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CERTIFICATION STATEMENT

August 5, 2013

The attached Quarterly Site Monitoring Status Report for the Sunshine Canyon Landfill dated August 5, 2013, is the second 2013 Quarterly Report issued by UltraSystems. This report covers the monitoring period from April 1, 2013 through June 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 reflect the site conditions observed and compliance status noted by me and other qualified experts during the stated site visits.

Signed,

James T. Aidukas
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**Sunshine Canyon Landfill
Independent Monitor
Quarterly Site Monitoring Status Report
April 1, 2013 – June 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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August 5, 2013

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

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

Appendices

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Appendix II – Relevant Site Photos

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Attendees by Date and Monitoring Site Reports

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Quarterly Status Report

The Quarterly Status Report is a compilation of the period's monthly Site Monitoring. After each site visit, the UltraSystems monitors who went to the Sunshine Canyon Landfill site each wrote a Mitigation Monitoring Site Report, updated the Mitigation Monitoring Summary Excel Tables for the City and County of Los Angeles noting any conditions and/or mitigation measures that need further review, and documented these areas in an appendix for that site visit date. Any issues that required immediate attention were reported to 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 April 1, 2013 to June 30, 2013. It includes:

1. The City and County Mitigation Monitoring Summary Excel Tables for June. These tables record the areas of monitoring completed during the second 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. 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; and
7. Biologist's summary of re-vegetation programs' progress.

Site Visits During the Quarter

Five site visits were performed by UltraSystems during the April through June 2013 quarter in order to observe operational site activities and determine compliant status with conditions and/or mitigation measures. They were performed on April 10, 2013; May 1, 2013; May 29, 2013; June 12, 2013; and June 25, 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-C.10.c (City)

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

Odor/Landfill Gas - 7.07 (County)

The permittee will recover and sell as much gas as is technically and economically feasible to reduce total air quality emissions from the landfill operations. It is expected that the technical and economic feasibility of commercial recovery and sale of landfill gas as a renewable energy resource will occur at

levels below 40 MMCFD. The gas collection system will be installed in increments to allow for maximum gas recovery.

Gas - 52 (County)

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

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

Current Status/Comments – The DTE Gas-to-Energy facility was having building permit-related delays. This put the start of construction on hold. The first delays were regarding sanitary sewer and firewater services. These issues were resolved in May. In early June, an electrical permit issue regarding the sealing of buried conduits extended the hold on the start of construction. At the end of June, all permit issues were resolved and the hold on the start of construction was lifted.

The construction is now scheduled to start in July with completion and start-up before the end of 2013. The construction for the tie-in to Edison started in June, with all the foundations for the new transmission line poles completed by the end of June and concrete foundations curing.

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 – The development of Cell CC3A Part II will require a buttress to be placed on existing alluvial soils to support an old landslide area that is under the existing City South waste and daylights in the cell development area. The buttress design approach, which was considered the optimal design by Republic's consulting engineers, has been submitted to and approved by the LARWQCB and the City Department of Building and Safety. A deviation of complying with the condition regarding the removal of alluvial soils and other requirements noted above was approved. The installation should be monitored.

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 – The prior hydroseeding and mulching of the temporary and permanent slopes and inactive areas has not been successful. A comprehensive plan, with possibly temporary irrigation should be developed and implemented to establish vegetation.

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, 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 – 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. The need to apply soil sealant should be planned and applied to bare soil areas prior to the start of the Santa Ana wind season.

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 which ever 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. None of these were observed during the quarterly monitoring visits this period.

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 – There is very little surface cover from vegetation to retard erosion from disturbed areas of the landfill. Emphasis should be placed on establishing vegetation in order to control erosion in these areas.

M-4.3.1(43) (City)

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

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 basis shall be monitored in accordance with NPDES requirements. Sediment shall be cleaned out of the sedimentation basins after every significant storm.

Current Status/Comments – The terminal basin contains sediments that will need to be removed prior to the Fall 2013 rainy season.

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-4.3.1(46) (City)

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

Surface Water 2.15 (County)

Surface Water Preventive Maintenance Program

A preventive maintenance program will be implemented by the permittee, including inspection of facility equipment, systems, and stormwater management devices to detect conditions that may cause breakdowns or failures resulting in discharge of materials into stormwater. This program applies to the onsite drainage ditches, rip-rap, berms and dikes, dust control, silt fences, diversion grading, and pavement surfaces. Each system and piece of equipment will be inspected monthly.

Procedures for inspection would vary based on the piece of equipment or system. However, the major elements of the inspection program will include checking for cracks or structural failures, inspecting parts or pieces of equipment nonfunctioning, checking for the degradation or deterioration of operating units, and investigating the need for cleaning or emptying units.

Current Status/Comments – The western drainage into Basin A is partially plugged. The westside drainage system's concrete had areas with sidewall and bottom cracking and spalling. Trees in two areas could possibly be causing the sidewall cracking. The Basin D North Drainage v-ditch HDPE liner was windblown and crumpled, causing a potential drainage blockage. The terminal basin exterior sidewall facing the entrance road has a crack that had worsened since it was first observed. A preventative maintenance program with a schedule should be implemented to satisfy the above mitigation measures.

M-4.3.2/49 (City)

Areas of natural groundwater seepage shall be intercepted by the installation of a subgrade gravel drainage blanket. A series of underdrains shall be placed in areas where seeps and springs have been identified, and they shall collect and convey any water from these sources to the sedimentation basin. In the event any chemical constituents are in the seep water, the seep waters will be sampled, analyzed, collected, and then sent either to the onsite leachate treatment facility or offsite for proper treatment and disposal. The nature and the source of the seep would be investigated including additional sampling and laboratory testing.

Surface Water – 2.05 (County)

Placement of a series of underdrains in areas where seeps and springs have been identified will collect and convey any water from these sources.

Groundwater - 3.03 (County)

Areas of natural groundwater seepage will be intercepted by the installation of a subgrade gravel drainage system approved by the RWQCB.

Current Status/Comments – The underdrain system piping at the back of the material storage area canyon was noted to have gas present. A gas recovery lateral was connected to the underdrain piping and recovering gas. A gas concentration reading of 6.6% methane was taken from the recovery piping. The source of the gas should be identified.

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 – Deck C Sage Mitigation was initiated in this quarter. The site was tilled to a depth of approximately 6" for the preparation of a seedbed for native plantings. Irrigation equipment consisting of galvanized metal pipes and sprinkler heads were installed and functioning. Plantings consisting of coastal sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), and blue elderberry (*Sambucus nigra*) were present and in good health.

Biota - 4.27 (County)

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

Current Status/Comments – The county sage mitigation area has had minimal success. 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. Republic's consulting biologist should evaluate options to implement. Soils type and erosion appeared to be the main cause for lack of sage revegetation. Employing erosion control methods, along with reseeding, could prove successful.

Groundwater – 3.06 (County)

The existing deep bedrock groundwater monitoring wells located within the City portion of Sunshine Canyon will continue to be monitored during the development of the landfill within the County portion of Sunshine Canyon. These wells may be supplemented with additional wells if required by RWQCB and shall promptly undertake any corrective action required by RWQCB.

Groundwater – 3.14 (County)

Pursuant to the 1999 City approval, the existing groundwater monitoring wells located within the City portion of Sunshine Canyon will continue to be monitored during the development of the proposed Project; and the monitoring system may be revised as construction progresses in the areas where wells are located as approved by the LARWQCB

Current Status/Comments – The water level at the monitoring well on the embankment of the terminal basin was approximately 4.75 feet below the embankment manhole cover. This high a water level would indicate a high water table in the embankment. However, there was no evidence of a high water level on the concrete side of the basin (i.e., moisture, seeping out of cracks) nor on the earthen side of the embankment. The reason for a high water level within the monitoring well should be determined.

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. The inlet to Basin A was partially plugged with soil, litter, and windblown dry vegetation. 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.

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 – Sierra Highway was noted to have debris and litter near the I-14 overpass during the May 1, 2013 site monitoring visit.

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) Current erosion control plans
- 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 Second Quarter Mitigation Monitoring Summary Excel spreadsheets track the progress and completion of tasks as they were accomplished during this quarterly period.

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

Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 4-01-2013 through 6-30-2013)

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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		✓	C	NONE		✓	C	NONE					
10			Ancillary Uses and Facilities		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
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		✓	C	NONE					
16	Q - C.3.g.		Paved Access Roads	ongoing	✓	C	NONE		✓	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		✓	C	NONE					

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18	Q - C.5.		Graffiti Removal and Deterrence	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
19	Q - C.10.c.		Evaluation of Beneficial Gas Usage	June yearly	✓	C	NONE		✓	FRN	I-h		✓	FRN	I-i		✓	FRN	I-j		✓	FRN	I-k					
20	Q - C.10.d. (1)		Alternative Fuel Vehicles	status																								
21	Q - C.10.d. (2)		Alternative Fuel Refuse Collection Trucks	status																								
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																								
27	T - 5.j.		Trip Diversion	status	✓	C	NONE		✓	C	NONE		✓	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		✓	C	NONE					
31	M - 4.1.4	11	Post-5.0 Earthquake Analysis	upon event	/	NA	NONE		/	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		✓	C	NONE					
33	M - 4.2.12		Heavy Equipment Operations	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					

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34	M - 4.2.12	28	Site Erosion-Cover	ongoing	✓	C	NONE		✓	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		✓	C	NONE					
36	M - 4.2.12		Site Erosion-Sealant	ongoing									✓	FRN	I-i													
37	M - 4.2.13	29	LFG Control Measures	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
38	M - 4.2.13	30	Operational Odor Control Techniques	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
39	M - 4.2.13	31	Solid Waste Compaction	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
40	M - 4.2.13	32	LFG Collection and Recovery System	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
41	M - 4.2.13	33	Odor Control Measures	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
42	M - 4.2.13	34	Odor/LFG Monitoring	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
43			Periodic LFG Monitoring		/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
44	M - 4.3.2	52	LFG Migration Mitigation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		✓	FRN	I-k					
45	M - 4.3.2	57	Dust Control Water	ongoing	✓	C	NONE		✓	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		✓	C	NONE					

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50	M - 4.7.1	86	Open Space Buffer Area	ongoing	✓	C	NONE		✓	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		✓	C	NONE					
52	M - 4.9.3	107	Litter/Debris Containment	ongoing	✓	C	NONE		✓	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		✓	C	NONE					
54	M - 4.9.3	109	Periodic Offsite Litter Pickup	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
55	M - 4.9.3	110	Illegal Dumping Activities	ongoing	✓	C	NONE		✓	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		✓	C	NONE					
57	M - 4.9.3	112	Litter Control	ongoing	✓	C	NONE		✓	FRN	I-h		✓	FRN	I-i		✓	FRN	I-j		✓	FRN	I-k					
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 Levels	ongoing	✓	C	NONE		✓	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		✓	C	NONE					
61	M - 4.9.6	130	Landfill Gas/Collection System Risk Mitigation	ongoing	✓	C	NONE		✓	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		✓	C	NONE					
64																												
82	Civil & Geotechnical Engineer																											

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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		✓	C	NONE					
86	M - 4.1.1	3	Unsuitable Material Removal/Buffer Zones	ongoing													✓	FRN	I-j									
87	M - 4.1.1	4	Grading Outside of Landfill Footprint	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
88	M - 4.1.1	5	Grading Activity Compliance	ongoing													✓	FRN	I-j									
89	M - 4.1.2	8	Landslide Guidelines	ongoing													✓	FRN	I-j									
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		/	NA	NONE		/	NA	NONE		/	NA	NONE					
93	M - 4.1.5	12	Geologic Hazards - Liquefaction	ongoing													✓	FRN	I-j									
94	M - 4.1.5	13	Design/Construction- Liquefaction	ongoing													✓	FRN	I-j									
95	M - 4.1.5	14	Design/Construction- Containment Structures	ongoing																								
96	M - 4.1.6	15	Refuse Slope Gradients	ongoing													✓	C	NONE									
97	M - 4.1.6	16	Cut and Fill Slope Gradients	ongoing													✓	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																								
100	M - 4.3.2	47	Landfill Liner	ongoing													✓	C	I-j									

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101	M - 4.3.2	48	Landfill Liner	ongoing													✓	C	I-j									
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									
105	M - 4.14.1	155	Access Roadway Grade	ongoing													✓	C	NONE									
106	M - 4.18	178	Landfill Elevation Exceedance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	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		/	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-j									
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-j									
120	M - 4.3.1	44	Final Landfill Cover	ongoing													✓	FRN	I-j									
121	M - 4.3.1	45	Erosion Control Plan	ongoing																								
122	M - 4.3.1	46	Preventive Maintenance Program	ongoing					✓	FRN	I-h		✓	FRN	I-i		✓	FRN	I-j		✓	FRN	I-k					
123	M - 4.3.2	49	Interception of Groundwater Seepage	ongoing																	✓	FRN	I-k					
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-g						✓	FRN	I-i													
131	M - 4.2.11	23	Revegetation/Excavation	ongoing	✓	FRN	I-g						✓	FRN	I-i													
132	M - 4.2.12		Temporary Vegetation Cover	ongoing	✓	FRN	I-g						✓	FRN	I-i													
133	M - 4.4.1	60	Coastal Sage Scrub Mitigation Plan	ongoing	✓	FRN	I-g						✓	FRN	I-i													
134	M - 4.4.1	61	Coastal Sage Scrub Seeding	ongoing	✓	FRN	I-g						✓	FRN	I-i													
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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Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 4-01-2013 through 6-30-2013)

Line #	Reference #	Mitigation #	City Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	4/10/2013	Status*	Further Review Needed/Comments**	Resolved*	5/1/2013	Status*	Further Review Needed/Comments**	Resolved*	5/29/2013	Status*	Further Review Needed/Comments**	Resolved*	6/12/2013	Status*	Further Review Needed/Comments**	Resolved*	6/25/2013	Status*	Further Review Needed/Comments**	Resolved*	7/1/2013	Status*	Further Review Needed/Comments**	Resolved*
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	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
144	M - 4.4.3	74	Mitigation Tree Planting	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
145	M - 4.4.3	75	Tree Planting Mitigation Site Prep	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
146	M - 4.4.3	76	Poultry Wire Screen	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
147	M - 4.4.3	77	Backfill Material	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
148	M - 4.4.3	78	Tree Planting Procedure	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
149	M - 4.4.3	79	Tree Area Mulching	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
150	M - 4.4.3	80	Tree Irrigation/Fertilization	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
151	M - 4.4.3	81	Irrigation System	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
152	M - 4.4.3	82	Annual Tree Monitoring Report	annual	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
153	M - 4.9.2	96	Vector Activity Monitoring	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					

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154	M - 4.9.2	97	Vector Elimination	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
155	M - 4.9.2	98	Fly Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
156	M - 4.9.2	99	Rodent Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
157	M - 4.9.2	100	Operational Vector-Limiting Activity	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
158	M - 4.9.2	101	Equipment Cleanliness/Maintenance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
159	M - 4.9.2	102	Storage of Vector-Attracting Items	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
160	M - 4.9.2	103	Salvaged Material Storage- Vector Control	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
161	M - 4.9.2	104	Periodic Vector Inspections	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
162	M - 4.9.2	105	Implementation of Vector Control Measures	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
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		✓	C	NONE					
168	M - 4.2.11	19	Construction Curtailing due to Pollution	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
169	M - 4.2.11	20	Dust Lofting Minimization	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
170	M - 4.2.11	21	Wind Speed Monitoring	ongoing	✓	C	NONE		✓	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		✓	C	NONE					

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172	M - 4.2.12	24	Construction Equipment Maintenance	ongoing	✓	C	NONE		✓	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		/	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	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
179	M - 4.2.12		Refuse Trucks-Emissions	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
180	M - 4.2.12	26	Truck Travel and Fugitive Dust Emissions	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
181	M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
182	M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
183	M - 4.2.12		Truck Travel and Fugitive Dust Emissions	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
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		✓	C	NONE					
186																												
187	Hydrology, Hazardous Waste / Risk of Upset																											
188																												
189																												

