
- 16-ounce per square yard filter geotextile

On side slopes:

- 16-ounce per square yard geotextile

Figure 15 shows the existing and proposed future leachate collection pipes and sumps. Perforated HDPE pipes are placed in gravel-filled trenches above the liner in each phase and connected to provide flow of leachate to a single sump

located in the eastern corner of SCL County. As required by Title 27, the SCL County LCRS is tested annually.

B.7.1.2.2 LEACHATE VOLUMES

For calendar year 2006, the site managed a total of 2.6 million gallons of leachate from a lined area of approximately 150 acres in the SCL City and County. This is equivalent to approximately 6.4 cubic feet per acre per day of leachate. The peak period, April 2006, generated a total of approximately 790,000 gallons, equivalent to 24 cubic feet per day per acre. See Section C.3 for information on future leachate generation from the combined SCL.

B.7.1.2.3 PREVENTION OF PUBLIC CONTACT WITH LEACHATE

BFI prevents potential exposure of employees or the public to leachate by regular inspections and maintenance of the leachate management system and landfill slopes where leachate seeps may potentially occur. Reintroduction of leachate is done in a manner that prevents public contact with leachate, and maintains a minimum 75 feet of separation between leachate reintroduction areas and landfill exterior sideslopes.

In the event a leachate seep is discovered on a landfill sideslope or elsewhere on the site, it is immediately repaired by excavation of refuse if necessary, and placement of clean compacted soil over the affected area. The LEA is notified of any such incident, and the RWQCB is notified in the event a leachate seep causes contamination of surface water discharged from the site.

B.7.1.3 DUST CONTROL (27 CCR, SECTION 21600(b)(8)(D))

The site experiences high wind periods, particularly during Santa Ana conditions, that result in a potential for fugitive dust generation from landfilling operations. For compliance with South Coast Air Quality Management District (SCAQMD) Rule 403, a dust control plan was detailed in two separate documents approved by the District. The dust control plan covers mitigation procedures during normal operations and for high wind periods. It also complies with District Rule

402, which mandates that landfill activities not cause a nuisance to the surrounding community.

SCL utilizes the most effective available techniques and methods to avert fugitive dust emissions that may be a nuisance or hazard in adjacent areas. The dust abatement program will include those items listed in Condition 21 of the City MMRP, Condition 45 of the County CUP as well as the re-vegetation measures included in Condition 44D of the County CUP.

The dust abatement program will include the following elements:

1. The final fill slopes will be concurrently reclaimed and revegetated in lifts as detailed in Condition 16 of the Conditional Use and Oak Tree Permit (86-312-(5)).
2. A temporary vegetation cover will be established on all slopes and other areas that are to remain inactive for a period longer than 180 days.
3. Excavations and other activities that may result in significant emissions of fugitive dust, which cannot be confined to areas under the landfill's control, will not be conducted during high wind conditions (or when such conditions may be reasonably expected).
4. Working faces will be kept to small contained areas of two to three acres, and if practical during high wind periods, will be confined to areas with minimal wind exposure. Other operation areas (i.e., liner preparation, cover soil stockpiles, etc.) will be contained to sites less than five acres.
5. Daily soil cover will be moistened with water, except on rainy days. A soil sealant can also be used as necessary to supplement water for fugitive dust control, soil erosion and to enhance revegetation.
6. The landfill will apply soil sealant to any previously active dirt area (which has not already been sealed or revegetated) before each day when the landfill will be closed to waste acceptance.
7. Inactive areas of exposed dirt will be regularly monitored to determine the need for additional soil sealant.
8. All access roads to permanent facilities, excepting those infrequently used, shall be paved.
9. The paved access road to the fill areas will be extended as new areas are opened to minimize the length of dirt road.. The roads shall be surfaced with recycled asphalt, aggregate materials or soil stabilization products to minimize length of untreated dirt.

10. All paved roads in regular use will be regularly cleansed to remove dirt left by trucks.
11. All dirt roads in regular use will be watered at least daily on operating days and more often as needed, except on rainy days.
12. Loads capable of producing significant dust shall be watered during the dumping process, if such a practice is deemed acceptable to the Regional Water Quality Control Board.
13. The landfill will maintain water tanks and piping capable of supplying by gravity at least one day's maximum water usage to the fill areas for dust control.
14. The landfill will install and maintain devices to monitor wind speed and direction (as specified by the South Coast Air Quality Management District) and utilize the information on predicted wind conditions to assist in the planning of operations at the landfill.
15. Landfill equipment and operators will be available (if necessary) on non-operating days for soil treatment and dust control.
16. A hydro-mulch blanket may be used to cover slopes for dust control and soil erosion purposes.
17. A 20-foot maximum cell height (which includes daily cover) will be utilized; this height will minimize the disturbances to the landfill site (longer period of operation on each cell provides for effective control of any fugitive dust).
18. Areas that are left inactive for 90 days or more will be treated with soil sealant and those areas monitored for continued compliance or treatment, as necessary.
19. As needed, rental equipment will be used to supplement site equipment.

B.7.1.4 VECTORS (27 CCR, SECTION 21600(b)(8)(E))

The following bird deterrent techniques have been implemented at Sunshine Canyon Landfill:

- Reducing availability of food supply: Minimizing the work area, and the compaction and daily cover of refuse reduces the availability of food to birds, and reduces the landfill's attraction of birds.
- Eliminating sources of water and nesting: Drainage controls which prevent ponding of water effectively eliminate potential water sources for birds.
- Noise-making bird guns: Blank-firing guns and other noise making devices are used by landfill personnel to intimidate birds and minimize their desire to land at the landfill.

- Use of falcons or other predator birds that deter birds from the landfill.
- Alternative methods as approved by the LEA.

The following landfill maintenance activities are implemented to discourage rodent and insect propagation and habitation:

- Compaction and daily cover of refuse with soil to eliminate rodent habitat and food.
- Covering wastes with compacted soil or an approved alternative, and minimizing the work area over which refuse is spread to prevent the emergence of flies from eggs present in household wastes.
- Monthly service by a rodent control contractor.
- Salvaged materials generated onsite or imported will be placed away from storage areas, other activity areas, and limited to a volume approved by the LEA, local land use authority, or other approval agencies, minimizing the harborage or attraction of flies, rodents, or other vectors. No scavenging will be allowed.
- Flies will be controlled at the site by a trap-and-destroy program. The use of sprays will be avoided to the fullest extent possible.
- Insect breeding such as mosquitoes will be minimized by preventing surface water ponding.

B.7.1.5 DRAINAGE AND EROSION (27 CCR, SECTION 21600(b)(8)(F))

The primary function of the surface water drainage and erosion control system is to minimize erosion, convey surface waters around the refuse cells and off the landfill in order to minimize potential infiltration of surface water into the refuse prism. The surface water drainage control system for SCL is designed to accommodate a 50-year, 96-hour storm event. The drainage system is comprised of drainage ditches and channels, various down-drain structures and desilting basins.

