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CERTIFICATION STATEMENT

January 23, 2014

The attached Quarterly Site Monitoring Status Report for the Sunshine Canyon Landfill dated January 23, 2014 is the Fourth Quarterly Report for 2013 issued by UltraSystems. This report covers the monitoring period from October 1, 2013 through December 31, 2013 and is prepared for the City of Los Angeles Department of City Planning and the County of Los Angeles Department of Regional Planning.

I, James T. Aidukas, Project Manager for the Mitigation Monitoring Services of the Sunshine Canyon Landfill, certify that the statements in the Quarterly Report and the referenced monthly reports reflect the site conditions observed and compliance status noted by me and other qualified experts during the stated site visits.

Signed,

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Sunshine Canyon Landfill
Independent Monitor
Quarterly Site Monitoring Status Report
October 1, 2013 – December 31, 2013

Prepared For:

City of Los Angeles Department of City Planning

And

County of Los Angeles Department of Regional Planning

Prepared By:

UltraSystems
environmental | management | planning

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January 23, 2014

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Quarterly Status Report

The Quarterly Status Report is a compilation of the period's monthly Site Monitoring. After each site visit, the UltraSystems monitors who went to the Sunshine Canyon Landfill site each wrote a Mitigation Monitoring Site Report, updated the Mitigation Monitoring Summary Excel Tables for the City and County of Los Angeles noting any conditions and/or mitigation measures that need further review, and documented these areas in an appendix for that site visit date. Any issues that required immediate attention were reported to Republic staff and the appropriate staff at the City of Los Angeles Planning Department, the County of Los Angeles Department of Regional Planning, the County of Los Angeles Department of Public Works and the Sunshine Canyon Landfill Local Enforcement Agency (SCL-LEA).

The Sunshine Canyon Landfill City and County Summary Tables record each site visit and frequency of monitoring of specific conditions and/or mitigation measures, by date. When a condition and/or mitigation measure is monitored, a check mark is made under the date that it was monitored, and the status of being compliant with the conditions and/or mitigation measures' requirements observed during monitoring is recorded. Tasks with a yearly or non-ongoing monitoring frequency are denoted by a forward slash (/) in subsequent date columns. In the status column, the letter "C" is put next to the task if it is Compliant; the letters "NC" are noted if the task status is Non-Compliant; and the letters "FRN" are used if Further Review is Needed for meeting the requirements of the conditions and/or mitigation measures.

Under the Further Review Needed/ Comment column, observed conditions that have been noted as "FRN" in the status column refer to appendices which detail what was observed during the site monitoring. When the conditions and/or mitigation measures that were previously noted as "FRN" are fully compliant, an "R" is placed in the Resolved column and a "C" replaces the "FRN" in the status column. Also noted in the FRN-Comment column are those action items that would improve monitoring efficiency by having reports and documents readily available. These are summarized in the Compliant with Comments section of the monthly reports and the Summary of Requested Documents of the Quarterly Reports. The City and County Excel Spreadsheets record the site conditions observed during monitoring.

This Quarterly Report provides the City of Los Angeles Department of Planning and the County of Los Angeles Department of Regional Planning with a concise status of the Mitigation Measure Monitoring for the period of October 1, 2013 to December 31, 2013. It includes:

1. The City and County Mitigation Monitoring Summary Excel Tables for December. These tables record the areas of monitoring completed during the fourth quarter and the status of being compliant;

2. A Status Summary of Non-Compliant, Further Review Needed and Compliant with the requirements of the conditions and/or mitigation measures;

3. Photo Location Map and Relevant Site Photos showing site conditions of key areas of the landfill during the quarter;

4. Site visit attendees by date of site visit and the mitigation monitoring report for each monitor;

5. Meeting logs documenting any meetings with Republic Services staff and/or public agencies and the topics discussed;

6. Any site monitoring documenting site changes

Site Visits During the Quarter

Five site visits were performed by UltraSystems during the October through December 2013 quarter in order to observe operational site activities and determine compliant status with conditions and/or mitigation measures. They were performed on October 9, 2013; October 23, 2013; November 13, 2013; December 4, 2013; and December 18, 2013. The previously discussed conditions and/or mitigation measures were tracked by each specialist who visited, and observations were documented. Site conditions were noted to be: Compliant, Non-Compliant, or Further Review Needed. If a Condition was found to be Non-Compliant or observed as having Further Review Needed, a reference was made to an appendix which details what was observed by the monitor.

Definition of Terms

Compliant is defined as complying with the City and County conditions and/or mitigation measures.

Non-compliant is defined as not complying with the City and County conditions and/or mitigation measures.

Further Review Needed is defined as implementing plans (agency-approved, if required) to fully comply with a condition and/or mitigation measure. Some plans, especially vegetation, require an extended time frame, and immediate compliance is not possible.

Further Review Needed/ Comments is defined as comments documenting site conditions observed during monitoring visits that are not fully compliant but action is being taken in order to obtain full compliance with conditions and/or mitigation measures. Recommendations from the monitor, as appropriate, and status from Republic Services (Republic) may also be given. Comments are also made for compliant conditions where the comment notes action that may be taken to provide documents to improve monitoring efficiency.

Resolved is defined as action taken or activities completed to fully comply with conditions and/or mitigation measures.

Status Summary

This section summarizes the conditions and/or mitigation measures that were monitored during the quarterly reporting period and their respective statuses. The Sunshine Canyon Mitigation Monitoring Spreadsheets for the City and County show the conditions and/or mitigation measures monitored during the quarter. Also included in this report are relevant photos in Appendix II.

Compliant

The majority of the conditions and/or mitigation measures monitored were observed to be compliant. There are City and County conditions which are compliant, but are noted as having corresponding comments that refer to the appendices. The Compliant with Comments section of the monthly reports provide a summary of these comments where monitoring efficiency would be improved by having reports and documents readily available. These are summarized in the Summary of Requested Documents in the Quarterly Report.

Non-Compliant

During UltraSystems' five site visits, no Non-Compliant conditions and/or mitigation measures were noted. Also, it must be understood that any monitoring related to landfill gas and odors are not part of the UltraSystems Monitoring Program at this time. These issues are currently being handled by a multi-agency team, which is led by the South Coast Air Quality Management District (SCAQMD).

Further Review Needed

The following conditions and/or mitigation measures were found not to be fully compliant, but were being worked on in order to obtain full compliance. This section summarizes the progress being made toward being fully compliant. When a condition and/or mitigation measure progresses from FRN to fully compliant, it is noted as Resolved in this section.

Q-B.2.c (City)

Ancillary Uses and Facilities. The subject property may only be used for the following uses and facilities. These ancillary uses and facilities described in the July 1997 Draft Subsequent EIR, pages 2-38 through 2-43, and may be located on the applicant's property generally in conformance with the diagram attached as Exhibit e-4, and during the life of the landfill, may be moved or relocated following commencement of landfilling operations as necessary to accommodate development of the ultimate landfill footprint.

Biota-4.13 (County)
All oak trees will be counted when removed to verify that adequate mitigation has been provided in accordance with the Oak Tree Mitigation Plan.

Biota-4.27 (County)
Venturan Coastal Sage Scrub: A detailed conceptual mitigation plan shall be prepared by the permittee and shall contain specific information on planting, maintenance, and monitoring. A revegetation plan that includes coastal sage scrub restoration can feasibly occur on-site. The implementation of this plan will provide on-site mitigation greater than 1:1 to offset the loss of coastal sage scrub.

Biota-4.29 (County)
San Diego Horned Lizard: Impact on the San Diego horned lizard can be mitigated to a level of less than significant by restoring coastal sage scrub habitat. This will create a temporal loss of the species, but the population should recover following restoration of this habitat. Topsoils should be selected that are friable to suit lizard habitat requirements.

Biota-4.30 (County)
California Gnatcatcher: Surveys shall be conducted for California gnatcatchers prior to Game Permit on-site grading to determine the status of this Game species within development areas.

Biota-4.33 (County)
Migratory Bird Treaty Act: To prevent the loss of an active migratory bird nest, vegetation shall not be cleared during the breeding season (i.e. March 15 to August 1).

Biota-4.34 (County)
Raptor nests: If habitat removal is proposed during the raptor breeding season (i.e. March to July), a survey shall be conducted for active nesting areas.

Current Status/Comments - The County needs to approve the proposed drainage system for the realignment of the access road before initiating the grading. The impacts to trees need to be approved by the City Street Department. Biological, archeological, and paleontological assessments must be performed and provided to the appropriate agencies, if required.

Q-C.3.h (City)
The access roads extended to new fill areas shall be surfaced with recycled asphalt, aggregate material, or soft stabilization products to minimize the length of untreated dirt.

M-4.14.1/155 (City)
Construction of the realigned access roadway shall not exceed 15 percent in grade. An access road shall be constructed and maintained around the working area of the landfill for emergency access for firefighting equipment.

Current Status/Comments - The application of crushed gravel is needed on areas of the unpaved access road that are steep grades to provide traction for trash trucks under rain conditions. It was observed that the sudden rainstorm caused the incline on the access roads east of Basin A to be slick. Several transfer trucks were observed sliding backwards, with two separate accidents seen. Unpaved roads with a steep incline should be covered with rock or recycled asphalt for the rainy season.

Q-C.5 (City)

Graffiti removal and deterrence on buildings and structures in public view. The property owners and all successors shall acknowledge the applicability of the graffiti removal and deterrence requirements pursuant to Municipal Code Sections 91.8101-F, 91.8904 and 91.1707-E relative to the subject project.

Current Status/Comments - Graffiti was observed on the wall along San Fernando Boulevard at the Gas Company's metering station.

Q-C.10.c (City)

The operator shall submit, as part of its annual report, an evaluation of the feasibility of beneficial uses of the landfill gas collected at the site such as landfill-gas-to-energy.

Odor/Landfill Gas - 7.07 (County)

The permittee will recover and sell as much gas as is technically and economically feasible to reduce total air quality emissions from the landfill operations. It is expected that the technical and economic feasibility of commercial recovery and sale of landfill gas as a renewable energy resource will occur at levels below 40 MMCFD. The gas collection system will be installed in increments to allow for maximum gas recovery.

Gas - 52 (County)

To the extent technically and economically feasible, the Permittee shall use Landfill gas for energy generation at the Facility or other beneficial uses, rather than flaring, and shall obtain all applicable local, state, and/or federal approvals for any such use. Notwithstanding the forgoing, the Permittee shall be exempt from this Condition No. 52 if, as a 'part of its annual report required by Part X of the IMP, the Permittee determines that any such activity or project is infeasible, which determination shall be subject to the review and approval of the Director of Public Works.

The Permittee shall also install and maintain a landfill gas collection system complying with SCAQMD requirements, which uses best available control technology to control the lateral migration of gases to the satisfaction of the Director of Public Works, County LEA, and SCAQMD. In addition to the other requirements of this Condition No. 52, Landfill gas flares shall be installed below the adjacent interior ridges of the site, unless otherwise required by the SCAQMD, and the flames shall be totally contained within the stacks. Flame arrestors shall be provided to the satisfaction of the County Forester and Fire Warden.

Current Status/Comments – The gas-to-energy and Edison facilities were observed during this quarter. Progress can be seen by the photos taken. The Edison facility appeared complete and ready for commissioning on December 4, 2013. On December 18th, the gas-to-energy facility still had work to be accomplished. The expected schedule for commissioning of both facilities is the end of the 1st Quarter or early 2nd Quarter of 2014.

T-4 (City)

Prepare a plot plan ["fire plan"] to the satisfaction of the Fire Department.
a. immediate access fire plan [now]
b. plot plan for the future facilities will be submitted when these are implemented

Fire Service - 12.03 (County)

The permittee shall maintain on-site fire response capabilities, construct access road, provide water tanks, water mains, fire hydrants and fire flows and perform brush clearance to the satisfaction of the County Forester and Fire Warden. The landfill will comply with all applicable County codes and ordinances which delineated the requirements for fire access, water mains, fire flows and fire hydrants, specifically defined by the County Fire Department. New construction water tanks, water mains and fire hydrants will be completed to meet the fire flow requirements of the Fire Department.

Current Status/Comments – There is no secondary access road now that the Flare 8 road has been eliminated. A new secondary access should be added to the fire plan and graded for passenger car use for egress.

M-4.1.1(3) (City)

During excavation, any unsuitable material encountered below the base grade for the landfill, including alluvium, organic material, and landslide debris, shall be removed. Engineered compacted fill shall be placed in those areas to restore the base grade for liner system construction. Excess material not used immediately for cover material shall be stockpiled onsite for future use. The unsuitable material shall be excavated, a portion at a time, as the working area of the landfill progresses to avoid opening large sections of potentially unstable material. A buffer area (i.e., 50-100 horizontal feet or as deemed appropriate to maintain safe working conditions) shall be used between the active cells receiving waste and areas under excavation. In accordance with CCR Title 14 a certified engineering geologist shall delineate the limits of the unsuitable material and associated "backcuts" to facilitate removals during excavation. Removal shall not occur during the rainy season (October 1 - April 30) or when the ground is saturated unless performed under the direction and specifications of a certified engineering geologist.

M-4.1.1(5) (City)

All grading activities shall be in compliance with specific requirements provided in a comprehensive geotechnical report prepared specifically for the proposed project, including provisions for excavation approved by the Department of Building and Safety, City Engineer, City LEA and other Responsible Agencies.

M-4.1.2(8) (City)

When excavating for the landfill operation, if a landslide is encountered, all material constituting that landslide shall be removed. Excess landslide material not used immediately for cover material shall be stockpiled onsite for future use. If necessary, the landslide area shall be excavated a portion at a time to avoid opening large sections of potentially unstable material. A buffer area shall be maintained between the active landfill cells receiving waste and areas under excavation to remove overburden soils, landslide debris, and weathered bedrock. A qualified geologist shall delineate the limits of the landslide during excavation. Landslide removal shall not commence when the ground is saturated, unless removed under the direction and specifications of a certified engineering geologist.

M-4.1.5(12) (City)

Geologic Hazards - Liquefaction

Alluvium in the canyon bottoms beneath the footprint of the waste containment system and beneath ancillary structures shall be excavated and, if necessary, replaced with compacted structural fill during construction. A qualified geologist shall be onsite during construction activities to observe removal and replacement of alluvium and verify that all alluvium within the landfill footprint has been removed prior to placement of any compacted fill or construction of any containment system elements.

M-4.1.5(13) (City)

The landfill facility shall be designed and constructed in accordance with RCRA, Subtitle D, 40 CFR, Part 258, Subpart B, § 258.14 (Unstable Areas) so that there would be no liquefaction related impacts.

Geology-1.05 (County)

During excavation, any unsuitable material encountered below the base grade for the landfill, including alluvium, organic material, and landslide debris, shall be removed. Engineered compacted fill shall be placed in those areas to restore the base grade for liner system construction. Excess material not used immediately for cover material shall be stockpiled on-site for future use. The unsuitable material shall be excavated, a portion at a time, as the working area of the landfill progresses to avoid opening large sections of potentially unstable material. A buffer area (i.e. 50 -100 horizontal feet or as deemed appropriate to maintain safe working conditions) shall be used between the active cells receiving waste and areas under excavation. In accordance with CCR Title 14, a certified engineering geologist shall delineate the limits of the unsuitable material and associated "backcuts" to facilitate removals during excavation. Removal shall not occur during the rainy season (October 1 - April 30) or when the ground is saturated, unless performed under the direction and specifications of a certified engineering geologist.

Geology-1.18 (County)

Alluvium in the canyon bottoms beneath the footprint of the waste containment system and beneath ancillary structures shall be excavated and, if necessary, replaced with compacted structural fill during construction. A qualified geologist shall be on-site during construction activities to observe removal and replacement of alluvium and to verify that all alluvium within the landfill footprint has been removed prior to placement of any compacted fill or construction of any containment system elements.

Geology-1.19 (County)
The landfill facility shall be designed and constructed in accordance with RCRA, Subtitle D, 40 CFR, Part 258, Subpart B, § 258.14 (Unstable Areas) so that there would be no liquefaction-related impacts.

Groundwater-3.09 (County)
As the landfill is constructed, all alluvium will be removed to solid bedrock, thereby removing any connection with groundwater-bearing alluvium down-gradient within Sunshine Canyon.

Current Status/Comments – It was observed in the August monitoring that the City south waste slope had fissures and cracks in the vicinity of the buttress area. Vertical and horizontal offsets in the roadway and hillside were observed in the October monitoring visit. The cause of these cracks and their potential impact should be addressed by Republic's geotechnical engineer. In November, waste was being placed in Cell CC3A Part II, and the cracks and offsets were repaired.

M-4.1.4(11) (City)
An operations checklist shall be used by a registered engineering geologist for surveys following all earthquake events measuring 5.0 on the Richter Scale or greater near the project site. A comparison of operating parameters and site conditions before and after major earthquake events shall be made to verify that systems are operational as designed. Final designs for major engineered structures shall be based on the results of the detailed stability analyses of potential seismic events.

Geology-1.16 (County)
An operations checklist will be used by a certified engineering geologist, registered civil engineer or licensed surveyor for surveys following all earthquake event of 5.0 magnitude or greater wherein significant shaking or rolling movement was experienced at the landfill. All environmental protection and control systems for the landfill will use the best available control technology (BACT) and will be designed to withstand a maximum probable earthquake in accordance with Title 23, Division 3 Chapter 15, Article 4 §2547 of the California Code of Regulations (CCR). A comparison of operating parameters and site conditions before and after major earthquake events (5.0 magnitude or greater) will be made to verify that the designed systems are operational.

Current Status/Comments – The accelerometer adjacent to the main access road was observed to have a hole in the enclosure and appeared not to be maintained. This equipment should have maintenance performed on it and a new enclosure. Republic's staff stated that the unit will be relocated in 2014 and maintained or updated, if required.

M-4.1.1(6) (City)
Revegetation and erosion control procedures on all exposed slopes shall be implemented. The erosion controls to be implemented at the site shall include soil stabilization measures and revegetation in accordance with the approved revegetation plan as approved by the City Building and Safety Department. Interceptor ditches shall be designed to divert storm runoff to a sedimentation basin.

M-4.2.11(23) (City)

Disturbed areas shall be revegetated with an interim ground cover as specified in the proposed revegetation program. Excavation will proceed in a manner to reduce the amount of graded areas at any given time.

M-4.2.12 (City)

Site Erosion

c. A temporary vegetation cover shall be established on all slopes that are to remain inactive for a period longer than 180 days.

Geology-1.13 (County)

Revegetation and erosion control of all exposed slopes will be an ongoing process. The erosion controls to be implemented at the site will include soil stabilization measures and revegetation in accordance with the approved Revegetation Program. The installation of interceptor ditches shall be designed for the diversion of storm runoff to sedimentation basins. Sediment traps will be used at points of runoff concentration along the perimeter of exposed slopes surfaces.

Condition: Approval of drainage plan. Retention of a consulting horticulturalist/Registered Professional Forester and an independent qualified biologist by the permittee for ongoing supervision of revegetation programs. Review and monitoring of planting programs by County Forester.

Geology-1.14 (County)

To prevent soil erosion on the face of the landfill, interim vegetation measures will be taken after placement of the temporary soil layer (even though the area may be disturbed by future filling operations). Vegetative cover will be placed as in the approved Revegetation Program.

Condition: Retention of a consulting horticulturalist/Registered Professional Forester and an independent qualified biologist by the permittee for ongoing supervision of revegetation programs. Review and monitoring of planting programs by County Forester.

Biota – 4.42 (County)

Areas inactive for 180 days or longer will be planted with interim vegetation as approved by County biologist. Records will be kept to track fill areas of the site which are transferred to an inactive status so that appropriate dust control and revegetation measures can be implemented.

Visual-10.08 (County)

Cover/Revegetation Requirements

The permittee shall comply with the following cover and re-vegetation requirements at the Landfill:

(1). The permittee shall apply a temporary hydroseed vegetation cover on any slope or other Landfill area that is projected to be inactive for a period greater than 180 days, as set forth in the IMP. The permittee shall promptly notify the County LEA and the Department of Public Works of any such slope or area;

Revegetation Requirements

(5) Notwithstanding the foregoing, the permittee shall not be bound by the previous provisions of this Condition No. 44, but instead by the requirements of the County LEA, so long as the Limits of Fill are

not exceeded, if in consultation with the Department of Public Works, the County LEA determines that a different re-vegetation design or plan:
(1) would better protect public health and safety;
(2) would enable revegetation of the final slopes at least as well as shown in Exhibit "B" described in subsection D, above; and/or experts, including an independent, qualified bio(3) would be required because the minimum standards adopted by the CIWMB have been amended;
(6) the permittee shall employ an expert or biologist, to satisfy this Condition No. 44. Soil sampling and laboratory analysis shall be conducted in all areas that are required to be re-vegetated before any re-vegetation occurs to identify chemical or physical soil properties that may adversely affect plant growth or establishment. Soil amendments and fertilizer recommendations shall be applied and plant materials selected, based on the above referenced testing procedures and results. To the extent possible, plant types shall blend with species indigenous to the area, be drought tolerant, and be capable of rapid growth. The selected plants shall not include nonindigenous species that are likely to be invasive of adjacent natural areas.

Biota - Revegetation - 44.A (County)
A. The Permittee shall apply a temporary hydroseed vegetation cover on any slope or other Landfill area that is projected to be inactive for a period greater than 180 days, as set forth in the IMP. The Permittee shall promptly notify the SCL-LEA and the Department of Public Works of any such slope or area.

Revegetation - 44.F/44.F CUP (County)
F. The Permittee shall employ an expert or experts, including an independent, qualified biologist, to satisfy this Condition No. 44. Soil sampling and laboratory analysis shall be conducted in all areas that are required to be re-vegetated before any re-vegetation occurs to identify chemical or physical soil properties that may adversely affect plant growth or establishment. Soil amendments and fertilizer recommendations shall be applied and plant materials selected, based on the above-referenced testing procedures and results. To the extent possible, plant types shall blend with species indigenous to the area, be drought tolerant, and be capable of rapid growth. The selected plants shall not include non-indigenous species that are likely to be invasive of adjacent natural areas.

Current Status/Comments – The prior hydroseeding and mulching of the temporary and permanent slopes and inactive areas has not been successful. The majority of these areas are dirt. A comprehensive plan for seeding, with possibly temporary irrigation should be developed and implemented to establish vegetation.

Also, there was a County and City meeting on December 5, 2013 with Republic to review the status of revegetation efforts at the landfill. As a result of this meeting, a new seed mix containing some non-natives was submitted to the City and County for approval. The non-natives were added for quicker and earlier establishment.

M-4.2.11(20) (City)
Daily watering of active construction areas, active soil stockpiles, and all traveled unpaved roads shall be performed to minimize dust lofting from construction disturbances. Construction areas will also

receive a soil stabilization (sealant) product if they are to be left unattended for periods in excess of 5 days and control is required.

M-4.2.12(28) (City)

Site Erosion

d. An SCAQMD approved soil stabilization (sealant) product shall be used to retard soil erosion and enhance revegetation. Soil sealant shall be applied when necessary to selected working areas of the landfill. The sealant will also be used as a binder or tackifier to hold seed during revegetation, mulch, and fertilizers in-place until grasses become established and stabilize on the landfill surface.

Air Quality - 6.01 (County)

Except during rainy conditions, any active area or active cover soil stockpile shall be moistened with water on a daily basis unless wind conditions dictate otherwise, in which case, soil sealant shall be used in addition to water.

Air Quality - 6.02 (County)

Dust Control will also be accomplished through the temporary revegetation of the landfill surface. A temporary revegetation of the landfill surface, and a temporary vegetation cover will be established on all slopes that are to remain inactive for a period longer than 180 days. Specifications of temporary revegetation measures will be provided in the Revegetation Plan submitted to the County biologist for approval, the Closure and Postclosure Maintenance Plans, the Condition Use Permit, and Conditions of Project Approval.

Fugitive Dust - 45.F (County)

Inactive Areas Monitoring

F. Inactive areas of exposed dirt that have been sealed shall be regularly monitored to determine the need for additional sealing and to prevent unauthorized access that might disturb the sealant. If additional sealing treatment is required, the Permittee shall promptly apply such treatment to assure full control of the soil particles;

Current Status/Comments – In October, the soil bottom of Basin D, the area next to the Basin D drainage channel and some areas of the County top deck have been sealed with soil sealant. Other areas should be considered to be sealed with the lack of rain and frequent high winds this year.

M-4.2.13/29, 30, 32, 33, 34 (City)

The natural biological processes that generate odors in a landfill through anaerobic decomposition cannot be prevented or avoided. However, the LFGs shall be prevented from escaping to the atmosphere through the use of control measures. These measures include using daily and intermediate cover material over deposited wastes, filling any surface cracks with clean dirt as necessary, and extracting LFG through the use of an LFG collection and recovery system and destroying collected gases by combustion.

Operational techniques shall be utilized to control odor sources at the landfill. The size of the working face shall be limited so that the area of waste exposed to the atmosphere is kept to a minimum.

The LFG collection and recovery system shall be installed in phases as each portion of the landfill site is filled. The final system shall contain a network of gas extraction wells, collection system piping, and flaring facilities. Because the LFG generation begins at lower levels of volume and increases during the landfill site life, the gas will be flared initially until sufficient quantities are available for processing into electricity.

If an odor problem should develop, appropriate control measures shall be implemented. These measures include the application of additional dirt daily cover material or more frequent application of the cover material to seal the landfill surface, or adjustments to the wells, equipment, and operation of the LFG collection and recovery system.

To ensure that odors are kept to a minimum, the following odor/LFG monitoring program shall be implemented for the proposed landfill project. The monitoring program shall comply with the requirements of SCAQMD Rule 1150.1 and include:

a. Sample Probe Installation: One monitoring probe per 1,000 feet or as identified by South Coast Air Quality Management District (SCAQMD) and/or Local Enforcement Agency (LEA) in the landfill expansion, and one probe per 650 feet or as identified by SCAQMD and/or LEA in the City Inactive landfill along the landfill perimeter, or whichever is more restrictive shall be installed to identify potential areas of subsurface landfill gas (LFG) migration. These probes shall be monitored to ensure that quantities of LFG beyond regulatory standards do not vent offsite through subsurface soils.

b. Integrated Landfill Surface Sampling: The landfill surface shall be monitored to ensure that the average concentration of total organic compounds over the landfill surface does not exceed SCAQMD's standard of 25 ppm.

c. Ambient Air Samples: 24-hour integrated gas samples and required meteorological data shall be taken to assess any impact the landfill is having on the ambient air quality at the landfill perimeter.

d. Instantaneous Landfill Surface Monitoring: Spot checks on the landfill surface shall be made to determine the maximum concentration of total organic compounds measured as methane, measured at any one point on the surface of the landfill does not exceed the SCAQMD's standard of 500 ppm.

e. Regular Monitoring and Annual Testing: LFG concentrations at perimeter probes, gas collection system headers, the landfill surface, and in ambient air downwind of the landfill shall be monitored once per month or less frequently (but no less than quarterly) as required by the SCAQMD. The LFG collection system shall be adjusted and improved based on quarterly monitoring data and annual stack testing results.

Odor/Landfill Gas - 7.06 (County)

If an odor problem should develop, appropriate control measures shall be implemented. These measures include the application of daily cover material or more frequent applicant of the cover material to seal the landfill surface, or adjustments to the wells, equipment, and operation of the LFG collection and recover system.

Amendment 45.N - 4.a, 4.c, 4.d (County)

Identify and provide status on the measures currently being implemented as required by the AQMD's Order for Abatement.

An odor patrol program, which would include the following at a minimum:

• Provide a trained technician to conduct odor patrols in the surrounding neighborhoods at a frequency of one patrol per hour from 6 a.m. to 10 a.m., Monday through Saturday, and during adverse wind conditions.
• If odor is detected, identify its potential and/or actual source, including those that may not be related to the Landfill's operation, such as an odorous trash dumpster or transfer trucks.
• If odor is determined to be related to the Landfill's operation, take immediate action to reduce the odor. Document the streets patrolled on a map, time of the patrol, potential source of odor, and immediate actions taken by the Landfill.
• A landfill gas mitigation plan in preparation for the next rainy season since landfill gas emissions from either the landfill surface or landfill gas control equipment is cited as a potential contributor in the AQMD's Order for Abatement. The plan should include the following at a minimum:
• Description of the site's current Gas Monitoring and Control Plan, including a map showing locations of gas monitoring probes, gas extraction wells, horizontal and vertical gas collection lines, etc.
• Compliance history of the site's landfill gas migration control program from January 1, 2009, to the present quarter as well as any corrective actions.
• Discuss the impacts of the most recent heavy rains on the landfill gas collection system, including identifying locations of damage due to soil erosion, as well as any corrective actions or mitigation measures.
• A work plan that includes preventive measures, such as identifying and filling any surface cracks and installing additional extraction wells, as well as contingency measures.
• An implementation schedule for the above work plan.

Amendment 45.N - 5 (County)
Include in the Quarterly Dust and Odor Reports, which are required by CUP Condition No. 45.N, the status and effectiveness of mitigation measures 1 through 3 above, and the Odor Mitigation Plan.

Current Status/Comments – Compliance with these mitigation measures, concerning landfill gas monitoring and odor control and detection, is being monitored by a multi-agency team led by the SCAQMD. Only obvious gas emission sources, lack of cover, or exposed trash resulting in odor and gas emissions observed during the monitoring visit will be reported.

In October, it was observed that well CWG 568 had been damaged and was leaking gas around its base. The condition was reported to Republic and the well was marked and a crew mobilized to make repairs.

In November, Flare 1 was observed. The wind was coming from the north, causing a downdraft condition, which had stack exhaust odors at ground level near the blower skid.

In December, it was observed that an abandoned gas collection line and a corrugated drainage pipe was buried in the City South soil stockpile area. When recently uncovered, the gas line and drainage pipe was emitting odorous fumes. Republic was in the process of removing more soil to make repairs.

It was also observed at Flare 1 that when the wind blows south over the flare unit that there was a landfill gas odor near the blower skid. This was reported to Republic.

M-4.3.1(38) (City)

Permanent bench drainage ditches shall be installed when final cover is placed on completed portions of the landfill. These ditches shall be lined. Temporary unlined drainage facilities consisting of diversion ditches (V-ditches) where necessary shall directly intercept natural surface runoff. Any intermittent channel flow in the existing canyon bottom shall be captured, channelized, and conveyed into Sedimentation Basin A. Diversion ditches shall convey surface runoff from the undisturbed areas to the permanent perimeter ditches for safe transport around the landfill footprint. Surface covers of various types, from mulches to vegetation, shall be used to retard erosion from areas of disturbance. In addition, areas of disturbance shall be kept at a minimum during active filling operations.

