

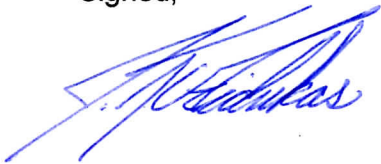
## CERTIFICATION STATEMENT

October 28, 2013

The attached Quarterly Site Monitoring Status Report for the Sunshine Canyon Landfill dated October 28, 2013, is the third 2013 Quarterly Report issued by UltraSystems. This report covers the monitoring period from July 1, 2013 through September 30, 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,



James T. Aidukas  
Project Manager

**Sunshine Canyon Landfill  
Independent Monitor  
Quarterly Site Monitoring Status Report  
July 1, 2013 – September 30, 2013**

*Prepared For:*

**City of Los Angeles Department of City Planning**

*And*

**County of Los Angeles Department of Regional Planning**



*Prepared By:*



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October 28, 2013

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Sunshine Canyon Landfill Mitigation Monitoring – 2013 Third Quarter Summary/ City  
(see Excel spreadsheets)

Sunshine Canyon Landfill Mitigation Monitoring – 2013 Third Quarter Summary/ County  
(see Excel spreadsheets)

## Appendices

Appendix I – Excel Summary Further Review Needed Comments Reference I-l through I-o

Appendix II – Photo Location Map and Relevant Site Photos

Appendix III – Quarterly Site Visits

Attendees by Date and Monitoring Site Reports

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Appendix V – Landfill Elevations:

GPS Data Logs

GPS Elevation Maps

GPS Elevation Data Tables

## 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 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 July 1, 2013 to September 30, 2013. It includes:

1. The City and County Mitigation Monitoring Summary Excel Tables for September. These tables record the areas of monitoring completed during the third 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

Four site visits were performed by UltraSystems during the July through September 2013 quarter in order to observe operational site activities and determine compliant status with conditions and/or mitigation measures. They were performed on July 10, 2013; August 7, 2013; August 20, 2013; and September 11, 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' six 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.*

**Current Status/Comments** - Grading was done south of Basin A to create a scraper access road through a previously undisturbed hill. Coastal sage and one oak tree were removed. A copy of the biological, archaeology and paleontology assessment reports should be provided to and reviewed by the agencies and monitor.

**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 foregoing, 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** - In July, construction was underway at the gas-to-energy facility site. The flare gas header was extended to the edge of the flare site. Trenches for electrical runs and areas for equipment foundations were excavated.

In August, the gas-to-energy facility was progressing with underground conduit being installed. The solar gas turbines will be delivered in late September. Foundations are scheduled to be poured in December. The commissioning and start-up is scheduled for the 1st Quarter 2014.

In September, the gas-to-energy facility and the Edison facility were observed. Work was being performed on both sites. Scheduled commissioning remains 1st Quarter 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** – The secondary access to the landfill using the fire road to Flare #8 has been removed for the development of Flares #9 and #10, and for the gas-to-energy facility. There is no secondary access road that is graded for use by fire vehicles or passenger cars. A new secondary access road for this use should be provided and added to the fire plan.

**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** – In August, the construction of the approved design for Cell CC3A Part II that included a buttress to support an old landslide under the existing City south waste has been completed. The liner is now being placed along with the operations layer. An underdrain system was installed using directional drilling. The initial portion of the cell should be open for disposal by early October.

It was observed that the City south waste slope has fissures and cracks. A crack was also observed on the access road near this area. Some vertical offset at the crack and some horizontal offset at the roadway curb was seen. Also when driving in the area, one can feel a small depression. These conditions indicate some downward and outward movement. Cracks on the road and hillside and their potential impact should be addressed by Republic's geotechnical engineer.

**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** – There is a ground motion mooring station installed at the toe of the City south landfill. In August, it was observed that the protective case was broken and the station may be at risk. Though monitoring the status of the station is not an item in the list of conditions to be monitored, its proper functioning could be helpful to the landfill in case of a seismic event to have site-specific ground motion data to assess the validity of current design parameters as

required by these conditions. This equipment was required by the county DPW for the County Landfill development. The equipment should be check and maintenance performed.

**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*

*(3) would be required because the minimum standards adopted by the CIWMB have been amended;*

*(6) 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 nonindigenous species that are likely to be invasive of adjacent natural areas.*

### **Visual-10.09 (County)**

*The final cover of the landfill will be landscaped with a ground-cover mix and plant species that are compatible with the immediate area and will be maintained in a natural setting until the time that it is converted to its final use.*

### **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.FCUP (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** – In July and August, it was observed by the monitoring biologist that the prior hydroseeding and mulching of the temporary and permanent slopes and inactive areas had 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.

#### **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 - 6.02 (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 September, it was observed that the Basin D dirt bottom and the County top deck near the City-County jurisdictional line had not been sealed with soil sealant. Application should be considered prior to the start of the Santa Ana winds. During the May 29, 2013 monitoring, wind gusts caused dust to be released from the Basin D floor, areas adjacent to the Basin D north drainage, and the City/County top decks near the City/County line.

**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 50 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.*

**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 July, a PVC cap on a tee in a header that was being worked on the County top deck was leaking gas. Republic was notified and a repair was directed to be made by the contractor.

**Odor/Landfill Gas - 7.04 (County)**

*Risks associated with the gas collection and flaring system shall be mitigated through use of flexible piping, flame arrestors, sensors, and automatic shutoff controls. Numerous safety shutdown devices have been designed and installed into the flare station, including a telephone auto-dialer, to provide*

*emergency notification. All gas extraction equipment, including gas condensate and propane tanks, shall be adequately secured to prevent damage during a seismic event. Inspections of the gas collection and flaring system shall be performed after ground-shaking from an earthquake, and necessary action shall be taken to correct any potential problems.*

**Current Status/Comments** – In July, it was observed that Flare #3 was cycling and shaking. Republic was notified of this condition. In September, it was observed that the flame arresters on Flares #9 and #10 did not have drain valves installed.

#### **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(43) (City)**

*Sediment shall be cleaned out of the sedimentation basins after every significant storm.*

#### **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 - 2.10 (County)**

*The surface water collection system shall be designed to collect runoff and collect/retain suspended solids. Water leaving the sedimentation basin shall be monitored in accordance with NPDES requirements. Sediment shall be cleaned out of the sedimentation basins after every significant storm.*

#### **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 August, it was observed that the terminal basin was not clean of sediment and the outlet risers had debris and mud caked to the filter fabric. Republic stated that all sediment was scheduled to be removed by October. The exterior sidewall of the terminal basin along the entrance road has a long horizontal crack and offset in the concrete. The manhole along the walking access of the basin continues to uplift.

In September, it was observed that the terminal basin had sediment in the area around the outlet risers. Trash was also noted around the front outside perimeter of the basin wall facing east. All sediment is still scheduled to be removed by 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. A preventative maintenance program with a schedule for repairs should be implemented to satisfy the above mitigation measures.

#### **M-4.3.1(44) (City)**

*The final landfill cover shall be compacted and graded with a minimum 3-percent gradient to preclude percolation of rainwater and direct surface water runoff away from the landfilled refuse and into drains that ultimately discharge into the monitored sedimentation basins.*

**Current Status/Comments** – The final cover grade on the old City North fill area should be checked to comply with the 3% gradient toward the perimeter ditch.

**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.*

**Current Status/Comments** – In July, the City Deck C Sage Mitigation was observed. The hydroseeded areas have not germinated. The black sage did not survive. The area was just planted, and cool weather, rain and time is needed.

In the first monitoring visit in August, the City Deck C was observed to evaluate the success of the mitigation plantings. The irrigation system appears to be functioning well. All plants are being watered regularly, although there are a lot of weeds, mostly non-native grasses and forbs. The greatest threat to plantings at this time appears to be the high salt content in the soil. The irrigation regimen has resulted in salt crust formation in many areas. Nearly all coyote bush (*Baccharis pilularis*) is surviving, with few signs of stress. Elderberry (*Sambucus mexicanus*) is struggling. Approximately 50% of these plants have died and the remaining plants show signs of stress from salt. Approximately 70% of the coastal sagebrush (*Artemisia californica*) plantings are still alive, with most of these showing signs of stress from excessive salt. Nearly all black sage (*Salvia mellifera*) plantings have died. Deck C mitigation planting will be maintained now and replacement of dead plants will occur in the fall.

In the second monitoring visit in August, the City South Deck C sage mitigation is being maintained until fall. Some varieties of sage are showing signs of stress. No replacement of plants will be done now. At the end of the year, the vegetation consultants will present an evaluation of the success of the mitigation planting and provide a revised plan, if needed.

In September, the City Deck C sage was observed. Approximately 20% of the sage and approximately 50% of all plants had died. The mitigation area was being watered and maintained. Replanting will occur when the weather becomes cooler. The monitoring biologist will perform a thorough evaluation of all plants in the site monitoring in late October.



**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** – In August, the County Sage Mitigation Area was observed and less than 50% of the site is vegetated. There is no revegetation activity or maintenance being performed at this time.

A plan to stabilize and retain the loose erosive soils along with a revegetation plan should be investigated. Reactivating the irrigation system may be beneficial.

**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** – In August, 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.

**M-4.9.3(112) (City)**

*The City LEA shall inspect the landfill on a regular basis, at which time the effectiveness of the litter control program shall be documented and any necessary improvements shall be made, including:*

- a. Landfill personnel shall continuously patrol the access road to the scales from the time the landfill opens until the time of closure in the evening.*
- b. Improperly covered or contained loads that may result in a significant release of litter shall be immediately detained and the condition corrected, if practical, before the load proceeds to the active working face areas. If correction cannot be made, the load shall be conducted under escort to the working face.*
- c. All debris found on or along the landfill entrance and working face access roads shall be immediately removed.*
- d. Operating areas shall be located in wind-shielded portions of the landfill during windy periods.*
- e. Litter fences shall be installed in operating active working face areas, as deemed necessary by the LEA.*

**Visual 10.11 / 91 (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** – Windblown litter was observed in the northern slopes of Basin A. Basin B adjacent hillsides had windblown litter. The terminal basin had litter and debris between the outside of the basin wall and the slump stone wall, which faces San Fernando Road.

**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.*

**Litter Control – 46.A-D (County)**

*The Permittee shall adopt a program that uses the most effective available methods and technology to prevent waste that has entered an area under the Permittee's control from escaping the area in the form of litter. Notwithstanding any other provision of this Condition 46, or of this grant, the Permittee shall cease accepting incoming waste during high wind conditions if, despite the methods and technology used, waste cannot be confined to areas under the Permittee's control.*

*The Permittee's litter control program shall include the following requirements, unless the County LEA requires otherwise:*

*A. Facility personnel shall continuously patrol the access road to the Landfill scales during the Landfill's hours of operation and remove any litter found during the patrol;*

*B. Loads of Solid Waste that are improperly covered or contained and which may create significant litter shall be immediately detained, and if practicable, correctly covered or contained prior to proceeding to the Working Face. If such a remedial measure cannot be taken, the load shall proceed to the Working Face under escort;*

*C. All debris found on or along the entrance to the Landfill and/or Working Face access roads shall be immediately removed; and*

*D. At every active Working Face area, the permittee shall install a primary portable litter fence eight feet in height, and also a secondary fence four feet in height behind the primary fence when wind conditions dictate the need for a secondary fence. The Permittee shall employ any-and all additional measures as necessary to control litter. On windy days, and when the fences are not sufficient, the Working Face shall be located within areas of minimal wind exposure or shall be closed, if so required by the County LEA. The County LEA may require additional measures deemed necessary to effectively control litter.*

**Visual 10.11/92 (County)**

*(5) On a regular basis, the permittee 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 off-site litter migration. On a daily basis, the cleanup crews shall inspect the surrounding area to assess if more frequent cleanups are required.*

*(6) The permittee shall employ additional measures as necessary to control litter.*

**Current Status/Comments** – In July, dumped trash and litter was observed on Sierra Highway near the I-14 overpass.

In August, windblown litter and dumped debris was noted between the front exterior wall of the terminal basin and the site's slump stone wall along San Fernando Road.

In September, windblown litter was observed on San Fernando Road at Balboa Boulevard, and on Balboa Boulevard south of San Fernando Road. Trash was also noted around the front outside perimeter of the terminal basin. Windblown litter was observed on both sides of Sierra Highway near the I-14 overpass.

**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** – On August 20, it was observed that dead and live tree branches were hanging over and above electrical lines, posing a potential 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 Third Quarter Mitigation Monitoring Summary Excel spreadsheets track the progress and completion of tasks as they were accomplished during this quarterly period.

# **Sunshine Canyon Landfill Third Quarter 2013 Mitigation Monitoring Summary / City – See Excel Spreadsheet**

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**Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 7-01-2013 through 9-30-2013)**

Line #	Reference #	Mitigation #	City Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	7/10/2013	Status*	Further Review Needed/Comments**	Resolved*	8/7/2013	Status*	Further Review Needed/Comments**	Resolved*	8/20/2013	Status*	Further Review Needed/Comments**	Resolved*	9/11/2013	Status*	Further Review Needed/Comments**	Resolved*
1	Project Manager																			
2																				
3																				
4	Q - A.3.		Definitions	info	/				/				/				/			
5	Q - A.6.		Submit Annual Reports	June yearly	/				/				/				/			
6	Q - A.10.		Provision of Fees	yearly	/				/				/				/			
7	Q - B.1.		Permitted/Prohibited Landfill Uses	yearly	/				/				/				/			
8	Q - B.2		Approval of Landfill	ongoing																
9	Q - B.2.c.		Ancillary Uses and Facilities	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	FRN	I-o	
10			Ancillary Uses and Facilities																	
11	Q - B.2.d (3)		10 Year Phase Review	2015	/				/				/				/			
12			10 Year Phase Review																	
13	Q - B.4.d.		Inert/Exempt Materials	info	/				/				/				/			
14	Q - B.5.a.		Prohibited Waste	info	/				/				/				/			
15	Q - B.6.		Waste Diversion	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
16	Q - C.3.g.		Paved Access Roads	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
17	Q - C.3.h.		Surfacing of Access Roads	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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\*\* See Appendix I for Comments

Checkmark = Condition or mitigation was monitored

/ = Yearly or non-ongoing monitoring frequency

**Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 7-01-2013 through 9-30-2013)**

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18	Q - C.5.		Graffiti Removal and Deterrence	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
19	Q - C.10.c.		Evaluation of Beneficial Gas Usage	June yearly	✓	C	I-l		✓	C	I-m		✓	C	NONE		✓	C	I-o	
20	Q - C.10.d. (1)		Alternative Fuel Vehicles	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
21	Q - C.10.d. (2)		Alternative Fuel Refuse Collection Trucks	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
22	Q - C.12.a.		Technical Advisory Committee	info	/				/				/				/			
23	Q - C.12.c.		Contract for Mitigation Monitoring	info	/				/				/				/			
24	Q - C.12.c.		Contract for Mitigation Monitoring-5 years	info	/				/				/				/			
25																				
26	T - 4		Fire Plan	status	✓	C	NONE		✓	C	NONE		✓	FRN	I-n					
27	T - 5.j.		Trip Diversion	status	✓	C	NONE		✓	C	NONE		✓	C	NONE					
28	T - 6		Satisfactory Street Lighting	status	/				/				/				/			
29																				
30	M - 4.1.1	7	Reabandonment Procedures	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
31	M - 4.1.4	11	Post-5.0 Earthquake Analysis	upon event	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
32	M - 4.2.12	27	Heavy Equipment Operations	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
33	M - 4.2.12		Heavy Equipment Operations	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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**Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 7-01-2013 through 9-30-2013)**

