

# SUNSHINE CANYON LANDFILL

May 19, 2013

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Subject: Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee  
Meeting Date June 4, 2014

Dear Ms. Webber and Mr. Sanabria:

This report provides an update of items specified by the City of Los Angeles, Planning Department and the County of Los Angeles Department of Planning to be discussed at the June 4, 2014 Joint Sunshine Canyon Landfill Technical Advisory Committee (TAC).

## 1.0 Cell Development

### 1.1 Cell CC-3A, Part 2

As reported in the December 2013 TAC report, construction activities for Cell CC-3A Part 2 began the week of April 15, 2013. The cell was divided into two sections, Parts 2A and 2B due to diminishing available constructed airspace. The Final Report of Construction Quality Assurance (CQA) for Cell CC-3A, Part 2A, was submitted to the LA RWQCB on September 28, 2013; approval for the disposal of municipal solid wastes in this cell was received on October 7, 2013. The Final CQA Report for Part 2B was submitted to the LA RWQCB on January 7, 2014; approval for the disposal of municipal solid wastes in this portion of the cell was received on January 31, 2014.

### 1.2 Cell CC-3B

The Design Report for Cell CC-3B was submitted to the LA RWQCB on May 22, 2013; a conditional approval for Cell CC-3B liner construction was received on August 29, 2013. Final approval is contingent on the submittal of a design report for the construction of the West Drainage including a schedule of completion for this project. This requirement was included because "the West Drainage is a critical stormwater management feature at the landfill that must be constructed in coordination with Cell CC-3B liner construction activities". The Design Report for the West Drainage was submitted to the LA RWQCB and the Los Angeles

Department of Public Works (DPW) on March 28, 2014. As of the date of this report, no comments have been received on the Design Report from either agency.

Cell CC-3B is scheduled for construction in 2015 with an anticipated start in the latter part of the second quarter of 2015. Cell CC-3B will provide approximately 20 acres of lined area for disposal operations with a capacity of approximately 5.5 million cubic yards.

#### 1.2.1 Phase 1 Temporary Construction By-Pass Road

As part of the phased construction of Cell CC-B, an interim toe berm will be constructed along with new drainage channels and a temporary access road. Construction of the first phase of this project, the Phase 1 temporary construction by-pass road, began the first week of May 2014 with an expected completion in September 2014.

A bird survey was conducted in the Phase 1 Temporary Construction By-Pass Road project area by a qualified biologist in February 2014 as required by site permits. The report from JMA for this survey is included in Attachment A. Removal of trees in the construction area commenced in early March 2014 and continued throughout March and April.

The removal of oak trees in the Phase 1 By-Pass Road construction area was accounted for during oak tree mitigation efforts concluded in 2011. The final Annual City Oak Tree Report was submitted to Mr. Ron Lorenzen, City of Los Angeles, Urban Forestry Division on August 3, 2011. This report documented that the site planted 1305 oak trees to mitigate for those that would be removed as part of development projects on the City portion of the site at the required 2:1 replacement ratio (Mitigation Reporting and Monitoring Program (MRMP) Measure No. M-4.4.3 (72 and 73). The survey conducted at the conclusion of the 5-year monitoring period documented that 1,113 total surviving oak trees remained at the end of the 5-year monitoring period. This resulted in a total of 192 excess oak trees that were planted to mitigate for those removed. For the Phase 1 Temporary Construction By-Pass Road project, a total of 34 oak trees were removed.

## 2.0 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.

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## 2.1 GCCS Completed Improvements and Planned Upgrades

### 2.1.1 Completed Improvements

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

- 388 vertical extraction wells;
- 18,500 linear feet of 36-inch and 24-inch perimeter header piping;
- Over 32,000 linear feet of horizontal collectors in the waste;
- 3,000 linear feet of perimeter liner collectors;
- 16,500 linear feet of lateral piping and slope collectors
- New 200 Horsepower blowers at Flares 1, 3 and 8.

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.

### 2.1.2 GCCS Current Work and Planned Upgrades

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

- Horizontal floor collectors continue to be installed in new cell CC-3A Part 2. Construction on these collectors is expected to be completed by May 31, 2014;
- Twenty (20) new vertical gas extraction wells were installed between January and April 2014;
- Eighty-five (85) vertical gas extraction wells in portions of the City Landfill footprint (closed portion of the site) were installed as replacement wells. This project is expected to be completed by early June 2014;

- Additional vertical extraction wells are planned to be installed 2014;
- The installation of horizontal collectors in the current cell will also continue; the vertical spacing between collectors will not exceed 50 feet.

## 2.2 Landfill Gas Monitoring

### 2.2.1 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. This frequency was reduced to bi-monthly monitoring in July 2011 after system improvements had been made.

### 2.2.2 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 cumulative results of the instantaneous and integrated SEM conducted for the second semi-annual period for 2013.

- Instantaneous SEM monitoring: the City side of the landfill had 142 locations over a total of 1174 grids monitored showing surface emissions over 500 ppm Total Organic Carbon (TOC); the County side of the landfill had 115 locations over a total of 856 grids that had surface emissions over 500 ppm TOC. These locations were repaired and re-monitored in accordance with SCAQMD Rule 1150.1 and the Abatement Order (A/O). Each of the locations passed either a 3-day re-check, a second 10-day re-check, or a third 30-day re-check with the gas system being expanded as allowed by Rule 1150.1 and the A/O;
- Integrated SEM monitoring: the City side of the landfill had 47 grids out of a total of 1,173 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 27 grids out of a total of 862 grids that showed results over 25 ppm TOC. The grids were repaired and re-monitored in accordance with Rule 1150.1 and the A/O. Each of the grids passed either a 3-day re-check, a second 10-



day re-check, or a third 30-day re-check with the gas system being expanded as allowed by Rule 1150 and the A/O.

### 2.3 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>) for the last quarter of 2013 or January through April 2014.

### 2.4 Potential Subsurface Oxidation Events

By letter dated October 3, 2013, a Fire Response Plan was submitted to the LEA which included the procedures that are followed when a subsurface oxidation event is identified at the landfill.

In December 2103, at the request of the LEA, Mr. Gino Yekta from CalRecycle reviewed data provided to him by Sunshine Canyon Landfill personnel regarding potential subsurface oxidation events at the site. By email dated December 30, 2013 (Attachment B), Mr. Yekta stated the matter was completed.

There have been no potential subsurface oxidation events in 2014 at the site.

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

Sunshine Gas Producers, L.L.C. ("SGP") will be the owner and operator of the turbine power plant that is currently under construction. The project will generate approximately 20MW of renewable energy. The plant will consist of five (5) Solar Mercury turbines at approximately 4.6 MW each. Significant milestones 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;
- As of the date of this report, approximately 95% of construction is complete.

