

January 21, 2021

Ms. Tiffany Butler
Senior Management Analyst II
Department of City Planning
200 N. Spring St., Room 525
Los Angeles, CA 90012

Subject: Report to the Joint Sunshine Canyon Landfill
Technical Advisory Committee

Dear Ms. Butler,

Attached please find an electronic copy of the Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee for the February 3, 2021 TAC meeting.

Please do not hesitate to contact me should you have any questions regarding this report.

Sincerely,



Tuong-Phu Ngo, PE, QSD/QSP
Environmental Manager
Sunshine Canyon Landfill

Cc: Chris Coyle, General Manager
Josh Mills, West Area Environmental Manager
Valorie Moore, Team Environmental Manager

Joint Sunshine Canyon Landfill Technical Advisory Committee Report

Meeting Date – February 3, 2021

Prepared By:
Republic Services – Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, California 91342

January 21, 2021

Ms. Lisa Webber
SCL TAC Co-Chair
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
Los Angeles, CA 90012

Subject: Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee
SCL TAC Meeting Date - February 3, 2021

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 February 3, 2021. Sunshine Canyon Landfill Team provided a draft copy of the report to the City of Los Angeles Department of City Planning on January 21, 2021 for review.

1.0 Cell Development

1.1 Cell CC-4, Part 4A

CC-4 Part 4A cell construction was completed in 2020 with a cell footprint of 4 acres of floor area and 2.9 acres of side slopes. Approval for disposal operations in Cell CC-4 Part 4A was received from the LARWQCB on November 6, 2020 (Attachment A).

1.2 Future Cell CC-4, Part 4B

The cell design for the new cell CC-4 Part 4B is in progress cell construction is anticipated to be complete in the third quarter of 2021. The cell is anticipated to be 13 acres.

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

2.1 Fill Sequence

Disposal operations were conducted in CC-4 Parts 1 & 2 from June of 2020 (the date of the last TAC Report) to the end of December 2020. Disposal operations in CC-4 Part 3 began in mid October 2019 after the cell floor was certified substantially complete by LA-RWQCB. CC-4 Part 4A is certified for filling operations by the LA-RWQCB on November 6, 2020.

2.2 Soil Usage

Based on soil usage logs, approximately 11.7% of airspace volume consumed year to date is daily 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 four stockpile areas on site that have been designated for such purpose. These stockpile areas are shown on the figure included in Attachment B.

3.0 Landfill Gas Collection and Control System

Improvements to the site's landfill gas collection and control system (GCCS) are conducted on an annual basis. This year's improvements to date include the installation of vertical and horizontal gas collection wells and the continuation of improvements as a component of our robust monitoring, maintenance, and operations program. Summaries of these activities have been provided in prior TAC reports.

The following is a summary of the GCCS activities that have been completed thus far in 2020:

- Installation and activation of 46 (as of June 2020) new and replacement vertical collection points
- Installation and activation of 6 (as of June 2020) horizontal collectors in new waste placement areas
- Installation of six horizontal to gabion cube collector connections in new cell construction
- Installation and activation of three liner collectors in new cell construction
- Installation of two trench collectors along the access to the active area
- Installation of dewatering pumps in gas wells impacted by liquids;
 - Installation of 96 dewatering pumps in vertical gas extraction wells
 - Installation of over 3,000 feet of air and force main lines for the operation of pumps and transport of liquids removed from the wells

- Installation of fourteen de-scalers on the force main lines to prevent the build-up of solids that can create blockage in the force main lines.
- Installation of a grinder pump in a transfer sump to accommodate the solids in the liquid being transported by the force main lines
- Installation of an additional pump in the main sump (total of 3) to accommodate the increased flow from the additional pumps
- Installation of approx. 1,800 feet of 18 inch header pipe around the perimeter of the active area
- Installation of new active sump for Flare #3
- Installation of two passive sumps at the County side of the landfill

A robust operations and maintenance program continues to ensure all components of the GCCS are working effectively and efficiently. A force main line maintenance program has been implemented. Gauges installed on wells with pumps to monitor the force main back pressure. This information is plotted and reviewed on a weekly basis to identify the location of blockages or restrictions in the force main piping. Once identified the blockages can then be remediated. A blockage prevention program includes the installed electronic de-scalers and monthly jetting of the over 3,000 feet of main force main lines to prevent the accumulation of scaling.

Republic Services continues to conduct gas well monitoring and tuning of the wellfield on a semi-monthly basis.

3.1 Surface Emissions Monitoring

The number of initial surface monitoring exceedances continues to decrease as the wellfield improvements described above and in prior TAC reports are impacting the GCCS performance

Third Quarter 2020 SEM Results

- Instantaneous SEM monthly monitoring: During the three initial monitoring events, the City side of the landfill had 7 locations over 165 grids monitored indicating surface emissions over 500 ppm Total Organic Carbon, measured as methane (TOC); the County side of the landfill had 10 locations over 159 grids that indicated surface emissions over 500 ppm TOC. These locations were repaired and re-monitored in accordance with SCAQMD Rule 1150.1. Each of the locations originally identified as being in excess of the 500 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.
- Integrated SEM monitoring: During the initial monthly monitoring events, the City side of the landfill had 7 grids out of a total of 193 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 5 grids

out of a total of 159 grids that showed results over 25 ppm TOC. The exceedances were addressed and re-monitored in accordance with Rule 1150.1. Each of the locations originally identified as being in excess of the 25 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

Fourth Quarter 2020 SEM Results

- Instantaneous SEM monitoring: During the initial monthly monitoring events, the City side of the landfill had 4 locations over a total of 193 grids monitored showing surface emissions over 500 ppm TOC; the County side of the landfill had 8 locations over a total of 124 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 originally identified as being in excess of the 500 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.
- Integrated SEM monitoring: During the initial monthly monitoring events, the City side of the landfill had 15 grids out of a total of 128 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 27 grids out of a total of 171 grids that showed results over 25 ppm TOC. The grids were repaired and re-monitored in accordance with Rule 1150.1. Each of the locations originally identified as being in excess of the 25 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