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34	M - 4.2.12	28	Site Erosion-Cover	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
35	M - 4.2.12		Site Erosion-Cell Height	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
36	M - 4.2.12		Site Erosion-Sealant	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	FRN	I-o	
37	M - 4.2.13	29	LFG Control Measures	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
38	M - 4.2.13	30	Operational Odor Control Techniques	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
39	M - 4.2.13	31	Solid Waste Compaction	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
40	M - 4.2.13	32	LFG Collection and Recovery System	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
41	M - 4.2.13	33	Odor Control Measures	ongoing	✓	FRN	I-l		/		I-m		/		I-n		/		I-o	
42	M - 4.2.13	34	Odor/LFG Monitoring	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
43			Periodic LFG Monitoring		/		I-l		/		I-m		/		I-n		/		I-o	
44	M - 4.3.2	52	LFG Migration Mitigation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
45	M - 4.3.2	57	Dust Control Water	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
46	M - 4.4.2	69	Offsite Mitigation Sites	status																
47	M - 4.4.2	70	Purchasing Wetland Credit	status	/				/				/				/			
48	M - 4.4.2	71	Funding-Invasive Species Eradication Program	status	/				/				/				/			
49	M - 4.6	85	Site Lighting	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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**Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 7-01-2013 through 9-30-2013)**

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50	M - 4.7.1	86	Open Space Buffer Area	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
51	M - 4.9.3	106	Litter Minimization	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
52	M - 4.9.3	107	Litter/Debris Containment	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
53	M - 4.9.3	108	Vehicle Tarping Requirements	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
54	M - 4.9.3	109	Periodic Offsite Litter Pickup	ongoing	✓	C	NONE		✓	C	NONE		✓	FRN	I-n		✓	FRN	I-o	
55	M - 4.9.3	110	Illegal Dumping Activities	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
56	M - 4.9.3	111	Radio Dispatch Litter Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
57	M - 4.9.3	112	Litter Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
58	M - 4.9.5	127	Address Concerns of Citizens' Advisory Committee	ongoing	/				/				/				/			
59	M - 4.9.6	128	Landfill Gas/Collection System-Unsafe Methane	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
60	M - 4.9.6	129	Landfill Gas/Collection System-Detection/Training	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
61	M - 4.9.6	130	Landfill Gas/Collection System-Risk Mitigation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
62	M - 4.16.4	176	Reclaimed Water	status	/				/				/				/			
63	M - 4.16.4	177	Water Conservation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
64																				
82	Civil & Geotechnical Engineer																			

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**Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 7-01-2013 through 9-30-2013)**

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83																				
84																				
85	M - 4.1.1	2	Grading Outside of Conceptual Grading Plan Area	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
86	M - 4.1.1	3	Unsuitable Material Removal/Buffer Zones	ongoing									✓	FRN	I-n					
87	M - 4.1.1	4	Grading Outside of Landfill Footprint	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE					
88	M - 4.1.1	5	Grading Activity Compliance	ongoing									✓	FRN	I-n					
89	M - 4.1.2	8	Landslide Guidelines	ongoing									✓	FRN	I-n					
90	M - 4.1.2	9	Soil Stabilization	ongoing																
91	M - 4.1.4	10	Landfill Design	ongoing																
92	M - 4.1.4	11	Earthquake Operations Checklist	upon event	/	NA	NONE		/	NA	NONE		✓	FRN	I-n		/	NA	NONE	
93	M - 4.1.5	12	Geologic Hazards - Liquefaction	ongoing									✓	FRN	I-n					
94	M - 4.1.5	13	Design/Construction- Liquefaction	ongoing									✓	FRN	I-n					
95	M - 4.1.5	14	Design/Construction- Containment Structures	ongoing																
96	M - 4.1.6	15	Refuse Slope Gradients	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
97	M - 4.1.6	16	Cut and Fill Slope Gradients	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
98	M - 4.1.6	17	Final Slope Factors of Safety	ongoing									✓	C	NONE					
99	M - 4.1.6	18	Survey Monuments	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
100	M - 4.3.2	47	Landfill Liner	ongoing																

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**Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 7-01-2013 through 9-30-2013)**

Line #	Reference #	Mitigation #	City Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	7/10/2013	Status*	Further Review Needed/Comments**	Resolved*	8/7/2013	Status*	Further Review Needed/Comments**	Resolved*	8/20/2013	Status*	Further Review Needed/Comments**	Resolved*	9/11/2013	Status*	Further Review Needed/Comments**	Resolved*
101	M - 4.3.2	48	Landfill Liner	ongoing																
102	M - 4.3.2	54	Preliminary Closure/Postclosure Plan	status																
103	M - 4.3.2	55	Landfill Design/Operation/Final	status									✓	C	NONE					
104	M - 4.3.2	56	Cover Application	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
105	M - 4.14.1	155	Access Roadway Grade	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
106	M - 4.18	178	Landfill Elevation Exceedance	ongoing									✓	C	NONE					
107																				
108	Hydrologist																			
109																				
110																				
111	M - 4.1.4	11	Earthquake Operations Checklist	upon event	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
112	M - 4.3.1	36	Surface Water Infiltration Minimization	ongoing																
113	M - 4.3.1	37	Surface Drainage Systems	ongoing																
114	M - 4.3.1	38	Permanent/Temporary Ditches	ongoing									✓	FRN	I-n					
115	M - 4.3.1	39	Drainage Protection	ongoing																
116	M - 4.3.1	40	SWRCB Permit Coverage	ongoing																
117	M - 4.3.1	41	Surface Water Collection System	ongoing																
118	M - 4.3.1	42	Surface Water Quality Monitoring	ongoing																

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119	M - 4.3.1	43	Sediment Basin Maintenance	ongoing									✓	FRN	I-n					
120	M - 4.3.1	44	Final Landfill Cover	ongoing									✓	FRN	I-n					
121	M - 4.3.1	45	Erosion Control Plan	ongoing									✓	C	I-n					
122	M - 4.3.1	46	Preventive Maintenance Program	ongoing													✓	FRN	I-o	
123	M - 4.3.2	49	Interception of Groundwater Seepage	ongoing																
124	M - 4.3.2	50	LCRS/Leachate Monitoring	ongoing																
125	M - 4.3.2	51	LCRS Monitoring	ongoing																
126																				
127	Biologist																			
128																				
129																				
130	M - 4.1.1	6	Slope Erosion Control	ongoing	✓	FRN	I-l		✓	FRN	I-m		✓	C	NONE		✓	C	NONE	
131	M - 4.2.11	23	Revegetation/Excavation	ongoing	✓	FRN	I-l		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	
132	M - 4.2.12		Temporary Vegetation Cover	ongoing	✓	FRN	I-l		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	
133	M - 4.4.1	60	Coastal Sage Scrub Mitigation Plan	ongoing	✓	FRN	I-l		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	
134	M - 4.4.1	61	Coastal Sage Scrub Seeding	ongoing	✓	FRN	I-l		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	
135	M - 4.4.1	62	Mariposa Lily Mitigation Plan	ongoing																
136	M - 4.4.1	63	San Diego Horned Lizard Mitigation	ongoing																

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

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154	M - 4.9.2	97	Vector Elimination	ongoing					✓	C	NONE									
155	M - 4.9.2	98	Fly Control	ongoing					✓	C	NONE									
156	M - 4.9.2	99	Rodent Control	ongoing					✓	C	NONE									
157	M - 4.9.2	100	Operational Vector-Limiting Activity	ongoing					✓	C	NONE									
158	M - 4.9.2	101	Equipment Cleanliness/Maintenance	ongoing					✓	C	NONE						✓	C	NONE	
159	M - 4.9.2	102	Storage of Vector-Attracting Items	ongoing					✓	C	NONE						✓	C	NONE	
160	M - 4.9.2	103	Salvaged Material Storage- Vector Control	ongoing					✓	C	NONE						✓	C	NONE	
161	M - 4.9.2	104	Periodic Vector Inspections	ongoing																
162	M - 4.9.2	105	Implementation of Vector Control Measures	ongoing																
163																				
164	Air Quality & Noise Specialist																			
165																				
166																				
167	M - 4.2.11	19	Emissions Mitigation Measures	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
168	M - 4.2.11	19	Construction Curtailing due to Pollution	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
169	M - 4.2.11	20	Dust Lofting Minimization	ongoing													✓	FRN	I-o	
170	M - 4.2.11	21	Wind Speed Monitoring	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
171	M - 4.2.11	22	Grading-Dust Reduction	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	

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172	M - 4.2.12	24	Construction Equipment Maintenance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
173	M - 4.2.12		Construction Curtailing due to Pollution	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
174	M - 4.2.12	25	Refuse Trucks-Maintenance	ongoing																
175	M - 4.2.12		Refuse Trucks-Engine	ongoing																
176	M - 4.2.12		Refuse Trucks-Fee Schedule	ongoing																
177	M - 4.2.12		Refuse Trucks-Fee Schedule Delivery Time	ongoing																
178	M - 4.2.12		Refuse Trucks-Idling	ongoing																
179	M - 4.2.12		Refuse Trucks-Emissions	ongoing																
180	M - 4.2.12	26	Truck Travel and Fugitive Dust Emissions	ongoing					✓	C	NONE		✓	C	NONE					
181	M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
182	M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing																
183	M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing																
184	M - 4.5.2	83	Landfill Hours	info	/				/				/				/			
185	M - 4.5.2	84	Landfill Equipment-Noise Reduction	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
186																				
187	Hydrology, Hazardous Waste / Risk of Upset																			
188																				
189																				

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190	M - 4.3.2	53	Groundwater Monitoring Wells	ongoing																
191	M - 4.3.2	58	Operation as Class III Landfill	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
192	M - 4.3.2	59	Underground Fuel Storage	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
193	M - 4.9.1	90	Refuse Inspection Program	ongoing																
194	M - 4.9.1	91	Hazardous Waste Load- Checking	status																
195	M - 4.9.1	93	Hazardous Waste Detection Training	status																
196	M - 4.9.1	94	Spill Response Program	status																
197	M - 4.9.4	115	Safety Inspections/Checklists	ongoing																
198	M - 4.9.4	118	Accident/Injury reports, Inspections	status																
199	M - 4.9.4	121	Fire Prevention Plan	ongoing									✓	FRN	I-n					
200	M - 4.9.4	123	Personal Protective Equipment	ongoing																
201	M - 4.9.4	125	Site Access/Fencing	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
202	M - 4.14.1	147	Fire Response Capabilities	ongoing																
203	M - 4.14.1	148	Hydrant Installation	ongoing																
204																				
205	Archaeologist																			
206																				
207																				

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208	M - 4.19.1	183	Archaeological Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		✓	C	I-o	
209	M - 4.19.1	184	Onsite Archaeologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
210	M - 4.19.1	185	Archaeological Resources	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
211	M - 4.19.1	186	Archaeological Resources	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
212																				
213	Paleontologist																			
214																				
215																				
216	M - 4.19.2	187	Paleontological Resources Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		✓	C	I-o	
217	M - 4.19.2	188	Paleontological Resources Excavation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
218	M - 4.19.2	189	Paleontological Resources Training	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
219	M - 4.19.2	190	Paleontological Resources Recovery	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
220	M - 4.19.2	191	Paleontological Resources Inspection	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					

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# **Sunshine Canyon Landfill Third Quarter 2013 Mitigation Monitoring Summary / County – See Excel Spreadsheet**

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**Sunshine Canyon Landfill Mitigation Monitoring Summary - County (07-01-2013 through 09-30-2013)**

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1	Project Manager																			
2																				
3																				
4	Amendment 45.N - 1	45N	Daily Cover Materials	ongoing	✓	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	
6	Amendment 45.N - 4.a	45N	Order for Abatement Status	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
7	Amendment 45.N - 4.c	45N	Odor Patrol Program	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
8	Amendment 45.N - 4.d	45N	Landfill Gas Mitigation Plan	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
9	Amendment 45.N - 5	45N	Dust and Odor Reports	ongoing	/		I-l		/		I-m		/		I-n		/		I-o	
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	
15	Revegetation - 44.F	44. F	Revegetation	status	✓	FRN	I-l		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	
16	Fugitive Dust - 45.B	45. B	Working Face Areas	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
17	Fugitive Dust - 45.F	45. F	Inactive Areas Monitoring	ongoing													✓	FRN	I-o	

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18	Fugitive Dust - 45.I	45.I	Cleaning of Roads	ongoing	✓	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	
20	Gas - 52	52	Landfill Gas Collection System	ongoing	✓	C	I-I		✓	C	I-m		✓	C	NONE		✓	C	I-o	
21	Traffic - 57	57	Traffic Improvements	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
22	Traffic - 60	60	Street Light Installation	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
23	Traffic - 61	61	Traffic Minimization	ongoing	✓	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	
29	Alternative Fuel Vehicles - 77.B	77.B	Alternative Fuel Vehicles-Refuse/Collection Trucks	status	✓	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	c				/				/				/			
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-m		✓	FRN	I-n		✓	FRN	I-o	
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	

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51	BIOTA – 4.07		Buffer Zone Maintenance-Vegetation	ongoing	✓	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	
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	
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	
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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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	
73	Odor/Landfill Gas - 7.02		Landfill Gas Collection System	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
74	Odor/Landfill Gas - 7.04		Gas Collection/Flare System Risk Mitigation	ongoing	✓	FRN	I-I										✓	FRN	I-o	
75	Odor/Landfill Gas - 7.05		Wellhead Awareness	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
76	Odor/Landfill Gas - 7.06		Odor Control Measures	ongoing																
77	Odor/Landfill Gas - 7.07		Gas Recovery and Sale	status	✓	C	I-I		✓	C	I-m		✓	C	NONE		✓	C	I-o	
78	Traffic/Circulation - 8.03		Street Light Installation	status	✓	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																
90	Visual - 10.11		Litter Control-Fencing	ongoing																
91	Visual - 10.11		Periodic Litter Pickup	ongoing	✓	FRN	I-I										✓	FRN	I-o	
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	
95	Recycling - 14.01		On-site Waste Diversion/Recycling	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
96	Recycling - 14.03		Tonnage Disposal Determination	info	/				/				/				/			
97	Recycling - 14.04		Recycling-Variou 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	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
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	
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	
129	Geology - 1.02		Seismic Design	ongoing																
130	Geology - 1.03		Maximum Refuse Slope Gradients	ongoing									✓	C	NONE					
131	Geology - 1.04		Maximum Refuse Slope Gradients	ongoing									✓	C	NONE					
132	Geology - 1.05		Unsuitable Material Procedures	ongoing									✓	FRN	I-n					

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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	/	NA	NONE		/	NA	NONE		✓	FRN	I-n		/	NA	NONE	
138	Geology - 1.18		Alluvium- Removal/Replacement	ongoing									✓	FRN	I-n					
139	Geology - 1.19		Landfill Design/Construction	ongoing									✓	FRN	I-n					
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-n					
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	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
156	Surface Water - 2.01		Surface Water Runoff Interception	ongoing																
157	Surface Water - 2.02		Surface Water Runoff Collection	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
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									✓	FRN	I-n					
164	Surface Water - 2.11		Surface Water Quality-Collection/Monitoring	ongoing																
165	Surface Water - 2.12		Permanent/Temporary Drainage Facilities	ongoing									✓	FRN	I-n					
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-n					
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-I		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	
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-m									
181	Geology - 1.14		Personnel Retention for Monitoring Soil Erosion	ongoing					✓	FRN	I-m									
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-o	
186	BIOTA – 4.20		Poultry Wire Screen	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
187	BIOTA – 4.24		Drip Irrigation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
188	BIOTA – 4.27		Coastal Sage Scrub Mitigation Plan	ongoing					✓	FRN	I-m						✓	C	I-o	
189	BIOTA – 4.28		Coastal Sage Scrub Seeding	ongoing																
190	BIOTA – 4.29		San Diego Horned Lizard Mitigation	ongoing					✓	FRN	I-m									
191	BIOTA – 4.30		California Gnatcatcher Surveys	ongoing	/				/				/				/			
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	/				/				/				/			
195	BIOTA – 4.34		Raptor Nests Habitat	ongoing	/				/				/				/			
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-I		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	