. Full operation of the facility is expected in late third quarter of 2014.

## 4.0 Current Odor Control Mitigation Measures (City/County)

Although the Order for Abatement expired on December 31, 2013, 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. The receipt of transfer station loads on Saturdays prior to 9 AM is dependent on whether adverse wind conditions are present;
- 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;

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- Three orchard fans continue to be run in the scalehouse area of the site and are operated during the nighttime hours as a mitigation measure to collect potentially odorous air that could accumulate along the ground surface during low wind conditions.

## 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 lysimeter. Reports of sampling and monitoring activities, including all analytical results, are submitted to the LA RWQCB on a semiannual and annual basis.

The following is a summary of the results of the second semi-annual monitoring period of 2013:

- Exceedances of site water quality protection standards (WQPS) were noted for 1,4-dioxane at downgradient groundwater monitoring wells MW-1, and MW-5. Alkalinity exceeded site WQPS' from samples collected at well PZ-4 and has been added to the tracking mode constituent for this well. Allyl Chloride exceeded site WQPS from samples collected at well DW-5 and has been added to the tracking mode constituent for this well. No other new groundwater monitoring parameter/well pairs were added to the facility's tracking mode list during this semi-annual monitoring period.
- Concentrations of total dissolved solids, sulfate, fluoride, iron, and manganese exceed State of California secondary drinking water standards in samples from many site monitoring wells, including upgradient (background) monitoring wells. Comparison of upgradient and downgradient water quality data suggest significant natural spatial variability exists at the site.
- One Appendix I VOC was detected in the samples from corrective action evaluation monitoring well MW-2A, and six Appendix I VOCs were detected in the sample from well MW-9.
- VOCs were detected in samples from Subdrain N and the Combined Subdrain. The sample from Subdrain N contained five VOCs with a total concentration of 11.7 ug/L. The sample from the Combined Subdrain contained 10 VOCs with a combined concentration of approximately 176.25 ug/L. These results are generally similar to those measured during the previous monitoring periods. Liquids discharged from Subdrain N and Combined Subdrain represent a composite of natural shallow groundwater seepage from various subdrain liquid collection systems associated

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with County disposal phases I through V and City Landfill Unit 2, Cells A and CC-1. All liquids from these subdrains are collected and conveyed to the water treatment system.

## 5.0 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.

The following sections describe the existing systems and planned additions that will enable these goals to be met throughout the life of the site, together with an evaluation of the current conditions relative to regulatory compliance.

### 5.1 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.

#### 5.1.1 Perimeter Drainage System

The perimeter drainage system contains 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 pre-landfill 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. As discussed in Section 1.2, the design report for the continuation of the West Drainage was submitted on March 28, 2014 as required for the full approval of the design report for Cell CC-3B. 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 the West Drainage Channel is scheduled for 2015.

#### 5.1.2 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 Closed City Landfill, currently areas of Cells CC-1, CC-2 and CC-3, and most of Cell A. During the current phase of landfill development in CC-3A, the interim interior system is modified on an annual basis to accommodate ongoing construction activity. System elements in place include the following:

- A primary drainage channel running from Basin A to the scalehouse area. The initial segment is an 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. This segment collects runoff from the administration area and slopes below it, and from a substantial area of slopes in the County landfill area. It connects to a temporary asphalt and HDPE geomembrane-lined segment that also receives runoff from the west side Closed City Landfill, and extends to the bottom of the scalehouse access road and crosses the road in a concrete box culvert, where it discharges into the Terminal Basin.
- Two 90-inch corrugated steel pipes buried below the main site access road, which discharge 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.

#### 5.1.3 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. Typical components of the plan include:

- Silt fencing at the toe of refuse slopes and stockpiles;
- Placement of silt fencing and sandbags along drainage channels to control silt and direct water from upslope areas into the channels;
- Straw wattles placed on landfill and stockpile slopes;
- Hydroseeding new refuse slopes and stockpiles that will not be used within the next 180 days;

- Installation of new temporary HDPE-lined channels on refuse slopes to direct flow from landfill areas into existing drainage channels. Existing channels are inspected and repairs as needed;
- Reducing sediment discharge and peak flows from sedimentation basins by placing temporary barriers around the discharge pipes and wrapping the discharge pipe openings with geotextile;
- Placement of K-rails along main haul road to direct surface water flow to stormwater channels;
- Grading of benches to direct surface water flow to inside of bench, then to drainage conveyance systems;
- Placement of sand bag check dams along bench roads;

As part of the cell construction activities for CC-3A, Part 2, a secondary temporary drainage channel on the southern edge of Cell CC-3A, Part 1 has been removed as well as the small concrete basin in this area. As part of the construction activities, a new temporary sedimentation basin has been constructed at the southern end of CC-3A, Part 2 which has been tied into the site's overall storm water management system.

#### 5.1.4 Storm Event of February 28 – March 1, 2014

During a rain event from February 28 – March 1, 2014, six (6) inches of rainfall were recorded on-site at SCL. Winds, as recorded by the on-site weather station located on the southern berm, were recorded at an average of 6-7 miles per hour (mph) on February 28<sup>th</sup>, and up to 20 mph on Saturday, March 1<sup>st</sup>.

Due to the intensity of this storm, damage occurred to some of the site's interim stormwater control systems. Stormwater flow tore the geomembrane liner of the channel along the main access road. A report to the LEA was submitted on March 14, 2014 (Attachment C), detailing the actions taken and the repairs conducted as of the date of that report. As of the date of this report, repairs to all the temporary stormdrain channels have been completed. Additional improvements to the site's storm channel system will be completed by August 2014. These additional improvements include the following:

- Sections of the plastic-lined channel that are interim in nature (less than one rainfall season and/or will be taken out of service by capital projects relating to liner development within the next 2-3 years) were replaced in kind with new sections of 60-mil geomembrane;
- The sections of channel that are not interim (as defined above), are currently being improved as follows:
  - Removal of all damaged liner material (completed);
  - Grading of channels (completed);



- Permanent improvements consisting of the installation of reinforced concrete side walls and asphalt pavement invert. All sections of channel are being designed to conform to Section K.1.c of the site's WDRs;
  - Silt fencing along the channels will be installed as soon as the improvements are completed.
- The temporary sedimentation basin just north of Cell CC-3A Part 2 where stormwater collected will be graded and lined with an appropriate liner material.

