# **SUNSHINE CANYON LANDFILL**



May 13, 2016

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Subject:

Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee

SCL TAC Meeting Date - June 1, 2016

Dear Ms. Webber and Mr. Sanabria:

This report provides an update of items requested to be included in the report to the Joint Sunshine Canyon Landfill Technical Advisory Committee (TAC) for the meeting to be held on June 1, 2016.

#### 1.0 Cell Development

#### 1.1 Cell CC-3B, Part 1A

As reported in the September 2015 TAC report, subgrade excavation activities for Cell CC-3B Part 1 began on July 27, 2015. Liner construction was conducted from October 2015 – January 2016. The report of Construction Quality Assurance (CQA) was submitted to the Los Angeles Regional Water Quality Control Board (LARWQCB) on January 19, 2016; approval for disposal activities in Cell CC-3B Part 1A was received on January 28, 2016 (Attachment A). Disposal activities commenced on March 8, 2016.

#### 1.2 Cell CC-4, Part 1

The Design Report for Cell CC-4, Parts 1 – 5 was submitted to the LARWQCB on December 16, 2015. By letter dated April 26, 2016, approval for the construction of Cell CC-4 was received (Attachment B).

Construction of Cell CC-4 is currently proposed to be conducted in phases. CC-4, Part 1, is an 8-acre cell that will provide 5.3M CY of disposal capacity. Subgrade excavation activities for CC-4, Part 1 are planned to begin in July.

## 2.0 Fill Sequence, Soil Usage, Stockpile/Borrow Areas and Disposal on County Top Deck

#### 2.1 Fill Sequence

Since September 2015, fill operations have been conducted in Cell CC-3A, Part 2. As noted previously, fill operations commenced in Cell CC-3B, Part 1A on March 8, 2016. Disposal operations will continue in both areas until the floor of CC-3B, Part 1A is at a sufficient elevation to support all disposal operations. There have been no disposal activities on the County top deck since early March 2014.

## 2.2 Soil Usage

As reported in previous TAC reports, based on daily soil tracking, approximately 30% of the site's consumed airspace was taken up by soil used for daily cover. This volume was directly related to the requirement from the LA County Department of Public Works to place nine (9) inches of compacted soil cover at the end of each working day that cannot be removed prior to the next day's operations. This requirement was followed from the end of September 2010 until October 2015 when the alternative daily cover (ADC) pilot study using a geosynthetic panel product (EnviroCover) was implemented. Approval to conduct the pilot study was obtained from the LEA and the Los Angeles County Department of Public Works (DPW) on November 26, 2014 and October 27, 2015, respectively (Attachment C).

Based on soil usage logs, there is approximately 40% less soil being used as a result of implementing the ADC pilot study.

#### 2.3 Stockpile/Borrow Areas

Placement and subsequent removal of stockpile material is an operational activity that occurs over the life of the landfill. There are three stockpile areas on site that have been designated for such purpose. These stockpile areas are shown on the figure included in Attachment D. Only the stockpile area on City South is being used to provide material for the daily soil requirements which includes providing material for ballast for the ADC as well as for site projects. The other stockpile areas will be used as deemed appropriate by site operations personnel; however, it should be noted that although there is stockpiled soil on the County portion of the site, the presence of the aboveground piping for the gas collection system makes it prohibitive for these stockpiled soils to be accessed at this time. There is currently no stockpiled soil on the eastern stockpile area; soil may be stockpiled in this area in the future.

#### 3.0 Landfill Gas Collection and Control System

Significant improvements to the site's landfill gas collection and control system (GCCS) have been on-going since August 2011. These improvements include the installation of vertical and horizontal gas collection wells, the installation of two new, state of the art flare systems,

and a robust monitoring and operations and maintenance program. A summary of these activities is provided in the following sections.

#### 3.1.1 Completed Improvements

Improvements to the site's landfill gas collection system include the installation of the following:

- 609 vertical gas extraction wells;
- 75 horizontal gas extraction wells;
- 18,500 linear feet of 36-inch and 24-inch perimeter header piping;
- Over 60,000 linear feet of horizontal collectors in the waste mass;
- 3,000 linear feet of perimeter liner collectors;
- Over 28,000 linear feet of lateral piping and slope collectors;

In addition, two new flare stations have been constructed and placed into operation as follows:

- Flare 9 was constructed and placed into operation in August 2012.
   Flare 9 is a state-of-the-art, Zink Ultra Low Emission (ZULE) flare capable of controlling 5,000 standard cubic feet per minute (scfm) of landfill gas;
- Flare 10, which is also a 5,000 scfm ZULE flare, was constructed and placed into operation in August 2013. Operation of Flare 10 commenced on August 15, 2013, which was within 90 days of permit issuance. The initial startup sequence was completed and the initial source performance test was conducted in September 2013;
- The temporary flare, which became operational in February of 2012, was permanently taken out of service on August 21, 2013.
- Flare 8 was decommissioned and was physically removed in May'15.
- Flare 11 application to construct has been submitted to the SCAQMD.

#### 3.1.2 GCCS Current Work and Planned Upgrades

The following activities have recently been completed or are currently in progress on the site's GCCS:

7,400 linear feet of horizontal collector piping was installed in 2015;

- 14 horizontal gas extraction wells were installed in 2015;
- 52 vertical gas extraction wells were installed in 2015;
- 1,740 linear feet of 12" header, 3,040 linear feet of 18" header, and 80 linear feet of 24" header was installed during 2015;
- 72 pumps were installed in vertical gas wells by the end of 2015;
- Approximately 60 vertical gas extraction wells will be installed during 2016; 23 wells were installed in April – May 2016 are and hooked up to the collection system;
- Approximately 9,000 linear feet of horizontal collector piping will be installed in Cell CC-3A and CC-3B during 2016;
- Floor collectors were installed in CC-3B, Part 1A in May 2016;
- Approximately 1,500 linear feet of 18" header was installed in April May 2016.

#### 3.2 Landfill Gas Monitoring

#### 3.2.1 Wellhead Monitoring

Monitoring of the site's landfill gas collection system is conducted in accordance with Federal NSPS (New Source Performance Standards) which require readings of pressure, temperature and oxygen be taken on a monthly basis from each monitoring point. Beginning in March 2011, SCL contracted with Brian A. Stirrat (BAS) and Associates to conduct weekly monitoring of the site's gas collection wells. The frequency was reduced to bi-monthly monitoring in July 2011 after system improvements had been made. This bi-monthly monitoring schedule has remained in effect.

#### 3.2.2 Surface Emission Monitoring

Monthly surface emission monitoring (SEM) is conducted in accordance with SCAQMD Rule 1150.1 requirements. SEM monitoring consists of instantaneous and integrated monitoring conducted over an approved grid system established over the site. Each grid is 50,000 square feet or approximately 1.2 acres. The following is a summary of the results of the instantaneous and integrated SEM conducted for the first quarter of 2016.

Instantaneous SEM monitoring: the City side of the landfill had 34 locations over a total of 557 grids monitored showing surface emissions over 500 ppm Total Organic Carbon (TOC); the County side of the landfill had 49 locations over a total of 457 grids that had surface emissions over 500 ppm TOC. These locations were repaired and re-

monitored in accordance with SCAQMD Rule 1150.1. Each of the locations passed either the first or second 10-day re-check as allowed by Rule 1150.1;

• Integrated SEM monitoring: the City side of the landfill had 17 grids out of a total of 557 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 12 grids out of a total of 457 grids that showed results over 25 ppm TOC. The grids were repaired and remonitored in accordance with Rule 1150.1. Each of the grids passed either the first or second 10-day re-check as allowed by Rule 1150.1.

#### 3.3 Perimeter Probe Monitoring

Rule 1150.1 monitoring requires monthly monitoring of the site's perimeter probes. There were no probes that exceeded the regulatory threshold of 5% methane (%CH<sub>4</sub>) during the third and fourth quarter of 2015.

## 4.0 Development of Gas-to-Energy Facility (City/County)

Sunshine Gas Producers, L.L.C. (SGP) is the owner and operator of the turbine power plant. The power plant began commercial power generation on September 1, 2014 and currently places approximately 18.5 MW of renewable energy on the grid. The plant consists of five (5) Solar Mercury turbines rated at 4.6 MW each. Significant milestones related to this project include the following:

- Air permit issued to DTE Biomass Energy in April 2012;
- Building permit received from LA County in June 2013;
- SCE began construction of their substation in August 2013; construction was completed in November 2013;
- Four new 66kV line poles were installed in October 2013 and stringing of the line was completed in December 2013;
- Commercial operations of the power plant began on September 1, 2014.

## 5.0 Groundwater Monitoring (City/County)

The groundwater monitoring program approved by the LA RWQCB for Sunshine Canyon Landfill is based on quarterly and semi-annual monitoring of 18 groundwater monitoring wells. Samples are analyzed by an EPA-approved analytical laboratory for more than 100 individual potential contaminants as specified by the approved monitoring program. Statistical analyses are used to identify any trends or changes in concentrations of constituents that could indicate a potential release from the site. In addition to the

groundwater wells, samples are collected from sub-drains and lysimeters. Reports of sampling and monitoring activities, including all analytical results, are submitted to the LA RWQCB on a semiannual and annual basis.

## 5.1 Summary of Results of Second Semi-Annual Groundwater Monitoring Period of 2015

During the second semiannual 2015 monitoring period, environmental monitoring was conducted on a quarterly basis during September (third quarter) and December (fourth quarter). The results were generally similar to past monitoring event results, as most analyte/well pairs were previously in tracking mode. Retest samples were inadvertently not collected for T-butanol at well MW-5; however, this volatile organic compound (VOC) was not detected in the sample collected from well MW-5 during the fourth quarter 2015. Only chloride at well DW-1 was confirmed at concentrations that exceed the WQPS.

During the second semiannual 2015 monitoring period, several VOCs were detected in the third and fourth quarter samples collected from Subdrain N and Combined Subdrains. These findings are consistent with historical results, and as a result, the liquids collected at the subdrains are conveyed to the water treatment system prior to reuse.

Lysimeters LY-6 and LY-7 were sampled on a quarterly basis, though lysimeter LY-6 was dry during both sampling events. Both samples from lysimeter LY-7 contained at least five VOCs at quantifiable concentrations. The types of concentrations of detected VOCs were similar to historical results for this monitoring point.