Surface Water - 2.12 (County)

Permanent bench drainage ditches shall be installed when final cover is placed on completed portions of the landfill. These ditches shall be lined. Temporary unlined drainage facilities consisting of diversion ditches (V-ditches) where necessary shall directly intercept natural surface runoff. Any intermittent channel flow in the existing canyon bottom shall be captured, channeled, and conveyed into a sedimentation basin. Diversion ditches shall convey surface runoff from the undisturbed areas to the permanent perimeter ditches for safe transport around the landfill footprint. Surface covers of various types, from mulches to vegetation, shall be used to retard erosion from areas of disturbance. In addition, areas of disturbance shall be kept at a minimum during active filling operations.

Current Status/Comments – Temporary and permanent drainage ditches have been installed to convey water to the basins. The majority of inactive and/or areas that have been disturbed have no temporary or permanent vegetation or other surface cover to retard erosion.

M-4.3.1(46) (City)

A preventive maintenance program would be implemented by the project proponent, including inspection of facility equipment, systems, and stormwater management devices to detect conditions that may cause breakdowns or failures resulting in discharge of materials into stormwater. This program applies to the onsite drainage ditches; rip-rap; berms and dikes; dust control; silt fences; diversion grading; and pavement surfaces. Each system and piece of stationary equipment would be inspected monthly. Procedures for inspection would vary, due to the piece of equipment or system. However, the major elements of the inspection program would include checking for cracks or structural failures, inspecting parts or pieces of equipment nonfunctioning, checking for the degradation or deterioration of operating units, and investigating the need for cleaning or emptying units. A summary report of these monitoring results and the corrective actions taken will be disseminated in each newsletter with a more detailed report on the web site and in the annual report.

Surface Water 2.15 (County)

Surface Water Preventive Maintenance Program

A preventive maintenance program will be implemented by the permittee, including inspection of facility equipment, systems, and stormwater management devices to detect conditions that may cause breakdowns or failures resulting in discharge of materials into stormwater. This program applies to

the onsite drainage ditches, rip-rap, berms and dikes, dust control, silt fences, diversion grading, and pavement surfaces. Each system and piece of equipment will be inspected monthly.
Procedures for inspection would vary based on the piece of equipment or system. However, the major elements of the inspection program will include checking for cracks or structural failures, inspecting parts or pieces of equipment nonfunctioning, checking for the degradation or deterioration of operating units, and investigating the need for cleaning or emptying units.

Current Status/Comments – In October, the westside drainage channel had cracking and spalling in the concrete sidewalls and uplifting in the concrete bottom. Trees were growing next to the channel wall possibly causing the cracking in the concrete walls. The cause of the damage to the drainage structure should be determined and necessary repairs made to the structure.

In December, the condition of the westside drainage channel was observed by the County, Republic staff, and monitor. Areas of degrading conditions were noted by Republic staff.

M-4.4.1(60) (City)
Venturan Coastal Sage Scrub
A detailed conceptual mitigation plan shall be prepared by the project proponent and contain specific information on planting, maintenance, and monitoring. A revegetation plan that includes Coastal sage scrub restoration can feasibly occur onsite. The implementation of this plan will provide onsite mitigation greater than 1:1 to offset the loss of coastal sage scrub.

M-4.4.1(61) (City)
Venturan Coastal Sage Scrub
Surface soils and seed source will be gathered from areas of the project site and spread within onsite mitigation areas.

Biota - 4.27 (County)
Venturan Coastal Sage Scrub: A detailed conceptual mitigation plan shall be prepared by the permittee and shall contain specific information on planting, maintenance, and monitoring. A revegetation plan that includes coastal sage scrub restoration can feasibly occur on-site. The implementation of this plan will provide on-site mitigation greater than 1:1 to offset the loss of coastal sage scrub.

Current Status/Comments – The County Sage Mitigation Area was observed. Joe Decruyenaere (County biologist) and Joe Thompson (Monitor biologist) observed that no mitigation activity was occurring at this location. The lower areas that are void of sage vegetation appear to have friable soils that if terraced or if benches are created and supported by straw wattles, the flat areas could be vegetated with sage. A further investigation of the site soils condition is warranted. Re-activating the irrigation system may be beneficial. Refer to Joe Thompson's mitigation monitoring site reports and the December 17, 2013 memo for detailed biological assessment.

Biota - 4.29 (County)

San Diego Horned Lizard: Impact on the San Diego horned lizard can be mitigated to a level of less than significant by restoring coastal sage scrub habitat. This will create a temporal loss of the species, but the population should recover following restoration of this habitat. Topsoils should be selected that are friable to suit lizard habitat requirements.

Current Status/Comments – The San Diego Horned Lizard was seen in the County Coastal Sage Mitigation area and in the slopes near the Basin D western outlet. The sage vegetation in these areas should be improved to provide the required habitat. In November, Republic staff stated that Horned Lizard habitat will be added to the Deck C site once vegetation is established.

M-4.4.2/69 (City)

Potential candidate mitigation sites have been identified by the project proponent in conjunction with resource agencies for consideration to compensate for impacts on riparian and wetland resources as a result of project development. These sites include Bull Creek, Bee Canyon and East Canyon, which are located proximate to the project site. Prior to the development of any detailed mitigation plans and drawings, the final selection will be determined cooperatively by the CDFG, Corps, SWRCB, and other regulatory agencies in conjunction with the City and project proponent.

Current Status/Comments – There are still City of Los Angeles property transfer issues with the wetland and riparian mitigation at the Chatsworth Reservoir. The Corps of Engineers had given an extension of time on the implementation of a mitigation program until the end of 2013. A new schedule reflecting the current conditions should be developed and provided to the City and County Planning Departments. Notification to the Corps of Engineers and California Fish and Wildlife should be provided.

M-4.9.3(109) (City)

On a once-a-week basis, or as needed, the landfill operator shall mobilize cleanup crews to provide litter pickup services within the O'Melveny Park area, along Balboa Boulevard and San Fernando Road, and in other residential areas located in proximity to the landfill, that may be affected by offsite litter migration. On a daily basis, the cleanup crews shall inspect the surrounding area to assess if more frequent cleanups are required. Fences outside of the landfill perimeter may be visible to the surrounding community.

Visual 10.11 (County)

The permittee's on-site Litter Control Program will include continuous patrol of the access road and working face during hours of operations and mobilize clean-up crews on a regular basis for litter pick-up along designated public access routes, O'Melveny Park and the adjacent neighborhood.

Current Status/Comments – In October and in December, windblown litter and dumped debris was noted between the front exterior wall of the terminal basin and the site slump stone wall along San Fernando Road.

Windblown litter was also observed on the back hillsides of Basins A and B.

M-4.9.4(121) (City)
The landfill operator shall implement a fire prevention plan in compliance with CCR, Title 8, § 3221. Components of this written fire prevention plan shall include potential fire hazards and their proper handling and storage procedures; potential ignition sources (i.e., welding or smoking), their control procedures, and the type of fire protection equipment or systems that can control a fire involving them; names or regular job titles of those responsible for maintenance of equipment and systems installed to prevent or control ignitions or fires; and names or regular job titles of those responsible for the control of accumulation of flammable or combustible waste materials.

Fire Service - 12.03 (County)
The permittee shall maintain on-site fire response capabilities, construct access road, provide water tanks, water mains, fire hydrants and fire flows and perform brush clearance to the satisfaction of the County Forester and Fire Warden. The landfill will comply with all applicable County codes and ordinances which delineated the requirements for fire access, water mains, fire flows and fire hydrants, specifically defined by the County Fire Department. New construction water tanks, water mains and fire hydrants will be completed to meet the fire flow requirements of the Fire Department.

Current Status/Comments – In December, it was observed that tree branches were laying on the leachate facility overhead electrical lines and pose a fire hazard.

Summary of Requested Documents

The following documents, reports and plans are recommended to be made available at the site for agency and monitor review in order to assist in streamlining the monitoring process.

a) Design report for the Leachate Collection and Treatment Facility (LCTF).

b) Current Fill Sequence Plan.

c) A plan showing areas inactive for 180 days or longer with records tracking fill areas and interim reclamation and revegetation, including the timing of proposed work, as well as a plan showing current and projected areas to be within ten feet of the limits of fill.

d) Maps showing areas that are at final elevation and bench ditches that will connect to drainage ditches to protect against natural surface runoff.

e) The current erosion control plans should be available for agency and monitor review.

f) Site drainage plans, including surface and underdrains systems with complementing revegetation plan.

g) A plan/ report of the liner interceptor ditches design/ installation to ensure that surface runoff is appropriately conveyed to the existing flood control channel directly east of the project site entrance.

h) Comprehensive geotechnical reports.

i) A preventative maintenance plan and summary of monitoring reports of inspections of facility equipment, systems and stormwater management devices to detect conditions that may cause breakdowns or failures resulting in discharge of materials into stormwater.

Conclusions

In this reporting period, UltraSystems has monitored the conditions and/or mitigation measures for the City/County, as shown on the Mitigation Monitoring Summary Excel spreadsheets.

As shown by the Non-Compliant and Further Review Needed sections above, the landfill is actively working toward being fully compliant with conditions and/or mitigation measures, with no non-compliant conditions observed. Furthermore, monitoring of the tasks on these Excel spreadsheets track progress toward being fully compliant. Notwithstanding the above, air quality issues are not being actively monitored by UltraSystems, and may not be compliant.

The 2013 Fourth Quarter Mitigation Monitoring Summary Excel spreadsheets track the progress and completion of tasks as they were accomplished during this quarterly period.

Sunshine Canyon Landfill Fourth Quarter 2013 Mitigation Monitoring Summary / City – See Excel Spreadsheet

Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 10-01-2013 through 12-31-2013)

Reference #	Mitigation #	City Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	10/9/2013	Status*	Further Review Needed/Comments**	Resolved*	10/23/2013	Status*	Further Review Needed/Comments**	Resolved*	11/13/2013	Status*	Further Review Needed/Comments**	Resolved*	12/4/2013	Status*	Further Review Needed/Comments**	Resolved*	12/18/2013	Status*	Further Review Needed/Comments**	Resolved*
Project Manager																							
Q - A.3.		Definitions	info	/				/				/				/				/			
Q - A.6.		Submit Annual Reports	June yearly	/				/				/				/				/			
Q - A.10.		Provision of Fees	yearly	/				/				/				/				/			
Q - B.1.		Permitted/Prohibited Landfill Uses	yearly	/				/				/				/				/			
Q - B.2		Approval of Landfill	ongoing	/				/				/				/				/			
Q - B.2.c.		Ancillary Uses and Facilities	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	I-t	
		Ancillary Uses and Facilities																					
Q - B.2.d (3)		10 Year Phase Review	2015	/				/				/				/				/			
		10 Year Phase Review																					
Q - B.4.d.		Inert/Exempt Materials	info	/				/				/				/				/			
Q - B.5.a.		Prohibited Waste	info	/				/				/				/				/			
Q - B.6.		Waste Diversion	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
Q - C.3.g.		Paved Access Roads	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
Q - C.3.h.		Surfacing of Access Roads	ongoing	✓	FRN	I-p		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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Q - C.5.		Graffiti Removal and Deterrence	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	FRN	I-t	
Q - C.10.c.		Evaluation of Beneficial Gas Usage	June yearly	✓	C	I-p		✓	C	I-q		✓	C	I-r		✓	C	I-s		✓	C	I-t	
Q - C.10.d. (1)		Alternative Fuel Vehicles	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
Q - C.10.d. (2)		Alternative Fuel Refuse Collection Trucks	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
Q - C.12.a.		Technical Advisory Committee	info	/				/				/				/				/			
Q - C.12.c.		Contract for Mitigation Monitoring	info	/				/				/				/				/			
Q - C.12.c.		Contract for Mitigation Monitoring-5 years	info	/				/				/				/				/			
T - 4		Fire Plan	status									✓	FRN	I-r									
T - 5.j.		Trip Diversion	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
T - 6		Satisfactory Street Lighting	status	/				/				/				/				/			
M - 4.1.1	7	Reabandonment Procedures	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.1.4	11	Post-5.0 Earthquake Analysis	upon event	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.2.12	27	Heavy Equipment Operations	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.12		Heavy Equipment Operations	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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M - 4.2.12	28	Site Erosion-Cover	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.12		Site Erosion-Cell Height	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.12		Site Erosion-Sealant	ongoing	✓	FRN	I-p		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.13	29	LFG Control Measures	ongoing	/		I-p		/		I-q		/		I-r		/		I-s		/		I-t	
M - 4.2.13	30	Operational Odor Control Techniques	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.13	31	Solid Waste Compaction	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.13	32	LFG Collection and Recovery System	ongoing	/		I-p		/		I-q		/		I-r		/		I-s		/		I-t	
M - 4.2.13	33	Odor Control Measures	ongoing	✓	FRN	I-p		/		I-q		✓	FRN	I-r		/		I-s		✓	FRN	I-t	
M - 4.2.13	34	Odor/LFG Monitoring	ongoing	/		I-p		/		I-q		/		I-r		/		I-s		/		I-t	
		Periodic LFG Monitoring		/		I-p		/		I-q		/		I-r		/		I-s		/		I-t	
M - 4.3.2	52	LFG Migration Mitigation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.3.2	57	Dust Control Water	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.4.2	69	Offsite Mitigation Sites	status													✓	FRN	I-s		✓			
M - 4.4.2	70	Purchasing Wetland Credit	status	/				/				/				/				/			
M - 4.4.2	71	Funding-Invasive Species Eradication Program	status	/				/				/				/				/			
M - 4.6	85	Site Lighting	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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M - 4.7.1	86	Open Space Buffer Area	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.3	106	Litter Minimization	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.3	107	Litter/Debris Containment	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.3	108	Vehicle Tarping Requirements	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.3	109	Periodic Offsite Litter Pickup	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	C	NONE		✓	FRN	I-s		✓	FRN	I-t	
M - 4.9.3	110	Illegal Dumping Activities	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.3	111	Radio Dispatch Litter Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.3	112	Litter Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.5	127	Address Concerns of Citizens' Advisory Committee	ongoing	/				/				/				/				/			
M - 4.9.6	128	Landfill Gas/Collection System-Unsafe Methane	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.6	129	Landfill Gas/Collection System-Detection/Training	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.6	130	Landfill Gas/Collection System-Risk Mitigation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.16.4	176	Reclaimed Water	status	/				/				/				/				/			
M - 4.16.4	177	Water Conservation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
Civil & Geotechnical Engineer																							

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M - 4.1.1	2	Grading Outside of Conceptual Grading Plan Area	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.1.1	3	Unsuitable Material Removal/Buffer Zones	ongoing	✓	FRN	I-p						✓	C	I-r									
M - 4.1.1	4	Grading Outside of Landfill Footprint	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.1.1	5	Grading Activity Compliance	ongoing	✓	FRN	I-p																	
M - 4.1.2	8	Landslide Guidelines	ongoing	✓	FRN	I-p																	
M - 4.1.2	9	Soil Stabilization	ongoing																				
M - 4.1.4	10	Landfill Design	ongoing																				
M - 4.1.4	11	Earthquake Operations Checklist	upon event	✓	FRN	I-p		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.1.5	12	Geologic Hazards - Liquefaction	ongoing	✓	FRN	I-p																	
M - 4.1.5	13	Design/Construction-Liquefaction	ongoing	✓	FRN	I-p																	
M - 4.1.5	14	Design/Construction-Containment Structures	ongoing																				
M - 4.1.6	15	Refuse Slope Gradients	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.1.6	16	Cut and Fill Slope Gradients	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.1.6	17	Final Slope Factors of Safety	ongoing	✓	C	NONE																	
M - 4.1.6	18	Survey Monuments	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.3.2	47	Landfill Liner	ongoing																				

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M - 4.3.2	48	Landfill Liner	ongoing																				
M - 4.3.2	54	Preliminary Closure/Postclosure Plan	status																				
M - 4.3.2	55	Landfill Design/Operation/Final	status																				
M - 4.3.2	56	Cover Application	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.14.1	155	Access Roadway Grade	ongoing	✓	FRN	I-p																	
M - 4.18	178	Landfill Elevation Exceedance	ongoing																				
Hydrologist																							
M - 4.1.4	11	Earthquake Operations Checklist	upon event	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.3.1	36	Surface Water Infiltration Minimization	ongoing																				
M - 4.3.1	37	Surface Drainage Systems	ongoing																				
M - 4.3.1	38	Permanent/Temporary Ditches	ongoing	✓	FRN	I-p																	
M - 4.3.1	39	Drainage Protection	ongoing																				
M - 4.3.1	40	SWRCB Permit Coverage	ongoing																				
M - 4.3.1	41	Surface Water Collection System	ongoing																				
M - 4.3.1	42	Surface Water Quality Monitoring	ongoing																				

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Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 10-01-2013 through 12-31-2013)

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M - 4.3.1	43	Sediment Basin Maintenance	ongoing																				
M - 4.3.1	44	Final Landfill Cover	ongoing																				
M - 4.3.1	45	Erosion Control Plan	ongoing	✓	C	I-p																	
M - 4.3.1	46	Preventive Maintenance Program	ongoing	✓	FRN	I-p										✓	FRN	I-s					
M - 4.3.2	49	Interception of Groundwater Seepage	ongoing																				
M - 4.3.2	50	LCRS/Leachate Monitoring	ongoing																				
M - 4.3.2	51	LCRS Monitoring	ongoing																				
Biologist																							
M - 4.1.1	6	Slope Erosion Control	ongoing	✓	FRN	I-p		✓	FRN	I-q			✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t
M - 4.2.11	23	Revegetation/Excavation	ongoing	✓	FRN	I-p		✓	FRN	I-q			✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t
M - 4.2.12		Temporary Vegetation Cover	ongoing	✓	FRN	I-p		✓	FRN	I-q			✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t
M - 4.4.1	60	Coastal Sage Scrub Mitigation Plan	ongoing	✓	C	I-p		✓	C	I-q			✓	C	I-r		✓	C	I-s		✓	C	I-t
M - 4.4.1	61	Coastal Sage Scrub Seeding	ongoing																				
M - 4.4.1	62	Mariposa Lily Mitigation Plan	ongoing																				
M - 4.4.1	63	San Diego Horned Lizard Mitigation	ongoing										✓	C	I-r								

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M - 4.4.1	64	California Gnatcatcher Surveys	ongoing	/				/				/				/				/			
M - 4.4.1	65	Least Bell's Vireo Surveys	ongoing	/				/				/				/				/			
M - 4.4.1	66	Western Burrowing Owl Surveys	ongoing	/				/				/				/				/			
M - 4.4.1	67	Migratory Bird Treaty Act	ongoing	/				/				/				/				/			
M - 4.4.1	68	Raptor Nests Habitat	ongoing	/				/				/				/				/			
M - 4.4.3	72	Native Tree Mitigation	ongoing									✓	C	NONE									
M - 4.4.3	73	Nonnative Tree Mitigation	status									✓	C	NONE									
M - 4.4.3	74	Mitigation Tree Planting	ongoing									✓	C	NONE									
M - 4.4.3	75	Tree Planting Mitigation Site Prep	ongoing									✓	C	NONE									
M - 4.4.3	76	Poultry Wire Screen	ongoing									✓	C	NONE									
M - 4.4.3	77	Backfill Material	ongoing									✓	C	NONE									
M - 4.4.3	78	Tree Planting Procedure	ongoing									✓	C	NONE									
M - 4.4.3	79	Tree Area Mulching	ongoing									✓	C	NONE									
M - 4.4.3	80	Tree Irrigation/Fertilization	ongoing									✓	C	NONE									
M - 4.4.3	81	Irrigation System	ongoing									✓	C	NONE									
M - 4.4.3	82	Annual Tree Monitoring Report	annual																				
M - 4.9.2	96	Vector Activity Monitoring	ongoing																				

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M - 4.9.2	97	Vector Elimination	ongoing																				
M - 4.9.2	98	Fly Control	ongoing																				
M - 4.9.2	99	Rodent Control	ongoing																				
M - 4.9.2	100	Operational Vector-Limiting Activity	ongoing																				
M - 4.9.2	101	Equipment Cleanliness/Maintenance	ongoing																				
M - 4.9.2	102	Storage of Vector-Attracting Items	ongoing																				
M - 4.9.2	103	Salvaged Material Storage-Vector Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.9.2	104	Periodic Vector Inspections	ongoing																				
M - 4.9.2	105	Implementation of Vector Control Measures	ongoing																				
Air Quality & Noise Specialist																							
M - 4.2.11	19	Emissions Mitigation Measures	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.11	19	Construction Curtailing due to Pollution	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.2.11	20	Dust Lofting Minimization	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	
M - 4.2.11	21	Wind Speed Monitoring	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.11	22	Grading-Dust Reduction	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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M - 4.2.12	24	Construction Equipment Maintenance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.2.12		Construction Curtailing due to Pollution	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.2.12	25	Refuse Trucks-Maintenance	ongoing																				
M - 4.2.12		Refuse Trucks-Engine	ongoing																				
M - 4.2.12		Refuse Trucks-Fee Schedule	ongoing																				
M - 4.2.12		Refuse Trucks-Fee Schedule Delivery Time	ongoing																				
M - 4.2.12		Refuse Trucks-Idling	ongoing																				
M - 4.2.12		Refuse Trucks-Emissions	ongoing																				
M - 4.2.12	26	Truck Travel and Fugitive Dust Emissions	ongoing																				
M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing																				
M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing																				
M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing																				
M - 4.5.2	83	Landfill Hours	info	/				/				/				/				/			
M - 4.5.2	84	Landfill Equipment-Noise Reduction	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
Hydrology, Hazardous Waste / Risk of Upset																							

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M - 4.3.2	53	Groundwater Monitoring Wells	ongoing																				
M - 4.3.2	58	Operation as Class III Landfill	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
M - 4.3.2	59	Underground Fuel Storage	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.9.1	90	Refuse Inspection Program	ongoing																				
M - 4.9.1	91	Hazardous Waste Load-Checking	status																				
M - 4.9.1	93	Hazardous Waste Detection Training	status																				
M - 4.9.1	94	Spill Response Program	status																				
M - 4.9.4	115	Safety Inspections/Checklists	ongoing																				
M - 4.9.4	118	Accident/Injury reports, Inspections	status																				
M - 4.9.4	121	Fire Prevention Plan	ongoing													✓	FRN	I-s					
M - 4.9.4	123	Personal Protective Equipment	ongoing																				
M - 4.9.4	125	Site Access/Fencing	ongoing	✓	C	NONE						✓	C	NONE									
M - 4.14.1	147	Fire Response Capabilities	ongoing																				
M - 4.14.1	148	Hydrant Installation	ongoing																				
Archaeologist																							

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M - 4.19.1	183	Archaeological Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.19.1	184	Onsite Archaeologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.19.1	185	Archaeological Resources	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.19.1	186	Archaeological Resources	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
Paleontologist																							
M - 4.19.2	187	Paleontological Resources Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.19.2	188	Paleontological Resources Excavation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.19.2	189	Paleontological Resources Training	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.19.2	190	Paleontological Resources Recovery	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
M - 4.19.2	191	Paleontological Resources Inspection	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	

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Sunshine Canyon Landfill Fourth Quarter 2013 Mitigation Monitoring Summary / County – See Excel Spreadsheet

Sunshine Canyon Landfill Mitigation Monitoring Summary - County (10-01-2013 through 12-31-2013)

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	10/9/2013	Status*	Further Review Needed/Comments**	Resolved*	10/23/2013	Status*	Further Review Needed/Comments**	Resolved*	11/13/2013	Status*	Further Review Needed/Comments**	Resolved*	12/4/2013	Status*	Further Review Needed/Comments**	Resolved*	12/18/2013	Status*	Further Review Needed/Comments**	Resolved*
1	Project Manager																							
2																								
3																								
4	Amendment 45.N - 1	45N	Daily Cover Materials	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
5	Amendment 45.N - 3	45N	Daily Cover Procedure	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
6	Amendment 45.N - 4.a	45N	Order for Abatement Status	ongoing	/		I-p		/		I-q		/		I-r		/		I-s		/		I-t	
7	Amendment 45.N - 4.c	45N	Odor Patrol Program	ongoing	/		I-p		/		I-q		/		I-r		/		I-s		/		I-t	
8	Amendment 45.N - 4.d	45N	Landfill Gas Mitigation Plan	ongoing	/		I-p		/		I-q		/		I-r		/		I-s		/		I-t	
9	Amendment 45.N - 5	45N	Dust and Odor Reports	ongoing	/		I-p		✓	FRN	I-q		/		I-r		✓	FRN	I-s		/		I-t	
10																								
11	Combined Site & Bridge Area -20.A	20. A	Joint Powers Authority	info	/				/				/				/				/			
12	Combined Site & Bridge Area -20.F	20. F	Mitigation Reporting and Monitoring Program	status	/				/				/				/				/			
13	Landfill Capacity - 27	27	Tipping Fees for Partial Loads/Peak Hours	status																				
14	Grading & Drainage-41.A -.D	41A -D	Water Conservation	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
15	Revegetation - 44.F	44. F	Revegetation	status	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	
16	Fugitive Dust - 45.B	45. B	Working Face Areas	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
17	Fugitive Dust - 45.F	45. F	Inactive Areas Monitoring	ongoing	✓	FRN	I-p																	

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18	Fugitive Dust - 45.I	45.I	Cleaning of Roads	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
19	Litter Control - 46.A - .D	46A-D	Litter Control Program	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
20	Gas - 52	52	Landfill Gas Collection System	ongoing	✓	C	I-p		✓	C	I-q		✓	C	I-r		✓	C	I-s		✓	C	I-t	
21	Traffic - 57	57	Traffic Improvements	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
22	Traffic - 60	60	Street Light Installation	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
23	Traffic - 61	61	Traffic Minimization	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
24	Permittee Fees - 64 - 72	64-72	Permittee Fees	info	/				/				/				/				/			
25	Permittee Fees - 69	69	Permittee Fees-Contributions	info	/				/				/				/				/			
26	Permittee Fees - 70	70	Permittee Fees	info	/				/				/				/				/			
27	Permittee Fees - 72	72	Permittee Fees	info	/				/				/				/				/			
28	Alternative Fuel Vehicles - 77.A	77.A	Alternative Fuel Vehicles-Light Duty	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
29	Alternative Fuel Vehicles - 77.B	77.B	Alternative Fuel Vehicles-Refuse/Collection Trucks	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
30	Alternative Fuel Vehicles - 77.C	77.C	Alternative Fuel Vehicles-Report	status																				
31	Alternative Fuel Vehicles - 77.D	77.D	Alternative Fuel Vehicles-heavy-duty, alternative fuel	status																				
32	Alternative Fuel Vehicles - 77.E	77.E	Alternative Fuel Vehicles-Non-diesel Requirements	status																				
33	Alternative Fuel Vehicles - 77.F	77.F	Alternative Fuel Vehicles-Non-diesel Truck Trip	status																				

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34	Alternative Fuel Vehicles - 77.G	77.G	Alternative Fuel Vehicles-Clean Fuel Demo Program	status																				
35	Alternative Fuel Vehicles - 77.H	77.H	Alternative Fuel Vehicles-Compliance Evaluation	status																				
36	Air Quality Monitoring - 81	81	Air Quality Monitoring-Testing	ongoing	/				/				/				/				/			
37			Air Quality Monitoring-Testing																					
38	IMP - Part I..A	IMP 1	Air Quality Monitoring-Testing	ongoing	/				/				/				/				/			
39			Air Quality Monitoring-Testing																					
40	IMP - Part VI	IMP 6	Air Quality Monitoring-Testing	ongoing	/				/				/				/				/			
41																								
42	MMRS-12/01/06		Mitigation Monitoring and Reporting Summary	info	/				/				/				/				/			
43			Permits																					
44	Geology - 1.15		Permittee's On-site Solid Waste Recovery and	status	/				/				/				/				/			
45	Surface Water - 2.09		SWRCB Permit Coverage	ongoing	/				/				/				/				/			
46	Surface Water - 2.15		Surface Water Preventive Maintenance Program	ongoing	✓	FRN	I-p										✓	FRN	I-s					
47	Groundwater - 3.13		Groundwater-LFG Migration Mitigation	ongoing																				
48	Groundwater - 3.14		Groundwater-Monitoring Wells	ongoing																				
49	BIOTA – 4.05		Annual Fee Submission for SEA Studies	status	/				/				/				/				/			
50	BIOTA – 4.06		Buffer Zone Maintenance as Nature Preserve	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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51	BIOTA – 4.07		Buffer Zone Maintenance-Vegetation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
52	BIOTA – 4.08		Ridgeline Maintenance-Remain Undisturbed	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
53	BIOTA – 4.47		Cleaning of Equipment	ongoing																				
54	BIOTA – 4.48		Monitoring of Vector-Attracting Items	ongoing																				
55	BIOTA – 4.49		Salvaged Material Storage-Vector Control	ongoing																				
56	BIOTA – 4.50		Vector Activity Monitoring	ongoing																				
57	Air Quality - 6.03		Dust Emission Minimization	ongoing																				
58	Air Quality - 6.04		Usage of Cut Material for Cover	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
59	Air Quality - 6.05		Operations in Accordance with SCAQMD/DOPW	info	/				/				/				/				/			
60	Air Quality - 6.06		Landfill Gas Control/Extraction	ongoing	/				/				/				/				/			
61	Air Quality - 6.07		Flaring Systems	info	/				/				/				/				/			
62	Air Quality - 6.08		Management of Truck Arrivals	ongoing																				
63	Air Quality - 6.10		Refuse Truck Mitigation	status																				
64	Air Quality - 6.11		Light Duty Alternative Fuel Vehicles	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
65	Air Quality - 6.11		Alternative Fuel Refuse Collection/Transfer Trucks	status																				
66	Air Quality - 6.11		Alternative Fuel Vehicle Report Submission	status																				

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Sunshine Canyon Landfill Mitigation Monitoring Summary - County (10-01-2013 through 12-31-2013)

