Finding of Conformance Proposal
Sunshine Canyon
City/County Landfill

May 2008
Amended August 2008

Submitted by

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Sylmar, California 91342

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TABLE OF CONTENTS

FIGURES

APPENDICES

FINDING OF CONFORMANCE PROPOSAL
SUNSHINE CANYON CITY/COUNTY LANDFILL

PURPOSE

This document constitutes a proposal to the Los Angeles County Solid Waste Management Committee / Integrated Waste Management Task Force for a Finding of Conformance (FOC) under Section 10.1 of the Countywide Siting Element of the Countywide Integrated Waste Management Plan of Los Angeles County. The proposed FOC is for Sunshine Canyon City/County Landfill which comprises the "Sunshine Canyon Landfill Expansion" listed as a potential Class III landfill expansion in the Countywide Siting Element dated June 1997. This application for a FOC is submitted as a supplement to the existing Siting Element.

The proposal information is organized specifically according to the list of FOC submittal requirements set forth in Table 10-1 of the Countywide Siting Element.

RESPONSES TO COUNTYWIDE SITING ELEMENT TABLE 10-1

1. *Identity of Project Proponent, Owner and Operator*

The Sunshine Canyon City/County Landfill is owned and operated by:

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

2. *Project Location*

The Sunshine Canyon City/County Landfill combines the existing Sunshine Canyon City Landfill, Units 1 and 2, and the Sunshine Canyon County Extension Landfill. The City Landfill is located within the limits of the City of Los Angeles, and the County Extension Landfill is located in unincorporated Los Angeles County. The street address of the facility is 14747 San Fernando Road, Sylmar, CA 91342. Figure 1 is a vicinity map showing the general location of the site. Figure 2 is the site map showing the existing City and County landfills in relation to the proposed City/County facility.

3. *Project Implementation Schedule*

BFI anticipates the following implementation schedule:

- Commence operations as City/County Landfill — September 2008
- Begin construction in area between existing City and County Landfills — January 2009
- Expansion — None
- Closure — 2037

4. *Project Design Capacity*

The total design capacity of the City/County Landfill is estimated to be 141.2 million cubic yards, of which approximately 50.7 million cubic yards is presently permitted in the existing City and County landfills. Thus, approval of the City/County Landfill will add approximately 90.5 million cubic yards of permitted capacity to the facility. The total estimated amount of solid waste to be disposed in the City/County Landfill is approximately 91.1 million tons.

5. *Waste Material to be Handled*

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)(I)" nor does SCL accept biosolids, untreated medical waste or asbestos wastes.

The site may accept up to 6,600 tons per week of total exempt clean soil and waste for beneficial use (e.g., asphalt rubble and processed green material).

6. *Waste Sources*

Wastes are received from municipalities and private individuals and companies, primarily in the City of Los Angeles, other incorporated cities and unincorporated areas of Los Angeles County. As provided in Condition 78 of CUP No. 00-194-(5), Sunshine Canyon Landfill will not receive for disposal any solid waste originating from outside of Los Angeles County.

7. *Waste Quantity at Start-up and at Five-Year Intervals*

The maximum waste intake rate in the City/County Landfill will not exceed 12,100 tons, including materials received for beneficial use and recycling on any given day. The maximum permitted weekly quantity is 66,000 tons of non-hazardous solid waste and 6,600 tons of material for beneficial reuse and recycling. The combined total of MSW and materials for beneficial use or recycling may not exceed 72,600 tons per week.

Actual projected volumes are anticipated to be as follows:

YEAR	TONS/DAY[1]	TONS/YEAR[2]
2008	8,500	1,892,100
2009	9,200	2,535,520
2010	9,200	2,535,520
2015	9,200	2,535,520
2020	9,200	2,535,520
2025	9,200	2,535,520
2030	9,200	2,535,520
2035	9,200	2,535,520
2037	9,200	925,340

8. *Waste Transport Corridors*

The existing site entrance at San Fernando Road will continue to be used. Access routes leading to the San Fernando Road entrance include the following:

- North along the Golden State Freeway (I-5);
- South along the Antelope Valley Freeway (SR14);
- West along the Foothill Freeway (I-210)
- Southeast along the Golden State Freeway (I-5);
- North along the San Diego Freeway (I-405);
- East and West along the Simi Valley Freeway (SR118)
- North on San Fernando Road; and

[1] Source: Joint Technical Document, City-County Landfill, Revised May 2008
[2] Annual volume based on 5.3 days/week at stated daily tonnage, and 52 weeks/year

- North on Balboa Boulevard to San Fernando Road. (This route is restricted to small vehicles only, less than six tons, except for trash collection vehicles that serve the local communities).

9. *Technology for Treatment Facilities*

Solid waste will not be treated prior to disposal. Leachate is collected, stored and treated as necessary to meet regulatory requirements for discharge to the Los Angeles City sewer system. The existing leachate treatment facility at the Sunshine Canyon City/County Landfill uses as system of air strippers, coalescing filters and carbon absorption filters to remove volatile and semi-volatile organic compounds and reduce total toxic organic compounds before being discharged to the Los Angeles City sanitary sewer. The existing treatment facility will be located from its present location to elsewhere on the site during implementation of the City/County Landfill.