Also as a result of this storm, the protective soil layer placed over the liner and daily soil placed over MSW at the southern portion of Cell CC-3A, Part 2, washed away from stormwater flow. Cleanup of this area began on March 11<sup>th</sup> after the ground surface was sufficiently dry to allow access by heavy equipment. The work was completed on March 17<sup>th</sup> by a contractor working under the supervision of our engineering consultant, A-Mehr, Inc. The Construction Quality Assurance (CQA) Report prepared by A-Mehr, Inc. dated March 20, 2014, was submitted to the LA RWQCB on March 21, 2014. The report documents the cleanup and repair work and certifies that no damage to the liner was observed and no liner repair was required. This report is included in Attachment D.

#### 6.0 Sediment Cleanup at Basins A, B, D and Terminal Basin (City/County)

Sediment is removed from the onsite basins once the material is dry and the basins are safely accessible with heavy equipment. The removal activities are typically completed by August of each year; sediment cleanup at Basins A, B, and D is scheduled for August 1, 2014 and will be completed by October 1, 2014.

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

There have been no changes to the leachate collection and treatment system since the December 2013 TAC report. 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 landfill, and pumped via extraction pumps to the influent tank at the leachate treatment facility (LTF). Leachate collected in this manner produces approximately 10,000 – 15,000 gallons per day (gpd). In addition, approximately 12,000 gpd of liquid is pumped out of gas collection wells. This liquid is taken off-site for disposal.

##### 7.1 Leachate Treatment Facility

There have been no changes to the leachate treatment facility (LTF) since the December 2013 TAC report. 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.



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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 full 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.

#### 8.0 Revegetation Plans and Recent Hydroseeding Efforts on Temporary Slopes and Stockpiles (City/County)

As reported in the Quarterly Vegetation Report for the First Quarter of 2014 (submitted April 30, 2014), hydroseeding of approximately 30 acres of site slope areas was conducted in April 2014. The site areas hydroseeded are shown on the figure in Attachment E. Hydroseeding activities were delayed due to multiple factors including the following:

- Discussions and meetings with the Los Angeles County Department of Public Works (DPW) staff to develop a revised Hydroseed mix that may have a better chance of success at the site;
- A storm event from February 27 – March 1, 2014 that required repairs to slope areas;
- Strong winds that precluded hydroseeding activities from occurring.

Discussions with DPW also included recommendations from Ms. Betsy Landis with respect to the method for the Hydroseed application. The typical Hydroseed application used at the site provided for a two-step process that including the seed application first followed by a second application of the fiber matrix material. The method of application for the April 2014 hydroseeding event was changed from this typical application to accommodate Ms. Landis' request that the seeds be applied on top of the wetted mulch layer rather than be covered by it to see if this method would have a better success rate at the site. The hydroseeding over the majority of the 30 acres was therefore done by applying the mulch layer first followed by a second application which included the seeds. To evaluate the method of hydroseeding previously used at the site and the "reverse" application, a test plot area was established on the City North portion of the site. Two adjacent areas were selected for this test area as shown on the figure in Attachment E. Periodic evaluations of these two areas will be made and documented to determine if one method of application has better success rate at the site. Future hydroseeding activities at the site will use the method showing the more promising results.

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

As reported in the May 2013 TAC Report, 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 re-vegetation 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.

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 biologist reported several species of Coastal sage scrub (CSS) have been established in the pilot project area. In addition, the report states that several birds were observed foraging within the planted areas including the California towhee, white crowned sparrow, sage sparrow, common raven and mocking birds.

The pilot project area is also monitored by the contractor (Architerra) who designed and oversaw the construction of the project. Architerra's assessment of the pilot project area for the first quarter of 2014 include the following observations:

- There has been germination and establishment of many Coastal sage scrub (CSS) species including Deerweed, Giant Wild Rye, Nesselia, White and Black Sage, Buckwheat and several wildflower species;
- Most of the container plants are growing and establishing well with only a small percentage dying out.

Since late May 2013, activities for this project have continued with weekly inspections and maintenance including weeding and any maintenance to the irrigation system. These maintenance activities will be conducted for the remainder of 2014.

10.0 Chatsworth Mitigation (City Q.C.9)

As reported in the December 2013 TAC report, the City has completed the survey of the property and has determined to have the mitigation property remain under the control of the Department of Water and Power (LADWP). As of the date of this report, LADWP has not reached a decision regarding the appraisal methodology it wishes to require for the agreement to be consummated.

The City of Los Angeles and SCL are working cooperatively to finalize the appraisal, mitigation contract and form of conservation easement needed to allow SCL to begin work on this mitigation project. It should be noted that the U.S. Army Corps of Engineers (ACOE) has indicated another permit extension (Permit Numbers SPL 2002-00802-AOA and SPL-2003-00408-AOA) will not be granted without a face-to-face meeting with SCL personnel, staff from the City of Los Angeles and ACOE personnel (Attachment F).

11.0 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 thirteen vehicles that use E-85 fuel.

Three light-duty site trucks were purchased in 2013; one was converted to use LPG in late 2013. It was planned to convert the other two trucks to LPG in early 2014, but due to difficulties in fueling with LPG, the decision was made to use E-85 for the other two site trucks. A tipper fueled by LPG is expected to be put into operation in June 2014. According to SCL's research, there have been no advancements in technology for alternative fuel for heavy machinery.

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

As reported in the May 2013 TAC report, 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. Please note SCL has not made a decision on the purchase of permanent generators and will only do so after the permitting efforts have been completed. The permit applications were submitted to the SCAQMD on March 25, 2013. As of the date of this report, permits for the generators have not been received from SCAQMD.

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

##### 13.1 Fill Sequence

Fill operations will continue in CC-3A, Part 2 for the remainder of 2014. As reported in the December 2013 TAC report, fill operations were conducted in areas of the County that had not reached final grade when deemed necessary by site operations personnel. As of early April 2014, all fill operations have been conducted in CC-3A Part 2.

##### 13.2 Soil Usage

As reported in the December 2013 TAC report, based on daily soil tracking, approximately 30% of the site's consumed airspace is taken up by soil used for daily cover. This volume is 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 has been followed since the end of September 2010. Prior to September 2010, typically 15-18% of the site's consumed airspace was soil used for cover.

##### 13.3 Stockpile/Borrow Areas

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Placement and subsequent removal of stockpile material is an operational activity that occurs over the life of the landfill. The December 2013 TAC report provided a figure showing three stockpile areas on site. This figure is provided again in Attachment G for reference. Currently, the stockpile area on City South is being used to provide material for the daily soil cover requirements. The other stockpile areas will be used as deemed appropriate by site operations personnel. 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.