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67	Air Quality - 6.11		Heavy-duty, Alternative Fuel Off-Road Equipment Pilot	status																				
68	Air Quality - 6.11		Non-Diesel, Alternative Fuel Vehicles-Transfer/Collection	status																				
69	Air Quality - 6.11		Non-Diesel, Alternative Fuel VehiclesTruck Trips	status																				
70	Air Quality - 6.11		Clean Fuel Demonstration Program	status																				
71	Air Quality - 6.11		Compliance Evaluation	status																				
72	Odor/Landfill Gas – 7.01		Landfill Gas Escape Prevention	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
73	Odor/Landfill Gas – 7.02		Landfill Gas Collection System	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
74	Odor/Landfill Gas – 7.04		Gas Collection/Flare System Risk Mitigation	ongoing																				
75	Odor/Landfill Gas – 7.05		Wellhead Awareness	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
76	Odor/Landfill Gas – 7.06		Odor Control Measures	ongoing	✓	FRN	I-p						✓	FRN	I-r						✓	FRN	I-t	
77	Odor/Landfill Gas – 7.07		Gas Recovery and Sale	status	✓	C	I-p		✓	C	I-q		✓	C	I-r		✓	C	I-s		✓	C	I-t	
78	Traffic/Circulation – 8.03		Street Light Installation	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
79	Traffic/Circulation – 8.04		Truck Traffic Minimization	status																				
80	Traffic/Circulation – 8.08		Tipping Fees for Partial Loads/Peak Hours	status																				
81	Traffic/Circulation – 8.10		Nighttime Landfill Operations Feasibility	status	/				/				/				/				/			
82	Traffic/Circulation – 8.11		Parking Management along San Fernando Road	status	/				/				/				/				/			

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83	Traffic/Circulation – 8.13		Adequate Queuing	status	/				/				/				/				/			
84	Visual – 10.03		Landfill Flare Locations	status	/				/				/				/				/			
85	Visual – 10.04		Confinement of Excavation Cover Material	status																				
86	Visual – 10.05		Lighting Requirements	status																				
87	Visual – 10.11		Litter Control Program	ongoing																				
88	Visual – 10.11		Solid Waste Load Procedures-Improperly	ongoing																				
89	Visual – 10.11		Debris Removal at Entrance	ongoing	✓	FRN	I-p		✓	FRN	I-q						✓	FRN	I-s		✓	FRN	I-t	
90	Visual – 10.11		Litter Control-Fencing	ongoing																				
91	Visual – 10.11		Periodic Litter Pickup	ongoing																				
92	Visual – 10.11		Litter Control-Additional Measures	ongoing																				
93	Visual – 10.12		Discharge Control/Litter Recovery	status																				
94	Water Conserv. - 11.01		Water Conservation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
95	Recycling - 14.01		On-site Waste Diversion/Recycling	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
96	Recycling - 14.03		Tonnage Disposal Determination	info	/				/				/				/				/			
97	Recycling - 14.04		Recycling-Various Tasks	info	/				/				/				/				/			
98			Clean Dirt Procedures																					

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99	Site - 15.11		Reclaimed Water Utilization	status																				
100	Site - 15.12		Water Conservation Measures	ongoing																				
101	Admin Rpts/Pgms - 17.4		Operation Compliance	info	/				/				/				/				/			
102	Admin Rpts/Pgms -17.10		Fill Sequencing Plans	status																				
103	Admin Rpts/Pgms-17.15		Quarterly Newsletter	status																				
104	Landfill Operation - 18.7		Graffiti Removal/Deterrent Plan	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	FRN	I-t	
122																								
123	Civil & Geotechnical Engineer																							
124																								
125																								
126	Revegetation - 44.C	44.C	Cut Slope Requirements	ongoing																				
127																								
128	Geology - 1.01		Survey Monument Locations	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
129	Geology - 1.02		Seismic Design	ongoing																				
130	Geology - 1.03		Maximum Refuse Slope Gradients	ongoing																				
131	Geology - 1.04		Maximum Refuse Slope Gradients	ongoing																				
132	Geology - 1.05		Unsuitable Material Procedures	ongoing	✓	FRN	I-p																	

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133	Geology - 1.06		Grading Activities Procedures	ongoing																				
134	Geology - 1.07		Grading Activities Procedures	ongoing																				
135	Geology - 1.09		Outer Perimeter Ridgeline Requirements	info	/				/				/					/				/			
136	Geology - 1.12		Soil Stabilization	ongoing																				
137	Geology - 1.16		Checklists/Surveys Following Earthquake	upon event	✓	FRN	I-p																	
138	Geology - 1.18		Alluvium-Removal/Replacement	ongoing	✓	FRN	I-p																	
139	Geology - 1.19		Landfill Design/Construction	ongoing	✓	FRN	I-p																	
140	Geology - 1.20		Landfill Design/Construction-Foundations	ongoing																				
141	Surface Water - 2.03		Surface Drainage Control Facilities	ongoing																				
142	Surface Water - 2.05		Underdrain Requirements	ongoing																				
143	Surface Water - 2.06		Final Cover for Surface Water Runoff Control	ongoing																				
144	Groundwater - 3.02		Liner System Requirements	ongoing																				
145	Groundwater - 3.04		Onsite Inspector for Liner Installation	ongoing																				
146	Groundwater - 3.09		Alluvium Removal	ongoing	✓	FRN	I-p																	
147	Visual – 10.01		Landfill Elevations	ongoing																				
148	Visual – 10.02		Final Fill Elevations	ongoing																				
149																								

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150	Hydrologist																							
151																								
152																								
153	Grading & Drainage - 38	38	Installation of Drainage Structures	ongoing																				
154																								
155	Geology - 1.17		Landfill Design/Construction-Seismic	ongoing																				
156	Surface Water - 2.01		Surface Water Runoff Interception	ongoing																				
157	Surface Water - 2.02		Surface Water Runoff Collection	ongoing																				
158	Surface Water - 2.03		Surface Drainage Control-Maintenance	ongoing																				
159	Surface Water - 2-04		Sedimentation Basin Capabilities	ongoing																				
160	Surface Water - 2.05		Underdrain Placement	ongoing																				
161	Surface Water - 2.07		Drainage Control System Design Approval	ongoing																				
162	Surface Water - 2.08		Surface Water Runoff-Drainage System	ongoing																				
163	Surface Water - 2.10		Surface Water Collection System-Monitoring	ongoing																				
164	Surface Water - 2.11		Surface Water Quality-Collection/Monitoring	ongoing																				
165	Surface Water - 2.12		Permanent/Temporary Drainage Facilities	ongoing	✓	FRN	I-p																	
166	Surface Water - 2.13		Permanent/Temporary Drainage Facilities	ongoing																				

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167	Surface Water - 2.14		Erosion Control Plan	ongoing	✓	FRN	I-p																	
168	Groundwater - 3.03		Interception of Groundwater Seepage	ongoing																				
169	Groundwater - 3.06		Monitoring Wells	ongoing																				
170																								
171	Biologist																							
172																								
173																								
174	Revegetation - 44	44	Revegetation/Cover Requirements	ongoing																				
175	Revegetation - 44.A	44. A	Temporary Hydroseed Vegetation	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	
176	Revegetation - 44.B	44. B	Interim Reclamation/Revegetation	ongoing																				
177	Revegetation - 44.D	44. D	Final Fill Slope Requirements	ongoing																				
178	Revegetation - 44.E	44. E		ongoing																				
179																								
180	Geology - 1.13		Drainage Plan Approval	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	
181	Geology - 1.14		Personnel Retention for Monitoring Soil Erosion	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	
182	Groundwater - 3.11		Irrigation/Revegetation Management-Personnel	ongoing																				
183	BIOTA – 4.10		Oak Tree Permit	ongoing																				
184	BIOTA – 4.11		Oak Tree Mitigation Plan	ongoing																				

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185	BIOTA – 4.13		Oak Tree Mitigation Counting	ongoing																	✓	FRN	I-t	
186	BIOTA – 4.20		Poultry Wire Screen	ongoing																				
187	BIOTA – 4.24		Drip Irrigation	ongoing																				
188	BIOTA – 4.27		Coastal Sage Scrub Mitigation Plan	ongoing									✓	FRN	I-r						✓	FRN	I-t	
189	BIOTA – 4.28		Coastal Sage Scrub Seeding	ongoing																				
190	BIOTA – 4.29		San Diego Horned Lizard Mitigation	ongoing									✓	FRN	I-r						✓	FRN	I-t	
191	BIOTA – 4.30		California Gnatcatcher Surveys	ongoing																	✓	FRN	I-t	
192	BIOTA – 4.31		Least Bell's Vireo Surveys	ongoing																				
193	BIOTA – 4.32		Western Burrowing Owl Surveys	ongoing																				
194	BIOTA – 4.33		Migratory Bird Treaty Act	ongoing																	✓	FRN	I-t	
195	BIOTA – 4.34		Raptor Nests Habitat	ongoing																	✓	FRN	I-t	
196	BIOTA – 4.36		Personnel Retention for Monitoring Revegetation Plan	ongoing																				
197	BIOTA – 4.37		Personnel Retention for Monitoring Revegetation	status																				
198	BIOTA – 4.38		Green Waste Material	ongoing																				
199	BIOTA – 4.39		Revegetation of Slopes/Fill Areas	ongoing																				
200	BIOTA – 4.41		Revegetation Plan-Replacement Cover	ongoing																				
201	BIOTA – 4.42		Interim Vegetation	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	

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202	BIOTA – 4.43		Replacement Riparian Habitat	status																				
203	Air Quality - 6.02		Dust Control	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	
204	Visual – 10.06		Upper Ridge Planting/Revegetation	ongoing																				
205	Visual – 10.07		Tree Planting Around Perimeter	ongoing																				
206	Visual – 10.08		Cover/Revegetation Requirements	ongoing	✓	FRN	I-p		✓	FRN	I-q		✓	FRN	I-r		✓	FRN	I-s		✓	FRN	I-t	
207	Visual – 10.08		Solid Waste Disposal Procedures	ongoing																				
208	Visual – 10.08		Final Cut Slope Steepness	ongoing																				
209	Visual – 10.08		Final Fill Slopes-Reclamation/Revegetation	status																				
210	Visual – 10.08		Revegetation Requirements	status																				
211	Visual – 10.09		Final Cover Composition Requirements	ongoing																				
212	Visual – 10.10		Buffer Zone Maintenance	ongoing																				
213	Water Conservation - 11.02		Plant Species	ongoing																				
214	Fire Service - 12.01		Brush Clearance Measures	ongoing																				
215																								
216	Air Quality & Noise Specialist																							
217																								
218																								

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219	Fugitive Dust - 45.F	45. F	Fugitive Dust Monitoring	ongoing																				
220	Fugitive Dust - 45.I	45.I	Paved Roads-Cleaning	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
221	Fugitive Dust - 45.N	45. N	Report Submission-Dust/Odor	every quarter	/				/				/				/				/			
222	Air Quality Monitoring - 81	81	Air Quality Monitoring-Tests	ongoing	/				/				/				/				/			
223																								
224																								
225	Air Quality – 6.01		Fugitive Dust Aversion	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
226	Air Quality – 6.01		Working Face Requirements	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
227	Air Quality – 6.01		Erosion Control-Daily Cover	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
228	Air Quality – 6.01		Soil Stockpile Requirements	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
229	Air Quality – 6.01		Active Area Fill	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
230	Air Quality – 6.01		Soil Sealant	ongoing	✓	FRN	I-p																	
231	Air Quality – 6.01		Dust Emissions-Road Maintenance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
232	Air Quality – 6.01		Access Roads-Paving	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
233	Air Quality – 6.01		Dust Generation-Dumping	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
234	Air Quality – 6.01		Water Tanks/Piping Maintenance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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235	Air Quality – 6.01		Wind Speed Monitoring	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
236	Air Quality – 6.01		Report Submission-Dust/Odor	every quarter	/				/				/				/				/			
237	Odor/Landfill Gas – 7.03		Odor/Landfill Gas Monitoring Program	ongoing	/				/				/				/				/			
238	Odor/Landfill Gas – 7.03		Landfill Surface Sampling	ongoing	/				/				/				/				/			
239	Odor/Landfill Gas – 7.03		Landfill Perimeter Air Samples	ongoing	/				/				/				/				/			
240	Odor/Landfill Gas – 7.03		Landfill Surface Monitoring	ongoing	/				/				/				/				/			
241	Odor/Landfill Gas – 7.03		LFG Collection System Monitoring	ongoing	/				/				/				/				/			
242	Noise – 9.01		Landfill Access/Operation	info	/				/				/				/				/			
243	Noise – 9.03		Landfill Equipment-Mufflers/Silencers	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
244	Admin Rpts/ Pgms-17.16		Air Quality Monitoring-Corrective Action Plan	ongoing	/				/				/				/				/			
245																								
246																								
247	Hydrology, Hazardous Waste / Risk of Upset																							
248																								
249																								
250	IMP - Part IV.E	IMP 4	Load Inspection-Random Manual	ongoing																				
251																								

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252	Groundwater - 3.05		Leachate Collection and Removal System	ongoing																				
253	Groundwater - 3.15		Underground Diesel Fuel Storage Tanks	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
254	Fire Service - 12.02		On-site Fire Response Capabilities-Operating	ongoing																				
255	Fire Service - 12.03		On-site Fire Response Capabilities-Roads/Water	ongoing									✓	FRN	I-r		✓	FRN	I-s					
256	Fire Service - 12.04		On-site Fuel Storage Tanks-Permit Issuance	ongoing																				
257	Fire Service - 12.05		Building Limits	ongoing																				
258	Fire Service - 12.06		Methane Gas Monitoring-On-site Structures	ongoing																				
259	Hazardous Materials – 13.02		Waste Load Checking Program	ongoing																				
260	Hazardous Materials – 13.05		Hazardous Waste Disposal	ongoing																				
261	Hazardous Materials – 13.10		Hazardous Waste-Procedures	ongoing																				
262	Hazardous Materials – 13.11		Spill Response Program	ongoing																				
263	Safety - 16.02		Injury and Illness Prevention Program	status																				
264	Safety - 16.03		Working Conditions-Monitoring	status																				
265	Safety - 16.04		Inspection Checklist-Work Area Exposure	status																				
266	Safety - 16.07		Accident/Injury Reports	status																				
267	Safety - 16.08		First-aid Kits	ongoing																				

*** C = Compliant, NC = Non-Compliant, FRN = Further Review Needed, R = Resolved**
**** See Appendix I for Comments**
Checkmark = Condition or mitigation was monitored
/ = Yearly or non-ongoing monitoring frequency

Sunshine Canyon Landfill Mitigation Monitoring Summary - County (10-01-2013 through 12-31-2013)

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	10/9/2013	Status*	Further Review Needed/Comments**	Resolved*	10/23/2013	Status*	Further Review Needed/Comments**	Resolved*	11/13/2013	Status*	Further Review Needed/Comments**	Resolved*	12/4/2013	Status*	Further Review Needed/Comments**	Resolved*	12/18/2013	Status*	Further Review Needed/Comments**	Resolved*
268	Safety - 16.10		Lockout/Blackout Procedures	status																				
269	Safety - 16.11		Personal Protective Equipment	status																				
270	Landfill Operation - 18.8		Prohibited Waste Procedures	ongoing																				
271																								
272	Archaeologist																							
273																								
274																								
275	Ecological Significance - 62	62	Archaeological/Paleontological Identification/Conservation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
276	IMP - Part VII.B	IMP 7	Archaeological/Paleontological	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
277	Archaeological – 5.01		Archaeological Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
278	Archaeological – 5.02		Onsite Archaeologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
279	Archaeological – 5.03		Onsite Paleontologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
280	Archaeological – 5.04		Archaeological/Paleontological Identification Instruction	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
281	Archaeological – 5.05		Archaeological Resource Curat	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
282																								
283	Paleontologist																							
284																								
285																								

*** C = Compliant, NC = Non-Compliant, FRN = Further Review Needed, R = Resolved**
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Sunshine Canyon Landfill Mitigation Monitoring Summary - County (10-01-2013 through 12-31-2013)

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	10/9/2013	Status*	Further Review Needed/Comments**	Resolved*	10/23/2013	Status*	Further Review Needed/Comments**	Resolved*	11/13/2013	Status*	Further Review Needed/Comments**	Resolved*	12/4/2013	Status*	Further Review Needed/Comments**	Resolved*	12/18/2013	Status*	Further Review Needed/Comments**	Resolved*
286	Ecological Significance - 62	62	Archaeological/Paleontological -Material	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
287	IMP - Part VII.B	IMP 7	Archaeological/Paleontological-Report Submission	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	

*** C = Compliant, NC = Non-Compliant, FRN = Further Review Needed, R = Resolved**
**** See Appendix I for Comments**
Checkmark = Condition or mitigation was monitored
/ = Yearly or non-ongoing monitoring frequency

Appendix I
Further Review Needed-Comments/ I-p through I-t
Fourth Quarter Site Visits

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager	Q – B.2.c		City Planning	I-t: The County needs to approve the proposed drainage system for the realignment of the access road before initiating the grading. The impacts to trees need to be approved by the City Street Department. Biological, archeological, and paleontological assessments must be performed and provided to the appropriate agencies, if required.
		Biota - 4.13	County Forester	I-t: See Q – B.2.c above
		Biota - 4.27, 4.29, 4.30, 4.33, 4.34	California Fish and Wildlife	I-t: See Q - B.2.c above
	Q - C.3.h		City Planning	I-p: The application of crushed gravel is needed on areas of the unpaved access road that are steep grades to provide traction for trash trucks under rain conditions.
	Q - C.5		City Planning	I-t: Graffiti was observed on the wall along San Fernando Boulevard at the Gas Company's metering station.
	Q - C.10.c		City Planning	I-p through I-t: The gas-to-energy and Edison facilities were observed during this quarter. Progress can be seen by the photos taken. The Edison facility appeared complete and ready for commissioning on December 4, 2013. On December 18th, the gas-to-energy facility still had work to be accomplished. The expected schedule for commissioning of both facilities is the end of the 1st Quarter or early 2nd Quarter of 2014.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager		Odor/Landfill Gas - 7.07	County Planning/ SCAQMD SCL-LEA	I-p through I-t: See Q - C.10.c above.
		Gas - 52	County DPW EPD/SCL-LEA County Forester Fire Warden	I-p through I-t: See Q - C.10.c above.
	T – 4		City Planning, City Fire Department	I-r: There is no secondary access road now that the Flare 8 road has been eliminated. A new secondary access should be added to the fire plan and graded for passenger car use for egress.
		Fire Service - 12.03	Dept. of Forester	I-r: See T - 4 above.
		Revegetation - 44 F	SCL-LEA/ County DPW EPD Regional Planning County Biologist	I-p through I-t: See M - 4.1.1/6 I-l below under Biologist Discipline.
	M – 4.2.12/28		City Planning/ SCAQMD	I-p: The soil bottom of Basin D, the area next to the Basin D drainage channel and some areas of the County top deck have been sealed with soil sealant. Other areas should be considered to be sealed with the lack of rain and frequent high winds this year.
		Air Quality - 6.01	SCAQMD/ SCL-LEA	I-p: see M – 4.2.12/28 above.
		Fugitive Dust - 45.F	County DPH/ County LEA County DPW-EPD County Biologist	I-p: See M - 4.2.12/28 above.
		Air Quality - 6.02	County DPH	I-p: See M - 4.2.12/28 above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager	M - 4.2.13/33		City Planning/ SCAQMD SCL-LEA	I-p: It was observed that well CWG 568 had been damaged and was leaking gas around its base. The condition was reported to Republic and the well was marked and a crew mobilized to make repairs. I-r: Flare 1 was observed. The wind was coming from the north, causing a downdraft condition, which had stack exhaust odors at ground level near the blower skid. I-t: It was observed that an abandoned gas collection line and a corrugated drainage pipe were buried in the City South soil stockpile area. When recently uncovered, the gas line and drainage pipe was emitting odorous fumes. Republic was in the process of removing more soil to make repairs. It was also observed at Flare 1 that when the wind blows south over the flare unit that there was a landfill gas odor near the blower skid. This was reported to Republic.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager	M -4.2.13/ 29, 30, 32, 33, 34		City Planning/SCL-LEA/SCAQMD	I-q and I-s on 33 and I-p through I-t on all others: Compliance with these mitigation measures concerning landfill gas monitoring and odor control and detection is being monitored by a multi-agency team led by the SCAQMD. Only obvious gas emission sources, lack of cover, or exposed trash resulting in odor and gas emissions observed during the monitoring visit will be reported. None of these were observed during the quarterly monitoring visits this period.
		Amendment 45.N - 4.a, 4.c, 4.d	County DPW-EPD	See M-4.2.13/29, 30, 32, 33, and 34 above.
		Amendment 45.N - 5	County DPW-EPD	See M-4.2.13/29, 30, 32, 33, and 34 above.
		Surface Water - 2.15	County DPW EPD/ LARWQCB, SCL-LEA	I-p: The westside drainage channel had cracking and spalling in the concrete sidewalls and uplifting in the concrete bottom. Trees were growing next to the channel wall possibly causing the cracking in the concrete walls. The cause of the damage to the drainage structure should be determined and necessary repairs made to the structure. I-s: The condition of the westside drainage channel was observed by the County, Republic staff, and monitor. Areas of degrading conditions were noted by Republic staff.
		Odor/Landfill Gas - 7.06	County DPW-EPD/SCL-LEA/SCAQMD	I-p, I-r, I-t: See: M-4.2.13/33 I-p, I-r and I-t above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager	M - 4.4.2/69		City Planning	I-s: There are still City of Los Angeles property transfer issues with the wetland and riparian mitigation at the Chatsworth Reservoir. The Corps of Engineers had given an extension of time on the implementation of a mitigation program until the end of 2013. A new schedule reflecting the current conditions should be developed and provided to the City and County Planning Departments. Notification to the Corps of Engineers and California Fish and Wildlife should be provided.
	M - 4.9.3/109		City Planning	I-p and I-s: Windblown litter and dumped debris was noted between the front exterior wall of the terminal basin and the site slump stone wall along San Fernando Road. I-q and I-t: Windblown litter was observed on the back hillsides of Basins A and B
		Visual - 10.11	SCL-LEA	I-p, I-q, I-s, I-t: see M - 4.9.3/109 above.
		Landfill Operation - 18.7	County DPW EPD/ County LEA	I-t: Graffiti was observed on the outside wall facing San Fernando Road near the Southern California Gas metering station. This graffiti should be removed as soon as possible.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Civil and Geotechnical Engineer	M - 4.1.1 / 3, 5		City Planning/ LARWQCB CalRecycle SCL-LEA LADBS PW-BOE	I-p: It was observed in the August monitoring that the City south waste slope had fissures and cracks in the vicinity of the buttress area. Vertical and horizontal offsets were observed at this monitoring visit in the roadway and hillside. The cause of these cracks and their potential impact should be addressed by Republic's geotechnical engineer. I-r: Waste was being placed in Cell CC3A Part II and the cracks and offsets repaired.
		Geology - 1.05	County DPW EPD/ County LEA	I-p: See M - 4.1.1 / 3, 5 above.
	M - 4.1.2 / 8		City Planning/ LARWQCB CalRecycle LADBS PW-BOE	I-p: See M - 4.1.1 / 3, 5 above.
	M - 4.1.5/ 12, 13		City Planning/ LARWQCB CalRecycle LADBS PW-BOE	I-p: See M - 4.1.1 / 3, 5 above.
		Geology - 1.18	County DPW EPD/ SCL-LEA LARWQCB	I-p: See M - 4.1.1 / 3, 5 above.
		Geology - 1.19	County DPW EPD/ LARWQCB County LEA	I-p: See M - 4.1.1 / 3, 5 above.
		Groundwater - 3.09	LARWQCB/ County DPW EPD	I-p: See M - 4.1.1 / 3, 5 above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Civil and Geotechnical Engineer	M-4.1.4/11		City Planning/ SCAQMD LARWQCB CalRecycle LADBS PW-BOE	I-p: The accelerometer adjacent to the main access road was observed to have a hole in the enclosure and appeared not to be maintained. This equipment should have maintenance performed on it and a new enclosure. Republic's staff stated that the unit will be relocated in 2014 and maintained or updated, if required.
	M-4.14.1/155		City Planning/ CalRecycle PW-BOE LADBS SCL-LEA	I-p: It was observed that the sudden rainstorm caused the incline on the access roads east of Basin A to be slick. Several transfer trucks were observed sliding backwards, with two separate accidents seen. Unpaved roads with a steep incline should be covered with rock or recycled asphalt for the rainy season.
		Geology - 1.16	County DPW EPD	I-p: See M - 4.1.4/11 above
Hydrologist	M - 4.3.1/ 38		City Planning/ LARWQCB CalRecycle SCL-LEA PW-BOE	I-p: Temporary and permanent drainage ditches have been installed to convey water to the basins. The majority of inactive and/or areas that have been disturbed have no temporary or permanent vegetation or other surface cover to retard erosion.
		Surface Water - 2.12	County DPW EPD/ LARWQCB SCL-LEA	See M - 4.3.1/ 38 above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Hydrologist	M - 4.3.1/ 45		City Planning/ LARWQCB CalRecycle SCL-LEA PW-BOE LADBS	I-p: An erosion control plan should be available on site for review by the agencies and monitor.
		Surface Water - 2.14	LARWQCB / County DPW EPD	I-p: See M - 4.3.1/ 45 above.
	M - 4.3.1/ 46		City Planning/ LARWQCB CalRecycle PW-BOE	I-p and I-s: See Surface Water 2.15 above.
Biologist	M - 4.1.1 / 6		City Planning/ LARWQCB CalRecycle SCL-LEA LADBS	I-p through I-t: The prior hydroseeding and mulching of the temporary and permanent slopes and inactive areas has not been successful. The majority of these areas are dirt. A comprehensive plan for seeding, with possibly temporary irrigation should be developed and implemented to establish vegetation. I-t: Also, there was a County and City meeting on December 5, 2013 with Republic to review the status of revegetation efforts at the landfill. As a result of this meeting, a new seed mix containing some non-natives was submitted to the City and County for approval. The non-natives were added for quicker and earlier establishment.
		Geology - 1.14	LARWQCB/ County Forester	I-p through I-t: See M - 4.1.1/6 above.
	M - 4.2.11 / 23		City Planning	I-p through I-t: See M - 4.1.1/6 above.

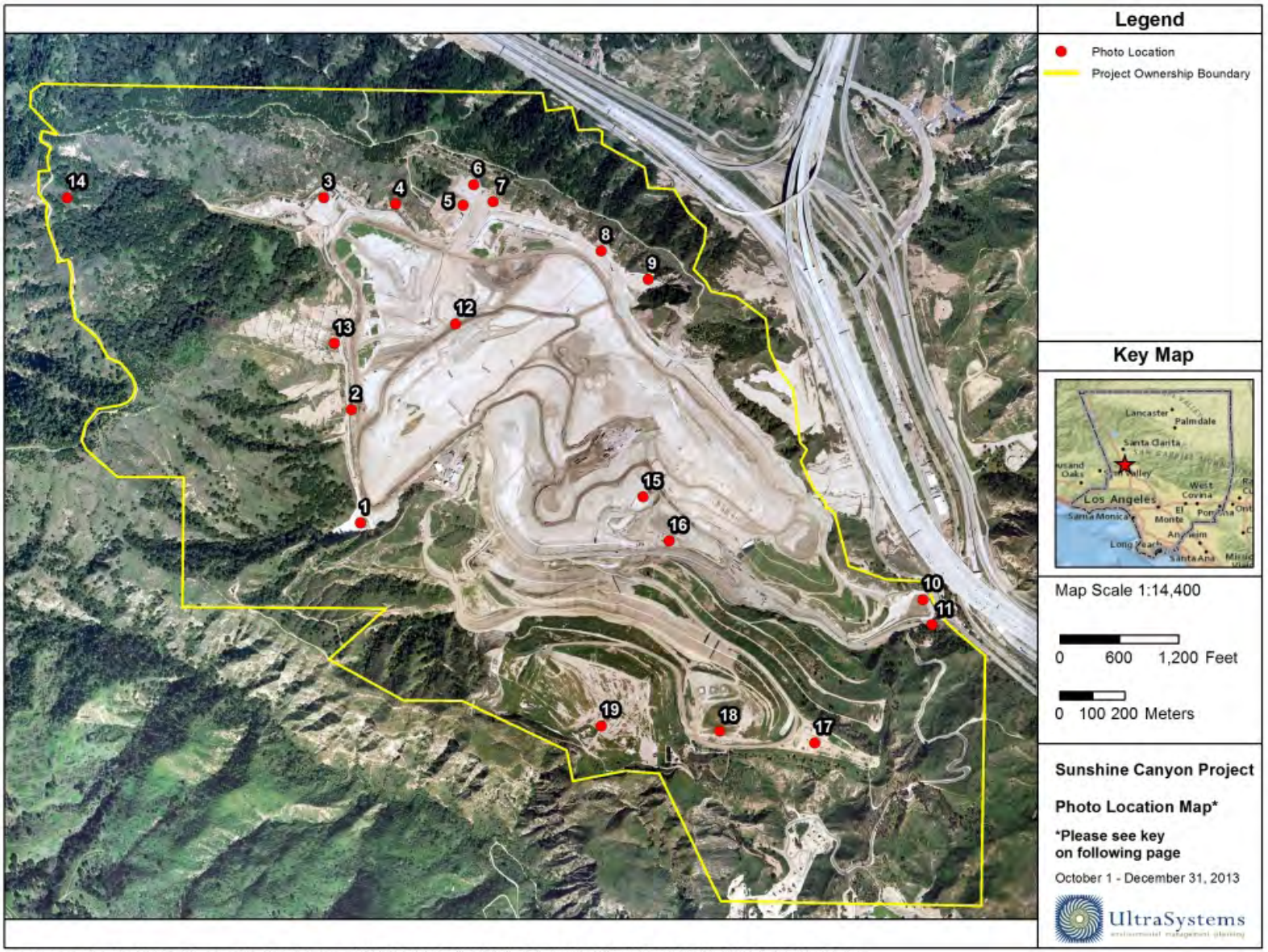
Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Biologist		Geology - 1.13	County DPW EPD/ County Forester LARWQCB	I-p through I-t: See M - 4.1.1/6 above.
	M - 4.2.12		SCL-LEA/ City Planning	I-p through I-t: See M - 4.1.1/6 above.
		Revegetation - 44.A	SCL-LEA/ County DPW EPD Regional Planning County Biologist	I-p through I-t: See M - 4.1.1/6 above.
		Biota - 4.42	SCL-LEA	I-p through I-t: See M - 4.1.1/6 above.
		Air Quality - 6.02	SCAQMD/ SCL-LEA	I-p through I-t: See M - 4.1.1/6 above.
		Visual - 10.08	County Forester	I-p through I-t: See M - 4.1.1/6 above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Biologist	M - 4.4.1 / 60		City Planning	I-p through I-t: The City Deck C sage mitigation site was observed on the November 13, 2013 site monitoring visit by both the monitor's and County's biologist. The salt tolerant plants were doing well. The majority of the sage community plants were dead and the ones surviving showed signs of dying. The possible causes of the loss of sage plants were discussed by UEI and County biologists and both biologists thought that the exact cause should be investigated before just replacing the same type of plants. Possible changes in some plants should be made. Potted plants were planted in Deck C in early December. Refer to Joe Thompson's mitigation monitoring site reports and the December 17, 2013 memo for detailed biological assessment.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Biologist		Biota - 4.27	SCL-LEA/CDFW	I-r: The County Sage Mitigation Area was observed. Joe Decruyenaere (County biologist) and Joe Thompson (Monitor biologist) observed that no mitigation activity was occurring at this location. The lower areas that are void of sage vegetation appear to have friable soils that if terraced or benches are created and supported by straw wattles, the flat areas could be vegetated with sage. A further investigation of the site soils condition is warranted. Re-activating the irrigation system may be beneficial. Refer to Joe Thompson's mitigation monitoring site reports and the December 17, 2013 memo for detailed biological assessment.
		Biota - 4.29	County LEA/CDFW	I-r: The San Diego Horned Lizard was seen in the County Coastal Sage Mitigation area and in the slopes near the Basin D western outlet. The sage vegetation in these areas should be improved to provide the required habitat. Republic staff stated that Horned Lizard habitat will be added to the Deck C site once vegetation is established.
Air Quality & Noise Specialist	M - 4.2.11/20		City Planning/ SCAQMD SCL-LEA LADBS	I-p through I-t: Construction areas that become non-active and un-vegetated slopes should be evaluated for dust potential and soil sealant applied when required.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Hydrology, Hazardous Waste/Risk of Upset	M - 4.9.4/121		City Planning/ CalRecycle Cal/OSHA SCL-LEA	I-s: The leachate facility electrical lines are hanging on branches and pose a fire hazard.
		Fire Service - 12.03	Department of Forester/Fire Warden	I-s: See M - 4.9.4/121 above.