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202	BIOTA – 4.43		Replacement Riparian Habitat	status																
203	Air Quality - 6.02		Dust Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	FRN	I-o	
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-l		✓	FRN	I-m		✓	FRN	I-n		✓	FRN	I-o	
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	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE	
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	
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	
226	Air Quality – 6.01		Working Face Requirements	ongoing	✓	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	
228	Air Quality – 6.01		Soil Stockpile Requirements	ongoing	✓	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	
230	Air Quality – 6.01		Soil Sealant	ongoing																
231	Air Quality – 6.01		Dust Emissions-Road Maintenance	ongoing	✓	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	
233	Air Quality – 6.01		Dust Generation-Dumping	ongoing	✓	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	

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235	Air Quality – 6.01		Wind Speed Monitoring	ongoing	✓	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	
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	
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-n					
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 (07-01-2013 through 09-30-2013)**

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	7/10/2013	Status*	Further Review Needed/Comments**	Resolved*	8/7/2013	Status*	Further Review Needed/Comments**	Resolved*	8/20/2013	Status*	Further Review Needed/Comments**	Resolved*	9/11/2013	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/Paleontologica I Identification/Conservation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		✓	C	I-o	
276	IMP - Part VII.B	IMP 7	Archaeological/Paleontological	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
277	Archaeological – 5.01		Archaeological Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
278	Archaeological – 5.02		Onsite Archaeologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
279	Archaeological – 5.03		Onsite Paleontologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
280	Archaeological – 5.04		Archaeological/Paleontologica I Identification Instruction	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
281	Archaeological – 5.05		Archaeological Resource Cura	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE					
282																				
283	Paleontologist																			
284																				
285																				

\* C = Compliant, NC = Non-Compliant, FRN = Further Review Needed, R = Resolved

\*\* See Appendix I for Comments

Checkmark = Condition or mitigation was monitored

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286	Ecological Significance - 62	62	Archaeological/Paleontologica I -Material	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		✓	C	I-o	
287	IMP - Part VII.B	IMP 7	Archaeological/Paleontologica I-Report Submission	ongoing	/	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-l through I-o Third Quarter Site Visits

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Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Project Manager</b>	Q – B.2.c		City Planning	I-o: Grading was done south of Basin A to create a scraper access road through a previously undisturbed hill. Coastal sage and one oak tree were removed. A copy of the biological, archaeology and paleontology assessment reports should be provided to and reviewed by the agencies and monitor.
		Biota - 4.13	County Forester	I-o: See Q – B.2.c I-o above
	Q - C.10.c		City Planning	I-l: Construction was underway at the gas-to-energy facility site. The flare gas header was extended to the edge of the flare site. Trenches for electrical runs and areas for equipment foundations were excavated.  I-m: The gas-to-energy facility was progressing with underground conduit being installed. The solar gas turbines will be delivered in late September. Foundations are scheduled to be poured in December. The commissioning and start-up is scheduled for the 1st Quarter 2014.  I-o: The gas-to-energy facility and the Edison facility were observed. Work was being performed on both sites. Scheduled commissioning remains 1st Quarter 2014.
		Odor/Landfill Gas - 7.07	County Planning/ SCAQMD SCL-LEA	I-l, I-m, I-o: See Q-C.10.c I-l, I-m, I-o above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Project Manager</b>		Gas - 52	County DPW EPD/SCL-LEA County Forester Fire Warden	I-l, I-m, I-o: See Q-C.10.c I-l, I-m, I-o above.
	T - 4		City Planning, City Fire Department	I-n: 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		I-n: See T - 4 I-n above.
		Revegetation - 44 F	SCL-LEA/ County DPW EPD Regional Planning County Biologist	I-l through I-o: See M - 4.1.1/6 I-l and I-m below under Biologist Discipline.
	M - 4.2.12/28		City Planning/ SCAQMD	I-o: Basin D dirt bottom and the County top deck near the City-County jurisdictional line have not been sealed with soil sealant. Application should be considered prior to the start of the Santa Ana winds.
		Fugitive Dust - 45.F	County DPH/ County LEA County DPW-EPD County Biologist	I-o: See M - 4.2.12/28 I-o above.
		Air Quality - 6.02	County DPH	I-o: See M - 4.2.12/28 I-o above.
	M - 4.2.13/33		City Planning/ SCAQMD SCL-LEA	I-l: A PVC cap on a tee in a header that was being worked on the County top deck was leaking gas. Republic was notified and a repair was directed to be made by the contractor.



Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Project Manager</b>	M -4.2.13/ 29, 30, 32, 33, 34		City Planning/SCL- LEA/SCAQMD	I-m through I-o on 33 and I-l through I-o and 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, I-l through I-o above.
		Amendment 45.N - 5	County DPW-EPD	See M-4.2.13/29, 30, 32, 33, and 34, I-l through I-o above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Project Manager</b>		Surface Water - 2.15	County DPW EPD/ LARWQCB, SCL- LEA	<p>I-m: The terminal basin was not clean of sediment and the outlet risers had debris and mud caked to the filter fabric. All sediment is scheduled to be removed by October. The exterior sidewall of the basin along the entrance road has a long horizontal crack and offset in the concrete. The manhole along the walking access of the basin continues to uplift.</p> <p>I-n: The terminal basin had sediment in the bottom and the outlet risers had trash and mud on the filter fabric. Debris was noted around the front perimeter of the terminal basin.</p> <p>I-o: The terminal basin was observed and sediment was noted in the area around the outlet risers. Trash was also noted around the front outside perimeter basin wall. All sediment is still scheduled to be removed by October.</p> <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.</p>

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Project Manager</b>		Odor/Landfill Gas - 7.04	SCAQMD	I-l: It was observed that Flare #3 was cycling and shaking. Republic was notified of this condition.  I-o: It was observed that the flame arresters on Flares 9 and 10 did not have drain valves installed.
	M - 4.9.3/109		City Planning	I-n: 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-o: Windblown litter was observed on San Fernando Road at Balboa Boulevard and on Balboa Boulevard south of San Fernando Road. Trash was also noted around the front outside perimeter of the terminal basin.
		Visual - 10.11	SCL-LEA	I-l: Dumped trash and litter was observed on Sierra Highway near the I-14 overpass.  I-o: Windblown litter was observed on both side of Sierra Highway near the I-14 overpass.  Also see M - 4.9.3/109 I-n and I-o above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Civil and Geotechnical Engineer</b>	M - 4.1.1 / 3, 5		City Planning/ LARWQCB CalRecycle SCL-LEA LADBS PW-BOE	<p>I-n: The construction of the approved design for Cell CC3A Part II that included a buttress to support an old landslide under the existing City south waste has been completed. The liner is now being placed along with the operations layer. An underdrain system was installed using directional drilling. The initial portion of the cell should be open for disposal by early October.</p> <p>It was observed that the City south waste slope has fissures and cracks. A crack was also observed on the access road near this area. Some vertical offset at the crack and some horizontal offset at the roadway curb was seen. Also when driving in the area one can feel a small depression. These conditions indicate some downward and outward movement. Cracks on the road and hillside and their potential impact should be addressed by Republic's geotechnical engineer.</p>
		Geology - 1.05	County DPW EPD/ County LEA	I-n: See M - 4.1.1 / 3, 5 I-n above.
	M - 4.1.2 / 8		City Planning/ LARWQCB CalRecycle LADBS PW-BOE	I-n: See M - 4.1.1 / 3, 5 I-n above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Civil and Geotechnical Engineer</b>	M - 4.1.5/ 12, 13		City Planning/ LARWQCB CalRecycle LADBS PW-BOE	I-n: See M - 4.1.1 / 3, 5 I-n above.
		Geology - 1.18	County DPW EPD/ SCL-LEA LARWQCB	I-n: See M - 4.1.1 / 3, 5 I-n above.
		Geology - 1.19	County DPW EPD/ LARWQCB County LEA	I-n: See M - 4.1.1 / 3, 5 I-n above.
		Groundwater - 3.09	LARWQCB/ County DPW EPD	I-n: See M - 4.1.1 / 3, 5 I-n above.
	M-4.1.4/11		City Planning/ SCAQMD LARWQCB CalRecycle LADBS PW-BOE	I-n: There is a ground motion monitoring station installed at the toe of the City south landfill. The protective case is broken and the station may be at risk. Though monitoring the status of the station is not an item in the list of conditions, its proper functioning could be helpful to the landfill in case of a seismic event to have site specific ground motion to assess the validity of current design parameter. This equipment was required by the county DPW. The equipment should be check and maintenance performed.
		Geology - 1.16	County DPW EPD	I-n: See M - 4.1.4/11 In above

Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Hydrologist</b>	M - 4.3.1/ 38		City Planning/ LARWQCB CalRecycle SCL-LEA PW-BOE	I-n: 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 I-n above.
	M - 4.3.1/ 43		City Planning/ LARWQCB CalRecycle SCL-LEA PW-BOE	I-n: The terminal basin had sediment in the bottom near the outlet risers and the risers' filter fabric coated with mud and trash.
		Surface Water - 2.10	LARWQCB / County DPW EPD	See M - 4.3.1/ 43 I-n above.
		Surface Water - 2.14	LARWQCB / County DPW EPD	I-n: The current erosion control plans should be available for agency and monitor review.
	M - 4.3.1/ 44		City Planning/ LARWQCB CalRecycle SCL-LEA PW-BOE	I-n: The final cover slope gradient on the old City North and City South should be checked to verify that they have a 3% slope toward the drainage ditches.
	M - 4.3.1/ 45		City Planning/ LARWQCB CalRecycle SCL-LEA PW-BOE LADBS	I-n: An erosion control plan should be available on site for review by the agencies and monitor.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Hydrologist</b>	M - 4.3.1/ 46		City Planning/ LARWQCB CalRecycle PW-BOE	I-o: See Surface Water 2.15 I-o above.
<b>Biologist</b>	M - 4.1.1 / 6		City Planning/ LARWQCB CalRecycle SCL-LEA LADBS	I-l and I-m: 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.
		Geology - 1.14	LARWQCB/ County Forester	I-m: See M - 4.1.1/6 I-l and I-m above.
	M - 4.2.11 / 23		City Planning	I-l - I-o: See M - 4.1.1/6 I-l and I-m above.
		Geology - 1.13	County DPW EPD/ County Forester LARWQCB	I-m: See M - 4.1.1/6 I-l and I-m above.
	M - 4.2.12		SCL-LEA/ City Planning	I-l - I-o: See M - 4.1.1/6 I-l and I-m above.
		Revegetation - 44.A	SCL-LEA/ County DPW EPD Regional Planning County Biologist	I-l - I-o: See M - 4.1.1/6 I-l and I-m above.
		Biota - 4.42	SCL-LEA	I-l - I-o: See M - 4.1.1/6 I-l and I-m above.
		Air Quality - 6.02	SCAQMD/ SCL-LEA	I-l - I-o: See M - 4.1.1/6 I-l and I-m above.
		Visual - 10.08	County Forester	I-l - I-o: See M - 4.1.1/6 I-l and I-m above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Biologist	M - 4.4.1 / 60		City Planning	<p>I-l: The City Deck C Sage Mitigation was observed. The hydroseeded areas have not germinated. The black sage did not survive. The area was just planted, and cool weather, rain, and time is needed.</p> <p>I-m: City Deck C was observed to evaluate the success of the mitigation plantings. The irrigation system appears to be functioning well. All plants are being watered regularly, although there are a lot of weeds, mostly non-native grasses and forbs. The greatest threat to plantings at this time appears to be the high salt content in the soil. The irrigation regimen has resulted in salt crust formation in many areas. Nearly all coyote bush (<i>Baccharis pilularis</i>) is surviving, with few signs of stress. Elderberry (<i>Sambucus mexicanus</i>) is struggling. Approximately 50% of these plants have died and the remaining plants show signs of stress from salt. Approximately 70% of the coastal sagebrush (<i>Artemisia californica</i>) plantings are still alive, with most of these showing signs of stress from excessive salt. Nearly all black sage (<i>Salvia mellifera</i>) plantings have died. Deck C mitigation planting will be maintained now and replacement of dead plants will occur in the fall.</p> <p>I-n: The City South Deck</p>



Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Biologist</b>	M - 4.4.1 / 60		City Planning	<p>I-n: The City South Deck C sage mitigation is being maintained until fall. Some varieties of sage are showing signs of stress. No replacement of plants will be done now. At the end of the year, the vegetation consultants will present an evaluation of the success of the mitigation planting and provide a revised plan, if needed.</p> <p>I-o: The City Deck C sage was observed. Approximately 20% of the sage and approximately 50% of all plants had died. The mitigation area was being watered and maintained. Replanting will occur when the weather becomes cooler. The monitoring biologist will perform a thorough evaluation of all plants in the site monitoring in late October.</p>
	M - 4.4.1 / 61		City Planning	I-l - I-o: See M - 4.1.1/6 I-l and I-m above.

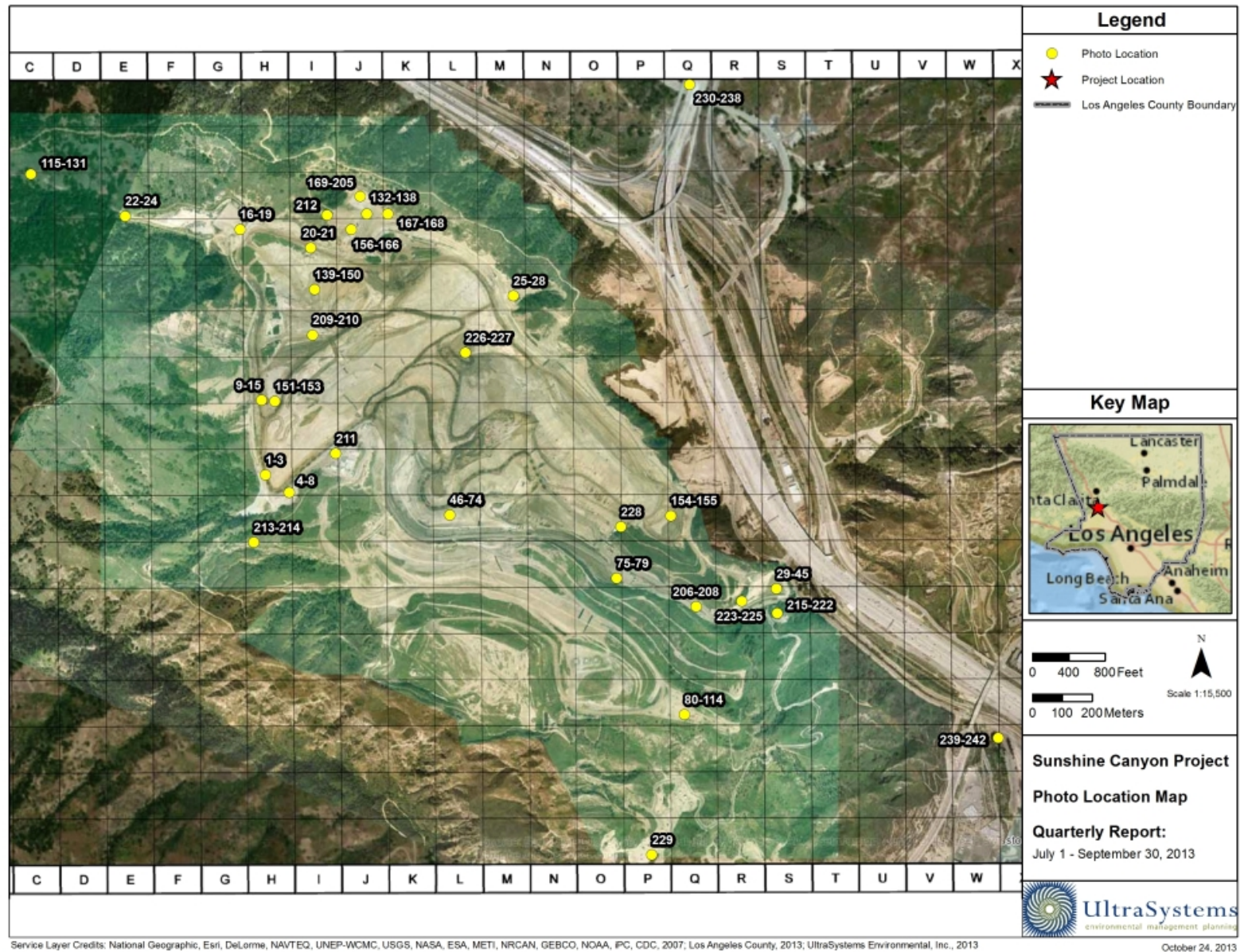
Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
<b>Biologist</b>		Biota - 4.27	SCL-LEA/CDFW	I-n: The County Sage Mitigation Area was observed and less than 50% of the site is vegetated. There is no revegetation activity or maintenance being performed at this time. A plan to stabilize and retain the loose erosive soils along with a revegetation plan should be investigated. Re-activating the irrigation system may be beneficial. I-o: Grading for a scraper access road occurred in an area south of Basin A. The archaeological, paleontological and biological reports should be obtained and reviewed by County DPW and the monitor.
		Biota - 4.29	County LEA/CDFW	I-m: In August, 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.
<b>Air Quality &amp; Noise Specialist</b>	M - 4.2.11/20		City Planning/ SCAQMD SCL-LEA LADBS	I-o: Construction areas that become non-active and un-vegetated slopes should be evaluated for dust potential and soil sealant applied when required.
<b>Hydrology, Hazardous Waste/Risk of Upset</b>	M - 4.9.4/121		City Planning/ CalRecycle Cal/OSHA SCL-LEA	I-n: The leachate facility electrical lines are hanging on branches and pose a fire hazard.