Annual leachate sampling was performed in October 2015. Based on the results obtained, verification retest samples will be collected in April 2016 from "Leachate" and "LR-2R" to verify the presence of phenol in the "Leachate" sample and Endosulfan I in the sample from LR-2R.

#### 6.0 Leachate Collection and Treatment System (City/County)

There have been no changes to the leachate collection and treatment system. Leachate is collected in the leachate collection system installed beneath the City and County portions of the site. Leachate is collected in a gravel-packed riser sump at the low point of each area, and pumped via extraction pumps to the influent tank at the leachate treatment facility (LTF). The site produces about 10,000 – 15,000 gallons per day (gpd) of leachate.

#### LTF Process Description

The LTF treatment system consists of filters and granular activated carbon (GAC) vessels. The leachate first passes through the bag filter units, to remove suspended matter from the leachate and protect the GAC media from clogging which could reduce the treatment capacity and performance.

The filtered leachate then undergoes treatment in three GAC vessels, which are configured in series. The second and third GAC vessels serve as polishing units, ensuring effective removal of low level VOCs. The effluent routinely meets the WDR limits for VOCs.

The treated effluent from the third GAC vessel is routed to the effluent tank where it is conveyed by gravity to the gray water tank at the gray water treatment system. The treated effluent is blended with other site waters. The treated effluent from the gray water system is then pumped to two storage tanks; one 265,000 gallon tank and one 100,000 gallon tank. These tanks are used for temporary storage prior to the treated effluent being used on-site for dust control and irrigation. The gray water used onsite routinely meets the WDR limits, and is in compliance with the site's WDRs. Approximately 120,000 -150,000 gpd is processed in the gray water treatment system and re-used on site for dust control.

7.0 Surface Water Management System, Including Drainage and Erosion Control (City/County)

Management of surface water from the site and the substantial upland non-landfill area that drains to it is a major part of the site's environmental compliance and operational programs.

Functions of the surface water management system include the following:

- Prevent or minimize erosion from the landfill surface;
- Prevent discharge of sediments from the site in excess of regulatory standards;
- Maintain peak stormwater discharges at levels no greater than the pre-landfill condition of the site; and,
- Manage the 100-year, 24 hour storm as required by Title 27 of the California Code of Regulations (CCR).

The surface water management system at Sunshine Canyon has been designed according to requirements of CCR Title 27 and the County of Los Angeles. Its major components were evaluated in the Joint Technical Document for the City/County Landfill, and determined to be in conformance with all requirements.

#### 7.1 Existing Stormwater Management System

The existing surface water management system at Sunshine Canyon consists of three subsystems of drainage controls:

- Permanent Perimeter Drainage System;
- Interim Interior Drainage System; and
- Temporary Erosion and Sediment Control Measures

Elements of each system are described below. Elements of permanent drainage facilities at the site as well as some interim facilities such as concrete drainage channels, are shown on the figure included in Attachment E.

#### 7.1.1 Permanent Perimeter Drainage System

The perimeter drainage system is comprised of the major permanent control systems for the landfill. It intercepts all run-on of surface water from non-landfill areas and diverts it away from the landfill area, and manages runoff from landfill areas where refuse elevations are above the site perimeter drainage elevations. Existing elements of the perimeter system include the following, all of which have been designed to handle the peak discharge from a 100-year, 24-hour storm:

- Sedimentation Basin D, located at the far north end of the County area, which receives run-on from the native canyons north of the landfill area;
- Sedimentation Basin B, located on the east side of the County area, which receives runoff from the native East Canyon area and from portions of the landfill area. Basin B is concrete-lined and has a discharge structure designed to level out peak discharges of stormwater;
- Sedimentation Basin A, located on the west side of the County area, which receives run-on from slope and canyon areas west of the landfill area, and runoff from portions of the landfill area on the County side. Basin A is lined with concrete:
- East Perimeter Drainage Channel is currently completed from Basin D to the Terminal Basin. The final phase of this channel improvement was completed in September 2012;
- Terminal Sedimentation Basin, located near the site entrance at San Fernando Road. All surface water discharge from the site passes through this concrete-lined basin, which is designed to manage the peak flow from the 100-year storm and discharge no greater flow than the prelandfill condition of the site.
- West Perimeter Drainage Channel is currently completed from Basin D to Basin A. It presently discharges to the interim interior drainage system, as described in the following section. When completed, the West Perimeter Drainage Channel will collect all drainage from the west side of the Closed City Landfill and discharge directly to the Terminal Basin. Construction of Phase 1 of the West Drainage Channel is tentatively scheduled for 2016. Phase 2 of the West Drainage Channel will be constructed after the completion of Phase 1.

#### 7.1.2 Interim Interior Drainage System

Until all areas of the City/County Landfill have been developed and filled to elevations above the site perimeter, run-off from areas of the site interior must be managed in a system of basins and channels discharging through the center of the site to the Terminal Basin. At present, this includes the entire west side of the Closed City Landfill, currently areas of Cells CC-1, CC-

2 and CC-3, and most of Cell A. The interim interior system is modified on an annual basis to accommodate ongoing construction activity. System elements in place include the following:

- Significant improvements have been completed on the interim primary drainage channel running from Basin A to the scalehouse area. The initial segment of the asphalt and concrete-lined channel conveying discharge from Basin A along access roads to a point approximately 700 feet below the entrance to the Administration area remains as is; improvements to the remainder of this channel have been made as follows:
  - Installation of approximately 2,100 linear feet of trapezoidal channel to replace plastic-lined channels; this channel has been completed with concrete and asphalt.
  - Installation of an additional 1,200 linear feet of trapezoidal channel along the temporary Phase 1 By-Pass Road alignment; this channel is completed with concrete and asphalt;
  - Installation of a box culvert to direct discharge from the trapezoidal channel along the temporary Phase 1 By-Pass Road to a channel that discharges to the Terminal Basin.
- The drainage system for the Closed City Landfill features one large shallow sedimentation basin and a series of semi-permanent and temporary channels that collect runoff and convey it to the primary interior drainage channel described above. In the future, this system will discharge to the West Perimeter Drainage.

#### 7.1.3 Temporary Erosion and Sediment Control Measures

Temporary erosion control systems are installed on an annual basis in advance of the rainy season. A drainage plan is prepared annually which includes a variety of measures that not only reduce soil erosion but also reduce peak flows by slowing down and leveling discharges from the site. These measures include the following:

- Removal of deposited silt in site basins and drainage channels;
- Removal of deposited silt in Terminal Basin;
- Removal of rock filter around risers in Terminal Basin and replacement with new rock filter;
- Removal of old filter material around risers in Terminal Basin and replacement with new filter material;
- Grading benches to promote positive drainage;
- Removal of vegetation from pipes and inlets;
- Installation of temporary geosynthetic downdrain channels and chutes where required on the active fill area slopes;
- Installation of a geosynthetic-lined stormwater retention basin;

 Installation of a grated road crossing on paved entry road to separate runoff flows from vehicle traffic.

Temporary erosion and sediment control measures are installed by October 1<sup>st</sup> each year. After each rain event, erosion and sediment control measures are inspected and evaluated, and repairs are made as needed prior to the next rain event.

8.0 Current Odor Control Mitigation Measures (City/County)

Odor control mitigation measures continue to be implemented as follows:

- To eliminate the potential contribution of odors from loads carried by transfer trucks, site supervisors continue to patrol areas close to the site where transfer trucks have been observed parking to wait for the site gates to open at 6 AM. If a transfer truck or any other waste truck is observed parking within a 5-mile radius of the site, they are reminded of the site's policy, told to leave the area and banned from entering the site for the day. Repeat offenders are reported to the hauling company and the drivers are banned from entering the site for a week;
  - Starting on October 17, 2011, transfer trucks from Republic-operated transfer stations were delayed from coming to the site until after 9 AM Monday through Friday irrespective of wind conditions. This practice has continued although when favorable wind conditions are present, Operations Supervisors may exercise the option to receive transfer trucks from Republic-operated transfer stations earlier than 9 AM;
  - SCL has worked with one major customer whose wastestream has been identified as
    odorous to delay the receipt of their containers until after 9 AM. This practice went
    into effect on February 1, 2012 continued until mid-August 2012 when it was agreed
    that these trucks could enter the site at 8:30 AM due to routing of these loads. This
    practice remains in effect;
  - Procedures for the handling and management of odorous loads at Republic-operated transfer stations have been developed and the Operations Supervisors at the transfer stations have been trained on these procedures. These procedures involve identifying odoriferous loads at the transfer stations and notifying SCL personnel when these loads are coming into the site so they can be properly managed. The procedures also call for not accepting the loads if they are deemed too odorous to be handled at SCL. These procedures remain in effect;
  - The procedures for the management of odorous loads at the site have been developed and the site scale house operators have been trained on these procedures. The procedures include identifying loads that register a '4' on SCAQMD's odor classification scale and notifying the site supervisor on duty so the load can be immediately taken to the working face, deposited and covered with a layer of soil. As indicated previously, loads are not accepted if they are deemed too odorous to be handled at SCL. These procedures have remained in effect:

- The procedures for the minimization of odors and emissions during installation and trenching of vertical wells and horizontal collectors remain in effect. These procedures are being followed by all SCL contractors when they are performing work that involves the installation of wells and/or trenching for the installation of horizontal collectors;
- The four DustBoss systems remain in use;
- New vapor odor control systems were installed in August September 2014. A
  notification of the operation of these systems was sent to the LEA and SCAQMD on
  October 7 2014. Modifications to these systems were finished in July 2015, however
  the system located off of the oil field road was turned off on April 2, 2015 and
  remains off as of the date of this report;
- A new misting system was installed on the wind fences that are placed at the working face in February 2015. The misting system is operated every morning from 6 AM to 10 AM.
- 9.0 Revegetation Plans and Recent Hydroseeding Efforts on Temporary Slopes and Stockpiles (City/County)

A quarterly vegetation report is submitted which provides discussions on the vegetation efforts and any hydroseeding activities conducted during the quarter. The vegetation report for the first quarter of 2016 was submitted on April 28, 2016.