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Sunshine Canyon Landfill Mitigation Monitoring Summary - (City 4-01-2013 through 6-30-2013)

Line #	Reference #	Mitigation #	City Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	4/10/2013	Status*	Further Review Needed/Comments**	Resolved*	5/1/2013	Status*	Further Review Needed/Comments**	Resolved*	5/29/2013	Status*	Further Review Needed/Comments**	Resolved*	6/12/2013	Status*	Further Review Needed/Comments**	Resolved*	6/25/2013	Status*	Further Review Needed/Comments**	Resolved*	7/1/2013	Status*	Further Review Needed/Comments**	Resolved*
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		✓	C	NONE					
192	M - 4.3.2	59	Underground Fuel Storage	ongoing	/	NA	NONE		/	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																								
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		✓	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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Line #	Reference #	Mitigation #	City Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	4/10/2013	Status*	Further Review Needed/Comments**	Resolved*	5/1/2013	Status*	Further Review Needed/Comments**	Resolved*	5/29/2013	Status*	Further Review Needed/Comments**	Resolved*	6/12/2013	Status*	Further Review Needed/Comments**	Resolved*	6/25/2013	Status*	Further Review Needed/Comments**	Resolved*	7/1/2013	Status*	Further Review Needed/Comments**	Resolved*
208	M - 4.19.1	183	Archaeological Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					
209	M - 4.19.1	184	Onsite Archaeologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					
210	M - 4.19.1	185	Archaeological Resources	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					
211	M - 4.19.1	186	Archaeological Resources	ongoing	/	NA	NONE		/	NA	NONE		/	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		/	NA	NONE		/	NA	NONE					
217	M - 4.19.2	188	Paleontological Resources Excavation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					
218	M - 4.19.2	189	Paleontological Resources Training	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					
219	M - 4.19.2	190	Paleontological Resources Recovery	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					
220	M - 4.19.2	191	Paleontological Resources Inspection	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					

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

Sunshine Canyon Landfill Mitigation Monitoring Summary - County (04-01-2013 through 06-30-2013)

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	4/10/2013	Status*	Further Review Needed/Comments**	Resolved*	5/1/2013	Status*	Further Review Needed/Comments**	Resolved*	5/29/2013	Status*	Further Review Needed/Comments**	Resolved*	6/12/2013	Status*	Further Review Needed/Comments**	Resolved*	6/25/2013	Status*	Further Review Needed/Comments**	Resolved*	7/9/2013	Status*	Further Review Needed/Comments**	Resolved*
1	Project Manager																											
2																												
3																												
4	Amendment 45.N 1	45N	Daily Cover Materials	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
5	Amendment 45.N 3	45N	Daily Cover Procedure	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
6	Amendment 45.N 4.a	45N	Order for Abatement Status	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
7	Amendment 45.N 4.c	45N	Odor Patrol Program	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
8	Amendment 45.N 4.d	45N	Landfill Gas Mitigation Plan	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
9	Amendment 45.N 5	45N	Dust and Odor Reports	ongoing	/		I-g		/		I-h		/		I-i		/		I-j		/		I-k					
10																												
11	Combined Site & Bridge Area -20.A	20. A	Joint Powers Authority	info	/				/				/				/				/							
12	Combined Site & Bridge Area -20.F	20. F	Mitigation Reporting and Monitoring Program	status	/				/				/				/				/							
13	Landfill Capacity - 27	27	Tipping Fees for Partial Loads/Peak Hours	status																								
14	Grading & Drainage-41.A -.D	41A- D	Water Conservation	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
15	Revegetation - 44.F	44. F	Revegetation	status	✓	FRN	I-g						✓	FRN	I-i													
16	Fugitive Dust - 45.B	45. B	Working Face Areas	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
17	Fugitive Dust - 45.F	45. F	Inactive Areas Monitoring	ongoing									✓	FRN	I-i													

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

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

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

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

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83	Traffic/Circulation – 8.13		Adequate Queuing	status	/			/				/				/				/								
84	Visual – 10.03		Landfill Flare Locations	status	/			/				/				/				/								
85	Visual – 10.04		Confinement of Excavation Cover Material	status	/			/				/				/				/								
86	Visual – 10.05		Lighting Requirements	status	✓	C	NONE	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE						
87	Visual – 10.11		Litter Control Program	ongoing	✓	C	NONE	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE						
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	✓	C	NONE	✓	FRN	I-h		✓	FRN	I-i		✓	FRN	I-j		✓	FRN	I-k						
92	Visual – 10.11		Litter Control-Additional Measures	ongoing				✓	FRN	I-h																		
93	Visual – 10.12		Discharge Control/Litter Recovery	status																								
94	Water Conserv. - 11.01		Water Conservation	ongoing	✓	C	NONE	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE						
95	Recycling - 14.01		On-site Waste Diversion/Recycling	ongoing	✓	C	NONE	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE						
96	Recycling - 14.03		Tonnage Disposal Determination	info	/			/				/				/				/								
97	Recycling - 14.04		Recycling-Various Tasks	info	/			/				/				/				/								
98			Clean Dirt Procedures																									

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99	Site - 15.11		Reclaimed Water Utilization	status	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
100	Site - 15.12		Water Conservation Measures	ongoing	✓	C	NONE		✓	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		✓	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		✓	C	NONE					
129	Geology - 1.02		Seismic Design	ongoing																								
130	Geology - 1.03		Maximum Refuse Slope Gradients	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
131	Geology - 1.04		Maximum Refuse Slope Gradients	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
132	Geology - 1.05		Unsuitable Material Procedures	ongoing													✓	FRN	I-j									

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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		/	NA	NONE		/	NA	NONE		/	NA	NONE					
138	Geology - 1.18		Alluvium- Removal/Replacement	ongoing													✓	FRN	I-j									
139	Geology - 1.19		Landfill Design/Construction	ongoing													✓	FRN	I-j									
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																	✓	FRN	I-k					
143	Surface Water - 2.06		Final Cover for Surface Water Runoff Control	ongoing																								
144	Groundwater - 3.02		Liner System Requirements	ongoing													✓	C	I-j									
145	Groundwater - 3.04		Onsite Inspector for Liner Installation	ongoing													✓	C	I-j									
146	Groundwater - 3.09		Alluvium Removal	ongoing													✓	FRN	I-j									
147	Visual – 10.01		Landfill Elevations	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
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		/	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		✓	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-j									
164	Surface Water - 2.11		Surface Water Quality-Collection/Monitoring	ongoing																								
165	Surface Water - 2.12		Permanent/Temporary Drainage Facilities	ongoing													✓	FRN	I-j									
166	Surface Water - 2.13		Permanent/Temporary Drainage Facilities	ongoing																								

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167	Surface Water - 2.14		Erosion Control Plan	ongoing																								
168	Groundwater - 3.03		Interception of Groundwater Seepage	ongoing																	✓	FRN	I-k					
169	Groundwater - 3.06		Monitoring Wells	ongoing													✓	FRN	I-j									
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-g						✓	FRN	I-i													
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-g						✓	FRN	I-i													
181	Geology - 1.14		Personnel Retention for Monitoring Soil Erosion	ongoing	✓	FRN	I-g						✓	FRN	I-i													
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	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					

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185	BIOTA – 4.13		Oak Tree Mitigation Counting	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
186	BIOTA – 4.20		Poultry Wire Screen	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
187	BIOTA – 4.24		Drip Irrigation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
188	BIOTA – 4.27		Coastal Sage Scrub Mitigation Plan	ongoing	✓	FRN	I-g						✓	FRN	I-i													
189	BIOTA – 4.28		Coastal Sage Scrub Seeding	ongoing																								
190	BIOTA – 4.29		San Diego Horned Lizard Mitigation	ongoing																								
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 Plan,	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-g						✓	FRN	I-i													

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202	BIOTA – 4.43		Replacement Riparian Habitat	status																								
203	Air Quality - 6.02		Dust Control	ongoing									✓	FRN	I-i													
204	Visual – 10.06		Upper Ridge Planting/Revegetation	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
205	Visual – 10.07		Tree Planting Around Perimeter	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
206	Visual – 10.08		Cover/Revegetation Requirements	ongoing	✓	FRN	I-g						✓	FRN	I-i													
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	✓	FRN	I-g						✓	FRN	I-i													
212	Visual – 10.10		Buffer Zone Maintenance	ongoing	✓	C	NONE		✓	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									✓	FRN	I-i													
220	Fugitive Dust - 45.I	45.I	Paved Roads-Cleaning	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
221	Fugitive Dust - 45.N	45.N	Report Submission-Dust/Odor	every quarter	/				/				/				/				/							
222	Air Quality Monitoring - 81	81	Air Quality Monitoring-Tests	ongoing	/				/				/				/				/							
223																												
224																												
225	Air Quality – 6.01		Fugitive Dust Aversion	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
226	Air Quality – 6.01		Working Face Requirements	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
227	Air Quality – 6.01		Erosion Control-Daily Cover	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
228	Air Quality – 6.01		Soil Stockpile Requirements	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
229	Air Quality – 6.01		Active Area Fill	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
230	Air Quality – 6.01		Soil Sealant	ongoing																								
231	Air Quality – 6.01		Dust Emissions-Road Maintenance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
232	Air Quality – 6.01		Access Roads-Paving	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
233	Air Quality – 6.01		Dust Generation-Dumping	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
234	Air Quality – 6.01		Water Tanks/Piping Maintenance	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					

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Checkmark = Condition or mitigation was monitored

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Sunshine Canyon Landfill Mitigation Monitoring Summary - County (04-01-2013 through 06-30-2013)

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	4/10/2013	Status*	Further Review Needed/Comments**	Resolved*	5/1/2013	Status*	Further Review Needed/Comments**	Resolved*	5/29/2013	Status*	Further Review Needed/Comments**	Resolved*	6/12/2013	Status*	Further Review Needed/Comments**	Resolved*	6/25/2013	Status*	Further Review Needed/Comments**	Resolved*	7/9/2013	Status*	Further Review Needed/Comments**	Resolved*
235	Air Quality – 6.01		Wind Speed Monitoring	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
236	Air Quality – 6.01		Report Submission-Dust/Odor	every quarter	/				/				/				/				/							
237	Odor/Landfill Gas – 7.03		Odor/Landfill Gas Monitoring Program	ongoing	/				/				/				/				/							
238	Odor/Landfill Gas – 7.03		Landfill Surface Sampling	ongoing	/				/				/				/				/							
239	Odor/Landfill Gas – 7.03		Landfill Perimeter Air Samples	ongoing	/				/				/				/				/							
240	Odor/Landfill Gas – 7.03		Landfill Surface Monitoring	ongoing	/				/				/				/				/							
241	Odor/Landfill Gas – 7.03		LFG Collection System Monitoring	ongoing	/				/				/				/				/							
242	Noise – 9.01		Landfill Access/Operation	info	/				/				/				/				/							
243	Noise – 9.03		Landfill Equipment- Mufflers/Silencers	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
244	Admin Rpts/ Pgms-17.16		Air Quality Monitoring- Corrective Action Plan	ongoing	/				/				/				/				/							
245																												
246																												
247	Hydrology, Hazardous Waste / Risk of Upset																											
248																												
249																												
250	IMP - Part IV.E	IMP 4	Load Inspection-Random Manual	ongoing																								
251																												

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Sunshine Canyon Landfill Mitigation Monitoring Summary - County (04-01-2013 through 06-30-2013)

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	4/10/2013	Status*	Further Review Needed/Comments**	Resolved*	5/1/2013	Status*	Further Review Needed/Comments**	Resolved*	5/29/2013	Status*	Further Review Needed/Comments**	Resolved*	6/12/2013	Status*	Further Review Needed/Comments**	Resolved*	6/25/2013	Status*	Further Review Needed/Comments**	Resolved*	7/9/2013	Status*	Further Review Needed/Comments**	Resolved*
252	Groundwater - 3.05		Leachate Collection and Removal System	ongoing																								
253	Groundwater - 3.15		Underground Diesel Fuel Storage Tanks	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE					
254	Fire Service - 12.02		On-site Fire Response Capabilities-Operating	ongoing																								
255	Fire Service - 12.03		On-site Fire Response Capabilities-Roads/Water	ongoing																								
256	Fire Service - 12.04		On-site Fuel Storage Tanks-Permit Issuance	ongoing																								
257	Fire Service - 12.05		Building Limits	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
258	Fire Service - 12.06		Methane Gas Monitoring-On-site Structures	ongoing	✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE		✓	C	NONE					
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																								

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Sunshine Canyon Landfill Mitigation Monitoring Summary - County (04-01-2013 through 06-30-2013)

Line #	Reference #	Mitigation #	County Mitigation Measures and Conditions Monitored by Discipline	Monitoring Frequency	4/10/2013	Status*	Further Review Needed/Comments**	Resolved*	5/1/2013	Status*	Further Review Needed/Comments**	Resolved*	5/29/2013	Status*	Further Review Needed/Comments**	Resolved*	6/12/2013	Status*	Further Review Needed/Comments**	Resolved*	6/25/2013	Status*	Further Review Needed/Comments**	Resolved*	7/9/2013	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 l Identification/Conservation	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
276	IMP - Part VII.B	IMP 7	Archaeological/Paleontological	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
277	Archaeological – 5.01		Archaeological Resurvey	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
278	Archaeological – 5.02		Onsite Archaeologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
279	Archaeological – 5.03		Onsite Paleontologist	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
280	Archaeological – 5.04		Archaeological/Paleontologica l Identification Instruction	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	
281	Archaeological – 5.05		Archaeological Resource Curat	ongoing	/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE		/	NA	NONE	