SCL County

Figure 17 shows the major existing stormwater management structures and features at Sunshine Canyon Landfill. On the County side, they consist of the following:

- Sedimentation Basin “D” located at the extreme northwest corner of the landfill, which currently receives and detains runoff from the undeveloped canyon areas north and west of the landfill. It has two outlets, one to the west and one to the east.
- The west perimeter maintenance corridor (PMC), a large concrete-lined trapezoidal drainage channel receiving runoff from the west side of the landfill and cut slopes to the west. It runs from the west outlet of Basin “D” to Basin “A” (described below).
- Sedimentation Basin “A” is located at the extreme west side of Phase III-B. It receives water from the west PMC and from the canyon immediately west of Phase III-B. It discharges to a 66-inch corrugated metal pipe (CMP) buried under the Phase III-B access road and soil stockpile, that in turn connects to a buried 78-inch CMP leading to the primary County sedimentation basin.
- The east perimeter channel, consisting of connecting segments of concrete channels, earthen channels, and pipes collecting runoff from canyons and cut slopes north and east of the landfill as well as drainage from easterly portions of the landfill. It begins at the east discharge of Basin “D” and terminates in pipes discharging to the existing primary sedimentation basin.
- Existing primary sedimentation basin, currently the collection point for all runoff from the SCL County and tributary canyons outside the landfill footprint. This basin also receives seep water collected in the subdrain system constructed below composite liners in the landfill. It discharges to a drainage system comprised of temporary and permanent channels and culverts which also receives runoff from the SCL City and conveys it under the SCL City access road to the terminal basin located near the site entrance. The terminal basin discharges through a concrete box channel underneath San Fernando Road into the Weldon Canyon Flood Control Channel, which is part of the City of Los Angeles flood control system.

SCL City

V-Ditches

Lined and unlined drainage diversion ditches (V-ditches) installed along the benches intercept surface runoff from native and developed landfill slopes. Diversion ditches will convey surface water runoff from native and landfilled areas to designated low points along each bench where pipe downchute inlet structures are located. Drainage is directed from the downchutes to the perimeter channels for conveyance around the SCL City footprint to the terminal

retention basin located adjacent to the main entrance of the landfill. V-ditches may be unlined or lined with erosion control fabric or concrete.

Downchutes

Downchutes convey collected surface waters from V-ditches installed along the benches down slope to perimeter surface water conveyance channels for routing to the terminal retention basin. Downchutes are located at designated low points along each bench. Downchutes are typically composed of corrugated steel pipe (CSP) or corrugated HDPE materials.

Conveyance channels will be sized to provide adequate hydraulic capacity to accommodate peak flow resulting from the 50-year, 96-hour burned and bulked design storm event.

Terminal Retention Basin

One primary retention (i.e., sedimentation/detention) basin has been developed within SCL City. This basin is designed to control both sediment loads, transported downstream by surface runoff, and to control peak discharge corresponding to the 50-year 96-hour burned and bulked design storm event.

The terminal retention basin has been designed to accommodate 10.5 acre-ft of sediment from the City portion of the Sunshine Canyon Landfill watershed. (The calculations assumed that sediment-free water discharges from the County sedimentation basin.) Basin sizing is based on calculations of debris storage volume and surface water runoff storage volume and provides peak flow attenuation to pre-project condition outflows. In addition the basin's capacity will be maintained by cleaning out any debris subsequent to a storm as rapidly as practical. Proposed drainage for the landfill expansion is discussed in Section C.3.8.

The onsite drainage control facilities should be free of debris and operational at all times. In order to provide the desired protection against flooding and erosion damage, routine inspections/maintenance of the drainage control system are conducted on a regular basis and prior to the rainy season.

B.7.1.6 LITTER (27 CCR, SECTION 21600(b)(8)(G))

SCL will use the most effective available techniques and methods to prevent litter from escaping the area. Daily litter collection is conducted both on and off-site in close proximity to the landfill. SCL may shut down operations during high wind conditions if, despite the application of the most effective available techniques and methods, litter cannot be confined to the site boundary.

The litter control program includes the following elements:

- Landfill personnel patrol the access road to the Scalehouse during operating hours.
- All loads are required to be covered, and improperly covered or contained loads, which may release litter, will be immediately detained and corrected before the load proceeds to the working face. If necessary, the load will be escorted to the working face.
- Maintenance of the active working face areas as small as possible (the City of Los Angeles [1999] requires that the working face area is smaller than 5 acres (2 ha)), given the type and quantity of landfill equipment.
- All litter found on or along the entrance and working face access roads will be immediately removed, if practical, or measures taken to remove said litter as soon as practical.
- To the extent practical, operating areas for waste disposal will be located in a wind-shielded area during windy periods.
- Litter fences will be installed in the operating areas.
- A neighborhood survey plan has been implemented to monitor surrounding areas for litter. A copy of this plan is available on site for regulatory agency review.
- Temporary personnel will be used, as necessary, to assist in litter control.

SCL requires all incoming refuse loads to be transported in closed vehicles or covered by a secure cover that prevents litter from escaping during transport.

The following notice is posted at the site entrance:

TARPS ARE REQUIRED

The State of California Vehicle Code (Section 23115) requires all vehicles hauling refuse or recyclables to be covered to prevent spillage from the vehicle.

Customers who repeatedly violate the policy requiring tarps or equivalent covers are barred from further use of the landfill.

Portable primary litter fencing (backstops, plastic and/or chain link) will be installed adjacent to the operating area to capture materials blowing off the working face. Manual labor and/or the use of vacuum truck(s) will be used to remove litter from the litter fences as soon as practical in order to maintain their effectiveness during windy periods. The use of portable secondary litter fences will be utilized as deemed necessary by the LEA and SCL to control litter in other areas of the landfill. The secondary litter fence will be considered if their effectiveness can be demonstrated during windy periods, especially at significant distances from the active working face where the litter is generated. As required, the existing perimeter fence will be retained to capture litter before it leaves the site.

Landfill employees will watch for any illegal dumping activities on or around the project site. The landfill litter control crew will provide cleanup service for areas within one-mile of the project site.

In accordance with current practice, SCL will mobilize cleanup crews on a weekly basis (or more frequently if needed) to provide litter control pick-up service in O'Melveny Park, along Balboa Boulevard, San Fernando Road and Old Sepulveda Road and in other areas in close proximity to the landfill. On a daily basis, a SCL employee inspects the surrounding area to assess whether a more frequent clean up is required. This program is provided to clean up any stray litter which may have dropped in the surrounding area, whether or not its source is related to landfill operations. The landfill is equipped with radio communications that will mobilize crews on a daily basis to respond to litter complaints and other complaints from the surrounding neighborhoods.