No hydroseeding activities have taken place in 2016. Hydroseeding is expected to occur in October 2016.

10.0 Venturan Coastal Sage Mitigation Plan (City's M.4.4.1 (60) &(61))

As reported in previous TAC reports, a landscape architecture and planning contractor, Architerra Design Group (Architerra), was hired to design and develop a habitat restoration and landscape improvement plan for the City South C Trial Plot. This project is intended to be a pilot or demonstration project to determine the most effective course of action for revegetation of the closed deck and slopes area on the City South area of the site. Work on this project began in the first quarter of 2013 with construction/planting activities completed in May of 2013. Weekly activities have been conducted in the pilot project area since that time consisting of maintenance, selective pruning and repairs to the irrigation system when needed.

An assessment of the site's sage mitigation areas, including the pilot project area, is conducted by a qualified biologist on a quarterly basis and is included in the quarterly vegetation reports. The quarterly monitoring consists of an overall assessment of the site's sage mitigation areas (City and County mitigation areas) as well as a sampling and assessment of the pilot project area in accordance with the procedure presented in the First Quarter Vegetation Report entitled "Methodology for Monitoring Percent Cover and Species Richness within Each Seeded Application Method on the Coastal Sage Scrub Pilot Project at the Sunshine Canyon Landfill".

Many positive observations were noted in the first quarter report including the following:

- Many of the Coastal Sage Scrub (CSS) species have emerged from the canopy of the Saltbush and are benefiting from the selective pruning. Many plants are flourishing with new growth and bloom due to the selective pruning which has helped these plants expand their growth;
- The drainage swales appear to have the most biodiversity of plant species and continue to expand ourtward helping to fill in more of the deck areas;
- Ants were observed at the east of the trial site;
- Overall, the trial site appears healthy with blooming CSS natives and new seedlings emerging from the winter's rain. The site continues to fill in on cover density and is expanding in biodiversity of species and quantities of CSS plants;
- Numerous wildlife species have been observed in the pilot area including spotted towhee, California towhee, black phoebe, western kingbird, sage sparrow, song sparrow, northern mocking bird, Anna's humming bird, and California quail;
- There is evidence of small mammals including rodent burrows rabbit scat, and deer tracks, and reptiles including side-blothced lizard, western whiptail, and Western fence lizard.

## 11.0 Chatsworth Mitigation (City Q.C.9)

The ordinance amending Section 12.04 of the Los Angeles Municipal Code has not been finalized as of the date of this report. Comments on the draft Ordinance were received from the Army Corps of Engineers (ACOE) on April 17, 2015 and forwarded to the City the same day. ACOE has requested a meeting be held to discuss the status of the Ordinance; this meeting is tentatively scheduled for July 7, 2016.

#### 12.0 Status of Alternative Fuels Vehicles (City/County)

SCL continues to fuel the E-85 vehicles with Ethanol 85 approximately once a week at a fueling station located at 12881 Encinitas Avenue, Sylmar. Currently the site owns and operates eleven vehicles that use E-85 fuel.

In 2009, six Tier 3 engines were fitted with additional Diesel Particulate Filters (DPFs) to help reduce emissions. In 2014, one (1) unit was retrofitted with an LPG engine to reduce emissions; one (1) unit was retrofitted with an LPG engine in 2015; one (1) unit currently uses ultra-low sulfur diesel fuel. All other DPFs have been eliminated due to fire hazards or problems associated with the Electronic Control Module (ECM). According to SCL's research, there have been no advancements in technology for alternative fuel for heavy machinery.

#### 13.0 Backup Generator (City/County)

As reported in previous TAC reports, SCL is in compliance with CUP Condition 83. Generators needed to provide power to the landfill gas flaring system have been identified and secured by a contractual arrangement with Quinn Power Systems.

The transfer switches for Flares 1, 3, 9 and 10 have been installed. One generator has been purchased and is currently staged on-site, however, a permit for this generator has not been received. The permit applications were submitted to the SCAQMD on March 25, 2013.

#### 14.0 Soil Importation

On July 28, 2015, Republic Services submitted a request to LA County DPW for approval to import clean soil that will be made available from the Los Angeles County's Devil's Gate Reservoir Sediment Removal and Management Project located in Pasadena, California. By letter dated May 4, 2016, DPW approved the importation of this material to Sunshine Canyon Landfill (Attachment F). Based on information provided by the Los Angeles County Department of Public Works, Water Resources Department, the project is scheduled to begin in Spring 2017.

#### 15.0 Current and Planned Projects Outside the Disposal Area

Grading for a portion of the SCE Power Pole Relocation Project requires work to be conducted outside the site's grading limit. A project to create a structural buttress prior to the construction of a portion of future Cell CC-4 will require additional grading limit revisions.

#### 15.1 SCE Power Pole Relocation Project

This project includes the removal of approximately 4,200 feet of the 66kV subtransmission line currently running through the center of the landfill and relocating the line along the perimeter of the County portion of the site. This prevents the line from interfering with landfill operations and will also serve to ensure compliance with the subtransmission line clearance requirements found in Commission General Order (GO) 95. The decision granting SCE a permit to construct the project was issued by the California Public Utilities Commission (CPUC) on April 2, 2014.

Grading activities to create the required pads and access roads to the pole locations started in March 2016 and are expected to be complete by early June. As of the date of this report, eight (8) of the tubular steel poles (TSPs) have been erected by SCE; the remaining poles will be installed when the grading activities are completed. Stringing of the conductor line will be done once all the TSPs have been erected.

Project grading plans were approved by DPW by letter dated January 13, 2016 (Attachment G). As part of this approval, a Revised Exhibit A is required to be submitted which only reflects the grading for the SCE project. The revised Exhibit A Application including a proposaed Survey Monument Plan was submitted to the Los Angeles County Department of Regional Planning and DPW on April 28, 2016.

#### 15.2 Future Cell CC-4 Stability Buttress

CC-4 will be constructed in the southwest portion of the site along the southwestern boundary of Phases I and II-B and west of CC-2 and CC-3A Part 1. An earthen stability buttress is being proposed in order to construct the west slope of the CC-4 liner unit. The rationale for the design of the proposed stability buttress is included

in the Design Report for CC-4 which has been submitted to the LARWQB. By letter dated April 26, 2016, the LARWQCB approved the design report for Cell CC-4, Parts 1-5 (Attachment B).

Comments on the CC-4 stability buttress were received from DPW in letters dated October 19, 2015 and January 13, 2016 and also discussed during meetings held with DPW personnel on December 13, 2015 and March 1, 2016. DPW comments pertain to the proposed analysis that indicated the slope stability factors of safety (FS) for temporary construction slopes could be less than the County's minimum standard of 1.25. Based on these comments, an addendum report was submitted to DPW on April 6, 2016 detailing the mitigation recommendations and supporting analysis to substantiate that the proposed Cell CC-4 development grading will meet or exceed DPW's minimum slope stability FS criteria for temporary slopes (e.g. 1.25).

#### 16.0 Current Monitoring Activities

The following monitoring activities are being conducted:

Construction Monitoring - Grading for SCE Power Pole Relocation Project:

Scope: Archaeological and paleontological monitoring, Tree Survey

Consultant: John Minch and Associates (JMA)

Third Party Mitigation Monitoring

Scope: Third-party Mitigation Monitoring

Consultant: UltraSystems

Surface Emission Monitoring

Scope: Monitoring required by SCAQMD Rule 1150.1 (Surface Emission

Monitoring, Perimeter Probe Monitoring, etc.)

Consultant: RES Environmental

Biological Monitoring

Scope: Coastal Sage, Oak Tree and Big Cone Fir Mitigation Monitoring

Consultant: John Minch and Associates (JMA)

Ambient Air Monitoring

Scope: Third-party Ambient Air Monitoring Consultant: Sonoma Technology, Inc. (STI)

Gas Well Monitoring

Scope: NSPS Monitoring

Consultant: TetraTech/Brian A. Stirrat and Associates (TetraTech-BAS)

Please note that off-site odor monitoring conducted in nearby neighborhoods is conducted by Republic Services' employees.

#### 17.0 Status on Work Plan for Intermediate Cover Sampling and Soil Testing

A Work Plan to conduct soil sampling of the site's intermediate cover was submitted to the LEA on February 17, 2016; approval to proceed with the work plan was received by letter dated February 24<sup>th</sup> (Attachment H). Components of the work plan include the following:

- Collection of soil samples from 30 locations at the landfill in accordance with American Society for Testing and Materials (ASTM) D1587 – Standard Practice for Thin-Walled Tube Sampling of Fine-Grained Soils for Geotechnical Purposes;
  - The basis for the sampling locations was derived from information provided by Mr. Eugene Tseng;
- Laboratory testing of soil samples for:
  - Standard Practice for Classification of Soils for Engineering Purposes (ASTM D2487);
  - Standard Test Method for Laboratory Determination of Water (Moisture)
     Content of Soil and Rock by Mass (ASTM D2216);
  - Standard Test Method for Density of Soil in Place by the Drive-Cylinder Method (ASTM D2937);
  - Standard Test Method for Particle-Size Analysis of Soils (ASTM D422);
  - Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils (ASTM D4318);
  - Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter (ASTM D 5084).

Soil sampling was conducted by a third-party contractor on March 21 and 22, 2016. It is expected the report providing the results of the analytical testing will be completed by the end of May.

#### 18.0 Recent Landfill Activities and Planned Activities for Next Six Months

Recent activities conducted at the landfill are discussed in previous sections and include the following:

- Completion of Cell CC-3B, Part 1A and commencement of disposal activities;
- Installation of new vertical gas wells and associated piping (23 wells installed in April May 2016);
- Installation of horizontal collectors in Cell CC-3A;
- Installation of floor collectors in Cell CC-3B, Part 1A;
- Continued implementation of ADC Pilot Project;
- Continued maintenance of City South Coastal Sage Mitigation Area;
- Grading activities for the pads and access roads for the SCE power pole relocation project;

Installation of TSPs (by SCE);

Planned activities for the third and fourth guarters of 2016 include:

- Excavation for Cell CC-4 Part 1;
- Completion of SCE power pole relocation project;
- · Grading for future Flare 11 pad;
- Continued maintenance of City South Coastal Sage Mitigation Project area;
- · Continued implementation of the ADC pilot project.