Appendix II
Relevant Site Photos



Service Layer Credits: National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, iPC, Los Angeles County, 2010; Republic, 2013; UltraSystems Environmental, Inc., 2013

Project Location Map – Photo Map Key

1. Basin A
2. Westside Drainage Channel
3. Basin D
4. Basin D North Drainage
5. Flares 9 and 10
6. Gas-to-Energy Facility
7. Edison Equipment Site
8. Edison Sales Energy Power Poles
9. Basin B
10. Terminal Basin
11. Leachate Treatment Facility
12. County Top Deck
13. County Sage Mitigation
14. Big Cone Fir Mitigation
15. City Active Fill Area
16. Cell CC3A Buttress
17. City Sage Mitigation - Deck C
18. City Sage Mitigation - Deck B
19. City Sage Mitigation - Deck A

Photo 1: Scraper Access Road Grading: October 9, 2013

Photo 2: Scraper Access Road Grading: October 9, 2013

Photo 3: Scraper Access Road Grading: October 9, 2013

Photo 4: Scraper Access Road Grading: October 9, 2013

Photo 5: Scraper Access Road Grading: October 9, 2013

Photo 6: Scraper Access Road Grading: October 9, 2013

Photo 7: Basin A: October 9, 2013

Photo 8: Basin A: October 9, 2013

Photo 9: Basin A: October 9, 2013

Photo 10: Basin A: October 23, 2013

Photo 11: Basin A: October 23, 2013

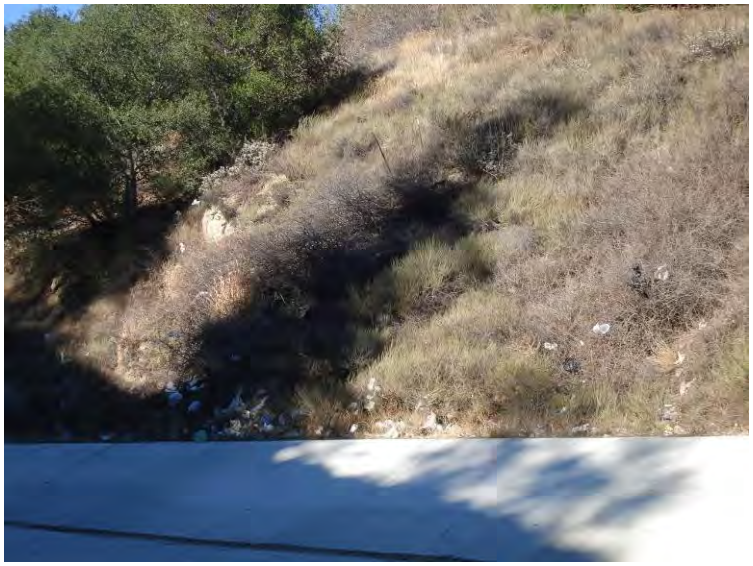


Photo 12: Basin A: December 4, 2013

Photo 13: Basin A: December 4, 2013

Photo 14: Basin A: December 18, 2013

Photo 15: Basin A: December 18, 2013

Photo 16: Basin A: December 18, 2013

Photo 17: Basin A: December 18, 2013

Photo 18: Wet Slick Roadway: October 9, 2013

Photo 19: Wet Slick Roadway: October 9, 2013

Photo 20: Westside Drainage Channel: October 9, 2013

Photo 21: Westside Drainage Channel: October 9, 2013

Photo 22: Westside Drainage Channel: October 9, 2013

Photo 23: Westside Drainage Channel: October 23, 2013

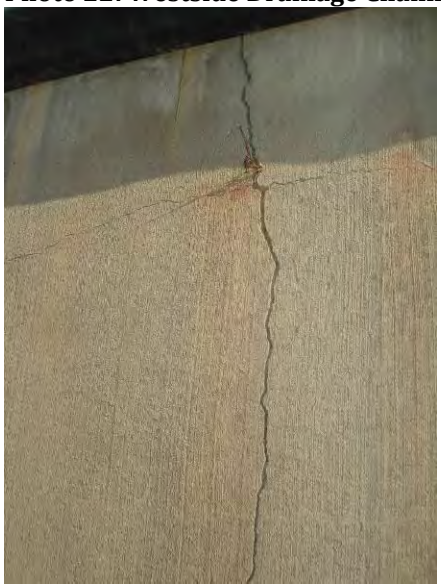


Photo 24: Westside Drainage Channel: October 23, 2013

Photo 25: Westside Drainage Channel: October 23, 2013

Photo 26: Westside Drainage Channel: October 23, 2013

Photo 27: Westside Drainage Channel: October 23, 2013

Photo 28: Westside Drainage Channel: October 23, 2013

Photo 29: Westside Drainage Channel: December 4, 2013

Photo 30: Westside Drainage Channel: December 4, 2013

Photo 31: Westside Drainage Channel: December 4, 2013

Photo 32: Westside Drainage Channel: December 4, 2013

Photo 33: Westside Drainage Channel: December 4, 2013

Photo 34: Westside Drainage Channel: December 4, 2013

Photo 35: Westside Drainage Channel: December 4, 2013

Photo 36: Basin D: December 4, 2013

Photo 37: Basin D: December 4, 2013

Photo 38: Basin D: December 4, 2013

Photo 39: Basin D: December 18, 2013

Photo 40: Basin D: December 18, 2013

Photo 41: Basin D: December 18, 2013

Photo 42: Basin D: December 18, 2013

Photo 43: Basin D North Drainage: October 23, 2013

Photo 44: Basin D North Drainage: October 23, 2013

Photo 45: Basin D North Drainage: December 18, 2013

Photo 46: Basin D North Drainage: December 18, 2013

Photo 47: Basin D North Drainage: December 18, 2013

Photo 48: Basin D North Drainage: December 18, 2013

Photo 49: Basin D North Drainage: December 18, 2013

Photo 50: Gas to Energy Facility: October 9, 2013

Photo 51: Gas to Energy Facility: October 9, 2013

Photo 52: Gas to Energy Facility: October 9, 2013

Photo 53: Gas to Energy Facility: October 9, 2013

Photo 54: Gas to Energy Facility: October 9, 2013

Photo 55: Gas to Energy Facility: October 23, 2013

Photo 56: Gas to Energy Facility: October 23, 2013

Photo 57: Gas to Energy Facility: October 23, 2013

Photo 58: Gas to Energy Facility: October 23, 2013

Photo 59: Gas to Energy Facility: October 23, 2013

Photo 60: Gas to Energy Facility: October 23, 2013

Photo 61: Gas to Energy Facility: November 13, 2013

Photo 62: Gas to Energy Facility: November 13, 2013

Photo 63: Gas to Energy Facility: November 13, 2013

Photo 64: Gas to Energy Facility: November 13, 2013

Photo 65: Gas to Energy Facility: November 13, 2013

Photo 66: Gas to Energy Facility: November 13, 2013

Photo 67: Gas to Energy Facility: November 13, 2013

Photo 68: Gas to Energy Facility: November 13, 2013

Photo 69: Gas to Energy Facility: November 13, 2013

Photo 70: Gas to Energy Facility: November 13, 2013

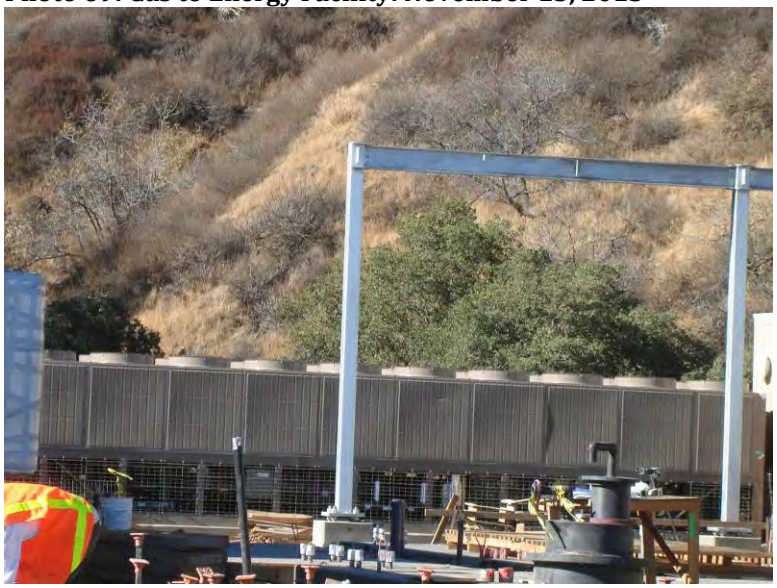


Photo 71: Gas to Energy Facility: November 13, 2013

Photo 72: Gas to Energy Facility: November 13, 2013

Photo 73: Gas to Energy Facility: November 13, 2013

Photo 74: Gas to Energy Facility: December 4, 2013

Photo 75: Gas to Energy Facility: December 4, 2013

Photo 76: Gas to Energy Facility: December 4, 2013

Photo 77: Gas to Energy Facility: December 4, 2013

Photo 78: Gas to Energy Facility: December 4, 2013

Photo 79: Gas to Energy Facility: December 4, 2013

Photo 80: Gas to Energy Facility: December 4, 2013

Photo 81: Gas to Energy Facility: December 4, 2013

Photo 82: Gas to Energy Facility: December 4, 2013

Photo 83: Gas to Energy Facility: December 4, 2013

Photo 84: Gas to Energy Facility: December 4, 2013

Photo 85: Gas to Energy Facility: December 18, 2013

Photo 86: Gas to Energy Facility: December 18, 2013

Photo 87: Gas to Energy Facility: December 18, 2013

Photo 88: Gas to Energy Facility: December 18, 2013

Photo 89: Gas to Energy Facility: December 18, 2013

Photo 90: Gas to Energy Facility: December 18, 2013

Photo 91: Gas to Energy Facility: December 18, 2013

Photo 92: Gas to Energy Facility: December 18, 2013

Photo 93: Gas to Energy Facility: December 18, 2013

Photo 94: Gas to Energy Facility: December 18, 2013

Photo 95: Gas to Energy Facility: December 18, 2013

Photo 96: Edison Equipment Site: October 9, 2013

Photo 97: Edison Equipment Site: October 9, 2013

Photo 98: Edison Equipment Site: October 9, 2013

Photo 99: Edison Equipment Site: October 23, 2013

Photo 100: Edison Equipment Site: October 23, 2013

Photo 101: Edison Equipment Site: October 23, 2013

Photo 102: Edison Equipment Site: November 13, 2013

Photo 103: Edison Equipment Site: December 4, 2013

Photo 104: Edison Equipment Site: December18, 2013

Photo 105: Edison Energy Sales New Poles: October 9, 2013

Photo 106: Edison Energy Sales New Poles: October 9, 2013

Photo 107: Edison Energy Sales New Poles: October 9, 2013

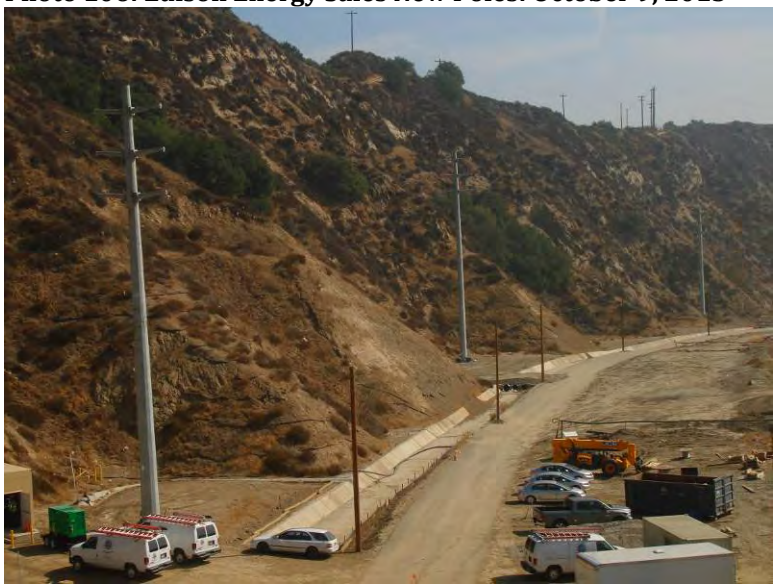


Photo 108: Edison Energy Sales New Poles: October 23, 2013

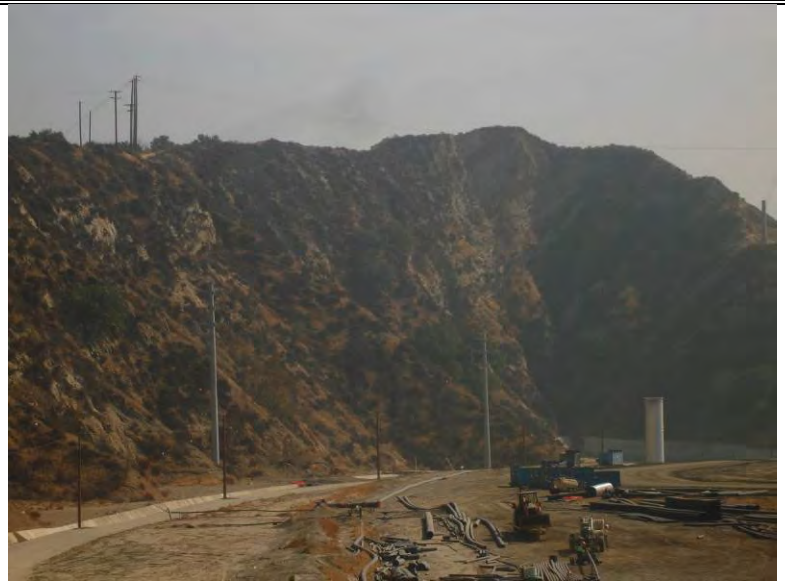


Photo 109: Edison Energy Sales New Poles: October 23, 2013

Photo 110: Edison Energy Sales New Poles: November 13, 2013

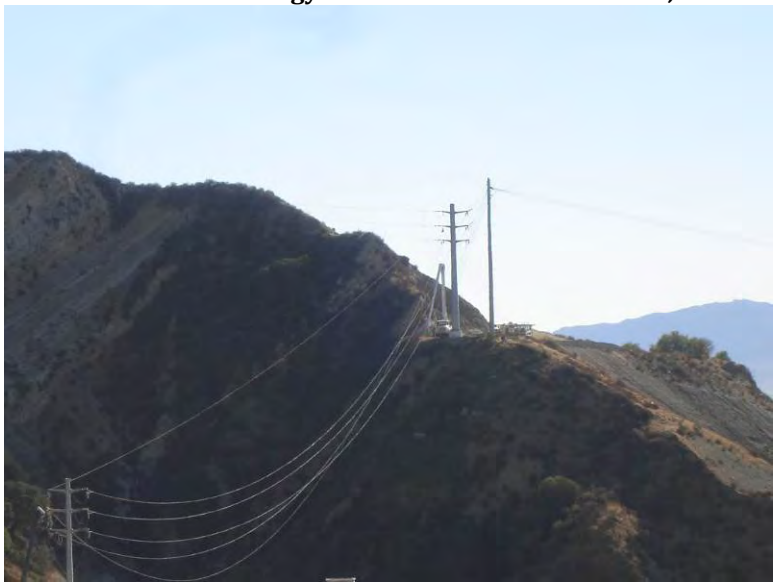


Photo 111: Edison Energy Sales New Poles: November 13, 2013

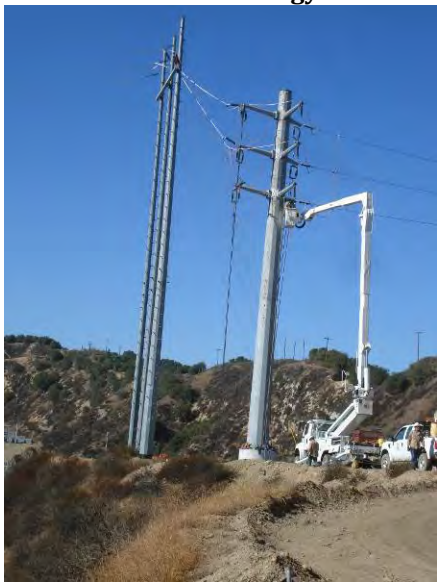


Photo 112: Edison Energy Sales New Poles: November 13, 2013

Photo 113: Edison Energy Sales New Poles: November 13, 2013

Photo 114: Edison Pole Line Equipment: December 4, 2013

Photo 115: Edison Pole Line Equipment: December 4, 2013

Photo 116: Edison Pole Line Equipment: December 4, 2013

Photo 117: Edison Pole Line Equipment: December 18, 2013

Photo 118: Edison Pole Line Equipment: December 18, 2013

Photo 119: Flare 9 & 10 Facility Sites: October 9, 2013

Photo 120: Flare 9 & 10 Facility Sites: October 23, 2013

Photo 121: Flare 9 and 10 Facility Sites: October 23, 2013

Photo 122: Flare 9 and 10 Facility Sites: October 23, 2013

Photo 123: Flare 9 and 10 Facility Sites: October 23, 2013

Photo 124: Flare 9 and 10 Facility Sites: October 23, 2013

Photo 125: Flare 9 and 10 Facility Sites: October 23, 2013

Photo 126: Flare 9 and 10 Facility Sites: October 23, 2013

Photo 127: Flare 9 and 10 Facility Sites: October 23, 2013

Photo 128: Slopes Below Flares 9 and 10: October 23, 2013

Photo 129: Slopes Below Flares 9 and 10: October 23, 2013

Photo 130: Slopes Below Flares 9 and 10: October 23, 2013

Photo 131: Slopes Below Flares 9 and 10: November 13, 2013

Photo 132: Slopes Below Flares 9 and 10: November 13, 2013

Photo 133: Slopes Below Flares 9 and 10: November 13, 2013

Photo 134: Slopes Below Flares 9 and 10: November 13, 2013

Photo 135: Slopes Below Flares 9 and 10: November 13, 2013

Photo 136: Slopes Below Flares 9 and 10: November 13, 2013

Photo 137: Slopes Below Flares 9 and 10: November 13, 2013

Photo 138: Slopes Below Flares 9 and 10: November 13, 2013

Photo 139: Hillside Behind Flares 9 & 10: November 13, 2013

Photo 140: Hillside Behind Flares 9 & 10: November 13, 2013

Photo 141: Hillside Behind Flares 9 & 10: November 13, 2013

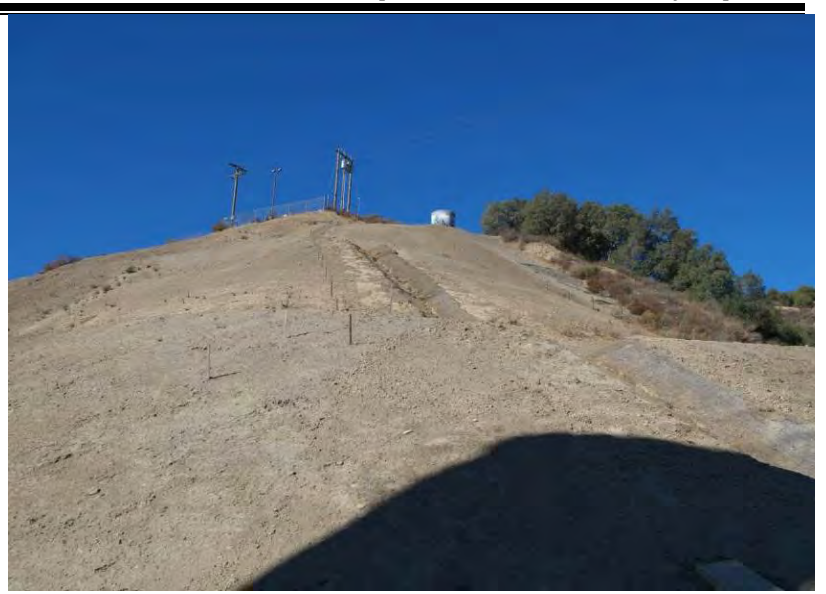


Photo 142: Hillside Behind Flares 9 & 10: November 13, 2013

Photo 143: County Top Deck: October 9, 2013: October 9, 2013

Photo 144: County Top Deck: October 9, 2013

Photo 145: County Top Deck: October 9, 2013

Photo 146: County Top Deck: October 9, 2013

Photo 147: County Top Deck: October 9, 2013

Photo 148: County Top Deck: October 9, 2013

Photo 149: County Top Deck: October 9, 2013

Photo 150: County Top Deck: October 9, 2013

Photo 151: County Top Deck: October 9, 2013

Photo 152: County Top Deck: October 23, 2013

Photo 153: County Top Deck: October 23, 2013

Photo 154: County Top Deck: October 23, 2013

Photo 155: County Top Deck: October 23, 2013

Photo 156: County Top Deck: October 23, 2013

Photo 157: County Top Deck: October 23, 2013

Photo 158: County Top Deck: October 23, 2013

Photo 159: County Top Deck: October 23, 2013

Photo 160: County Top Deck: December 4, 2013

Photo 161: County Top Deck: December 4, 2013

Photo 162: County Top Deck: December 4, 2013

Photo 163: County Top Deck: December 4, 2013

Photo 164: County Top Deck: December 4, 2013

Photo 165: County Top Deck: December 4, 2013

Photo 166: County Top Deck: December 4, 2013

Photo 167: County Top Deck: December 4, 2013

Photo 168: County Top Deck: December 4, 2013

Photo 169: County Top Deck: December 4, 2013

Photo 170: County Top Deck: December 4, 2013

Photo 171: County Top Deck: December 4, 2013

Photo 172: County Top Deck: December 4, 2013

Photo 173: County Top Deck: December 4, 2013

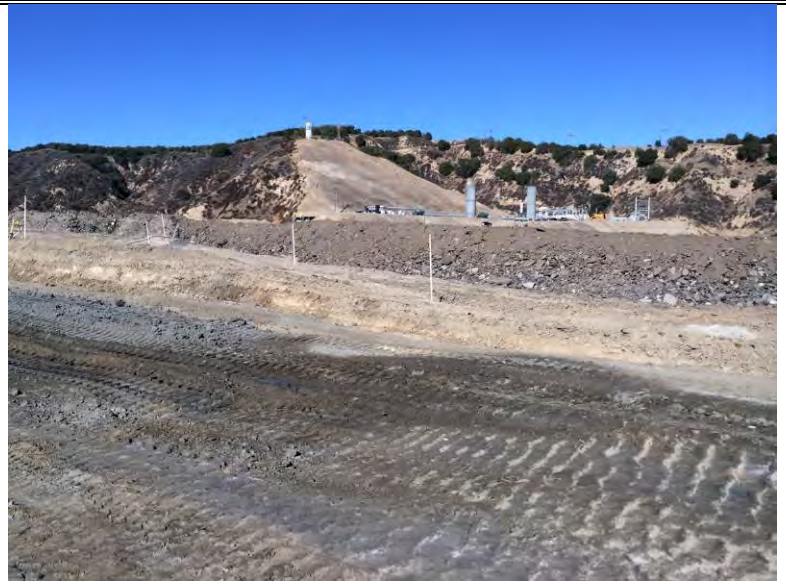


Photo 174: County Top Deck: December 4, 2013

Photo 175: County Top Deck: December 4, 2013

Photo 176: County Top Deck: December 4, 2013

Photo 177: County Top Deck: December 4, 2013

Photo 178: County Top Deck: December 4, 2013

Photo 179: County Top Deck: December 4, 2013

Photo 180: County Top Deck: December 4, 2013

Photo 181: County Top Deck: December 4, 2013

Photo 182: County Top Deck: December 4, 2013

Photo 183: County Top Deck: December 4, 2013

Photo 184: County Top Deck: December 4, 2013

Photo 185: County Top Deck: December 4, 2013

Photo 186: County Top Deck: December 4, 2013

Photo 187: County Top Deck: December 4, 2013

Photo 188: County Top Deck: December 4, 2013

Photo 189: County Top Deck: December 4, 2013

Photo 190: County Top Deck: December 4, 2013

Photo 191: County Top Deck: December 4, 2013

Photo 192: County Top Deck: December 4, 2013

Photo 193: County Top Deck: December 4, 2013

Photo 194: County Top Deck: December 18, 2013

Photo 195: County Top Deck: December 18, 2013

Photo 196: County Top Deck: December 18, 2013

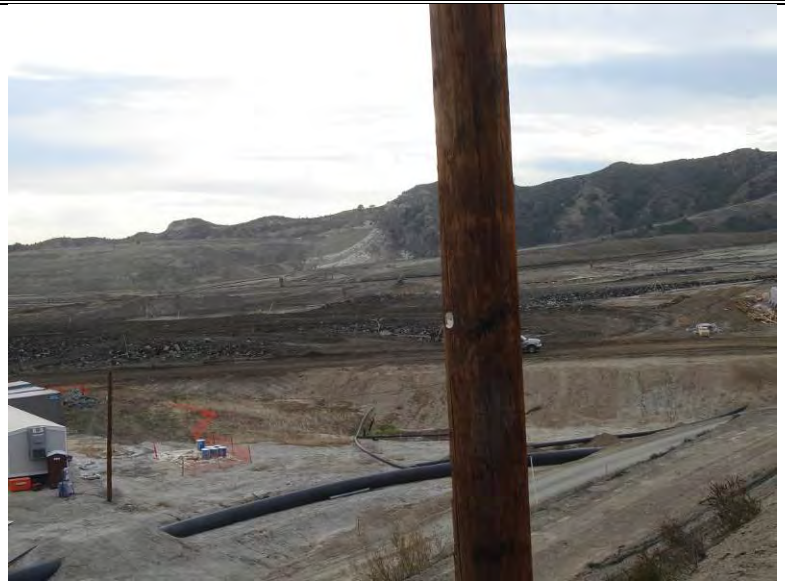