Landfill gas is collected and treated in the landfill gas management system, which currently includes Flare Stations 1, 3 and 8 to incinerate landfill gas in accordance with permit requirements of the South Coast Air Quality Management District. Landfill gas condensate is collected and treated as required prior to discharge to sanitary sewer or incineration in the gas flare stations, according to requirements of regulatory agencies having jurisdiction over these practices. One or more additional flares, and a potential gas-to-energy facility will be developed during implementation of the City/County Landfill.

BFI has entered into an agreement with "Sunshine Gas Producers, LLC" to develop an economically viable landfill gas to energy project. Sunshine Gas Producers is preparing applicable air permits and electrical interconnect applications. Sunshine Gas Producers anticipates using Mercury turbine engines (same as those used at Brea Olinda, Calabasas and Chiquita landfills) to generate electricity. Environmental reviews are expected to be completed by mid-2009, with implementation scheduled for mid-2010.

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10. Planned Site Classification

Sunshine Canyon City/County Landfill is a Class III Solid Waste Landfill as defined in 27 CCR 20260.

11. Planned End Uses

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.

12. Final Environmental Documentation

Environmental review of the City/County Landfill as described in this Application was performed separately by Los Angeles County and the City of Los Angeles. The original CEQA documentation for Sunshine Canyon Landfill was completed by the County of Los Angeles as lead agency by certification of the Final Environmental Impact Report in 1991 (State Clearing House Number 89071210). Based on this approval, Los Angeles County issued Conditional Use Permit (CUP) No. 86-312-(5) authorizing development of the Sunshine City/County Landfill with limits described by CUP Exhibit "A", and an estimated capacity of 16.9 million tons of waste capacity. The CUP also provided that the waste limits and capacity would be increased without further County action or amendment of the CUP upon approval by

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the City of Los Angeles of a combined City/County landfill described by CUP Exhibit "A" (Alternate).

The City of Los Angeles was subsequently the lead agency for the preparation, review and approval of a draft and final Subsequent Environmental Impact Report (SEIR) under the California Environmental Quality Act (CEQA) for the establishment of the Sunshine Canyon City and City/County Landfill. The Final SEIR was approved by the City Council on December 8, 1999 and by the Mayor on December 9, 1999, together with CEQA Findings, a Statement of Overriding Considerations, and mitigation measures. The SEIR was prepared under State Clearing House Number 92041053.

The County of Los Angeles Department of Regional Planning, acting as 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 the 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.

Appendix A contains the Notice of Determination and CEQA Findings for both the County and City EIRs as documentation of the final environmental documentation for the project.

13. Planned Markets for Materials / Energy from Resource Recovery Projects

Not applicable. (Sunshine Canyon Landfill is not a Resource Recovery Project.)

14. Proposed Waste Diversion / Salvage Programs

Sunshine Canyon Landfill diversion programs include the following:

- Acceptance of source-separated waste oil and recyclables at a public dropoff facility located on the site.
- Acceptance and segregation of clean loads of soil, rock, concrete and asphalt rubble for on-site use as cover and construction material.
- Acceptance of source-separated green waste for use on-site as mulch or daily cover, or for shipment off-site for processing into mulch, compost or fuel.

Additional diversion or recycling activities may be proposed to the regulatory agencies in the future.

15. Operations Plan for Meeting Applicable Permit/Regulatory Requirements

The detailed operations plan for the facility is set forth in Appendix B, consisting of the following sections from the Joint Technical Document dated November 2007:

Section B.5	Cover
Section B.6	Waste Handling
Section B.7	Controls

16. Demonstration of Compliance with Siting Criteria of Chapter 6 of the Countywide Siting Element

The Countywide Siting Element, Appendix 6-A, establishes eight general policy objectives to be used in evaluating solid waste management facilities:

- Protect the residents
- Ensure the structural stability and safety of the facility
- Protect surface water
- Protect groundwater
- Protect air quality
- Protect environmentally sensitive areas
- Ensure safe transportation of solid waste
- Protect the social and economic development goals of the community

Each objective is described in terms of one or more siting factors, for each of which specific site selection criteria are established. The criteria associated with each objective and factor are addressed below. Criteria associated with each factor are listed in italics.

16.1 Protect the Residents

Factor: Proximity to Populations

Facility must be in conformance with local land use and zoning requirements of a county or city planning agency.

Zoning on the County side of the Sunshine Canyon City/County Landfill property is A-2-2 (Heavy Agriculture – Two acre minimum lot sizes). Solid waste landfills are a permitted use in this zone provided a Conditional Use Permit is issued. The Los Angeles County Board of Supervisors approved the CUP on February 19, 1991.

The Board of Supervisors also determined the landfill to be consistent with the Los Angeles County General Plan on February 19, 1991. (Sub-Plan Amendment 86-312(5) and Compound Plan Amendment 90-2-(5).

The City of Los Angeles Municipal Code permits privately operated landfills only in areas zoned M3, "Heavy Industrial". Within the M-3 zone, landfill activities are required to be set back 500 feet from any more restrictive zone. The facility will be developed in accordance with these required conditions of its land use approvals. Additionally, in amending the General Plan to permit the Sunshine Canyon City Landfill Unit 2, the City required maintenance of a 100-acre open space buffer zone in the southern part of the landfill property, to provide additional visual and noise buffer for the residential community to the south and the recreational area to the west.

The County of Los Angeles prohibits construction of buildings or structures on or within 1,000 feet of a land disposal facility which contains decomposable materials/waste unless the facility is isolated by an approved natural or manmade protective system. The cities may have similar restrictions.