Please do not hesitate to contact me at (818) 362-2072 if you have any questions.

Sincerely,

Rob Sherman General Manager

Sunshine Canyon Landfill

Cc: Ly Lam, City Planning

Nick Hendricks, City Planning

Maria Masis, LA County Regional Planning

Martins Aiyetiwa, County of Los Angeles, Department of Public Works

David Thompson, SCL-LEA Program Lead

Gerry Villalobos, SCL-LEA

Rob Sherman, Republic Services

Michael Stewart, Republic Services

Wayde Hunter, SCL CAC







## Los Angeles Regional Water Quality Control Board

January 28, 2016

Ms. Patti Costa, Environmental Manager Sunshine Canyon Landfill 14747 San Fernando Road Sylmar, CA 91342

APPROVAL OF CONSTRUCTION QUALITY ASSURANCE REPORT, CELL CC-3B, PART 1A, LINER INSTALLATION - SUNSHINE CANYON LANDFILL, SYLMAR, CALIFORNIA (FILE NO. 58-076, ORDER NO. R4-2008-0088, WDID NO. 4B190329001)

Dear Ms. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), has received a document titled *Final Report of Construction Quality Assurance for Sunshine Canyon Landfill, Cell CC-3A, Parts 2* (Report), dated December 2015, and prepared by A-Mehr Inc. The Report summarizes the construction quality assurance (CQA) services performed during the construction of Cell CC-3B, Part 1A, which consists of approximately 4 acres of liner system at the Sunshine Canyon Landfill (Landfill) in Sylmar, California. Construction of the cell occurred from March 15, 2015, to December 22, 2015. The Report has been submitted to comply with waste discharge requirements (WDRs) included in Regional Board Order No. R4-2008-0088 and applicable requirements in title 27 of the California Code of Regulations (27 CCR).

We have completed review of the Report and, based on information provided in the Report and our observations during site inspections conducted on September 1, 2015, October 12, 2015, and December 24, 2015 at the Landfill, and have determined that this portion of the landfill liner system meets the requirements in Section D of the WDRs (Requirements for Containment Structures) and Section 20310 et. seq. of 27 CCR (Waste Management Construction Standards). Discharge of municipal solid wastes, as defined in Section A of WDRs (Acceptable Materials), in this area of the Landfill is hereby approved.

If you have any questions, please contact me at (213) 620-2253.

Sincerely,

Wen Yang, Ph.D., C.H.G. Senior Engineering Geologist Chief of Land Disposal Unit

cc: Gerardo Villalobos, Los Angeles County, DPH, Baldwin Park

David Thompson, City of Los Angeles, Environmental Affairs Department

M. Ali Mehrazarin, A-Mehr, Inc.









## Los Angeles Regional Water Quality Control Board

April 26, 2016

Ms. Patti Costa, Environmental Manager Sunshine Canyon Landfill 14747 San Fernando Road Sylmar, CA 91342

APPROVAL OF PHASE CC-4, PARTS 1 – 5, DESIGN REPORT, SUNSHINE CANYON CITY/COUNTY LANDFILL, SYLMAR, CALIFORNIA (ORDER NO. R4-2008-0088, FILE NO. 58-076)

Dear Ms. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), has received from you a document titled *Design Report, Phase CC-4, Parts* 1-5, *Sunshine Canyon Landfill* (Design Report) that was prepared by Geo-Logic Associates for Republic Services (Discharger), dated September 2015, and submitted to the State Water Resources Control Board GeoTracker System on December 16, 2015. The Report was submitted for the construction of Phase CC-4 liner system at the Sunshine Canyon City/County Landfill (Landfill), which is regulated under waste discharge requirements (WDRs) included in Order No. R4-2008-0088 adopted by this Regional Board on October 2, 2008. The Design Report provides the design and construction information of an approximate 55-acre area within the permitted footprint of the Landfill, including liner and leachate collection systems, subdrain system, grading plans, and slope stability analyses.

Regional Board staff has reviewed the Design Report and found that the proposed liner system design meets the requirements of the WDRs and standards described in California Code of Regulations, title 27, section 20310 et. al. The Design Report is therefore approved. During the proposed landfill construction, if any revision of the Design Report is necessary, the Discharger must submit an amendment to the Design Report, at least 90 days prior to the construction involved the revision, to the Regional Board for the review and approval of Regional Board staff.

In accordance with Requirement D.9 of the WDRs, prior to the start of construction of any containment structure, a geologic map of the final excavation grade shall be prepared for review, approval, and confirmation in the field by Regional Board staff. A final construction quality assurance (CQA) report, including drawings documenting "as-built" conditions, shall be submitted within 60 days after the completion of each part or subpart of liner construction.

A public notice letter regarding this approval was sent to interested parties on March 15, 2016, to meet General Provision No. M.22. of the WDRs, which states: "During oversight of this Order, wherever the Executive Officer is authorized to grant any approval under a particular provision of this Order, the Executive Officer is directed to assess if there is controversy associated with the decision following public notice and, if so, bring the decision to the Regional Board for approval." The deadline for submitting comments regarding this matter was April 14, 2016. During the period, we received an email from Mr. David Nugyen of the County of Los Angeles Department of Public Works (DPW) (copy attached) that provides comments regarding the

Design Report. The email requested that the Regional Board's approval of the Design Report be in conjunction with the approvals and clearances of the DPW on grading and drainage design of the proposed liner construction. In accordance with Requirement M.3. of the WDRs<sup>1</sup>, approval of the Design Report by the Regional Board does not release you from the responsibility of complying with any other laws and regulations that may be enforced by the DPW or other regulatory agencies.

If you have any questions or need additional information, please call Dr. Wen Yang, Chief of Landfill Disposal Unit, at (213) 620-2253.

Sincerely,

Samuel Unger, P.I Executive Officer

Enclosure

Cc: Leslie Graves, Division of Water Quality, State Water Resources Control Board Michael Wochnick, California Department of Resources Recycling and Recovery, Sacramento

Gerardo Villalobos, Los Angeles County, DPH, Baldwin Park
Martin Aiyitiwa, Los Angeles County Department of Public Works, Alhambra
David Thompson, City of Los Angeles, Environmental Affairs Department
Ted Kowalzcyk, South Coast Air Quality Management District, Diamond Bar
Richard Slade, Upper Los Angeles River Area Watermaster
Mitchell Englander, Councilmember, 12th District, City of Los Angeles
Wayde Hunter, North Valley Coalition, Granada Hills
Wayne Aller, Knollwood Property Owners Association, Granada Hills
Becky Bendickson, Granada Hills North Neighborhood Council
Kim Thompson, Granada Hill North Neighborhood Council
Wayne Adelstein, North Valley Regional Chamber of Commerce
Ralph Kroy, LA City Sunshine Canyon Landfill Community Advisory Committee

Requirement M.3. of the WDRs states: "These requirements do not exempt the Discharger from compliance with any other current or future law that may be applicable. They do not legalize this waste management facility, and they leave unaffected any further restraints on the disposal of wastes at this waste management facility that may be contained in other statutes."

## Yang, Wen@Waterboards

From:

Dave Nguyen < DNGUYEN@dpw.lacounty.gov>

Sent:

Wednesday, April 13, 2016 6:11 PM

To: Cc: Yang, Wen@Waterboards Martins Aiyetiwa; Gabriel Esparza; Karlo Manalo; Nam Doan

Subject:

Sunshine Canyon City-Cnty Landfill\_Public Notice, File No. 58-076\_2016-03-15 -

Comments from Los Angeles County Department of Public Works

**Attachments:** 

Sunshine Cyn City-Cnty Landfill\_Public Notice, File No. 58-076\_2016-03-15.pdf

Good afternoon Wen,

We appreciated the opportunity to review the Liner Design Report provided as part of the Water Board's Public Notice dated March 15, 2016, for Phase CC-4, Parts 1-5 (attached). Based on our review, we have the following comment:

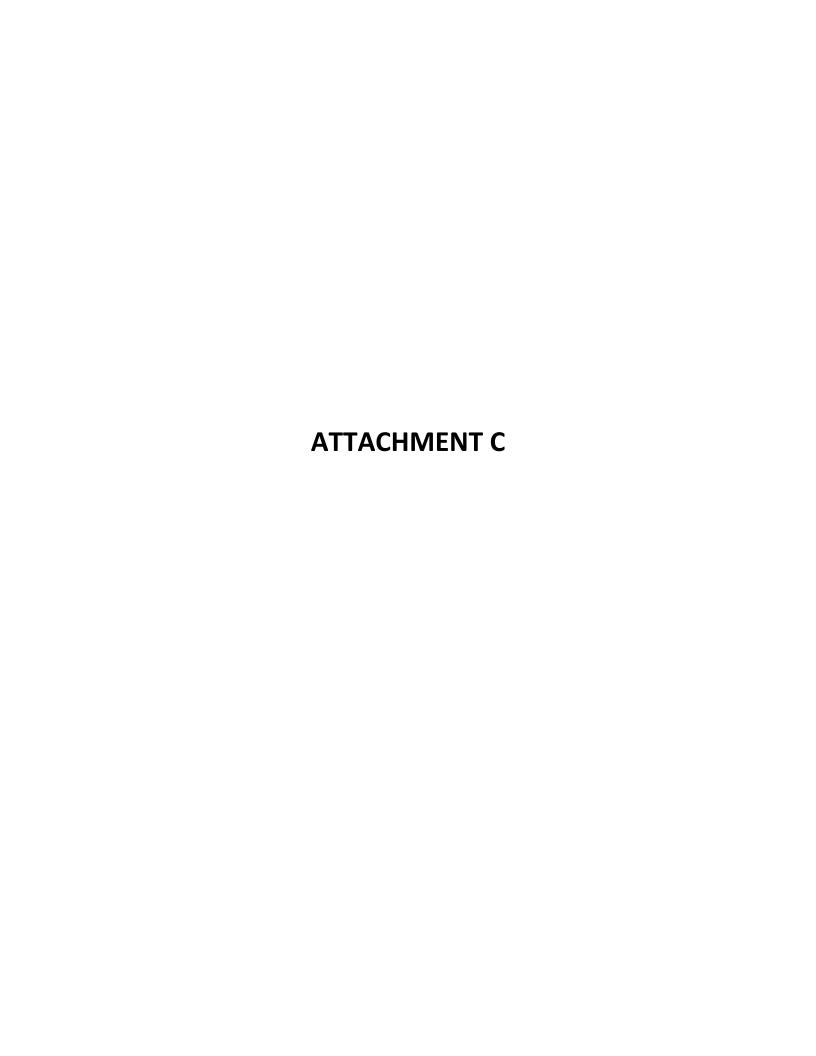
Since the Sunshine Canyon Landfill Operator, Republic Services, also submitted grading plans and slope stability analysis reports for the construction of Cell CC-4 to the Department of Public Works for review and approval, to ensure the operator also acquire necessary approval of these items from the regulatory agencies, we respectfully request the Water Board to include this clauses (or similar) in the Water Board's approval letter: "Republic Services is required to obtain necessary approvals and clearances relating to grading and drainage design of Cell CC-4 that may be required by the Los Angeles County Department of Public Works and other regulatory agencies."