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Appendix I

Further Review Needed-Comments/ I-g through I-k Second Quarter Site Visits

Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager	Q – C.10.c		City Planning	<p>I-h: The gas to energy facility was having building permits delays concerning water and sanitary sewer issues. Resolution was expected soon.</p> <p>I-i: The gas to energy facility water and sewer permits are awaiting final approval.</p> <p>I-j: The gas to energy facility construction is on hold until an electrical permit conduit seal issue is resolved. Edison is proceeding with pole foundation installation.</p> <p>I-k: The gas to energy permitting issues were resolved. Equipment foundations and conduit trench locations were surveyed. Edison pole foundations were in place and curing.</p>
		Odor/Landfill Gas – 7.07	County DPW EPD	See Q – C.10.c I-h through I-k above.
		Gas - 52	County DPW EPD	See Q – C.10.c I-h through I-k above.
		Revegetation – 44.F	County DPW EPD	See M - 4.1.1/6 below.
	M – 4.2.12 / 28		City Planning	I-i: Wind gusts in the Basin D area caused some dust to be released from the basin floor and the area adjacent to the Basin D North Drainage. The City/County Top Deck near the City/County line had occasional dust emissions from wind gusts.
		Fugitive Dust – 45.F	County DPH	See M – 4.2.12 / 28 I-i above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager	M – 4.2.13 / 29, 30, 32, 33, 34		City Planning / SCL-LEA / SCAQMD	I-g through I-k: 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 Planning/ SCL-LEA, SCAQMD	See M-4.2.13/29, 30, 32, 33, and 34, I-g through I-k above.
		Amendment 45.N – 5	County Planning/ SCL-LEA, SCAQMD	See M-4.2.13/29, 30, 32, 33, and 34, I-g through I-k above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
Project Manager	M – 4.9.3 / 112		City Planning	<p>I-h: Windblown litter was observed in the vegetation around Basin B. The terminal basin had litter and debris around the outside of the basin wall, which faces San Fernando Road.</p> <p>I-i: The northern hillside of Basin A had windblown litter in the vegetation.</p> <p>I-j: Windblown litter was observed in the northern slopes of Basin A. The inlet to Basin A was partially plugged with soil, litter, and windblown dry vegetation. Basin B adjacent hillsides had windblown litter. The terminal basin had litter and debris around the outside of the basin wall, which faces San Fernando Road.</p> <p>I-k: Basins A and B had windblown litter in the adjacent hillside vegetation.</p>
		Visual 10.11/91	County DPW EPD	See M – 4.9.3 I-h through I-k above.
		Visual 10.11/92	County DPW EPD	I-h: Sierra Highway was noted to have debris and litter near the I-14 overpass.
		Litter Control 46 A-D	County DPW EPD	I-i: See Visual 10.11/92 above.
		Surface Water 2.15	County DPW EPD	See M - 4.31/46 below.
		Groundwater 3.14	County DPW EPD	I-j: See Groundwater 3.06 below.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
Civil and Geotechnical Engineer	M - 4.1.1 / 3, 5		City Planning	I-j: The development of Cell CC3A Part II will require a buttress to be placed on existing alluvial soils to support an old landslide area under the existing City South waste. This design approach has been approved by the LARWQCB and the City Department of Building and Safety. A deviation of complying with these requirements was approved. The installation should be monitored.
		Geology - 1.05	County DPW EPD	See M - 4.1.1 / 3, 5 above.
	M - 4.1.2 / 8		City Planning	See M - 4.1.1 / 3, 5 above.
	M - 4.1.5/ 12, 13		City Planning	See M - 4.1.1 / 3, 5 above.
		Geology - 1.18	County DPW EPD	See M - 4.1.1 / 3, 5 above.
		Geology - 1.19	County DPW EPD	See M - 4.1.1 / 3, 5 above.
		Groundwater - 3.09	County DPW EPD	See M - 4.1.1 / 3, 5 above.
	M - 4.3.2/ 47, 48		City Planning/SCL LEA	I-j: This condition is not applicable at this time and will be reviewed when the next Cell CC3A Part II liner installation has begun.
		Groundwater – 3.02	County DPW EPD	See M - 4.3.2/ 47, 48 above.
		Groundwater – 3.04	County DPW EPD	See M - 4.3.2/ 47, 48 above.
		Surface Water-2.05	County DPW EPD	See M-4.3.2 / 49 I-k below.
Hydrologist	M - 4.3.1/ 38		City Planning	I-j: There is very little surface cover to retard erosion from disturbed areas.
		Surface Water - 2.12	County DPW EPD	See M - 4.3.1/ 38 above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Hydrologist	M - 4.3.1/ 43		City Planning	I-j: The terminal basin contains sediments that will need to be removed prior to the rainy season.
		Surface Water - 2.10	County DPW EPD	See M - 4.3.1/ 43 above.
	M - 4.3.1/ 44		City Planning	I-j: The final cover grade on the old City North fill area should be checked to comply with the 3% gradient toward the perimeter ditch.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Hydrologist	M - 4.3.1/ 46		City Planning	<p>I-h: The Basin D North drainage v-ditch HDPE liner material was windblown and crumpled, causing a potential drainage blocking. The terminal basin exterior side wall facing the entrance road has a crack that had worsened since it was first observed. A preventative maintenance program should be implemented.</p> <p>I-i: The western drainage into Basin A is partially plugged. The westside drainage system's concrete had areas with sidewall and bottom cracking and spalling. Trees in two areas could possibly be causing the sidewall cracking. The Basin D North Drainage v-ditch HDPE liner was windblown and crumpled, causing a potential drainage blockage. The terminal basin exterior sidewall facing the entrance road has a crack that had worsened since it was first observed. A preventative maintenance program with a schedule should be implemented.</p> <p>I-j: See I-h above.</p> <p>I-k: See I-h above.</p>

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Hydrologist	M – 4.3.2/49		City Planning/SCL- LEA	I-k: The underdrain system piping at the back of the material storage canyon was noted to have gas present. A gas recovery lateral was connected to the underdrain piping and recovering gas. A gas concentration reading of 6.6% methane was taken from the recovery piping.
		Groundwater 3.03	County DPW EPD/SCL LEA	See M – 4.3.2 / 49 I-k above.
		Groundwater 3.06	County DPW EPD/SCL LEA	I-j: The water level at the monitoring well on the embankment of the terminal basin was approximately 4.75 feet below the embankment manhole cover. This high a water level would indicate a high water table in the embankment. However, there was no evidence of a high water level on the concrete side of the basin (i.e., moisture, seeping out of cracks) nor on the earthen side of the embankment. The reason for a high water level within the monitoring well should be determined.
Biologist	M - 4.1.1 / 6		City Planning	I-g and I-i: The prior hydroseeding and mulching of the temporary and permanent slopes and inactive areas has not been successful. A comprehensive plan, with possibly temporary irrigation should be developed and implemented to establish vegetation.
		Geology - 1.14	County DPW EPD/SCL LEA	See M - 4.1.1/6 above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference # / Mitigation #	Responsible Agency	Further Review Needed-Comments
Biologist	M - 4.2.11 / 23		City Planning	See M - 4.1.1/6 above.
		Geology - 1.13	County DPW EPD	See M - 4.1.1/6 above.
	M - 4.2.12		City Planning	See M - 4.1.1/6 above.
		Revegetation - 44.A	County LEA/ County DPW EPD	See M - 4.1.1/6 above.
		Biota - 4.42	County LEA	See M - 4.1.1/6 above.
		Air Quality - 6.02	SCAQMD/ County LEA	See M - 4.1.1/6 above.
		Visual - 10.08	County Forester	See M - 4.1.1/6 above.
		Visual - 10.09	County LEA	See M - 4.1.1/6 above.
	M - 4.4.1 / 60		City Planning	I-g: Deck C Sage Mitigation area was initiated. The site was tilled to a depth of approximately 6" for the preparation of a seedbed for native plantings. I-i: Irrigation equipment consisting of galvanized metal pipes and sprinkler heads were installed and functioning. Plantings consisting of coastal sagebrush (<i>Artemisia californica</i>), black sage (<i>Salvia mellifera</i>), coyote brush (<i>Baccharis pilularis</i>), and blue elderberry (<i>Sambucus nigra</i>) were present, and in good health.
	M - 4.4.1 / 61		City Planning	See M - 4.4.1 / 60 above.

Discipline	City Condition Reference # / Mitigation #	County Condition Reference #/ Mitigation #	Responsible Agency	Further Review Needed-Comments
Biologist		Biota - 4.27	County Planning	I-g and I-i: The county sage mitigation has had minimal success. 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.

Appendix II

Relevant Site Photos

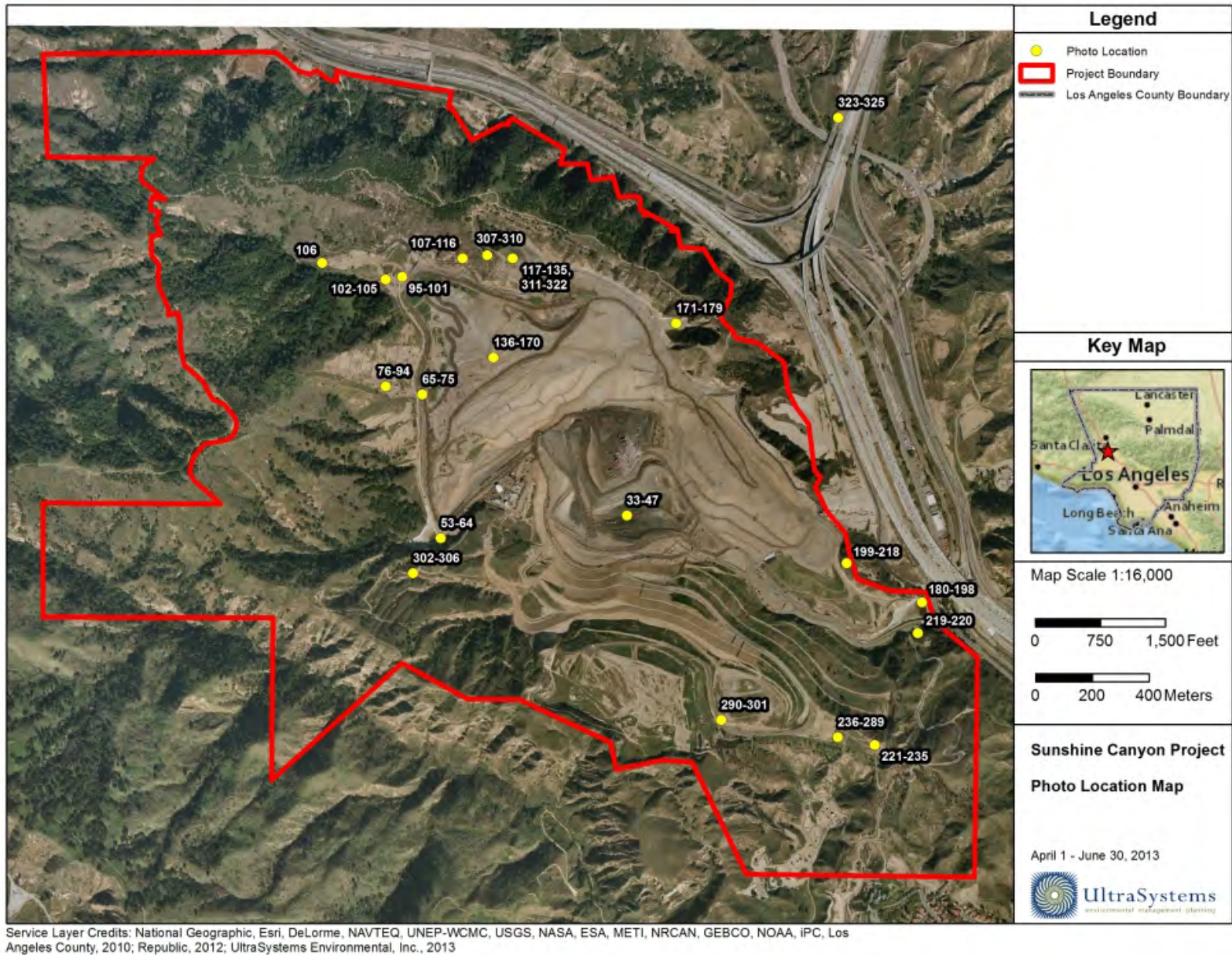




Photo 1: Site: April 10, 2013



Photo 2: Site: April 10, 2013



Photo 3: Site: April 10, 2013



Photo 4: Site: April 10, 2013



Photo 5: Site: May 1, 2013



Photo 6: Site: May 1, 2013



Photo 7: Site: May 1, 2013



Photo 8: Site: May 1, 2013



Photo 9: Site: May 1, 2013



Photo 10: Site: May 1, 2013



Photo 11: Site: May 1, 2013



Photo 12: Site: May 1, 2013



Photo 13: Site: May 1, 2013



Photo 14: Site: May 1, 2013

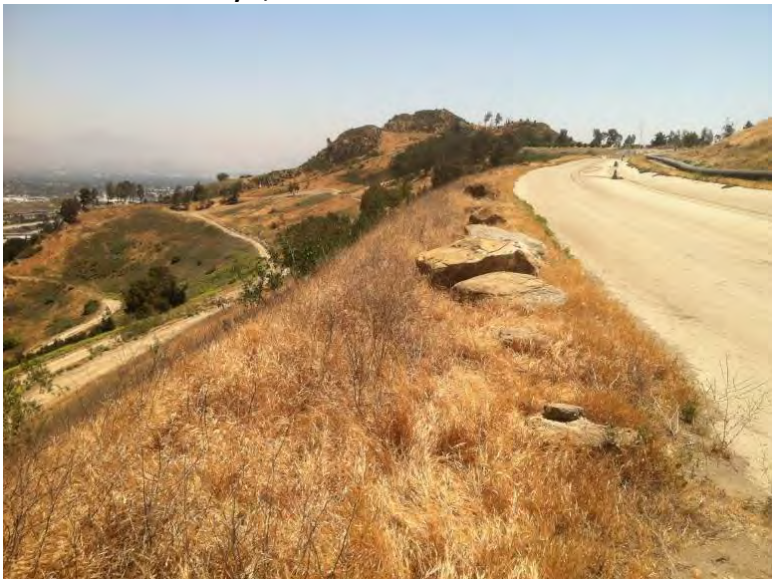


Photo 15: Site: May 1, 2013



Photo 16: Site: May 29, 2013



Photo 17: Site: May 29, 2013



Photo 18: Site: May 29, 2013



Photo 19: Site: May 29, 2013



Photo 20: Site: May 29, 2013



Photo 21: Site: May 29, 2013



Photo 22: Site: June 12, 2013



Photo 23: Site: June 12, 2013



Photo 24: Site: June 12, 2013



Photo 25: Site: June 12, 2013



Photo 26: Site: June 12, 2013



Photo 27: Site: June 12, 2013



Photo 28: Site: June 25, 2013



Photo 29: Site: June 25, 2013



Photo 30: Site: June 25, 2013



Photo 31: Site: June 25, 2013



Photo 32: Site: June 25, 2013



Photo 33: Working Face: April 10, 2013



Photo 34: Working Face: April 10, 2013



Photo 35: Working Face: May 1, 2013



Photo 36: Working Face: May 1, 2013



Photo 37: Working Face: May 29, 2013



Photo 38: Working Face: May 29, 2013



Photo 39: Working Face: May 29, 2013



Photo 40: Working Face: May 29, 2013



Photo 41: Working Face: June 12, 2013



Photo 42: Working Face: June 12, 2013



Photo 43: Working Face: June 12, 2013



Photo 44: Working Face: June 12, 2013



Photo 45: Working Face: June 25, 2013



Photo 46: Working Face: June 25, 2013



Photo 47: Working Face: June 25, 2013



Photo 48: County Front Slope: April 10, 2013



Photo 49: County Front Slope: April 10, 2013



Photo 50: County Front Slope: April 10, 2013



Photo 51: County Front Slope: June 12, 2013



Photo 52: County Fire Area: June 25, 2013



Photo 53: Basin A: May 29, 2013



Photo 54: Basin A: May 29, 2013



Photo 55: Basin A: May 29, 2013



Photo 56: Basin A: May 29, 2013



Photo 57: Basin A: May 29, 2013



Photo 58: Basin A: June 12, 2013



Photo 59: Basin A: June 12, 2013



Photo 60: Basin A: June 25, 2013



Photo 61: Basin A: June 25, 2013



Photo 62: Basin A: June 25, 2013



Photo 63: Basin A Inlet: May 29, 2013



Photo 64: Basin A Inlet: June 12, 2013



Photo 65: Westside Drainage: May 29, 2013



Photo 66: Westside Drainage: May 29, 2013



Photo 67: Westside Drainage: May 29, 2013



Photo 68: Westside Drainage: May 29, 2013



Photo 69: Westside Drainage: May 29, 2013



Photo 70: Westside Drainage: June 12, 2013



Photo 71: Westside Drainage: June 12, 2013



Photo 72: Westside Drainage: June 12, 2013



Photo 73: Westside Drainage: June 12, 2013



Photo 74: Westside Drainage: June 12, 2013



Photo 75: Westside Drainage: June 12, 2013



Photo 76: County Sage Mitigation Area: April 10, 2013



Photo 77: County Sage Mitigation Area: April 10, 2013



Photo 78: County Sage Mitigation Area: April 10, 2013



Photo 79: County Sage Mitigation Area: April 10, 2013



Photo 80: County Sage Mitigation Area: April 10, 2013



Photo 81: County Sage Mitigation Area: April 10, 2013



Photo 82: County Sage Mitigation Area: May 1, 2013



Photo 83: County Sage Mitigation Area: May 1, 2013



Photo 84: County Sage Mitigation Area: May 1, 2013



Photo 85: County Sage Mitigation Area: May 29, 2013



Photo 86: County Sage Mitigation Area: May 29, 2013



Photo 87: County Sage Mitigation Area: May 29, 2013



Photo 88: County Sage Mitigation Area: May 29, 2013



Photo 89: County Sage Mitigation Area: May 29, 2013



Photo 90: County Sage Mitigation Area: June 25, 2013



Photo 91: County Sage Mitigation Area: June 25, 2013



Photo 92: County Sage Mitigation Area: June 25, 2013



Photo 93: County Sage Mitigation Area: June 25, 2013



Photo 94: County Sage Mitigation Area: June 25, 2013



Photo 95: Basin D: May 1, 2013



Photo 96: Basin D: May 29, 2013



Photo 97: Basin D: May 29, 2013



Photo 98: Basin D: June 12, 2013



Photo 99: Basin D: June 12, 2013



Photo 100: Basin D: June 12, 2013



Photo 101: Basin D: June 12, 2013



Photo 102: Material Storage Area: May 1, 2013



Photo 103: Material Storage Area: May 1, 2013



Photo 104: Material Storage Area: May 29, 2013



Photo 105: Material Storage Area: May 29, 2013



Photo 106: County Mitigation Gas Control System West of Material Storage Area: June 25, 2013