There are no structures located in unincorporated Los Angeles County within 1,000 feet of approved or proposed refuse limits of the City/County Landfill. The Los Angeles Municipal Code permit privately operated landfills only in areas zoned M3, "Heavy Industrial". Within the M-3 zone, landfill activities are required to be set back 500 feet from any more restrictive zone. The facility will be developed in accordance with these required conditions of its land use approvals. Additionally, in amending the General Plan to permit the Sunshine Canyon City Landfill Unit 2, the City required maintenance of a 100-acre open space buffer zone in the southern part of the landfill property, to provide additional visual and noise buffer for the residential community to the south and the recreational area to the west.

16.2 Ensure the Structural Stability of the Facility

Factor: Flood Hazard Areas

Disposal facilities must comply with requirements of the Federal Clean Water Act, as amended, and local Stormwater/Urban Runoff requirements.

The City/County Landfill operates under the provisions of General Permit No. CAS000001, established by the State Water Resources Control Board (SWRCB) pursuant to regulations of the USEPA under 40 CFR Parts 122, 123, and 124. The general permit establishes requirements for control of industrial and stormwater discharges from industrial facilities, including preparation and implementation of a Stormwater Pollution Prevention Plan.

In addition to compliance with the general industrial permit, the facility also operates under the provisions of the general permit for storm water discharges associated with construction activity (SWRCB Water Quality Order 99-08-DWQ). This permit applies to all construction activity that disturbs five acres or more, and emphasizes control of erosion and sediment in surface water runoff from the facility.

Additional requirements for control and monitoring of surface water are included in the landfill's Waste Discharge Requirements issued and enforced by the Regional Water Quality Control Board.

Federal and State regulations require new, existing and expansions of existing Class III landfills to be designed, constructed, operated and maintained to prevent inundation or washout due to floods within a 100-year return period. In addition, the landfill must not reduce the flow of a 100-year flood or reduce the temporary storage capacity of the floodplain.

The Sunshine Canyon City/County Landfill property is located in an area categorized by the Federal Emergency Management Agency (FEMA) as "Zone C", identified as having moderate or minimal hazard from the principal flood source in the area. The site lies entirely outside the area classified by FEMA as the 100-year floodplain.

In conformance with 27 CCR 20320, the facility and its surface water management features are designed and maintained to manage the 100 year, 24-hour storm. Compliance with these requirements are mandated in the facility's Waste Discharge Requirements issued by the RWQCB.

Factor: Areas Subject to Tsunamis, Seiches and Storm Surges

Disposal facilities should avoid locating in areas subject to tsunamis, seiches and storm surges unless designed, operated and maintained to preclude failure due to such events.

Due to its inland location and elevation, Sunshine Canyon is not subject to these coastal phenomena.

Factor: Proximity to Active or Potentially Active Faults

All facilities are to be designed and constructed in accordance with the local building code.

All permanent buildings on the site are constructed in conformance with applicable building codes under building permits issued by the City or County of Los Angeles. County CUP Condition No. 38 requires drainage structures to comply with requirements of the County Public Works Department.

Conformance to City building code requirements is ensured by mitigation measures incorporated into the Mitigation Monitoring and Reporting Program (MMRP) adopted as conditions of approval of the land use approvals for the City Landfill Unit 2. Specifically, all grading activities must be performed in accordance with Division 70 of the City of Los Angeles Building Regulations (Mitigation Measure No. 1), and in compliance with a comprehensive geotechnical report approved by the Department of Building and Safety (Mitigation Measure No. 5).

Federal and State regulations prohibit the locating a new Class III landfill or a lateral expansion of an existing Class III landfill on a known Holocene Fault.

The closest active (Holocene) fault is the San Fernando-Sierra Madre Fault, located 3.0 miles from the Sunshine Canyon Landfill site. (A-Mehr, Inc., 2006)

Factor: Slope Stability

Facilities located within these areas of potential rapid geological change, including landslides and mass movement] should have engineered design safety features to assure structural stability.

Areas of the site subject to landslides have been identified in extensive geologic and geotechnical studies performed at Sunshine Canyon, and submitted to the Regional Water Quality Control Board with slope stability analyses required prior to issuance of Waste Discharge Requirements. Grading plans for each phase of construction of the facility will address potential landslide areas by removing them using excavation sequences that ensure the stability of the landslide during removal.

Factor: Subsidence / Liquefaction

Avoid locating in areas determined to have a high potential for failure due to subsidence or liquefaction unless containment structures are designed, constructed and maintained to preclude failure as a result of such change.

The Sunshine Canyon site is underlain by the Towsley Formation, a geologic structure of interbedded sandstone with subordinate amounts of siltstone, mudstone and conglomerates. Landfill liner systems will be founded on this formation, which is solid bedrock and therefore not subject to subsidence or liquefaction.

Factor: Dam Failure Inundation Areas

Facilities should be located outside dam failure inundation areas.

There are no dams located upslope from the Sunshine Canyon site, or on any adjacent stream. Therefore the site is not in a dam failure inundation area.

16.3 Protect Surface Water

Factor: Aqueducts and Reservoirs

Disposal facilities must comply with requirements of the Federal Clean Water Act, as amended, and local Stormwater / Urban Runoff requirements.