Please let us know if you have any questions.

Thank you,

## **David Nguyen**

Civil Engineer County of Los Angeles Department of Public Works Environmental Programs Division (626) 458-5189



SUNSHINE CANYON LANDFILL



14747 San Fernando Road Sylmar, California 91343

November 26, 2014

Mr. Rob Sherman, General Manager Republic Services Sunshine Canyon Landfill 14747 San Fernando Road Sylmar, CA 91342

Subject:

Sunshine Canyon City/County Landfill (SWIS # 19-AA-2000)

LEA Approval of ADC Pilot Project

Dear Mr. Sherman,

On November 5, 2014, the Sunshine Canyon Landfill Local Enforcement Agency (LEA) received a proposal to conduct an alternative daily cover (ADC) pilot project at Sunshine Canyon Landfill (Landfill) using a geosynthetic panel product. The proposal was submitted in response to the recommendations of the Interagency Task Force to help control odor generation at the landfill by increasing the efficiency of the landfill gas collection system and leachate control system. The pilot project as proposed is scheduled to run for a period of one year which will allow the ADC to be evaluated under different season conditions.

The LEA has reviewed the proposed ADC pilot project and has determined that it meets the Alternative Daily Cover requirements pursuant to California Code of Regulations, Title 27 Section 20690, the Landfill's solid waste facility permit (SWFP) and CalRecycle's ADC Guidelines. The LEA has determined that the pilot project is one of the preapproved ADC materials specified in Title 27, and is consistent with the Interagency Task Force recommendations.

The LEA's approval is contingent on the following conditions:

- The geosynthetic cover area must be either covered with new waste or a full soil cover within 24 hours of product placement.
- The geosynthetic cover is non-reusable and once deployed shall not be removed from the working face.
- Any damage to the geosynthetic cover that occurs during deployment will be repaired prior to the end of that day's operations.
- At the end of the pilot project, a report shall be submitted to the LEA within 30 days documenting the observations, results and recommendations on the use of the geosynthetic cover at Sunshine Canyon Landfill.
- The LEA must be notified at least 7 days prior to the start of the pilot project.

The LEA reserves the right to suspend, modify or revoke this approval if problems are observed with the use of the geosynthetic cover. This approval is only for areas of the pilot project under the jurisdiction of the LEA. The operator is required to obtain all of the other necessary approvals and clearances that may be required by the other regulatory agencies that have jurisdiction over the site.

If you have any questions regarding the LEA approval, I can be contacted at (626) 430-5550 or

Sincerely,

Gerry Villalobos

SCL LEA Program Manager

cc: David Thompson, SCL LEA

Sue Markie, CalRecycle

Patti Costa, Republic Services

Cillalobos

Emiko Thompson, L.A. County Dept. of Public Works Maria Masis, L.A. County Dept. of Regional Planning

Ly Lam, City of L.A. Planning Dept.

Mohsen Nazemi, SCAQMD

Wayde Hunter, SCL CAC



## COUNTY OF LOS ANGELES

#### DEPARTMENT OF PUBLIC WORKS

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900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO: P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

REFER TO FILE: EP-5

October 27, 2015

Mr. Rob Sherman, General Manager Sunshine Canyon Landfill Republic Services, Inc. 14747 San Fernando Road Sylmar, CA 91342-1021

Dear Mr. Sherman:

# SUNSHINE CANYON CITY/COUNTY LANDFILL PROPOSED ALTERNATIVE DAILY COVER PILOT PROJECT UTILIZING GEOSYNTHETIC PANEL PRODUCT

Republic Services (Republic) submitted a letter dated April 13, 2015, which included a project proposal dated November 2014, to the Department of Public Works requesting to conduct a 1-year pilot project using Environmental Products, Inc.'s (EPI's), Extended Enviro™ cover as an alternative daily cover (ADC) in lieu of the 9 inches of soil currently being used on-site for daily cover. Subsequently, Republic submitted two more revised project proposals with the latest submittal on August 20, 2015 (Report). The revisions were made to address Public Works' requests to further clarify the proposal's performance measurements, emergency response measures, and public outreach requirements.

Based on Public Works' evaluation of the Report dated August 20, 2015, and consistent with the adopted environmental documentation for the Sunshine Canyon City/County Landfill (Landfill), Public Works hereby modifies the additional corrective measures that it imposed in accordance with Condition 45N of the Conditional Use Permit (CUP) No. 000-194-(5) as set forth in letters dated October 22, 2014, and February 26, 2015, to permit Republic to implement its proposed ADC pilot project for a period of 1 year from the implementation date, subject to the "Conditions of Approval" specified in this letter.

Mr. Rob Sherman October 27, 2015 Page 2

This letter addresses only Republic's request for a modification of the additional corrective measures imposed by Public Works in accordance with Condition 45N of the CUP, and does not address any other approvals that may be required by any other agencies in order for Republic to implement the proposed ADC pilot project.

In a letter dated October 5, 2015, the Sunshine Canyon Landfill Joint City/County Technical Advisory Committee (TAC) stated that it endorses the ADC pilot project. On October 8, 2015, Republic notified Public Works that, on the basis of the TAC's letter, it planned to move forward with the pilot project commencing October 12, 2015.

To the extent that Republic considered the TAC's October 5, 2015, letter to effectuate a modification of Public Works' 9-inch cover requirement to allow for the use of the ADC, Republic misconstrued the TAC's letter and its advisory role. It is important that Republic understand that it is required to comply with the County's CUP.

## **Objectives of the Pilot Project**

The objectives of this ADC 1-year pilot project as stated in the Report are as follows:

- Determine if the geosynthetic panel product material meets the performance requirements of Title 27, Section 20690 to meet the requirements for controlling blowing litter, vectors, fires, odor and scavenging.
- Determine if the geosynthetic panel product material is as effective for controlling odors as 9 inches of compacted soil as a daily soil cover material.

An evaluation of the effectiveness of the geosynthetic panel product will be conducted throughout the 1-year term of the pilot period, as well as at the conclusion of this 1-year period. Information collected during the pilot period will be used to determine (1) whether the project objectives have been met, (2) if it results in improvement in the landfill gas collection and management system, and (3) if it leads to potential reduction in odor nuisance and complaints from the surrounding community.

## California Environmental Quality Act Compliance

In December 1999, the City of Los Angeles adopted a Final Subsequent Environmental Impact Report (FSEIR) and a General Plan Amendment and Zone Change (GPA/ZC) allowing Browning-Ferris Industries, now Republic, to operate and maintain a separate City Landfill and eventually a joint City/County Landfill. In 2007, the County approved an addendum to the FSEIR in connection with its approval of the CUP.

Mr. Rob Sherman October 27, 2015 Page 3

The FSEIR calls for the application of 6 inches of daily cover or the use of an approved alternative daily cover. We note that the Sunshine Canyon Landfill Local Enforcement Agency has approved the use of the proposed ADC. In addition, Mitigation Measure No. 7.06 of the Mitigation Monitoring and Reporting Summary (MMRS) adopted by the County, provides that if an odor problem develops, appropriate control measures shall be implemented, which include the application of daily cover material or more frequent application of cover material to seal the landfill surface, or adjustments to the wells, equipment and operation of the landfill gas collection and recovery system.

Among the odor control measures contained in the Mitigation Reporting and Monitoring Program (MRMP) adopted by the City, mitigation measure no. 33 provides that when an odor problem develops, appropriate control measures shall be implemented, which include the application of additional dirt daily cover material, or more frequent application of the cover material to seal the landfill surface, or adjustments to the wells, equipment and operation of the landfill gas collection and recovery system.

As discussed in further detail in this letter, with the conditions spelled out in this letter, the proposed ADC is an appropriate measure for controlling odors in conjunction with other corrective measures that are set forth in our letters dated September 27, 2010; October 22, 2014; and February 26, 2015. It is our determination that the ADC Pilot Project as described in this letter is within the scope of the project that is the subject of the FSEIR. Therefore, Public Works is approving the ADC pilot project, subject to the following conditions:

#### **General Conditions of Approval**

- 1. <u>Effective Area</u> These requirements apply to all areas within the "Limits of Fill" of Exhibit "A-2" as defined in the combined "City/County Project" pursuant to the Los Angeles County CUP.
- 2. <u>Duration of Pilot Project</u> 1 year from the date of this letter.
- 3. <u>Termination</u> Public Works may terminate the approval of the pilot project at any time, including but not limited to the following causes, as determined by Public Works in its sole discretion:
  - a. Republic has failed to comply with any of the requirements specified herein, including the *Evaluation Standards and Program Requirements*, Reporting Requirements, and Additional Requirements, as specified.

- b. Problems arise with the use of the ADC material that cannot be corrected.
- c. The use of the ADC material does not meet the objectives of the pilot project as stated in this letter and in the Report.

If, at any time during the term of this pilot project, Public Works terminates the approval of the pilot project, Republic shall revert back to using 9 inches of soil as daily cover at the Landfill unless Public Works approves another form of daily cover in accordance with Condition 45N, in order to promote best gas management practices at the site and to protect public health and safety.