<b>Discipline</b>	<b>City Condition Reference # / Mitigation #</b>	<b>County Condition Reference #/ Mitigation #</b>	<b>Responsible Agency</b>	<b>Further Review Needed-Comments</b>
<b>Hydrology, Hazardous Waste/Risk of Upset</b>		Fire Service - 12.03	Department of Forester/Fire Warden	I-n: See M - 4.9.4/121 above.
<b>Archaeologist</b>	M - 4.19.1/183		City Planning	I-o: See Biota – 4.27 I-o above.
		Ecological Significance 62	County Planning	I-o: See Biota – 4.27 I-o above.
<b>Paleontologist</b>	M - 4.19.2/187		City Planning	I-o: See Biota – 4.27 I-o above.
		Ecological Significance 62	County Planning	I-o: See Biota – 4.27 I-o above.

## Appendix II

# Relevant Site Photos

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**Photo 1: Basin A: September 11, 2013**



**Photo 2: Basin A: September 11, 2013**



**Photo 3: Basin A Inlet: September 11, 2013**



**Photo 4: Grading South of Basin A: September 11, 2013**





**Photo 5: Grading South of Basin A: September 11, 2013**



**Photo 6: Grading South of Basin A: September 11, 2013**



**Photo 7: Grading South of Basin A: September 11, 2013**



**Photo 8: Grading South of Basin A: September 11, 2013**





**Photo 9: Westside Drainage Channel: September 11, 2013**



**Photo 10: Westside Drainage Channel: September 11, 2013**



**Photo 11: Westside Drainage Channel: September 11, 2013**



**Photo 12: Westside Drainage Channel: September 11, 2013**





**Photo 13: Westside Drainage Channel: September 11, 2013**



**Photo 14: Westside Drainage Channel: September 11, 2013**



**Photo 15: Westside Drainage Channel: September 11, 2013**



**Photo 16: Basin D: September 11, 2013**





**Photo 17: Basin D: September 11, 2013**



**Photo 18: Basin D: September 11, 2013**



**Photo 19: Basin D: September 11, 2013**



**Photo 20: Basin D Outlet Channel: September 11, 2013**





**Photo 21: Basin D Outlet Channel: September 11, 2013**



**Photo 22: Canyon D Monitoring Wells: September 11, 2013**



**Photo 23: Canyon D Monitoring Wells: September 11, 2013**



**Photo 24: Canyon D Monitoring Wells: September 11, 2013**





**Photo 25: Basin B: July 10, 2013**



**Photo 26: Basin B: July 10, 2013**



**Photo 27: Basin B: September 11, 2013**



**Photo 28: Basin B: September 11, 2013**



**Photo 29: Terminal Basin: July 10, 2013**



**Photo 30: Terminal Basin: July 10, 2013**



**Photo 31: Terminal Basin: July 10, 2013**



**Photo 32: Terminal Basin: July 10, 2013**





**Photo 33: Terminal Basin: July 10, 2013**



**Photo 34: Terminal Basin: August 20, 2013**



**Photo 35: Terminal Basin: August 20, 2013**



**Photo 36: Terminal Basin: August 20, 2013**





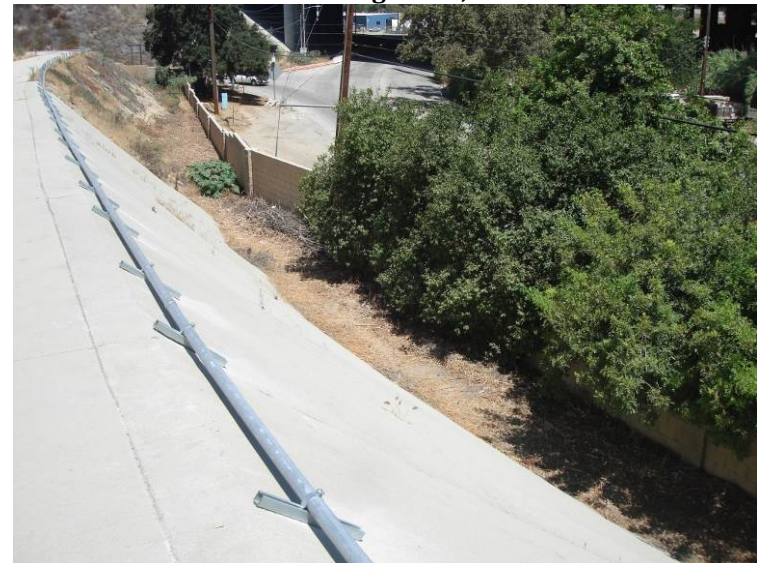
**Photo 37: Terminal Basin: August 20, 2013**



**Photo 38: Terminal Basin: August 20, 2013**



**Photo 39: Terminal Basin: August 20, 2013**



**Photo 40: Terminal Basin: August 20, 2013**

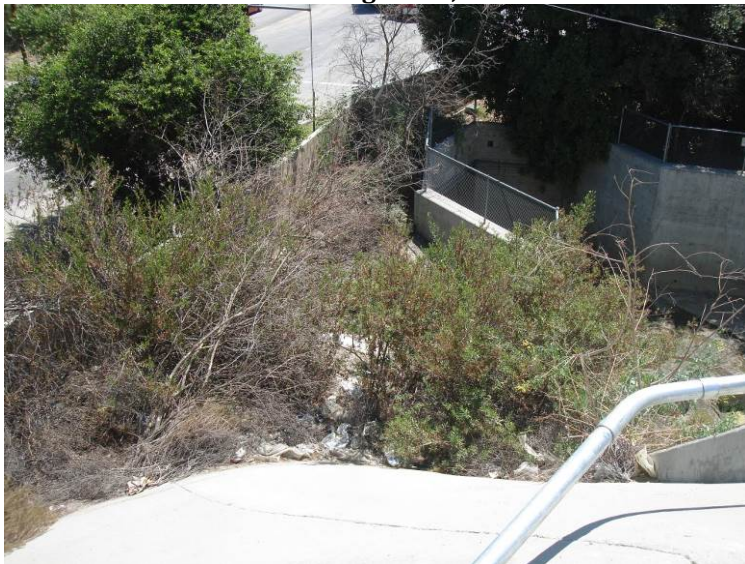




**Photo 41: Terminal Basin: August 20, 2013**



**Photo 42: Terminal Basin: August 20, 2013**



**Photo 43: Terminal Basin: August 20, 2013**



**Photo 44: Terminal Basin: September 11, 2013**





**Photo 45: Terminal Basin: September 11, 2013**



**Photo 46: Cell CC3A Part II: July 10, 2013**



**Photo 47: Cell CC3A Part II: July 10, 2013**



**Photo 48: Cell CC3A Part II: July 10, 2013**



**Photo 49: Cell CC3A Part II: July 10, 2013**



**Photo 50: Cell CC3A Part II: July 10, 2013**



**Photo 51: Cell CC3A Part II: July 10, 2013**



**Photo 52: Cell CC3A Part II: July 10, 2013**





**Photo 53: Cell CC3A Part II: July 10, 2013**



**Photo 54: Cell CC3A Part II: July 10, 2013**



**Photo 55: Cell CC3A Part II: August 7, 2013**



**Photo 56: Cell CC3A Part II: August 7, 2013**





**Photo 57: Cell CC3A Part II: August 7, 2013**



**Photo 58: Cell CC3A Part II: August 7, 2013**



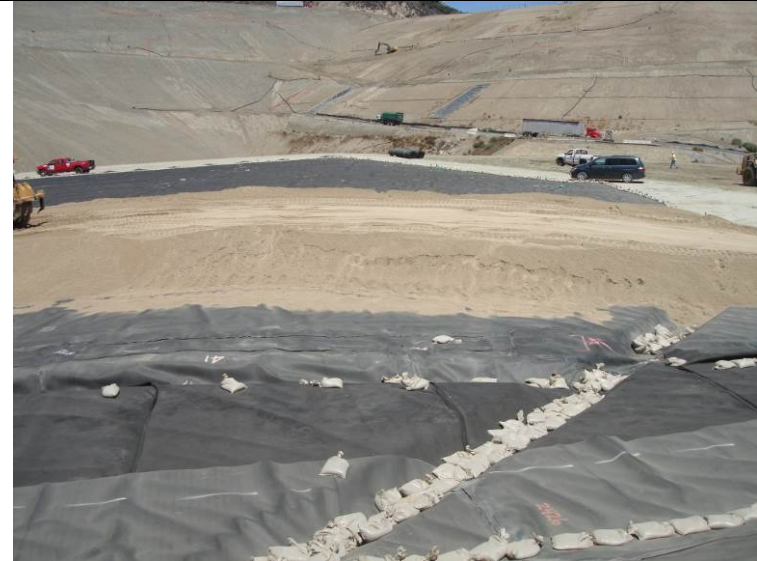
**Photo 59: Cell CC3A Part II: August 7, 2013**



**Photo 60: Cell CC3A Part II: August 7, 2013**



**Photo 61: Cell CC3A Part II: August 20, 2013**



**Photo 62: Cell CC3A Part II: August 20, 2013**



**Photo 63: Cell CC3A Part II: August 20, 2013**



**Photo 64: Cell CC3A Part II: August 20, 2013**





**Photo 65: Cell CC3A Part II: August 20, 2013**



**Photo 66: Cell CC3A Part II: August 20, 2013**



**Photo 67: Cell CC3A Part II Buttriss: September 11, 2013**



**Photo 68: Cell CC3A Part II: September 11, 2013**



**Photo 69: Cell CC3A Part II: September 11, 2013**



**Photo 70: Cell CC3A Part II: September 11, 2013**



**Photo 71: Cell CC3A Part II: September 11, 2013**



**Photo 72: City South Entrance Road Crack: July 10, 2013**





**Photo 73: City South Hillside Slope Crack: July 10, 2013**



**Photo 74: City South Hillside Slope Crack: July 10, 2013**



**Photo 75: Underdrain Directional Drilling: July 10, 2013**



**Photo 76: Underdrain Water Control: July 10, 2013**





**Photo 77: Underdrain Water Control: July 10, 2013**



**Photo 78: Underdrain Water Control: July 10, 2013**



**Photo 79: Underdrain Drilling: August 7, 2013**



**Photo 80: City Sage Deck C: July 10, 2013**





**Photo 81: City Sage Deck C: July 10, 2013**



**Photo 82: City Sage Deck C: July 10, 2013**



**Photo 83: City Sage Deck C: July 10, 2013**



**Photo 84: City Sage Deck C: July 10, 2013**





**Photo 85: City Sage Deck C: July 10, 2013**



**Photo 86: City Sage Deck C: July 10, 2013**



**Photo 87: City Sage Deck C: July 10, 2013**



**Photo 88: City Sage Deck C: July 10, 2013**





**Photo 89: City Sage Deck C: July 10, 2013**



**Photo 90: City Sage Deck C: July 10, 2013**



**Photo 91: City Sage Deck C: July 10, 2013**



**Photo 92: City Sage Deck C: July 10, 2013**





**Photo 93: City Sage Deck C: July 10, 2013**



**Photo 94: City Sage Deck C: July 10, 2013**



**Photo 95: City Sage Deck C: July 10, 2013**



**Photo 96: City Sage Deck C: July 10, 2013**





**Photo 97: City Sage Deck C: August 7, 2013**



**Photo 98: City Sage Deck C: August 7, 2013**



**Photo 99: City Sage Deck C: August 7, 2013**



**Photo 100: City Sage Deck C: August 7, 2013**





**Photo 101: City Sage Deck C: August 7, 2013**



**Photo 102: City Sage Deck C: September 11, 2013**



**Photo 103: City Sage Deck C: September 11, 2013**



**Photo 104: City Sage Deck C: September 11, 2013**





**Photo 105: City Sage Deck C: September 11, 2013**



**Photo 106: City Sage Deck C: September 11, 2013**



**Photo 107: City Sage Deck C: September 11, 2013**



**Photo 108: City Sage Deck C: September 11, 2013**





**Photo 109: City Sage Deck C: September 11, 2013**



**Photo 110: City Sage Deck C: September 11, 2013**



**Photo 111: City Sage Deck C: September 11, 2013**



**Photo 112: City Sage Deck C: September 11, 2013**





**Photo 113: City Sage Deck C: September 11, 2013**



**Photo 114: City Sage Deck C: September 11, 2013**



**Photo 115: Big Cone Fir Mitigation Area: August 7, 2013**



**Photo 116: Big Cone Fir Mitigation Area: August 7, 2013**





**Photo 117: Big Cone Fir Mitigation Area: August 7, 2013**



**Photo 118: Big Cone Fir Irrigation tank: August 7, 2013**



**Photo 119: Big Cone Fir Irrigation tank: August 7, 2013**



**Photo 120: Big Cone Fir Mitigation: August 7, 2013**





**Photo 121: Big Cone Fir Mitigation: August 7, 2013**



**Photo 122: Big Cone Fir Mitigation: August 7, 2013**



**Photo 123: Big Cone Fir Mitigation: August 7, 2013**



**Photo 124: Big Cone Fir Mitigation: August 7, 2013**





**Photo 125: Big Cone Fir Mitigation: August 7, 2013**



**Photo 126: Big Cone Fir Mitigation: August 7, 2013**



**Photo 127: Big Cone Fir Mitigation: August 7, 2013**



**Photo 128: Big Cone Fir Mitigation: August 7, 2013**





**Photo 129: Big Cone Fir Mitigation: August 7, 2013**



**Photo 130: Big Cone Fir Mitigation: August 7, 2013**



**Photo 131: Big Cone Fir Mitigation: August 7, 2013**



**Photo 132: Permanent Slopes at Flare 9 and 10 Locations: August 7, 2013**





**Photo 133: Permanent Slopes at Flare 9 and 10 Locations:  
August 7, 2013**



**Photo 134: Permanent Slopes at Flare 9 and 10 Locations:  
August 7, 2013**



**Photo 135: Permanent Slopes at Flare 9 and 10 Locations:  
August 7, 2013**



**Photo 136: Permanent Slopes at Flare 9 and 10 Locations:  
August 7, 2013**



**Photo 137: Permanent Slopes at Flare 9 and 10 Locations:  
August 7, 2013**



**Photo 138: Permanent Slopes at Flare 9 and 10 Locations:  
August 7, 2013**



**Photo 139: County Top Deck: July 10, 2013**



**Photo 140: County Top Deck: July 10, 2013**





**Photo 141: County Top Deck: August 7, 2013**



**Photo 142: County Top Deck: August 7, 2013**



**Photo 143: County Top Deck: August 7, 2013**



**Photo 144: County Top Deck: August 7, 2013**





**Photo 145: County Top Deck: August 7, 2013**



**Photo 146: County Top Deck: August 7, 2013**



**Photo 147: County Top Deck: September 11, 2013**



**Photo 148: County Top Deck: September 11, 2013**



**Photo 149: County Top Deck: September 11, 2013**



**Photo 150: County Top Deck: September 11, 2013**



**Photo 151: County Top Deck Vegetation Test Plots: September 11, 2013**



**Photo 152: County Top Deck Vegetation Test Plots: September 11, 2013**





**Photo 153: County Top Deck Vegetation Test Plots: September 11, 2013**



**Photo 154: City North Old Top Deck: July 10, 2013**



**Photo 155: City North Old Top Deck: July 10, 2013**



**Photo 156: Flare 10: July 10, 2013**



**Photo 157: Flare 10: July 10, 2013**



**Photo 158: Flare 10 Construction: July 10, 2013**



**Photo 159: Flare 10 Construction: July 10, 2013**



**Photo 160: Flare 10 Construction: July 10, 2013**





**Photo 161: Flare 10 Construction: July 10, 2013**



**Photo 162: Flare 10 Construction: July 10, 2013**



**Photo 163: Flare 10 Construction: July 10, 2013**



**Photo 164: Flare 10 Construction: July 10, 2013**





**Photo 165: Flare 10: July 10, 2013**



**Photo 166: Flare 10: August 7, 2013**



**Photo 167: Edison Equipment Site: July 10, 2013**



**Photo 168: Edison Pole Foundation: July 10, 2013**





**Photo 169: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 170: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 171: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 172: Gas to Energy Underground Electrical: July 10, 2013**