The City/County Landfill operates under the provisions of General Permit No. CAS000001, established by the State Water Resources Control Board (SWRCB) pursuant to regulations of the USEPA under 40 CFR Parts 122, 123, and 124. The general permit establishes requirements for control of industrial and stormwater discharges from industrial facilities, including preparation and implementation of a Stormwater Pollution Prevention Plan.

In addition to compliance with the general industrial permit, the facility also operates under the provisions of the general permit for storm water discharges associated with construction activity (SWRCB Water Quality Order 99-08-DWQ). This permit applies to all construction activity that disturbs five acres or more, and emphasizes control of erosion and sediment in surface water runoff from the facility.

Additional requirements for control and monitoring of surface water are included in the landfill's Waste Discharge Requirements issued and enforced by the Regional Water Quality Control Board.

Federal and State regulations require new and existing Class III landfills to be fitted with subsurface barriers, as well as precipitation and drainage control facilities.

All disposal areas developed within Sunshine Canyon City/County Landfill are constructed with liner and leachate collection systems designed and constructed in conformance with plans approved by the RWQCB pursuant to applicable provisions of 40 CFR Part 258 (Subtitle D) and Title 27 of the California Code of Regulations. Detailed design plans for each phase of construction are submitted to and approved by the RWQCB prior to construction.

Factor: Discharge of Treated Effluent

Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternatively, wastewaters could also be transported in bulk via highways to facilities capable of treating them.

The Sunshine Canyon site is served by City of Los Angeles sewer, with sufficient capacity to handle sanitary and potential industrial wastewater discharges from the facility.

Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System (NPDES) permits issued by the Regional Water Quality Control Board.

As stated in 16.3 above, the site operates under and in compliance with the State's General Permit established under NPDES for industrial facilities. This permit requires, among other things, the elimination of any non-stormwater discharges to waters of the United States. Accordingly, Sunshine Canyon Landfill will not discharge any effluent, treated or otherwise, to surface water streams or conveyances.

16.4 Protect Groundwater

Factor: Proximity to Supply Wells and Well Fields

Facilities must meet the State of California's geologic setting criteria for ensuring no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill.

The referenced State criteria, listed in 27 CCR 20260(b), are as follows:

(b) Geologic Setting

(1) MSW landfills are subject to the SWRCB-promulgated waste containment requirements of this subdivision and of SWRCB Resolution No. 93-62. New Class III and existing Class II-2 landfills shall be sited where soil characteristics, distance from waste to ground water, and other factors will ensure no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill. Factors that shall be evaluated include:

(A) size of the landfill;
(B) hydraulic conductivity and transmissivity of underlying soils;
(C) depth to groundwater and variations in depth to groundwater;
(D) background quality of groundwater;
(E) current and anticipated use of the groundwater; and
(F) annual precipitation

(2) Where consideration of the factors in (b)(1) indicates that site characteristics alone do not ensure protection of the quality of groundwater or surface water, Class III landfills shall be required to have a single clay liner with hydraulic conductivity of 1 x 10^{-6} cm/sec or less.

Water quality monitoring beneath the City/County Landfill indicates that groundwater below the facility is non-potable. Test results on both surface water and groundwater samples have indicated that the waters of the Sunshine Canyon watershed are of poor quality and unfit for use as a drinking water source. Naturally

occurring hydrocarbons and inorganic compounds have been identified in samples from on-site monitoring wells. There are no groundwater wells used to extract water for beneficial use from the water bearing units below the landfill. Additionally, there are no groundwater extraction wells known to be in use within a one-mile radius of the Sunshine Canyon Landfill site. (GeoSyntec, 2002, A-Mehr, Inc., 2006)

Based on these considerations, it may be concluded that no beneficial uses of groundwater or surface water will be impaired as a result of establishment of the City/County Landfill.

Factor: Depth to Groundwater

For Class III landfills, all containment structures must be capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression or uplift as certified by a registered civil engineer or engineering geologist registered in California.

As required by CEQA Mitigation Measure No. 49, subdrains will be installed as needed under the liner systems to intercept and remove natural groundwater seeps in areas being excavated for landfill construction. Subdrain plans are included in design plans submitted to the RWQCB for approval prior to each phase of construction. The subdrains prevent the creation any hydraulic pressures on the containment system.

Federal and State regulations require new and expansions of existing Class III landfills to be fitted with containment structures that meet specified permeability standards. In addition, the facility must be fitted with a groundwater collection system and a leachate collection and removal system.

All components and systems of the facility will meet applicable state and federal standards and requirements for permeability, leachate collection, construction quality assurance and other elements needed to ensure protection of groundwater.

Furthermore, facilities must meet the State of California's minimum requirements for ensuring no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill, which also includes location restrictions.

Water quality monitoring beneath the City/County Landfill indicates that groundwater below the facility is non-potable. Test results on both surface water and groundwater samples have indicated that the waters of the Sunshine Canyon watershed are of poor quality and unfit for use as a drinking water source. Naturally occurring hydrocarbons and inorganic compounds have been identified in samples from on-site monitoring wells. There are no groundwater wells used to extract water for beneficial use from the water bearing units below the landfill. Additionally, there are no groundwater extraction wells known to be in use within a one-mile radius of the Sunshine Canyon Landfill site. (GeoSyntec, 2002, A-Mehr, Inc., 2006)

Based on these considerations, it may be concluded that no beneficial uses of groundwater or surface water will be impaired as a result of establishment of the City/County Landfill.