## **Evaluation Standards and Program Requirements:**

- 4. <u>ADC Material Specifications</u> The ADC material to be used for the implementation of this project shall be limited to a non-reusable, geosynthetic Extended Enviro<sup>™</sup> cover with a thickness of 1.75 millimeters, as stated in the proposal. Any proposed change to this ADC material will require prior approval from Public Works.
- 5. <u>Equipment Specifications</u> The Extended Enviro<sup>™</sup> cover shall only be deployed using EPI's Extended Enviro<sup>™</sup> Cover System Deployer Model 800 (Deployer). Any proposed change to this equipment will require prior approval from Public Works.
- 6. <u>Soil Usage</u> Soil to be used as daily cover at the end of operation on Saturdays, or as ballast material during ADC application or as intermediate daily cover, must be free of sulfate (SO<sub>4</sub>) prior to its usage, or at a level acceptable to Public Works. Prior testing of the soil must be performed to ensure that sulfate is not present in the soil at a level not acceptable to Public Works. Test results must be provided to Public Works for approval. However, every source of soil material must be tested and approved prior to its use at the site.
- 7. <u>ADC Material Procedures</u> The ADC material shall only be applied as described in the following restrictions:
  - a. The ADC material shall be applied at the end of each operating day or at more frequent intervals (except Saturday) and shall be left in place at the start of the following day's operations.

- No removal of this ADC material shall be conducted after it is applied at the Working Face.
- ii. The ADC material will be placed over the entire deck of the operating day's Working Face.
- iii. The maximum exposure time for the ADC material shall not exceed 5 days.
- iv. The ADC material shall not be placed on any outside slopes or slopes that will not be part of the operating day's Working Face for longer than 180 days.
- v. The ADC material shall not be used for intermediate or final cover.
- b. Six inches of soil shall be used for daily cover at the close of operations on Saturdays and shall remain in place on Monday mornings.
  - No "peeling back" of the soil cover shall be conducted after it is applied at the Working Face.
  - ii. Only soil may be used as cover on the outside and temporary slopes.
- c. The ADC material will be used on one lift per day.
- d. The maximum size of the Working Face deck area shall be no larger than 3 acres.
- 8. <u>Material Placement</u> The ADC material shall be placed as detailed in the Report as follows:
  - a. General Placement Procedure
    - i. The Deployer is loaded with a roll of the Extended Enviro<sup>™</sup> cover and on-site ballast material.
    - ii. The Deployer is positioned on the outside edge of the cover area to deploy the first panel of the ADC material. The outside edge shall be positioned at a minimum of 5 feet from the outside of the waste material.
    - iii. During the application process, the ADC material is unrolled from the Deployer while ballast material is simultaneously discharged at a controlled rate to securely anchor the ADC material onto the Working Face.
    - iv. On successive adjacent runs to deploy the ADC material. The material is placed so that it overlaps by not less than 10 percent, thus forming a compression-type seal creating a continuous closure and impermeable barrier between the waste and the environment.

- b. Placement During Windy Conditions During high-wind conditions, the following operational measures shall be implemented and maintained:
  - i. Wind direction and speed must be established to better determine how the ADC material will be deployed.
  - ii. Upon determination of the wind direction, the ADC material will be placed parallel to the wind direction to minimize the potential uplifting of the material.
  - iii. Additional overlap of the ADC material can be applied, provided that natural tearing and puncturing of the overlapped material as a result of the heavy equipment operating on top of previously covered trash is maintained.
- c. Placement During Rainy/Stormy Conditions During rainy/stormy conditions, the following operational measures shall be implemented and maintained:
  - i. Intactness of the ballast material shall be maintained to ensure that the ballast material is not washed away by water runoff.
  - ii. No ponding on the surface of the ADC material shall occur. If ponding occurs, appropriate measures shall be taken to resolve this issue.
  - iii. Placement of the ADC material on the working face shall be appropriately deployed to prevent stormwater run-off underneath the ADC material and to inhibit continuous contact of stormwater on the disposed solid waste.

If conditions such as high-winds or heavy rains prevent compliance with these restrictions and prevent the ADC material from functioning properly, the operator shall cover the Working Face with 9 inches of soil, which shall be kept in place at the beginning of the next operating day. No "peeling back" of the soil cover shall be conducted after it is applied at the Working Face.

#### Reporting Requirements:

9. <u>Performance Requirements</u> – In order to determine the effectiveness of the ADC material, the ADC material shall be evaluated in accordance with the performance requirements and standards set forth in CCR Title 27, Section 20690 and 20695, respectively. Evaluation of performance criteria shall be conducted as follows:

#### a. Vector

i. Threshold values for vector populations shall be established prior to commencement of the ADC pilot project; therefore, provide these to us within

- 14 days from the date of this letter. Based on these threshold values, daily inspection of vector populations shall be recorded in accordance with the recording requirements specified in CCR Title 27, Section 20690(a)(1)(D).
- ii. Any vector infestation shall be recorded in the Monthly Reporting Requirements stipulated herein, and controlled immediately upon observation. If infestation cannot be controlled, the use of the ADC material shall be ceased and be replaced with 9 inches of soil as daily cover.

#### b. Fire

- i. Any burning material, or any solid waste that has the potential to cause fire, shall not be disposed of at the Working Face and shall not be covered with the ADC material. Procedures on handling such materials or solid waste shall be subject to the requirements specified in CCR Title 27, Section 20695(b).
- ii. Any fire incidents, or relocation of any burning material or any solid waste that has the potential to cause fire, shall be recorded in the Monthly Reporting Requirements stipulated herein.

#### c. Litter

- i. The operator shall control windblown litter from the operating day's Working Face.
- ii. If wind conditions are too extreme for the ADC material to remain intact once applied and all operational adjustments as described in Condition 6 have been proven to be ineffective, the operator shall cease the application of the ADC material and replace it with 9 inches of soil for cover until such time as conditions permit the use of the ADC material.

## d. Scavenging

- i. No scavenging activities shall be allowed.
- ii. Any scavenging activities shall be reported to the operations manager and appropriate action must be taken.

#### e. Odor

i. Daily observation of the Working Face area for any potential odor sources before, during, and after the placement of the ADC material shall be conducted.

- ii. Current odor management program as stipulated in the Final Odor Plan of Action dated June 15, 2012, shall continue to be implemented.
- iii. If odor sources have been found within the Working Face area, appropriate odor control measures shall be implemented. If odor persists, Republic may be required to discontinue the use of the ADC material and return to using 9 inches of soil for daily cover in accordance with the conditions concerning "Termination" under the "General Conditions of Approval" of this letter.
- iv. Any potential odor sources from the Working Face shall be recorded in the Monthly Reporting Requirements, and shall include, but not be limited to, the approximate location of the source, time and/or period of the duration of odor, weather condition, and odor control measures taken.
- f. In addition to the above performance criteria, Republic shall also establish a base line for two areas of the site: (1) where 9 inches of soil cover has been applied, and (2) where the ADC material is applied. The following observations shall be made on both areas in order to measure the performance of the pilot project in comparison to the use of 9 inches of soil cover.
  - i. Surface Gas Emissions Republic shall monitor for any surface gas exceedances, in accordance with the South Coast Air Quality Management District Rule 1150.1.
  - ii. Landfill Gas Collection and Recovery System Republic shall locate wells impacted by fluid build-ups, indicate the amount of fluid that is pumped-out from the well, and record the vacuum pressure before and after fluid is pumped-out.
  - iii. Leachate Collection and Recovery System Republic shall record the amount of leachate that is collected from the sump.
  - iv. Public Works reserves the right to add additional criteria that it determines are necessary to evaluate the performance of the ADC at the site.

## 10. Environmental Monitoring

- a. In addition to implementing the Landfill's current odor management program, which includes on-and-off site odor monitoring, Republic shall also examine the ADC material at the end of each operating day after the Working Face has been completely covered with the ADC material. Any tears, punctures, or unusual observations of the ADC material during its application and/or prior to placing new trash on top of the previous day's application of the ADC material, shall be documented and included in the Monthly Reporting Requirements.
- b. Weather data shall also be collected on a daily basis and reported in the Monthly Reporting Requirements. Weather data shall include but not be limited to ambient temperature, humidity conditions, wind and speed direction, and rainfall.
- c. Daily observations of vectors, blown litter, fire, and any indication of scavenging shall also be included.
- 11. Monthly Reporting Requirements Republic shall provide a monthly report to Public Works summarizing all monitoring observations and maintenance issues of the ADC pilot project, including but not limited to any tears, punctures, or unusual observations related to the application of the ADC material; any immediate odors detected at the vicinity of the Working Face during and after the application of the ADC material; and any unusual occurrences at the Working Face, such as, fire, vectors, blowing litter, and scavenging. A copy of the daily logs from the monitoring requirements specified in Republic's proposal and on this letter must also be provided in the monthly report as specified herein.

Mr. Rob Sherman October 27, 2015 Page 10

## 12. Additional Requirements

- a. Republic shall within 30 days of the date of this letter implement <u>all</u> requirements that were previously required by Public Works in the letters dated October 22, 2014, and February 26, 2015, pursuant to Condition 45N of the CUP except to the extent modified by this letter.
- b. Republic shall cooperate with Public Works in hiring an independent consultant to determine, evaluate, and make recommendations regarding the quality and permeability of soil used for daily and intermediate cover materials at the site.
- 13. <u>Data Analysis</u> At the conclusion of this ADC pilot project, Republic shall submit a detailed report documenting all of the observations, monitoring data and results, and recommendations for continued use of the ADC material as an ADC for Sunshine Canyon Landfill. Such Data Analysis and Evaluation Report must also include all documentation establishing whether the project's stated objectives have been met.

## Conclusions and Results of the ADC Pilot Project:

At the conclusion of the ADC pilot project, Public Works will evaluate the Data Analysis and Evaluation Report to determine if the project objectives have been met and will consider whether continued modification/elimination of the 9-inch daily soil cover requirement to allow the use of the ADC will protect public health and safety within the meaning of Condition 45N of the CUP. If the project objectives are met, Public Works, in consultation with the Departments of Regional Planning and Public Health, may modify or eliminate the requirement specifying the use of 9 inches of daily soil cover and allow the continued use of the ADC material on a more permanent basis.