3.2 Perimeter Probe Monitoring

Rule 1150.1 monitoring requires monthly monitoring of the site's perimeter probes. There were no exceedances higher than 3.0% during the probe monitoring in the third quarter 2020 and fourth quarter 2020. A letter dated October 24, 2018 was prepared by SCS Engineers on behalf of SCL for P-205R which has shown methane levels slightly exceeding the AOC value of 2.5% by volume, but has not exceeded the regulatory threshold of 5% by volume. Conclusions to the study indicated the low-level methane detected in P-205R did not originate from landfill but rather are observed to be from petrogenic VOC sources such as an abandon oil well. The recommendations are to request removal of the AOC threshold of 2.5% by volume for P-205R and should P-205R ever exceed the regulatory threshold SCL have a chance to evaluate the origin of methane prior to an issuance of any regulatory violation (Attachment C). The SCL LEA's response to the origin request can also be found in attachment C.

4.0 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 per hour or 445 MW per day of renewable energy onto the grid. The plant consists of five (5) Solar Mercury turbines rated at 4.6 MW per hour each.

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 and Annual Groundwater Monitoring Period of 2020

During the second semiannual 2020 monitoring period, environmental monitoring was conducted on a quarterly basis during September (third quarter) and December (fourth quarter). The results were generally similar to past monitoring event results, as most analyte/well pairs were previously in tracking mode.

During the second semiannual 2020 monitoring period, a few volatile organics 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 nearby sewer system under a City of Los Angeles Bureau of Sanitation permit. Currently, none of the collected liquid is being reused onsite and all of the subdrain liquids are discharged to the sewer.

Lysimeters LY-6 and LY-7 are sampled on a quarterly basis; Results from the sample collected from LY-7 during the third quarter 2020 include six VOCs detected historically and lysimeter LY-6 was reported dry during the third quarter 2020. Results from the sample collected from LY-7 during the fourth quarter 2020 include six VOCs detected historically and LY-6 was dry again during the fourth quarter 2020.

6.0 Leachate Collection and Treatment System (City/County)

By letter dated October 18, 2017, a new industrial wastewater permit was issued by the City of Los Angeles Bureau of Sanitation (Attachment D). Permit W-535428 is in effect until August 31,

2020. A new revised sewer discharge permit has been issued on September 1, 2020 with an expiration of August 31, 2023 approximately 3 years.

A Revised Fact Sheet was prepared and submitted to the City to support the industrial wastewater application; this Fact Sheet is also included in Attachment D. The fact sheet provides a description of the liquids generated at the facility as well as the site liquids management plan (provided as Figure 2 in the Fact Sheet) and other supporting documentation. As shown on Figure 2, liquids generated at the facility include, leachate, gas well liquids, condensate, seep water, subdrain and cut-off wall water. The major components of the site's liquid management plan include:

- Direct discharge of all site liquids including leachate, gas well liquids and condensate to the sewer with hydrogen peroxide as needed;
- Optional on-site treatment of seep, subdrain and cut-off wall water after which the effluent can be used on-site for dust control

Figure 3 in the Fact Sheet provides the process flow schematic for the optional on-site water reuse treatment system. This treatment system (formerly call the LTF treatment system in prior TAC reports) has not changed operationally. As shown on Figure 3, the treatment system consists of filters and granular activated carbon (GAC) vessels 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.

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

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

Functions of the surface water management system include the following:

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

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

7.1 Existing Stormwater Management System

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

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

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

7.1.1 Permanent Perimeter Drainage System

The perimeter drainage systems are 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. Upgrades in the form of water discharge

skimmers and new outfall structures have been installed in early 2018 to extend the retention time and optimize the capacity of this basin.

- The 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. Approval of the Revised West Drainage Channel Master Plan was received from the LARWQB by letter dated October 24, 2016 (Attachment F). Comments on the West Drainage Channel Master Plan were received from DPW on June 15, 2016 (Attachment F). Since the construction of the West Perimeter Drainage Channel cannot be implemented until the CC4 Stability Buttress is in place, no action has been taken to date to address the comments from DPW.

7.1.2 Interim Interior Drainage System

Until all areas of the City/County Landfill have been developed and filled to elevations above the site perimeter, run-off from areas of the site interior must be managed in a system of basins and channels discharging through the center of the site to the Terminal Basin. At present, this includes the entire west side of the Closed City Landfill, currently areas of Cells CC-1, CC-2, CC-3, CC-4 Parts 1, 2, 3, and 4 parts A and B and most of Cell A. The interim interior system is modified to accommodate ongoing construction activity. Construction includes drainage elements to ensure stormwater is directed to existing stormwater conveyance systems which ultimately discharge to the Terminal Basin.

The interim interior drainage system consists of an asphalt and concrete-lined trapezoidal channel which runs along the western side of the main haul road. This channel discharges to a box culvert which directs discharge from the trapezoidal channel along the temporary Phase 1 By-Pass Road that discharges to the Terminal Basin.

The drainage system for the Closed City Landfill features one large shallow sedimentation basin and a series of semi-permanent and temporary channels that collect runoff and convey it to the primary interior drainage channel described above. In the future, this system will discharge to the West Perimeter Drainage Channel.

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;
- Removal of sediment that accumulated around the gabion check dam in the Terminal Basin;
- Installation of Filtrexx compost rolls along the toe of the slopes of City South and toe of the slope of Cell CC-3B adjacent to the haul road;
- Installation of approximately 12 acres of erosion matting;
- Installation of approximately 26 acres of Closure Turf; and
- Regrading and reseeding of vegetative cover areas.

Temporary erosion and sediment control measures are documented and reported to the LEA, the Los Angeles Regional Water Quality Control Board and the County of Los Angeles, Department of Public Works. The Wet Weather Preparedness Plan submitted to these agencies is included in Attachment G. After each rain event, erosion and sediment control measures are inspected and evaluated, and repairs made as needed prior to the next rain event.