Factor: Groundwater Monitoring Reliability

Facilities must comply with the California Regional Water Quality Control Board permit requirements for groundwater monitoring.

Before commencing operations, Sunshine Canyon City/County Landfill must comply with all provisions of Waste Discharge Requirements to be issued by the RWQCB, which will include a site-specific Monitoring Plan prescribing the locations of groundwater monitoring wells, monitoring parameters, analytical and statistical procedures, and frequency of monitoring and reporting.

Factor: Major Recharge Areas

Facilities must meet the State of California's geologic setting criteria for ensuring no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill.

Water quality monitoring beneath the City/County Landfill indicates that groundwater below the facility is non-potable. Test results on both surface water and groundwater samples have indicated that the waters of the Sunshine Canyon watershed are of poor quality and unfit for use as a drinking water source. Naturally occurring hydrocarbons and inorganic compounds have been identified in samples from on-site monitoring wells. There are no groundwater wells used to extract water for beneficial use from the water bearing units below the landfill. Additionally, there are no groundwater extraction wells known to be in use within a one-mile radius of the Sunshine Canyon Landfill site. (A-Mehr, Inc., 2006).

Based on these considerations, it may be concluded that no beneficial uses of groundwater or surface water will be impaired as a result of establishment of the City/County Landfill.

Factor: Permeability of Surficial Materials

Federal and State Regulations require new and lateral expansions of existing Class III landfill facilities to be underlain by a composite liner, consisting of a lower clay liner and an upper synthetic membrane, and which is of sufficient thickness to prevent vertical movement of fluids including waste and leachate. The lower component of which shall consist of a minimum of two feet of compacted soil/clay with a hydraulic conductivity of no more than 1 x 10^{-7} cm/sec.

The installed and proposed liner designs for Sunshine Canyon City/County Landfill satisfy all State and Federal regulations. The proposed liner system future new disposal areas is a double composite liner similar to that used in Phase I of Sunshine Canyon City Landfill Unit 2 (City Landfill Unit 2) and Phase V of the County Extension Landfill, the components of which are described below and illustrated in Figure 3.

Floor Areas

- Prepared native ground to provide foundation support for the overlying containment system components;
- In stream bed/seep areas only – a minimum 12-in. (300 mm) thick granular underdrain layer, with a hydraulic conductivity of 1 cm/s or more, and with centrally located subdrains along the canyon floors; a perforated pipe within a trench will be placed along the centerline of the canyon to collect and convey groundwater beneath the composite liner system:
- A minimum 24-in (600 mm) thick low-permeability soil barrier layer, with an average saturated hydraulic conductivity of 1 x 10^{-7} cm/s;
- A minimum 60-mil (1.5 mm) thick textured high density polyethylene (HDPE) geomembrane;
- A drainage and leak detection layer consisting of a 12-inch layer of sand;
- A minimum 24-in (600 mm) thick low-permeability soil barrier layer, with an average saturated hydraulic conductivity of 1 x 10^{-7} cm/s, or approved equivalent (e.g., geosynthetic clay liner (GCL));
- A minimum 60-mil (1.5 mm) thick textured high density polyethylene (HDPE) geomembrane (BFI may upgrade this layer to 80-mil thick at its option);
- Geotextile cushion placed beneath the LCRS granular drainage layer;

- A minimum 12-in (300 mm) thick leachate granular drainage layer, with a hydraulic conductivity of 1 cm/s or more, or equivalent geocomposite, with a perforated pipe along low points to collect and convey liquids to leachate sumps;

- Geotextile filter fabric placed above LCRS granular drainage layer; and

- A minimum 24-in (600 mm) thick protective (operations) soil layer.

Sideslope Areas

- Prepared Subgrade to provide foundation support for the overlying liner system components;

- Geosynthetic clay liner (GCL) with a thickness of 0.25 in. (6mm) and a saturated hydraulic conductivity less than or equal to 5 x 10-9 cm/s;

- A minimum 60-mil (1.5 mm) thick (textured top and bottom) HDPE geomembrane;

- Geotextile leak detection / drainage layer placed below a 60-mil HDPE separation layer on the lower 10 feet of the slope;

- Geosynthetic clay liner (GCL) with a thickness of 0.25 in. (6 mm) and a saturated hydraulic conductivity less than or equal to 5 x 10-9 cm/s;

- A minimum 60-mil (1.5 mm) thick (smooth top, textured bottom) HDPE geomembrane (BFI may upgrade this layer to 80-mil thick at its option);

- Geotextile filter fabric to serve as a cushion and drainage layer; and

- A minimum 24-in (600 mm) thick protective (operations) soil layer.

Facilities must meet the State of California's geologic setting criteria for ensuring no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill.

Water quality monitoring beneath the City/County Landfill indicates that groundwater below the facility is non-potable. Test results on both surface water and groundwater samples have indicated that the waters of the Sunshine Canyon watershed are of poor quality and unfit for use as a drinking water source. Naturally occurring hydrocarbons and inorganic compounds have been identified in samples from on-site monitoring wells. There are no groundwater wells used to extract water for beneficial use from the water bearing units below the landfill. Additionally, there are no groundwater extraction wells known to be in use within a one-mile radius of the Sunshine Canyon Landfill site. (A-Mehr, Inc., 2006).

Based on these considerations, it may be concluded that no beneficial uses of groundwater or surface water will be impaired as a result of establishment of Phase I of Sunshine Canyon City/County Landfill.