Photo 197: County Top Deck: December 18, 2013

Photo 198: County Top Deck: December 18, 2013

Photo 199: County Top Deck Near Basin B: October 23, 2013

Photo 200: County Top Deck Near Basin B: October 23, 2013

Photo 201: County Top Deck Near Basin B: October 23, 2013

Photo 202: County Top Deck Near Basin B: October 23, 2013

Photo 203: Basin B: October 23, 2013

Photo 204: Basin B: October 23, 2013

Photo 205: Basin B: October 23, 2013

Photo 206: Terminal Basin: October 9, 2013

Photo 207: Terminal Basin: October 9, 2013

Photo 208: Terminal Basin: October 9, 2013

Photo 209: Terminal Basin: October 9, 2013

Photo 210: Terminal Basin: October 9, 2013

Photo 211: Terminal Basin: October 9, 2013

Photo 212: Terminal Basin: October 9, 2013

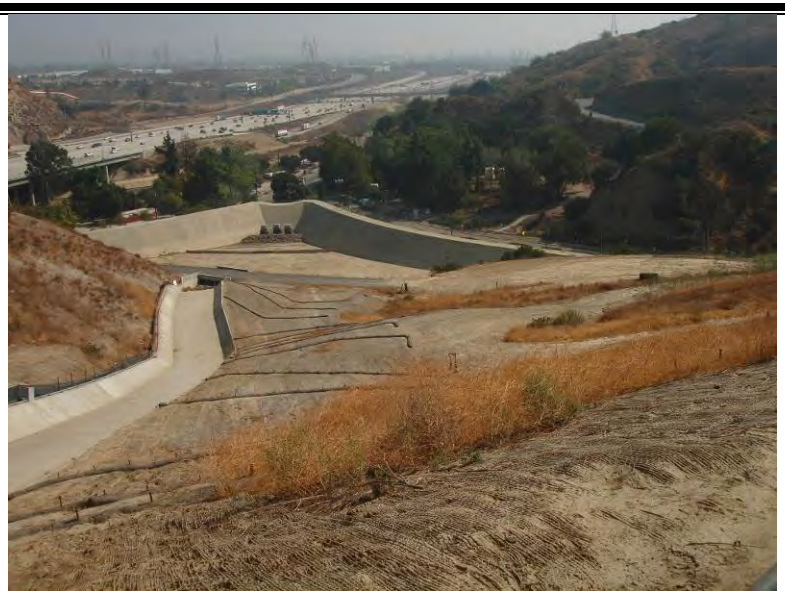


Photo 213: Terminal Basin: October 23, 2013

Photo 214: Terminal Basin: October 23, 2013

Photo 215: Terminal Basin: December 4, 2013

Photo 216: Terminal Basin: December 4, 2013

Photo 217: Terminal Basin Exterior Wall Crack: October 9, 2013

Photo 218: Terminal Basin Exterior Wall Crack: October 9, 2013

Photo 219: Terminal Basin Exterior Wall Crack: October 9, 2013

Photo 220: Terminal Basin Exterior Wall Crack: October 9, 2013

Photo 221: Terminal Basin Exterior Wall Crack: December 4, 2013

Photo 222: Terminal Basin Exterior Front Wall: October 9, 2013

Photo 223: Terminal Basin Exterior Front Wall: October 9, 2013

Photo 224: Terminal Basin Exterior Front Wall: October 9, 2013

Photo 225: Terminal Basin Exterior Front Wall: December 4, 2013

Photo 226: Terminal Basin Exterior Front Wall: December 4, 2013

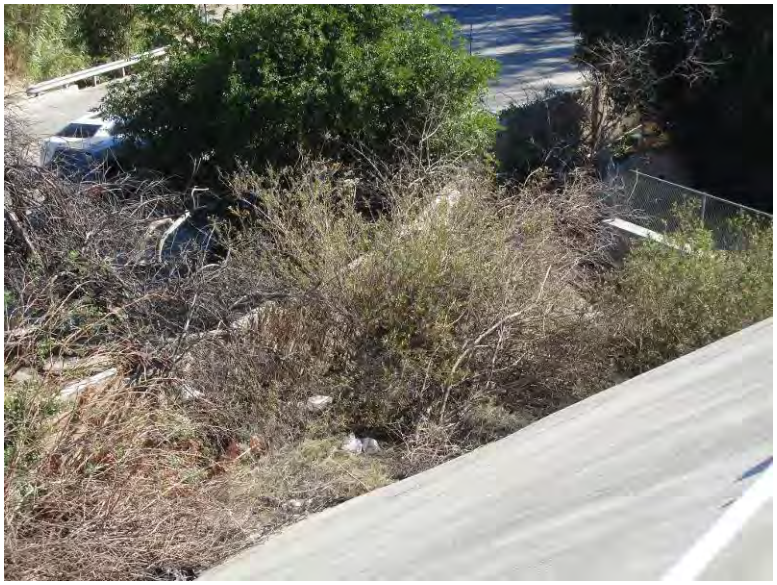


Photo 227: Terminal Basin Exterior Front Wall: December 4, 2013

Photo 228: Terminal Basin Outflow: October 9, 2013

Photo 229: Cell CC3A Part II Buttress: October 9, 2013

Photo 230: Cell CC3A Part II Buttress: October 9, 2013

Photo 231: Cell CC3A Part II Buttress: October 9, 2013

Photo 232: Cell CC3A Part II Buttress: October 9, 2013

Photo 233: Cell CC3A Part II Buttress: October 9, 2013

Photo 234: Cell CC3A Part II Buttress: October 9, 2013

Photo 235: Cell CC3A Part II Buttress: December 4, 2013

Photo 236: Cell CC3A Part II Buttress: December 4, 2013

Photo 237: Cell CC3A Part II Buttress: December 4, 2013

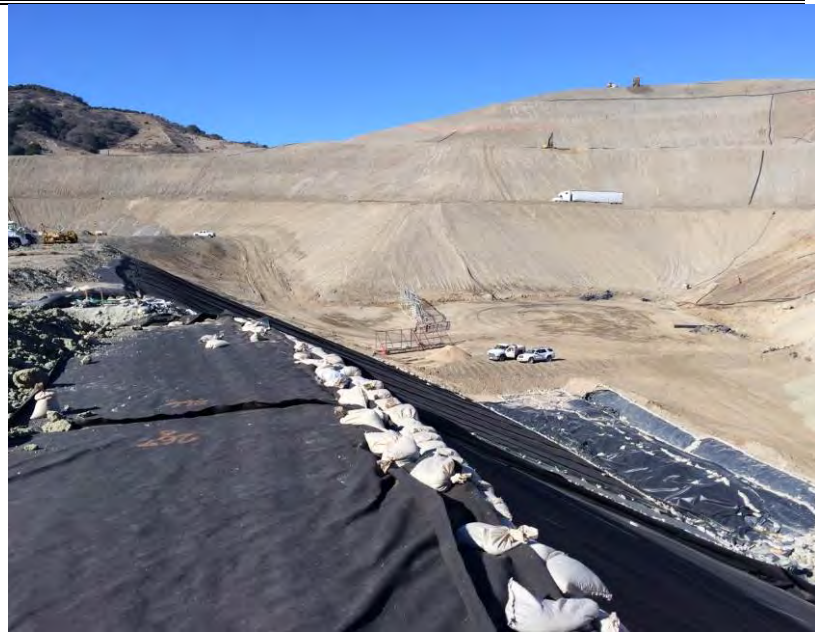


Photo 238: Cell CC3A Part II Buttress: December 4, 2013

Photo 239: Cell CC3A Part II Buttress: December 4, 2013

Photo 240: Cell CC3A Part II Buttress: December 4, 2013

Photo 241: Cell CC3A Part II Buttress: December 4, 2013

Photo 242: Cell CC3A Part II Buttress: December 4, 2013

Photo 243: Cell CC3A Part II Buttress: December 4, 2013

Photo 244: Leachate Treatment Facility Electrical Lines: October 9, 2013

Photo 245: Leachate Treatment Facility Electrical Lines: October 9, 2013

Photo 246: Leachate Treatment Facility Electrical Lines: October 9, 2013

Photo 247: Leachate Treatment Facility Electrical Lines: October 9, 2013

Photo 248: Leachate Treatment Facility Electrical Lines: December 4, 2013

Photo 249: Leachate Treatment Facility Electrical Lines: December 4, 2013

Photo 250: Leachate Treatment Facility Electrical Lines: December 4, 2013

Photo 251: Leachate Treatment Facility Electrical Lines: December 18, 2013

Photo 252: Leachate Treatment Facility Electrical Lines: December 18, 2013

Photo 253: Leachate Treatment Facility Electrical Lines: December 18, 2013

Photo 254: County Sage Mitigation Area: October 9, 2013

Photo 255: County Sage Mitigation Area: October 9, 2013

Photo 256: County Sage Mitigation Area October 23, 2013

Photo 257: County Sage Mitigation Area October 23, 2013

Photo 258: County Sage Mitigation Area October 23, 2013

Photo 259: County Sage Mitigation Area October 23, 2013

Photo 260: County Sage Mitigation Area October 23, 2013

Photo 261: County Sage Mitigation Area October 23, 2013

Photo 262: County Sage Mitigation Area November 13, 2013

Photo 263: County Sage Mitigation Area November 13, 2013

Photo 264: County Sage Mitigation Area November 13, 2013

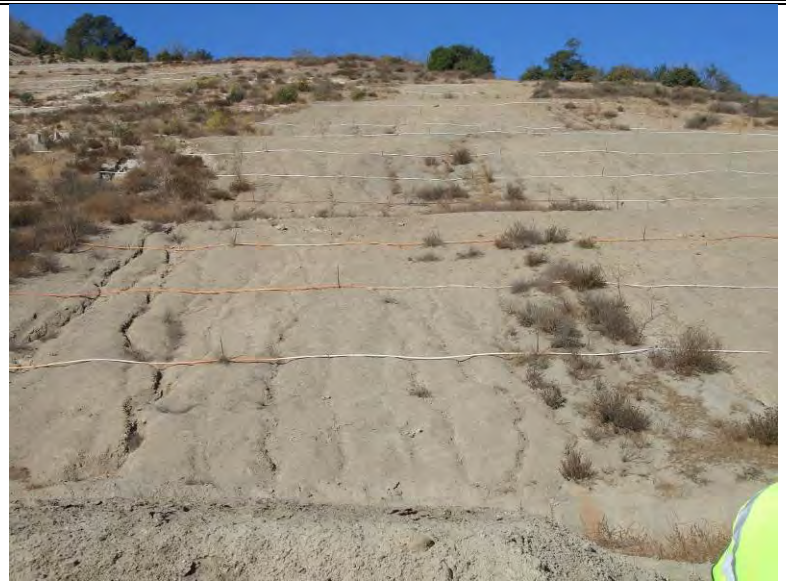


Photo 265: County Sage Mitigation Area November 13, 2013

Photo 266: County Sage Mitigation Area November 13, 2013

Photo 267: County Sage Mitigation Area November 13, 2013

Photo 268: County Sage Mitigation Area November 13, 2013

Photo 269: City Sage Deck C: October 9, 2013

Photo 270: City Sage Deck C: October 9, 2013

Photo 271: City Sage Deck C: October 9, 2013

Photo 272: City Sage Deck C: October 9, 2013

Photo 273: City Sage Deck C: October 9, 2013

Photo 274: City Sage Deck C: October 9, 2013

Photo 275: City Sage Deck C: October 9, 2013

Photo 276: City Sage Deck C: October 9, 2013

Photo 277: City Sage Deck C: October 9, 2013

Photo 278: City Sage Deck C: October 9, 2013

Photo 279: City Sage Deck C: October 9, 2013

Photo 280: City Sage Deck C: October 9, 2013

Photo 281: City Sage Deck C: October 9, 2013

Photo 282: City Sage Deck C: October 9, 2013

Photo 283: City Sage Deck C: October 9, 2013

Photo 284: City Sage Deck C: October 9, 2013

Photo 285: City Sage Deck C: October 23, 2013

Photo 286: City Sage Deck C: October 23, 2013

Photo 287: City Sage Deck C: October 23, 2013

Photo 288: City Sage Deck C: October 23, 2013

Photo 289: City Sage Deck C: October 23, 2013

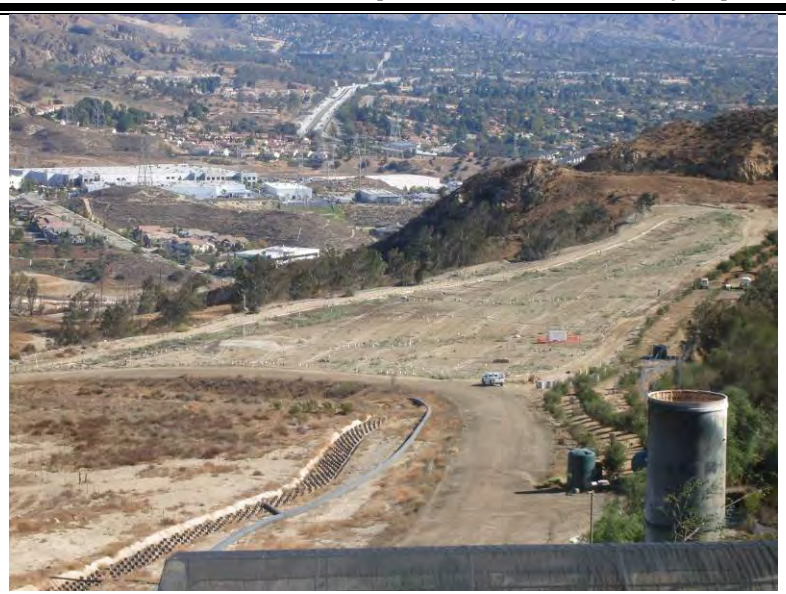


Photo 290: City Sage Deck C: November 13, 2013

Photo 291: City Sage Deck C: November 13, 2013

Photo 292: City Sage Deck C: November 13, 2013

Photo 293: City Sage Deck C: November 13, 2013

Photo 294: City Sage Deck C: November 13, 2013

Photo 295: City Sage Deck C: November 13, 2013

Photo 296: City Sage Deck C: November 13, 2013

Photo 297: City Sage Deck C: November 13, 2013

Photo 298: City Sage Deck C: November 13, 2013

Photo 299: City Sage Deck C: November 13, 2013

Photo 300: City Sage Deck C: November 13, 2013

Photo 301: City Sage Deck C: November 13, 2013

Photo 302: City Sage Deck C: November 13, 2013

Photo 303: City Sage Deck C: November 13, 2013

Photo 304: City Sage Deck C: November 13, 2013

Photo 305: City Sage Deck C: November 13, 2013

Photo 306: City Sage Deck C: November 13, 2013

Photo 307: City Sage Deck C: November 13, 2013

Photo 308: City Sage Deck C: November 13, 2013

Photo 309: City Sage Deck C: November 13, 2013

Photo 310: City Sage Deck C: November 13, 2013

Photo 311: City Sage Deck C: November 13, 2013

Photo 312: City Sage Deck C: November 13, 2013

Photo 313: City Sage Deck C: November 13, 2013

Photo 314: City Sage Deck C: November 13, 2013

Photo 315: City Sage Deck C: November 13, 2013

Photo 316: City Sage Deck C: November 13, 2013

Photo 317: City Sage Deck C: November 13, 2013

Photo 318: City Sage Deck C: November 13, 2013

Photo 319: City Sage Deck C: November 13, 2013

Photo 320: City Sage Deck C: November 13, 2013

Photo 321: City Sage Deck C: November 13, 2013

Photo 322: City PM10 Berm Vegetation: November 13, 2013

Photo 323: City PM10 Berm Vegetation: November 13, 2013

Photo 324: City PM10 Berm Vegetation: November 13, 2013

Photo 325: City PM10 Berm Vegetation: November 13, 2013

Photo 326: City PM10 Berm Vegetation: November 13, 2013

Photo 327: City PM10 Berm Vegetation: November 13, 2013

Photo 328: City PM10 Berm Vegetation: November 13, 2013

Photo 329: City PM10 Berm Vegetation: November 13, 2013

Photo 330: City PM10 Berm Vegetation: November 13, 2013

Photo 331: City PM10 Berm Vegetation: November 13, 2013

Photo 332: City PM10 Berm Vegetation: November 13, 2013

Photo 333: City PM10 Berm Vegetation: November 13, 2013

Photo 334: City Sage Deck C: December 4, 2013

Photo 335: City Sage Deck C: December 4, 2013

Photo 336: City Sage Deck C: December 4, 2013

Photo 337: City Sage Deck C: December 4, 2013

Photo 338: City Sage Deck C: December 4, 2013

Photo 339: City Sage Deck C: December 4, 2013

Photo 340: City Sage Deck C: December 4, 2013

Photo 341: City Sage Deck C: December 4, 2013

Photo 342: City Sage Deck C: December 4, 2013

Photo 343: City Sage Deck C: December 4, 2013

Photo 344: City Sage Deck C: December 4, 2013

Photo 345: City Sage Deck C: December 4, 2013

Photo 346: City Sage Deck C: December 4, 2013

Photo 347: City Sage Deck C: December 4, 2013

Photo 348: City Sage Deck B: November 13, 2013

Photo 349: City Sage Deck B: November 13, 2013

Photo 350: City Sage Deck B: November 13, 2013

Photo 351: City Sage Deck B: November 13, 2013

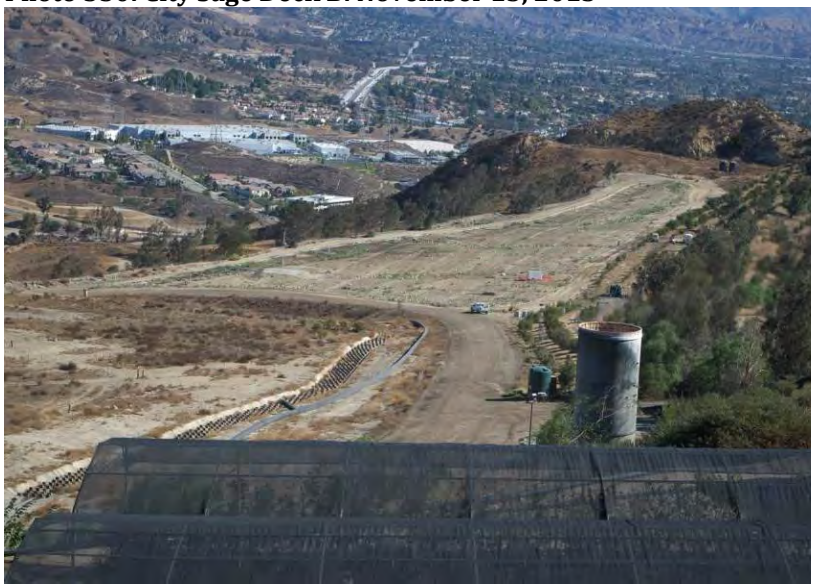


Photo 352: City Sage Deck B: November 13, 2013

Photo 353: City Sage Deck B: November 13, 2013

Photo 354: City Sage Deck B: November 13, 2013

Photo 355: City Sage Deck B: November 13, 2013

Photo 356: City Sage Deck B: November 13, 2013

Photo 357: City Sage Deck B: November 13, 2013

Photo 358: City Sage Deck B: November 13, 2013

Photo 359: City Sage Deck B: November 13, 2013

Photo 360: City Sage Deck B: December 4, 2013

Photo 361: City Sage Deck B: December 4, 2013

Photo 362: City Sage Deck B: December 4, 2013

Photo 363: City Sage Deck B: December 4, 2013

Photo 364: City Sage Deck B: December 4, 2013

Photo 365: City Sage Deck B: December 4, 2013

Photo 366: City Sage Deck B: December 4, 2013

Photo 367: City Sage Deck B: December 4, 2013

Photo 368: City Sage Deck B: December 4, 2013

Photo 369: City Sage Deck B: December 4, 2013

Photo 370: City Sage Deck B: December 4, 2013

Photo 371: City Sage Deck B: December 4, 2013

Photo 372: City Sage Deck B: December 4, 2013

Photo 373: City Sage Deck B: December 4, 2013

Photo 374: City Sage Deck B: December 4, 2013

Photo 375: City Sage Deck B: December 4, 2013

Photo 376: City Sage Deck A: November 13, 2013

Photo 377: City Sage Deck A: November 13, 2013

Photo 378: City Sage Deck A: November 13, 2013

Photo 379: City Sage Deck A: November 13, 2013

Photo 380: City Sage Deck A: November 13, 2013

Photo 381: City Sage Deck A: November 13, 2013

Photo 382: City Sage Deck A: November 13, 2013

Photo 383: City Sage Deck A: December 4, 2013

Photo 384: City Sage Deck A: December 4, 2013

Photo 385: City Sage Deck A: December 4, 2013

Photo 386: City Sage Deck A: December 4, 2013

Photo 386: City Sage Deck A: December 4, 2013

Photo 388: City Sage Deck A: December 4, 2013

Photo 389: City Sage Deck A: December 4, 2013

Photo 390: City Sage Deck A: December 4, 2013

Photo 391: Site: October 9, 2013

Photo 392: Site: October 9, 2013

Photo 393: Site: October 9, 2013

Photo 394: Site: October 9, 2013

Photo 395: Site: October 9, 2013

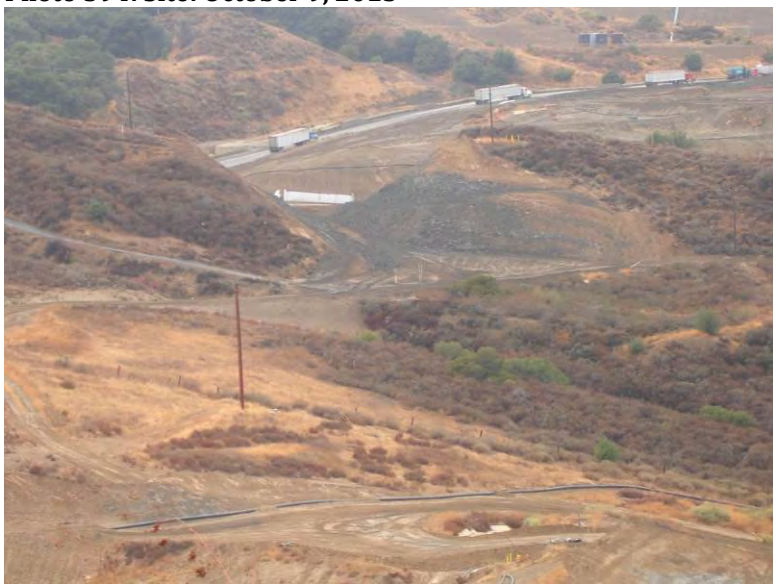


Photo 396: Site: October 9, 2013

Photo 397: Site: October 9, 2013

Photo 398: Site: October 9, 2013

Photo 399: Site: October 23, 2013

Photo 400: Site: October 23, 2013

Photo 401: Site: October 23, 2013

Photo 402: Site: October 23, 2013

Photo 403: Site: October 23, 2013

Photo 404: Site: November 13, 2013

Photo 405: Site: November 13, 2013

Photo 406: Site: November 13, 2013

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Photo 411: Site: November 13, 2013

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Photo 413: Site: November 13, 2013