8.0 Current Odor Control Mitigation Measures (City/County)

This section provides an overview of the odor control mitigation measures that have been on-going as well as providing the current status of items related to the following regulatory actions:

- SCAQMD Order to Abate, Case 3448-14, signed on December 15, 2016;
- Los Angeles County Department of Regional Planning, Notice of Violation
- Los Angeles County Department of Public Health.

8.1 On-Going Odor Control Measures

Aggressive odor control measures are being implemented at the site. By letter dated November 29, 2017, a response to DPW was submitted which included a Revised Odor Mitigation Measures and Interim Milestones table providing the status of the odor mitigation measures being conducted at the site. This table is included in Attachment H and includes all of the work that has been completed through December 2018, the on-going operations and maintenance management (O&MM) activities being conducted for the gas collection and control system (GCCS), and other activities being conducted solely for the purpose of identifying odorous sources, potential odorous sources and remediating those sources.

The combined benefit of all of the odor mitigation measures completed at Sunshine Canyon Landfill as well as the on-going processes and procedures to address and mitigate odors and potential odor sources has resulted in the following quantifiable benefits:

- (1) Reduction of Odor Complaints Called in to SCAQMD: Please refer to Figure 1 included in Attachment I which presents a graph showing the Annual number of odor complaints called in to SCAQMD compared to the most recent rolling 12-month total of odor complaints called in to SCAQMD. This graph illustrates the significant reduction in the number of odor complaints.
- (2) Reduction in Notices of Violation for Odor Nuisance: A Notice of Violation (NOV) for odor nuisance was issued by SCAQMD to Sunshine Canyon Landfill on August 17, September 9, 15, 16, October 2, 5, 12, 13 and December 5, 2020
- (3) Increased Gas Collection: Please refer to Figure 2 included in Attachment I which illustrates the increase in gas flow in correlation with the implementation and completion of the Action Plan components. This figure also illustrates the number of odor complaints called in to SCAQMD. This figure also demonstrates, the significant positive impact of the implementation and completion of the Action Plan components.
- (4) Recently, SCL has developed a plan to strategically place additional segments of odor neutralizing misting line and odor abatement misting fans along the upper perimeter of City South. These controls are in addition to the existing site controls and would further enhance SCL's ability to intercept and control any odors from the operation. This project is now complete.

8.2 SCAQMD Stipulated Order for Abatement

On December 15, 2016, a Stipulated Order for Abatement (Order) (Case 3448-14) was approved by the SCAQMD Hearing Board and subsequently signed on January 10,

2017. The Order requires Republic Services to implement programs and processes for the purpose of mitigating conditions contributing to the alleged odor nuisance. The following presents a brief summary of each of the conditions contained in the Order and the status of each condition.

Condition 1: Requires the submittal of a Traffic Mitigation Program that establishes a program to address unnecessary truck trips and reduce queuing of trucks outside the Facility potentially resulting from the change in operational hours.

Status: The Traffic Mitigation Program was submitted to the Los Angeles City Department of Transportation, SCAQMD, LEA and DPW on December 30, 2016. Comments were received from DPW on February 2, 2017; responses to these comments were submitted to DPW on February 20, 2017.

By letter dated May 1, 2017, the City of Los Angeles Department of Transportation stated they are in agreement with the conclusions presented in the Traffic Mitigation Program report and that the shift in operation will not result in any increased significant impacts during the morning peak hours.

Condition 2: Prohibits the unloading/dumping of transfer trailer loads from all Republic transfer stations and from all third parties, including the City of Los Angeles Bureau of Sanitation, from occurring any earlier than 9:00 AM during weekdays and Saturdays.

Status: Effective December 19, 2016, all Republic Services, City of Los Angeles and other third-party transfer trailers were prohibited from coming to the landfill before 9:00 AM weekdays and Saturdays. This condition has been adhered to since December 19, 2016.

Condition 2.a: Requires Republic Services to provide funding for an independent third party odor monitor at and near Van Gogh Charter School during the hours of 6:00 AM to 9:00 AM. This third party monitor reports directly to the District.

Status: SCAQMD made the decision to solicit a contractor directly to provide the services for this condition. A contractor was hired by SCAQMD and the independent third party monitored for

odor near Van Gogh Charter School. Republic Services personnel did not have any interaction with the independent third party monitors.

Condition 3: Requires the implementation of the Food Waste Diversion Program proposed by Republic Services for the purposes of increasing the diversion of Food Waste and organic materials from disposal at Sunshine Canyon Landfill. In addition, the Food Recovery Program proposed by Republic Services will be implemented.

Status: Status reports for the Food Waste and Organics Diversion Program for the first and second quarters of 2019 were submitted to SCAQMD on April 15, 2019 and July 15, 2019, respectively. Key components of the reports include:

(1) Food Recovery – Food Finders

In Q1 2019, the following activities were conducted:

- Republic's food recovery coordinator continued customer re-training, working diligently with businesses to fine-tune and expand pilot programs;
- Through the partnerships between Republic Services, The St. Francis Center, Food Finders, World Harvest, and MEND, 94 tons of edible surplus food was recovered and diverted from Sunshine Canyon Landfill. Which translates to 156,462 meals utilizing the USDA pounds-to-meals conversion.

In Q2 2019, the following activities were conducted:

- Republic's food recovery coordinator continued customer re-training, working diligently with businesses to fine-tune and expand pilot programs. Field sales teams and zero-waste account managers similarly engaged with new and current prospects on food diversion.
- Through the partnerships between Republic Services, The St. Francis Center, Food Finders, World Harvest, and MEND, 84 Tons of edible surplus food was recovered and diverted from Sunshine Canyon Landfill in Q2, creating 139,200 meals from the program.

(2) Transfer Station Transload

- During 1Q2019, 289 tons of organic waste was diverted from Sunshine Canyon Landfill through the program at Innovation.
- During 2Q2019, 371 tons of organic waste was diverted from Sunshine Canyon Landfill through the program implemented at the Falcon and Innovation Transfer Stations (Innovative);
- Over 5,850 tons of organic waste has been diverted since the program implementation.