Factor: Existing Groundwater Quality

Facilities must meet the State of California's geologic setting criteria for ensuring no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill.

Water quality monitoring beneath the City/County Landfill indicates that groundwater below the facility is non-potable. Test results on both surface water and groundwater samples have indicated that the waters of the Sunshine Canyon watershed are of poor quality and unfit for use as a drinking water source. Naturally occurring hydrocarbons and inorganic compounds have been identified in samples from on-site monitoring wells. There are no groundwater wells used to extract water for beneficial use from the water bearing units below the landfill. Additionally, there are no groundwater extraction wells known to be in use within a one-mile radius of the Sunshine Canyon Landfill site. (A-Mehr, Inc., 2006).

Based on these considerations, it may be concluded that no beneficial uses of groundwater or surface water will be impaired as a result of establishment of the City/County Landfill.

16.5 Protect Air Quality

Factor: PSD (Prevention of Significant Deterioration) Areas

Facilities locating in regions which are classified under PSD regulations as major stationary sources will be required to submit to preconstruction review and apply BACT [Best Available Control Technology]. All facilities locating in the South Coast Air Basin will be required to apply BACT for any net emission increase of an attainment area air pollutant.

Sunshine Canyon Landfill has obtained permits to construct and permits to operate landfill gas collection systems and other facilities at the site. Permits were issued by the South Coast AQMD, after full review, and include Best Available Control Technology for applicable processes and equipment including landfill gas collection systems, landfill gas flare stations, and the leachate treatment facility. SCAQMD also monitors compliance with Rule 1150.1 relative to monitoring and controlling landfill gas emissions from the surface of the landfill.

Factor: Nonattainment Areas

Facilities with air emissions locating in nonattainment areas and emitting air contaminants in excess of established limits will require preconstruction review under New Source Review requirements, and the obtaining of a Permit to Construct and a Permit to Operate from the SCAQMD. Air pollution control requirements vary by type of facility and are specified by SCAQMD.

Sunshine Canyon City/County Landfill has obtained permits to construct and permits to operate landfill gas collection systems and other facilities at the site. Permits were issued by the South Coast AQMD, after full review, and include Best Available Control Technology for applicable processes and equipment including landfill gas collection systems, landfill gas flare stations, and the leachate treatment facility. SCAQMD also monitors compliance with Rule 1150.1 relative to monitoring and controlling landfill gas emissions from the surface of the landfill.

Factor: Emissions from Class III Landfills

Class III land disposal facilities are subject to the SCAQMD rules and regulations. All existing and proposed Class III land disposal facilities must comply with the SCAQMD Rule 1150.1 "Control of Gaseous Emissions from Active Landfills." The Rule requires installation of a landfill gas control system and perimeter monitoring probes, as well as implementation of a monitoring program to ensure that landfill gas emissions do not exceed specified SCAQMD standards.

Landfill gas is collected and treated in the landfill gas management system, which currently includes Flare Stations 1, 3 and 8 to incinerate landfill gas in accordance with permit requirements of the South Coast Air Quality Management District. Landfill gas condensate is collected and treated as required prior to on-site use, discharge to sanitary sewer, or incineration in the gas flare stations, according to requirements of regulatory agencies having jurisdiction over these practices.

In addition to gas collection and flaring systems, the site is also obligated to include in its monitoring plan the routine monitoring of perimeter gas probes and surface emissions according to Rule 1150.1 requirements.

16.6 Protect Environmentally Sensitive Areas

Factor: Wetlands

Facilities should avoid locating in current wetlands areas, as defined in adopted general, regional and State plans, unless: a) industrial usage is permitted by the local government's land use planning or zoning, and b) fish, plant and wildlife resources can be maintained in a portion of the site, or preserved elsewhere in the area.

Development of Sunshine Canyon City/County Landfill will not impact any existing wetland areas. As required by CUP Conditions, riparian habitat disturbed by previous development of the facility has been mitigated by replacement at a 2:1 ratio under plans approved by the California Department of Fish and Game.

Factor: Proximity to Habitats of Threatened and Endangered Species

A facility should not locate in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource.

Twenty-five biological surveys conducted at the Sunshine Canyon site between 1978 and 1996 identified several sensitive plant and animal species, but not threatened or endangered species. Oak Tree Permit No. 86-312(5) was adopted by the County Board of Supervisors and its conditions are implemented and monitored to address potential biological impacts due to loss of oak trees.

Factor: Agricultural Lands

A facility located in areas zoned for agricultural uses must obtain a local land use permit from the local jurisdiction.

County zoning on the Sunshine Canyon City/County Landfill property is A-2-2 (Heavy Agriculture – Two acre minimum lot sizes). Solid waste landfills are a permitted use in this zone provided a Conditional Use Permit is issued. The Los Angeles County Board of Supervisors approved the CUP on February 19, 1991.

Factor: Natural, Recreational, Cultural and Aesthetic Resources

Facilities should avoid locating in these areas unless the applicant can demonstrate that a facility is compatible with the land use in the area.

Significant mitigation measures were incorporated into the approvals of the City/County Landfill to compensate for the loss of natural and recreational resources associated with the facility's development.

Factor: Significant Ecological Areas

Location of a proposed facility must be in conformance with a local jurisdiction's General Plan and abide by Federal and State regulations regarding unique or protected species and their habitat.