B.7.1.7 NOISE (27 CCR, SECTION 21600(b)(8)(H))

Pursuant to 27 CCR 20840, equipment noise is controlled by maintaining manufacturer-specified mufflers on site equipment. Hand-unloading users are protected from noise hazards by stationing them away from areas with operating equipment

B.7.1.8 ODOR CONTROL

The landfill is located in an area surrounded by an open space which provides a natural buffer to protect the public from landfill odors. On-site odor control measures address the principal potential sources of landfill odors, including uncovered waste, landfill gas and landfill liquids (leachate and condensate).

Odors from uncovered waste are prevented by:

- compacting waste within one hour of its arrival at the working face;
- placing daily and intermediate cover material over compacted waste;
- limiting the size of the working face so that the area of waste exposed to the atmosphere is minimized; and
- implementing special handling procedures for any unusually odorous waste loads (i.e. immediate burial).

Odorous landfill gas (LFG) emissions are monitored and controlled by activities of programs implemented pursuant to SCAQMD regulations. These measures include:

- extracting and destroying LFG using the LFG collection and recovery system;
- maintaining soil cover to prevent surface cracks or fissures that could allow LFG to be emitted to the atmosphere;
- implementing the LFG monitoring program.

If a gas-related odor problem should be identified at the site, additional control measures will be developed and implemented, such as applying additional cover or more frequent cover material, increased cover maintenance, or making improvements or adjustments to the landfill gas collection system.

Odors from landfill liquids are prevented by keeping leachate and condensate from being exposed to the atmosphere. They are kept in enclosed pipes and tanks while being extracted, treated and disposed.

B.7.2 GAS MANAGEMENT PLAN (27 CCR, SECTION 21600(b)(4)(E))

Landfills which receive organic wastes in some significant quantity eventually produce landfill gas. The decomposition of organic wastes within the refuse prism generates landfill gas as a by-product. This landfill gas generally consists of equal amounts of methane and carbon dioxide along with traces of other constituents. The production of landfill gas within the refuse cell is of interest primarily due to the explosivity of methane in concentrations between 5 and 15 percent by volume in air. Landfill gas controls are implemented to prevent surface emissions in excess of State and Federal regulations. State and Federal regulations also require the control of landfill gas to prevent it from migrating into onsite structures and beyond the landfill boundaries and accumulating in offsite structures.

Section C.3.7 discusses the proposed gas control and monitoring system modifications for the City/County Landfill expansion. As of September 20, 2007 new regulations for Gas Monitoring and Control at Active and Closed Disposal Sites became effective. For disposal sites which receive greater than 20 tons of waste per day compliance is required within one year from the effective date. Section B.7.2.5 includes a discussion of the SCL's compliance with these new regulations.

B.7.2.1 LANDFILL GAS COLLECTION SYSTEM

SCL County

Figure 18 shows the system of collection wells used to extract landfill gas and deliver it to the gas treatment system. The facility operates under a SCAQMD permit to construct and operate a network of vertical wells and horizontal collectors as required. Permit applications will be prepared and submitted to the

SCAQMD to increase the number of wells needed to manage landfill gas as additional landfill area is developed.

Vertical gas extraction wells are generally constructed using 6-inch diameter perforated PVC or HDPE pipe installed in a 24 to 36-inch diameter borehole filled with gravel and sealed using bentonite chips or other surface seals and HDPE pipe boots. Figure 19 is a typical extraction well construction detail.

Horizontal collectors at SCL County have typically consisted of perforated HDPE pipe placed near the perimeter of the landfill adjacent to the geonet drainage layer installed as part of the side slope liner system. These collectors have been shown to effectively collect gas migrating through the geonet. Similarly, gas extraction lines have been connected to leachate collection pipes in some disposal cells to collect gas migrating into the LCRS drainage media on the cell floor. In the future, horizontal collectors consisting of alternating lengths of different diameter corrugated metal pipes, or of perforated corrugated metal or HDPE pipes, may be installed in areas of the landfill and connected to the collection system. Vertical wells and horizontal collectors will be added and maintained as needed to comply with SCAQMD rules for surface emissions from landfills and to prevent lateral migration of landfill gas in accordance with SCAQMD rules and CCR Title 27.

The network of extraction wells and collectors is connected by a system of HDPE pipe headers to a loop transmission line that allows gas from any part of the landfill to be delivered to either of the two flare stations on the SCL County.

SCL City

A comparable network of extraction wells and collectors is installed in the inactive Unit 1 City Landfill. A twelve-inch pipeline connects the City and County collection systems, allowing gas from the City system to be delivered to the County flare stations as well as to the dedicated SCL City flare station (Flare Station No. 1).

The existing SCL City landfill gas collection system consists of six (6) vertical wells and one layer of horizontals on top of the operations layer connected to the existing gas extraction and flare system described in Section B.7.2.2.

B.7.2.2 FLARE STATION

SCL City

The existing flare station, located within the City of Los Angeles portion of the Sunshine Canyon Landfill (Flare Station #1, Figure 8), is enclosed in a well-secured, fenced area of approximately 0.5 acre. The existing flare system is a McGill flare capable of processing approximately 4,160 standard ft³/min (scfm) of landfill gas (LFG). The flare is equipped with a process skid that includes two Lampson blowers, liquid knock-outs and associated control. The Flare Station #1 system includes a cylindrical-shaped, insulated metal flare shroud, approximately 13 feet in diameter and 50 feet in height. The gas flaring system contains automatic shutdown and alarm systems and automatic combustion, air-regulating, and temperature controllers. When the flare is in operation, a typical temperature of 1,600 degrees Fahrenheit is maintained in the flare stack. The flare stack is designed to contain the flame internally within the cylindrical stack. Future flare systems are expected to be similar to existing systems. Emissions from the combustion process will be released into the atmosphere in compliance with SCAQMD regulations. Ports are provided in the flare to allow for the sampling of raw gas and incinerated emissions to source test the flare, evaluate its performance, fine-tune the flare system, and maintain compliance to SCAQMD regulations. Each flare station will undergo an annual source-testing program conducted in accordance with SCAQMD source test procedures.

LFG entering the flare will be analyzed in accordance with SCAQMD operating permits. The testing results will be recorded and provided to SCAQMD upon request. If a breakdown or malfunction of the LFG flare system results in the emission of raw gas, BFI is required to report the occurrence in accordance with Rule 1150.1 [SCAQMD, 1998] within one (1) hour to SCAQMD's Director of Enforcement. Remedial measures are required to be undertaken immediately to correct the problem. Flare station safeguards include an automatic alarm and notification system, automatic blower, and an LFG collection system automatic

shutoff valve system. The alarms provide indication of a flare flame out, low flare stack temperature, high flare stack temperature, excessive vibration, or low blower discharge pressure and generally notify landfill personnel via auto dialer systems.

SCL County

Landfill gas from the SCL County is incinerated in two flare stations, designated Flare Station No. 3 and Flare Station No. 8. Flare Station No. 3 is located on a ridge west of the landfill, and Flare Station No. 8 is located on the ridge north of the landfill. Each flare station has a capacity to treat up to 4,167 standard cubic feet per minute (scfm) of landfill gas. They are operated in accordance with permits to operate issued by the SCAQMD, including a requirement for annual emissions and performance testing. Flare stations are equipped with emergency notification systems capable of alerting gas system management personnel immediately in the event of an operational upset.