**Photo 173: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 174: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 175: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 176: Gas to Energy Facility Construction: July 10, 2013**





**Photo 177: Gas to Energy Facility Construction: July 10, 2013**



**Photo 178: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 179: Gas to Energy Underground Electrical: July 10, 2013**



**Photo 180: Gas to Energy Underground Electrical July 10, 2013**





**Photo 181: Gas to Energy Facility Construction: July 10, 2013**



**Photo 182: Gas to Energy Facility Construction: July 10, 2013**



**Photo 183: Gas to Energy Facility Construction: July 10, 2013**



**Photo 184: Gas to Energy Facility Construction: July 10, 2013**





**Photo 185: Gas to Energy Facility Construction: August 7, 2013**



**Photo 186: Gas to Energy Facility Construction: August 7, 2013**



**Photo 187: Gas to Energy Facility Construction: August 7, 2013**



**Photo 188: Gas to Energy Facility Construction: August 7, 2013**





**Photo 189: Gas to Energy Facility Construction: August 7, 2013**



**Photo 190: Gas to Energy Facility Construction: August 7, 2013**



**Photo 191: Gas to Energy Facility Construction: August 7, 2013**



**Photo 192: Gas to Energy Facility Construction: August 20, 2013**





**Photo 193: Gas to Energy Facility Construction: August 20, 2013**



**Photo 195: Gas to Energy Facility Construction: August 20, 2013**



**Photo 194: Gas to Energy Facility Construction: August 20, 2013**



**Photo 196: Gas to Energy Facility Construction: August 20, 2013**





**Photo 197: Gas to Energy Facility Construction: August 20, 2013**



**Photo 198: Gas to Energy Facility Construction: August 20, 2013**



**Photo 199: Gas to Energy Facility Construction: August 20, 2013**



**Photo 200: Gas to Energy Facility Construction: September 11, 2013**





**Photo 201: Gas to Energy Facility Construction: September 11, 2013**



**Photo 202: Gas to Energy Facility Construction: September 11, 2013**



**Photo 203: Gas to Energy Facility Construction: September 11, 2013**



**Photo 204: Edison Equipment Site: September 11, 2013**





**Photo 205: Edison Equipment Site: September 11, 2013**



**Photo 206: Condensate Treatment Facility: July 10, 2013**



**Photo 207: Condensate Treatment Facility: July 10, 2013**



**Photo 208: Condensate Treatment Facility: August 7, 2013**





**Photo 209: Head Pipeline Gas Collection Leaking:  
July 10, 2013**



**Photo 210: PVC Cap: July 10, 2013**



**Photo 211: Equipment Maintenance Yard: July 10, 2013**



**Photo 212: Flare 8: August 7, 2013**





**Photo 213: Flare 3: August 20, 2013**



**Photo 214: Flare 3: August 20, 2013**



**Photo 215: Leachate Treatment Facility: August 20, 2013**



**Photo 216: Leachate Treatment Facility: August 20, 2013**



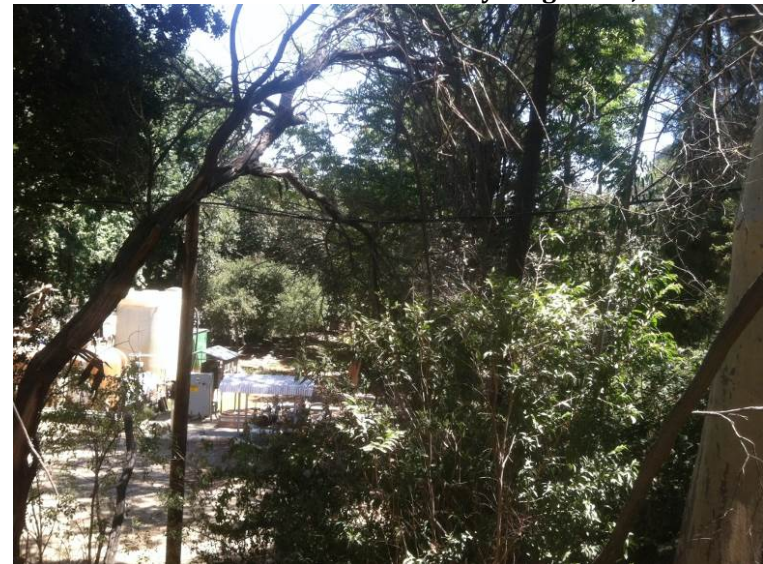
**Photo 217: Leachate Treatment Facility: August 20, 2013**



**Photo 218: Leachate Treatment Facility: August 20, 2013**



**Photo 219: Leachate Treatment Electrical Lines:  
August 20, 2013**



**Photo 220: Leachate Treatment Electrical Lines:  
August 20, 2013**





**Photo 221: Leachate Treatment Electrical Lines: August 20, 2013**



**Photo 222: Leachate Treatment Electrical Lines: August 20, 2013**



**Photo 223: Accelerometer: August 20, 2013**



**Photo 224: Accelerometer: August 20, 2013**





**Photo 225: Accelerometer: August 20, 2013**



**Photo 226: Gas Drilling City Top Deck: August 20, 2013**



**Photo 227: Gas Drilling City Top Deck: August 20, 2013**



**Photo 228: Leachate Removal Sump Gas Leak: September 11, 2013**





**Photo 229: Oil Field gate Access: September 11, 2013**



**Photo 230: Sierra Highway Near I-14: July 10, 2013**



**Photo 231: Sierra Highway Near I-14: July 10, 2013**



**Photo 232: Sierra Highway Near I-14: July 10, 2013**





**Photo 233: Sierra Highway Near I-14: July 10, 2013**



**Photo 234: Sierra Highway Near I-14: August 7, 2013**



**Photo 235: Sierra Highway Near I-14: August 7, 2013**



**Photo 236: Sierra Highway Near I-14: August 7, 2013**





**Photo 237: Sierra Highway Near I-14: September 11, 2013**



**Photo 238: Sierra Highway Near I-14: September 11, 2013**



**Photo 239: San Fernando Road at Balboa: September 11, 2013**



**Photo 240: San Fernando Road at Balboa: September 11, 2013**





**Photo 241: San Fernando Road at Balboa: September 11, 2013**



**Photo 242: Balboa at San Fernando Road: September 11, 2013**



**Photo 243: Site Working Areas: July 10, 2013**



**Photo 244: Site Working Areas: July 10, 2013**



**Photo 245: Site Working Areas: July 10, 2013**



**Photo 246: Site Working Areas: July 10, 2013**



**Photo 247: Site Working Areas: July 10, 2013**



**Photo 248: Site Working Areas: July 10, 2013**





**Photo 249: Site Working Areas: July 10, 2013**



**Photo 250: Site Working Areas: July 10, 2013**



**Photo 251: Site Working Areas: August 7, 2013**



**Photo 252: Site Working Areas: August 7, 2013**





**Photo 253: Site Working Areas: August 7, 2013**



**Photo 254: Site Working Areas: August 20, 2013**



**Photo 255: Site Working Areas: August 20, 2013**



**Photo 256: Site Working Areas: August 20, 2013**





**Photo 257: Site Working Areas: August 20, 2013**



**Photo 258: Site Working Areas: September 11, 2013**



**Photo 259: Site Working Areas: September 11, 2013**



**Photo 260: Site Working Areas: September 11, 2013**





**Photo 261: Site: July 10, 2013**



**Photo 262: Site: July 10, 2013**



**Photo 263: Site: July 10, 2013**



**Photo 264: Site: July 10, 2013**





**Photo 265: Site: July 10, 2013**



**Photo 266: Site: July 10, 2013**



**Photo 267: Site: July 10, 2013**



**Photo 268: Site: July 10, 2013**





**Photo 269: Site: July 10, 2013**



**Photo 270: Site: July 10, 2013**



**Photo 271: Site: August 7, 2013**



**Photo 272: Site: August 7, 2013**





**Photo 273: Site: August 7, 2013**



**Photo 274: Site: August 7, 2013**



**Photo 275: Site: August 20, 2013**



**Photo 276: Site: August 20, 2013**





**Photo 277: Site: August 20, 2013**



**Photo 278: Site: August 20, 2013**



**Photo 279: Site: August 20, 2013**



**Photo 280: Site: August 20, 2013**





**Photo 281: Site: August 20, 2013**



**Photo 282: Site: August 20, 2013**



**Photo 283: Site: August 20, 2013**



**Photo 284: Site: August 20, 2013**





**Photo 285: Site: September 11, 2013**



**Photo 286: Site: September 11, 2013**



**Photo 286: Site: September 11, 2013**



**Photo 288: Site: September 11, 2013**



**Photo 289: City South Deck C Sage Mitigation: September 11, 2013**



**Photo 290: Flare 1 Piping Supports: September 11, 2013**



**Photo 291: Flare 1 Piping Supports: September 11, 2013**



# **Appendix III**

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

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### **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**




**July Site Visits**

**July 10, 2013:** James Aidukas (UltraSystems), Mike Lindsay (UltraSystems)



**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING SITE REPORT**

Monitor: James Aidukas	Page: 1 of 1
Discipline: Project Manager	Date: July 10, 2013
Site Conditions: Cloudy with moderate wind gusts	
<b>SITE LOG</b>	
<p>Republic Site Manager - Anthony Bertrand</p> <p>Met with John Nelson (LADPW) and Mike Lindsay (UEI) and signed in at the office and proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> <li>Construction activity was observed in Cell CC-3A Part II. Side liner was installed and construction of buttress was underway.</li> <li>There were cracks in the City South slope just south of the area where the buttress was being installed. Possible movement prior to the buttress construction. The underdrain direction drilling had experienced getting the drill bit stuck a couple days prior to our visit. This caused a release of drilling mud and water, approximately 18,000 gallons, into the terminal basin where it was contained.</li> <li>The condensate treatment facility was observed and we noted that since the last monitoring, the carbon vessel had burped and carbon was on the equipment and adjacent ground area. The clean-up was scheduled.</li> <li>The equipment maintenance yard was observed and no issues were noted.</li> <li>The City Sage Deck C was observed. The sage plants appeared to be surviving the hot spell. The hydroseeded areas did not germinate. The black sage did not survive. The area was just planted and cool weather and time is needed.</li> <li>Flare 10 was installed on its foundation along with the air blower. Gas piping and electrical construction was in progress. It was estimated that it would be commissioned and running before August 1.</li> <li>The gas-to-energy facility site was observed. The gas piping header was being constructed and was extended to the edge of the site. Trenches for electrical runs and areas for equipment foundations were excavated. Trenches were being lined with fabric and spread with a HDPE liquid.</li> <li>On the County top deck a collection headed with a PVC cap on a tee was noted to be leaking. Achaya Kelapanda was notified of the condition.</li> <li>Litter was observed in the vegetation behind Basin B.</li> <li>Dumped trash and litter was observed near the I-14 overpass.</li> </ul> <p>Flare Operating Conditions:</p> <p>Temporary Flare - 1671° F, 1581 SCFM, 54.17" vacuum</p> <ul style="list-style-type: none"> <li>Flare 1 - 1707° F, 4017 SCFM</li> <li>Flare 3 - 1672° F, 3941 SCFM, 70" vacuum</li> <li>Flare 9 - 1694° F, 4124 SCFM, 50" vacuum</li> </ul> <p>Flare 3 was observed to be stuttering and it also had a slight exhaust gas stack odor. Flare 1 also had a slight exhaust gas stack odor.</p>	
<b>FURTHER REVIEW NEEDED</b>	
Have UEI's biologist observe sage mitigation at the next monitoring visit.	
<b>COMMENTS</b>	
Signed: 	



UltraSystems

**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING  
SITE REPORT**

Monitor: Mike Lindsay	Page 1 of 1
Discipline: Environmental Engineer	Date: 07-10-13
Site Conditions: Cloudy, 65/86°F, 5-10 mph	
<b>SITE LOG</b>	
1. Met with John Nelson (LACORP) and Jim Aidukas (UltraSystems). 2. Measured County Top Deck elevations using a Trimble 2008 GeoXH GPS device ( $\pm 0.1$ m). 3. Located large gas leak at 12" pipe T-connector (Republic was already planning the repair) at Co. Top Deck. 4. Observed City Sage Top Deck C revegetation area. Sage plants doing well (blue flags), small leaf, broad leaf plants doing well (green flags), plants with orange flags are 75-98% dead. Soil moisture at plantings was good. 5. Flare 1 is operating at 4004 SCFM, 1690°F. Gas sample measured at 26% Vol. CH <sub>4</sub> , 3.9% Vol. O <sub>2</sub> , 208 ppm CO. 6. Flare 3 is operating at 3906 SCFM, 1684°F. Gas sample measured at 31% Vol. CH <sub>4</sub> , 3.8% Vol. O <sub>2</sub> , over 500 ppm CO. 7. Met with Acharya Kelpanda (Republic) and discussed location of 12" gas pipe leak on Co. Top Deck. 8. Flare 9 is operating at 4124 SCFM, 1694°F. Gas sample measured at 35% Vol. CH <sub>4</sub> , 1.9% Vol. O <sub>2</sub> , over 500 ppm CO. 9. Observed construction of new Flare 10 and Gas-to-Energy plant.	
<b>FURTHER REVIEW NEEDED</b>	
1. Replace dead orange-flagged plants at City Top Deck C.	
Project Number: 5800	Signed: Mike Lindsay

[Well CGW  
1284/536]