Photo 107: Basin D North Drainage: May 1, 2013



Photo 108: Basin D North Drainage: May 1, 2013



Photo 109: Basin D North Drainage: May 1, 2013



Photo 110: Basin D North Drainage: May 29, 2013



Photo 111: Basin D North Drainage: May 29, 2013



Photo 112: Basin D North Drainage: May 29, 2013



Photo 113: Basin D North Drainage: May 29, 2013



Photo 114: Basin D North Drainage: June 12, 2013



Photo 115: Basin D North Drainage: June 12, 2013



Photo 116: Basin D North Drainage: June 12, 2013



Photo 117: Permanent Slopes Behind Flare 9: April 10, 2013



Photo 118: Permanent Slopes Behind Flare 9: April 10, 2013



Photo 119: Permanent Slopes Behind Flare 9: April 10, 2013



Photo 120: Permanent Slopes Behind Flare 9: April 10, 2013



Photo 121: Permanent Slopes Behind Flare 9: April 10, 2013



Photo 122: Permanent Slopes Behind Flare 9: May 1, 2013



Photo 123: Permanent Slopes Behind Flare 9: May 1, 2013



Photo 124: Permanent Slopes Behind Flare 9: May 1, 2013



Photo 125: Permanent Slopes Behind Flare 9: May 1, 2013



Photo 126: Hillside Behind Flare 9: May 29, 2013



Photo 127: Hillside Behind Flare 9: May 29, 2013



Photo 128: Hillside Behind Flare 9: May 29, 2013



Photo 129: Hillside Behind Flare 9: May 29, 2013



Photo 130: Gas to Energy Adjacent Slope Behind Flare 9: June 25, 2013



Photo 131: Gas to Energy Adjacent Slope Behind Flare 9: June 25, 2013



Photo 132: County Permanent Slopes Below Flare 9: May 1, 2013



Photo 133: County Permanent Slopes Below Flare 9: June 12, 2013



Photo 134: County Permanent Slopes Below Gas to Energy Facility: June 12, 2013



Photo 135: County Permanent Slopes Below Gas to Energy Facility: June 12, 2013



Photo 136: County Top Deck: April 10, 2013



Photo 137: County Top Deck: April 10, 2013



Photo 138: County Top Deck: April 10, 2013



Photo 139: County Top Deck: April 10, 2013



Photo 140: County Top Deck: April 10, 2013



Photo 141: County Top Deck: April 10, 2013



Photo 142: County Top Deck: April 10, 2013



Photo 143: County Top Deck: April 10, 2013



Photo 144: County Top Deck: April 10, 2013



Photo 145: County Top Deck: April 10, 2013



Photo 146: County Top Deck: April 10, 2013



Photo 147: County Top Deck: May 1, 2013



Photo 148: County Top Deck: May 1, 2013



Photo 149: County Top Deck: May 1, 2013



Photo 150: County Top Deck: May 1, 2013



Photo 151: County Top Deck: May 1, 2013



Photo 152: County Top Deck: May 1, 2013



Photo 153: County Top Deck: May 1, 2013



Photo 154: County Top Deck: May 1, 2013



Photo 155: County Top Deck: May 1, 2013



Photo 156: County Top Deck: May 1, 2013



Photo 157: County Top Deck: May 1, 2013



Photo 158: County Top Deck: May 1, 2013



Photo 159: County Top Deck: May 1, 2013



Photo 160: County Top Deck: May 29, 2013



Photo 161: County Top Deck: May 29, 2013



Photo 162: County Top Deck: May 29, 2013



Photo 163: County Top Deck: May 29, 2013



Photo 164: County Top Deck: May 29, 2013



Photo 165: County Top Deck: May 29, 2013



Photo 166: County Top Deck: May 29, 2013



Photo 167: County Top Deck: June 25, 2013



Photo 168: County Top Deck: June 25, 2013



Photo 169: County Top Deck: June 25, 2013



Photo 170: County Top Deck- Gas Well Near City-County Line: June 25, 2013



Photo 171: Basin B: April 10, 2013



Photo 172: Basin B: April 10, 2013



Photo 173: Basin B: April 10, 2013



Photo 174: Basin B: May 1, 2013



Photo 175: Basin B: May 1, 2013



Photo 176: Basin B: May 29, 2013



Photo 177: Basin B: May 29, 2013



Photo 178: Basin B: June 25, 2013



Photo 179: Basin B: June 25, 2013



Photo 180: Terminal Basin: April 10, 2013



Photo 181: Terminal Basin: May 1, 2013



Photo 182: Terminal Basin: May 1, 2013



Photo 183: Terminal Basin: May 1, 2013



Photo 184: Terminal Basin: May 29, 2013



Photo 185: Terminal Basin: June 12, 2013



Photo 186: Terminal Basin: June 12, 2013



Photo 187: Terminal Basin: June 29, 2013



Photo 188: Terminal Basin Exterior Wall: April 10, 2013



Photo 189: Terminal Basin Exterior Wall: May 1, 2013



Photo 190: Terminal Basin Exterior Wall: May 1, 2013



Photo 191: Terminal Basin Exterior Wall: May 1, 2013



Photo 192: Terminal Basin Exterior Wall: May 1, 2013



Photo 193: Terminal Basin Exterior Wall: May 1, 2013

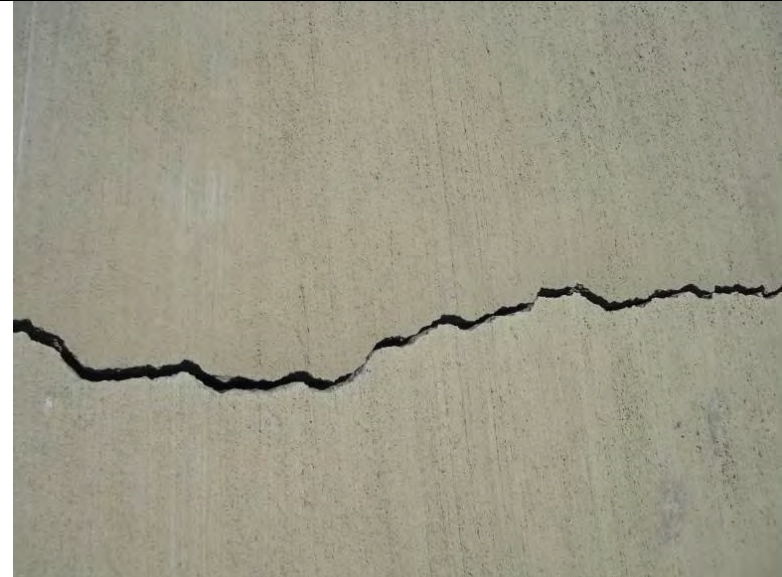


Photo 194: Terminal Basin Exterior Wall: May 1, 2013



Photo 195: Terminal Basin Exterior Wall: May 1, 2013



Photo 196: Terminal Basin Exterior Wall: June 12, 2013



Photo 197: Terminal Basin Exterior Wall: June 12, 2013



Photo 198: Terminal Basin Exterior Wall: June 12, 2013



Photo 199: City North Old Top Deck: May 1, 2013



Photo 200: City North Old Top Deck: May 1, 2013



Photo 201: City North Old Top Deck: May 1, 2013



Photo 202: City North Old Top Deck: May 1, 2013



Photo 203: City North Old Top Deck: May 1, 2013



Photo 204: City North Old Top Deck: May 1, 2013



Photo 205: City North Old Top Deck: May 29, 2013



Photo 206: City North Old Top Deck: May 29, 2013



Photo 207: City North Old Top Deck: May 29, 2013



Photo 208: City North Old Top Deck: May 29, 2013



Photo 209: City North Old Top Deck: May 29, 2013



Photo 210: City North Old Top Deck: May 29, 2013



Photo 211: City North Old Top Deck: May 29, 2013



Photo 212: City North Old Top Deck: June 12, 2013



Photo 213: City North Old Top Deck: June 12, 2013



Photo 214: City North Slopes: May 1, 2013



Photo 215: City North Stockpile Removal: May 1, 2013



Photo 216: City North Stockpile Removal: May 1, 2013



Photo 217: City North Stockpile Removal: May 1, 2013



Photo 218: City North Stockpile Removal: May 1, 2013



Photo 219: Leachate Treatment Electrical Lines: April 10, 2013



Photo 220: Leachate Treatment Electrical Lines: April 10, 2013



Photo 221: City South Vegetation Near Entrance: April 10, 2013



Photo 222: City South Vegetation Near Entrance: April 10, 2013



Photo 223: City South Vegetation Near Entrance: April 10, 2013



Photo 224: City South Vegetation Near Entrance: April 10, 2013



Photo 225: City South Vegetation Near Entrance: April 10, 2013



Photo 226: City South Vegetation Near Entrance: April 10, 2013



Photo 227: City South Vegetation Near Entrance: April 10, 2013



Photo 228: City South Vegetation Near Entrance: April 10, 2013



Photo 229: City South Vegetation Near Entrance: April 10, 2013



Photo 230: City South Vegetation Near Entrance: April 10, 2013



Photo 231: City South Vegetation Near Entrance: April 10, 2013



Photo 232: City South Vegetation Near Entrance: June 25, 2013



Photo 233: City South Vegetation Near Entrance: June 25, 2013



Photo 234: City South Vegetation Near Entrance: June 25, 2013



Photo 235: City South Vegetation Near Entrance: June 25, 2013



Photo 236: City South Deck C Sage Mitigation: April 10, 2013



Photo 237: City South Deck C Sage Mitigation: April 10, 2013



Photo 238: City South Deck C Sage Mitigation: April 10, 2013



Photo 239: City South Deck C Sage Mitigation: April 10, 2013



Photo 240: City South Deck C Sage Mitigation: April 10, 2013



Photo 241: City South Deck C Sage Mitigation: April 10, 2013



Photo 242: City South Deck C Sage Mitigation: May 1, 2013



Photo 243: City South Deck C Sage Mitigation: May 1, 2013



Photo 244: City South Deck C Sage Mitigation: May 1, 2013



Photo 245: City South Deck C Sage Mitigation: May 1, 2013



Photo 246: City South Deck C Sage Mitigation: May 1, 2013



Photo 247: City South Deck C Sage Mitigation: May 1, 2013



Photo 248: City South Deck C Sage Mitigation: May 1, 2013



Photo 249: City South Deck C Sage Mitigation: May 1, 2013



Photo 250: City South Deck C Sage Mitigation: May 29, 2013



Photo 251: City South Deck C Sage Mitigation: May 29, 2013



Photo 252: City South Deck C Sage Mitigation: May 29, 2013



Photo 253: City South Deck C Sage Mitigation: May 29, 2013



Photo 254: City South Deck C Sage Mitigation: May 29, 2013



Photo 255: City South Deck C Sage Mitigation: May 29, 2013



Photo 256: City South Deck C Sage Mitigation: May 29, 2013



Photo 257: City South Deck C Sage Mitigation: May 29, 2013



Photo 258: City South Deck C Sage Mitigation: May 29, 2013



Photo 259: City South Deck C Sage Mitigation: May 29, 2013



Photo 260: City South Deck C Sage Mitigation: May 29, 2013



Photo 261: City South Deck C Sage Mitigation: May 29, 2013



Photo 262: City South Deck C Sage Mitigation: June 12, 2013



Photo 263: City South Deck C Sage Mitigation: June 12, 2013



Photo 264: City South Deck C Sage Mitigation: June 12, 2013



Photo 265: City South Deck C Sage Mitigation: June 12, 2013



Photo 266: City South Deck C Sage Mitigation: June 12, 2013



Photo 267: City South Deck C Sage Mitigation: June 12, 2013



Photo 268: City South Deck C Sage Mitigation: June 12, 2013



Photo 269: City South Deck C Sage Mitigation: June 12, 2013



Photo 270: City South Deck C Sage Mitigation: June 12, 2013



Photo 271: City South Deck C Sage Mitigation: June 12, 2013



Photo 272: City South Deck C Sage Mitigation: June 12, 2013



Photo 273: City South Deck C Sage Mitigation: June 12, 2013



Photo 274: City South Deck C Sage Mitigation: June 12, 2013



Photo 275: City South Deck C Sage Mitigation: June 12, 2013



Photo 276: City South Deck C Sage Mitigation: June 12, 2013



Photo 277: City South Deck C Sage Mitigation: June 12, 2013



Photo 278: City South Deck C Sage Mitigation: June 12, 2013



Photo 279: City South Deck C Sage Mitigation: June 12, 2013



Photo 280: City South Deck C Sage Mitigation: June 12, 2013



Photo 281: City South Deck C Sage Mitigation: June 25, 2013



Photo 282: City South Deck C Sage Mitigation: June 25, 2013



Photo 283: City South Deck C Sage Mitigation: June 25, 2013



Photo 284: City South Deck C Sage Mitigation: June 25, 2013



Photo 285: City South Deck C Sage Mitigation: June 25, 2013



Photo 286: City South Deck C Sage Mitigation: June 25, 2013



Photo 287: City South Deck C Sage Mitigation: June 25, 2013



Photo 288: City South Deck C Sage Mitigation: June 25, 2013



Photo 289: City South Deck C Sage Mitigation: June 25, 2013



Photo 290: Flare 1 Piping Supports: April 10, 2013



Photo 291: Flare 1 Piping Supports: April 10, 2013



Photo 292: Flare 1 Piping Supports: May 1, 2013



Photo 293: Flare 1 Piping Supports: May 1, 2013



Photo 294: Flare 1 Piping Supports: May 29, 2013



Photo 295: Flare 1 Piping Supports: May 29, 2013



Photo 296: Flare 1 Piping Supports: May 29, 2013



Photo 297: Flare 1 Piping Supports: May 29, 2013



Photo 298: Flare 1 Piping Supports: June 12, 2013



Photo 299: Flare 1 Piping Supports: June 12, 2013



Photo 300: Flare 1 Piping Supports Emergency Generator Hookup Panel: June 12, 2013