#### 14.0 Sewer Project

SCL personnel have worked with the City of Los Angeles Bureau of Engineering (BOE) to obtain all the necessary permits for the construction of the off-site sewer in San Fernando Road. These permits include the following:

- Police Commission Permit for night work;
- Sewer connection permit
- Approval from the Department of Transportation for the traffic control plan
- Approval of the shoring plan from the BOE

All of these permits and approvals were obtained in mid-April 2014, however work on the project could not commence due to work being conducted by Time Warner Cable in this area. Final approval from BOE was given on Friday, May 16<sup>th</sup> and work on the project will commence on May 19<sup>th</sup>. The project work hours are from 7:30 PM to 3:30 AM.

#### 15.0 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-3A, Part 2 (January 2014);
- Installation of new vertical gas wells and associated piping;
- Installation of replacement vertical gas wells and associated piping;
- Installation of horizontal collectors in Cell CC-3A, Part 2;
- Construction activities for SGP's gas-to-energy facility (by HR Green, contractors for SGP);
- Hydroseeding of 30 acres of slope area.

Planned activities for the third and fourth quarters of 2014 include:

- Completion of the Phase 1 Temporary Construction By-Pass Road;
- Drainage improvements;
- Construction of a temporary scalehouse facility;
- Installation of the sewer line and associated lift station;
- Installation of new vertical wells and associated piping;
- Installation of horizontal collectors.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Rob Sherman". The signature is fluid and cursive, with the first name "Rob" and last name "Sherman" clearly distinguishable.

Rob Sherman  
General Manager  
Sunshine Canyon Landfill

Cc: Ly Lam, City Planning  
Nick Hendricks, City Planning  
Dan Scott, City Planning  
Maria Masis, LA County Regional Planning  
Emiko Thompson, County Department of Public Works  
Wayne Tsuda, SCL LEA, Program Lead  
Cindy Chen, SCL-LEA  
Gerry Villalobos, SCL-LEA  
David Thompson, SCL-LEA  
Dave Hauser, Republic Services  
Michael Stewart, Republic Services  
Wayde Hunter, SCL CAC  
Becky Bendikson, SCL CAC

## Attachments

- Attachment A – JMA Bird Nest Survey Results, Phase 1 Temporary By-Pass Road Project Area
- Attachment B - Email from CalRecycle, Gino Yekta regarding Subsurface Fire Concern
- Attachment C - Report to LEA on Stormwater Repairs, Storm Event of February 28 – March 1, 2014, Report dated March 14, 2014
- Attachment D - Report to LA RWQCB, Post Storm Cleanup and Repairs CC-3A Part 2, dated March 21, 2014
- Attachment E - Figure 1 from Quarterly Vegetation Report for the First Quarter 2014 showing Hydroseeded Areas
- Attachment F - Letters from US Army Corps of Engineers dated January 28, 2014
- Attachment G - Stockpile Location Map

## **ATTACHMENT A**



# memorandum

date March 17, 2014

to Patty Costa, Sunshine Canyon Landfill

from Greg Ainsworth, Consulting Biologist

subject Bird Nest Survey Results for the Phase I By-pass Road Disturbance Area

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On February 3 and 7, 2014, between the hours of 0630 and 0930 and 1000 and 1200, respectively, biologist Greg Ainsworth conducted a focused nesting bird survey at the Phase I By-pass Road Disturbance Area Project site (project site). Weather conditions included clear skies, light winds, and mild temperatures between 50-70 degrees F. During the survey the biologist recorded visual and audible observations of bird species and their behavior while walking transects through the project site and from observing birds with binoculars from several fixed locations. The survey included 100% visual coverage of the nesting bird habitat (trees and shrubs) on the project site, including all areas within approximately 500 feet.

## Results

No birds exhibiting breeding behavior or active bird nests were observed during the survey. On inactive (potential) barn owl (*Tyto alba*) nest was observed nestled on a short rock cliff face located in close proximity to the entrance road. This nest was monitored on both dates for approximately two hours total and no sign of owl presence or other indicators that this nest is active were observed. A pair of red-tailed hawks was observed in a cluster of oak tree located near the project site to the east, as well as soaring over the landfill during both surveys; however, no nest site was located for this pair of hawks.

Bird species observed include western scrub jay (*Aphelocoma californica*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), rock dove (*Columba livia*), American crow (*Corvus brachyrhynchos*), pacific-slope flycatcher (*Empidonax difficilis*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), Eurasian collared-dove (*Streptopelia decaocto*), red-shouldered hawk (*Buteo lineatus*) (soaring), red-tailed hawk (*B. jamaicensis*), California thrasher (*Toxostoma redivivum*), and European starling (*Sturnus vulgaris*).

## Discussion and Recommendations

No breeding birds or active bird nests were observed on or adjacent to the project site. However, if project activities are not initiated within a minimum of 30 days from the last survey date (February 7, 2014), it is recommended that an additional breeding bird survey be conducted to ensure that no new nests have occurred prior to any ground disturbing activities.



If you have any questions or comments regarding the contents of this letter, please do not hesitate to contact me at (818) 564-5544 or at AinsworthEnv@gmail.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Greg Ainsworth', with a stylized flourish at the end.

Greg Ainsworth  
Biologist / Certified Arborist (ISA Cert # WE-7473A)



# memorandum

date May 8, 2014

to Patty Costa, Sunshine Canyon Landfill

from Greg Ainsworth, Consulting Biologist

subject Follow Up on Bird Nest Survey Results for Vegetation Management at Landfill Entrance at Northwest Corner of Gentili Ranch Road and San Fernando Road and Phase 1 Temporary Construction Road Project

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As indicated in the bird survey memorandum submitted on March 27, 2014 for the Phase 1 Temporary Construction Road Project and the memorandum submitted on April 22, 2014 for vegetation clearing and management activities at the entrance to the Landfill, no breeding birds or active bird nests were observed within the vegetation that will be removed or trimmed at these project locations, respectively. To recap, no active bird nests were found within the Phase 1 Temporary Construction Road Project footprint, however, birds carrying nest material to offsite locations was observed, insinuating that nesting was occurring in the general area. However, project activities have been ongoing and any bird nesting would have begun after the initiation of grading. With regards to the vegetation management at the entrance to the Landfill, there was some breeding activity observed during the bird nest survey approximately 40 feet to the south, within the stand of liquidambar and blue gum. However, due to the high amount of vehicle and truck traffic that passes through the intersection and through the entrance to the landfill, the vegetation thinning/removal that will occur at the northwest corner will have no affect on any nests located on the other side of the intersection.

