SUNSHINE CANYON LANDFILL

A REPUBLIC SERVICES COMPANY

March 18, 2015

Ms. Lisa Webber
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City of Los Angeles
Department of City Planning
200 N. Spring Street
Los Angeles, CA 90012

Mr. Jon Sanabria
SCL TAC Co-Chair
Los Angeles County
Department of Regional Planning
320 W. Temple St, 13th Floor
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Subject: Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee
SCL TAC Meeting Date - April 2, 2015

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 April 2, 2015.

1.0 Cell Development

1.1 Cell CC-3B, Part 1

As reported in the June 2014 TAC Report, 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 with final approval contingent on the submittal of a design report for the construction of the West Drainage.

Only a portion of Cell CC-3B will be constructed this year (CC-3B, Part 1). This cell will be approximately 8 acres and will provide 3.2 million cubic yards of airspace. CC-3B Part 1 will be constructed adjacent to the existing Cell CC-3A liner and will use the currently landfill drainage system toprovide approximately one year of disposal capacity which will allow for the approval for the West Drainage to be conducted.

The main elements of the project are:

- Completion of the Phase 1 Bypass Road as described in the 2013 Design Report for Cell CC-3B. The new bypass road will have a paved width of approximately 40 feet. The bypass road will allow excavation of unsuitable soils in the area currently occupied by the existing access road.

- Excavation and replacement of unsuitable soils under the current access road and construction of the permanent seep water extraction and management system to a final collection area behind the existing cutoff wall/extraction system for the landfill.

- Excavation and fill for the liner subgrade.

- Improvements to the existing drainage system in the project area including:

    - Lining of the drainage channels along the Phase 1 Bypass Road to convey stormwater from existing channels on the main access road to the terminal sedimentation basin;

    - An additional temporary channel along the north side of Cell CC-3B, Part 1 to intercept drainage from the closed north City Landfill;

    - Construction of a temporary detention basin north of the terminal basin.

A design report and detailed plans will be submitted to the RWQCB before construction of the Cell CC-3B, Part 1 liner and LCRS.

1.1.1 Phase 1 Temporary Construction By-Pass Road

Construction of the Phase 1 temporary construction by-pass road resumed on March 3, 2015. As reported in the June 2014 TAC report, environmental reviews and surveys were conducted in the Phase 1 Temporary Construction By-Pass Road project area by a qualified biologist in February 2014 as required by site permits. Prior to the start of construction this year, another environmental survey was conducted by our third party biologist who works for John Minch and Associates (JMA). The report from JMA regarding this survey is included in Attachment A.

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

2.1 Fill Sequence

Fill operations will continue in CC-3A, Part 2 until CC-3B, Part 1 is completed, e.g. until the fourth quarter of 2015. There have been no disposal activities on the County top deck since early March 2014.

2.2 Soil Usage

As reported in the June 2014 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.

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 B. Only 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; 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 GCCS Completed Improvements and Planned Upgrades

3.1.1 Completed Improvements

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

- 425 vertical extraction wells;
- 18,500 linear feet of 36-inch and 24-inch perimeter header piping;
- Over 47,100 linear feet of horizontal collectors in the waste mass;
- 3,000 linear feet of perimeter liner collectors;
- Over 19,000 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.

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:

- 6,100 linear feet of horizontal floor collectors were installed in January 2015 in Cell CC-3A, Part 2;
- Thirty-seven (37) new vertical gas extraction wells were installed between May and November 2014;
- Approximately 15 new vertical gas wells will be installed by April 2015;
- 20 new pumps are being installed in vertical gas wells by the end of March 2015;
- Approximately 4,500 linear feet of 18" header pipe will be installed by the end of March 2015.

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. This 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 cumulative results of the instantaneous and integrated SEM conducted for the third and fourth quarter of 2014.