**August Site Visits**

**August 7, 2013:** James Aidukas (UltraSystems), Joe Thompson (UltraSystems), Mike Lindsay (UltraSystems)

**August 20, 2013:** James Aidukas (UltraSystems), Mike Lindsay (UltraSystems), Tarik Hadj-Hamou (SLR)



**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING SITE REPORT**

Monitor: James Aidukas	Page: 1 of 2
Discipline: Project Manager	Date: 8/7/13
Site Conditions: Clear and sunny, slight wind, 5-10 MPH	
<b>SITE LOG</b>	
<p>Republic Site Manager - Anthony Bertrand</p> <p>Met with John Nelson (LADPW), Clark Ajwani (LADPW), Joe Decruyenaere (LA County Biologist), Mike Lindsay and Joe Thompson (UltraSystems). Signed in at Republic's office and proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> <li>• The City South Deck C sage mitigation planting were observed. Plants were being watered, but the soil's high salt content and hot winds were having a toll on some plant species. I estimated that approximately 40% of the plants had died.</li> <li>• The Big Cone Fir mitigation area was visited next. The animal barrier chicken wire cages had been removed and the plantings were surviving. There were several dead trees noted in the mitigation area. The county biologist and UltraSystem's biologist did a complete evaluation of the mitigation site.</li> <li>• One of the HDPE lines from the central irrigation tank for the Big Cone Fir mitigation area was noted to be kinked and would restrict flow.</li> <li>• It was observed that the work on the gas-to-energy facility was progressing with underground conduit being installed. DTE's anticipated start-up is 1st Quarter 2014.</li> <li>• The terminal basin was the only basin that had sediment. Approximately 50% of the sediment had been removed.</li> <li>• The condensate treatment facility carbon tank area was cleaned up since the last site visit.</li> <li>• The underdrain drilling was still in progress and anticipated to be completed within a week.</li> <li>• Cell CC3A Part II was under construction.</li> <li>• Sierra Highway at the I-14 overpass was observed and it had been cleaned. There was no litter nor illegal dumping.</li> </ul> <p>Flare Operating Conditions:</p> <ul style="list-style-type: none"> <li>○ Flare 1 - 1703° F, 3983 SCFM</li> <li>○ Flare 3 - 1723° F, 3798 SCFM</li> <li>○ Flare 8 - 1703° F, 3210 SCFM</li> <li>○ Flare 9 and 10 were being worked on by the manufacturer John Zinc.</li> </ul> <p>Met with Patti Costa after the monitoring. We informed her that we observed the following conditions during our site visit:</p> <ul style="list-style-type: none"> <li>• Sierra Highway was clean.</li> <li>• The terminal basin was not cleaned of sediment and the risers had debris and mud caked to the filter fabric.</li> <li>• 40% of the plants in the City South Deck C sage mitigation area were dying, with 60% surviving.</li> <li>• Flare 3 was cycling and shaking and that the flare operating personnel should investigate.</li> </ul> <p>Patti Costa provided the following information:</p> <ul style="list-style-type: none"> <li>• The first phase of CC3A Part II liner reports will be submitted to RWQCB in September, with an October schedule for start of fill. The second phase will be submitted in November with a scheduled December start of fill.</li> <li>• The terminal basin is being worked on and all sediment will be removed and the basin will be ready for handling rain by October.</li> </ul>	

(8/7/13, Page 2 of 2)

- The re-alignment of the access road to allow the installation of the final toe berm is scheduled for 1st or 2nd Quarter of 2014.
- The installation of a sewer pipeline is being designed and bids will be obtained and evaluated in September 2013.
- Five vegetation test plots are being run on the County top deck by Pacific Restoration Group and S&S seeds. They are testing various seeds with the site's soils and different soil conditioning.
- Deck C mitigation plantings will be maintained now and replacement of dead plants will occur in the fall.

#### FURTHER REVIEW NEEDED

1. Monitor Deck C at next site monitoring visit.
2. Review Big Cone Fir report when issued.
3. Review proposed revegetation plans for temporary vegetation when developed and released by Republic's consultant.

#### COMMENTS

Signed: 





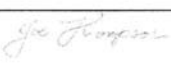
**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING  
SITE REPORT**

Monitor: Mike Lindsay	Page 1 of 2
Discipline: Environmental Engineer	Date: 08-07-13
Site Conditions: Clear, Sunny, 66 / 81 °F, 5-10 mph	
<b>SITE LOG</b>	
<ol style="list-style-type: none"> <li>1. Met with John Nelson, Clark-engineer and Joe - biologist (all 3 with LACDPW), Jim Aldukas and Joe Thompson (UltraSystems).</li> <li>2. Flare 8 is operating at 3207 SCFM, 1695 °F; gas sample measured at 36 % Vol. CH<sub>4</sub>, 2.8 % Vol. O<sub>2</sub>, over 500 ppm CO.</li> <li>3. Observed Big Cone Fir mitigation trees to be in good overall health. Mesh screens have been removed and irrigation system is working well. Approx. 8 Big Cone Fir trees are dead.</li> <li>4. Observed City Sage Top Deck C. revegetation area. Plantings are doing well overall, except for orange-flagged plants that are all mostly dead.</li> <li>5. Flare 1 is operating at 3921 SCFM, 1688 °F; gas sample measured at 28 % Vol. CH<sub>4</sub>, 4.1 % Vol. O<sub>2</sub>, 156 ppm CO; Flare intake gas at 158 °F.</li> <li>6. Flare 3 is operating at 3790 SCFM, 1676 °F; gas sample measured at 35 % Vol. CH<sub>4</sub>, 3.4 % Vol. O<sub>2</sub>, over 500 ppm CO.</li> <li>7. Observed County Sage mitigation area (westside) to be less than 50% covered with vegetation.</li> <li>8. Observed permanent slopes under Flare 9/10/GTE to have no vegetation cover.</li> <li>9. Observed Flare 9 being serviced (could not take readings or measurements).</li> </ol>	
<b>FURTHER REVIEW NEEDED</b>	
<ol style="list-style-type: none"> <li>1. Replace approx. 8 Big Cone Fir trees with same or equiv.</li> <li>2. Replace dead orange-flagged plants at City Top Deck C.</li> <li>3. Increase County Sage mitigation area coverage.</li> <li>4. Vegetate permanent slopes under Flare 9/10/GTE.</li> </ol>	
Project Number: 5800	Signed: <i>Mike Lindsay</i>

Monitor: Mike Lindsay	Page 2 of 2
Discipline: Environmental Engineer	Date: 08-07-13
Site Conditions:	
SITE LOG	
10. Observed construction of new Flare 10 and Gas-to-Energy plant.	
11. Met with Papi Costa (Republic):	
a. New access road schedule pushed back to 2014 Q1.	
b. Flare 10 has technical problems that Zink is fixing.	
c. Due to soil deficit, County may deliver soil to landfill.	
d. New aerial map of 03-12-13; we will provide an FTP site directory for download.	
e. Sewer line going to bid in 2 weeks for October operation. May go to 2014 Q1 if permit is delayed. Line is 2200 linear feet long, with force main.	
f. City sage top deck C will have dead plants replaced by contractor.	
g. 5 test plots of soil amendments were installed, with compositions designed by SAS-SEEDS.	
FURTHER REVIEW NEEDED	
Project Number: 5800	
Signed: Mike Lindsay	



**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING SITE REPORT**

Monitor: Joe Thompson	Page: 1 of 1
Discipline: Biologist	Date: August 7, 2013
Site Conditions: Clear, 66/81 degrees F. Winds: 5-10 MPH.	
<b>SITE LOG</b>	
<ol style="list-style-type: none"> <li>1. Met with Jim Aidukas and Mike Lindsay (Ultrasystems) John Nelson and Clark (LA County Engineering) and Joe Decruyenaere (LA County Biologist).</li> <li>2. Visited City Deck C to evaluate success of mitigation plantings. The irrigation system appears to be functioning well. All plants are being watered regularly, although there are a lot of weeds, mostly non-native grasses and forbs. The greatest threat to plantings at this time appears to be the high salt content in the soil. The irrigation regime has resulted in salt crust formation in many areas. Nearly all coyote bush (<i>Baccharis pilularis</i>) is surviving, with few signs of stress. Elderberry (<i>Sambucus mexicanus</i>) is struggling. Approximately 50 percent of these plants have died and the remaining plants show signs of stress from salt. Approximately 70 percent of the coastal sagebrush (<i>Artemisia californica</i>) plantings are still alive, with most of these showing signs of stress from excessive salt. Nearly all black sage (<i>Salvia mellifera</i>) plantings have died.</li> <li>3. Visited the big cone Douglas fir (<i>Pseudotsuga macrocarpa</i>) mitigation area and saw that most of the planted trees are in good health. Approximately 8 trees appear to have died since the site was planted and two trees appear to have died recently.</li> <li>4. Visited the County Mitigation Area and observed that less than 50 percent of the site is vegetated.</li> <li>5. Visited Flare 9 and Flare 10 and saw that there is almost no vegetation cover.</li> </ol>	
<b>FURTHER REVIEW NEEDED</b>	
<ol style="list-style-type: none"> <li>1. Dead plants need to be replaced at the City Mitigation area.</li> <li>2. New trees (approximately 8) need to be replaced at the big cone mitigation area.</li> <li>3. A new approach to establishing coastal sage vegetation is needed for the County mitigation area.</li> <li>4. Permanent slopes at Flares 9 and 10 need to be planted.</li> </ol>	
<b>COMMENTS</b>	
Signed: 	





**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING SITE REPORT**

Monitor: James Aidukas	Page: 1 of 2
Discipline: Project Manager	Date: 8-20-13
Site Conditions: Clear and sunny	
<b>SITE LOG</b>	
<p>Republic Site Manager - Anthony Bertrand Met with John Nelson (LADPW), Lukasz Przbylo (LADPW), Mike Lindsay (UltraSystems), and Tarik Hadj-Hamou (SLR). Signed in at Republic's office and had a pre-monitoring meeting with Anthony Bertrand and Tim Johnson. I requested an update on the site activities and John Nelson and Lukasz Przbylo had operations questions. Anthony Bertrand provided the following information:</p> <ol style="list-style-type: none"> <li>1. CC-3B design has been submitted to the RWQCB and it includes the final design of the toe berm. The State Division of Dams will not have to approve the toe berm design. CC-3B will be built in three phases and all will start construction in 2014 with completion by 2015. This will also entail three phases of road re-alignment. The scalehouse will be moved to a new location in 2015.</li> <li>2. CC-4 will be the next and final cell development.</li> <li>3. Cell CC-3A Part II earthwork to stabilize the City South slope is near completion. The cell is being lined and submittals to RWQCB will be in two phases:             <ol style="list-style-type: none"> <li>a) October 1st submittal to RWQCB with approval anticipated by October 15th;</li> <li>b) December 1st submittal to RWQCB with approval anticipated by January 15th.</li> </ol> </li> <li>4. The City South Deck C sage mitigation is being maintained until fall. No replacement of plants will be done now. At the end of the year, the vegetation consultants will present an evaluation of the success of the mitigation planting and provide a revised plan, if needed.</li> <li>5. There are 89 new gas wells being drilled in the City jurisdiction to provide better gas recovery.</li> <li>6. The Temporary Flare will be shut down by the end of September 2013.</li> <li>7. There is a contract proposal for the temporary generators for Flares 1, 3, 9 and 10, and a purchase order will authorize delivery. Flares 1 and 3 have connection panels in place.</li> </ol> <p>Mr. Przbylo had the following questions to which Mr. Bertrand responded:</p> <ol style="list-style-type: none"> <li>A. Question: How will the temporary generator be handled? Answer: By purchase order. One for Flares 9 and 10 and one each for Flares 1 and 3.</li> <li>B. Question: Where is the accelerometer onsite? Answer: Will investigate.</li> <li>C. Question: Is Republic interested in basin soils from County facilities? Answer: Anthony and Patti Costa will respond to Mr. Przbylo's emails.</li> <li>D. Question: How are radiation events handled? Answer: They are held in the truck until half-life occurs and the County inspector verifies it is safe to dispose of the waste.</li> </ol> <p>Following the meeting, we proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> <li>• Observed gas drilling on City Top Deck near CC-2A.</li> <li>• Observed accelerometer near the front entrance. The fiberglass cover had a hole in it and it appeared that the equipment has not been maintained.</li> <li>• The terminal basin had sediment in the bottom and risers had trash and mud on the filter fabric</li> <li>• Debris was noted around the front perimeter of the terminal basin.</li> <li>• The electrical powerlines to the leachate treatment plant were noted to be hanging on tree branches.</li> <li>• A hump and crack was observed in the access road pavement near the CC-3A Part II buttress. Two cracks were noted on the City South slopes above the access road.</li> </ul>	

(8/20/13, Page 2 of 2)

Flare Operating Conditions:

- Flare 9 - 1702° F, 2140 SCFM
- Flare 10 - 1685° F, 2257 SCFM

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

- There is no secondary access road now that the Flare 8 road has been eliminated.
- The leachate facility electrical lines are hanging on branches and pose a fire hazard.
- The terminal basin has sediment.
- When the realignment road design has been finalized and associated impacts analyzed, the monitors would request that a copy be provided.

Becky Van Sickle gave the following update:

- The terminal basin should be cleaned by October.
- The leachate electrical powerlines condition will be reported to maintenance.
- The gas-to-energy turbines will be on site in late September, with foundations in place by early December.
- There is a draft tree mitigation status report that has been submitted to the County Forrester Kelly Kim.
- The replacement designation of a secondary access has not been made.

FURTHER REVIEW NEEDED

1. Check on status of maintenance on accelerometer.
2. Check terminal basin for sediment removal.
3. Check electrical powerlines to the leachate facility.
4. Cracks on access road and City South slope should be investigated by Republic's geotechnical engineer.

COMMENTS

Signed: 



**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING  
SITE REPORT**

Monitor: Mike Lindsay	Page 1 of 2
Discipline: Environmental Engineer	Date: 08-20-13
Site Conditions: Sunny, clear, 66/85°F, 5-10 mph	
<b>SITE LOG</b>	
<ol style="list-style-type: none"> <li>1. Met with Anthony Bertrand, Tim Johnson (Republic), John Nelson and Lucas (LACDPW), Jim Aidukaitis and Tarik-Hodj Hamou (UltraSystems).</li> <li>2. Anthony's Cell CC3B approved on 08-19-13 by water board (includes toe berm and front area).             <ul style="list-style-type: none"> <li>- Build all 3 phases in 2014</li> <li>- Scale house needs to be moved in 2015</li> <li>- Phase 1 = temp. road; Phase 2 = (see earlier presentation)</li> </ul> </li> <li>3. 2 1/2 years of airspace should be available w/ Phase 1/2.</li> <li>4. Tipperies are on County side; rest on City side (2 working trees).</li> <li>5. Pente Hill closing end of 2013. Not expected to impact SCL volume significantly.</li> <li>6. Horizontal drilling for sub-drains finished Wed. PM.</li> <li>7. US Forester is looking at big cone firs today; may allow use of oak tree replacements instead of firs.</li> <li>8. City says mitigation status is pending further time and development.</li> <li>9. 89 ver-trake wells are being replaced on S. City / N. City to achieve higher grade gas for GTE system (\$2M).</li> <li>10. Flare 3 had lower control problem → check w/ Ackinger.</li> <li>11. Flare 10 is operational (F9 + F10 are in startup mode).</li> <li>12. Temp. Flare to go off-line late Sept.; will be dismantled.</li> <li>13. Lucas: - generators - the PO is the contract.             <ul style="list-style-type: none"> <li>- F9 + F10 will have one generator.</li> <li>- Generator connectors are complete for F1, 3, 9 and 10.</li> <li>- Accelerometer at front entrance area (~1994).</li> </ul> </li> </ol>	
<b>FURTHER REVIEW NEEDED</b>	
<ul style="list-style-type: none"> <li>- County is interested in bringing soil to SCL (Anthony and Ruffic will respond to Lucas' emails).</li> <li>- Radiation events - County radiating notified after first detection. Will until half-life occurs, and County inspector clears it.</li> <li>- Odiferous loads monitored by load checkers at scale house; buried immediately.</li> </ul>	
Project Number: 5800	Signed: <i>Mike Lindsay</i>