Photo 301: Flare 1 Piping Supports: June 12, 2013



Photo 302: Flare 3: May 29, 2013



Photo 303: Flare 3: May 29, 2013



Photo 304: Flare 3 Generator Hookup Panel: May 29, 2013



Photo 305: Flare 3 Generator Hookup Panel: May 29, 2013

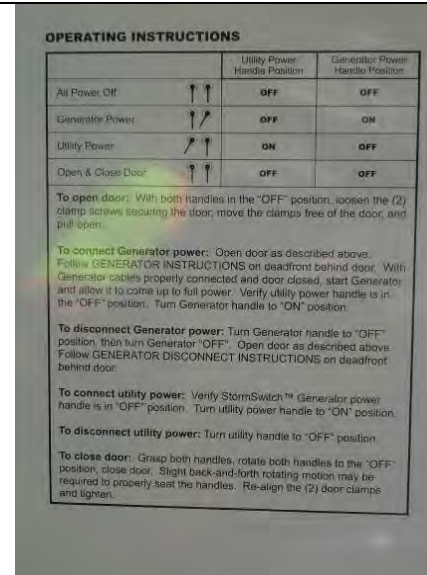


Photo 306: Flare 3 Generator Hookup Panel: May 29, 2013



Photo 307: Flare 8: May 1, 2013



Photo 308: Flare 8: May 1, 2013



Photo 309: Flare 8: May 1, 2013



Photo 310: Flare 8: May 1, 2013



Photo 311: Flare 9: Burner Cleaning: May 29, 2013



Photo 312: Flare 10 Construction: May 29, 2013



Photo 313: Flare 10 Construction: May 29, 2013



Photo 314: Flare 10 Construction: May 29, 2013



Photo 315: Flare 10 Construction: May 29, 2013



Photo 316: Flare 10 Construction: May 29, 2013



Photo 317: Flare 10 Construction: June 25, 2013



Photo 318: Gas to Energy Plant Site: June 25, 2013



Photo 319: Gas to Energy Plant Site: June 25, 2013



Photo 320: Gas to Energy Plant Site: June 25, 2013



Photo 321: Gas to Energy Plant Site: June 25, 2013

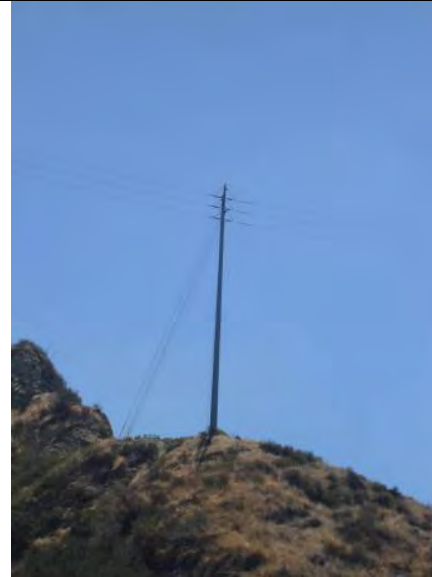


Photo 322: Gas to Energy Edison Pole Foundation: June 25, 2013

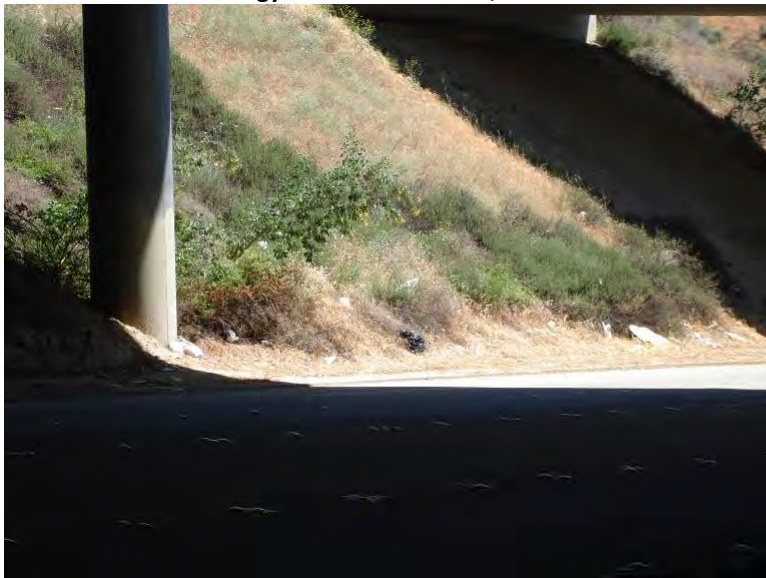


Photo 323: Sierra Highway Near I-14: April 10, 2013



Photo 324: Sierra Highway Near I-14: May 1, 2013



Photo 325: Sierra Highway Near I-14: May 1, 2013

Appendix III

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

UltraSystems Staff; Field of Expertise:

James Aidukas; Project Manager, Permitting and Operations/ Engineer

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

Joe Thompson; Biological Resources/ Biologist

SES Staff; Field of Expertise:


Tarik Hadj-Hamou; Civil/ Geotechnical Engineer

April Site Visits

April 10, 2013: James Aidukas (UltraSystems), Joe Thompson (UltraSystems), Mike Lindsay (UltraSystems)



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT**

Monitor: James Aidukas	Page: 1 of 1
Discipline: Project Manager	Date: April 10, 2013
Site Conditions: Clear and sunny, slight wind	
SITE LOG	
<p>Republic Site Manager-Anthony Bertrand</p> <p>Met with John Nelson (LADPW), Rogelio Gamino (LADPW), Mike Lindsay and Joe Thomson (UltraSystems.) Signed in and had a brief update on current activities from Patti Costa and Achaya Kelapanda. Ms. Costa stated that they had done the grading and soil preparation and irrigation was to follow. Mr. Achaya stated that all systems were operational. The wind caused Flare #8 to go down earlier in the week. After these discussions, John Nelson Rogelio Gamino and I proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> • It was observed that sage, oaks, and other trees will be impacted in the main entrance area where the temporary and future realigned access road is planned. A final design for the temporary and permanent realignment should be developed and boundaries staked so the vegetation and habitat impact could be assessed. • No change in the County Sage Mitigation. The mitigation is spotty with soil erosion and lack of water the main problems. • The permanent slopes north of Flare#9 were hydroseeded approximately one year ago with no success. These permanent slopes need to be revegetated. • Deck C was observed and the summer hot wind may be an issue in the success of the establishment of the sage mitigation. Wind fencing may be needed. • Lack of vegetation on the temporary and inactive slopes was observed throughout the landfill. A plan should be developed and implemented. • Cell CC3A Part 2 was not yet started. <p>Flare Operating Conditions:</p> <ul style="list-style-type: none"> ○ Temporary Flare - 1680 °F, 1709 SCFM, -50" vacuum ○ Flare #9 - 1698 °F, 3485 SCFM, 43" vacuum ○ Flare #1 - 1689 °F, 4007 SCFM 	
FURTHER REVIEW NEEDED	
<ul style="list-style-type: none"> • A final design for the temporary and permanent realignment should be developed and boundaries staked so the vegetation and habitat impact could be assessed. • A plan should be developed and implemented: <ul style="list-style-type: none"> for improving the County sage mitigation area; for the revegetation of the permanent slope north of Flare #9; and for the revegetation of the temporary and inactive slopes and decks. 	
COMMENTS	
<p>Signed: </p>	



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT**

Monitor: Joe Thompson	Page: 1 of 2
Discipline: Biology	Date: 4-10-2013
Site Conditions: 0% CC, Winds NE 10 MPH, 60 degrees F.	
SITE LOG	
<ul style="list-style-type: none"> • Evaluated west slope mitigation area at County Top Deck. The coastal sage vegetation community appeared to be in poor condition. Vegetation cover was nearly 100 percent absolute cover near the center drainage and < 1 percent 100 feet north and south of drainage for a total CSS coverage of <5 percent. Significant erosion was observed in areas with spotty or no vegetative cover. The biologist observed and photographed a coast horned lizard, which is a California Species of Special Concern. • Evaluated steep slopes at Flare 9. Site has been treated with hydromulch. This appeared to be doing a good job of controlling erosion. However, little to no vegetation was observed, except for a few scattered non-native grasses and forbs. • Evaluated site conditions at Deck C. The site had recently been tilled to a depth of approximately 6 inches for the preparation of a seedbed for native plantings. • Evaluated site of proposed new access road at east end of facility. The proposed access will require the removal of approximately 40 coast live oaks intermixed with coastal sage scrub habitat. The biologist also observed an active red-tailed hawk nest in a steel lattice electrical distribution tower close to the proposed alignment. 	
FURTHER REVIEW NEEDED	
<ul style="list-style-type: none"> • A new approach is needed for proposed mitigation at the County Top Deck mitigation site. Suggestions include more intensive irrigation, planting with container plants in the fall, and more intensive erosion control measures as well as adaptive monitoring. • The steep slopes at Flare 9 require the same approach as the County Top Deck mitigation site, with modifications for the steeper slopes. • The proposed new access road will require that Republic perform all necessary CEQA studies and reporting, consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, and an assessment of waters of the State and Waters of the U.S. 	
COMMENTS	
<ul style="list-style-type: none"> • UltraSystems would be happy to work with Republic as well as the City and County of Los Angeles to develop a comprehensive revegetation strategy for meeting their mitigation goals. Based on the observable failure of the CSS community at the County Top Deck, a new approach is clearly needed. It appears that soil moisture, erosion, the desiccating effects of wind, and possibly low pH and excessive salts are the primary factors inhibiting the reestablishment of CSS vegetation. These factors would all need to be controlled in a new revegetation strategy. • UltraSystems would also be more than happy to assist with any CEQA studies, biological reports, 	

permits, field surveys, construction monitoring, and post project impact analysis and mitigation monitoring that will be needed in order to complete the new access road project. We have personnel who are experienced in all of the required disciplines and would be more than happy to provide assistance where needed.



Signed:



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT**

Monitor: Mike Lindsay	Page 1 of 1
Discipline: Environmental Engineer	Date: 04-10-13
Site Conditions: Sunny, clear, 64/82°F, 5-15 mph	
SITE LOG	
<ol style="list-style-type: none"> 1. Met with John Nelson and Rogelio Gamino (LACDPW), Jim Addekas and Joe Thompson (UltraSystems). 2. Checked in at office with Patty Costa and Achaya Kelapanda (Republic Services). 3. Measured County Top Deck elevations using a Trimble GHX 2008 GPS device (± 0.1 meter). 4. Observed oil drip pans under equipment at maintenance yard by office. 5. Observed northwest storage yard to be in good order. 6. Observed new 36-inch header pipe and valves for gas collection on County Top Deck. 7. Flare 9 operating at 3522 scfm and 1704°F. Gas sample measured at 34.2% Vol CH₄, 3.8% Vol O₂, and over 500 ppm CO. 8. Slopes above Flare 9 are at 48° (~1:1 slope). They are hydroseeded but no growth is visible. 9. Observed City Deck C vegetation preparation (below PM10 berm) with soil grade at final elevation. 10. Observed proposed new access road route, noting trees and vegetation that will be removed (by transmission line tower no. 89 above lower leachate tanks). 11. Observed lower leachate tanks to be in good order. 12. Tree branches have fallen on power lines by lower leachate tanks. 	
FURTHER REVIEW NEEDED	
<ol style="list-style-type: none"> 1. Re-vegetate slopes above Flare 9. 2. Remove branches that are laying on power lines by lower leachate tanks. 	
<p>Note: Rogelio Gamino LACDPW Env. Proj. Div. 626-458-3569</p>	
Project Number: 5800	Signed: <i>Mike Lindsay</i>

May Site Visits


May 1, 2013: James Aidukas (UltraSystems), Joe Thompson (UltraSystems), Mike Lindsay (UltraSystems)

May 29, 2013: James Aidukas (UltraSystems), Joe Thompson (UltraSystems), Mike Lindsay (UltraSystems)



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT**

Monitor: James Aidukas	Page: 1 of 2
Discipline: Project Manager	Date: May 1, 2013
Site Conditions: Clear and warm, slight wind	
SITE LOG	
<p>Republic Site Manager - Anthony Bertrand</p> <p>Met with John Nelson (LADPW) and Mike Lindsay (UEI). Signed in at the office and checked in with Becky Van Sickle before going out to the landfill. John Nelson, Mike Lindsay and I then proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> • Observed the servicing of equipment at the leachate treatment facility. Noted standing water inside the berm area. • Traveled to Deck C on the City South area. Observed the progress on the sage mitigation project construction and planting activities. • Observed Flare 1 operating conditions. Noted that the piping supports did not have hold-down brackets and that the design should be checked to confirm that the piping supports meet seismic design requirements. • Mike Lindsay went to the County top deck area to monitor that area while John Nelson and I proceeded to the City North area. • Removal of stockpiled soil on the City North top deck was observed and final elevations appear to exist on that deck. • The vegetation on the City North slopes had died and the prior test seed used last year appeared to be unsuccessful without irrigation water. • Stockpiled soil adjacent to the westside drainage was being moved and the area adjacent to the drainage was flat and appeared to be at final elevation. • Basin B was dry and soil was removed in portions of the basin. Wind-blown litter was observed in the back area of the basin and in the native vegetation. • Gas mainlines and collection lines were being worked on in the County top deck area. Wells were also lowered. The surface of the top deck was graded and the working face access road was realigned. • The County sage mitigation area had no activity since the last monitoring. • The County permanent slopes above and below Flare 9 and adjacent to the gas the energy facility plot had no success with last year's revegetation efforts. These slopes are bare and visible offsite. A revegetation plan should be prepared for these areas and implemented in the fall. • The Basin D north drainage V-ditch HDPE liner material was windblown and crumpled, causing potential drainage blockage. This and other drainage maintenance should be scheduled and completed before the rainy season. • It was observed that the front exterior wall of the terminal basin had litter and debris between the wall and the block wall along San Fernando Road. The outlet structure had mud, debris, and vegetation growing near the energy dissipaters. The terminal basin exterior side wall had a crack that had worsened since it was first observed. The terminal basin was dry and ready for the yearly cleaning. • Sierra Highway was noted to have debris and litter near the I-14 overpass. 	

Monitor: James Aidukas	Page: 2 of 2
Discipline: Project Manager	Date: May 1, 2013
SITE LOG	
<ul style="list-style-type: none"> Flare 8 was observed and operating. A conduit with loose wires with taped ends was noted lying on the ground. This condition was reported to Republic. The area within the fence at Flare 8 had high dry grass that should be cut for fire safety. Flare 9 was observed and operating. No unusual conditions were noted. The temporary flare was observed and operating. There was no ambient odor noted in the general area. Flare 3 was observed and operating. No unusual conditions were noted. Flare Operating Conditions: <ul style="list-style-type: none"> Temporary Flare - 1692°F, 1476 SCFM <ul style="list-style-type: none"> Flare 1 - 1687°F, 4007 SCFM Flare 3 - 1644°F, 3651 SCFM Flare 8 - 1694°F, 2931 SCFM Flare 9 - 1698°F, 4521 SCFM, -50" vacuum <p>Had a post-meeting discussion with Achaya Kelapanda, Republic's Gas Systems Environmental Manager, and discussed the gas recovery and flare systems, and the gas-to-energy facility scheduled activities.</p>	
FURTHER REVIEW NEEDED	
<ul style="list-style-type: none"> Piping supports on Flare 1 skid to verify that they meet seismic design requirements. Top deck of Old City North fill to meet closure requirements now that stockpiled soil has been removed. Revegetation plan for interim and inactive fill area Revegetation plan for county sage mitigation slopes. Clean-up of areas adjacent to the terminal basin. Maintenance list and schedule for drainage system repair. Flare 8 conduit repair and weed abatement. 	
COMMENTS	
Signed: 	



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT**

Monitor: Joe Thompson	Page: 1 of 2
Discipline: Biology	Date: 5-1-2013
Site Conditions: 0% CC, Winds NE 10 MPH, 72 degrees F.	
SITE LOG	
<ul style="list-style-type: none"> • Evaluated site conditions at Deck C. Irrigation equipment consisting of galvanized metal pipes and sprinkler heads had recently been installed for upcoming planting. • • Evaluated west slope mitigation area at County Top Deck. The coastal sage vegetation community does not appear to have had any activity since the April 10, 2013 visit. Therefore, conditions have not changed. Vegetation cover was nearly 100 percent absolute cover near the center drainage and < 1 percent 100 feet north and south of drainage for a total CSS coverage of <5 percent. Significant erosion was observed in areas with spotty or no vegetative cover. • Evaluated steep slopes at Flare 9. It did not appear that any activity had taken place at this site since the April 10, 2013 site visit, so conditions had not changed. Past hydromulch treatments were still evident and there was no evidence of recent erosion. Vegetation was scant and consisted of non-native grasses and forbs. 	
FURTHER REVIEW NEEDED	
<p><u>Deck C, City Mitigation Site.</u> The newly installed irrigation system should be fully functioning with a reliable water source prior to planting activities. A wind fence would be beneficial, particularly if the City plans to do the planting during the spring or early summer. The preferred option would be to plant in the fall, after the first gentle rains.</p> <p><u>County Sage Mitigation Site.</u> The County Sage Mitigation Site would benefit from a more intensive overall planting and maintenance strategy.</p> <p>Recommendations to control erosion include close placement of lateral straw wattles and erosion control blankets held in place by anchored wire mesh. Hydromulching may not be practical due to difficult access for trucks.</p> <p>The irrigation system should be in place and fully functioning prior to any new plantings and should have a reliable water supply, particularly during periods of drought.</p> <p>Management should be adaptive. This would require frequent monitoring and the ability to repair</p>	

problems with the erosion control and irrigation systems and to be able to adjust the watering timing, frequency, and volume to account for weather conditions, and to replace failed plantings as soon as it is evident that they are no longer surviving. It is also recommended that large-scale planting efforts take place in the fall, after the first gentle rains.