Photo 414: Site: November 13, 2013

Photo 415: Site: November 13, 2013

Photo 416: Site: November 13, 2013

Photo 417: Site: November 13, 2013

Photo 418: Site: November 13, 2013

Photo 419: Site: November 13, 2013

Photo 420: Site: November 13, 2013

Photo 421: Site: December 4, 2013

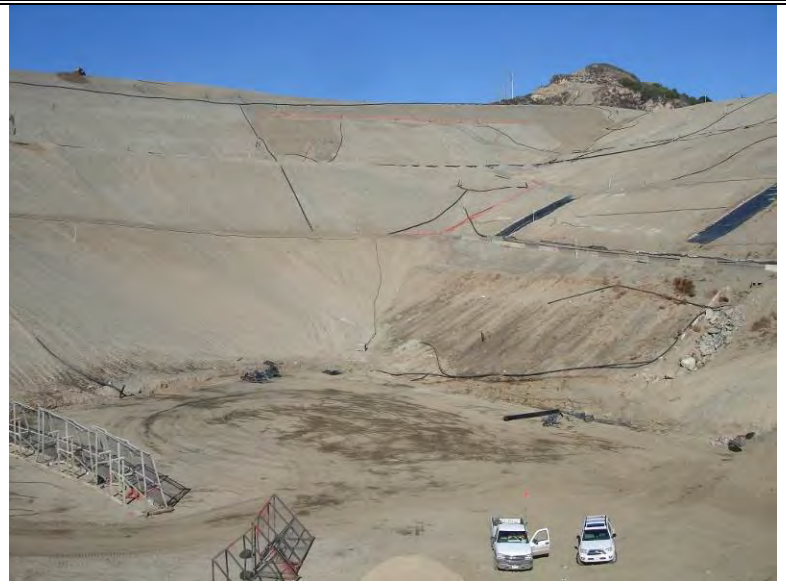

Photo 422: Site: December 4, 2013

Photo 423: Site: December 4, 2013

Photo 424: Site: December 4, 2013

Photo 425: Site Working Areas: October 9, 2013

Photo 426: Site Working Areas: October 9, 2013

Photo 427: Site: Site Working Areas: October 9, 2013

Photo 428: Site Working Areas: October 9, 2013

Photo 429: Site Working Areas: October 9, 2013

Photo 430: Site Working Areas: October 9, 2013

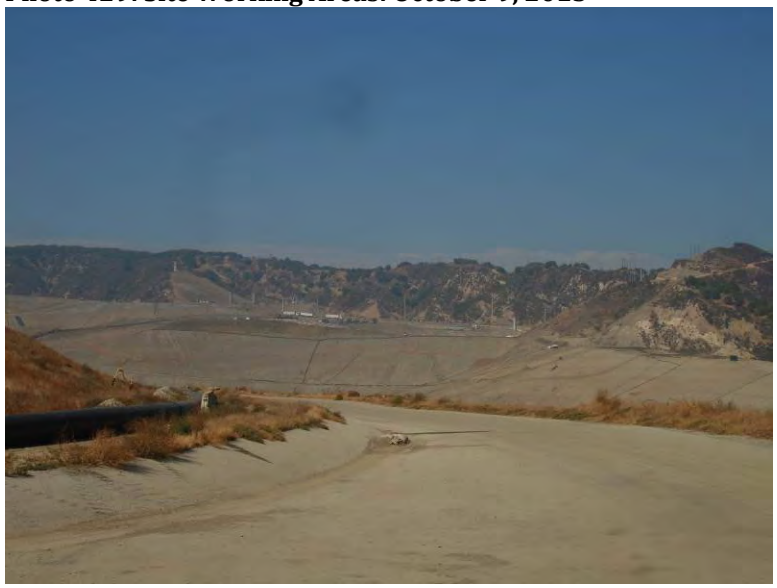

Photo 431: Site Working Areas: October 23, 2013

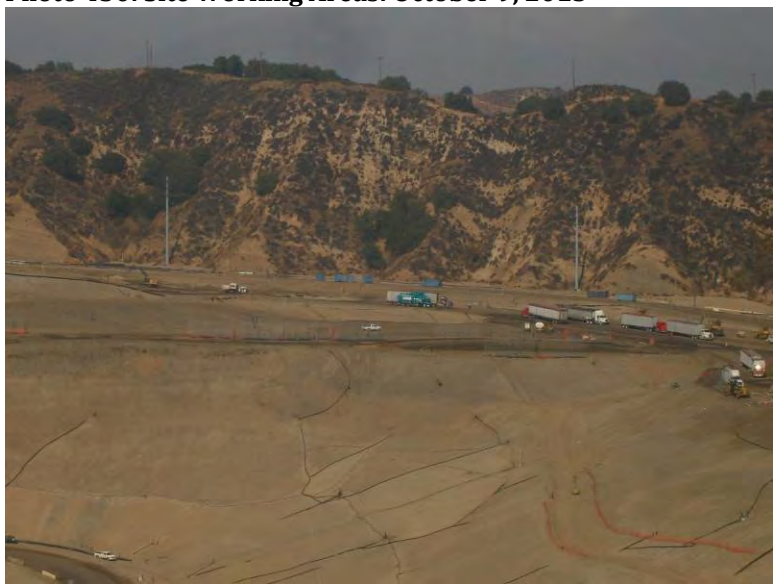

Photo 432: Site Working Areas: October 23, 2013

Photo 433: Site Working Areas: October 23, 2013

Photo 434: Site Working Areas: October 23, 2013

Photo 435: Site Working Areas: October 23, 2013

Photo 436: Site Working Areas: October 23, 2013

Photo 437: Site Working Areas: October 23, 2013

Photo 438: Site Working Areas: November 13, 2013

Photo 439: Site Working Areas: November 13, 2013

Photo 440: Site Working Areas: November 13, 2013

Photo 441: Site Working Areas: November 13, 2013

Photo 442: Site Working Areas: November 13, 2013

Photo 443: Site Working Areas: November 13, 2013

Photo 444: Site Working Areas: November 13, 2013

Photo 445: Site Working Areas: November 13, 2013

Photo 446: Site Working Areas: November 13, 2013

Photo 447: Site Working Areas: November 13, 2013

Photo 448: Site Working Areas: November 13, 2013

Photo 449: Site Working Areas: November 13, 2013

Photo 450: Site Working Areas: December 4, 2013

Photo 451: Site Working Areas: December 4, 2013

Photo 452: Site Working Areas: December 4, 2013

Photo 453: Site Working Areas: December 4, 2013

Photo 454: Site Working Areas: December 4, 2013

Photo 455: Site Working Areas: December 4, 2013

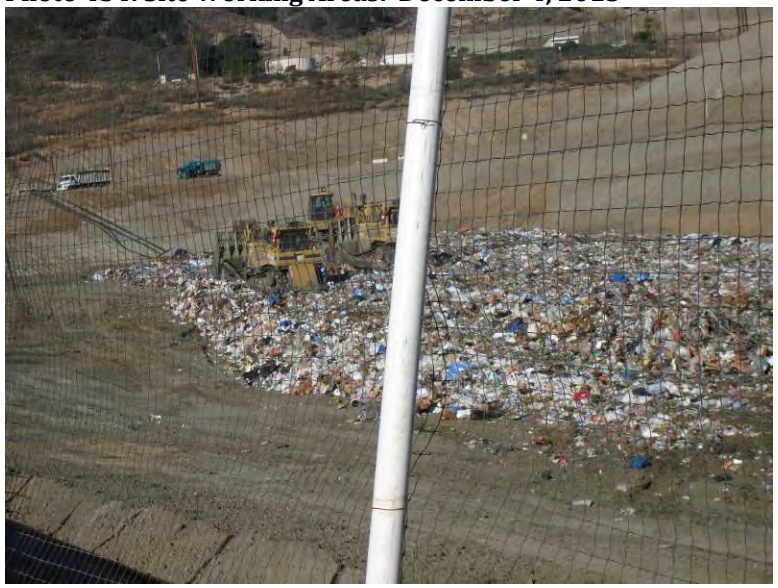

Photo 456: Site Working Areas: December 4, 2013

Photo 457: Site Working Areas: December 4, 2013

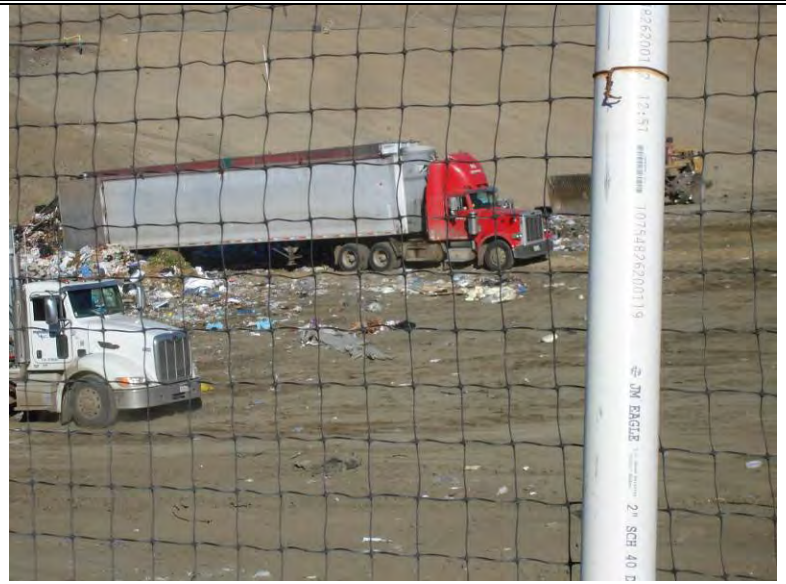

Photo 458: Site Working Areas: December 4, 2013

Photo 459: Site Working Areas: December 4, 2013

Photo 460: Site Working Areas: December 4, 2013

Photo 461: Site Working Areas: December 4, 2013

Photo 462: Site Working Areas: December 4, 2013

Photo 463: Site Working Areas: December 4, 2013

Photo 464: Site Working Areas: December 18, 2013

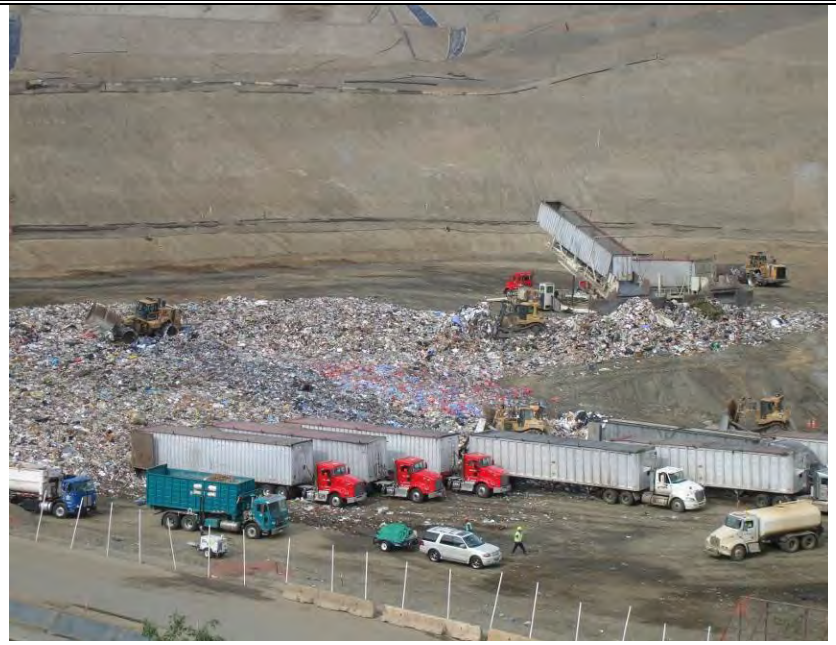

Photo 465: Site Working Areas: December 18, 2013

Photo 466: Site Working Areas: December 18, 2013

Photo 467: Site Working Areas: December 18, 2013

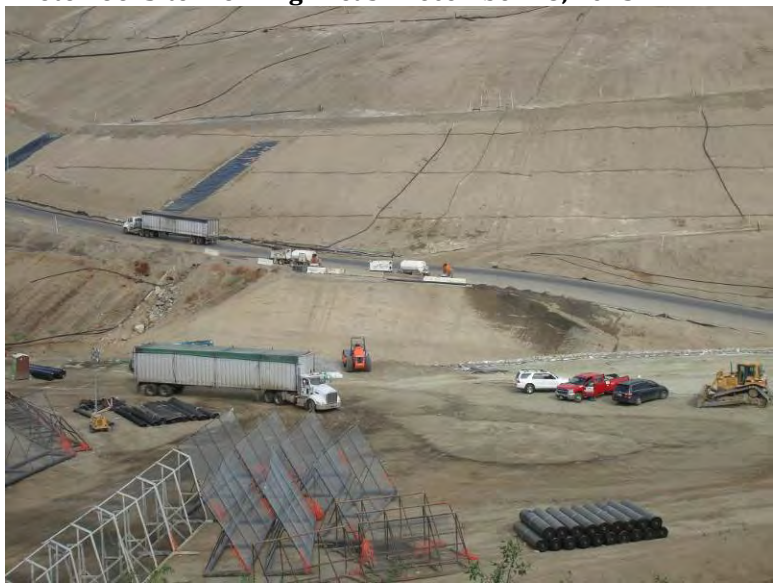

Photo 468: Site Working Areas: December 18, 2013

Photo 469: Site Working Areas: December 18, 2013

Photo 470: Site Working Areas: December 18, 2013

Photo 471: Material Storage: December 18, 2013

Photo 472: Material Storage: December 18, 2013

Photo 473: Site Working Areas: December 18, 2013

Photo 474: Material Storage: December 18, 2013

Photo 475: Site Working Areas: December 18, 2013

Photo 476: Material Storage: December 18, 2013

Photo 477: Material Storage: December 18, 2013

Photo 478: Road Realignment Area: December 18, 2013

Photo 479: Road Realignment Area: December 18, 2013

Photo 480: Road Realignment Area: December 18, 2013

Photo 481: Road Realignment Area: December 18, 2013

Photo 482: Road Realignment Area: December 18, 2013

Photo 483: Road Realignment Area: December 18, 2013

Photo 484: Road Realignment Area: December 18, 2013

Photo 485: Road Realignment Area: December 18, 2013

Photo 486: Road Realignment Area: December 18, 2013

Photo 487: Road Realignment Area: December 18, 2013

Photo 488: Road Realignment Area: December 18, 2013

Photo 489: Road Realignment Area: December 18, 2013

Photo 490: Road Realignment Area: December 18, 2013

Photo 491: Road Realignment Area: December 18, 2013

Photo 492: City South Stockpile Area: December 18, 2013

Photo 493: City South Stockpile Area: December 18, 2013

Photo 494: City South Stockpile Area: December 18, 2013

Appendix III

Quarterly Site Visits: Site Visit Attendees by Date of Site Visit/ Mitigation Monitoring Site Reports

UltraSystems Staff; Field of Expertise:

James Aidukas; Project Manager, Permitting and Operations/ Engineer

Mike Lindsay; Air Quality, Noise, Vehicle Emissions, Environmental Specialist/ Engineer

Joe Thompson; Biological Resources/ Biologist

SLR Staff; Field of Expertise:

Tarik Hadj-Hamou; Civil/ Geotechnical Engineer

October Site Visits

October 9, 2013: James Aidukas (UltraSystems), Mike Lindsay (UltraSystems), Tarik Hadj-Hamou (SLR)

October 23, 2013: James Aidukas (UltraSystems), Mike Lindsay (UltraSystems)

SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT

Monitor: James Aidukas	Page: 1 of 2
Discipline: Project Manager	Date: October 9, 2013
Site Conditions: On-and-off rain; low 60˚ F	

SITE LOG

Republic Site Manager - Dave Hauser
Drove through the Granada Hills neighborhood and the adjacent roads, Balboa and San Fernando. There was no litter observed and no landfill odors detected.
Met with John Nelson, Clark Ajwani, Saeid Shirzadegan (LACDPW), Mike Lindsay (UltraSystems), and Tarik Hadj-Hamou (SLR). We signed in and proceeded to monitor the following areas:

- Basin A was observed to be clean and ready for stormwater. Windblown litter was observed on the northwest hillside.
- The grading for the scraper road was completed southeast of Basin A.
- It was observed that the sudden rainstorm caused the access roads to be slick. Several transfer trucks were observed sliding backwards with two separate accidents seen.
- The Edison switchgear facility had equipment mounted on foundations with the I-beans for the enclosure and mounting of equipment erected. Edison was working on the last new poles at the landfill elevation. The last pole that needs to be installed is on the top of the hill at the City/County line. This pole may be delayed due to interference with the existing live wires.
- The gas-to-energy facility had the buried electric conduits in place and the forms and rebar for the gas turbine foundations were in place, ready for concrete. The gas turbine skid units were not yet delivered.
- A wet weather area on the County top deck was observed to be almost ready for use.
- No re-vegetation activity was observed at the County sage mitigation area.
- The electrical supply lines and poles to the temporary flare were removed. The flare and blower skid was still on-site.
- Temporary drainage ditches were installed around cell CC3A Part II and the final section of liner was being installed on the buttress area.
- K-rails were installed in the terminal basin to assist in controlling sediment.
- Trash was observed on the outside perimeter wall of the terminal basin.
- The terminal basin wall facing the landfill access road had the horizontal crack worsening.
- The westside drainage channel concrete walls in one area had spalling and cracks and two trees growing adjacent to the walls on the east and west sides of the drainage ditch. The concrete floor was uplifting in another area of the channel.
- The electrical lines to the leachate facility are hanging on tree branches, posing a fire hazard.
- The City Deck C sage mitigation area was observed to have more growth of potted planted plants and germination of seeds since the last site visit.
- The depression and uplifting of the roadway south of the buttress for cell CC3A Part II and cracks in the city south landfill slopes was observed.

Flare Operating Conditions:

- Flare 1 - 1693˚ F, 3793 SCFM, -52.51" vacuum
- Flare 9 - 1668˚ F, 2649 SCFM
- Flare 10 - 1638˚ F, 2187 SCFM

It was noted that at Flares 9 and 10, one blower had a broken drive shaft.

Page 2 of 2, October 9, 2013, continued:

Met with Patti Costa and Becky Van Sickle after the monitoring and discussed the following:

1. The grading for the new scraper access road and the need for biological, archeological and paleontological analysis in undisturbed areas and the need to perform site evaluations and supply required reports on the area that will be used for the new access road realignment and ultimate landfill toe berm were discussed.
   Becky Van Sickle said that biological, archeological, and paleontological reports were done for the new scraper access road and were in her office.
   Patti Costa said that the required analysis (biological, archeological, and paleontological) will be done for the road realignment and ultimate landfill toe berm prior to the initiation of construction.

2. The accelerometer adjacent to the main access road was observed to have a hole in the enclosure and appeared not to be maintained. This equipment should have maintenance performed on it and a new enclosure.
   Patti Costa said that the unit will be relocated in 2014 and maintained or updated, if required.

3. It was observed that a shaft seal on a Flare 1 blower was leaking oil.
   Patti Costa said that she would notify Achaya Kelapanda of this condition.

4. It was observed that the terminal basin wall facing the landfill access road had the previously seen horizontal cracks worsened. The westside drainage channel concrete walls in one area had spalling and cracks and two trees growing adjacent to the walls on the east and west sides. The concrete floor was uplifting in a section of the channel
   Trash was observed on the outside perimeter wall of the terminal basin.
   Patti Costa said that she would let operations know of our observations.

FURTHER REVIEW NEEDED

- Cracks in westside drainage and terminal basin wall.
- City south landfill cracks in the landfill slopes and uplifting of the access roadway.

COMMENTS

Signed:

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: **Mike Lindsay**	Page 1 of 1
Discipline: Environmental Engineer	Date: 10-09-13
Site Conditions: Overcast, raining, 56-61 °F, 5-15 mph	

SITE LOG

1. Met with John Nelson, Clark Ajwani, Said (LADPW), Jim Aidukas, Tarik Hadj-Hamou (Ultrasystems) to discuss site visit objectives. Checked in with Patti Costa (Republic).
2. Measured County Top Deck elevations using a Trimble 2008 GeoXH GPS device (± 0.1 m accuracy).
3. Found leaking well CWG-568, with steaming gas exiting around base of well. Well is already marked with beacon and orange flag (Map Grid #H-8).
4. Observed trash trucks slipping up hill along west perimeter access road. Yellow iron is assisting trucks up hill in the rain.
5. Flare 9 is operating at 2641 SCFM, 1665 °F; Flare 10 is operating at 2187 SCFM, 1654 °F; gas sample measured at 37% Vol. CH_4, 2.6% Vol. O_2, 456 ppm CO; gas delivery temp. is 115°F.
6. Observed progress of Gas-To-Energy plant, with substation work comencing.
7. Observed City Top Deck CQ sage revegetation area. Salt bush is spreading fast; this was part of the broadcast seed mix.
8. Met with Patti Costa and Becky VanSickle (Republic), and discussed the following topics:
   a. A cut was made for scrapers to avoid main haul road.
   b. One oak was removed for making cut.
   c. Arch-Paleo reports are part of monthly LEA reports (From GTA to County).

~~FURTHER REVIEW NEEDED~~

   d. Accelerometer to be moved/tested for access road.
   e. Flare 1 has an oil leak at blower coupler seal.
   F. Terminal sediment basin has trash that needs removal.
   g. Sediment Basin D needs soil sealant for dust control.
   h. Land Fill was closed this past Friday and Saturday due to winds.
   I. New sewer line project delayed until 2014 Q1.

Project Number: 5800 Signed: Mike Lindsay

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: Tarik Hadj-Hamou, Ph.D., P.E.	PAGE 1 OF 2
Discipline: Civil - Geotechnical	Date: October 9, 2013
Site Conditions: cold and rainy - Very muddy conditions on site	
SITE LOG	
9:00 arrive at Sunshine Canyon Landfill , meet with John Nelson and Clark Ajwani and Saeid Shirzadegan (LADPW) and Jim Aidukas and Mike Lindsay (UltraSystem) to prepare visit	
9:15 - 2:30: site tour Drainage system, flare stations, waste face, slopes, roads	
Drainage system • Sedimentation basins o Basins A and D are clean o Terminal basin cleaned up – K-rails installed in basin to catch large debris • Channels o We noted that the cracks mentioned in previous visits are still present (Photo 1) with the rainy season beginning there those cracks may worsen and the floor slabs may be uplifted by high flow.	
Waste face • Republic was operating one waste faces: on top of the County Landfill deck and on top of CC2 • Could not get close to muddy conditions to check how runoff from waste face was controlled and managed	
Flare stations • Flare 10 installed and running • Construction of the gas to energy facility is on-going	
Cell CC3 Phase II • The stability berm is in place (Photo 3) • No lining activity because of rain o Work in progress shows that liner is being installed over the sides berm and floor of the cell o Operation layers has been placed on floor and up sides of cell CC3a part I (Photo 4)	

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Monitor: Tarik Hadj-Hamou, Ph.D., P.E.	PAGE 2 OF 2
Discipline: Civil – Geotechnical	Date: October 9,, 2013
Site Conditions: cold and rainy	
SITE LOG	
Geotechnical Issues • Depression on access road near cell CC3a noted in on August 20, 2013 is more pronounced. • Asphalt curve show cracks • Cracks were noted on hillside • Stability berm is finished and lined. These observations indicate that some movement has occurred in the area	
FURTHER REVIEW NEEDED	
COMMENTS	
Cracks on road and hillside and potential impact should be addressed by Republic Geotechnical engineer	
Cracks in north concrete channel should be addressed	
Signed: 	

Photo 1: North channel – crack in concrete wall

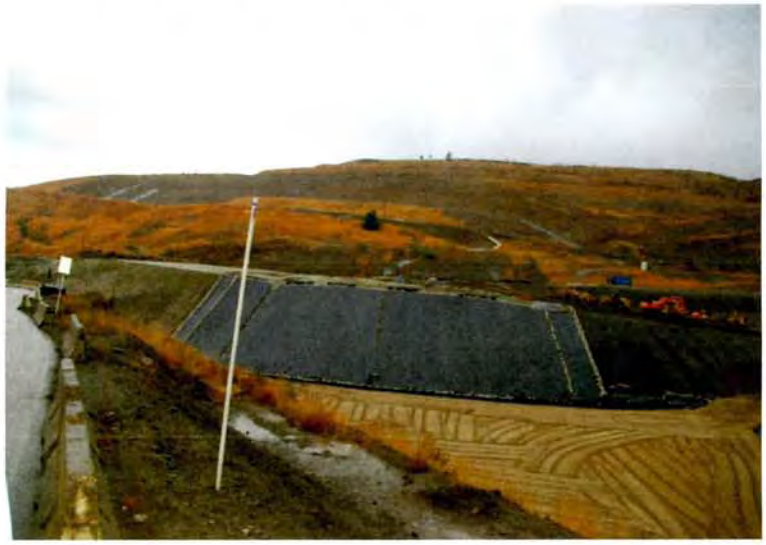

Photo 2: Stability berm in place at Cell CC3a Part 1

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Photo 3: Operation layer over geosynthetics in Cell CC3a Part 1

SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT

Monitor: James Aidukas	Page: 1 of 2
Discipline: Project Manager	Date: October 23, 2013
Site Conditions: Clear, sunny, and mildly windy ~70° F	

SITE LOG

Republic Site Manger - Dave Hauser
Met with John Nelson, Dave Nguyen, and Lukas Przbylo (LACDPW) and Mike Lindsay (UltraSystems). We signed in and proceeded to monitor as follows:
Mike Lindsay went separately from the other monitors and observed and assessed permanent slopes and inactive areas for vegetation. He also observed the whole landfill gas recovery system for any odors or equipment problems.
The other monitors went to the following areas:

- Basin A was observed and had minor sediment from the prior rainstorm. Windblown litter was observed on the north hillside of the basin.
- The conditions previously noted on the westside drainage ditch has not been repaired.
- The westside drainage channel concrete walls in one area had spalling and cracks and two trees growing adjacent to the walls on the east and west sides. The concrete floor was uplifting in a section of the channel.
- The county sage mitigation area was observed with no revegetation activity noted.
- The Basin D north drainage was observed and the current liner material is functioning well.
- The gas-to-energy facility was observed and some of the gas turbine foundations had been poured. The last foundation rebar was being sand blasted in preparation of pouring soon. I-beams were being installed for a structure.
- The Edison sales connection facility site was observed with additional equipment being installed under and on the I-beam structure. All but one power sales pole was installed.
- Basin B had a minor amount of sediment from the prior rainstorm. Windblown litter was observed on the eastern hillsides.
- The terminal basin had a minor amount of sediment from the prior rainstorm.
- The City Deck C sage mitigation area was observed having additional seeds germinating and small plants sprouting in areas that were bare. The cooler weather appears to be helping growth and germination.
- Initial filling was being done in a small area of Cell CC3A Part II.

Flare Operating Conditions:

- Flare 1 - 1691° F, 3783 SCFM, -52.84" vacuum
- Flare 3 - 1708° F, 3609 SCFM
- Flare 9 - 1673° F, 2279 SCFM
- Flare 10 - 1655° F, 2383 SCFM

Met with Patti Costa and Becky Van Sickle after the monitoring and discussed the following:

1. Basins A and B had windblown litter in the back hillside of the basins
   Patti Costa said she would advise operations of the conditions observed.

2. The westside drainage channel concrete walls and bottom had cracking and spalling and trees growing and undermining the sidewall.
   Patti Costa said that the facility maintenance/operations personnel would be notified of the conditions observed.

Page 2 of 2, October 23, 2013, continued.

3. It was stated that UltraSystems thought some of the vegetation growing in the City Deck C sage mitigation area might be Lambs Quarter, an aggressive non-native. Our biologist was not onsite to confirm.
   Patti Costa said that the plant that we showed the photo of to you and thought that it was not Lamb Quarters, but Salt Bush, a plant seed planted for mitigation.

4. The question was asked when the access road realignment ultimate toe berm construction would start and when plans would be available for the agencies to review.
   Patti Costa said that the plans were being reviewed by Republic today and should be finalized by the end of the year.

FURTHER REVIEW NEEDED
COMMENTS
Signed:

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: **Mike Lindsay**	Page 1 of 1
Discipline: Environmental Engineer	Date: 10-23-13
Site Conditions: Clear, sunny, 60-72°F, 5-10 mph	

SITE LOG

1. Met with John Nelson, Lukas Przbylo, Dave Nguyen (LACDPW), Jim Aidukas (UltraSystems), to discuss site visit objectives. Checked into Republic office.
2. Observed Sediment Basin A to be clear of debris and sediment.
3. Observed blown trash and debris along western slope of Sediment Basin A.
4. Measured non-vegetated soil areas west of County Top Deck (above storage tanks) at landfill perimeter.
5. Observed County westside perimeter drainage ditch to have trees growing into waterway, possibly undermining concrete.
6. Material storage yard is in good order.
7. Observed Sediment Basin D to be clear of obstructions.
8. Flare 9 is operating at 2469 SCFM, 1653°F; Flare 10 is operating at 2521 SCFM, 1660°F; gas sample measured 39 %Vol. CH_4, 2.2 %Vol. O_2, 467 ppm CO; gas delivery temp. is 119°F.
9. Measured non-vegetated soil area between Flare 10 and the Gas-to-Energy substation using a Trimble 2008 GeoXH GPS device (±0.1 m accuracy).
10. Observed working fence.
11. Observed Terminal Sediment Basin to be clear of sediment and debris.

FURTHER REVIEW NEEDED

1. Remove trash and debris along western slope of Sediment Basin A.
2. Remove trees growing along County westside drainage ditch.

Project Number: 5800 Signed: Mike Lindsay

November Site Visits

November 13, 2013: James Aidukas (UltraSystems), Joe Thompson (UltraSystems), Mike Lindsay (UltraSystems)

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT

Monitor: James Aidukas	Page: 1 of 2
Discipline: Project Manager	Date: November 13, 2013
Site Conditions: Sunny and clear	

SITE LOG

Republic Site Manger - Dave Hauser
Met with Joe Decruyenaere (LA County Biologist) and Chris Robertson (LA County Planning) and Mike Lindsay and Joe Thompson (UEI.) Signed in at the office and proceed to monitor the following areas:

- The County sage mitigation area was observed. Joe Decruyenaere and Joe Thompson observed that no mitigation activity was occurring at this location. The lower areas that are void of sage vegetation appear to have friable soils that if terraced or benches are created and supported by straw wattles, the flat areas could be vegetated with sage. A further investigation of the site soils condition is warranted.
- The slopes at the gas-to-energy and Flare 9 and 10 sites were observed. The slopes below the flares and the gas-to-energy plans are permanent and the ones above are temporary. Some of the slopes had jute netting and were hydroseeded in the past. Minimal vegetation was seen to have germinated.
- The gas-to-energy and Edison facilities had significant progress since the last monitoring on October 23.
- The Edison switchgear transformer station was near completion. The last power pole on the hill at the City/County line was installed and wired to the existing power line. Pull-lines were being strung to enable the power lines to be installed to the switchgear/transformer station.
- The gas-to-energy facility had the following equipment installed on their foundations: all five gas turbine units and air coolers; the siloxanes pretreatment skid and cooler; and the motor control center.
- First quarter commissioning appears to be on schedule.

We then proceeded to the office where I met with John Nelson and Russell Bukoff (LACDPW.) We checked in with Patti Costa and let her know that we were focusing our monitoring on vegetation. She said that we should have our exit conference with Becky Van Sickle. She also said that replanting of Deck C was scheduled to occur within two weeks. John Nelson, Russel Bukoff and I proceeded to meet Joe Decruyenaere, Chris Robertson, Joe Thompson, and Mike Lindsay at City South Deck C.

- Deck C was observed. The salt tolerant plants were doing well. The majority of the sage community plants were dead and the ones surviving showing signs of dying. The possible causes of the loss of sage plants were discussed and both biologists thought that the exact cause should be investigated before just replacing the same type of plants. Possible changes in some plants should be made.
- Joe Decruyenaere and Chris Robertson left for another engagement. The rest of us continued the site monitoring.
- The oak trees in the PM-10 area were observed. The trees in the saddle of the southern berm were stunted, with the outlying trees showing moderate growth. No planting of toyon or acacia in the understory was observed.
- Deck B was observed to have some areas of coastal sage habitat and some areas of non-native vegetation. The deck was seen as a location where non-natives could be eradicated and the sage community saved and enhanced.
- The oak tree nursery was observed along with the mitigation oak trees on the southern ridgeline. Trees on the ridgeline and at the nursery were doing well.

Page 2 of 2, November 13, 2013 Monitoring, continued:

- Flare 1 was observed. The wind was coming from the north, causing a downdraft condition, which had stack exhaust odors at ground level near the blower skid.
- Deck A was observed. Minimal coastal sage habitat was seen on this deck. Revegetation of this total deck will be needed to establish the required sage community habitat.
- The big cone fir mitigation area was observed. The chicken wire protective cages were removed and the trees were doing well.
- The mitigation oak trees around the top of the canyon from the county fir tree mitigation area to the City/County line were observed. All of these trees were doing well. Weeds under the trees were being controlled to minimal height due to the dense canopies.
- The flare number 8 was observed with no unusual operating conditions noted.
- The oil field was observed along with the mitigation oaks and eucalyptus trees in the 100 acre buffer. All trees were doing well.

Flare Operating Conditions:

- Temporary flare has been decommissioned
- Flare 1 - 1690˚ F, 4055 SCFM, -52.84" vacuum
- Flare 8 - 1714˚ F, 2422 SCFM
- Flare 9 was not operating
- Flare 10 - 1630˚ F, 3520 SCFM

We met with Becky Van Sickle after the monitoring and discussed the sage mitigation.

FURTHER REVIEW NEEDED

Monitor the sage mitigation areas.

Monitor hydroseeded areas for germanation and vegetation growth.

COMMENTS

Signed:

UltraSystems

SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT

Monitor: Joe Thompson	PAGE 1 of 1.
Discipline: Biological Resources/ Vegetation	Date: 11/13/2013 (Wed)
Site Conditions: Clear, sunny, clear, 61-77° F	

SITE LOG

1. Met with Joe Decruyeanaere, Chris Robertson (LACDPW), Jim Aidukas, Mike Lindsay (UltraSystems) and checked in with Republic.
2. Observed County Top Deck Sage Mitigation Area. No change in vegetation conditions since previous site visit.
3. Observed Flare 9 slopes. No change in vegetation conditions since previous site visit.
4. Observed City Deck C Sage Mitigation Area. Early summer plantings had achieved about 20 percent coverage of mitigation area. Atriplex species: four-wing saltbush (*Atriplex canescens*) and quail bush (*Atriplex lentiformis*) were the most successful of the species planted. These two species accounted for more than 90 percent of the vegetation cover. The next most successful plant observed was coyote bush (*Baccharis pilularis*). Most of these plantings appear to be surviving, but show some signs of stress from high salt soil concentrations, including burning of leaf tips and browning. Three other species: Mexican elderberry (*Sambucus nigra ssp. caerulea*), bush monkeyflower (*Mimulus aurantiacus*), a native bunch grass (*Nassella spp.*), California sagebush (*Artemesia californica*) and bush sunflower (*Encelia californica*) were present. These species occupied less than 5 percent of the living vegetation. California sagebush was in poor condition, possibly owing to the season, since under normal conditions, this plant is dormant in the summertime). Black sage (*Salvia mellifera*), which had been planted extensively, had all died. Two desirable volunteer species (not intentionally planted) were observed in low numbers: willow (*Salix spp.*) and white sage (*Salvia apiana*).
5. Observed PM-10 Berm. Coast live oak trees (Quercus agrifolia) were being watered, leaves are curled, probably due to wind stress.
6. Observed plant nursery by Flare 1.
7. Observed City Deck B, which had patches of healthy coastal sage scrub vegetation, including broom baccharis (*Baccharis sarothroides*), California sage bush, flat-top buckwheat (*Eriogonum fasciculatum*), white sage, deer weed (*Lotus scoparius*), coast goldenbush (Isocoma menziesii), and ragweed (*Ambrosia psilostachya*). A high pervcentage of non-native species were also present, including Australian saltbush (*Atriplex semibaccata*), tocalote (*Centaurea melitensis*), mustard (*Hirschfeldia incana*), and annual grasses (*Bromus spp.*).
8. Observed City Deck C, which had a similar vegetation composition to that of City Deck B.
9. Observed Flare 8 slopes for vegetation. Vegetation communities include coastal sage scrub interspersed with non-native annual grasses. In the immediate vicinity are healthy planted coast live oak trees and big cone fir trees (*Pseudotsuga macrocarpa*).
10. Observed oak tree mitigation area. Coast live oak trees showed signs of recent growth and vigor from loosening/removal of chicken wire, which had been placed around seedlings to inhibit predation by herbivores.
11. Observed oil drilling area.
12. Met with Becky Van Sickle to discuss re-vegetation plans and conditions.

FURTHER REVIEW NEEDED

- Need to verify conditions at City Deck C and slopes at County Top Deck for compliance with mitigation requirements for species and percent cover.
- Need to review plans for revegetation of slopes at Flare 9.

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: **Mike Lindsay**	Page 1 of 1
Discipline: Environmental Engineer	Date: 11-13-13 Wed.
Site Conditions: Clear, sunny, 61-77 °F, 5-20 mph	

SITE LOG

1. Met with Joe Decruyenaere, Chris Robertson (LACDPW), Jim Aidukas, Joe Thompson (UltraSystems). Checked into Republic office.
2. Observed County Top Deck sage mitigation area and Flare 9 / 10 slopes.
3. Met with John Nelson, Russell Bukoff (LACDPW).
4. Observed City Deck C sage revegetation area. Black sage that died during summer has not been replaced. Salt Bush and Quail Bush are growing well.
5. Observed PM-10 berm. Coast live oak trees are being watered, but leaves are curled and dry.
6. Observed plant nursery by Flare 1.
7. Observed City Deck B vegetation area.
8. Observed City Deck A vegetation area.
9. Observed Flare 8 slopes for vegetation.
10. Flare 8 is operating at 2414 SCFM, 1711 °F; gas sample measured at 43% Vol. CH4, 1.5% Vol. O2, 497 ppm CO.
11. Observed oak tree mitigation area above Flare 8.
12. Observed big cone fir mitigation area.
13. Observed oil drilling area.
14. Flare 9 was not operation (zero flow).
15. Flare 10 was operating at 3514 SCFM, 1627 °F; gas sample measured at 43 % Vol. CH4, 1.7 % Vol. O2, 500+ ppm CO.
16. Met with Becky Van Sickle (Republic) to discuss re-vegetation plans and conditions.

FURTHER REVIEW NEEDED

Project Number: 5800 Signed: Mike Lindsay

December Site Visits

December 4, 2013: James Aidukas (UltraSystems), Mike Lindsay (UltraSystems)

December 18, 2013: James Aidukas (UltraSystems), Mike Lindsay (UltraSystems)

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT

Monitor: James Aidukas	Page: 1 of 1
Discipline: Project Manager	Date: December 4, 2013
Site Conditions: 60-75° F, Slight wind gusts	

SITE LOG

Republic Site Manger - Dave Hauser
On the way to the site, stopped at the leachate treatment facility. Observed tree branches hanging on the powerlines to the facility. These pose a fire hazard.
Met with John Nelson, Clark Ajwani, Lukas Przbylo (LACDWP) and Mike Lindsay (UEI). Signed in and arranged for Patti Costa and Becky Van Sickle to join the monitoring staff to observe the western channel and terminal basin.

- Observed the western drainage channel with Becky Van Sickle. The westside drainage channel concrete walls in one area had spalling and cracks and two trees growing adjacent to the wall on the east and west sides. The concrete floor was uplifting in another section of the channel. These areas were noted to need repair. We then met with Patti Costa and observed the terminal basin. The terminal basin exterior wall facing the access road had the horizontal cracks worsening.
- The area between the front exterior wall and the San Fernando Road wall had debris and dumped trash in this area. Patti Costa noted the conditions and was going to inform operations and maintenance.
- The County personnel and UEI monitoring staff then proceeded to monitor without Republic staff.
- Basin A was observed. There was standing water in the basin from prior rains. The north slope of the basin had blown litter in the vegetation.
- Basin D was observed and it appeared that the floor of the basin was sealed with soil sealant.
- The gas-to-energy facility was observed. The Edison powerlines appeared to be complete. Minor work was being done at the switchgear facility. The gas-to-energy facility has the exhaust ducts being installed on the first turbine unit. Commissioning is now expected late 1st Quarter or early 2nd Quarter.
- Deck C sage mitigation was observed. The salt bush and quail bush were doing well. Additional species of potted plants were planted since our last monitoring.