**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING  
SITE REPORT**

Monitor: Mike Lindsay	Page 2 of 2
Discipline: Environmental Engineer	Date: 08-20-13
Site Conditions:	
<b>SITE LOG</b>	
14. Observed working face and well drilling rig, overlooking cell CC3A.	
15. Observed accelerometer by landfill entrance.	
16. Observed Terminal Sediment Basin; approx. 5 feet of sediment at drainage end - 1/2 removed.	
17. Observed lower leachate plant to be in good order.	
18. Observed tree limb laying on overhead power line at lower leachate plant.	
19. Observed a 2-foot hump in asphalt on southwest access road (by City Deck C access road - "Fire Department Road" sign).	
20. Well GW 619 west of City Closed Landfill area - gas sample measured 49% Vol. CH <sub>4</sub> (highest reading ever for CH <sub>4</sub> ), 0.1% Vol. O <sub>2</sub> , 500+ ppm CO.	
21. Well GW 106 gas sample measured 37% Vol. CH <sub>4</sub> , 3.8% Vol. O <sub>2</sub> , 500+ ppm CO.	
22. Flare 9 is operating at 2014 SCFM, 1695 °F. Gas sample measured at 38% Vol. CH <sub>4</sub> , 2.1% Vol. O <sub>2</sub> , 500+ ppm CO, and delivery gas at 156 °F.	
23. Flare 10 is operating at 2257 SCFM and 1647 °F. Note that F9 and F10 are supplied from same gas source, so gas sampling is same for both flares.	
24. Met with Becky van Sickle; 66 KV line strung in Sept. Switchyard starts Sept. 1. Mfg. of solar turbines due late Sept.; GTE system starts operations 2014 Q1. Gas collectors in cell 3A part 1 installing in Sept. Big cone pits are over	
<b>-FURTHER REVIEW NEEDED-</b>	
mitigation count, so there is a surplus of trees.	
Project Number: 5800	Signed: <i>Mike Lindsay</i>

PAGE 1 OF 5



**SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING  
SITE REPORT**

Monitor: Tarik Hadj-Hamou, Ph.D., P.E.	PAGE 1 OF 5
Discipline: Civil - Geotechnical	Date: August 20, 2013
Site Conditions: Sunny	
SITE LOG	
9:00 arrives at Sunshine Canyon Landfill , meet with John Nelson and Lukas Przybylo (LADPW) and Jim Aidukas and Mike Lindsay (UltraSystems) to prepare visit	
9:30-11:00 Meeting with Anthony Bertrand and his team <ul style="list-style-type: none"> <li>• General discussion about the status of the site</li> <li>• Cell CC3A Phase II, :               <ul style="list-style-type: none"> <li>○ Earthworks related to the stability berm finished</li> <li>○ Liner is being installed</li> <li>○ Ali-Mehr is providing CQA services</li> <li>○ Cell should be open for waste disposal by early October</li> </ul> </li> <li>• Design               <ul style="list-style-type: none"> <li>○ Only remaining design element is that of Cell CC4</li> <li>○ Cell CC3b was approved by water board including the design of the toe berm</li> </ul> </li> <li>• Schedule of construction               <ul style="list-style-type: none"> <li>○ Toe berm construction slated to begin in 2014</li> <li>○ Scale house to be moved to new location in 2015.</li> <li>○ The temporary access road will be built in 3 phases in 2014</li> </ul> </li> </ul>	
10:15 - 2:30: site tour	
Drainage system, flare stations, waste face, slopes, roads	
Drainage system <ul style="list-style-type: none"> <li>• Sedimentation basins               <ul style="list-style-type: none"> <li>○ Basins A and D are clean</li> <li>○ Terminal basin contains sediments and will have to be cleaned before rainy season</li> </ul> </li> <li>• Channels               <ul style="list-style-type: none"> <li>○ Not observed this visit</li> </ul> </li> </ul>	
Waste face <ul style="list-style-type: none"> <li>• Republic was operating two waste faces: on top of the County Landfill deck and on top of CC2</li> <li>• A gas well was being installed at CC2</li> </ul>	
Flare stations <ul style="list-style-type: none"> <li>• Flare 10 installed</li> <li>• Construction of the gas to energy facility is on-going</li> </ul>	

PAGE 2 OF 5



Monitor: Tarik Hadj-Hamou, Ph.D., P.E.	PAGE 2 OF 2
Discipline: Civil – Geotechnical	Date: August 20, 2013
Site Conditions: Sunny	
SITE LOG	
<p>Cell CC3 Phase II</p> <ul style="list-style-type: none"> <li>• The stability berm is in place (Photo 1)</li> <li>• The liner was installed over the berm and floor of the cell</li> <li>• The operation layer was being placed. We noted the use of the thick layer in the area where the dump truck rides. This extra thickness will lead to an acceptable stress level on the geosynthetics</li> </ul>	
<p>Geotechnical Issues</p> <ul style="list-style-type: none"> <li>• A crack was observed on the access road near the cell CC3 buttress (Photo 3). The photo shows some vertical offset at the crack and some horizontal offset of the concrete. Also when driving in the area one can feel a small depression. These indicia indicate some downward and outward movement</li> <li>• Fissures/cracks were also observed on the hillside (Photo 4)</li> </ul>	
<p>Miscellaneous</p> <ul style="list-style-type: none"> <li>• There is a ground motion mooring station installed at the toe of the landfill (Photo 5). The protective case is broken and the station may be at risk. Though monitoring the status of station is not a item in the list of conditions, its proper functioning could be helpful to the landfill in case of a seismic event to have site specific ground motion to assess the validity of current design parameters</li> </ul>	
FURTHER REVIEW NEEDED	
COMMENTS	
Cracks on road and hillside and potential impact should be addressed by Republic Geotechnical engineer	
Signed:	





Photo 1: Berm for Cell CC3 Phase II



Photo 2: Thick layer under dump truck to reduce stresses on geosynthetics

PAGE 4 OF 5



Photo 3: Crack across access road



Photo 4: Crack on fill on hillside

PAGE 5 OF 5



Photo 5: Damaged protective case for ground motion monitoring station



### **September Site Visits**

**September 11, 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: September 11, 2013
Site Conditions: Clear and sunny	
<b>SITE LOG</b>	
<p>Republic Site Manager - Dave Hauser</p> <p>Observed the Granada Hills neighborhood and adjacent roads for windblown litter and illegal dumping. Also drove through the neighborhood with the windows down to detect any odors.</p> <p>There was no landfill odor detected in the neighborhood. Windblown litter was observed on San Fernando Road at Balboa Boulevard and on Balboa Boulevard south of San Fernando Road.</p> <p>Met with John Nelson, Dave Nguyen and Lukas Przybylo from LADPW and Mike Lindsay from UltraSystems. Briefly met with Patti Costa and was informed that Anthony Bertrand was no longer an employee of Republic Services and that the temporary site manager is Dave Hauser. We signed in and proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> <li>• Basin A was observed. The basin was cleared of sediment and ready for stormwater. The sediment and tumbleweed in the inlet from the westside channel was cleared since the last site monitoring visit. Windblown litter was observed at this inlet and on the basin's back hillside.</li> <li>• Grading had occurred since the last monitoring visit in an area south of Basin A. This area had coastal sage removed and there were remains of one coast live oak. A biological assessment report should have been performed and a copy should be obtained and reviewed.</li> <li>• The County top deck was observed from the County sage water tank area. Disposal activity was observed on the County top deck. The top deck was graded and well kept.</li> <li>• The roadway to the water tank area had a large hole in the road's shoulder posing a vehicle hazard.</li> <li>• 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 causing cracking in the concrete walls.</li> <li>• Basin D was observed and is ready to handle stormwater. Basin D's dirt bottom was not sealed with soil sealant.</li> <li>• Gas monitoring wells were observed in the back of canyon D. No concerns were noted.</li> <li>• Basin D outlet channel liner had been replaced since the last monitoring visit and is now ready to handle stormwater.</li> <li>• The gas-to-energy facility and the Edison facility were observed. Work was being performed on both sites. Scheduled commissioning is 1st Quarter 2014.</li> <li>• Basin B was observed and was ready for handling stormwater.</li> <li>• The leachate removal sump near the City north top deck was noted to be leaking landfill gas.</li> <li>• The terminal basin was observed and sediment was noted at the area around the outlet risers. Trash was also noted around the front outside perimeter basin wall.</li> <li>• The City deck C sage was observed. Approximately 20% of the sage and approximately 50% of all plants had died. The mitigation area was being watered and maintained. Replanting will occur when the weather becomes cooler.</li> </ul>	

(Page 2 of September 11, 2013 Site Report)

Flare Operating Conditions:

- Flare 1 - 1691° F, 3988 SCFM, -52.84" vacuum
- Flare 3 - 1715° F, 3913 SCFM
- Flare 8 - 1703° F, 3210 SCFM
- Flare 9 - 1671° F, 2592 SCFM
- Flare 10 - 1681° F, 2718 SCFM

It was noted that at flares 9 and 10 the flame arresters did not have drains.

FURTHER REVIEW NEEDED

1. Obtain a copy of the biological report for the grading being done south of Basin A.
2. Repair to the County sage water tank roadway shoulder to eliminate a hole and vehicle hazard.
3. Scheduled maintenance and repair of the westside concrete channel.
4. Check Basin D area when Santa Ana winds begin and evaluate the need for the application of soil sealant .
5. The City north leachate removal sump pump piping was leaking landfill gas and repair is needed.

COMMENTS

Signed: 





UltraSystems  
environmental • management • planning

SUNSHINE CANYON LANDFILL  
MITIGATION MONITORING  
SITE REPORT

Monitor: Mike Lindsay	Page 1 of 1
Discipline: Environmental Engineer	Date: 09-11-13
Site Conditions: Clear, sunny, 68/84°F, 5-10 mph	
SITE LOG	
1. Observed blown litter along Sierra Highway at the SR 14 overpass, both sides of the road.	
2. Met with John Nelson and Lucas, and Dave Wynn (LACOPW), and Jim Adukas (UltraSystems).	
3. Per Patric Costa (Republic), Anthony Bertrand is no longer working at Republic Services / SCL.	
4. Measured cavity Top Deck elevations using a Trimble 2008 GeoXH GPS device ( $\pm 0.1$ m accuracy).	
5. Observed trees growing over northwest drainage ditch.	
6. Observed Terminal Settlement Basin; removal of accumulated sediment is ongoing.	
7. Observed City Top Deck C sage revegetation area. Approx. 20% of sage plants have died (area has experienced several days of $+100^{\circ}\text{F}$ weather lately).	
8. Flare 1 is operating at 4041 SCFM, 1696°F. Gas sample measured at 4.4% Vol. CH <sub>4</sub> , 1.1% Vol. O <sub>2</sub> , 344 ppm CO <sub>2</sub> and 158°F delivery temperature.	
9. Flare 3 is operating at 3954 SCFM, 1684°F, and over 500 ppm CO <sub>2</sub> . Gas delivery temp. unknown. Flare louvers were cycling in and out of vibration resonance.	
10. Observed oil fields to be in good order.	
11. Met with Becky Jansick to discuss site visit findings.	
Note - new Republic admin. office receptionist is named Peggy.	
FURTHER REVIEW NEEDED	
1. Remove trees growing over northwest drainage ditch.	
Project Number: 5800	Signed: <i>Mike Lindsay</i>

# Appendix IV

## Meeting Logs

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## **Sunshine Canyon Landfill Meeting Log for the Third Quarter Site Monitoring**

### **Sunshine Canyon Landfill Meeting Log for July 2013 Site Monitoring**

July 10, 2013

Post-monitoring meeting with Achaya Kelapanda, Republic's Gas Systems Environmental Manager

**Attendees:**

John Nelson, LADPW  
James Aidukas, UltraSystems  
Mike Lindsay, UltraSystems

The above attendees met with Achaya Kelapanda and relayed to him that there was a 12" gas collection line that had a PVC cap on top of a tee that was loose and that was leaking. This tee was located on the County top deck in the same general area where a contractor was modifying the collection system. Mike Lindsay went to the location with Mr. Kelapanda.

We then discussed the Flare 10 schedule and Mr. Kelapanda stated that the flare was on schedule for commissioning and start-up before August 1st. The DTE gas-to-energy schedule was discussed and Mr. Kelapanda stated that the construction was in progress. The estimated start-up was 1st Quarter 2014.

We mentioned to Mr. Kelapanda that Flare 3 was observed having vibrating and chattering cycles when we saw it earlier. This same chattering was observed on prior visits. Mr. Kelapanda directed a field staff person to check the flare.

Site monitoring discussion with David Seymour, Sukit Construction Manager

John Nelson and James Aidukas had a discussion with David Seymour concerning the directional drilling operation for the underdrain system. Mr. Seymour stated that a few days earlier, the drill bit got stuck and that drilling mud and water were discharged into the terminal basin. He stated that the drilling was taking longer to complete due to the native material being harder than expected. He said that they were back in operation and anticipated the drilling to be completed within a week. He also stated that the liner and buttress were proceeding as scheduled.



**Sunshine Canyon Landfill  
Meeting Log for August 2013 Site Monitoring**

August 7, 2013

Post-monitoring meeting with Patti Costa, Republic's Environmental Manager

Attendees:

John Nelson, LADPW  
Clark Ajwani, LADPW  
James Aidukas, UltraSystems  
Mike Lindsay, UltraSystems

Met with Patti Costa after the monitoring. We informed her that we observed the following conditions during our site visit:

- Sierra Highway was clean.
- The terminal basin was not cleaned of sediment and the risers had debris and mud caked to the filter fabric.
- 40% of the plants in the City South Deck C sage mitigation area were dying, with 60% surviving.
- Flare 3 was cycling and shaking and that the flare operating personnel should investigate.

Patti Costa provided the following information:

- The first phase of CC3A Part II liner reports will be submitted to RWQCB in September, with an October schedule for start of fill. The second phase will be submitted in November with a scheduled December start of fill.
- The terminal basin is being worked on and all sediment will be removed and the basin will be ready for handling rain by October.
- The re-alignment of the access road to allow the installation of the final toe berm is scheduled for 1st or 2nd Quarter of 2014.
- The installation of a sewer pipeline is being designed and bids will be obtained and evaluated in September 2013.
- Five vegetation test plots are being run on the County top deck by Pacific Restoration Group and S&S seeds. They are testing various seeds with the site's soils and different soil conditioning.
- Deck C mitigation plantings will be maintained now and replacement of dead plants will occur in the fall.

August 20, 2013

Pre-monitoring meeting with Anthony Bertrand, Republic's Site Manager and Tim Johnson, Republic's Operations Manager.

Attendees:

John Nelson, LADPW  
Lukasz Przbylo, LADPW  
James Aidukas, UltraSystems  
Mike Lindsay, UltraSystems  
Tarik Hadj-Hamou, SLR

I requested an update on the site activities and John Nelson and Lukasz Przybylo had operations questions. Anthony Bertrand provided the following information:

1. CC-3B design has been submitted to the RWQCB and it includes the final design of the toe berm. The State Division of Dams will not have to approve the toe berm design. CC-3B will be built in three phases and all will start construction in 2014 with completion by 2015. This will also entail three phases of road re-alignment. The scalehouse will be moved to a new location in 2015.
2. CC-4 will be the next and final cell development.
3. Cell CC-3A Part II earthwork to stabilize the City South slope is near completion. The cell is being lined and submittals to RWQCB will be in two phases:
  - a) October 1st submittal to RWQCB with approval anticipated by October 15th;
  - b) December 1st submittal to RWQCB with approval anticipated by January 15th.
4. The City South Deck C sage mitigation is being maintained until fall. No replacement of plants will be done now. At the end of the year, the vegetation consultants will present an evaluation of the success of the mitigation planting and provide a revised plan, if needed.
5. There are 89 new gas wells being drilled in the City jurisdiction to provide better gas recovery.
6. The Temporary Flare will be shut down by the end of September 2013.
7. There is a contract proposal for the temporary generators for Flares 1, 3, 9 and 10, and a purchase order will authorize delivery. Flares 1 and 3 have connection panels in place.