The above systems are operated in accordance with the maintenance plan titled, "Landfill Gas Management Operations and Maintenance Standard Operating Procedures," which provides for periodic inspections and servicing of the landfill gas control equipment. This document is maintained onsite. This manual is maintained and kept current to reflect any expansion or modifications to the gas control system. The systems described above will be expanded as the landfill is developed to provide ongoing control within the performance criteria established and mandated by the SCAQMD and State and Federal regulations as further discussed in Section C.3.7.

B.7.2.3 PERIMETER GAS MIGRATION MONITORING SYSTEM

SCL City

The perimeter probe gas monitoring points for SCL City consist of a series of 20-multi-depth perimeter gas monitoring probes installed around the final footprint of the landfill (i.e., P-213 through P-231) to meet the regulatory requirements contained in Sections 20923 and 20925 of Title 27 of the CCR and

MMRP Condition No. 34(a)⁴ [Los Angeles City, 1999]. The multi-depth gas monitoring probes are installed around the SCL City property boundary at the locations shown on Figure 20.

SCL County

A network of gas monitoring wells has been installed around the perimeter of the SCL County waste footprint in conformance with requirements of the Rule 1150.1 Compliance Plan approved by the South Coast Air Quality Management District (SCAQMD). The network consists of 12 multi-depth probes (i.e., P-201 through P-212), each of which allows sampling from three different depths. Existing gas probes are shown on Figure 20.

Temporary gas probes are installed as needed to monitor special situations, such as when soil stockpiles or soil buttresses are placed above the limits of previously landfilled waste, such that landfill gas could migrate through the stockpiled soil beyond the waste perimeter. The LEA will be notified in advance of placing temporary probes under these conditions, and monitoring results will be included in routine monitoring reports. Temporary probes will be abandoned when authorized by the LEA. Appendix I contains the current temporary gas probe monitoring plan.

The network will be modified as the perimeter of the landfill is expanded under the proposed consolidation of the two landfills. Approximate locations of probes at ultimate build-out including future additional probes and abandonment of existing probes in development areas are shown on Figure 20.

Monitoring Parameters

The field monitoring parameters for the perimeter gas monitoring points consist of Total Organic Compounds (TOCs) measured in the field as methane. The

⁴ Mitigation Measure No. 34(a) states that "One monitoring probe per 1,000 or as identified by South Coast Air Quality Management District and/or Local Enforcement Agency in the landfill expansion and one probe per 650 feet or as identified by South Coast Air Quality Management District and/or Local Enforcement Agency in the City Inactive landfill along the landfill perimeter, or which ever is more restrictive, shall be installed to identify potential areas of subsurface landfill gas ("LFG") migration..."

laboratory monitoring parameters consist of methane, non-methane hydrocarbons, and the core group compounds listed in SCAQMD Rule 1150.1.

Sampling Methodology and Frequency

Field measurements of concentrations of TOCs as methane, at each gas monitoring point are conducted using an approved portable gas monitoring instrument, such as a Flame Ionization Detector (FID) or a Combustible Gas Indicator (CGI), or equivalent monitoring equipment. Probe testing is performed using procedures described in the SCAQMD Rule 1150.1 guidelines. Field measurements are conducted on a monthly basis.

In addition, gas samples are collected and analyzed in a laboratory on a quarterly basis. The quarterly samples are selected based on the corresponding monthly field screening measurements obtained with the FID or CGI. Gas samples are collected from the perimeter gas monitoring points exhibiting field TOCs concentrations greater than 5% (by volume). If no perimeter probe monitoring points have a TOCs concentration greater than 5% (by volume), the gas monitoring point with the highest reported field TOCs concentration is selected for sampling. The gas samples collected each quarter are analyzed for the monitoring parameters described above.

Data Analysis and Response

Should the field TOCs and laboratory methane concentrations in gas samples collected from a monitoring point exceed 5% (by volume), BFI will adjust and/or enhance the LFG system to control landfill gas and increase recovery, as needed. The system will be adjusted and/or enhanced until follow-up field monitoring indicates that the exceedance at the monitoring point of concern has been reduced to acceptable levels.

As required by Section 20919.5(c) of Title 27 of the CCR, if the concentration of methane gas exceeds the lower explosive limit (LEL) for methane at the facility property boundary (i.e., in the perimeter probes), BFI will:

- immediately take all necessary steps to ensure protection of human health and notify the LEA by telephone or electronic means;
- within 7 days of detection, verify validity of results by reviewing the following:
 - probe readings;
 - possible liquid interference;
 - control well influence; and
 - barometric pressure effects.
- place in the operating record a description of and submit a letter to the LEA that describes:
 - the levels of methane and trace gas detected;
 - a brief description of the nature and extent of the problem based on information currently available;
 - the steps the operator has taken to protect public health and safety and the environment; and
- a brief description of any further corrective actions that the operator or others need to take to adequately protect public health and safety and the environment prior to the implementation of the remediation plan.
- Within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the LEA that the plan has been implemented. The plan will describe the nature and extent of the problem and the proposed remedy.

Reporting

Provided that the results of the landfill gas monitoring demonstrate that none of the monitoring wells show gas concentrations in excess of the requirements, the perimeter probe gas monitoring results will be submitted to the SCAQMD and the LEA in accordance with the reporting frequency presented in Table 17, but no more than within ninety (90) days of sampling. The monitoring reports include:

- the concentrations of methane as measured at each probe within each well and within each on-site structure;
- the concentrations of specified trace gases, if required by the LEA;
- the documentation of date, time, barometric pressure, atmospheric temperatures, general weather conditions, and probe pressures at the time the sample was taken or the probe was monitored;

- the names of sampling personnel, apparatus utilized, and a brief description of the methods used; and
- a numbering system to correlate monitoring results to a corresponding well and probe location.

B.7.2.4 ADDITIONAL MONITORING

This section describes activities implemented by BFI to meet the landfill gas migration requirements of Title 27 of the CCR and South Coast Air Quality Management District (SCAQMD) relative to surface emissions of landfill gas. It consists of two basic types of monitoring: subsurface gas migration monitoring using perimeter gas probes as discussed above and surface emissions monitoring. Structure monitoring is also discussed in this section.

Surface Emissions Monitoring

SCAQMD Rule 1150.1 requires that gaseous organic compounds escaping at any point on the refuse fill surface be less than 500 parts per million by volume (ppmv). Landfill surface emissions are monitored monthly using a flame ionization detector. Gas extraction wells, drainage structures, and other structures are also monitored for leaks. If total organic carbon (TOC) readings of greater than 500 ppm are found at any point on the landfill, mitigation measures, such as adjusting the LFG collection system or maintaining the soil cover system, are taken and the area is re-tested to verify that emissions are below 500 ppm.