Flare Operating Conditions:
Not able to monitor because of lack of time.

FURTHER REVIEW NEEDED

1. Cut tree branches away from powerlines at the leachate treatment facility.
2. Perform maintenance on the western channel and terminal basin exterior wall.
3. Remove dumped trash and litter from the terminal basin front wall.

COMMENTS

Signed:

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: **Mike Lindsay**	Page 1 of 1
Discipline: Environmental Engineer	Date: 12-04-13
Site Conditions: Clear, sunny, 58-76°F, 5-15 mph	

SITE LOG

1. Observed tree branches laying on power lines by lower leachate tanks (near landfill entrance).
2. Met with John Nelson, Clark Ajwani, Lukas Przybylo (LACoPW), Jim Aidukas (UltraSystems).
3. Checked in with Patti Costa at Republic office.
4. Measured County Top Deck elevations using a Trimble 2008 GeoXH GPS device (±0.1 m accuracy).
5. Measured Buttress area elevations and slope. Average elevation approx. 1,535 feet; 3.7 ac.; 4.8%.
6. Observed City Top Deck C sage revegetation area. Salt Bush and Quail Bush are growing well.
7. Measured City Deck B elevations and area with Trimble. Also measured three helicopter landing pads. Area less heli pads is approx. 8.2 acres; slope is approx. 8.0%.
8. Measured City Deck A elevations and area with Trimble. Area is approx. 2.02 acres; slope is approx. 6.0%.

FURTHER REVIEW NEEDED

1. Remove lower branches that are laying on power lines by lower leachate tanks.

Project Number: 5800 Signed: Mike Lindsay

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT

Monitor: James Aidukas	Page: 1 of 1
Discipline: Project Manager	Date: December 18, 2013
Site Conditions: 60-75˚ F	

SITE LOG

Republic Site Manger - Dave Hauser
Met with John Nelson, Dave Nguyen, Lukas Przbylo (LACDWP) and Mike Lindsay (UEI). Signed in, confirmed meeting with Republic staff after monitoring, and proceeded to monitor site.

- Observed Basin A. There was standing water from November rains. The northern hillside vegetation had more windblown litter than seen on 12-4-13.
- The material storage area had old corrugated pipe that was removed from the site during the building of the buttress stored in this area.
- The Basin D floor was re-sealed with soil sealant and was in good condition. The dirt area adjacent to the Basin D north drainage v-ditch was sealed with soil sealant since the last monitoring visit.
- The Basin D north drainage outlet pipes were blocked with tumble weed and HDPE liner material.
- The Edison facility at the gas-to-energy site was completed and ready for commissioning.
- Additional foundations were being installed for gas pre-treatment equipment at the gas-to-energy site. The exhaust ducts were being installed on the third turbine generator.
- The area that will be graded for the access road realignment was observed and oak trees and native vegetation will be impacted.
- Observed Deck C sage mitigation site and noted that salt bush and quail bush were the predominate plants that survived.
- Observed an abandoned gas pipe and buried corrugated steel drain pipe uncovered in the City South soil stockpile. The water from the drain pipe had no odor and appeared to be seep water. The water around the gas pipe had a landfill gas odor
- Observed the adjacent neighborhood and no odors were detected and no litter was seen.

Flare Operating Conditions:

- Flare 1 - 1694˚ F, 4029 SCFM, -52.70 " vacuum
- Flare 3 - 1673˚ F, 3613 SCFM

Met with Tim Johnson, Patti Costa, and Becky Van Sickle after the monitoring.

FURTHER REVIEW NEEDED

1. Clear vegetation of windblown litter at Basin A.

COMMENTS

Signed: J. Aidukas

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: **Mike Lindsay**	Page 1 of 2
Discipline: Environmental Engineer	Date: 12-18-13
Site Conditions: Clear, sunny, 56-75°F, 5-15 mph	

SITE LOG

1. Met with Dave Nguyen, Lukas Przybylo, John Nelson (LACDPW) and Jim Arvikas (UltraSystems).
2. Checked in with Patti Costa at Republic office.
3. Observed Sediment Basin A to be clear of debris and sediment, some standing water (~2") by drains.
4. Observed blown trash and debris along north-western slope of Sediment Basin A.
5. Observed BAS Pipe Storage Yard to be in good order.
6. Flare 9 is operating at 2755 SCFM, 1694°F; gas sample measured at 43% Vol. CH_4, 0.8% Vol. O_2, 760 ppm H_2S, 496 ppm CO. Supply gas at 117°F.
7. Flare 10 is operating at 2654 SCFM, 1664°F. Blowers 2 and 4 are running. (Gas sample same as F9)
8. Observed progress at Gas-to-Energy plant, with substation work now complete.
9. Observed City Top Deck C sage revegetation area. Salt and Quail Bush continue to thrive. Dead plantings have not been all replaced.
10. Flare 1 is operating at 4027 SCFM, 1695°F; gas sample measured at 26% Vol. CH_4, 5.3% O_2, 44.5 ppm H_2S, 153 ppm CO, at 1440F.
11. Toured surrounding neighborhoods for odor and detected no landfill smells. Neighborhood sediment basin was clear. No odors detected.

FURTHER REVIEW NEEDED

1. Remove trash and debris along north-western slope of Sediment Basin A.

Project Number: 5800	Signed: Mike Lindsay

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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: **Mike Lindsay**	Page 2 of 2
Discipline: Environmental Engineer	Date: 12-18-13
Site Conditions: Clear, sunny, 56-75°F, 5-15 mph	

SITE LOG

12. Flare 3 is operating at 3613 SCFM, 1673°F, gas sample measured at 38 %Vol. CH_4, 1.8 %Vol. O_2, 56.0 ppm H_2S, 450 ppm CO, 121°F.
13. Met with Tim Johnson, Patti Costa and Becky Van Sickle (Republic Services), and discussed the following:
a. An abandoned pipe was discovered on City side above access road. Could be source of odor; seep water is draining.
b. Seed mix for hydroseeding is being reviewed by City / County; includes non-native species.
c. Flare 8 and hillside below it to be taken down in 2014, after GTE plant is fully online.
d. Approx. 300,000 cubic yards of soil went into buttress.
e. UltraSystems noticed odors today at Flare 1 and Flare 3, but no leak detected at blower flanges.
f. Water board approved new access road.
g. Contractor has been awarded for new sewer line project; scheduled for January 2014; nighttime work permit approved. It will be a forced main due to the topography.

FURTHER REVIEW NEEDED

Project Number: 5800 Signed: Mike Lindsay

Appendix IV
Meeting Logs

Sunshine Canyon Landfill
Meeting Log for October 2013 Site Monitoring

October 9, 2013

Post-monitoring meeting with Patti Costa, Environmental Manger and Becky Van Sickle, Republic's Environmental Compliance Specialist

Attendees:

John Nelson, LACDPW
Clark Ajwani, LACDPW
Saeid Shirzadegan, LACDPW
James Aidukas, UltraSystems
Mike Lindsay, UltraSystems
Tarik Hadj-Hamou, SLR

The monitoring staff met with Patti Costa and Becky Van Sickle after monitoring and discussed with them the following observations and issues:

1. The grading for the new scraper access road and the need for biological, archeological and paleontological analysis in undisturbed areas, the need to perform site evaluations and supply required reports on the area that will be used for the new access road realignment, and the ultimate landfill toe berm were discussed.

   Becky Van Sickle said that biological, archeological, and paleontological reports were done for the new scraper access road and were in her office.
   Patti Costa said that the required analysis (biological, archeological, and paleontological) will be done for the road realignment and ultimate landfill toe berm prior to the initiation of construction.

2. The accelerometer adjacent to the main access road was observed to have a hole in the enclosure and appeared not to be maintained. This equipment should have maintenance performed on it and a new enclosure.

   Patti Costa said that the unit will be relocated in 2014 and maintained or updated, if required.

3. It was observed that a shaft seal on a Flare 1 blower was leaking oil.

   Patti Costa said that she would notify Achaya Kelapanda of this condition.

4. It was observed that the terminal basin wall facing the landfill access road had the previously seen horizontal cracks worsened. The westside drainage channel concrete walls in one area had spalling and cracks and two trees growing adjacent to the walls on the east and west sides. The concrete floor was uplifting in a section of the channel.
   Trash was observed on the outside perimeter wall of the terminal basin.

   Patti Costa said that she would let operations know of our observations.

5. It was asked what was the status of the sewer pipeline project.

   Patti Costa said that the sewer pipeline project was being delayed until the first quarter of 2014.

6. It was observed that the leachate treatment facility's electric powerlines were hanging on tree branches posting a potential fire hazard.

   Patti Costa said that she would let operations know of the observed conditions.

7. It was asked if the high Santa Ana winds caused any operational problems.

   Patti Costa said that the landfill was closed on October 5th and 6th due to high winds.

October 23, 2013

Post-monitoring meeting with Patti Costa, Environmental Manger and Becky Van Sickle, Republic's Environmental Compliance Specialist.

Attendees:

John Nelson, LACDPW
Dave Nguyen, LACDPW
Lukas Przybylo, LACDPW
James Aidukas, UltraSystems
Mike Lindsay, UltraSystems

The following discussion took place:

1. Basins A and B had windblown litter in the back hillside of the basins.

   Patti Costa said she would advise operations of the conditions observed.

2. The westside drainage channel concrete walls and bottom had cracking and spalling and trees growing adjacent to the channel and are undermining the sidewalls.

   Patti Costa said that the facility maintenance/operations personnel would be notified of the conditions observed.

3. It was stated that UltraSystems thought some of the vegetation growing in the City Deck C sage mitigation area might be Lambs Quarter, an aggressive non-native. Our biologist was not onsite to confirm.

   Patti Costa said that the plant we showed her a photo of was not Lamb Quarters, but Salt Bush, a plant seed planted for mitigation.

4. The question was asked when the access road realignment and ultimate toe berm construction would start and when plans would be available for the agencies to review.

   Patti Costa said that the plans were being reviewed by Republic today (October 23rd) and should be finalized by the end of the year.

Sunshine Canyon Landfill
Meeting Log for November 2013 Site Monitoring

November 13, 2013

Post-monitoring meeting with Becky Van Sickle, Republic's Environmental Compliance Specialist

Attendees:
John Nelson, LACDPW
Russell Bukoff, LACDPW
James Aidukas, UltraSystems
Joe Thompson, UltraSystems
Mike Lindsay, UltraSystems

Discussion:

Russell Bukoff and Joe Thompson discussed the City Sage Mitigation on Deck C and the mixed results in establishing sage on this deck. Becky Van Sickle said that their consultant was planning on replanting container plants within the next two weeks. Joe Thompson suggested that an evaluation as to the cause for the plants dying be performed before replanting the same kind.

Russell Bukoff asked about the County Sage Mitigation Area. Ms. Van Sickle said that no activity was planned for the area at this time. John Nelson asked when hydroseeding of inactive areas and temporary slopes will be done. Ms. Van Sickle stated that hydroseeding is schedule to occur in December.

James Aidukas reported that the monitors observed the Big Cone Fir mitigation area and the Oak mitigation area around the canyon and that both areas were doing well, with no problem areas noted.

Sunshine Canyon Landfill
Meeting Log for December 2013 Site Monitoring

December 18, 2013

Post-monitoring meeting with Tim Johnson, Republic's Division Manager; Patti Costa, Republic's Environmental Manager; and Becky Van Sickle, Republic's Environmental Compliance Specialist

Attendees:
John Nelson, LACDPW
David Nguyen, LACDPW
Lukas Przbylo, LACDPW
James Aidukas, UltraSystems
Mike Lindsay, UltraSystems

Discussion:

1. We asked about the abandoned gas pipe and corrugated steel drain pipe uncovered in the City south soil stockpile area. Tim Johnson stated that they were going to move additional soils so that the abandoned gas line could be better exposed, cut, and capped. It is planned to further uncover the steel drain pipe to the final fill boundary and install drilled drain pipes to recover and discharge this seep water.

2. We asked about the revised seed mix to have seed for plants that will grow in the landfill soils. Patti Costa said that a revised seed mix that includes some non-native seeds was submitted to the City and County for their review.

3. We asked about the timing of the start of grading for removing the Flare 8 hill to allow for additional flares. Tim Johnson said that this grading will not start until after the gas-to-energy facility is fully operational. This could be late 3rd Quarter 2014. He said that this will involve moving approximately 300,000 yards of soil, about the same quantity of soil that went into constructing the buttress.

4. We asked about the timing of the new access road realignment. Patti Costa said that the water board had approved the CC-3B design and that the corresponding drainage design will be done in March and submitted to the water board for approval at that time. John Nelson stated that the County needs to review and approve the drainage design.

5. We asked about the status of the new sewer pipeline construction. Patti Costa said that the project construction contractor has been awarded a contract. It will be a forced main sewer pipeline. The construction will occur at night and is scheduled to start in 1st Quarter 2014.

Appendix V
Landfill Elevations

INTRODUCTION

During the fourth quarter of 2013, UltraSystems conducted Global Positioning System (GPS) surveys at the Sunshine Canyon Landfill, located in Sylmar, California. GPS data was collected for the top deck area and non-vegetated areas on the Los Angeles County side of the landfill, Decks A and B on the City of Los Angeles side of the landfill, and the Buttress area.

EQUIPMENT USED

A Trimble GeoXH 2008 Series handheld GPS device running TerraSync Professional software was used for the measurements. The device has a horizontal and vertical accuracy of 0.1 meters. The GPS built-in antenna was used with a four-foot vertical offset to compensate for carrying the device. Also, the unit was kept ten feet away from any materials that could have an effect on satellite signal reception (e.g. metal within well heads).

MEASUREMENT LOCATIONS

Transect lines were walked for elevation data along natural contours, ridge lines, break points and high/ low areas. For reference purposes, several gas well locations were measured multiple times, each on a different survey date. This helped to verify data consistency. Also, previous transect lines were navigated on the County top deck so elevation comparisons could be made.

MEASUREMENT RESULTS

For this reporting period, elevation measurements showed a slight decrease in stockpiled soil on the County top deck. For the County top deck area, the average elevation was 1,871.9 feet above mean sea level. The average gain in elevation for this same area was -0.7 feet (see GPS Elevation Data Table, Appendix V).

Three County non-vegetated slopes were measured for area (acres) and slope (percent grade). Two of the slopes are along the westside perimeter access road, and the third slope is between Flare 9/10 and the new Sunshine Substation.

GPS data was also collected for City Deck A, City Deck B and the Buttress area. For City Deck B, the area of the three helicopter landing pads was subtracted from the overall area of the deck. Both the area in acres and slope in percent grade were calculated.

GPS Data Logs

October 9, 2013

County Top Deck Elevation Measurements

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

October 23, 2013

County Non-Vegetated Areas Elevation Measurements

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

December 4, 2013

County Top Deck Elevation Measurements

City Deck A Area and Slope Measurements

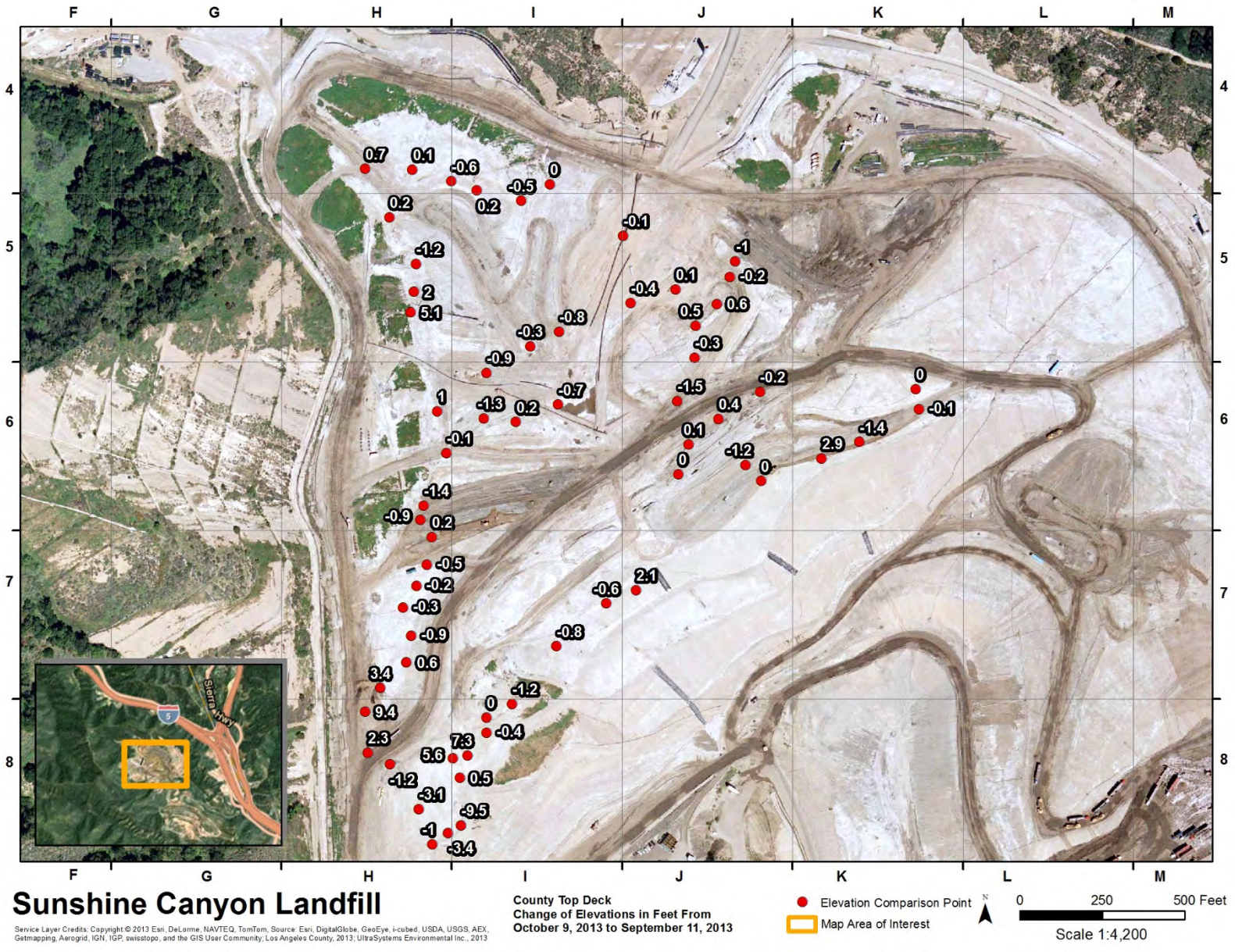
City Deck B Area and Slope Measurements

Buttress Area Elevation and Slope Measurements

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

GPS Elevation Maps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-0.1
-1.2
-1
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-0.4
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-1.2
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5.6
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-3.4
Sierra Hwy
5
Sunshine Canyon Landfill
Service Layer Credits: Copyright © 2013 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; Los Angeles County, 2013; UltraSystems Environmental Inc., 2013
County Top Deck
Change of Elevations in Feet From
October 9, 2013 to September 11, 2013
Elevation Comparison Point
Map Area of Interest
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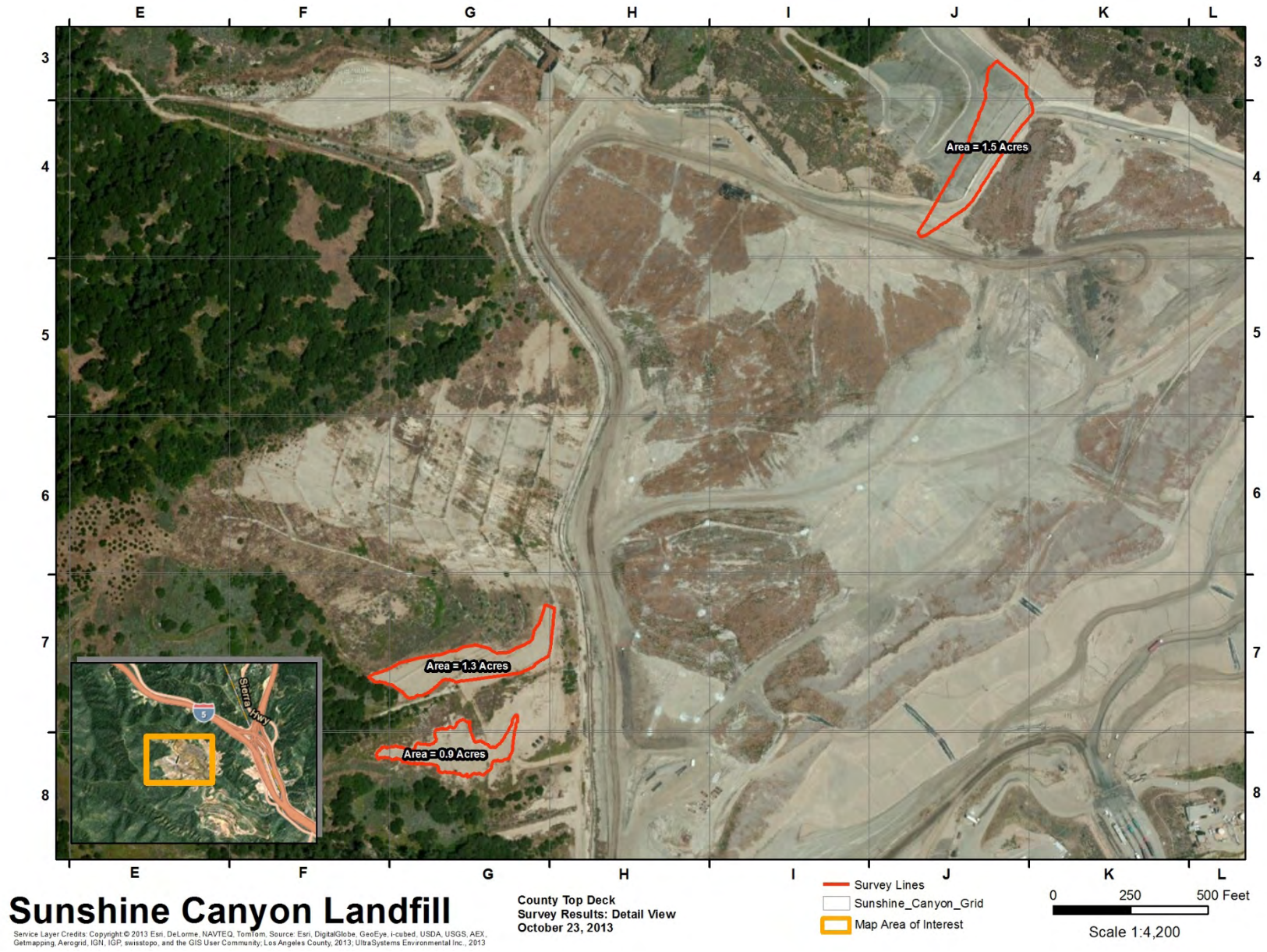
500 Feet
Scale 1:4,200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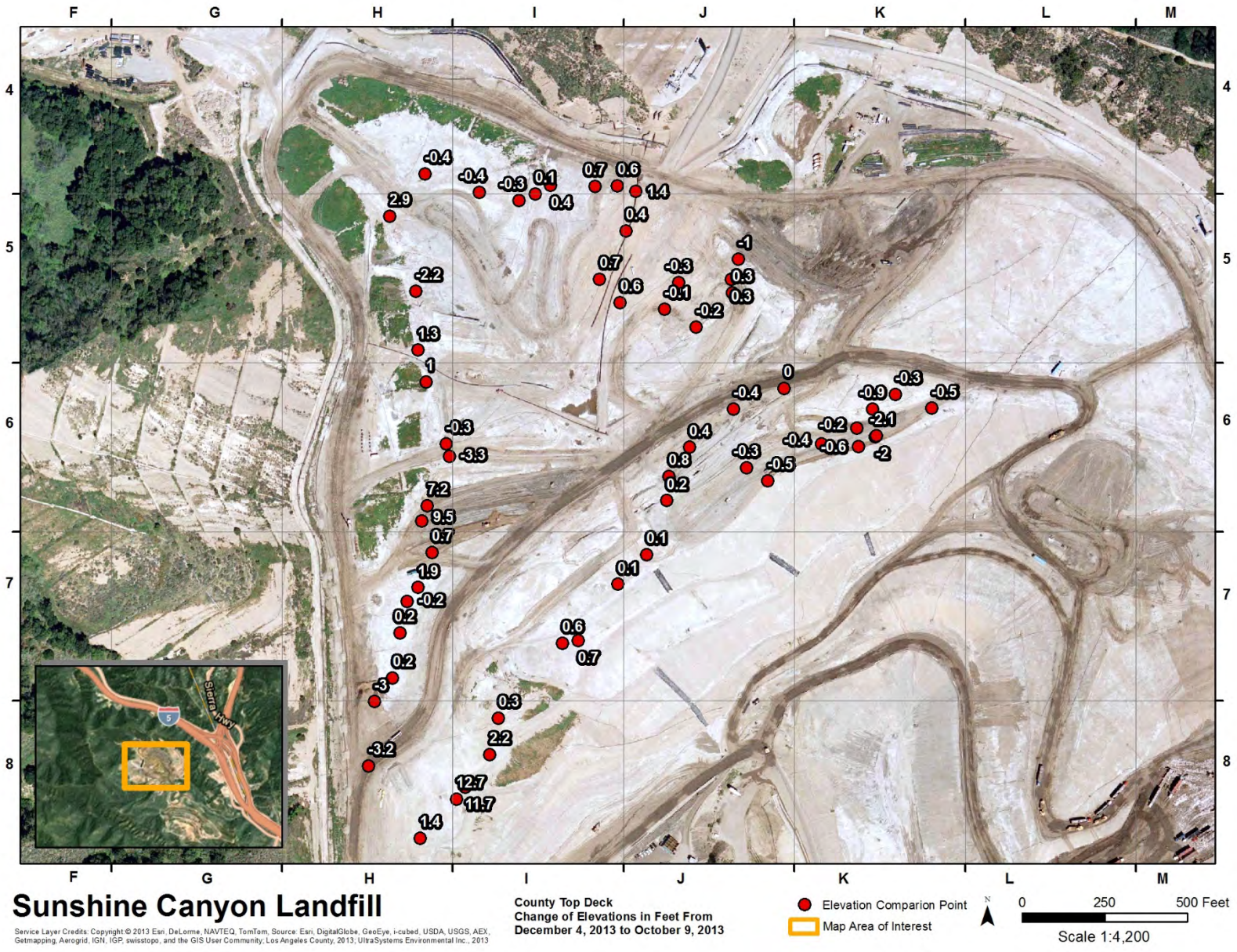
Area = 1.5 Acres
Area = 1.3 Acres
Area = 0.9 Acres
Sierra Hwy
5
Sunshine Canyon Landfill
Service Layer Credits: Copyright © 2013 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; Los Angeles County, 2013; UltraSystems Environmental Inc., 2013
County Top Deck
Survey Results: Detail View
October 23, 2013
Survey Lines
Sunshine_Canyon_Grid
Map Area of Interest
0
250
500 Feet
Scale 1:4,200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0.3
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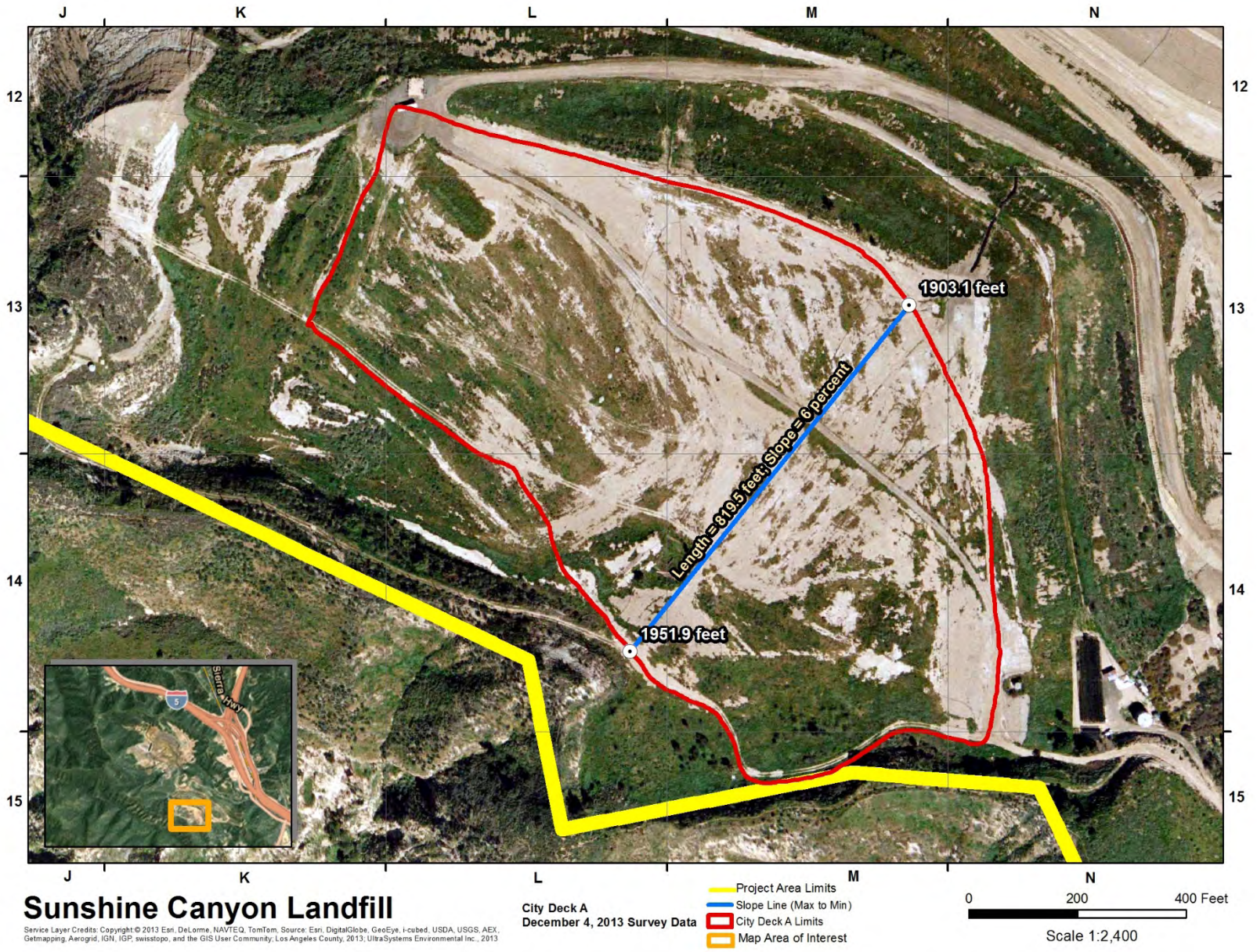
-3.2
12.7
11.7
1.4
Sierra Hwy
5
Sunshine Canyon Landfill
Service Layer Credits: Copyright © 2013 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; Los Angeles County, 2013; UltraSystems Environmental Inc., 2013
County Top Deck
Change of Elevations in Feet From
December 4, 2013 to October 9, 2013
Elevation Comparion Point
Map Area of Interest
N
0
250
500 Feet
Scale 1:4,200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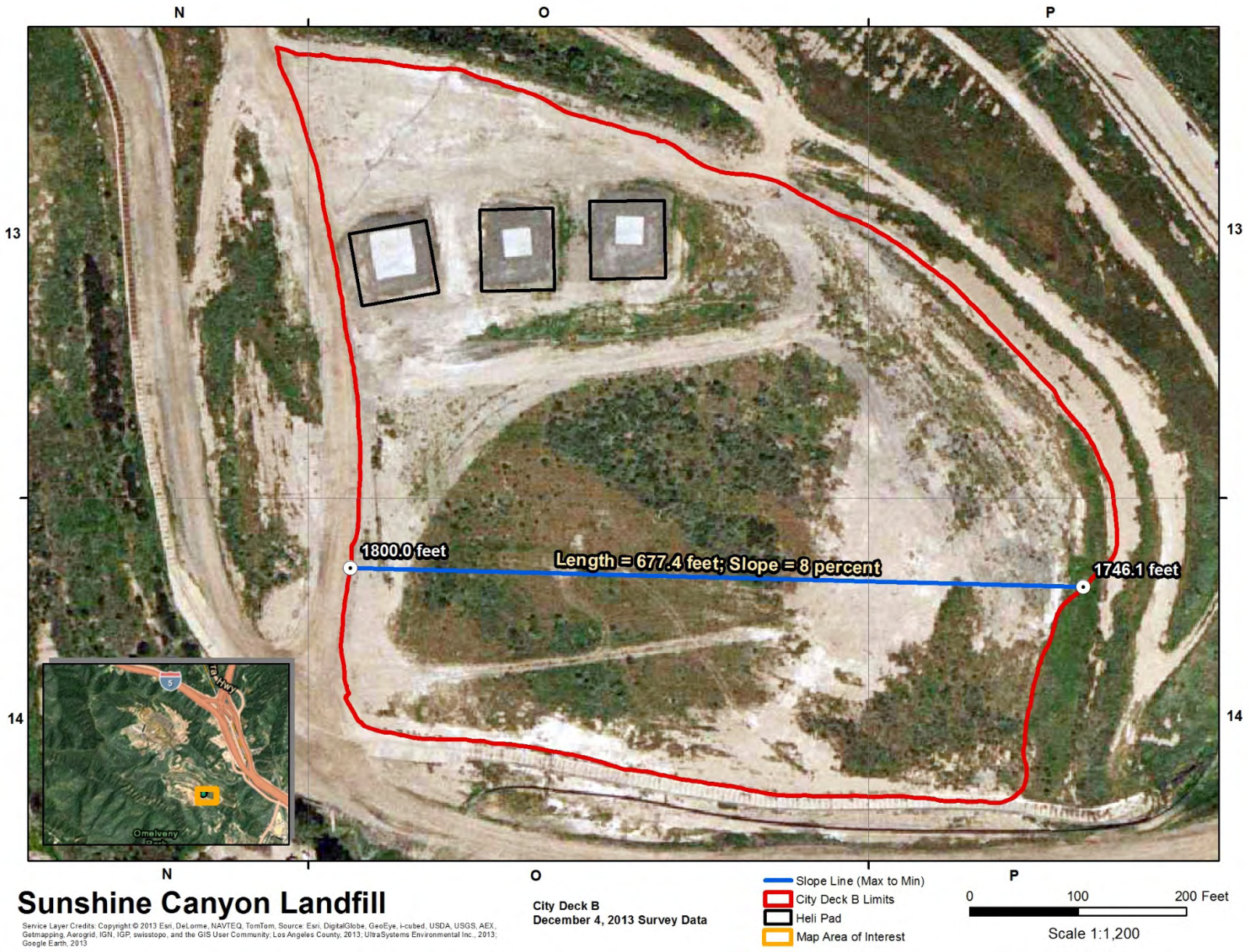
14
15
1903.1 feet
Length = 619.5 feet; Slope = 6 percent
1951.9 feet
Sierra Hwy
5
Sunshine Canyon Landfill
City Deck A
December 4, 2013 Survey Data
Project Area Limits
Slope Line (Max to Min)
City Deck A Limits
Map Area of Interest
0
200
400 Feet
Scale 1:2,400
Service Layer Credits: Copyright © 2013 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; Los Angeles County, 2013; UltraSystems Environmental Inc., 2013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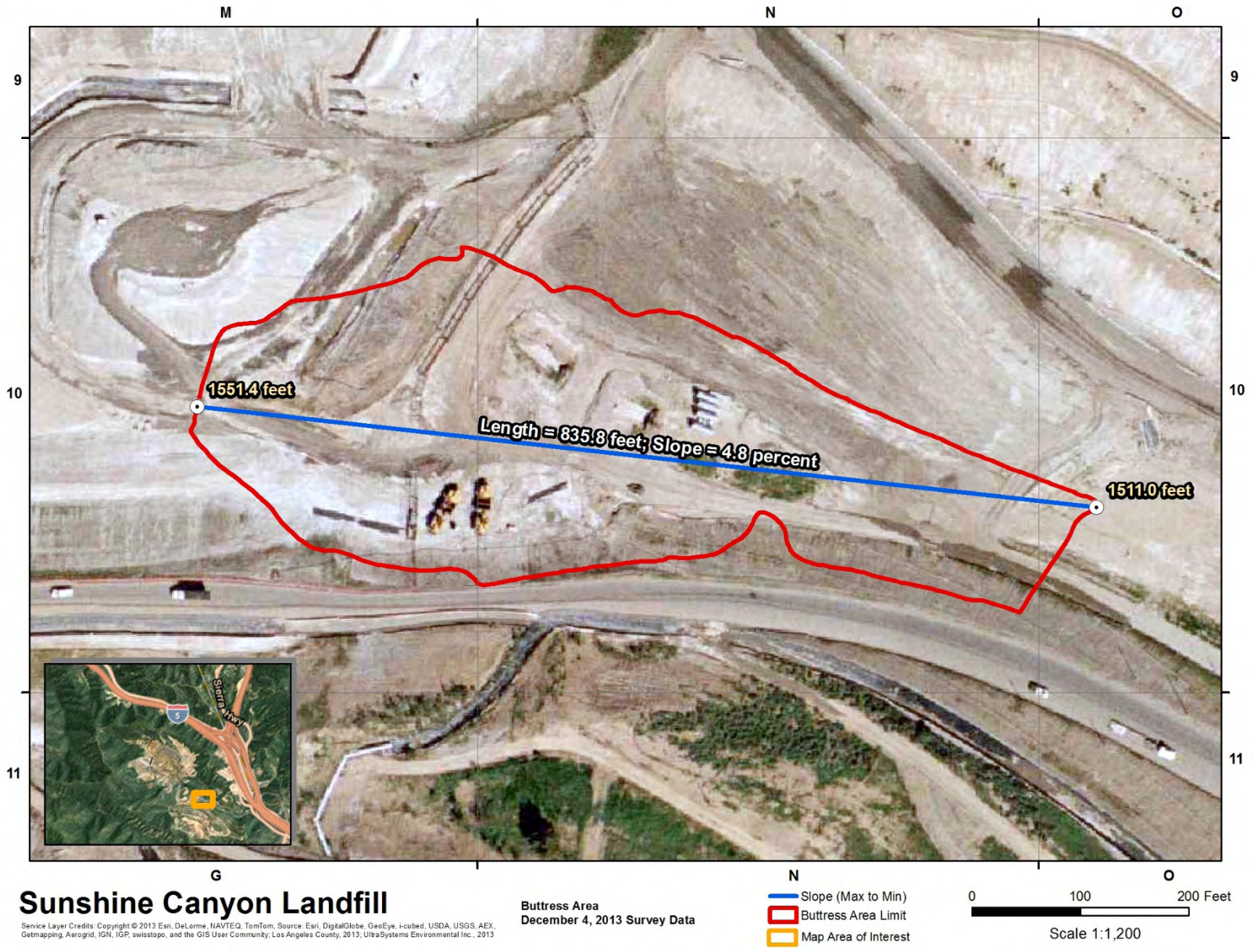
Length = 677.4 feet; Slope = 8 percent
1746.1 feet
Sunshine Canyon Landfill
City Deck B
December 4, 2013 Survey Data
Slope Line (Max to Min)
City Deck B Limits
Heli Pad
Map Area of Interest
0
100
200 Feet
Scale 1:1,200
Service Layer Credits: Copyright © 2013 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; Los Angeles County, 2013; UltraSystems Environmental Inc., 2013; Google Earth, 2013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10
11
1551.4 feet
Length = 835.8 feet; Slope = 4.8 percent
1511.0 feet
Sierra Hwy
5
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Sunshine Canyon Landfill
Service Layer Credits: Copyright © 2013 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; Los Angeles County, 2013; UltraSystems Environmental Inc., 2013
Buttress Area
December 4, 2013 Survey Data
Slope (Max to Min)
Buttress Area Limit
Map Area of Interest
0
100
200 Feet
Scale 1:1,200