Mr. Przybylo had the following questions to which Mr. Bertrand responded:

- A. Question: How will the temporary generator be handled?  
Answer: By purchase order. One for Flares 9 and 10 and one each for Flares 1 and 3.
- B. Question: Where is the accelerometer onsite?  
Answer: Will investigate.
- C. Question: Is Republic interested in basin soils from County facilities?  
Answer: Anthony and Patti Costa will respond to Mr. Przylo's emails.
- D. Question: How are radiation events handled?  
Answer: They are held in the truck until half-life occurs and the County inspector verifies it is safe to dispose of the waste.

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

Attendees:

John Nelson, LADPW  
Lukasz Przybylo, LADPW  
James Aidukas, UltraSystems  
Mike Lindsay, UltraSystems  
Tarik Hadj-Hamou, SLR

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

- There is no secondary access road now that the Flare 8 road has been eliminated.
- The leachate facility electrical lines are hanging on branches and pose a fire hazard.
- The terminal basin has sediment.
- When the realignment road design has been finalized and associated impacts analyzed, the monitors would request that a copy be provided.

Becky Van Sickle gave the following update:

- The terminal basin should be cleaned by October.

- The leachate electrical powerlines condition will be reported to maintenance.
- The gas-to-energy turbines will be on site in late September, with foundations in place by early December.
- There is a draft tree mitigation status report that has been submitted to the County Forrester Kelly Kim.
- The replacement designation of a secondary access has not been made.



**Sunshine Canyon Landfill  
Meeting Log for the Third Quarter Site Monitoring**

**September 11, 2013**

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

Attendees:

John Nelson, LADPW  
Lukas Przybylo, LADPW  
James Aidukas, UltraSystems  
Mike Lindsay, UltraSystems

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

1. The roadway to the County sage water tanks has a hole in the shoulder that poses a vehicle hazard.
2. The westside concrete drainage channel has sections that are cracking, spalling, and uplifting. The repair and maintenance should be addressed.
3. Basin D's dirt bottom should be monitored for dust when the Santa Ana winds begin and the need for soil sealant used when needed.
4. The City North leachate removal sump pump piping was leaking landfill gas and repair is needed.
5. The terminal basin has sediment near the outlet risers and trash around the front perimeter wall.

Becky Van Sickle gave the following update:

- The terminal basin should be cleaned by October.
- Items 1, 2, and 3 will be passed on to the maintenance supervisor.
- Item 4 will be passed on to the gas manager for handling.

# Appendix V

## Landfill Elevations

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## **INTRODUCTION**

During the third quarter of 2013, UltraSystems conducted Global Positioning System (GPS) surveys at the Sunshine Canyon Landfill, located in Sylmar, California. Elevation data was collected for the top deck area on the Los Angeles County side of the landfill.

## **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 increase in stockpiled soil on the County top deck. For the County top deck area, the average elevation was 1,874.8 feet above mean sea level. The average gain in elevation for this same area was 4.8 feet (see GPS Elevation Data Table, Appendix V).



# GPS Data Logs

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July 10, 2013

County Top Deck Elevation Readings

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

September 11, 2013

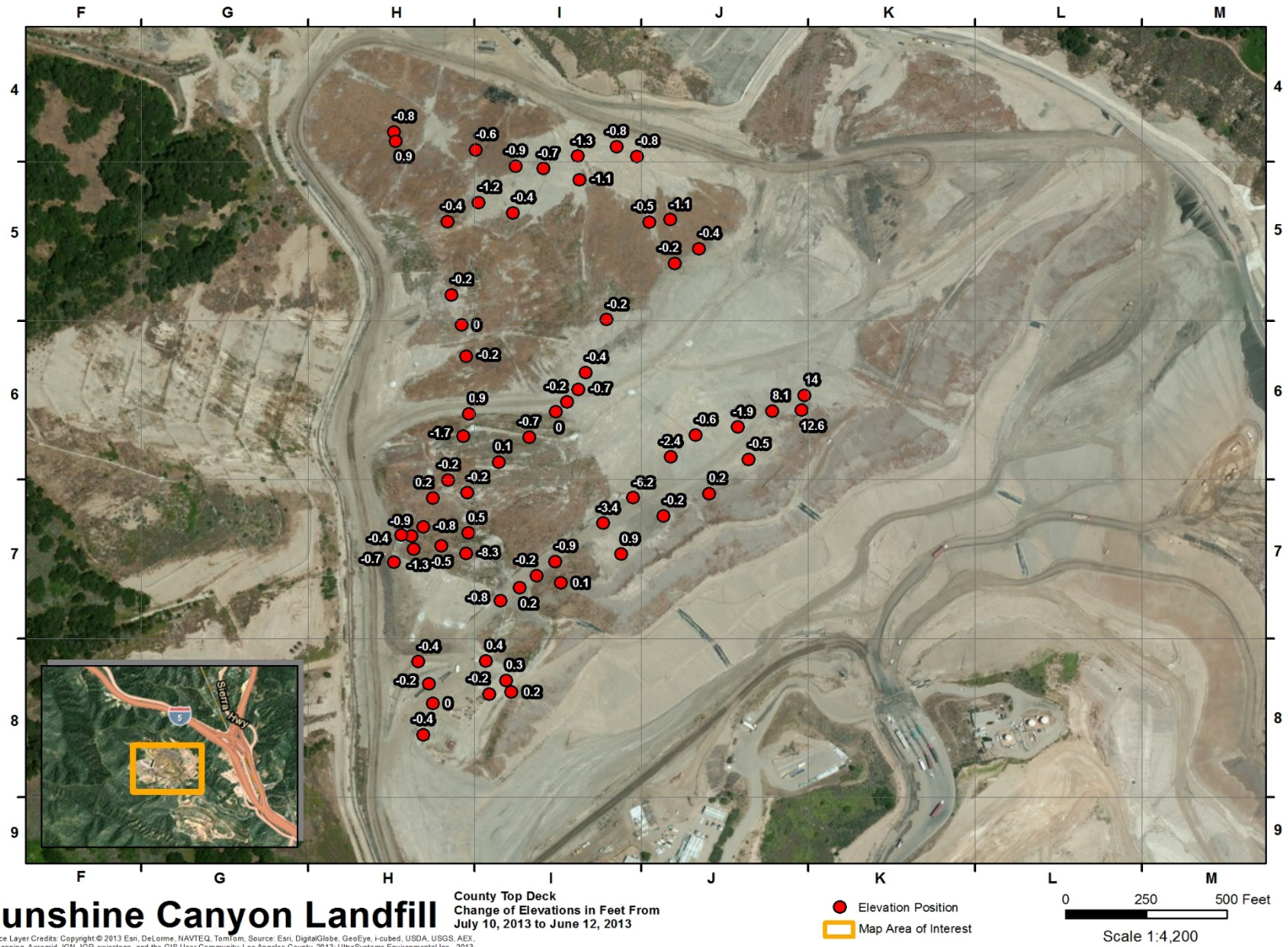
County Top Deck Elevation Readings

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

# GPS Elevation Maps

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## Sunshine Canyon Landfill

County Top Deck  
Change of Elevations in Feet From  
September 11, 2013 to July 10, 2013

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

● Elevation Position  
□ Map Area of Interest

0 250 500 Feet

Scale 1:4,200

# GPS Elevation Data Tables

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**SCL – Elevation Comparison of June 12, 2013 and July 10, 2013 Surveys (feet)**

<b>GPS Survey Date</b>	<b>Elevation</b>	<b>GPS Survey Date</b>	<b>Elevation</b>	<b>Elevation Difference Jun 12 / Jul 10</b>
06-12-2013	1861.4	07-10-2013	1861.2	-0.2
06-12-2013	1857.5	07-10-2013	1857.7	0.2
06-12-2013	1858.3	07-10-2013	1858.7	0.3
06-12-2013	1861.9	07-10-2013	1862.3	0.4
06-12-2013	1867.8	07-10-2013	1868.0	0.2
06-12-2013	1871.8	07-10-2013	1871.9	0.1
06-12-2013	1873.3	07-10-2013	1874.2	0.9
06-12-2013	1869.0	07-10-2013	1868.9	-0.2
06-12-2013	1868.4	07-10-2013	1868.6	0.2
06-12-2013	1862.5	07-10-2013	1862.0	-0.5
06-12-2013	1856.4	07-10-2013	1868.9	12.6
06-12-2013	1853.7	07-10-2013	1867.7	14.0
06-12-2013	1858.7	07-10-2013	1866.9	8.1
06-12-2013	1863.5	07-10-2013	1861.6	-1.9
06-12-2013	1875.6	07-10-2013	1875.1	-0.6
06-12-2013	1881.4	07-10-2013	1879.0	-2.4
06-12-2013	1867.7	07-10-2013	1866.9	-0.8
06-12-2013	1881.0	07-10-2013	1874.8	-6.2
06-12-2013	1880.0	07-10-2013	1876.6	-3.4
06-12-2013	1872.3	07-10-2013	1871.4	-0.9
06-12-2013	1868.7	07-10-2013	1868.6	-0.2
06-12-2013	1875.8	07-10-2013	1867.5	-8.3
06-12-2013	1863.1	07-10-2013	1863.6	0.5
06-12-2013	1861.7	07-10-2013	1861.2	-0.5
06-12-2013	1865.9	07-10-2013	1864.6	-1.3



<b>GPS Survey Date</b>	<b>Elevation</b>	<b>GPS Survey Date</b>	<b>Elevation</b>	<b>Elevation Difference Jun 12 / Jul 10</b>
06-12-2013	1867.5	07-10-2013	1866.6	-0.9
06-12-2013	1866.6	07-10-2013	1865.8	-0.8
06-12-2013	1869.9	07-10-2013	1869.8	-0.2
06-12-2013	1878.2	07-10-2013	1878.3	0.1
06-12-2013	1882.7	07-10-2013	1882.0	-0.7
06-12-2013	1885.6	07-10-2013	1885.7	0.0
06-12-2013	1887.4	07-10-2013	1887.1	-0.2
06-12-2013	1888.2	07-10-2013	1887.6	-0.7
06-12-2013	1891.8	07-10-2013	1891.4	-0.4
06-12-2013	1889.8	07-10-2013	1889.6	-0.2
06-12-2013	1875.7	07-10-2013	1875.6	-0.2
06-12-2013	1872.1	07-10-2013	1871.7	-0.4
06-12-2013	1872.0	07-10-2013	1870.8	-1.1
06-12-2013	1872.0	07-10-2013	1871.5	-0.5
06-12-2013	1886.9	07-10-2013	1886.5	-0.4
06-12-2013	1884.3	07-10-2013	1883.1	-1.2
06-12-2013	1871.2	07-10-2013	1870.1	-1.1
06-12-2013	1864.6	07-10-2013	1863.7	-0.8
06-12-2013	1866.2	07-10-2013	1865.4	-0.8
06-12-2013	1868.1	07-10-2013	1866.8	-1.3
06-12-2013	1876.6	07-10-2013	1875.9	-0.7
06-12-2013	1881.4	07-10-2013	1880.5	-0.9
06-12-2013	1885.6	07-10-2013	1885.0	-0.6
06-12-2013	1892.6	07-10-2013	1891.8	-0.8
06-12-2013	1893.1	07-10-2013	1894.0	0.9
06-12-2013	1876.8	07-10-2013	1876.4	-0.4

<b>GPS Survey Date</b>	<b>Elevation</b>	<b>GPS Survey Date</b>	<b>Elevation</b>	<b>Elevation Difference Jun 12 / Jul 10</b>
06-12-2013	1877.7	07-10-2013	1877.5	-0.2
06-12-2013	1875.2	07-10-2013	1875.2	0.0
06-12-2013	1877.2	07-10-2013	1877.0	-0.2
06-12-2013	1874.3	07-10-2013	1875.2	0.9
06-12-2013	1873.5	07-10-2013	1871.9	-1.7
06-12-2013	1870.9	07-10-2013	1870.7	-0.2
06-12-2013	1869.4	07-10-2013	1869.6	0.2
06-12-2013	1867.7	07-10-2013	1867.3	-0.4
06-12-2013	1865.2	07-10-2013	1864.5	-0.7
06-12-2013	1863.0	07-10-2013	1862.6	-0.4
06-12-2013	1867.4	07-10-2013	1867.0	-0.4
06-12-2013	1866.0	07-10-2013	1865.8	-0.2
06-12-2013	1864.7	07-10-2013	1864.6	0.0
06-12-2013	1872.4 (Average)	07-10-2013	1872.3 (Average)	-0.1 (Average)

**SCL – Elevation Comparison of July 10, 2013 and September 11, 2013 Surveys (feet)**

<b>GPS Survey Date</b>	<b>Elevation</b>	<b>GPS Survey Date</b>	<b>Elevation</b>	<b>Elevation Difference Jul 10 / Sep 11</b>
07-10-2013	1861.5	09-11-2013	1865.7	0.2
07-10-2013	1859.6	09-11-2013	1866.1	3.4
07-10-2013	1876.5	09-11-2013	1868.3	7.0
07-10-2013	1874.1	09-11-2013	1869.4	9.5
07-10-2013	1872.0	09-11-2013	1876.3	6.8
07-10-2013	1869.7	09-11-2013	1872.2	8.2
07-10-2013	1869.6	09-11-2013	1868.4	4.6
07-10-2013	1869.4	09-11-2013	1868.0	3.7
07-10-2013	1867.8	09-11-2013	1867.6	6.7
07-10-2013	1864.5	09-11-2013	1856.9	18.0
07-10-2013	1860.4	09-11-2013	1880.2	13.8
07-10-2013	1859.6	09-11-2013	1873.7	20.4
07-10-2013	1867.3	09-11-2013	1871.9	2.1
07-10-2013	1864.2	09-11-2013	1867.4	15.9
07-10-2013	1867.2	09-11-2013	1865.2	23.8
07-10-2013	1873.8	09-11-2013	1860.0	19.6
07-10-2013	1872.0	09-11-2013	1878.1	0.8
07-10-2013	1867.8	09-11-2013	1879.6	3.6
07-10-2013	1889.5	09-11-2013	1883.6	0.7
07-10-2013	1888.8	09-11-2013	1888.0	0.0
07-10-2013	1888.2	09-11-2013	1888.7	0.5
07-10-2013	1887.0	09-11-2013	1865.5	-0.5
07-10-2013	1881.1	09-11-2013	1861.9	-4.1
07-10-2013	1874.6	09-11-2013	1862.9	0.2
07-10-2013	1872.3	09-11-2013	1879.8	0.2



<b>GPS Survey Date</b>	<b>Elevation</b>	<b>GPS Survey Date</b>	<b>Elevation</b>	<b>Elevation Difference Jul 10 / Sep 11</b>
07-10-2013	1864.4	09-11-2013	1866.2	0.5
07-10-2013	1865.8	09-11-2013	1865.0	0.4
07-10-2013	1869.3	09-11-2013	1867.7	1.4
07-10-2013	1880.5	09-11-2013	1867.4	0.2
07-10-2013	1883.6	09-11-2013	1867.3	0.9
07-10-2013	1887.3	09-11-2013	1872.2	-0.1
07-10-2013	1891.0	09-11-2013	1882.0	-0.6
07-10-2013	1891.7	09-11-2013	1883.0	1.0
07-10-2013	1890.0	09-11-2013	1873.1	-0.1
07-10-2013	1877.5	09-11-2013	1868.6	0.0
07-10-2013	1860.5	09-11-2013	1888.1	-0.6
07-10-2013	1860.2	09-11-2013	1890.7	-0.8
07-10-2013	1861.8	09-11-2013	1892.9	11.8
07-10-2013	1876.6	09-11-2013	1879.7	0.5
07-10-2013	1875.4	09-11-2013	1878.0	0.3
07-10-2013	1874.4	09-11-2013	1878.9	0.4
07-10-2013	1870.8	09-11-2013	1876.9	1.4
07-10-2013	1867.1	09-11-2013	1866.5	4.9
07-10-2013	1862.8	09-11-2013	1875.8	2.6
07-10-2013	1872.3 (Average)	09-11-2013	1877.2 (Average)	4.9 (Average)