(3) Agromin OC Chino Organics Recycling

This condition required a Covered Aerated Static Pile (CASP) system to compost up to 75 tons per week of food waste be permitted, constructed and begin operating by March 30, 2019.

- The permit application was submitted to SCAQMD on February, 7, 2017;
- Permit approval was received on July 7, 2017;
- The CASP equipment was ordered on July 12, 2017. Equipment was received starting in mid August;
- The CASP system is online.
- In 1Q2019 573 tons of organic material was delivered to the CASP system.
- In 2Q2019 783 tons of organic material was delivered to the CASP system.
-

(4) American Waste Transfer Station Organics Pre-Processing

This condition required an organics pre-processing system capable of pre-processing up to 250 tons per day of food waste be installed at the American Waste Transfer Station.

- During the 3rd and 4th quarters of 2017, scoping and design for the enclosure of the American Waste Transfer Station in accordance with Rule 410

commenced;

- Applications and requests for approval were submitted to the City of Gardena for the building permit on November 30, 2017, and to the SCAQMD on December 1 2017 for the organics processing system and air control systems.
- During the 2nd quarter of 2018, Republic has continued to address questions related to the permitting applications.
- During the 3rd quarter of 2018, Republic received notification from the City of Gardena placing the approval of the organics pre-processing system on hold and outlining multiple conditions to be met prior to approval from the City. Republic has been in discussions with the City in regards to these conditions.
- As a result of the municipal permitting constraints for this facility, Republic is utilizing alternative facilities to meet the capacity. These facilities include Republic CVT , Puente Hills MRF, Ontario Agricultural Commodities, and Waste Management CORE.

Condition 4: Requires the continued use of the Alternative Daily Cover (ADC) in lieu of using nine inches of daily compacted soil cover.

Status: Approval to continue the pilot study to October 12, 2017 was obtained from the LEA by letter dated November 2, 2016 (Attachment J). The Los Angeles County Department of Public Works (DPW) initially approved the continuation of the pilot study to March 27, 2017 (Attachment J). By letter dated April 28, 2017, Republic Services requested DPW to extend their approval to October 12, 2017 based on evidence that strongly indicates the continued use of the ADC will ultimately result in the overall benefit of increased efficiencies to the site's gas collection and control system as well as the leachate collection system that will also contribute to the reduction of the potential for off-site odors (Attachment J). By letter dated May 11, 2017, DPW approved the continuation of the pilot study to October 12, 2017 to match the LEA's approval date (Attachment J).

The second year of the ADC pilot project concluding in mid-October 2017. A report summarizing the results of the project was submitted to the LEA and DPW on October 11, 2017, and October 25, 2017, respectively. Based on the observations and findings presented in report, it was concluded that the ADC is more effective than the nine inches of compacted soil cover and recommends the continued use of the ADC at Sunshine Canyon Landfill.

By letter dated October 16, 2017, the LEA acknowledged the receipt of the ADC report presenting the findings of the second year of the pilot project (Attachment J). The LEA further stated they were conducting an independent evaluation of the ADC pilot project based on SCL LEA observations, landfill gas monitoring results as well as the information presented in the Republic Services report. The LEA approved the continued use of the ADC during their evaluation.

By letter dated December 20, 2017, the LEA, provided their review of the ADC Pilot Project Report as well as presented the findings of their independent review of the ADC pilot project. The LEA concluded they concur with Republic Services' conclusion that the ADC should continue to be used as an ADC at Sunshine Canyon Landfill (Attachment J).

By letter dated April 10, 2018, the LA County Department of Public Works granted SCL an extension to continue to conduct the ADC Pilot Project until October 25, 2018 (Attachment J).

By letter dated November 15, 2018, SCL has requested a timeline from the LA County Department of Public Works as to when they anticipate granting approval of the ADC (Attachment J).

By letter dated January 15, 2019, the LA County Department of Public Works has granted Republic's request for a modification of the additional corrective measures imposed by Public Works in accordance with Condition 45N of the Conditional Use Permit (CUP) and the use of the geosynthetic panel products as a ADC on a permanent basis and the cessation of the pilot project (Attachment J).

Condition 5: Requires the implementation of the intermediate cover enhancement pilot program as directed by the SCL LEA.

Status: Approval for the implementation of the intermediate cover enhancement pilot program (ICE) was received from the LEA on May 16, 2016. Approval from DPW was received on December 20, 2016. These approval letters are included in Attachment K.

Completion of the ICE pilot project was delayed due to the wet weather from mid-December 2016 through early March 2017. The application of Posi-Shell in accordance with the ICE pilot project procedures was completed on March 2, 2017.

The ICE project was completed in September 2017. A report summarizing the results of the project was submitted to the LEA and DPW on December 8, 2017. Although it was difficult to provide a specific, supported conclusion based on the results of the ICE project, the following conclusions were presented:

- The placement of an additional 6” of soil was effective in controlling both instantaneous and integrated surface emissions during the study period;
- Posi-Shell® applied at twice the normal application rate was more effective than the Posi-Shell® applied at the normal rate;
- The use of the Posi-Shell® as intermediate cover is effective when used as part of the site’s overall odor management plan as the application of this product has the following overall benefits:
 - Minimization of air-borne dust in areas where the Posi-Shell® was applied particularly to slope areas;
 - Provides an improved barrier to ambient air allowing an increase in applied vacuum without increasing oxygen thus increasing vacuum for additional gas collection;
 - Posi-Shell® provided an easier walking surface increasing site safety for those walking on this surface;
 - Posi-Shell® provides an interim cover that can be integrated into vegetative cover or can be easily

removed to promote waste-to-waste contact providing for effective liquid and gas movement.

Condition 6: Requires conducting the intermediate cover program in a manner “to be harmonized and consistent” with all local land use requirements including the requirements of Condition 44A of the County’s CUP, the IMP and the City of Los Angeles “Q” conditions.