With regards to preconstruction bird nest surveys, the standard practice for avoiding impacts to nesting birds (including raptors) is to 1) conduct vegetation impacts (i.e., thinning, removal, nearby construction, etc) outside of the breeding season, or 2) have a qualified biologist conduct preconstruction surveys for active bird nests prior to impacting vegetation during the breeding season. These two methods are widely accepted and preferred by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service to avoid impacts to migratory birds in accordance with Fish and Game Codes 3503 and 3503.5 and the federal Migratory Bird Treaty Act of 1918, respectively. In accordance with the City of Los Angeles' Conditions of Approval, Mitigation Reporting and Monitoring Program (MRMP) - City Only Alternative (June 15, 2004), the two aforementioned approaches shall be implemented to avoid active bird nests. The MRMP identifies the breeding season as March 15 to August 1 for all passerine species and March to July for raptors. If vegetation impacts will occur during the breeding season and a biologist conducts a nest survey, but does not observe an active nest, no other actions are required by the biologist and impacts to the vegetation may occur. It should be noted that it is recommended to conduct vegetation impacts within one week following the nest survey to ensure that no new nests are constructed. If more than one week lapses between the survey and the onset of vegetation impacts, or if there is a lapse in project activity for one week or more, it is recommended that an additional nest survey be conducted to confirm that no new nests have been established.

If you have any questions or comments regarding the contents of this memo, please do not hesitate to contact me at (818) 564-5544 or at AinsworthEnv@gmail.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Ainsworth". The signature is stylized with a large, sweeping "G" and "A", followed by a horizontal line and a small flourish.

Greg Ainsworth  
Biologist / Certified Arborist (ISA Cert # WE-7473A)

## **ATTACHMENT B**

## Costa, Patti

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**From:** Yekta, Gino@CalRecycle <Gino.Yekta@CalRecycle.ca.gov>  
**Sent:** Monday, December 30, 2013 9:24 AM  
**To:** wayne.tsuda@lacity.org  
**Cc:** David Thompson (David.Thompson@lacity.org); Mindermann, Wes@CalRecycle; Wochnick, Michael@CalRecycle; Markie, Susan@CalRecycle; Thalhamer, Todd@CalRecycle; Kelapanda, Achaya  
**Subject:** Subsurface Fire Concern

Hello Wayne: I have not heard back from you since I left you a phone message sometimes last week regarding concern over potential subsurface fire at the City of LA landfill. It appears, based on my conversation with the Operator, review of data submitted as well as your confirmation e-mail below dated Nov. 12, 2013, that there have not been any further issues with respect to any on-going subsurface fire at the landfill. CalRecycle will continue to assist the LEA, at the request of the LEA, with our technical expertise regarding this and any other issues at the landfill. We consider this matter completed at this time but would ask you to please let's know if you need any further assistance. Please call (916-341-6354) or e-mail me if you have any questions. Thanks.....Gino

---

**From:** Yekta, Gino@CalRecycle  
**Sent:** Thursday, December 19, 2013 12:56 PM  
**To:** Kelapanda, Achaya  
**Cc:** David Thompson ([David.Thompson@lacity.org](mailto:David.Thompson@lacity.org)); [wayne.tsuda@lacity.org](mailto:wayne.tsuda@lacity.org); Mindermann, Wes; Wochnick, Michael; Markie, Susan@CalRecycle; Thalhamer, Todd  
**Subject:** RE: Probe Readings 11/6-11/8

Thank you.....Gino

---

**From:** Kelapanda, Achaya [AKelapanda@republicservices.com]  
**Sent:** Thursday, December 19, 2013 12:50 PM  
**To:** Yekta, Gino@CalRecycle  
**Cc:** David Thompson ([David.Thompson@lacity.org](mailto:David.Thompson@lacity.org)); [wayne.tsuda@lacity.org](mailto:wayne.tsuda@lacity.org)  
**Subject:** FW: Probe Readings 11/6-11/8

Gino:

Based on the data the we provided to the LEA; Mr. Tsuda approved suspension of monitoring for the last incident that we had on Oct 21<sup>st</sup>, 2013. We have not had another incident since the Oct 21<sup>st</sup>, 2013 event; we however have continued to monitor this area. Please let me know if you need any more information.

Sincerely  
Achaya Kelapanda

---

**From:** Wayne Tsuda [<mailto:wayne.tsuda@lacity.org>]  
**Sent:** Tuesday, November 12, 2013 8:02 AM  
**To:** David Thompson  
**Cc:** Gerardo Villalobos; Martin Rosen; Patricia Hundt; Andy Kao; Eugene Tseng; Cindy Chen; Kelapanda, Achaya; Hauser, Dave  
**Subject:** Re: Probe Readings 11/6-11/8

Based on the Nov. 6th monitoring results, the SCL LEA requirement for push probe monitoring for this location can be suspended unless another incident occurs.

On Tue, Nov 12, 2013 at 7:47 AM, David Thompson <[david.thompson@lacity.org](mailto:david.thompson@lacity.org)> wrote:  
FYI

----- Forwarded message -----

From: **Kelapanda, Achaya** <[AKelapanda@republicservices.com](mailto:AKelapanda@republicservices.com)>

Date: Mon, Nov 11, 2013 at 4:54 PM

Subject: Probe Readings 11/6-11/8

To: "David Thompson ([David.Thompson@lacity.org](mailto:David.Thompson@lacity.org))" <[David.Thompson@lacity.org](mailto:David.Thompson@lacity.org)>

Dave:

Please see attached the probe readings from 11/6 through 11/8. Please let me know if you have any questions.  
Thanks.

Regards

**Achaya Kelapanda** | **Environmental Manager** | **Sunshine Canyon Landfill**

14747 San Fernando Rd | Sylmar, CA 91342

☎ Cell: **818.277.6828** | ☎ Office: **818.362.2096**

☎ Fax: **818.362.5484** | ✉ e-Mail: [akelapanda@republicservices.com](mailto:akelapanda@republicservices.com)

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David Thompson, Program Supervisor  
Local Enforcement Agency Program  
Los Angeles Department of Building and Safety  
3550 Wilshire Blvd., 18th Floor  
Los Angeles, CA 90010  
Office: [213-252-3348](tel:213-252-3348)  
[David.Thompson@lacity.org](mailto:David.Thompson@lacity.org)

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**Wayne Tsuda**, Program Manager  
Local Enforcement Agency (LEA) Program  
Los Angeles Department of Building and Safety  
3550 Wilshire Blvd., 18th Floor, Mailstop 115  
Los Angeles, CA 90010  
Email: [wayne.tsuda@lacity.org](mailto:wayne.tsuda@lacity.org)  
Office: [213-252-3932](tel:213-252-3932)

## **ATTACHMENT C**

# SUNSHINE CANYON LANDFILL

March 14, 2014

Mr. Gerardo Villalobos  
Program Manager, SCL LEA  
5050 Commerce Drive  
Baldwin Park, CA 91706

Subject: Stormwater Controls Improvement and Repairs Related to Storm Event of  
February 28- March 1, 2014  
Sunshine Canyon Landfill, SWFP 19-AA-00

Dear Mr. Villalobos,

As requested, this letter provides a report of the improvements and repairs that have (1) been completed, and (2) are currently in progress to address the effects of the rain event of February 28 – March 1, 2014. During this rain event, six (6) inches of rainfall were recorded on-site at Sunshine Canyon Landfill. Winds, as recorded by the on-site weather station located on the Southern Berm, were recorded at an average of 6-7 miles per hour (mph) on February 28<sup>th</sup> and up to 20 mph on Saturday, March 1<sup>st</sup>.