Structures Monitoring

Pursuant to 27 CCR 20930, BFI monitors on-site structures for explosive gases, to prevent concentrations of methane from exceeding 25 percent of the lower explosive limit in any structure. Continuous gas monitors with alarms are installed in the administration building, the leachate plant control building and the employee services building. To date, no significant methane concentrations have been detected. In the event an exceedance of the maximum permissible level occurs, the affected structure will be evacuated of personnel until additional ventilation has restored levels below 25 percent of the explosive limit. Studies will be undertaken to identify the cause of the incident and determine

what remedial measures should be taken to prevent its recurrence. The remedial plan will be implemented and placed in the site's operating record within 60 days, and the LEA will be notified as provided in 27 CCR 20937(c).

B.7.2.5 PERIMETER MONITORING NETWORK REGULATORY COMPLIANCE (27 CCR, SECTION 20925 (a) through (d))

In compliance with the recently enacted (September 2007) regulations in 27 CCR, Section 20925, a complete review of existing and proposed gas migration monitoring probes was made to compare the system with the requirements of the new regulations. Following is a discussion of the review.

Location

27 CCR, Section 20925(a) requires that the probes be located outside the refuse footprint and at or near the disposal site permitted facility boundary. All existing and proposed probes are located outside the refuse footprint boundary. However, a majority of the probes are not located at or near the disposal site permitted facility boundary which in most cases is separated from the refuse footprint by a substantial buffer area (Figure 10). Because the SCL is located in a canyon area, the terrain surrounding the footprint is very steep and heavily vegetated and would require significant construction of access roads and drilling pads in order to place the probes at or near the facility boundary. This would create significant environmental issues in its own right. Because of this, the probes have been placed closer to the permitted refuse limit. As allowed in 27 CCR, Section 20925(a)(2), the operator may establish an alternate boundary closer to the waste disposal footprint. Should compliance levels be exceeded at the alternate boundary, BFI will install additional monitoring probes closer to the permitted facility boundary as feasible.

Spacing

27 CCR, Section 20925(b) indicates that the lateral spacing of the probes shall not exceed 1,000 feet unless the operator can demonstrate that there is no potential for adverse impacts to the public health and safety and the environment from wider spacing. The majority of the probes around the

perimeter of the SCL currently meet the spacing requirement with the exception of probes P-208, P-209 and P-210 which have a spacing of 1086 feet and 1046 feet and probes P-203, P-204 and P-205 which have a spacing of 1071 feet and 1482 feet (see Figure 20 of Appendix W). ~~BFI does not propose to adjust this spacing since these probes are adjacent to areas of open space with no inhabitable structures within 1,000 feet of the permitted boundary nor any man made pathways (Figure 10).~~ Probes GP-4 and GP-5 will be added to the network to replace P-209 and probes GP-6 and GP-7 will be added to ensure spacing of less than 1,000 feet along the west side of the County portion of the landfill.

Proposed probes GP-1, GP-2, GP-3, GP-8, GP-9 and GP-10 ~~through GP-5~~ have been located to replace probes that will be removed as part of the landfill expansion (see Figure 20). Probe GP-1 will be placed immediately upon approval of the SCL City/County consolidation to maintain the required spacing between probes P-212 and P-213. Probe GP-2 and GP-3 will be installed as part of Phase I of the consolidation and will replace probes P-211 and P-212. On July 31, 2007 the County of Los Angeles LEA approved decommissioning of probes P-211 and P-212 to allow for construction of Phase V of the County Extension landfill and that replacement probes P-239 and P-240 would be installed upon completion of Phase V Part B. Proposed probes GP-2 and GP-3 are to be placed where previously approved replacement probes P-239 and P-240 were to be placed. Probes P-211 and P-212 will not be fully decommissioned until replacement probes have been installed. Probe GP-4~~8~~ will be placed as part of Phase IV and will replace probes P-201 and P-202, ~~and p~~Probe GP-9~~5~~ will be placed as part of Phase V and will replace probes P-230 and P-231, and probe GP-10 will be placed as part of Phase III and replace probe P-218.

Depth

27 CCR, Section 20925(c) lists the requirements for the depths of perimeter gas probes. The number and depths of monitoring probes within the wellbore shall be installed in accordance with the following:

- a shallow probe shall be installed 5 to 10 feet below the surface;
- an intermediate probe shall be installed at or near half the depth of the waste;

- a deep probe shall be set at or near the depth of the waste;
- the specified depths of monitoring probes within the wellbore shall be adjusted, based on geologic data obtained during drilling, and probes shall be placed adjacent to soils which are most conducive to gas flow;
- all probes shall be installed above the permanent low seasonal water table, above and below perched groundwater, and above bedrock; and
- when the depth of the waste does not exceed 30 feet, the operator may reduce the number of probes to two, with one probe located in the shallow zone as indicated above, and the other located adjacent to permeable soils at or near the depth of the waste.

Exclusions or modifications to the above requirements may be requested pursuant to the regulations. Both existing and proposed probe depths have been evaluated via the probe construction logs (see Appendix W), ~~and the elevation of waste in the proximity of the probes and the elevation of regional groundwater below the probes.~~ GeoLogic Associates (GLA) evaluated the depth of the probes in their memorandum dated May 12, 2008 (see Appendix W). With regard to the maximum individual probe depths, it was noted that a number of the probes do not extend to the depth of the adjacent waste prism. In most cases this is the result of the fact that groundwater was encountered before waste depths were achieved. Probes that do not extend to the base of the landfill and did not encounter groundwater include: P-201, P-202, P-203, and P-205 through P-212. Of these, probes P-201, P-202, P-207, P-211 and P-212 will be replaced with appropriately positioned probes as part of the proposed site development (see Figure 20). In addition, it was noted that probes P-203, P-205, P-206, P-208 and P-210 plot near or below the projected line of groundwater elevation and are likely to have penetrated to very near the groundwater surface. Only probe P-209 appears to have been placed above the inferred elevation of groundwater; however, in order to maintain the 1,000-foot spacing this probed is to be abandoned and replaced with proposed probes GP-4 and GP-5 (see Figure 20). Proposed probes GP-1 through GP-10 will be drilled to either groundwater or the depth of adjacent waste, whichever is encountered first where the deepest completion will be constructed. (Figure 1 of Appendix W). Table 24 summarizes the results of this evaluation and requests exclusions or modifications as applicable.

Placement in Gas Permeable Zone

GLA evaluated the lithologic materials in which the existing probes have been placed based on the boring logs included in Appendix W. Based on GLA's evaluation (see Appendix W), bedrock below the landfill is generally characterized as the Towsley Formation which consists generally of interbedded siltstones, sandstones, and conglomerates which range from poorly to well-cemented. Because the area is seismically active, rocks have been folded and faulted into a complex structure that is highly fractured, contains complex folding and discontinuities in bedding. Based on this information GLA believes that fracture systems are the primary mode of transport for landfill gas and groundwater and that, on a scale of tens or hundreds of feet, vapor and groundwater flow through fractures will approximate flow through a porous media. Based on this, GLA concluded that the lateral placement of probes as well as gas probe depths based on a systematic spacing are likely to be as effective as probes located on the basis of targeted beds (i.e., sandstone rather than siltstone) and that the approximately uniform lateral distribution of well casings and vertical distribution of probe completions at each well location is appropriate.