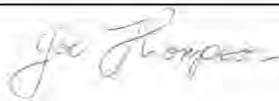
Steep slopes at Flare 9. Revegetation at this area is challenging due not only to the steepness of the slope, but also due to the requirement that plantings be of low flammability.

Hydromulching has been performed at this site and appears to be doing a good job of controlling erosion. However, to secure the soil during the winter months and during irrigation would require the addition of additional measures such as erosion control blankets held in place with anchored wire mesh.

Plantings should be native species. However, with regard to their capacity to carry fire, annual species, and particularly annual grasses should not be included. Recommendations for perennial species include black sage (*Salvia mellifera*), flat-top buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), white sage (*Salvia apiana*) and purple sage (*Salvia leucophylla*), bush monkeyflower (*Mimulus aurantiacus*) bush sunflower (*Encelia californica*), coyote bush (*Baccharis pilularis*), laurel sumac (*Malosma laurina*), deerweed (*Lotus scoparius*), and coast prickly pear (*Opuntia littoralis*). The initial planting should take place in the fall, after the first gentle rains. However, replacement of failed plantings should be performed as soon as it has been determined that a given plant is not viable.

COMMENTS

Signed:



Monitor: Mike Lindsay	Page 1 of 1
Discipline: Environmental Engineer	Date: May 1, 2013
Site Conditions: Sunny, clear, 62/80°F, 5-10 mph	
SITE LOG	
1. Met with John Nelson (LACDPW), Jim Aidukas (VEI). 2. Checked in at office with Becky Vansickle (Republic). 3. Observed City Deck C vegetation project (below PM10 berm), with irrigation system now in place. 4. Measured County Top Deck elevations using a Trimble GHX 2008 GPS device (± 0.1 meter). 5. Observed northwest storage yard to be in order. 6. Flare 9 operating at ± 533 scfm and 1787°F . Gas sample measured at 35% Vol. CH ₄ , 1.6% Vol. O ₂ , and over 500 ppm CO. 7. Flare 1 operating at 4011 scfm, and 1692°F . Gas sample measured at 28% Vol. CH ₄ and 3.3% Vol. O ₂ , and 298 298 ppm CO. 8. Met with Achana Kelapanda (Republic) and discussed gas to energy plant schedule.	
FURTHER REVIEW NEEDED	
Project Number: 5800 Signed: Mike Lindsay	



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT**

Monitor: James Aidukas	Page: 1 of 2
Discipline: Project Manager	Date: May 29, 2013
Site Conditions: Clear and sunny, 10-20 MPH wind gusts	
SITE LOG	
<p>Republic Site Manager - Anthony Bertrand Met with John Nelson (LADPW), Mike Lindsay and Joe Thompson (UEI). Signed in at the office and checked in with Becky Van Sickly before going on the landfill site. Mike Lindsay and Joe Thompson proceeded to monitor Deck C followed by going to the County top deck and slopes. John Nelson and I proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> Basin A was cleaned of sediment except for minor debris from sloughing of the adjacent southern hillside. The northern hillside had wind-blown litter in the vegetation. The western drainage inlet to Basin A was noted to be partially plugged with soil, debris and dry vegetation. The westside drainage system's concrete had areas with sidewall and bottom cracking and spalling. Trees were noted to be growing close to the sidewall in two areas possibly causing the sidewall cracking. The material storage area was observed to be clean and orderly with no vermin noted. Basin D was clean and ready for fall storms. Wind gusts caused some dust to be released from the basin floor. The Basin D north drainage was observed to have areas of the HDPE ditch liner wind blown into clumps that will partially block water flow. The hillside slopes behind Flare 9 were observed to have no success from last year's re-vegetation efforts. Flare 9 was not operating. The flare was shut down for routine burner cleaning. Construction was in progress on Flare 10 with electrical and foundation work being done. Concrete was being poured and finished for the air blower and flare. Basin B was observed to be clean of sediment and ready for fall storms. The City North Top Deck area that was filled in 1990 had stockpiled soils removed and was graded to what seemed to be the final elevations. The terminal basin was observed to have sediment that will need to be removed before the fall rains start. Deck C was observed. The irrigation and planting efforts appeared to be completed. Irrigation of plantings and hydroseeded areas by water truck was observed. The drip irrigation was working. Flare 1 was noted having the emergency generator hookup panel installed. It was observed that Flare 1 piping supports did not have hold-down brackets for seismic requirements. Flare 3 was noted having the emergency generator hookup panel installed. <p>Flare Operating Conditions:</p> <ul style="list-style-type: none"> Temporary Flare - 1673°F, 1815 SCFM Flare 1 - 1682°F, 4013 SCFM Flare 3 - 1645°F, 3997 SCFM Flare 9 was not operating <p>Had a post-meeting discussion with Achaya Kelapanda, Republic's Gas Systems Environmental Manager, and discussed Flare 10 construction and start-up schedule, maintenance activity on Flare 9, and the gas-to-energy facility schedule. (See meeting log for May 29, 2013.)</p>	

Monitor: James Aidukas	Page: 2 of 2
Discipline: Project Manager	Date: May 29, 2013

FURTHER REVIEW NEEDED

- Removal of litter from Basin A hillside vegetation
- Use of soil sealant in areas like Basin D before the start of the Santa Ana winds
- Piping supports of Flare 1 skid to verify that they meet seismic design requirements
- Top deck of old City North fill to meet closure requirements now that stockpiled soil has been removed
- Revegetation plan for interim and inactive fill area
- Revegetation plan for county sage mitigation slopes
- Maintenance list and schedule for drainage system repair

COMMENTS

Signed: 



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT**

Monitor: Joe Thompson	Page: 1 of 2
Discipline: Biology	Date: 5-29-2013
Site Conditions: 0% CC, Winds NE 10-15 MPH, 75 degrees F.	
SITE LOG	
<ul style="list-style-type: none"> • Evaluated site conditions at Deck C. Irrigation equipment consisting of galvanized metal pipes and sprinkler heads were installed and functioning. Also, recent plantings consisting of coastal sagebrush (<i>Artemisia californica</i>), black sage (<i>Salvia mellifera</i>), coyote brush (<i>Baccharis pilularis</i>), and blue elderberry (<i>Sambucus nigra</i>) were present, and in good health. During the site visit, a water truck with a monitor sprayed all of the plantings from access roads. • Evaluated west slope mitigation area at County Top Deck. The coastal sage vegetation community does not appear to have had any activity since the April 10, 2013 visit. Therefore, conditions have not changed. Vegetation cover was nearly 100 percent absolute cover near the center drainage and < 1 percent 100 feet north and south of drainage for a total CSS coverage of <5 percent. Significant erosion was observed in areas with spotty or no vegetative cover. • Evaluated steep slopes at Flare 9. It did not appear that any activity had taken place at this site since the April 10, 2013 site visit, so conditions had not changed. Past hydromulch treatments were still evident and there was no evidence of recent erosion. Vegetation was scant and consisted of non-native grasses and forbs. 	
FURTHER REVIEW NEEDED	
<p><u>Deck C, City Mitigation Site.</u> Plantings should be monitored closely with respect to health and water levels, particularly during the hot summer months, particularly due to the site's prevalence of high winds.</p> <p><u>County Sage Mitigation Site.</u> As has been stated in past site monitoring reports, the County Sage Mitigation Site would benefit from a more intensive overall planting and maintenance strategy.</p> <p>Recommendations to control erosion include close placement of lateral straw wattles and erosion control blankets held in place by anchored wire mesh. Hydromulching may not be practical due to difficult access for trucks.</p> <p>The irrigation system should be in place and fully functioning prior to any new plantings and should have a reliable water supply, particularly during periods of drought. It would be preferable if planting took place during the fall, due to cooler temperatures and natural precipitation.</p> <p>Management should be adaptive. This would require frequent monitoring and the ability to repair problems with the erosion control and irrigation systems and to be able to adjust the watering timing,</p>	

frequency, and volume to account for weather conditions, and to replace failed plantings as soon as it is evident that they are no longer surviving.

Steep slopes at Flare 9. Revegetation at this area is challenging due not only to the steepness of the slope, but also due to the requirement that plantings be of low flammability.

Hydromulching at this location appears to be doing a good job of controlling erosion. However, to secure the soil during the winter months and during irrigation would require the addition of additional measures such as erosion control blankets held in place with anchored wire mesh.

Plantings should be native species. However, with regard to their capacity to carry fire, annual species, and particularly annual grasses should not be included. Recommendations for perennial species include black sage (*Salvia mellifera*), flat-top buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), white sage (*Salvia apiana*) and purple sage (*Salvia leucophylla*), bush monkeyflower (*Mimulus aurantiacus*) bush sunflower (*Encelia californica*), coyote bush (*Baccharis pilularis*), laurel sumac (*Malosma laurina*), deerweed (*Lotus scoparius*), and coast prickly pear (*Opuntia littoralis*). The initial planting should take place in the fall, after the first gentle rains. However, replacement of failed plantings should be performed as soon as it has been determined that a given plant is not viable.

COMMENTS

Signed:





**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT**

Monitor: Mike Lindsay	Page <u>1</u> of <u>1</u>
Discipline: Environmental Engineer	Date: <u>May 29, 2013</u>
Site Conditions: <u>Sunny, clear, 66/86 °F, 10-25 mph</u>	
SITE LOG	
<ol style="list-style-type: none"> 1. Met with John Nelson (LACDPW), Jim Aldukas and Joe Thompson (UltraSystems). 2. Checked in at office and met with Becky Van Sickle (Republic) and discussed site visit plans. 3. Observed City Deck C vegetation project, with 60% of plants installed and water trucks / irrigation system keeping ground moist. 4. Measured County Top Deck elevations using a Trimble 2008 GeoXH GPS device (± 0.1 meter). 5. Observed County sage mitigation area. 6. Observed northwest storage yard to be in order. 7. Flare 9 was not operating for burner maintenance. 8. Observed construction crews pouring concrete foundations for Flare 10 (adjacent to Flare 9). 9. Met with Achayn Kelapanda (Republic) and discussed Flare 10 schedule. 	
FURTHER REVIEW NEEDED	
Project Number: 5800	Signed: <u>Mike Lindsay</u>


June Site Visits

June 12, 2013: James Aidukas (UltraSystems), Mike Lindsay (UltraSystems), Tarik Hadj-Hamou (UltraSystems)

June 25, 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: June 12, 2013
Site Conditions: Clear and sunny, mild wind	
SITE LOG	
<p>Republic Site Manager - Anthony Bertrand</p> <p>Met with John Nelson (LADPW), Mike Lindsay(UEI), and Tarik Hadj-Hamou (UEI), signed in at the office, and had a pre-monitoring meeting with Anthony Bertrand, Tim Johnson, Patti Costa and Becky Van Sickle (Republic Services). Refer to meeting log for June for issues discussed. Following the meeting, Mike Lindsay monitored the County Top Deck area and John Nelson, Tarik Hadj-Hamou and I proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> • The county soil stockpile area near the shop was observed and photographed. • Wind-blown litter was observed in the north slope vegetation of Basin A. Basin A inlet from the western drainage ditch was still plugged with soil, litter, and wind-blown, dry vegetation. • The concrete in the western drainage ditch remains cracked on sidewalls and the bottom in the same area. Trees appear to be causing some sidewall damage. • Basin D was clean and ready for fall rainstorms. • Basin D drainage ditch HDPE liner has been wind-blown and has areas of clumped HDPE that would impede rainwater flow. • The water level in the manhole on the terminal basin embankment appears to be high. • The City south deck C sage mitigation project was observed to have mixed success with some plants dying and others appear to be stressed but still living. • The permanent slopes below the gas-to-energy site and the Flare 9 and 10 site were observed to be un-vegetated. <p>Basin B was clean and ready for fall rain storms. The adjacent hills had wind-blown litter.</p> <ul style="list-style-type: none"> • The City North Old Landfill top deck had no change from prior monitoring. • The terminal basin was observed to have sediment near the outlet risers. The outlet energy dissipaters have soil and vegetation in the bottom of the channel. Debris was observed on the outside wall of this terminal basin. <p>Flare Operating Conditions:</p> <ul style="list-style-type: none"> ○ Terminal Flare - 1679°F, 1439 SCFM, -44.5" vacuum ○ Flare 1 - 1698°F, 4052 SCFM 	
FURTHER REVIEW NEEDED	
<ol style="list-style-type: none"> 1. Removal of litter from Basin A hillside vegetation 2. Inquire about potential future use of top deck of old City North landfill where stockpiled soil has been removed and top deck has been graded 3. Revegetation plan for interim and inactive fill area 4. Maintenance list and schedule for drainage system repair and cleaning 	
COMMENTS	
Signed: 	



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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: Mike Lindsay	Page 1 of 2
Discipline: Environmental Engineer	Date: 06-12-13
Site Conditions: Clear, Sunny, 63/78°F, 0-5 mph	
SITE LOG	
<ol style="list-style-type: none"> 1. Met with Anthony Bertrand, Tim Johnson, Patti Costa, Becky Van Sickle (Republic), John Nelson (LACDPW), Jim Adakas and Tarik Hadj-Hamou (UltraSystems). 2. Horizontal drilling for drainage has begun; liner work in July/Aug. (complete in Oct.). Butress goes in first after horz. drilling complete in two weeks. Butress is 200,000 cy (a 2-3 wk process). Venture Drilling (sub to sublet-liner contractor). 3. All presently available (lined) landfill airspace used by Nov. 1. 4. Leachate drain system will tie into City stub (existing). Cell CC3A Part II will fill in 2 years (Nov 2015). 5. Toe berm design report was submitted 2 weeks ago to Wynn. • Temp construction road starts this year (late summer). • Toe berm starts Q2-2014. ★ 6. Lost ~ 0.5M cy of soil in 2 months due to plan design changes (soil deficit). Can only import 6K cy/week. - may try for variance. 7. Powerline relocation starts summer 2014. 8. Flare 10 delivery next week; complete 08-01-13. 9. DTE Gas to Energy Plant - conduit seals and trench lining issues. Still want to complete in 2013. 10. Flare 9 burner cleaned; was down one day. ★ 11. When Flare 8 is decommissioned, hill behind Flare will be removed, and Flare 9 pad expanded for additional four new flares. 12. Large header in place for 40K scfm specification. 	
FURTHER REVIEW NEEDED	
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: 06-12-13
Site Conditions:	
SITE LOG	
13. City sage revegetation project is complete. Architema is planning next phase for City Top Deck.	
14. City sewer permit - will use a forced main to Balboa Bridge; permit by Aug. 1. Lift station will be on SCU property.	
15. Measured County Top Deck elevations using a Trimble 2008 GeoXH GPS device (± 0.1 meter).	
16. Observed trees growing larger at west side drainage ditch.	
17. Observed BAS pipe/storage yard to be in good order.	
18. Observed City Sage revegetation project; all plants installed and soil moist from watering.	
19. Flare 1 operating at 4035 scfm and 1680°F. Gas sample measured at 27% Vol. CH ₄ , 3.6% Vol. O ₂ and 230 ppm CO.	
20. Met with Becky Van Sickle and discussed findings of site inspection.	
FURTHER REVIEW NEEDED	
1. Remove trees along west side drainage ditch to halt concrete cracking at sides.	
Project Number: 5800	Signed: <i>Mike Lindsay</i>