Projected completion dates for each of the actions that are in progress are also provided.

## 1.0 Completed Improvements

Improvements completed to date include the following:

- Removal of sediments from San Fernando Road commenced early on Friday, February 28<sup>th</sup>. This activity continued and was completed on March 1<sup>st</sup> when all the sediments were removed from the street.
- Repairs have been completed in several areas of the site. These activities included adding dirt and track-walking to mitigate eroded areas as follows:
  - County slopes – completed March 11<sup>th</sup>;
  - Floor of 500-ft setback area – completed March 11<sup>th</sup>
  - Slopes above Cell CC-3A – completed March 8<sup>th</sup>.
- Removal of silt from internal roads – completed March 5<sup>th</sup>;
- Removal of water from the Cell CC-3A Sedimentation Basin (located north of the Cell CC-3A area) commenced on March 3<sup>rd</sup> and was substantially complete by March 7<sup>th</sup>. Samples of this water were collected immediately and sent to a laboratory for testing. SCL began pumping water from the basin on March 3, approximately 48 hours after the storm event ended. Additional activities in this area are described in Section 2.0.



## 2.0 Ongoing Activities

Improvements and repairs that are currently in progress are the following:

- Repairs on the northeast side of County deck:  
  
This work is currently in progress and is expected to be complete by March 19<sup>th</sup>;
- A residual amount of water remains in the Cell CC-3A Sedimentation Basin. The water remaining was unable to be removed via pumping due to the silt content. Site operators are grading in the portions of this area where it is practical to do so, and windblown litter is being removed. It is expected this area will be fully restored to pre-storm conditions by March 21<sup>st</sup>;
- Stormwater Channels:  
  
Damaged stormwater channels along the main haul road are being repaired by our contractor, Sukut Construction, Inc. Work to repair the channel along the closed access road (below the condensate treatment plant area) commenced on Tuesday, March 11<sup>th</sup>. These improvements are expected to be completed by March 31<sup>st</sup>.
- Temporary Scalehouse Sedimentation Basin:  
  
Removal of sediment from the basin that was constructed at the base of Cell CC-3A Part 2 commenced on Wednesday, March 12<sup>th</sup>. Sediment that washed into this basin is being removed by our contractor, Sukut Construction. We expect the basin will be cleaned to the design grades by March 31<sup>st</sup>.
- Haul Road:  
  
Small portions of the haul road in the area just above the scalehouse area were impacted by the heavy surface water flow, causing damage to sections of the pavement. These areas will be addressed by Sukut Construction as part of stormwater drainage repairs and are expected to be completed by March 31<sup>st</sup>.
- Liner Investigation  
  
Some protective soil that is placed over the liner prior to filling was displaced by storm water near the south end of Cell CC-3A Part 2B (just north of the scalehouse area). Our CQA Engineer, A-Mehr, Inc. is overseeing the investigation and cleaning in this area. The following report from A-Mehr, Inc. has been provided giving an update on this work as of today, March 14<sup>th</sup>:

*"Approximately half of the area starting from the south end to the north has been inspected and no damage was observed. Some silt (no sand or gravel) was found under the geotextile (between the geotextile and the liner). The liner and*

*the geotextile in the observed area has been properly inspected and cleaned. We expect that the inspection and cleaning of silt to be completed by Wednesday, March 19<sup>th</sup>, and start with protective soil placement over the area. All field work will be completed by March 24<sup>th</sup>. A-Mehr will prepare a CQA letter report by the end of the month."*

Please note that we will not place protective soil cover until we have approval from the Los Angeles Regional Water Quality Control Board to do so.

Please do not hesitate to contact me if you have any questions,

Sincerely,



Patti K. Costa, P.E.  
Environmental Manager  
Sunshine Canyon Landfill

Cc: David Thompson, SCL LEA  
Wen Yang, Los Angeles Regional Water Quality Control Board,  
Dave Hauser, Republic Services, Inc.  
Harold Barber, Republic Services, Inc.  
Michael Stewart, Republic Services, Inc.  
Tim Johnson, Republic Services, Inc.

## **ATTACHMENT D**

# SUNSHINE CANYON LANDFILL



A REPUBLIC SERVICES COMPANY

March 21, 2014

Dr. Wen Yang  
Chief, Land Disposal Unit  
Los Angeles Regional Water Quality Control Board  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, California 90013

RE: Sunshine Canyon Landfill, File No. 58-076  
Cell CC-3A, Part 2 Post-Storm Cleanup and Repairs

Dear Dr. Wen,

Attached please find a report prepared by our consultant, A-Mehr, Inc, documenting the cleaning and repairs conducted at the southern end of Cell CC-3A Part 2. These actions were taken after the storm event of February 28 – March 1, 2014 during which time over six (6) inches of rainfall was recorded at Sunshine Canyon Landfill.

The attached report documents the cleanup and repair work conducted from March 11 – 17, 2014 and certifies that no damage to the liner was observed and no liner repair was required. All work was done under the supervision of an A-Mehr, Inc. construction quality assurance (CQA) engineer.

It is important for us to be able to place trash in this portion of the cell for efficient fill placement and continue to improve drainage. We are therefore requesting your approval for waste placement in this area as soon as possible.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Patti K. Costa, P.E.  
Environmental Manager  
Sunshine Canyon Landfill

Attachment Post-Storm Cleanup and Repair, Cell CC-3A, Part 2, A-Mehr, Inc. March 20, 2014

cc: Gerardo Villalobos, SCL LEA  
Wayne Tsuda, SCL LEA  
David Thompson, SCL LEA  
Dave Hauser, Republic Services, Inc.  
Harold Barber, Republic Services, Inc.  
Michael Stewart, Republic Services, Inc.