Monitoring Well Construction

In accordance with 27 CCR, Section 20925(d), all monitoring wells at the SCL have and will be drilled by a licensed drilling contractor or by a drilling crew under the supervision of the design engineer or engineering geologist and the wells logged by a geologist or geotechnical engineer as included in Appendix W. The wells logs include the names of the person(s) logging the hole and as -built description. A seal of a minimum of 5-feet of bentonite is provided at the surface and between the monitored zones. A map of the location of all existing and proposed probes is included in the JTD as Figure 20.

B.7.2.6 GAS CONDENSATE COLLECTION SYSTEM

LFG condensate is removed by gravity from the header system, through a series of condensate collection sumps and pipes placed at low points, and conveyed to condensate sumps or holding tanks, where pumps convey the LFG condensate

to condensate storage tanks. The condensate pump stations are designed to allow the collected condensate to be removed from the LFG collection system while maintaining adequate vacuum within the LFG collection headers. LFG condensate that drains to the LCRS sumps is pumped out of the landfill and treated at the leachate treatment facility. In accordance with RWQCB Order No. R4-2007-0023 for the County Extension portion of the SCL, collected condensate from the County Extension portion of the SCL may be discharged into the landfill mass in areas that are equipped with a double composite liner system (see Appendix D). Alternatively, if approved by appropriate regulatory agencies, LFG condensate could be discharged to the sewage system or could be injected into the flare system for evaporation. The total amount of condensate conveyed to the treatment system is recorded daily into a log book.

A typical condensate sump is shown as Figure 21. As the gas collection system is expanded, exact locations and construction details of additional condensate sumps will be included on construction-level LFG extraction system design plans to be submitted to the applicable regulatory agencies for review and approval.

B.7.2.7 ENERGY RECOVERY

BFI has explored the potential for energy recovery from landfill gas at Sunshine Canyon Landfill. To date an economically viable program has not been identified. During 2004-05 a tentative agreement with a third party was reached for off-site industrial use of landfill gas, and studies were initiated related to pipeline right-of-way and permit issues. BFI will continue to pursue this and other potential beneficial uses of landfill gas.

B.7.3 GROUNDWATER MONITORING

The current water quality monitoring program for the SCL was developed to comply with 27 CCR, Article 1, requirements as implemented through site-specific WDR, Order No. R4-2003-0155 for the SCL City and WDR Order No. R4-2007-0023 for the SCL County, issued by the Los Angeles RWQCB. The existing and future water quality monitoring system has been and will be designed and certified by a registered geologist or registered civil engineer in accordance with 27 CCR, Section 20415(e)(1).

Specifically, the water quality protection standards include: establishment of monitoring systems for groundwater, surface water and the unsaturated or vadose zone, including background and compliance monitoring points for each medium; constituents of concern; monitoring parameters; and a monitoring protocol and compliance period.

The overall objectives of the water quality monitoring system for SCL are to:

- Characterize background groundwater quality.
- Detect changes in water quality that may result from changes in groundwater recharge or possible landfill leakage or landfill gas impacts.
- Monitor groundwater elevations and gradients to determine groundwater flow directions and velocities around the SCL.
- Monitor the effectiveness of the implemented Corrective Action Program (CAP) and make recommendations for subsequent changes and/or improvements.

The groundwater monitoring points discussed in the following sections were established for the two site-specific WDRs (SCL City and SCL County) in compliance with 27 CCR, Article 1, and reflect the following: the results of hydrogeologic investigations and previous/present groundwater monitoring; existing site conditions; the Detection Monitoring Programs (DMP) and CAP; and the RWQCB and CIWMB requirements regarding subsurface vadose zone monitoring. It is anticipated that a single unified Monitoring and Reporting Program (M&RP) will be developed for the consolidated city/county landfill and incorporated into new WDRs issued by the RWQCB. The new M&RP will include a comprehensive water quality monitoring network that will eliminate any duplication or overlap between the two current systems as the site is developed.

B.7.3.1 GROUNDWATER MONITORING SYSTEMS

SCL City

As shown on Figure 22, the groundwater monitoring network for the City Landfill Unit 1 and SCL City consists of the following wells: MW-1, MW-2A, MW-2B, MW-5, MW-6, MW-9, MW-13R, MW14, DW-1, DW-2, DW-3, and DW-4. Compliance groundwater monitoring is also currently conducted at the SCL City groundwater extraction trench. These 13 monitoring points (12 wells and 1 trench monitoring point) represent the current groundwater monitoring network for the SCL City pursuant to RWQCB Order No. R4-2003-0155 and RWQCB Monitoring and Reporting Program (M&RP) No. CI-2043. There are currently no upgradient groundwater monitoring wells at the SCL City. This system differs from that previously presented in the 2003 JTD for the SCL City. Changes to the groundwater monitoring system have been made gradually over time as the landfill has been developed. These changes have been documented through correspondence between the RWQCB and BFI as well as through annual monitoring reports submitted to the RWQCB. BFI will continue to modify the facility's groundwater monitoring network as necessary to reflect any future changes required by the RWQCB or to Order No. R4-2003-0155 and M&RP CI-2043.

SCL County

The current groundwater monitoring well network for the SCL County includes six groundwater wells (see Table 7). Monitoring Wells CM-9-R3, CM-10, and CM-11R are located upgradient of the SCL County within the Northwest, North, and Southwest Canyons, respectively. They serve as the current background monitoring points for the facility. Monitoring Wells CM-15, CM-16, and CM-17 are located downgradient of the SCL County and represent the current POC wells for the facility. During 2005, construction activities associated with Cell A of SCL City were initiated in the area just south of the SCL County primary sedimentation basin. As a result of these construction activities, the facility's then current POC groundwater monitoring wells MW-11 and CM-14 required decommissioning and replacement. Monitoring Wells CM-15, CM-16, and CM-17 were then installed as replacements for former POC wells MW-11 and

CM-14.

POC monitoring wells CM-15, CM-16, and CM-17 have been installed as temporary POC monitoring points. Once construction activities commence in that area, these wells will be decommissioned and subsequently replaced per the new well system to be developed as part of the new M&RP to be issued by the RWQCB for the combined City/County landfill. It is anticipated that subsequent monitoring for the SCL County will be conducted along the new POC established for the combined City/County Landfill.

B.7.3.2 VADOSE ZONE MONITORING SYSTEM

SCL City

The vadose zone monitoring points for SCL City consist of:

- A series of 20 multi-depth (three-depth) perimeter vadose zone gas monitoring probes installed around the final footprint of the landfill (i.e., P-213 through P-231);
- the termination points of the subdrain system installed below the elevation of the bottom of the waste and below the containment system to monitor the vadose zone below the landfill; and
- the leak detection systems (LDS) between two liner systems in both leachate sumps (i.e., Cells A and C).