- Instantaneous SEM monitoring: the City side of the landfill had 31 locations over a total of 1096 grids monitored showing surface emissions over 500 ppm Total Organic Carbon (TOC); the County side of the landfill had 131 locations over a total of 889 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 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;

- Integrated SEM monitoring: the City side of the landfill had 19 grids out of a total of 1096 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 38 grids out of a total of 889 grids that showed results over 25 ppm TOC. The grids were repaired and re-monitored in accordance with Rule 1150.1. Each of the grids passed either a 10-day re-check, a second 10-day re-check, or a 45-day re-check with the gas system being expanded 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_4) during the fourth quarter of 2014. There was one probe, Probe 207A that exceeded the regulatory threshold of 5% methane during the first quarter of 2015. Corrective action was immediately taken and the methane concentration dropped to 0.0% methane the same day (January 22, 2015). The probe was remonitored with the LEA present on January 23, 2015 and the methane concentration was 0.0%.

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 Sept 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 2014

During the third and fourth quarter events, the water quality protection standard (WQPS) was exceeded for 1,4-dioxane and t-butanol in the samples from well MW-1 and for 1,4-dioxane in the sample from well MW-13R. Additionally, the WQPS was exceeded for ammonia-N in the sample from well DW-1 and chemical oxygen demand in the sample from well PZ-4 during the third quarter and for 1,4-dioxane in the sample from well MW-5 during the fourth quarter.

These results are generally similar to past monitoring event results, as most constituent/well pairs were previously in tracking mode. However, verification retesting was performed for the following third quarter WQPS exceedances: t-butanol at well MW-1; ammonia-N at well DW-1; and chemical oxygen demand at well PZ-4. Only t-butanol at well MW-1 was confirmed at concentrations that exceed the WQPS.

During the second semiannual 2014 monitoring period, several volatile organic compounds (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 are sampled on a quarterly basis. Lysimeter LY-6 was dry during both sampling events. Both samples from lysimeter LY-7 contained at least three VOCs at quantifiable concentrations, and the types and concentrations of detected VOCs were similar to historical results for this monitoring point..

With the exception of the total dissolved solids concentrations in samples from all monitoring wells and the sulfate concentration in the sample from corrective action evaluation monitoring well MW-9, none of the analyte concentration measured in samples collected during the third quarter (Summer) 2014 monitoring period exceeded a State of California drinking water standard or Federal Maximum Contaminant Level.

In addition to quantifiable VOCs measured in samples from the detection monitoring wells, vinyl chloride was measured at a trace concentration in the samples from well MW-14 and a trace concentration of t-butanol was measured in the sample from well MW-5 during the fourth quarter event. With respect to corrective action evaluation monitoring wells, four VOCs were detected in the sample from well MW-9, and one VOC was detected in the samples from wells MW-2A and DW-4.

Concentrations of total dissolved solids, sulfate, fluoride, iron, and manganese exceeded State of California secondary drinking water standards, or Federal Maximum Contaminant Level (fluoride), 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.

VOCs were detected in samples from Subdrain N and Combined Subdrains during the third quarter event. The sample from Subdrain N contained six VOCs with a total concentration of 7.78 g/L. The sample from Combined Subdrains contained four VOCs with a combined concentration of approximately 97.1 g/L, dominated by t-butanol at 61 g/L and 1,4-dioxane at 25 g/L. These results are generally similar to those measured during the previous monitoring period. Of the reported VOCs, only the benzene concentration in the sample from Subdrain N at 1.4 g/L exceeded a State of California primary drinking water standard (1.0 g/L). All other VOC concentrations were below state and federal drinking water standards, or have no established ARAR. Additionally, TDS concentrations exceeded the state secondary drinking water standard in both subdrain samples.

The results from the fourth quarter 2014 sampling event were generally similar to those obtained during the third quarter from Subdrain N and Combined Subdrains. Six VOCs were detected in each sample from Subdrain N and Combined Subdrains, with total VOC concentrations of 10.48 µg/L and 30.86 µg/L (respectively). The benzene concentration measured in the sample from Subdrain N (2.1µg/L) exceeded the State of California primary drinking water standard for this analytes (1.0 µg/L). All other VOC concentrations were below State and federal drinking water standards. Concentrations of sulfate, total dissolved solids (TDS), iron, and manganese exceeded State of California secondary drinking water standards in both fourth quarter 2014 subdrain samples and the concentration of fluoride in the sample from Subdrain N excceded the State of California primary drinking water standard.

6.0 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 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.

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 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. 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 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 were 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.
- 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.