# **A-Mehr Inc.**

---

***Professional Engineers and Scientists Specializing in Landfills***

**23016 Mill Creek Drive  
Laguna Hills, CA 92653**

**Phone (949) 206-0157  
Fax (949) 206-9157**

March 20, 2014

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

RE: Post-Storm Cleanup and Repairs, Cell CC-3A, Part 2 Area

Dear Ms. Costa:

Sunshine Canyon Landfill has completed cleaning and repairing the eroded protective soil in the southern end of Cell CC-3A, Part 2 following the storm event of February 28 - March 1, 2014. All work was done under the supervision of an A-Mehr, Inc. construction quality assurance engineer. We certify that no damage to the liner was observed and no liner repair was required. This letter report documents the cleanup and repair work, which occurred from March 11 through March 17, 2014.

Prior to starting the cleanup work, we inspected the area and observed that some protective soil placed over the liner system prior to refuse filling was displaced by storm water near the south end of Cell CC-3A Part 2 (just north of the scalehouse area). Inspection also showed that in some areas the protective geotextile directly below the displaced protective soil was damaged, allowing fine-grained soils to be deposited between the 80-mil HDPE geomembrane liner and the geotextile.

In order to expose areas of displaced protective soil and geotextile, the contractor first removed refuse and protective soil from the affected area. This work was performed under our observation using a backhoe. We confirmed that the work was done without damage to the liner in the area.

After the affected area was exposed, the contractor pulled back the geotextile and removed the fine-grained soils under the geotextile. After the liner surface was cleaned, we inspected the liner and confirmed that the liner was undamaged. Any damaged geotextile was then replaced or repaired by sewing torn pieces and patches as needed. We confirmed that the repaired geotextile is sound and in conformance with original installation requirements.

After all cleaning and repairs were complete, we verbally reported our findings to staff of the Regional Water Quality Board, and then the contractor installed new protective soil in conformance with original construction requirements. Cover soil placement was completed under our supervision on March 17, 2014.

Representative photographs of cleaning and repair work are attached.

Based on our observations, we certify that the liner system in Cell CC-3A, Part 2 has been restored to a condition substantially identical to that described in our Final Report of Construction Quality Assurance dated January 2014.

Any questions regarding this report may be directed to the undersigned at (949) 206-0157.

Respectfully submitted,

**A-Mehr, Inc.**

A handwritten signature in black ink, appearing to read "M. Ali Mehrazarin". The signature is stylized with a large initial "M" and a long, sweeping underline.

M. Ali Mehrazarin, P.E.  
Certifying Engineer





Photo 1 - The area was covered with daily cover soil prior to the cleanup and repair work.



Photo 2 - Refuse and protective cover soil were removed from the affected area.





Photo 3 - Some damage was observed to geotextile below the displaced protective soil.



Photo 4 - Fine-grained soils were observed under the geotextile.





Photo 5 - Fine-grained soils were observed under the geotextile.



Photo 6 - Fine-grained soils were removed.





Photo 7 - The liner surface was inspected to confirm that the liner was undamaged.



Photo 8 - The liner surface was inspected to confirm that the liner was undamaged.





Photo 9 - The liner surface was inspected to confirm that the liner was undamaged.



Photo 10 - The geotextile was repaired.





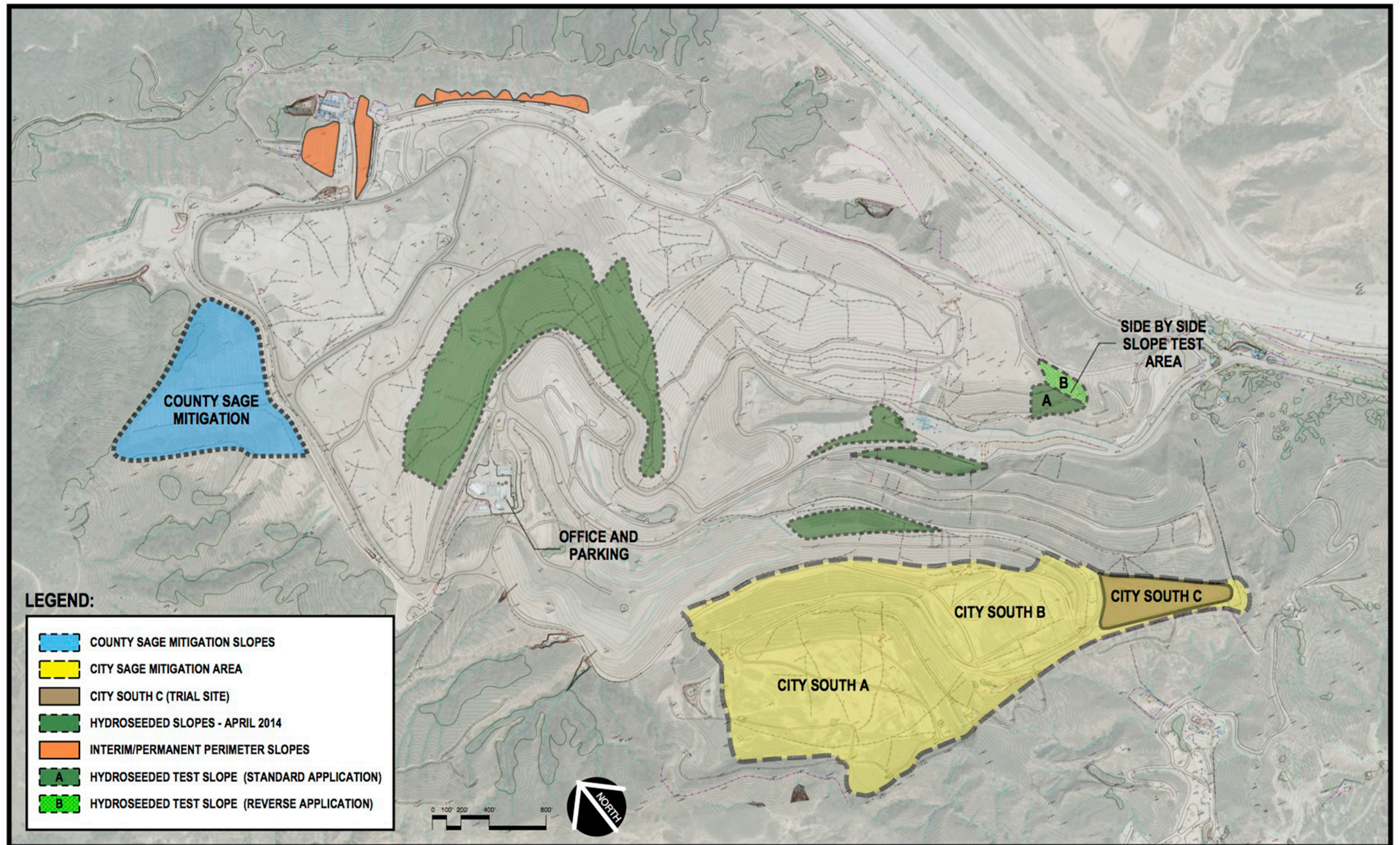
Photo 11 - The protective soil was replaced.