Status: DPW’s approval includes a condition that as part of the ICE project, the impact to the growth of vegetation must be studied and evaluated. This evaluation was conducted throughout the ICE project period; no vegetation was observed growing within the grids that were the subject of the pilot project.

Condition 7: Requires the submittal of monthly Rule 1150.1 surface emission monitoring results for the grids that are included in the intermediate cover enhancement pilot program.

Status: Monthly Rule 1150.1 surface emission monitoring results were submitted to SCAQMD for the grids included in the ICE project. The final report for the month of August 2017 was submitted on September 15, 2017.

Condition 8: Requires the placement of additional soil cover on a minimum of at least twenty (20) intermediate cover areas (grids) that have exceeded 25 ppm (methane) for integrated surface emission monitoring at least once during the last three (3) quarters.

Status: This work was completed in early March 2017.

Condition 9: Requires a proposal to be submitted for additional methods/procedures for upgrading and improving the additional areas of the landfill that have intermediate cover.

Status: A report entitled “Evaluation of Potential Enhanced Intermediate Cover Alternatives” was submitted to SCAQMD on March 15, 2017. Recommendations provided included enhancements to 115 acres of intermediate cover area at the site including:

- Application of Posi-Shell® – 37.3 acres
- Installation of Closure Turf – 20.7 acres in 2017

- Additional Closure Turf Installation – 5.2 acres in 2018
- Vegetative Cover Preparation and Seeding – 57 acres

At the March 29, 2017 Abatement Order Status Hearing, an expedited schedule for enhancement of the intermediate cover at the landfill was presented and incorporated into the Abatement Order (Action Plan).

The following presents a summary of the status of each of the intermediate cover enhancements included in the Action Plan:

ACTION	Target Completion	Current Progress
Install 21 acres of Closure Turf, an impermeable synthetic liner overlain by artificial turf	August 31, 2017	Deadline Met: 21 acres of Closure Turf was installed by the target completion date.
Apply 37 acres of a thick, flexible spray-on cover that serves as a temporary cover in new waste fill areas	August 31, 2017	Deadline Met: 38.5 acres of Posi-Shell was applied by the target completion date.
Establish vegetative cover over 57 acres to prevent erosion and soil thinning and to act as a natural bio-filter	December 31, 2017	Deadline Met: 58 acres of vegetative cover was installed to establish vegetation.

Condition 10: Requires expanding the application of the intermediate cover upgrades to additional surface emission monitoring grids if data or other performance metrics demonstrate cover performance improvements.

Status: The status of each of the recommended enhancements to intermediate cover areas is presented above. Based on aesthetics and GCCS performance metrics, SCL expanded the Closure Turf cover enhancement by 5.2 acres in 2018. No other expansion of the application of the intermediate cover upgrades to additional surface emission monitoring grids has been proposed or required as of the date of this report.

Condition 11: Requires dewatering of wells impacted by liquids, submittal of monthly reports, submittal of a methodology and monitoring procedure to determine the level of dewatering within each impacted well.

Status: Dewatering of gas wells impacted by liquids has been on-going and monthly reports have been submitted to SCAQMD since January 2017. The methodology and monitoring procedure to determine the level of dewatering within each impacted well has been submitted to SCAQMD.

Condition 12: Requires camera integrity testing of all vertical gas wells to evaluate the performance of each gas well.

Status: Integrity testing of all vertical gas wells using a downhole camera began in early December 2016 and was completed in early March 2017. Based on the results of this testing, a program to install new and replacement gas wells was implemented and 153 new and/or replacement gas wells have been installed.

This year, the integrity testing was completed in first quarter 2018 and has resulted in the installation of 89 new and/or replacement gas wells, year to date.

Condition 13: Requires maintaining records related to compliance with Condition 12.

Status: Records related to the well integrity testing have been maintained on-site.

Condition 14: Requires submittal of a proposal for additional best management practices to supplement existing best management practices intended to control and treat fresh trash odors. The proposal is to be submitted to the District within sixty (60) days of the issuance of the Order.

Status: This proposal was submitted to SCAQMD on February 13, 2017. By letter dated May 3, 2017 SCAQMD approved the proposal as final and directed Republic Services to implement the recommended actions (Attachment L).

Condition 15: Requires submittal of an updated Odorous Load Management Plan within thirty (30) days of the receipt of the SCL-LEA's finding and

recommendations of programs for best management practices for odor mitigation at transfer stations.

Status: The LEA's findings and recommendations for best management practices for odor mitigation at transfer stations was received on February 15, 2017. In accordance with Condition 15, a revised Odorous Load Management Plan was submitted to SCAQMD on March 16, 2017. By letter dated May 3, 2017, SCAQMD approved the revised plan as final and directed Republic Services to implement the recommended actions (Attachment M).

By letter dated October 31, 2017, SCAQMD was notified that the Revised Best Management Plan and Revised Odorous Load Management Plan had been implemented (Attachment M).

Condition 16: Requires an assessment of the feasibility of installing physical barriers and or dust/odor containment structures within ninety (90) days of the issuance of the Order.

Status: The Assessment of Physical Barriers and Dust-Odor Containment Structures report was submitted to SCAQMD on March 15, 2017. By letter dated May 3, 2017, SCAQMD issued an interim approval to "facilitate further discussion with the SCAQMD and SCL LEA regarding integration of such additional measures to achieve maximum effect." The additional measures refer to other mitigation measures that would be implemented as "an integral part of the design for proposed physical barriers." SCAQMD further directed Republic Services to implement the proposed plan while further review is being conducted (Attachment N).

Implementation of the proposed actions in the Physical Barriers and Dust-Odor Containment Structures report in part require the construction of the front entry berm improvements including the terminal stability berm. This project requires multiple approvals and is currently in the design stage.

On June 30, 2019 the Stipulated Abatement Order expired. While in effect Sunshine Canyon Landfill met all the conditions that were required under the order.