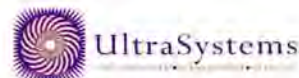


**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT**

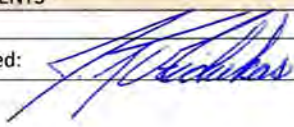
Monitor: Tarik Hadj-Hamou, Ph.D., P.E.	PAGE 1 OF 2
Discipline: Civil - Geotechnical	Date: June 12, 2013
Site Conditions: Sunny	
SITE LOG	
9:00 arrive at Sunshine Canyon Landfill , meet with John Nelson (LADPW) and Jim Aidukas and Mike Lindsay (UltraSystem) to prepare visit	
9:30-10:35 Meeting with Anthony Bertrand and his team <ul style="list-style-type: none"> • General discussion about the status of the site • Development of next phase of landfill, Cell CC3A Phase II, is the main item discussed that is pertinent to Civil-geotechnical compliance: <ul style="list-style-type: none"> ○ Earthworks related to the stability berm to start in early July ○ Soil will be imported from on-site stockpile ○ Ali-Mehr will perform CQA services ○ Liner installation slated to start in August ○ Cell should be open for waste disposal by early October • Anthony noted that the landfill will be out of air space for waste disposal by November 1st. • Anthony also noted Republic is concerned about availability of soil and fears that the use of the 9 inch daily cover coupled with the 500,000 CY swing (loss of excavated material n soil for berm) resulting from building the berm at CC3A may result in the need for import. 	
10:35 1:45: site tour Basins, channels, flare stations, waste face, observation deck	
Drainage system <ul style="list-style-type: none"> • Sedimentation basins <ul style="list-style-type: none"> ○ Basins A and D are clean ○ Terminal basin contains sediments and will have to be cleaned before rainy season • Channels <ul style="list-style-type: none"> ○ The cracks observed in the bottom of the west channel between Basin A and Basin D observed in previous visits are still there ○ Vegetation is growing through the crack at bottom and may exacerbate the problem and lead to further deterioration when the first flow will come through ○ Root pressure from tree growing on sides may lead to wall failure 	
Water level <ul style="list-style-type: none"> • The water elevation at the monitoring well on the embankment of the terminal basin was about 4 3-4 ft below ground surface, which would indicate high water table in embankment. There is no evidence of such high water level on either the concrete side , inside of basin (moisture would be seeping out of cracks) or earth side of embankment (outside of basin) 	



Monitor: Tarik Hadj-Hamou, Ph.D., P.E.	PAGE 2 OF 2
Discipline: Civil – Geotechnical	Date: June 12, 2013
Site Conditions: Sunny	
SITE LOG	
Cell CC2	
<ul style="list-style-type: none"> Waste placement was on-going 	
Geotechnical Issues	
<ul style="list-style-type: none"> Drove around site observing roads and slopes for geotechnical issues: none noted Observed the stockpile near the administration office: no concerns 	
FURTHER REVIEW NEEDED	
COMMENTS	
Republic may want to examine the high water conditions observed at terminal basin and develop an understanding of the hydrogeologic regime	
It is our understanding that we will be notified when placement of the buttress for Cell CC3A Part II begins.	
Signed:	



**SUNSHINE CANYON LANDFILL
MITIGATION MONITORING SITE REPORT**

Monitor: James Aidukas	Page: 1 of 1
Discipline: Project Manager	Date: June 25, 2013
Site Conditions: Clear and sunny, 80-85° F, 0-5 MPH wind	
SITE LOG	
<p>Republic Site Manager – Anthony Bertrand Met with John Nelson (LADPW) and Mike Lindsay (UEI), and signed in at the office. We then proceeded to monitor the following areas:</p> <ul style="list-style-type: none"> • Basin A was clean. The northern hillsides had wind-blown litter in the vegetation. The inlet to Basin A was partially plugged with soil and wind-blown, dry vegetation. • The County sage area was observed. There was no new activity in this area. • The County south slope, where there was a recent oxidation and surface fire, was observed. The oxidation appeared to have been stopped. • The material storage area was well organized with no vermin noted. • The underdrain system piping at the back of the material storage canyon was noted to have gas present. A gas reading of 6.6% was taken. This information was passed on to the City LEA Carolyn Lin and Achaya Kelapanda. • Flare 10 construction was observed. The air blower and flare foundations were in place and curing. Stainless steel piping and buried electrical was being worked on. Start-up is planned to beat the August 1st deadline. • The gas-to-energy facility site was surveyed and the facilities equipment foundations and conduit trenches were located on the site with flagging. • Basin B was clean. Blown litter was observed on the back hillside. • The Edison pole foundations for the gas-to-energy facility were in place and curing. • City South Deck C was observed. Some of the plants planted died or had die-back. The majority of sage was green. The seed that was hydroseeded did not germinate. • The terminal basin was not yet cleaned of sediment. • The majority of inactive slopes and decks were void of vegetation. <p>Flare Operating Conditions:</p> <ul style="list-style-type: none"> ○ Temporary Flare - 1675° F, 1546 SCFM, 53" vacuum ○ Flare 1 - 1691° F, 4005 SCFM ○ Flare 3 - 1689° F, 3740, 70" vacuum ○ Flare 8 - 1697° F, 3145 SCFM ○ Flare 9 - 1687° F, 3506 SCFM, 50" vacuum <p>Flare 3 was observed to be stuttering and experiencing possible pulsating inlet gas. We had a brief post-monitoring discussion with Achaya Kelapanda, Republic's Gas Systems Environmental Manager, and discussed Flare 10 construction and its start-up schedule, underdrain gas observed in the back material storage canyon, and Flare 3 operating conditions.</p>	
FURTHER REVIEW NEEDED	
<ul style="list-style-type: none"> • Removal of sediment from Terminal B • Progress of growth in City sage mitigation area in Deck C • Removal of litter in adjacent hillsides next to Basin A and B • Scheduled start-up of Flare 10 • Start of construction and schedule for gas-to-energy facility 	
COMMENTS	
Signed: 	



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SUNSHINE CANYON LANDFILL
MITIGATION MONITORING
SITE REPORT

Monitor: Mike Lindsay	Page 1 of 1
Discipline: Environmental Engineer	Date: 06-25-13
Site Conditions: Sunny, clear 66/84°F, 0-5 mph	
SITE LOG	
1. Met with John Nelson (LACDPW) and Jim Aidukas (UltraSystems).	
2. Observed Sediment Basin A to be clear.	
3. Observed fire/oxidation area.	
4. Observed working fence operations.	
5. Observed storage yard to be in good order.	
6. Measured gas sample at well behind storage yard. 6.6 % Vol CH ₄ , 18.9 % O ₂ , well number P206D. This is a perimeter probe, per Acharya Kelapanda.	
7. Flare 9 is operating at 3549 SCFM, 1717°F. Gas sample measured at 37% Vol. CH ₄ , 1.8 % Vol. O ₂ , and over 500 ppm CO. Air blower at 1360 SCFM.	
8. Observed F10 (new flare number 10) under construction.	
9. Observed Gas-to-Energy plant being laid out/construction.	
10. Flare - Temp. is operating at 37% Vol. CH ₄ , 2.0 % Vol. O ₂ .	
11. Observed Sediment Basin B to be clear.	
12. Flare 3 is operating at 34 % Vol. CH ₄ , 2.7 % Vol. O ₂ , 483 ppm CO.; 3780 SCFM and 1692 °F.	
13. Flare 1 is operation at 3973 SCFM, 1697 °F, 105/155°F gas delivery temp. Gas sample measured at 26 % Vol. CH ₄ , 3.8 % Vol. O ₂ , 338 ppm CO.	
14. Observed City sage Top Deck C revegetation area; some sage appeared dry and dying.	
15. Took elevation measurements around the old City North Closed Landfill.	
FURTHER REVIEW NEEDED	
Project Number: 5800	Signed: <i>Mike Lindsay</i>

Appendix IV

Meeting Logs

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

April 10, 2013

Pre-monitoring discussion with Patti Costa, Republic's Environmental Manager and Achaya Kelapanda, Republic's Gas Systems Environmental Manager

Attendees:

John Nelson, LADPW

Regelio Gamino, LADPW

James Aidukas, UltraSystems

Mike Lindsay, UltraSystems

Joe Thompson, UltraSystems

Discussion: Ms. Costa gave us an update on the City South Deck C sage mitigation project. She stated that the tilling of the soil and grading of Deck C was completed. Irrigation system piping was to be done next, followed by soil conditioning and planting. The plan is to complete Deck C this spring. Mr. Kelapanda stated that early in the week, the high winds caused flare #8 to shut down. Today, everything was operating and running as designed.

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

May 1, 2013

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

Attendees:

John Nelson, LADPW

James Aidukas, UltraSystems

Mike Lindsay, UltraSystems

Discussion: Achaya Kelapanda provided a brief summary of the status of the gas recovery and flare operations. He also gave a status update on the gas-to-energy project. The gas recovery system has additional wells that were drilled and put into operation since the last site monitoring visit.

The County top deck has had the gas collection system modified to eliminate a vacuum leak and has new collection lines in operation.

The gas wells on the County were lowered after removing stockpiled soil. Achaya showed us a diagram on his wall which indicated the number and location of gas wells that are in place and operational. Flare 10 has been ordered and the delivery and construction are on schedule.

The gas-to energy facility is having building permit approval problems. They expect to resolve them soon, however. The facility is scheduled for a 1st Quarter 2014 start-up.

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

May 29, 2013

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

Attendees:

John Nelson, LADPW

James Aidukas, UltraSystems

Mike Lindsay, UltraSystems

Discussion: Achaya Kelapanda gave an update on the Flare 10 activity. Construction is on schedule with foundations being poured today. The equipment is ordered and will arrive on schedule and commissioning/start-up will occur in Mid-July. The August 1st SCAQMD deadline will be met. Mr. Kelapanda stated that Flare 9 was down for burner cleaning and that dust from the air blower inlet caused the burners to plug and required cleaning. He stated that even with Flare 9 down, the gas recovery system was balanced with the other flares. Kelapanda stated that the gas-to-energy project was on a temporary hold and that DTE was still having building permit problems but they anticipated that they will be resolved soon.

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

June 12, 2013

Pre-monitoring meeting with Republic Services personnel

Attendees:

Anthony Bertrand, Republic Services
Tim Johnson, Republic Services
Patti Costa, Republic Services
Becky Van Sickle, Republic Services
John Nelson, LADPW
Martin Rosen, City LEA
James Aidukas, UltraSystems
Mike Lindsay, UltraSystems
Tarik Hadj-Hamou, UltraSystems

James Aidukas started the meeting by asking that the Republic representatives give an update on the status of current projects and provide a forecast of future planned site activities. This request was made so that the attendees would be made aware of current and scheduled site activities. Anthony Bertrand and staff provided the following information:

- Cell CC3A Part II liner is the main activity at this time. Liner installation should start in mid-July.
- Before starting the liner installation, a buttress will need to be placed at the foot of the old City Landfill. The buttress can only start to be constructed when an under-drain system is in place. Currently, Ventura Drilling, a directional drilling company, is drilling a six-inch bore hole starting at a depth of 80 feet from a location east of and below the condensate treatment facility. The drilling is now in progress and should be completed by the end of June.
- The buttress installation should start the first week of July and take 2-3 weeks to complete. The liner installation is scheduled to start in mid-July with completion of cell CC3A Part II in late September/early October. All current landfill capacity will be used by November 1, 2013.
- Cell CC3A Part II has a 2-year capacity. Cell CC3B is the last cell.
- Leachate will gravity flow to the City sump in the City North area.
- The buttress will use 200,000 cubic yards of soil resulting in an overall shortage of soil created by the revised plans of approximately 500,000 cubic yards. Authorization to allow more soil importation or modification to the daily cover requirement may be requested.
- The ultimate site toe berm design has been submitted to the RWQCB approximately two weeks ago. The berm construction is scheduled to start in the second quarter of 2014.
- The temporary landfill entrance road to allow for the toe berm will start to be constructed in late August/early September.
- There is a soil deficit of 500,000 cubic yards/year from using soil cover as now required.
- The County slopes near the shop area has had 18 feet of stockpiled soil removed from the area for use in operations.
- Vertical and horizontal gas wells are in place for cell CC3A.

- DTE's gas-to-energy facility is on hold until a resolution is obtained with LADPW on the requirement to have conduit seals for underground conduits. DTE's start-up is still scheduled for December 2013.
- Edison is scheduled to start pole construction for the gas-to-energy facility this month. Pole relocation of the lines around the site will start second quarter of 2014.
- Flare 10 equipment is scheduled for delivery by June 25 with a start-up on or before August 1, 2013.
- The City Deck C mitigation has been completed. Architerra is now planning the next phase for Deck B.
- Republic is proceeding with a City building permit application for a force main sewer line to a junction line at the Balboa bridge on San Fernando Road. A building permit is anticipated to be obtained by August 1, 2013.

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

June 25, 2013

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

Attendees:

John Nelson, LADPW

James Aidukas, UltraSystems

Mike Lindsay, UltraSystems

Discussion: We had a brief post-monitoring discussion with Achaya Kelapanda, Republic's Gas Systems Environmental Manager. Mr. Kelapanda gave us an update on the Flare #10 schedule and said that the August 1, 2013 deadline was going to be met. We advised him that we observed Flare #3 to be shuddering and experiencing possible pulsating inlet gas flows. He said that the flows were stable and that he would send a field person to investigate the shuttering. We also told him that we observed 6.6% methane in the underdrain system piping at the back of the material storage area canyon. He said that they were aware of it and that it was being recovered. Mr. Kelapanda also stated that the construction for the gas-to-energy facility will start in July.

Appendix V

Landfill Elevations

INTRODUCTION

During the second quarter of 2013, UltraSystems conducted Global Positioning System (GPS) surveys at the Sunshine Canyon Landfill, located in Sylmar, California (see GPS Data Logs, Appendix V). Elevation data was collected for the top deck area on the Los Angeles County side of the landfill, and for the north closed landfill portion on the City of Los Angeles 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. 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

A transect line was 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. Previous transect lines were navigated on the County top deck so elevation comparisons could be made.

MEASUREMENT RESULTS

Elevation measurements made during the second quarter of 2013 show a general reduction in stockpiled soil on the County top deck. For the City north closed landfill area, the average elevation was 1,577.7 feet above mean sea level (see GPS Elevation Data Table, Appendix V).

GPS Data Logs

April 10, 2013

County Top Deck Elevation Readings

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

May 1, 2013

County Top Deck Elevation Readings

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

May 29, 2013

County Top Deck Elevation Readings

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

June 12, 2013

County Top Deck Elevation Readings

Performed by:

Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

June 25, 2013

City North Closed Landfill Elevation Readings

Performed by:

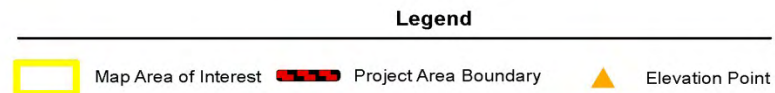
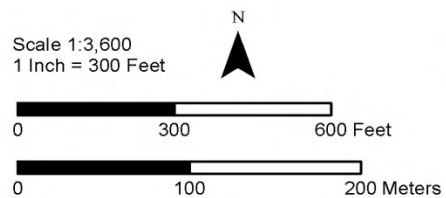
Mike Lindsay, UltraSystems (see GPS Elevation Data Table)