Habitat values were extensively addressed in the CEQA process and land use approvals by the County of Los Angeles. Twenty-five biological surveys conducted at the Sunshine Canyon site between 1978 and 1996 identified several sensitive plant and animal species, but not threatened or endangered species. Oak Tree Permit No. 86-312(5) was adopted by the County Board of Supervisors and its conditions are implemented and monitored to address potential biological impacts due to loss of oak trees.

16.7 Ensure Safe Transportation of Solid Waste

Factor: Proximity to Areas of Waste Generation

Facilities should be centrally located near wasteshed areas to minimize potential impacts associated with greater travel distances.

Sunshine Canyon is located at the edge of the San Fernando Valley, readily accessible to the major population centers of Los Angeles County. There are no feasible alternative sites for major disposal facilities within the County closer to the wasteshed.

Alternative transportation, by rail, may be evaluated in regard to specific sites to be located at distant areas from the wasteshed.

Not applicable.

Factor: Distance from Major Route

Distance traveled on minor roads should be kept to a minimum. Facilities are best located near an exit of a major route or accessed from major routes via routes used locally for truck traffic.

The San Fernando Road entrance to Sunshine Canyon Landfill is less than one mile from interchanges with the I-5 and 14 Freeways north and south of the site. The segment of San Fernando Road is used extensively for truck and commuter traffic.

Alternatively, local roads could be upgraded by increasing their load capacity, improving traffic controls or building truck-only lanes or routes. The facility developer may build a direct access road to avoid the minor route(s).

The Sunshine Canyon City/County Landfill has been in operation since 1996 and Phase I of Unit 2 of the City Landfill has been in operation since July 2005. Traffic improvements associated with the operation of the City Landfill were implemented as required by the Mitigation Monitoring and Reporting Program approved by the City of Los Angeles in conjunction with the City General Plan Amendment authorizing the Sunshine Canyon City Landfill Unit 2.

Factor: Structures and Properties Fronting Minor Routes

Facilities should be located such that any minor routes from the major route to the facility are used primarily by trucks, and the number of nonindustrial structures (homes, hospitals, schools, etc.) is minimal.

San Fernando Road, properly considered a major route, fronts only industrial facilities along the segment used for landfill traffic accessing the I-5 and 14 freeways.

Factor: Highway Accident Rate

The minimum time path from major wasteshed areas to a facility should follow highways with low to moderate average annual daily traffic and accident rates as guided by the research and findings of state, regional, county and city transportation planners.

The major transportation corridors used to access Sunshine Canyon Landfill are listed in Section 8 above. These are primarily freeways (I-5, I-405, I-210 and SR14), constructed and maintained by the State of California to carry high traffic volumes with the lowest possible accident rates.

Factor: Capacity Versus Average Annual Daily Traffic of Access Roads

The changes in the ratio capacity to AADT should be negligible after calculating the number of trucks on major and minor routes expected to service the facility.

No changes in existing traffic will result from continuing operation of the City/County Landfill.

16.8 Protect the Social and Economic Development Goals of the Community

Factor: Consistency with the General Plan

The proposed facility must be consistent with the county or city General Plan. However, the applicant may petition for an amendment to the General Plan. In addition, the proposed facility must be found to be in conformance with the Countywide Siting Element for the County of Los Angeles. This is accomplished by obtaining a valid Finding of Conformance granted by the Los Angeles County Solid Waste Management Committee / Integrated Waste Management Task Force.

The Board of Supervisors determined the Sunshine Canyon County Extension Landfill to be consistent with the Los Angeles County General Plan on February 19, 1991 (Sub-Plan Amendment 86-312(5) and Compound Plan Amendment 90-2-(5)).

The Los Angeles County Solid Waste Management Committee / Integrated Waste Management Task Force issued a Finding of Conformance (FOC) for the County Extension Landfill on August 15, 1991. An updated FOC Proposal was submitted by BFI in December 2006 for Phases V, VI and VII of the County Landfill, and approved on April 17, 2008.

A Finding of Conformance for Unit 2 of the Sunshine Canyon City Landfill was approved on April 17, 2004.

The presently proposed FOC is for Sunshine Canyon City/County Landfill. The proposed development will complete the Sunshine Canyon Landfill Expansion listed as a potential Class III landfill expansion in the Countywide Siting Element dated June 1997. This application for a FOC is submitted as a supplement to the existing Siting Element.

17. Demonstration of Compliance with General Plan Consistency Requirements of PRC 50000 and 50001, As Applicable

The Los Angeles County Board of Supervisors determined the Sunshine Canyon City/County Landfill to be consistent with the Los Angeles County General Plan, as mandated by PRC 50000, on February 19, 1991. (Sub-Plan Amendment 86-312(5) and Compound Plan Amendment 90-2-(5))

The City of Los Angeles, in amending the Los Angeles General Plan to designate the Sunshine Canyon City Landfill site as "Heavy Industrial" and change its zone to "M3-1", found that the project was "in substantial conformance with the purposes, intent, and provisions of the general plan and elements of the General Plan".[1] In making this finding, the City evaluated the action in relation to the following plan elements:

[1] CEQA Findings, Page 1. City Plan Case No. 98-0184(ZC/GPA)(MPR). City of Los Angeles, December 9, 1999.