8.3 Los Angeles County Department of Regional Planning NOV issued October 25, 2016

On October 25, 2016, the Los Angeles County Department of Regional Planning (DRP) issued a violation to Browning Ferris Industries of California (BFIC) for alleged non-compliance with required requests by DPW under Condition 45N of Conditional Use Permit (CUP) 00-194 (Code Case RPZPE2016002500) (Attachment O). This violation was issued based on a referral from DPW based on DPW's assessment of multiple submittals from Republic Services that DPW deemed "non-responsive".

By letter dated November 1, 2016, Republic Services responded to the NOV and detailed the responses provided to DPW and reiterated Republic's commitment to work with DPW to resolve the discrepancies. At a meeting held on November 28, 2016 with DPW and Republic personnel as well as Republic consultants, each item requested by DPW was discussed as well as the status of each submittal.

An appeal to the NOV issued by Regional Planning was submitted on January 25, 2017 maintaining BFIC had complied with the information requests from the Department of Public Works. An appeal hearing was held on March 7, 2017 which was continued until May 2, 2017 because Regional Planning failed to provide documents related to the Public Records request submitted by BFIC on February 2, 2017. At the May 2nd appeal hearing, the Hearing Officer sustained the issuance of the NOV, but noted that BFIC had provided a substantial amount of information, and several of DPW's information requests were "unclear". The Hearing Officer left it to the discretion of the Director of Regional Planning whether to issue a civil penalty

By letter dated May 4, 2017, Regional Planning notified BFIC that a penalty in the amount of \$174,000 had been assessed (Attachment O). This payment was made to Regional Planning on May 11, 2017 under protest and with the expectation that a further appeal would be made (Attachment O).

By letter dated September 14, 2017, DPW provided additional comments on submittals made to them that were the subject of this NOV. A meeting was held on October 3, 2017 with DPW and Republic Services personnel to discuss the comments. Responses to the comments were submitted to DPW on November 29, 2017.

BFIC filed a petition in the Los Angeles County Superior Court, challenging the County's 2016 Notice of Violation alleging that BFIC failed to respond to information requests from the Los Angeles County Department of Public Works (DPW) concerning information related to odor mitigation, and, specifically, concerning the landfill's GCCS. BFIC maintains it has fully responded to DPW's information requests. BFIC also seeks the return of the \$174,000 penalty imposed by the Director of Regional Planning

based on the NOV. At a hearing held on December 20, 2017, a trial date of BFIC's petition was set by this Court for June 13, 2017.

On June 13, 2018, the Judge granted BFIC's petition due to the Hearing Officer's failure to make legally adequate findings in support of the decision. The Judge asked BFIC's Legal Counsel to prepare a judgement in favor of BFIC's petition.

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 reports for the second quarter of 2020 and third quarter of 2020 were submitted on July 31, 2020 and October 30, 2020, respectively.

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. Weekly activities have been conducted in the pilot project area since that time consisting of maintenance, selective pruning and repairs to the irrigation system when needed.

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

The most recent observations of the Deck C sage mitigation area noted that overall the area looks healthy. The area will continue to be monitored on a quarterly basis and those observations will be included in the quarterly vegetation reports.

10.1 Phase 2 Coastal Sage Scrub Pilot Mitigation Project

On August 15, 2016, a proposal for a second phase of the Venturan Coastal Sage Scrub (CSS) mitigation was submitted to the TAC. This proposal presented two options to be

considered for the Phase 2 CSS mitigation; the option to implement the second phase on Deck B was selected. This includes approximately 9.5 acres with the majority of the area being relatively flat although there are some shallow slopes along the edges. The area contains established CSS which would be protected during the construction of the area.

The construction of the Phase 2 CSS mitigation area on Deck B was initiated in October 2017. Grading of the area was completed in early November 2017 and the project has been completed in December 2018. Ongoing maintenance for the first year's establishment is underway for 2019 and monitoring and reporting for Deck B has been implemented during the CSS quarterly vegetation program.

11.0 Chatsworth Mitigation (City Q.C.9)

The following presents a summary of the work conducted in 2017 related to the Chatsworth Mitigation project.

11.1 Ordinance Amending Section 12.04 of the Los Angeles Municipal Code

The ordinance amending Section 12.04 of the Los Angeles Municipal Code has not been finalized as of the date of this report. Comments on the draft Ordinance were received from the Army Corps of Engineers (ACOE) on April 17, 2015 and forwarded to the City the same day. A conference call was held on July 7, 2016 to discuss the status of the draft Ordinance. Based on that call, Republic Services proceeded with work to develop an Addendum to the Mitigated Negative Declaration (MND) as a supporting document to the Ordinance (Section 11.2).

A conference call was held with representatives from the California Department of Fish and Wildlife (CDFW) in June 2017 to discuss their comments on the draft Ordinance. Fish and Wildlife personnel stated they could not agree with the Ordinance since the site permit required a Conservation Agreement. In addition, Republic Services was informed that the original Streambed Alteration Agreement (SAA) R5-2002-0163 had expired and could not be amended to include a reference to the City Ordinance. In response to this, Republic Services submitted a Notification of Lake or Streambed Alteration Notification to the CDFW on October 26, 2017. By letter dated November 27, 2017, the CDFW notified Republic Services the submitted Notification was deemed complete (Attachment Q). CDFW also stated that if it is determined an Agreement is required for the project, a draft Agreement will be issued no later than January 26, 2018.

By letter dated January 26, 2018, CDFW notified Republic Services that because the CDFW did not submit a draft Lake or Streambed Alteration Agreement by January 26, 2018, Republic Services does not need an agreement to proceed with the proposed

work given that all federal, state and local laws are observed. Currently, Republic Services is awaiting the approval of the City Ordinance (Attachment Q).