All documents and reports required by this letter shall be submitted to the following address:

County of Los Angeles
Department of Public Works
Environmental Programs Division
P.O. Box 1460
Alhambra, California 91802-1460
Attention Martins Aiyetiwa, Landfills Section

Mr. Rob Sherman October 27, 2015 Page 11

If you have any questions, please contact Mr. Martins Aiyetiwa at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Director of Regional Planning

Very truly yours,

GAIL FARBER

Director of Public Works

Mau Faruer

KM:jl

P:\Sec\HOA\_1264552\_1 Sunshine ADC Pilot Program

cc: Department of Regional Planning (Maria Masis, Jon Sanabria, Dennis Slavin) Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force

South Coast Air Quality Management District (Mohsen Nazemi, Ed Pupka) Sunshine Canyon Landfill – Local Enforcement Agency (Dave Thompson, Gerardo Villalobos)

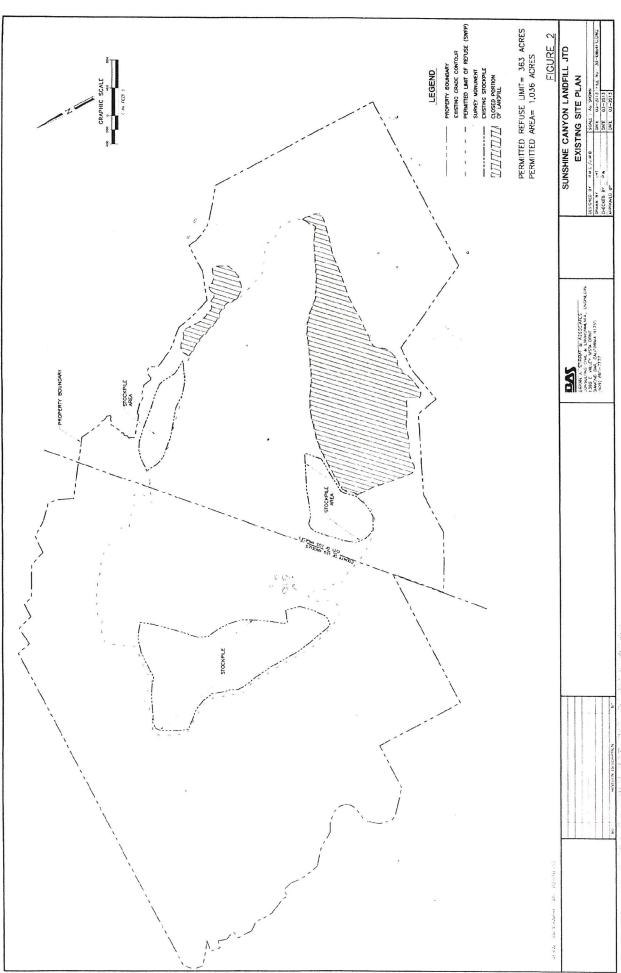
Sunshine Canyon Landfill – Community Advisory Committee (Becky Bendikson, Wayde Hunter)

City of Los Angeles Planning Department (Nicholas Hendricks, Ly Lam, Lisa Webber)

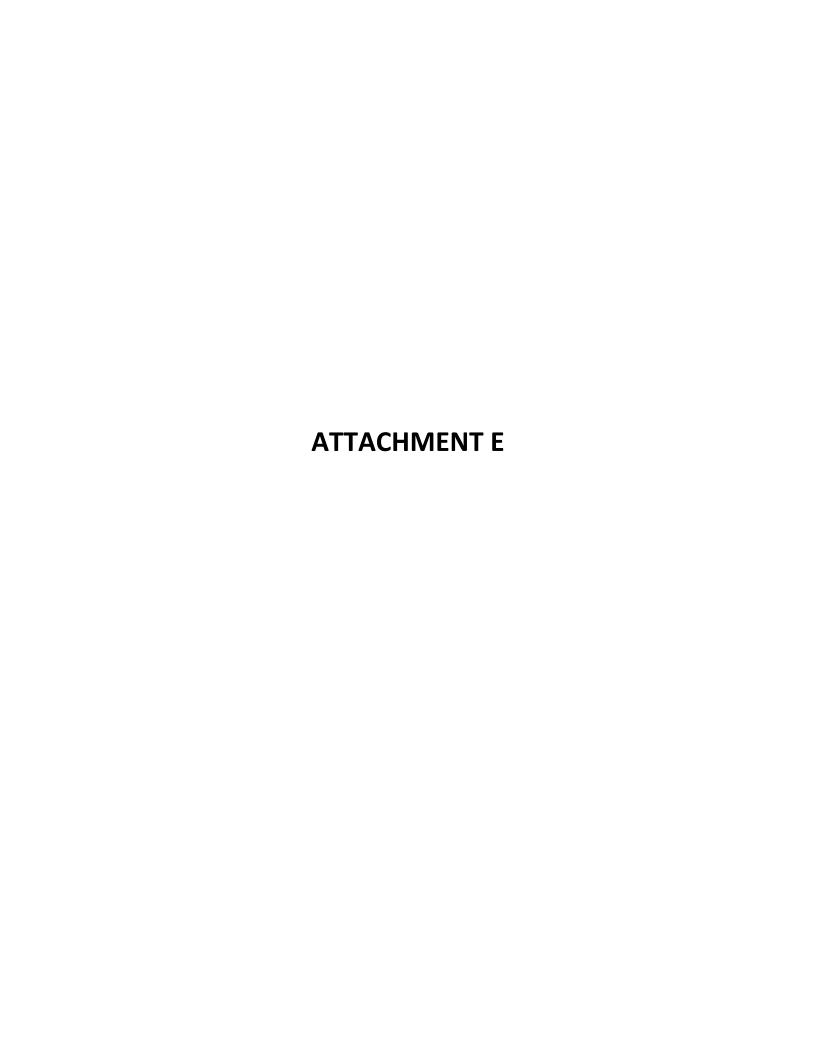
North Valley Coalition of Concerned Citizens (Wayde Hunter)

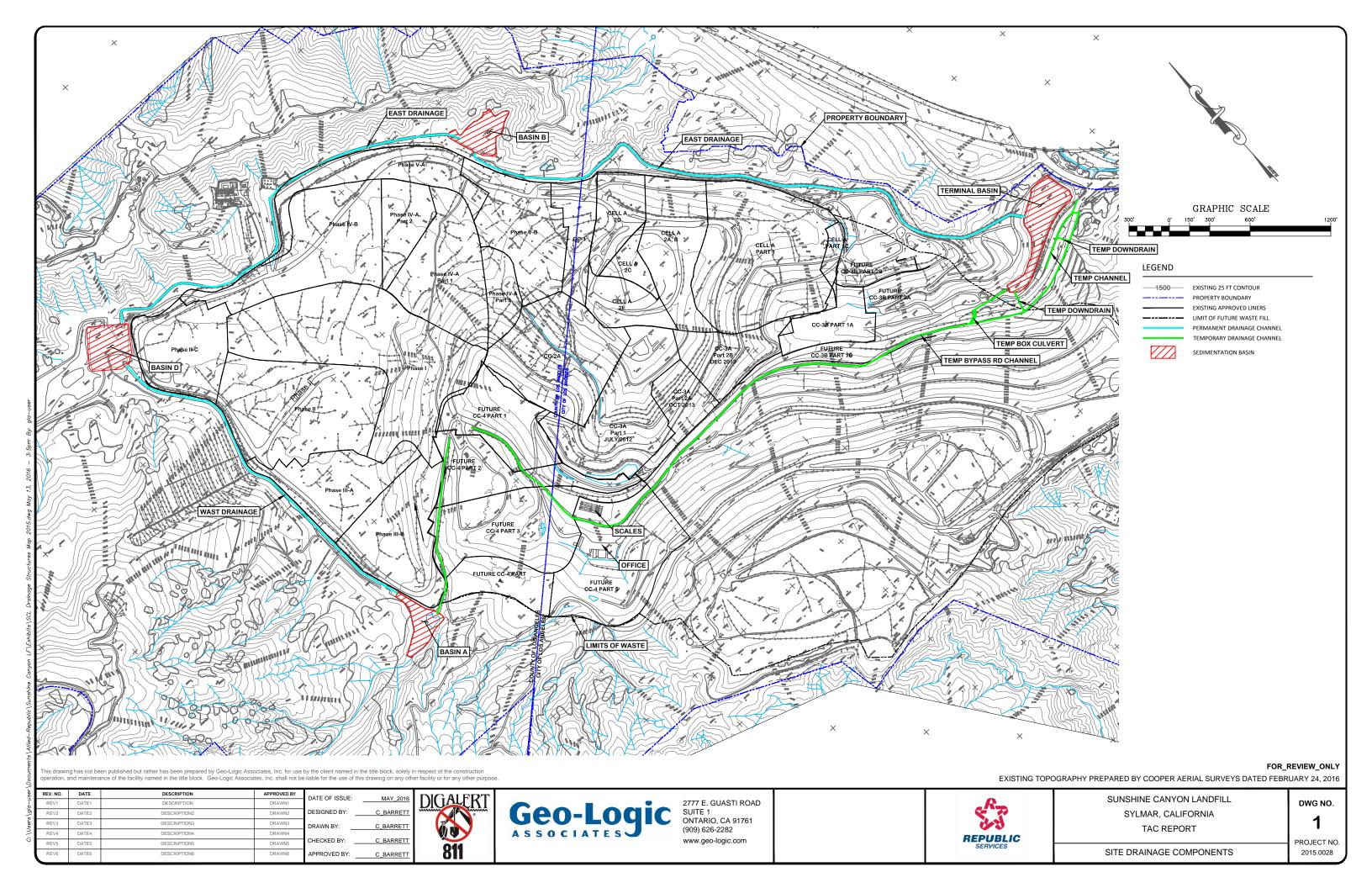
Granada Hills North Neighborhood Council





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## **COUNTY OF LOS ANGELES**

#### DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO: P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

May 4, 2016

Mr. Rob Sherman, General Manager Republic Services, Inc. Sunshine Canyon Landfill 14747 San Fernando Road Sylmar, CA 91342-1021

SUNSHINE CANYON CITY/COUNTY LANDFILL
CONDITIONAL USE PERMIT NO. 00-194-(5)
AUTHORIZATION TO IMPORT CLEAN DIRT FROM THE LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT

Dear Mr. Sherman:

We have reviewed your request dated July 28, 2015, and subsequent revision dated October 9, 2015, to import clean dirt from the Los Angeles County Flood Control District (District), beginning on April 2017, and ending on December 2021. Your request for importation of clean dirt for beneficial use at the Sunshine Canyon Landfill is hereby approved pursuant to Conditional Use Permit 00-194-(5), Conditions 1.D and 23.E, which requires Republic Services to obtain prior authorization from the Department of Public Works prior to importation and acceptance of clean dirt material for beneficial use and disposal at the site.