GPS Elevation Maps



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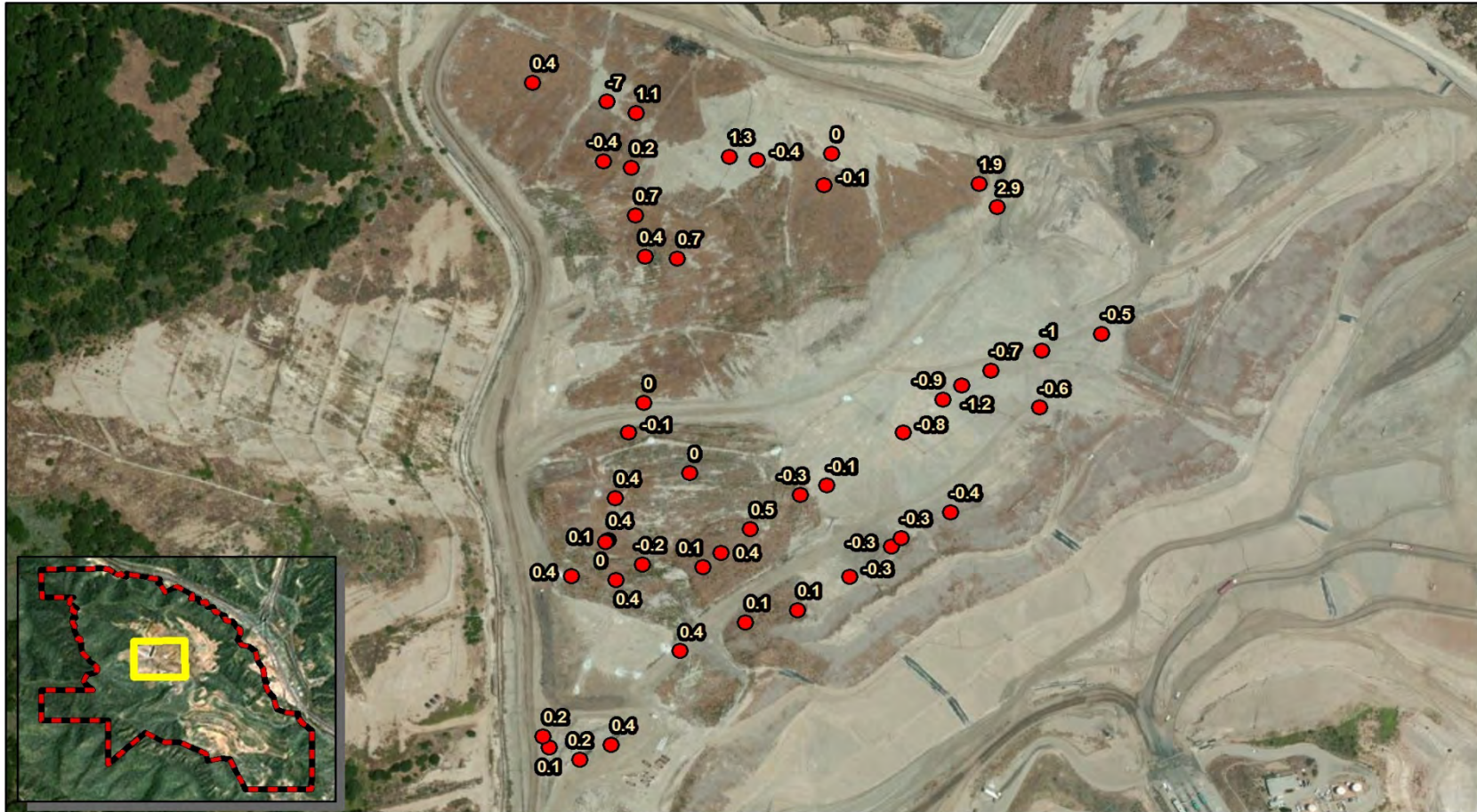
April 12, 2013



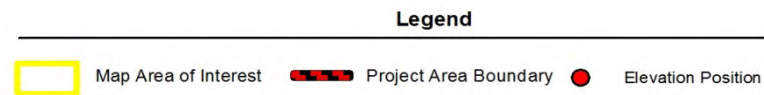
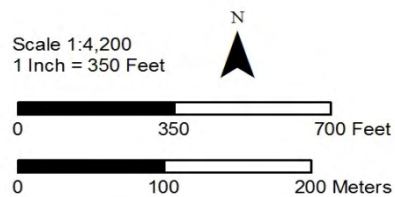
Sunshine Canyon Landfill

County Top Deck
GPS Elevation Data Comparison
Change of Elevations Between
from February 1 to April 10, 2013





May 29, 2013

**Sunshine Canyon Landfill**

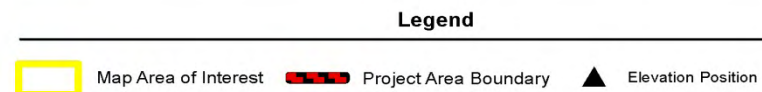
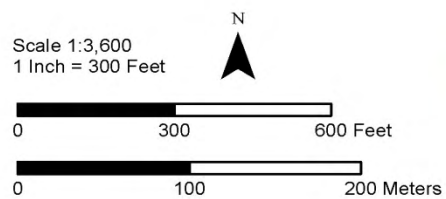
County Top Deck
Change of Elevations (in feet)
From May 1, 2013 to May 29, 2013





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Second Quarter 2013



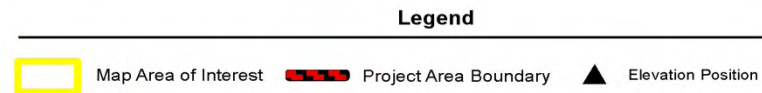
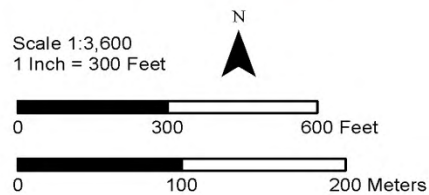
Sunshine Canyon Landfill

County Top Deck
Change of Elevations From
June 12, 2013 to April 10, 2013





June 17, 2013

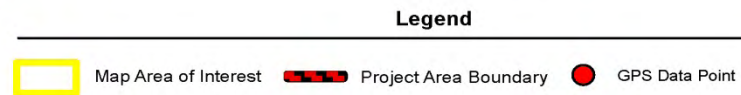
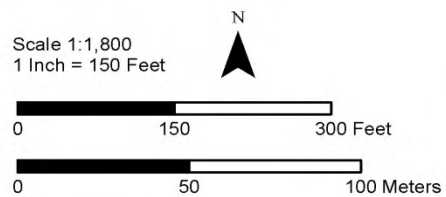
**Sunshine Canyon Landfill**

County Top Deck
Change of Elevations From
June 12, 2013 to May 29, 2013





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Sunshine Canyon Landfill
City North Closed Landfill Elevations
June 25, 2013 GPS Survey



GPS Elevation Data Tables

SCL – Elevation Comparison of May 1, 2013 and May 29, 2013 Surveys (feet)

GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference May 1 / May 29
05-01-2013	1865.5	05-29-2013	1865.7	0.2
05-01-2013	1865.7	05-29-2013	1866.1	0.4
05-01-2013	1867.9	05-29-2013	1868.3	0.4
05-01-2013	1869.3	05-29-2013	1869.4	0.1
05-01-2013	1876.2	05-29-2013	1876.3	0.1
05-01-2013	1872.5	05-29-2013	1872.2	-0.3
05-01-2013	1868.7	05-29-2013	1868.4	-0.3
05-01-2013	1868.3	05-29-2013	1868.0	-0.3
05-01-2013	1868.0	05-29-2013	1867.6	-0.4
05-01-2013	1857.5	05-29-2013	1856.9	-0.6
05-01-2013	1881.0	05-29-2013	1880.2	-0.8
05-01-2013	1874.5	05-29-2013	1873.7	-0.9
05-01-2013	1873.1	05-29-2013	1871.9	-1.2
05-01-2013	1868.0	05-29-2013	1867.4	-0.7
05-01-2013	1866.2	05-29-2013	1865.2	-1
05-01-2013	1860.5	05-29-2013	1860.0	-0.5
05-01-2013	1878.1	05-29-2013	1878.1	0.1

GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference May 1 / May 29
05-01-2013	1879.2	05-29-2013	1879.6	0.4
05-01-2013	1883.1	05-29-2013	1883.6	0.5
05-01-2013	1888.3	05-29-2013	1888.0	-0.3
05-01-2013	1888.8	05-29-2013	1888.7	-0.1
05-01-2013	1865.1	05-29-2013	1865.5	0.4
05-01-2013	1861.5	05-29-2013	1861.9	0.4
05-01-2013	1863.1	05-29-2013	1862.9	-0.2
05-01-2013	1879.8	05-29-2013	1879.8	0
05-01-2013	1863.4	05-29-2013	1866.2	2.9
05-01-2013	1863.1	05-29-2013	1865.0	1.9
05-01-2013	1867.3	05-29-2013	1867.7	0.4
05-01-2013	1867.4	05-29-2013	1867.4	0.1
05-01-2013	1867.3	05-29-2013	1867.3	0
05-01-2013	1872.3	05-29-2013	1872.2	-0.1
05-01-2013	1881.8	05-29-2013	1882.0	0.2
05-01-2013	1881.7	05-29-2013	1883.0	1.3
05-01-2013	1873.5	05-29-2013	1873.1	-0.4
05-01-2013	1868.6	05-29-2013	1868.6	0

GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference May 1 / May 29
05-01-2013	1887.0	05-29-2013	1888.1	1.1
05-01-2013	1897.7	05-29-2013	1890.7	-7
05-01-2013	1892.5	05-29-2013	1892.9	0.4
05-01-2013	1880.1	05-29-2013	1879.7	-0.4
05-01-2013	1877.3	05-29-2013	1878.0	0.7
05-01-2013	1878.2	05-29-2013	1878.9	0.7
05-01-2013	1876.5	05-29-2013	1876.9	0.4
05-01-2013	1866.4	05-29-2013	1866.5	0.1
05-01-2013	1875.7	05-29-2013	1875.8	0
05-01-2013	1873.5	05-29-2013	1873.5	-0.1
05-01-2013	1870.7	05-29-2013	1871.1	0.4
05-01-2013	1867.2	05-29-2013	1867.4	0.2
Average	1873.1	Average	1873.2	0.0

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

GPS Survey Date	Elevation	GPS Survey Date	Elevation	Elevation Difference April 10 / June 12
04-10-2013	1895.3	06-12-2013	1890.1	-5.2
04-10-2013	1876.5	06-12-2013	1875.7	-0.8
04-10-2013	1877.3	06-12-2013	1876.4	-0.8
04-10-2013	1868.1	06-12-2013	1867.4	-0.7
04-10-2013	1868.9	06-12-2013	1868.5	-0.5
04-10-2013	1887.1	06-12-2013	1886.7	-0.4
04-10-2013	1885.1	06-12-2013	1884.7	-0.4
04-10-2013	1879.4	06-12-2013	1879.2	-0.2
04-10-2013	1880.2	06-12-2013	1880.1	-0.2
04-10-2013	1880.4	06-12-2013	1880.7	0.3
04-10-2013	1876.9	06-12-2013	1877.4	0.5
04-10-2013	1884.5	06-12-2013	1885.3	0.8
Average	1880.0	Average	1879.3	-0.6

Appendix VI

Biologist's Vegetation Monitoring Second Quarter Summary Memo



Memo

To: James Aidukas

From: Joe Thompson

CC: Mike Lindsay

Date: July 15, 2013

Re: Sunshine Canyon Vegetation Monitoring Second Quarter Summary

I have made three site visits to the Sunshine Canyon Landfill in order to report on site conditions at Deck C, City of Los Angeles Mitigation Area, the Top Deck, County of Los Angeles West Slope Mitigation Area, and the steep slopes adjacent to Flare 9. Site visits were conducted on April 10, May 1, and May 29 of 2013. During each of the site visits, I examined the three sites for native vegetation cover, health of native species, erosion, and weed infestations. I also took photo documentation and observed weather conditions. In this report I have provided summaries of the conditions that I and other UltraSystems staff have observed at these three sites and recommendations for improvements.

Deck C, City of Los Angeles Mitigation Area

This mitigation area recently underwent an intensive revegetation effort. The site was tilled to a depth of approximately 6 inches, micro topography was created using earth and boulders, an irrigation system using a permanent water supply, a combination of overhead sprinklers and drip was installed, and the site was planted with native coastal sage species. At the time of the May 29, 2013 site visit, the site had recently been planted and the irrigation system appeared to be functioning perfectly. A water truck with a monitor was also being used to keep dust down and to cool the site by evaporation. All of the recently planted vegetation was in good condition and the crews were doing everything necessary to keep the plants hydrated.

Jim Aidukas conducted a follow-up investigation of the site on June 25, 2013 and noted that many plantings had either died or were showing signs of severe stress, which mainly consisted of drying leaves. Most of the sage plants (California sagebrush, white sage, and black sage) appeared to be surviving; however, blue elderberry plants were either dead or in poor condition. Hydroseeded plants were also either dead or in poor condition. The deteriorating condition of the plants was attributed to intense heat and strong, dry winds, which are typical for the site during the summer months. These observations took place several days prior to a major heat wave, which was expected to bring daytime temperatures of over 100 degrees F and strong winds, which presumably would result in further deterioration of the plantings.

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Jim Aidukas also noted that there have already been large weed infestations in areas with overhead watering. These weeds consist mainly of grasses that have already formed seed heads, which will potentially spread to other areas of open ground.

Recommendations

All of the measures employed at the site appear to have been good, except for the decision to plant during summer. Approximately 80 percent of the California sagebrush, white sage, and black sage plantings appear to be surviving, owing to diligent watering efforts. However, other less drought tolerant species have either died or are not expected to survive the summer.

All of the plant species that were selected are appropriate for the site. However, they are adapted to a winter growing season and summer dormancy in order to cope with stressfully hot and windy summertime conditions. For the next effort, the following measures are recommended:

1. It is imperative that new plantings, particularly on exposed sites such as those found at Deck C be planted in the fall, ideally at the onset of the season's first gentle rains.
2. The irrigation system should remain in place and be used to supplement dry periods during the growing season until the plants are well established.
3. Weeding should be performed periodically in order to prevent infestations and eliminate them as a source of competition until all of the large gaps within the coastal sage scrub vegetation are filled and irrigation is discontinued.
4. Monitoring for native vegetation cover values should be performed periodically in order to assess progress towards meeting the California Department of Fish and Wildlife (CDFW) mitigation requirements.
5. Following monitoring, Republic Services should use the tools they have available: irrigation, replanting, fertilizing, and weeding in order to maximize their progress towards meeting their mitigation requirements.

County of Los Angeles West Slope Sage Mitigation Area

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

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

slopes where weeds have been removed. Weeds are prevalent and consist primarily of mustards including *Hirschfeldia incana* and *Brassica spp.* And annual grasses including *Bromus diandrus* and *B. hordeaceus*.

Recommendations

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

1. Ensure that the irrigation system is in fully operational condition and is able to cover 100 percent of the areas where plants are to be planted. There should be a sufficient water supply to allow deep watering during the growing season and to allow for continuous watering during dry winds.
2. Measures to reduce erosion may include straw wattles, netting, hydromulch, and silt fencing. It is evident that some of these measures have been employed in the past; however, they were not successful, as they didn't take into account the steepness of the slope, occasional intense rainfall, and extremely friable and hydrophobic soils.
3. Planting should take place in the fall, coinciding with the first gentle rains. The irrigation should be used to supplement dry periods throughout the dry season. The use of irrigation should taper off as plants become established.
4. Maintenance of the site should be adaptive. Plants that fail should be removed and replaced immediately after they die and weed infestations should be either treated with herbicides or pulled. Evidence of erosion should be corrected immediately.
5. Goals for percent cover of native vegetation should be established and assessed at regular intervals using standardized vegetation sampling techniques. The results should be documented into a vegetation sampling report and adjustments should be made based on the survey results in order to meet the mitigation requirements.

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

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

Recommendations

1. The existing erosion control measures, which presently consist of jute netting, should be reinforced. Adding a layer of straw and covering it with an additional layer of jute

netting would provide a mulch that would reduce weeds, add nutrients, and further stabilize the soil.

2. An irrigation system with a permanent source of water should be installed and should be fully operational prior to the planting.
3. Plantings should be selected for their drought and fire resistance. Native plants should be selected if possible. No potentially invasive plants should be used. Good choices could include cacti, saltscale, brittle scale, California poppy and tar plant.
4. Planting should take place in the fall, coinciding with the first gentle rains. The irrigation should be used to supplement dry periods throughout the dry season. The use of irrigation should taper off as plants become established.
5. Maintenance of the site should be adaptive. Plants that fail should be removed and replaced immediately after they die and weed infestations should be either treated with herbicides or pulled. Evidence of erosion should be corrected immediately.
6. Goals for percent cover of native vegetation should be established and assessed at regular intervals using standardized vegetation sampling techniques. The results should be documented into a vegetation sampling report and adjustments should be made based on the survey results in order to meet the mitigation requirements.

City and County North Areas

The City and County are required to revegetate areas that have been inactive for more than 180 days. Many slopes as well as areas of flat ground do not have any ground cover and should be planted. Hydroseeding and overhead irrigation would be acceptable for areas that will become active in the near future. However, areas that are going to be retired should receive permanent plantings including native shrubs, forbs, and grasses.