GPS Elevation Data Tables

SCL – Elevation Comparison of September 11, 2013 and October 9, 2013 Surveys (feet)

Map Grid	GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference Sep 11 / Oct 9
I8	09-11-2013	1872.3	10-09-2013	1872.3	0.0
I8	09-11-2013	1872.6	10-09-2013	1871.4	-1.2
I7	09-11-2013	1881.4	10-09-2013	1880.6	-0.8
I7	09-11-2013	1883.2	10-09-2013	1882.6	-0.6
J7	09-11-2013	1874.0	10-09-2013	1876.1	2.1
J6	09-11-2013	1877.7	10-09-2013	1877.6	0.0
K6	09-11-2013	1863.1	10-09-2013	1866.0	2.9
K6	09-11-2013	1862.3	10-09-2013	1860.9	-1.4
K6	09-11-2013	1849.2	10-09-2013	1849.1	-0.1
K6	09-11-2013	1848.6	10-09-2013	1848.7	0.0
J6	09-11-2013	1880.6	10-09-2013	1879.4	-1.2
J6	09-11-2013	1892.8	10-09-2013	1892.8	0.0
J6	09-11-2013	1870.2	10-09-2013	1869.9	-0.2
J6	09-11-2013	1882.4	10-09-2013	1882.8	0.4
J6	09-11-2013	1890.4	10-09-2013	1890.5	0.1
J6	09-11-2013	1878.0	10-09-2013	1876.5	-1.5
J5	09-11-2013	1870.1	10-09-2013	1869.8	-0.3
J5	09-11-2013	1868.6	10-09-2013	1869.2	0.5
J5	09-11-2013	1867.4	10-09-2013	1868.0	0.6
J5	09-11-2013	1870.6	10-09-2013	1870.4	-0.2
J5	09-11-2013	1873.2	10-09-2013	1872.2	-1.0
J5	09-11-2013	1872.8	10-09-2013	1872.9	0.1
J5	09-11-2013	1880.4	10-09-2013	1879.9	-0.4
I6	09-11-2013	1888.6	10-09-2013	1887.8	-0.7
I6	09-11-2013	1884.6	10-09-2013	1884.9	0.2

Map Grid	GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference Sep 11 / Oct 9
I6	09-11-2013	1881.1	10-09-2013	1879.8	-1.3
I6	09-11-2013	1883.0	10-09-2013	1882.1	-0.9
I5	09-11-2013	1889.2	10-09-2013	1888.8	-0.3
I5	09-11-2013	1891.6	10-09-2013	1890.8	-0.8
J5	09-11-2013	1868.0	10-09-2013	1867.8	-0.1
I4	09-11-2013	1866.9	10-09-2013	1866.9	0.0
I5	09-11-2013	1876.7	10-09-2013	1876.3	-0.5
I4	09-11-2013	1883.1	10-09-2013	1883.4	0.2
H4	09-11-2013	1885.6	10-09-2013	1885.0	-0.6
H4	09-11-2013	1889.0	10-09-2013	1889.0	0.1
H4	09-11-2013	1892.0	10-09-2013	1892.6	0.7
H5	09-11-2013	1880.5	10-09-2013	1880.8	0.2
H5	09-11-2013	1875.9	10-09-2013	1874.7	-1.2
H5	09-11-2013	1873.0	10-09-2013	1875.0	2.0
H5	09-11-2013	1871.9	10-09-2013	1877.0	5.1
H6	09-11-2013	1878.3	10-09-2013	1879.4	1.0
H6	09-11-2013	1874.5	10-09-2013	1874.5	-0.1
H6	09-11-2013	1871.4	10-09-2013	1870.0	-1.4
H6	09-11-2013	1871.1	10-09-2013	1870.1	-0.9
H7	09-11-2013	1878.2	10-09-2013	1878.5	0.2
H7	09-11-2013	1878.4	10-09-2013	1877.9	-0.5
H7	09-11-2013	1876.7	10-09-2013	1876.5	-0.2
H7	09-11-2013	1875.0	10-09-2013	1874.6	-0.3
H7	09-11-2013	1874.8	10-09-2013	1873.9	-0.9
H7	09-11-2013	1874.7	10-09-2013	1875.3	0.6
H7	09-11-2013	1870.3	10-09-2013	1873.7	3.4

Map Grid	GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference Sep 11 / Oct 9
H8	09-11-2013	1863.7	10-09-2013	1873.1	9.4
H8	09-11-2013	1863.0	10-09-2013	1865.3	2.3
H8	09-11-2013	1863.9	10-09-2013	1862.7	-1.2
H8	09-11-2013	1862.1	10-09-2013	1859.0	-3.1
H8	09-11-2013	1854.8	10-09-2013	1853.8	-1.0
H8	09-11-2013	1857.1	10-09-2013	1853.7	-3.4
I8	09-11-2013	1860.5	10-09-2013	1851.0	-9.5
I8	09-11-2013	1860.8	10-09-2013	1861.3	0.5
I8	09-11-2013	1863.7	10-09-2013	1869.2	5.6
I8	09-11-2013	1862.6	10-09-2013	1869.9	7.3
I8	09-11-2013	1870.9	10-09-2013	1870.4	-0.4
	09-11-2013	1873.7 (Average)	10-09-2013	1873.8 (Average)	0.1 (Average)

SCL – County Non-Vegetated Areas (acres)

Location	Map Grid	GPS Survey Date	Area (acres)
Westside Perimeter	G7	10-23-2013	1.3
Westside Perimeter	G8	10-23-2013	0.9
East of Flare 9/10	J4	10-23-2013	1.5

SCL – Elevation Comparison of October 9, 2013 and December 4, 2013 Surveys (feet)

Map Grid	GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference Oct 9 / Dec 4
H8	10-09-2013	1857.8	12-04-2013	1856.4	1.4
I8	10-09-2013	1868.1	12-04-2013	1855.4	12.7
I8	10-09-2013	1869.8	12-04-2013	1858.2	11.7
I8	10-09-2013	1866.6	12-04-2013	1864.4	2.2
I8	10-09-2013	1871.9	12-04-2013	1871.6	0.3
I7	10-09-2013	1881.5	12-04-2013	1880.9	0.6
I7	10-09-2013	1881.6	12-04-2013	1880.9	0.7
I7	10-09-2013	1884.9	12-04-2013	1884.8	0.1
J7	10-09-2013	1889.8	12-04-2013	1889.7	0.1
J6	10-09-2013	1876.1	12-04-2013	1876.6	-0.5
K6	10-09-2013	1861.8	12-04-2013	1862.4	-0.6
K6	10-09-2013	1860.6	12-04-2013	1862.6	-2.0
K6	10-09-2013	1860.4	12-04-2013	1862.5	-2.1
K6	10-09-2013	1843.6	12-04-2013	1844.0	-0.5
K6	10-09-2013	1855.5	12-04-2013	1855.8	-0.3
K6	10-09-2013	1857.7	12-04-2013	1858.7	-0.9
K6	10-09-2013	1860.0	12-04-2013	1860.2	-0.2
K6	10-09-2013	1862.1	12-04-2013	1862.4	-0.4
J6	10-09-2013	1879.3	12-04-2013	1879.6	-0.3
J6	10-09-2013	1893.7	12-04-2013	1893.5	0.2
J6	10-09-2013	1893.7	12-04-2013	1892.9	0.8
J6	10-09-2013	1891.3	12-04-2013	1890.9	0.4
J6	10-09-2013	1878.1	12-04-2013	1878.5	-0.4
J6	10-09-2013	1866.2	12-04-2013	1866.2	0.0
J5	10-09-2013	1866.2	12-04-2013	1866.0	0.3

Map Grid	GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference Oct 9 / Dec 4
J5	10-09-2013	1868.9	12-04-2013	1869.1	-0.2
J5	10-09-2013	1870.6	12-04-2013	1870.3	0.3
J5	10-09-2013	1871.0	12-04-2013	1872.0	-1.0
J5	10-09-2013	1872.3	12-04-2013	1872.6	-0.3
J5	10-09-2013	1874.4	12-04-2013	1874.4	-0.1
I5	10-09-2013	1883.2	12-04-2013	1882.6	0.6
I5	10-09-2013	1877.0	12-04-2013	1876.4	0.7
J5	10-09-2013	1867.6	12-04-2013	1867.2	0.4
J4	10-09-2013	1864.4	12-04-2013	1863.0	1.4
I4	10-09-2013	1864.8	12-04-2013	1864.1	0.6
I4	10-09-2013	1866.3	12-04-2013	1865.6	0.7
I4	10-09-2013	1867.2	12-04-2013	1866.7	0.4
I5	10-09-2013	1871.6	12-04-2013	1871.4	0.1
I5	10-09-2013	1876.6	12-04-2013	1876.9	-0.3
I5	10-09-2013	1882.8	12-04-2013	1883.2	-0.4
H4	10-09-2013	1887.4	12-04-2013	1887.8	-0.4
H5	10-09-2013	1884.2	12-04-2013	1881.3	2.9
H5	10-09-2013	1872.7	12-04-2013	1874.9	-2.2
H5	10-09-2013	1872.8	12-04-2013	1871.5	1.3
H6	10-09-2013	1873.8	12-04-2013	1872.8	1.0
H6	10-09-2013	1875.2	12-04-2013	1875.5	-0.3
H6	10-09-2013	1873.9	12-04-2013	1877.3	-3.3
H6	10-09-2013	1877.4	12-04-2013	1870.2	7.2
H6	10-09-2013	1879.3	12-04-2013	1869.7	9.5
H7	10-09-2013	1879.2	12-04-2013	1878.5	0.7
H7	10-09-2013	1878.4	12-04-2013	1876.5	1.9

Map Grid	GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference Oct 9 / Dec 4
H7	10-09-2013	1874.7	12-04-2013	1874.9	-0.2
H7	10-09-2013	1872.7	12-04-2013	1872.5	0.2
H7	10-09-2013	1873.2	12-04-2013	1873.0	0.2
H8	10-09-2013	1871.8	12-04-2013	1874.9	-3.0
H8	10-09-2013	1861.1	12-04-2013	1864.2	-3.2
	10-09-2013	1872.6 (Average)	12-04-2013	1871.9 (Average)	-0.7 (Average)

SCL – Area and Slope for City Deck A, Deck B and Buttress

Location	Map Grid	GPS Survey Date	Area (acres)	Slope (%)
City Deck A	M13	12-04-2013	21.2	6.0
City Deck B (less 3 heli pads)	O13	12-04-2013	8.2	8.0
Buttress	N10	12-04-2013	3.7	4.8

Appendix VI
Biologist's Vegetation Monitoring Fourth Quarter Summary Memo

UltraSystems
environmental management planning

Memo

To: James Aidukas

From: Joe Thompson

CC: Mike Lindsay

Date: December 2, 2013

Re: Sunshine Canyon Vegetation Recommendations

On November 13, 2013 I visited the Sunshine Canyon Landfill in order to report on the status of coastal sage scrub revegetation efforts at Deck C, City of Los Angeles Mitigation Area, the Top Deck, County of Los Angeles West Slope Mitigation Area, and the steep slopes adjacent to Flare 9. During the site visit, I examined the three sites for native vegetation cover, health of native species, erosion, and weed infestations. I also took photo documentation and observed weather conditions. In this report I have provided summaries of the conditions that I and other UltraSystems staff observed at these three sites and recommendations for further mitigation efforts. Previous site visits had been conducted on April 10, May 1, and May 29 of 2013.

Please also not that although my recommendations for future revegetation efforts at Deck C, City of Los Angeles Mitigation Area, the Top Deck, County of Los Angeles West Slope Mitigation Area were derived independently of previous reports, they are highly similar to those that were made in the *Coastal Sage Scrub and Interim Cover Revegetation Plan* that was prepared in 2008 for Browning Ferris Industries of California, Inc.

Deck C, City of Los Angeles Mitigation Area

This year, the Deck C, City of Los Angeles mitigation area underwent an intensive revegetation effort. The site was tilled to a depth of approximately 6 inches, micro topography was created using earth and boulders, an irrigation system using a permanent water supply, a combination of overhead sprinklers and drip was installed, and the site was planted in early May with native coastal sage species. I visited the site on May 29, 2013 and noted the following native species, which had recently been planted from container stock: black sage (*Salvia melifera*), coastal sagebrush (*Artemisia californica*), white sage (*Salvia apiana*), blue elderberry (*Sambucus nigra ssp. caerulea*), bush monkeyflower (*Mimulus aurantiacus*), coyote bush (*Baccharis pilularis*) and bush sunflower (*Encelia californica*). All of these plantings appeared to be in good health. The site had also been hydroseeded to fill in the gaps between the container plants and some were germinating, but they had not yet reached an identifiable stage.

Jim Aidukas conducted a follow-up investigation of the site on June 25, 2013 and noted that many plantings had either died or were showing signs of severe stress, which mainly consisted of drying

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leaves. Most of the sage plants (California sagebrush, white sage, and black sage) appeared to be surviving; however, blue elderberry plants were either dead or in poor condition. Hydroseeded plants were also either dead or in poor condition. The deteriorating condition of the plants was attributed to intense heat and strong, dry winds, which are typical for the site during the summer months. These observations took place several days prior to a major heat wave, which was expected to bring daytime temperatures of over 100 degrees F and strong winds, which presumably would result in further deterioration of the plantings.

During the November 13 site visit, the dominant species were four-wing saltbush (*Atriplex canescens*) and big saltbush (*Atriplex lentiformis*). These two salt and drought-tolerant species were part of the hydroseed mix and were best able to survive the spring/early summer planting schedule as well as possibly high salt conditions at the site. All other plantings were either extirpated or in poor condition.

Recommendations

Aside from four-wing saltbush and big saltbush, most plantings are expected to die out once supplemental water is removed. A few of the remnant coastal sagebrush plantings and coyote bush are expected to survive and persist if they survive until the next major rains.

The primary reason for failure of this revegetation effort was the decision to plant in May instead of fall, as is the typical practice for coastal sage scrub vegetation communities. For the next effort, the following measures are recommended:

1. It is imperative that new plantings, particularly on exposed sites such as those found at Deck C be planted in the fall, ideally at the onset of the season's first gentle rains.

2. The seed mix and container plantings should be for Venturan coastal sage scrub, and in particular, those species that are well-adapted to the site's microclimate. A guide for potentially successful planting could be obtained by sampling the vegetation at undisturbed sites in the vicinity that have similar elevation, topography, aspect, and soils. Two species that should have been planted because they are prevalent within the nearby vegetation communities and thus would have had a high probability of success were not present: flat-top buckwheat (*Eriogonum fasciculatum*) and broom baccharis (*Baccharis sarothroides*).

3. The irrigation system should remain in place and be used to supplement dry periods during the growing season until the plants are well established.

4. Weeding should be performed periodically in order to prevent infestations and eliminate them as a source of competition until all of the large gaps within the coastal sage scrub vegetation are filled and irrigation is discontinued.

5. Monitoring for native vegetation cover values should be performed periodically in order to assess progress towards meeting the California Department of Fish and Wildlife (CDFW) mitigation requirements.

6. Following monitoring, Republic Services should use the tools they have available: irrigation, replanting, fertilizing, and weeding in order to maximize their progress towards meeting their mitigation requirements.

County of Los Angeles West Slope Sage Mitigation Area

This mitigation area has been planted using a mix of CSS species. An irrigation system using overhead sprinklers is in place, but does not appear to have been used recently. The slope is approximately 1/1 and consists of very friable soil material, derived from sediments. During all three surveys, the soil was very dry indicating that the site is currently not being irrigated and does not appear to be maintained for weeds.

Overall, the CSS community is in very poor condition, except for a narrow band of vegetation associated with a shallow drainage. This band is approximately 50 feet wide and strongly indicates that the presence of greater soil moisture associated with the drainage and possibly, shelter from desiccating winds are the primary factors for the success of this narrow portion of the mitigation area. There is evidence of erosion on the form of numerous rills and several small (2-3 foot) gullies within the slope. Several concrete brow ditches have been constructed on longitudinal slopes to reduce these impacts. Also, there are five or so terraces within the slope that help to retard the velocity of runoff water. Areas where non-native grasses have been allowed to persist had less erosion than the bare slopes where weeds have been removed. Weeds are prevalent and consist primarily of mustards including *Hirshfeldia incana* and *Brassica spp.* And annual grasses including *Bromus diandrus* and *B. hordeaceus.*

Recommendations

The lack of success at the site is clearly due to lack of soil moisture and desiccating winds, with erosion being a secondary factor. It is therefore recommended that revegetation efforts consist of the following:

1. Ensure that the irrigation system is in fully operational condition and is able to cover 100 percent of the areas where plants are to be planted. There should be a sufficient water supply to allow deep watering during the growing season and to allow for continuous watering during dry winds.

2. Measures to reduce erosion may include terracing, straw wattles, netting, hydromulch, and silt fencing. It is evident that some of these measures have been employed in the past; however, they were not successful, as they didn't take into account the steepness of the slope, occasional intense rainfall, and extremely friable and hydrophobic soils.

3. Planting should take place in the fall, coinciding with the first gentle rains. The irrigation should be used to supplement dry periods throughout the dry season. The use of irrigation should taper off as plants become established.

4. Maintenance of the site should be adaptive. Plants that fail should be removed and replaced immediately after they die and weed infestations should be either treated with herbicides or pulled. Evidence of erosion should be corrected immediately.

5. Goals for percent cover of native vegetation should be established and assessed at regular intervals using standardized vegetation sampling techniques. The results should be documented into a vegetation sampling report and adjustments should be made based on the survey results in order to meet the mitigation requirements.

Steep Slopes Above and Adjacent to Flare 9-Temporary and Permanent

The hillside adjacent to Flare 9 has a greater than 1:1 slope and faces primarily southeast. The steepness and aspect of this site presents a serious challenge for revegetation. Options are also limited by the requirement that vegetation be of low flammability. Jute netting has been placed over the hillside and has done a good job of stabilizing the soil. There is no evidence of serious erosion. No attempt has been made to plant native vegetation and a few weeds have begun colonizing the site. However, for the time being these weeds are considered beneficial because they are helping to stabilize the slope. These slopes are temporary and will be graded in future years.

The slopes below the Flare 9 pad and the Gas to Energy pad are permanent slopes and should be revegetated with vegetation of low flammability.

Recommendations

1. The existing erosion control measures, which presently consist of jute netting, should be reinforced. Adding a layer of straw and covering it with an additional layer of jute netting would provide a mulch that would reduce weeds, add nutrients, and further stabilize the soil.

2. An irrigation system with a permanent source of water should be installed and should be fully operational prior to the planting.

3. Plantings should be selected for their drought and fire resistance. Native plants should be selected if possible. No potentially invasive plants should be used. Good choices could include cacti, four-wing saltbush, big saltbush, broom baccharis, California poppy (*Eschscholzia californica*), telegraph plant (*Heterotheca grandiflora*), and tar plant (*Holocarpha spp.*).

4. Planting should take place in the fall, coinciding with the first gentle rains. The irrigation should be used to supplement dry periods throughout the dry season. The use of irrigation should taper off as plants become established.

5. Maintenance of the site should be adaptive. Plants that fail should be removed and replaced immediately after they die and weed infestations should be either treated with herbicides or pulled. Evidence of erosion should be corrected immediately.

6. Goals for percent cover of native vegetation should be established and assessed at regular intervals using standardized vegetation sampling techniques. The results should be documented into a vegetation sampling report and adjustments should be made based on the survey results in order to meet the mitigation requirements.

UltraSystems
environmental management planning

Memo

To: James Aidukas

From: Joe Thompson

CC: Mike Lindsay

Date: December 23. 2013

Re: Seed Mix

Jim,

I have reviewed the seed mix provided by S&S Seeds to Republic and dated December 16, 2013. The following species are non-native; however, they are not listed by the California Invasive Plant Council (Cal IPC) as invasive: *Bromus inermis, Elymus Canadensis, Elymus trachycaulus, Eragrostis curvata, Festuca ovina, and Poa compressa and Panicum virgatum* (*Panicum virgatum* is misspelled on the S&S Seeds list).

Festuca arundinaceae is considered mildly invasive; however, it is doubtful that it could be competitive with the established native and non-native vegetation in and around Sunshine Canyon. The remaining plants: *Bromus carinatus, Helianthus annua, Achillea millefolium, Atriplex canescens, Hordeum depressum, Atriplex polycarpa, Lasthenia glabra, Plantago insularis,* and *Deschampsia cespitosa* are California natives, but may not occur naturally in Sunshine Canyon.

The seed mix provided by S&S seeds would be adequate for vegetating the interim slopes and although most of the species are not native to the region of Sunshine Canyon, they should not pose a problem of a potential biological invasion. However, I would not recommend using them for any other purpose than vegetating inactive areas or temporary slopes that will be disturbed by future operations. Permanent revegetation efforts should ideally use native seeds and plants collected from local sources. I do not believe that any of the seeds recommended by S&S are likely to establish permanent populations and become a nuisance in Sunshine Canyon.

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