- Granada Hills-Knollwood Community Plan
- Open Space Plan
- Citywide General Plan Framework Element
- City-Collected Refuse Disposal Plan
- City Solid Waste Management Plan

General Plan Consistency as mandated by PRC 50000 was established by the City of Los Angeles on December 9, 1998 by approval of the above-referenced General Plan Amendment and zone change.

Appendix C contains documentation related to the land use approvals of the County and City.

18. Tarping Program

Sunshine Canyon Landfill requires all incoming refuse loads to be transported in closed vehicles or covered by a secure cover that prevents litter from escaping during transport. Penalties are assessed against customers who fail to comply with the tarping requirement. A written notice similar to the following is made available to customers in English and Spanish at the gatehouse:

Tarps or Covers Are Required

- **Permit conditions (CUP 00-194-(5)) and the State Vehicle Code (Section 23115) mandate that incoming AND outgoing loads must be covered if necessary prevent to litter.**
- **You must arrive at the gate with your vehicle covered. Placing tarps/covers while parked on Sunshine Canyon Landfill property is not acceptable.**
- **If residual trash remains in your vehicle after dumping, and it could cause windblown litter on the road, you must leave the disposal area with your vehicle covered.**

Penalties:

1 st offense per company per year:	**Warning**
2nd offense per company per year:	**$100**
3rd offense per company per year:	**$500**
4th offense per company per year:	**Termination of Disposal Privileges**
Non-payment of penalties:	**Termination of Disposal Privileges**

19. Load-Checking Program

Please refer to Appendix D for a detailed description of the load checking program for Sunshine Canyon City/County Landfill. The program includes activities at the scale house and at the active disposal working face to prevent the discharge of unacceptable wastes at the landfill.

Personnel at the scalehouse entry to the site conduct the following activities as provided by the program:

- Driver interviews
- Direct visual inspection, including the use of overhead mirrors
- Use of remote television monitors to inspect incoming roll-off type loads and open loads
- Portable and fixed radiation detection devices
- Portable sensors capable of detecting VOCs in contaminated soils scheduled for landfill disposal

Unacceptable loads are denied access or directed by landfill personnel to a designated area for further inspection if hazardous waste is suspected. If the vehicle then is found to contain unacceptable waste, it will be taken to an isolated area of the site for visual inspection and determination of how to manage the material.

At the working face, selected vehicles are directed to an isolated area and instructed to discharge their load for a random visual load check. A minimum of six random load checks are conducted each day.

20. Facility Plans

Appendix E contains the permit-level drawing sheets presenting the plans for Sunshine Canyon City/County Landfill, prepared for the Joint Technical Document submitted for review by the RWQCB and CIWMB.

21. Seismic Monitoring Program

BFI implements a seismic monitoring program including the following elements:

a. A recording accelerometer has been installed on site, under the direction of a California Registered Civil Engineer, and is being operated for continuous monitoring of seismic ground motions.

b. A detailed site inspection and damage assessment will be conducted after any major seismic event, and a report submitted to the Los Angeles County Department of Public Works and the Local Enforcement Agency.

22. Landfill Capacity Conservation Programs

BFI will continue to implement the programs currently in place at Sunshine Canyon City/County Landfill directed toward the conservation of landfill capacity:

a. Pricing incentives are offered for clean loads of inert waste materials such as soil, concrete and asphalt rubble. These materials are received and stockpiled

away from the active disposal area, and used for on-site construction of roads and wet weather tipping areas.

b. BFI operates active disposal areas in a manner that achieves the highest practical degree of compaction of the disposed materials. Waste is spread by a dozer or compactor blade in lifts of approximately one to two feet thick, then compacted by multiple passes of a heavy-duty compactor before the next lift is spread.

c. BFI will use geosynthetic fabric alternative daily cover (ADC) to the maximum extent possible, in order to minimize the volume of soil used for daily cover. Green waste will also be used as ADC as it becomes available.

d. Whenever feasible, significant soil stockpiles will be placed over completed or interim waste fills to promote additional compaction due to surcharge.

23. AB939 and Litter Control

a. BFI operates a waste origin recording program at the scalehouse of the City/County Landfill. The jurisdiction of origin of each load is recorded and entered into the computerized waste receipt and billing data base. Semi-monthly reports will be created and submitted to the County summarizing the total tonnage of waste received from each jurisdiction during the reporting period.

b. BFI discourages the transportation of uncovered waste by imposing penalties for loads arriving at the scalehouse without proper tarps installed over the waste load. As described in Item 16 above, repeat violators may be excluded from future use of the landfill.

c. Portable litter fences are deployed to minimize the amount of wind-blown litter leaving the active disposal area. BFI cleans the access road and other areas of the site daily to remove litter.

d. Once each week, or more frequently if required, BFI crews provide litter control to the following public roads in the vicinity to remove any debris that may have spilled from vehicles transporting waste to the site:

- In O'Melveny Park;
- Along Balboa Boulevard, San Fernando Road and Old Sepulveda Road; and
- In other areas within a 1.5 mile radius of the landfill

REFERENCES

City of Los Angeles, 1999. "Notice of Determination and CEQA/General Plan Findings". City of Los Angeles Planning Department, December 13, 1999.

GeoSyntec Consultants, Inc., 2002. "Joint Technical Document – Phase 1 of City Landfill Unit 2, Sunshine Canyon Landfill". 2 volumes, 23 February 2002.

A-Mehr, Inc., 2006. "Joint Technical Document – Sunshine Canyon City/County Landfill". 2 volumes, February 2006, updated May 2008.