The locations of the 20 multi-depth vadose zone monitoring points are shown on Figure 20.

In addition to the multiple-depth vadose zone gas monitoring probes described above, additional monitoring of the vadose zone is performed using the termination points of the subdrain system. The final subdrain system alignment will be determined in the field based on the presence of observed springs and seeps encountered during construction.

Lysimeter liquid monitoring is conducted via lysimeter LY-7 provides monitoring of conditions between the primary and secondary liners of the SCL City Unit II,

Cell A leachate sump. Lysimeter LY-7 is accessed from the east side of Cell A through a 360-foot long inclined riser pipe. The location of lysimeter LY-7 is shown on Figure 22.

BFI also monitors the presence of liquid in the LDSs on a quarterly basis.

SCL County

The current vadose zone monitoring program for the SCL County includes subdrain liquid-quality monitoring, lysimeter liquid monitoring, and landfill gas monitoring. BFI routinely monitors the quality of subdrain liquids beneath the SCL County. Subdrain liquids originate from springs and seeps in the canyon bottoms and walls that are exposed during landfill construction. These liquids are considered representative of conditions in the unsaturated zone¹ beneath the landfill liner and provide a method of liquid recovery-type unsaturated zone monitoring as required under 27 CCR, Section 20415(d)(4).

Fourteen subdrains have been constructed to date at the SCL County (see Figure 22). Subdrains A, B, and C underlie the existing waste footprint of Phases I, II, and III. Subdrains E, F, J, K, L, Q and R underlie the Phase IV disposal area. Subdrains E and F underly portions of the proposed Phase V disposal area. Subdrain D is located beneath the downgradient side of the SCL County grout curtain, south of Phase I. Subdrain D, located beneath an area of the facility which has not yet been used for waste disposal, and subdrain N, located at the northern end of the SCL City sedimentation basin, are not part of the subdrain liquid monitoring program. There are eleven subdrain monitoring points including A, B, C, D, E, F, J, KL, N, Q and R.

Lysimeter liquid monitoring is conducted on a quarterly basis as part of the vadose zone monitoring program for the SCL County. During each quarterly monitoring event, one lysimeter (designated as LY-6) is initially monitored for the presence or absence of accumulated liquids. If sufficient liquids are present, a sample is collected and analyzed, as feasible, for each of the COC listed in

¹ 27 CCR, Section 20164, defines the unsaturated zone as "the zone between the ground surface and the regional water table or, in cases where the uppermost aquifer is confined, the zone between the ground surface and the top of the saturated portion of the aquifer's confining layer."

Table 8. Lysimeter LY-6 provides monitoring of unsaturated zone conditions beneath the Phase IV leachate sump and is accessed from the east side of the Phase IV disposal area through a 252-foot long inclined riser pipe. The location of lysimeter LY-6 is shown in Figure 22.

WDR Order No. R4-2007-0023 requires that BFI conduct landfill gas monitoring at the SCL County as part of the facility's ongoing vadose zone monitoring program. Gas migration monitoring for the SCL County is currently conducted at 12 permanent gas migration monitoring probes. Each probe is constructed to allow monitoring at three discrete depths. The locations of the existing perimeter gas monitoring probes are shown in Figure 20.

Vadose zone gas monitoring is also conducted, when feasible, at five subdrain outfalls located at the SCL County primary sedimentation basin (Subdrain Termination Points P-203D, P-204D, P-207D, P-208D, P-211D, and P-212D). The locations of these vadose zone gas monitoring points are shown in Figure 22.

B.7.3.3 CORRECTIVE ACTION PROGRAM FOR UNSATURATED ZONE IMPACTS

SCL County

Liquids from Subdrains A, B, C, and J have been determined to contain landfill-related VOC constituents in concentrations exceeding background groundwater concentrations. Methane and other gas constituents typical of landfill gas have also been detected at elevated levels in the SCL County subdrain system. Based on substantial testing and sampling, BFI has tentatively identified the source of VOCs in subdrain liquids as landfill gas present in the subdrain system. To date, the impacts appear to be confined primarily to liquids within the SCL County subdrain system. There is no evidence of landfill impacts to groundwater downgradient of the SCL County.

RWQCB Order No. R4-2007-0023, adopted April 5, 2007, establishes required actions for mitigating the affects of migrating landfill gases on subdrain liquids beneath the SCL County. A copy of RWQCB Order No. R4-2007-0023 is presented in Appendix D. During the 2004 and 2005 annual monitoring periods, BFI is required to conduct site activities as specified in Sections H.1

through H.4 of Order No. R4-2007-0023, to assess monitor, and reduce the effect of low level VOCs in subdrain liquids beneath the SCL County. Provision H.1 of Order No. R4-2007-0023 requires that BFI continue to collect and manage all VOC impacted subdrain liquids. Provisions H.2 and H.3 of Order No. R4-2007-0023 requires that BFI take adequate measures to prevent landfill gas from entering the subdrain system beneath the SCL County. The prevention of landfill gas in the subdrain system is a RWQCB requirement only and is not regulated by or reported to the CIWMB. Results of vadose zone monitoring and related remedial activities required at the SCL County pursuant to Order No. R4-2007-0023 are presented in the semi-annual and annual groundwater monitoring reports submitted to the RWQCB.

B.7.3.4 SURFACE WATER MONITORING

A series of subdrains were constructed below the containment system to collect water from springs and seeps encountered during development of SCL City. These fluids are collected and either discharged to the City sewer or treated and used for dust control on-site due to contaminants migrating from the unlined City Landfill Unit 1 (Figure 22). Design of the future cells adjacent to the unlined City Landfill Unit 1 will include a collector trench or other conveyance to capture and remove liquids before they can mingle with subdrain water under the lined units (see Section C.3.3.1). The current number of subdrain monitoring points is two which corresponds to the number of outfall points. Any additional subdrain outfalls constructed as part of the City/County expansion will also be monitored.

MRP CI-2043 requires that BFI perform semi-annual monitoring of stream water quality at the SCL City. During each semi-annual monitoring event, stream water samples are collected at the four pre-established monitoring stations (i.e., S-AR, A-B, S-C and S-D) shown on Figure 22. Samples are collected and analyzed, as feasible, based on the stream water flow conditions existing at the time of the semi-annual monitoring event.

Subject to requirements of Stream Bed Alteration Agreement No. R5-2003-0005, adopted by the California Department of Fish and Game (CDF&G), BFI is required to conduct periodic monitoring of stream water quality at a diversion discharge point (CHRV-1) in the vicinity of Cell A construction area. Consistent

with Stream Bed Alteration Agreement No. R5-2003-0005, the results of the stream diversion monitoring activities are submitted to the CDF&G in weekly submittals. Although not a specific requirement of MRP CI-2043, RWQCB staff have requested that the stream diversion monitoring results be tabulated and included in the facility's semi-annual monitoring reports.