11.2 Addendum to the Mitigated Negative Declaration (MND)

The following contractors have been retained to develop the Addendum to the MND:

- Mike Zander and Associates (Zander) - Biological Resources
- John Minch and Associates (JMA) - Cultural Resources
- Tetra Tech and CET Engineering - Air Quality

Field surveys for biological and cultural resources were conducted on November 17 and 18, 2016. Based on the findings of their field survey, JMA recommended a Native American consultation for the project based on the results of the Sacred Lands File check which indicated a change in status of Sacred Lands within the Chatsworth Reservoir Mitigation Project Area (Attachment R). Based on this information, a Native American consultation was conducted. In cooperation with the Los Angeles Department of Water and Power (LADWP), consultation letters were sent out March 26, 2017 and responses requested by April 28, 2017. Responses received are included in Attachment R.

A conference call with Ms. Julie Wagner (LADWP) was held on May 8, 2017 to discuss the responses. Based on the discussion, Ms. Wagner indicated LADWP, as the lead agency for the project, would be requesting additional archaeological studies of some the sites in the project area. By letter dated June 13, 2017, the LADWP requested Republic Services to authorize JMA to conduct additional studies as requested by the Native American Consultation survey findings (Attachment R).

The additional field surveys were performed by JMA during the week of August 21, 2017 and also on September 13 - 14, 2017. The survey could not be completed during the week of August 21st due to excessive temperatures. Organic material was discovered at one location which was submitted for radiocarbon dating in accordance with JMA's procedures. As of the date of this report, JMA has completed the cultural resources portion of the Addendum to the MND and has submitted the Phase II Investigation document to LADWP, the California Historical Resource Information System, and Republic Services. Accordingly, in a letter dated February 27, 2018 from Sam Dunlap the Cultural Resource Director of the Gabrielino Tongva Nation commended JMA's archaeological field work and report. In a memo to Republic Services and LADWP dated March 17, 2018 from Dr. Ray Corbett has stated the completion of the Phase II Investigation report (Attachment R).

Republic continues to followup with the respective stakeholders on the Chatsworth project including and not limiting to Zander, LADWP, Los Angeles Department of Parks and Recreation, CDFW, ACOE, and the community of Chatsworth.

12.0 Status of Alternative Fuels Vehicles (City/County)

The filling station located at 12881 Encinitas Avenue, Sylmar intermittently has E-85 fuel available. When available, pickup trucks used onsite fuel with E-85. When E-85 is not available, unleaded fuel is used. There is no other E-85 filling station viable for this purpose.

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, 10 and 11 have been installed. One generator has been purchased and is staged on-site. The permit to operate this generator was received from SCAQMD in April 2017 (Permit No. G46227).

14.0 Soil Importation

On July 28, 2015, Republic Services submitted a request to LA County DPW for approval to import clean soil that will be made available from the Los Angeles County's Devil's Gate Reservoir Sediment Removal and Management Project located in Pasadena, California. By letter dated May 4, 2016, DPW approved the importation of this material to Sunshine Canyon Landfill (Attachment S).

By email dated September 12, 2016, Mr. Ken Zimmer (Senior Civil Engineer, Water Conservation Planning, LA County Department of Public Works) informed Republic Services personnel there would be a delay in the Devil's Gate Reservoir Sediment Removal Project and stated the LA County Flood Control District would plan on sending a portion or all of the material from the Pacoima Spreading Grounds to Sunshine Canyon Landfill.

Sunshine Canyon Landfill met with representatives from Sunshine Canyon Landfill Local Enforcement Agency and the LA County Flood Control District on June 14, 2018. Accordingly, the Pacoima Spreading Grounds project is scheduled to commence in the Fall of 2018. As of the date of this report, this is the latest information regarding the start of this project.

15.0 Current and Planned Projects Outside the Disposal Area

Grading for a portion of the SCE Power Pole Relocation Project started in March 2016 and was completed in early July 2016. Grading for the CC-4 stability buttress commenced in the second quarter of 2018. As part of the approvals for these projects, a Revised Exhibit "A" ("A-2") is

required to be submitted and the revised grading limits approved by the Los Angeles County Department of Public Works (DPW) and the Los Angeles County Department of Regional Planning. The Revised Exhibit A application was submitted to DPW and Regional Planning on November 16 and November 21, 2016, respectively. Comments 11a on the Survey Monument Plan were received from DPW on April 11, 2017. These comments have been addressed and the Revised Exhibit A application (“A-2”) has been submitted to DPW and Regional Planning on May 30 and 31, 2017, respectively.

Additional comments on the Survey Monument Plan were received from DPW on July 6, 2017. Republic Services personnel met with DPW staff to discuss the comments on July 19, 2017. A revised Survey Monument Plan was submitted to DPW on August 23, 2017. In addition, comments were received on the Tree Survey Report that is required to accompany the Revised Exhibit A application. Republic Services met with personnel from the Department of Regional Planning to resolve these comments. The Tree Survey Report was approved by Regional Planning on November 29, 2017.

Pursuant to the LA County DPW Letter dated February 7, 2018, approval was granted for the revised grading limit request (Attachment U).

As of the letter issued by LA County DPW, dated March 13, 2018, the conditional approval was granted for the grading and drainage features associated with the CC4 Stability Buttress Project (Attachment U).

Based on the geology mapped during the excavation and field investigation portion of the project, a redesign of the stability buttress was completed and submitted to the LA County Department of Public Works on October 30, 2018. The redesign included hydrology calculations, slope stability analyses and revised drawings.

15.1 CC-4 Stability Buttress

CC-4 has been constructed in the southwest portion of the site along the southwestern boundary of Phases I and II-B and west of CC-2 and CC-3A Part 1. An earthen stability buttress has been proposed in order to construct the west slope of the CC-4 liner unit (Future Cell CC-4, Part 3). The rationale for the design of the proposed stability buttress is included in the Design Report for CC-4 which has been submitted to the LARWQB. By letter dated April 26, 2016, the LARWQCB approved the design report for Cell CC-4, Parts 1-5 (Attachment A).