This authorization is being granted in order to allow the landfill to import soil for the site's daily and intermediate soil cover needs and other beneficial uses. Based on your submittal, the volume of on-site soil stockpile will be exhausted by October 2019 and importation of soil is necessary for effective landfilling operations at the site. This approval is subject to the following conditions:

- 1. The quantity of soil to be imported shall not exceed the following:
  - 2,200 tons per day average or 13,200 tons per week and
  - 2.5 million tons total for a 5-year duration of the project

- 2. The quantity of soil imported (tonnage) shall be included in the total permitted weekly tonnage capacity of materials (Solid Waste, Inert Debris and Beneficial Use Materials), which is limited to 72,600 tons per week. Pursuant to the CUP, in no event shall the daily tonnage of all materials received by the Landfill exceed 12,100 tons on any given day, six working days per week.
- 3. Limited only to Clean Dirt and sediments from the District
- 4. The soil importation schedule shall be from Monday to Friday, between the hours of 7:00 am to 6:00 pm.
- 5. The imported soil shall only be used for on-site daily and intermediate soil cover needs and other beneficial uses at the site.
- 6. All incoming and departing truck routes associated with this soil importation project shall be limited to Roxford Street, Sepulveda Boulevard and San Fernando Road.
- 7. The imported soil shall be placed adjacent to the working face area for immediate usage in a designated location, or, if soil is not needed at the working face, it will be taken to a designated stockpile location as defined in the Joint Technical Document. Additionally, all stockpile areas shall be vegetated if left unused longer than 180 days.
- 8. The operator shall comply with the currently approved Fugitive Dust Control Program to minimize dust resulting from the importation project
- 9. The operator shall follow the approved Waste Load Checking Program and the Waste Discharge Requirements issued by the California Regional Water Quality Control Board to ensure the imported soil's quality is acceptable under this program and permit.
- 10. Republic shall keep records of all materials received from the District including quantities accepted, stockpiled, beneficially used, and disposed of.

- 11. The operator shall submit a monthly summary of these records on an annual basis, including a stockpile location map, to Public Works' Environmental Programs Division at the end of each calendar year for the duration of this project.
- 12. The Director of Public Works, at his/her sole discretion may rescind or terminate this approval if the Department determines that any of the conditions of approval has been violated and/or that such termination is necessary to protect public health, safety, welfare, and/or the environment.

If you have any questions, please contact me at (626) 458-3553, Monday to Thursday, 7:00 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER

Director of Public Works

MARTIN AIYETIWA Senior Civil Engineer

**Environmental Programs Division** 

DN:il

P:\Sec\Sunshine Canyon Landfill Importation of Soil from FCD

cc: Sunshine Canyon Landfill Local Enforcement Agency (Gerry Villalobos, David Thompson)

Department of Regional Planning (Maria Masis, Tim Stapleton)

Department of Public Health (Gerry Villalobos)

City of Los Angeles Department of City Planning (Nicholas Hendricks, Ly Lam)

Sunshine Canyon Landfill Technical Advisory Committee (Lisa Webber, Jon Sanabria)

Sunshine Canyon Landfill Community Advisory Committee (Wayde Hunter, Gale Gunderson, Joe Vitti)

Members of the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task, Force

County of Los Angeles Public Works, Water Resources Division (Chris Stone, Ken Zimmer)





## **COUNTY OF LOS ANGELES**

#### DEPARTMENT OF PUBLIC WORKS

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REFER TO FILE: EP-5

January 13, 2016

Mr. Rob Sherman, General Manager Sunshine Canyon Landfill 14747 San Fernando Road Sylmar, CA 91342-1021

Dear Mr. Sherman:

# SUNSHINE CANYON CITY/COUNTY LANDFILL SOUTHERN CALIFORNIA EDISION POWER POLE REALIGNMENT PROJECT

We have completed our review of your request for approval of grading and drainage for the Southern California Edison (SCE) Power Pole Realignment Project (Project) at the Sunshine Canyon Landfill. The Project involves grading for 10 new SCE power pole locations and access roads at the Landfill. The project will also require grading outside the Landfill's current permitted grading limits as shown in the Drainage and Grading Limits Plan approved by the Los Angeles County Department of Public Works (Public Works) on August 30, 2012, for the Revision of Grading Limits and Survey Monuments for the Sunshine Canyon Landfill.

The following documents were reviewed in support of your request:

- 2015 Combined Grading Projects Sunshine Canyon Landfill dated June 2015, last revised by Geo-Logic Associates and stamped by Robert Dyer Johnson on December 16, 2015, included Plan Sheet Nos. 1 through 13 and A through C.
- Sunshine Canyon Landfill 2015 Combined Grading Project Culvert Hydrology, prepared by Geo-Logic Associates, dated July 2015.
- Geotechnical Report for Cell CC-4 Subgrade Slope Stability for Sunshine Canyon City/County Landfill, prepared by Geo-Logic Associates, dated March 5, 2015.
- Response to Comments Southern California Edison Power Pole Realignment for Sunshine Canyon City/County Landfill, prepared by Geo-Logic Associates, dated November 23, 2015.

Mr. Rob Sherman, General Manager January 13, 2016 Page 2

The aforementioned reports and drawings were reviewed in reference to the grading and drainage requirements stipulated in Conditions 35 through 38 of the Landfill's Conditional Use Permit No. 00-194-(5). Our review is limited to the areas under the purview of Public Works' responsibilities.

The reports and accompanied drawings meet our requirements for grading and drainage and are hereby approved. This approval is for grading activities and drainage structures associated with the SCE Project only, which is within the approved Landfill boundary as shown in Exhibit A-2 of the Conditional Use Permit No. 00-194-(5). The approval does not include any activities related to Cell CC-4 grading and construction.

While approval for this Project is granted as stated above, please note the following comments regarding the geotechnical reports submitted for review and approval:

- The County does not accept the material shear strengths reported and used in the July 31, 2015, stability analysis addendum for the proposed SCE Pole No. 7 shown on Sheet No. 5, prepared by Geo-Logic Associates, nor the supporting documents used in an effort to establish substantiating data for those shear strengths. However, this proposed cut slope will improve existing site conditions by reducing the slope gradient, which has an existing favorable bedrock bedding condition, and the proposed work has no potential impact to off-site properties. Therefore, Public Works has no comments that would preclude the proposed work to continue as shown and noted on the plans.
- Review of the November 23, 2015, geotechnical report is not to be construed as an acceptance of all material shear strengths reported therein. Independent slope stability analyses were conducted for evaluation of the report findings and found that the currently proposed grading for the power poles and modeled materials in slope stability cross sections do not warrant additional comments at this time. Additional commentary and supporting data may be required for future submittals modeling similar materials.

### Revised Exhibit "A" Site Plan and Drainage and Grading Limits Plan

This approval is contingent on Republic Services, as the owner/operator, submitting a Revised Exhibit "A" Site Plan and a Grading Limits and Survey Monument Plan for review and approval by the Los Angeles County Department of Regional Planning and Department of Public Works. As discussed in the December 14, 2015, meeting regarding this Project, the revised Site Plan and the Grading Limits and Survey Monument Plan must **only** show proposed changes to the grading limits that are

Mr. Rob Sherman, General Manager January 13, 2016 Page 3

consistent with the proposed grading activities necessary for this Pole Realignment Project, and must follow similar format as the previously approved Revised Exhibit A Site Plan and Grading Limits and Survey Monument Plan dated April 18, 2013, and August 30, 2012, respectively. Any plans associated with the Revised Exhibit A Site Plan and Grading Limits and Survey Monument Plan must be prepared, wet stamped, and signed by respective California State licensed professional. We request that these plans be prepared and submitted as soon as possible, but not later than March 31, 2016.

For questions or inquiries, please contact Mr. Martins Aiyetiwa at (626)458-3553, Monday to Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER

Director of Public Works

MARTIN AIYETIWA

Senior Civil Engineer Environmental Programs Division

Jelma

KM:jl

P:\Sec\DPW Comments - SCE Power Pole Realignment Project

Enc.

cc: Building & Safety Division (James Gustin, Amy Milanes)

City of Los Angeles Planning Department (Ly Lam)

Department of Regional Planning (Maria Masis)

Geotechnical & Materials Engineering Division (Greg Kelley, Brian Smith)

Los Angeles Regional Water Quality Control Board (Wen Yang)

Republic Services (Ron Krall, Rob Sherman, Michael Stewart)

Sunshine Canyon Landfill – Local Enforcement Agency (David Thompson, Gerardo Villalobos)

Sunshine Canyon Landfill – Community Advisory Committee (Becky Bendikson, Wayde Hunter)

Water Resources Division (Peter Imaa, Chi Wong)





14747 San Fernando Road Sylmar, California 91324

February 24, 2016

Ms. Patti Costa, P.E. **Environmental Manager** Sunshine Canyon Landfill

SUBJECT:

APPROVAL OF INTERMIEDATE COVER SAMPLING AND

SOILS TESTING

Dear Ms. Costa.

On February 17, 2016 the Sunshine Canyon Landfill Local Enforcement Agency (SCL LEA) received the Work Plan for Intermediate Cover Sampling and Soils Testing (Plan). Staff has completed its review of the Plan and concur with the procedures and sampling protocols as described.

Conditions of approval include the following:

- Notification prior commencement of sampling
- Estimated time for the completion of sampling
- · Copies of all sampling and laboratory testing results associated with the Plan

Thank you in advance and we look forward to working with you regarding the Plan. Please do not hesitate to contact me should you have any guestions or would like to discuss.

Regards,

Gerardo Villalobos Program Manager

Sunshine Canyon Landfill Local Enforcement Agency

Cc: David Thompson, SCL LEA

Martins Aiyetiwa, L.A. County Dept. of Public Works