B.7.3.5 LEACHATE-QUALITY MONITORING

SCL City

The SCL City leachate is monitored in accordance with the WDR issued by the RWQCB and as required by the wastewater treatment plant if leachate is to be discharged into the City of Los Angeles sewer system. Testing is performed by a laboratory, which has been certified by the California Department of Health Services.

SCL County

Section B.II.11 of MRP CI-7059 require that BFI conduct leachate-quality monitoring and related retesting for the SCL County on at least an annual basis. Annual monitoring is to be completed during October, with follow-up retesting to be conducted the following April. Annual leachate samples for the SCL County are collected from a mixture of the combined flow from Phases I through IV. Samples are collected from the existing leachate sump indicated on Figure 15. As additional phases are constructed under the consolidated landfill, samples will be collected from the new sumps and monitored in accordance with the new WDR issued by the RWQCB, which should be similar to current requirements.

B.7.3.6 MONITORING OF ONSITE WATER-USE

MRP CI-7059 for the County and MRPCI-2043 for the City requires that BFI record, on a monthly basis, the sources and volumes of waters used for dust control and irrigation at the landfill. In addition, any such waters (except potable waters) are to be monitored on a quarterly basis for pH, heavy metals, nitrate, and VOCs and must meet drinking water standard established for these

constituents. The current waste discharge requirements for the SCL County (RWQCB Order R4-2007-0023) contain additional water-use concentration limits related to heavy metals, VOCs, semi-volatile organic compounds, chemical oxygen demand, and oil and grease.

B.7.3.7 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
STORMWATER MONITORING PROGRAM (SMP)

BFI monitors storm water discharges at Sunshine Canyon Landfill in conformance with Waste Discharge Requirements under General Permit No. CAS0000001 issued by the California State Water Resources Board pursuant to requirements of the National Pollutant Discharge Elimination System (NPDES). A Stormwater Pollution Prevention Plan (SWPPP) and Stormwater Management Plan (SMP) have been prepared for the landfill as part of the State's NPDES General Permit requirements for stormwater inspection, sampling, observations and reporting. The monitoring program approved by the RWQCB for SCL under the Permit includes the following elements:

- Visual observations of storm water discharges and collection of storm water samples for at least two rain events during the wet weather season. Samples are analyzed for pH, total suspended solids, specific conductance, oil and grease, total organic carbon and iron. Observations and sample collection are conducted at the site's storm water monitoring point near San Fernando Road.
- Visual observations are conducted at areas of the site where potential pollution may originate or first be noticed, on a quarterly basis and monthly during the rainy season from October through April. Areas observed include the primary sedimentation basin, maintenance area, household hazardous waste storage area, hand unload recycling area, fueling area, administration area, leachate treatment plant area, and the v-ditch on the city-side landfill along the haul road into the site. Visual observations include: date; time; weather conditions; storm water discharge (yes/no); continuous discharge (yes/no); sheen or discoloration; turbidity; odors; floating material, and miscellaneous comments.
- An annual comprehensive site compliance evaluation is performed as required by the site's Storm Water Pollution Prevention Plan.
- Reports are submitted annually to the RWQCB.

- Grab samples will be collected of the storm water discharge in accordance with the General Permit. The grab sample will be analyzed for the constituents identified in the NPDES General Permit issued by the RWQCB.

B.7.3.8 REPORTING

BFI conducts compliance monitoring and submits associated reports in accordance with WDRs for the SCL. BFI also submits semi-annual CAP and DMP monitoring reports, semi-annual general monitoring reports and annual compliance statements.

B.7.4 **TRAFFIC (27 CCR, SECTION 21600(b)(8)(I))**

Six freeway systems will be utilized to transport solid waste materials to the SCL. Approximately 95 percent of the refuse being transported to the project site will use one of these existing freeway systems. All traffic will enter the project site via San Fernando Road from one of eight main access routes, including: (i) north along I-5 Freeway; (ii) south along SR-14; (iii) west along the Foothill (I-210) Freeway; (iv) southeast along I-5 Freeway; (v) north along the San Diego (I-405) Freeway; (vi) east and west along the Simi Valley-San Fernando Valley (SR-118) Freeway; (vii) north on San Fernando Road; and (viii) north on Balboa Boulevard to San Fernando Road (this route is restricted to light vehicles only, weighing less than 6 tons, except for refuse collection vehicles that serve the local communities) [UEI, 1997].

Refuse vehicles, personnel, and deliveries to the SCL will access the site via the proposed access road shown on Figure 6 and further described in Section C.3.6. Based on the traffic impact analysis included in the SEIR which was subsequently summarized in the County Addendum to the SEIR, as many as 1265 vehicles per day including transfer trucks, curbside collection trucks, local delivery trucks, and vendor and employee vehicles will utilize the SCL on a daily basis. Approximately six to eight scales will be installed as part of the proposed access road. Traffic from the scales house to active working face will be routed as follows:

- vehicles will enter the site at the main entrance gate;

- vehicles will follow the proposed asphalt concrete paved access road up to the proposed scale facilities;
- vehicles will be weighted and a disposal ticket processed;
- vehicles will be directed to the active disposal area by the scale house operator, traffic directors, or signage;
- beyond the scales, vehicles will follow asphalt concrete paved access roads to the landfill haul roads, landfill haul roads will be constructed as operations progress to each disposal cell with sufficient signage, traffic control personnel, and other traffic controls as may be necessary (i.e., concrete barriers, traffic cones, and temporary fencing) to ensure safe access to the active working face; and
- once wastes are unloaded at the active working face, vehicles will be directed back to the haul roads and access road for exit from the site:
 - vehicles that access the site on a routine basis will have their empty weight (i.e., tare weight) stored in the computerized scale system and will exit the site without returning the scale facility; and
 - vehicles without a stored tare weight will be directed back to the scale house for further processing and eventual exit from the site via the access road.

Control of traffic to minimize interference and safety problems leaving and entering the site have been addressed as part of the mitigation measures included in measure 8.0 of the SCL Mitigation Monitoring and Reporting Summary for Conditional Use Permit 00-194(5) and Oak Tree Permit 86-312(5) (see Appendix T). These measures have either been implemented or are being implemented throughout fill operations.

B.7.5 HAZARDOUS WASTE (27 CCR, SECTION 21600(b)(8)(J))

A Hazardous Waste Screening Program (HWSP) for the SCL was implemented to complement the load checking program (see Appendix H) and comply with state and federal regulations under 27 CCR, Sections 20220 and 20870. These regulations state that "Owners or operators of all Municipal Solid Waste Landfill (MSWLF) units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes as defined in Part 261 of this chapter (40 CFR, Chapter 1) and polychlorinated biphenyl (PCB) wastes as defined in Part 761 of this chapter (40 CFR, Ch 1)." Section B.6.4.1, Load

Checking Program, includes a more detailed discussion of the hazardous waste screening and load check program.