Comments on the CC-4 stability buttress were received from DPW in letters dated October 19, 2015 and January 13, 2016 and also discussed during meetings held with DPW personnel on December 13, 2015 and March 1, 2016. DPW comments pertain to the proposed analysis that indicated the slope stability factors of safety (FS) for temporary construction slopes could be less than the County’s minimum standard of

1.25. Based on these comments, an addendum report was submitted to DPW on April 6, 2016 detailing the mitigation recommendations and supporting analysis to substantiate that the proposed Cell CC-4 development grading will meet or exceed DPW's minimum slope stability FS criteria for temporary slopes (e.g. 1.25). Additional comments were received from DPW on June 15, 2016; an additional geotechnical report was submitted to DPW on July 11, 2016 and responses to comments from DPW's Building and Safety and Water Resources Divisions were submitted on August 11, 2016.

Additional comments were received from DPW on October 25, 2016. Responses to these comments were submitted to DPW on November 17, 2016. More comments were received from DPW on March 9, 2017; responses to these comments and revised drawings were submitted to DPW on April 24, 2017. By email dated October 10, 2017, one comment from the County's Design Division was received; the response to this comment was submitted to the County on November 8, 2017. Another comment from the County's Design Division was received via email dated November 30, 2017; the response to this comment including revised Grading and Drainage design plans was submitted to DPW on December 13, 2017.

By email dated December 20, 2017, DPW personnel informed Republic Services that a complete submittal including a soils report is required before DPW can review and issue an approval for the project.

All DPW requests were satisfied and as of the letter issued by LA County DPW, dated March 13, 2018, the conditional approval was granted for the grading and drainage features associated with the CC4 Stability Buttress Project (Attachment U).

15.2 Front Entrance Toe Berm

The ultimate access way into Sunshine Canyon Landfill from San Fernando Road and the Cascade Oilfield Road shall be designed to accommodate a geotechnical stability toe berm to complete the future cell construction of CC-5. The new roads will house the main road access on to the site for access to the Administration offices & breakroom, SCL-LEA building, Scalehouse, Maintenance Shop, and access to the Cascade Oilfield office. The geotechnical and structural engineering consultant, Geo-Logic Associates designed the ultimate entryway. As part of the design the east and west stormwater drainage channels and dampener structures were also modified as part of the project redesign.

16.0 Current Monitoring Activities

The following monitoring activities have been conducted since January 2017:

- Construction Monitoring - Grading for Cell Construction Subgrade Excavation:

- Scope: Archaeological and paleontological monitoring
Consultant: John Minch and Associates (JMA)
- Third Party Mitigation Monitoring

Scope: Third-party Mitigation Monitoring
Consultant: UltraSystems
 - Surface Emission Monitoring

Scope: Monitoring required by SCAQMD Rule 1150.1 (Surface Emission Monitoring, etc.)
Consultant: RES Environmental
 - Biological Monitoring

Scope: Coastal Sage, Oak Tree and Big Cone Fir Mitigation Monitoring
Consultant: John Minch and Associates (JMA)
 - Ambient Air Monitoring

Scope: Third-party Ambient Air Monitoring
Consultant: Sonoma Technology, Inc. (STI)
 - Gas Well & Perimeter Probe Monitoring

Scope: NSPS Monitoring
Consultant: SCS Engineers

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

17.0 Response to Third Party Mitigation Monitor Observations

UltraSystems provides the third party mitigation monitoring as required by Q Condition C.12.c. UltraSystems personnel perform monitoring visits in order to observe operational site activities and determine compliance status with conditions and/or mitigation measures. After each site visit, UltraSystems and Republic personnel meet to discuss the findings and observations.

This section provides an update on the status of the block retaining wall on San Fernando Road. The following activities have been conducted related to this item:

- A geotechnical investigation of the slope above the retaining wall has been conducted;
- A structural investigation of the current condition of the block retaining has been conducted;

These two investigations were finalized the last week of May 2017. Based on the results of these investigations, a scope of work including the following items was developed:

- Removal of the loose material on the slope behind the block retaining wall;
- Grading of the slope as needed under the direction of a geologist;
- Removal of loose material behind the block wall to expose the v-ditch and promote drainage;
- General clean-up of the sidewalk area to re-establish the walkway.

This task has been adopted as a part of the routine winterization process for the site and is also conducted on an as-needed basis. A picture of the project area is provided in Attachment T.

18.0 Saddle Ridge Fire Repair Activities

In October 2019, flames from the Saddle Ridge Fire impacted portions of Sunshine Canyon Landfill. Once it was safe to return, our Landfill team arrived on-site and determined the facility sustained some damage to landfill infrastructure and systems. The team worked quickly to restore the majority of infrastructure functionality and system operations. Site repairs were completed by December 15, 2019.

In order to facilitate this quick turnaround, our site developed a detailed plan and worked closely with regulatory partners to restore the impacted systems. In this two-month time frame our major accomplishments were bringing 122 landfill gas wells back online, 4 miles of landfill gas piping was replaced, and over 100 acres of hydroseeding / slope stabilization were deployed. Our heartfelt thanks goes out to the firefighters, other first responders and emergency personnel for their efforts to contain the fire and minimize impacts. We are grateful for their ongoing commitment to protect our community and keep us safe. We cannot say enough about them and how much we appreciate them.

19.0 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 (46 wells installed year to date)
- Installation of additional dewatering pumps in gas wells impacted by liquids (96 pumps installed along with associated piping, year to date);
- Continued maintenance of City South Coastal Sage Mitigation Area;
- Future design and construction of 5.4 acres of VCSS on Deck B City South;

Planned activities for the first and second quarters of 2021 include:

- Cell Design and Construction CC-4 Part 4B;
- Preliminary grading activities of the Front Entrance Toe Berm;
- Additional upgrades to the liquids management system;
- Landfill gas wellfield expansion activities;
- Phase 2 Coastal Sage Scrub Pilot Mitigation Project;
- Continued maintenance of City South Coastal Sage Mitigation Project area;

Please do not hesitate to contact me at (818) 362-2141 if you have any questions.

Sincerely,



Chris Coyle
General Manager
Sunshine Canyon Landfill

Cc: Devon Zatorski, City Planning
Tiffany Butler, City Planning
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
Dorcas Hanson-Lugo, SCL-LEA