Photo 12 - The protective soil was replaced.

## **ATTACHMENT E**







## **ATTACHMENT F**



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
VENTURA FIELD OFFICE  
2151 ALESSANDRO DRIVE, SUITE 110  
VENTURA, CALIFORNIA 93001

January 28, 2014

Mr. Dave Hauser  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342

Dear Mr. Hauser:

Reference is made to your request of December 9, 2013 to amend Permit Numbers SPL 2002-00802-AOA and SPL-2003-00408-AOA which authorized discharges of fill material into waters of the United States associated with the Sunshine Canyon Landfill projects. Enclosed are the requested permit modification letters that grant a one year extension to initiate the required compensatory mitigation program at Chatsworth Reservoir and record the required conservation easement or covenant.

We are concerned that you have requested similar permit modification letters over the last several years with no measureable progress in actually initiating the required compensatory mitigation program. If it appears that you will not be able to initiate the required mitigation program this year, please be aware that we will not grant another permit modification without a face-to-face meeting that includes your staff, staff from the City of Los Angeles and my staff. As part of this required meeting I would expect the outcome to be a detailed schedule documenting the specific approvals required for the City of Los Angeles to complete the land transfer that will allow you to initiate the compensatory mitigation program at Chatsworth Reservoir.

I look forward to working with you and your staff to implement the above compensatory mitigation program. If you have any questions please call me at (805) 585-2141 or Aaron Allen of my staff at (805) 585-2148.

Sincerely,

David J. Castanon  
Chief, Regulatory Division







DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT, CORPS OF ENGINEERS  
VENTURA FIELD OFFICE  
2151 ALESSANDRO DRIVE, SUITE 110  
VENTURA, CALIFORNIA 93001

January 28, 2014

Mr. Dave Hauser  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342



Dear Mr. Hauser:

Reference is made to your request of December 9, 2013 to amend Permit No. SPL-2002-00802 which authorized you to permanently impact 1.97 acres of waters of the United States, including 0.57 acres of jurisdictional wetlands, for the construction of a retention basin and a concrete channel in 2,300 linear feet of Drainage A, extension of a culvert in Drainage G (approximately 370 linear feet) and the installation of a collection and conveyance structure in Drainage F and an adjacent wetland area (W-1) that are required as part of the closure of the City of Los Angeles portion of the Sunshine Canyon Landfill in an unnamed tributary to Bull Creek near San Fernando, Los Angeles County, California.

Under the provisions of 33 Code of Federal Regulations 325.7(b), Special Conditions One and Six for your permit are modified as follows:

- 1) The permittee shall compensate for permanent impacts to 1.97 acres of waters of the United States, including 0.57 acres of wetlands, by restoring and enhancing at least 19 acres of riparian and wetland habitat within Chatsworth Reservoir. The permittee shall implement all the terms and conditions stipulated in the approved Final Mitigation Plan for Chatsworth Reservoir dated June 2006 in full. The permittee shall initiate restoration and enhancement activities as stipulated in the approved mitigation plan for Chatsworth Reservoir no later than December 31, 2014.
- 6) By December 31, 2014, the permittee shall either record a conservation easement or covenant, which shall run with the land, obligating the permittee, their successor or assigns to maintain the 19-acre preservation and enhancement area as natural open space in perpetuity, or provide other documentation that provides the Corps with legal assurances that the 19-acre mitigation area will be preserved in perpetuity. The permittee shall receive written approval from the Corps of this easement/covenant or other documentation prior to it being finalized and recorded.

The terms and conditions of Permit No. SPL-2002-00802, except as changed herein, remain in full force and effect.

Please note that a copy of this letter is being forwarded to U.S. Fish and Wildlife Service, Attn: Mr. Steve Henry, 2493 Portola Road, Suite B, Ventura, California 93003; U.S.



DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT, CORPS OF ENGINEERS  
VENTURA FIELD OFFICE  
2151 ALESSANDRO DRIVE, SUITE 110  
VENTURA, CALIFORNIA 93001

January 28, 2014

Mr. Dave Hauser  
Republic Services  
14747 San Fernando Road  
Sylmar, California 91342

Dear Mr. Hauser:

Reference is made to your request of December 9, 2013 to amend Permit No. SPL-2003-00408 which authorized you to permanently impact 3.41 acres of waters of the United States, including 1.01 acres of wetlands, for discharges of fill material for the construction of flood control facilities and the placement of liner for the disposal of waste material associated with the Sunshine Canyon Landfill Extension project in an unnamed tributary to Bull Creek near San Fernando, Los Angeles County, California.

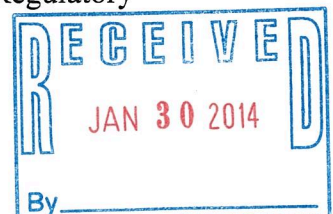
Under the provisions of 33 Code of Federal Regulations 325.7(b), Special Conditions One and Five for your permit are modified as follows:

1) The permittee shall compensate for permanent impacts to 3.41 acres of waters of the United States, including 1.01 acres of wetlands, by restoring and enhancing at least 12 acres of riparian and wetland habitat within Chatsworth Reservoir. The permittee shall implement all the terms and conditions stipulated in the approved Final Mitigation Plan for Chatsworth Reservoir dated June 2006 in full. The permittee shall initiate restoration and enhancement activities as stipulated in the approved mitigation plan for Chatsworth Reservoir no later than December 31, 2014.

5) By December 31, 2014, the permittee shall either record a conservation easement or covenant, which shall run with the land, obligating the permittee, their successor or assigns to maintain the 12-acre preservation and enhancement area as natural open space in perpetuity, or provide other documentation that provides the Corps with legal assurances that the 12-acre mitigation area will be preserved in perpetuity. The permittee shall receive written approval from the Corps of this easement/covenant or other documentation prior to it being finalized and recorded.

The terms and conditions of Permit No. SPL-2003-00408, except as changed herein, remain in full force and effect.

Please note that a copy of this letter is being forwarded to U.S. Fish and Wildlife Service, Attn: Mr. Steve Henry, 2493 Portola Road, Suite B, Ventura, California 93003; U.S. Environmental Protection Agency, Attn: Mr. Jason Brush, Supervisor, Wetlands Regulatory



## **ATTACHMENT G**