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 1st 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. 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;

- Three orchard fans were operated in the old scalehouse area of the site until February 28, 2015. Power to the old scalehouse was re-located at that time as part of the preparations for the construction of Cell CC-3B, Part 1. Placement of the orchard fans on another area of the site will be evaluated in the near future.

- 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 will be made in April 2015 including re-locating the systems located on the southern berm and along the oil field road.

  A letter was received from LA City Department of City Planning on March 4, 2015 regarding the placement of the vapor odor control system within the 100-acre buffer zone which states "the placement and use of the vapor odor control system is part of the required odor abatement efforts that are mandated by local and regional enforcement agencies. This is consistent with the intent of the City's land use determination." A copy of this letter is included in Attachment C.

- 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 third quarter of 2014 was submitted on October 31, 2104; the fourth quarter 2014 vegetation report was submitted on February 5, 2015.

No hydroseeding activities were conducted during the third or fourth quarter of 2014. Hydroseeding activities were conducted in late February – early March 2015 over approximately 12 acres of CC-3A Part 2 slopes. A figure showing the hydroseeded areas is included in Attachment D.

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 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 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"*. The sampling and assessment report submitted in the fourth quarter vegetation report indicates that there was a "substantial increase in the annual herbaceous cover due to seasonal timing of the survey since many annual grasses germinate and sprout in the winter".

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

- Many of the established native species have emerged from the summer dormancy period and are flushing out new growth;
- New species have germinated such as Salvia, Encelia and Artemesia. These are evident near or underneath the canopies of the established Saltbush shrubs;
- In the areas where the selective pruning of Saltbush was conducted, there is expanded growth of Salvia, Encelia and Artemesia;
- Several birds are using the coastal sage scrub trial area including bushtit, CA towhee, black phoebe, song sparrow and sage sparrow. These birds are observed during the monitoring visits.

Since late May 2013, activities for this project have continued with weekly inspections and maintenance including weeding and maintenance to the irrigation system when needed. These maintenance activities will be conducted for the remainder of 2015.

An evaluation of the pilot area is being conducted and recommendations for this area to be implemented in 2015 will be developed and reported in the first quarter 2015 vegetation report.

11.0 Chatsworth Mitigation (City Q.C.9)

As reported at the December 2014 TAC meeting, A meeting was held with representatives from the City of Los Angeles Department of Water and Power, the Army Corps of Engineers (ACOE) and Republic Services on September 3, 2014 to discuss the Chatsworth Mitigation Project. LADWP determined an ordinance amending Section 12.04 of the Los Angeles Municipal Code by amending the zoning map to designate boundaries for the Chatsworth

Nature Preserve Wetland Mitigation Project area was the appropriate mechanism for a conservation agreement for this area. The meeting was held to discuss the ordinance with the representative from the ACOE and to discuss the actions needed to move forward with the project.

In December 2014, a draft of the ordinance was submitted to the ACOE. A request was made by the ACOE to include the legal description of the mitigation area in the draft ordinance; as of the date of this report, a revised ordinance including the legal description of the project area has not been submitted.

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.

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 early 2015; at the CAC meeting held on November 13, 2014, SCAQMD indicated the permit for this tipper will be issued soon. 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. 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.

14.0 Soil Importation

In January 2015, Republic Services requested clarification from DPW regarding the information that would be required to be submitted for approval to import clean soil to Sunshine Canyon Landfill for purposes of using for cover material. A response from DPW was received on February 12, 2015 providing the information requested.

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:

- Installation of new vertical gas wells and associated piping;
- Completion and start-up of SGP's gas-to-energy facility;

- Continued maintenance of City South Coastal Sage Mitigation Area;
- Site wet weather preparedness activities;
- Start of construction of Phase 1 Temporary By-Pass Road;
- Hydroseeding;
- Material advance for SCE power pole realignment project submitted.

Planned activities for the first and second quarters of 2015 include:

- Construction of Phase 1 Temporary Construction By-Pass Road;
- Excavation activities for Cell CC3B, Part 1 subgrade;
- Installation of horizontal collectors and vertical extraction wells;
- Administration building and maintenance area re-locations;
- Continued maintenance of City South Coastal Sage Mitigation Project area.

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
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