February 9, 2010

To:

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County Department of Public Works – Emiko Thompson
City of Los Angeles Planning Department – Ly Lam
Regional Water Quality Control Board – Dr. Wen Yang
SCL Community Advisory Committee – Becky Bendikson, chair
SCL Community Advisory Committee – Wayde Hunter, vice-chair
C2Rem – Stefan Klemm

Subject: Transmittal of 4th Quarter 2009 Quarterly Vegetation Report, Sunshine Canyon Landfill

Sunshine Canyon Landfill is pleased to provide the attached quarterly report on vegetation activities occurring at the landfill. The report summarizes revegetation projects undertaken in the fourth quarter of 2009 and projects anticipated to be active in the first quarter 2010. This report is slightly delayed from our normal voluntary target date of January 15th. This was done to allow for compilation of additional information on the County Sage area as requested by Los Angeles County Public Works. That information was presented under separate cover and is available upon request.

We are providing this report for your information. If you do not wish to receive the report in the future, please contact us and we will remove you from the distribution list. Please feel free to contact me with any questions.

Sincerely,

Susan Jennings
Environmental Manager

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Quarterly

Vegetation Project Status Report

1st Quarter 2010

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SUNSHINE CANYON *Landfill*

BFI

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1.0 Introduction and Executive Summary

In order to keep regulatory agencies and other interested parties advised of Sunshine Canyon Landfill's (SCL's) ongoing vegetation projects, SCL has prepared this summary report. Normally SCL strives to issue this voluntary report by the fifteenth of the month following the quarter. However, this report was delayed in order to obtain additional information requested by Los Angeles County Regional Planning. That information has been prepared and submitted to them under separate cover along with this document.

Though operated as one contiguous landfill, SCL has two land use permits, one from the County of Los Angeles' jurisdiction, and one from the City of Los Angeles' jurisdiction. This report is divided accordingly due to different regulatory agencies and requirements for each area.

Typically the planting projects covered by this report fall into one of three categories: Sage, Final Landfill Cover, or Interim Planting. Sage planting is typically done on slopes that are at grade and may or may not be part of designated mitigation areas. Final Landfill Cover planting applies to slopes that area at final grade that are not designated a sage mitigation area. Interim planting treatments are primarily for short term dust and erosion control and are used on to slopes that will not be disturbed for 180 days or more, but that ultimately will be disturbed.

SCL is committed to taking the best approach possible to its planting projects. In the fall of 2007, SCL interviewed multiple potential expert consultants to assist with vegetation specifications. After an extensive review process, The Chambers Group Inc. (Chambers) was retained for their technical expertise and restoration experience. To date, Chambers has prepared detailed master plans for sage and interim planting. The document "Coastal Sage Scrub and Interim Cover Revegetation Plan for Sunshine Canyon County Landfill" (Chambers, 1/08) is available upon request.

The SCL does additional work with tree planting both on and offsite. This work is described in separate reports and will not be addressed in this document.

This report is designed to outline which planting projects were completed in the past quarter (Section 2.0) and which are planned for the upcoming quarter (Section 3.0.) Monitoring reports, where applicable, are discussed in Section 4.0.

1.1 Active Installations, 4th Quarter 2009

For the 4th Quarter 2009, the following vegetation projects were being implemented:

County side:
- BFI Interim Projects

City side:
- Phase VB Stabilization

These projects are shown on the map in Appendix A. Photos of various current and past project areas, if available, are included in Appendix D.

1.2 Projected Installations, 1st Quarter 2010

In the 1st quarter of 2010, the following projects are expected to be active:

County side:

- BFI Interim Projects
- County Sage Hill Test Plot Installation

City side:

- BFI Interim Projects
- City Upper Deck Sage Maintenance

Note that construction, contractor delays or rainfall conditions may dictate a change in projected planting schedules at any time. Landfill operational demands may also alter the work areas. A map of the planned project areas for the upcoming quarter is provided in Appendix B.

1.3 Vegetation Projects Being Formally Monitored

Some mitigation areas include provisions for monitoring by the restoration specialists. The projects currently being monitored include the following:

County Side:

- Sage Hill

City Side:

- City Upper Deck Sage

Monitoring reports for the areas being monitored are included in Appendix C.

2.0 Work Installed in Immediate Past Quarter

All work installed in the immediate past quarter is shown on the map in Appendix A.

2.1 County

2.1.1 County Interim Slopes by BFI

County vegetation work for this quarter was completed by site operations personnel.

Area A slopes were treated with amendments and the interim seed mix from Chamber's Plan (1/08) The area was then covered with a layer of greenwaste mulch. The greenwaste is an alternative to the top compost/tackifier layer specified by Chamber's for interim slopes.

Area B and C slopes were treated with greenwaste mulch only. The greenwaste mulch will serve as a slope stabilizer as well as a nutrient and seed source.

2.2 City

2.2.1 Phase VB Stabilization

City slope vegetation work was completed by outside contractors this quarter.

Cut slopes shown as Area X, also known as Phase VB, required stabilization. These slopes are not at final grades, but will be in existence for an extended time period, so sage seed mix was used. Seed mix and jute matting was applied. The area is not part of the formal sage mitigation areas.

3.0 Work Planned for Upcoming Quarter

Weather, contractor schedules, and landfill operational requirements may cause variations in the schedule or areas planted. A map showing where vegetation work is planned for the upcoming quarter is provided in Appendix B.

3.1 County

3.1.1 BFI Interim Projects

Area G and Area E will be treated with amendments and seed mix as specified by Chambers (1/08), then covered with greenwaste mulch.

3.1.2 Sage Hill Test Plots

Though a good portion of the County Sage Hill mitigation area has shown growth, difficult soils in some areas have hindered vegetation. SCL has retained the author of the sage mitigation plans, Ted St. John PhD, (formerly with Chambers, currently with AECOM) to design some tests of different soil treatments and oversee installation of test plots on Sage Hill.

Test plot design will be underway in February 2010, and SCL will strive to have installation done in the first quarter, weather permitting. It is expected 2-4 test plots will be installed in Area H Plant growth in the test plot areas will be monitored as part of the County Sage Monitoring.

3.2 City

3.2.1 BFI Interim Projects

Area F will be treated with amendments and seed mix as specified by Chambers (1/08), then covered with greenwaste mulch.

3.2.2 City Upper Deck Sage Maintenance

The City Upper Deck sage area (Area J on map) showed significant growth in the early winter rains. It is expected that restoration specialist Dr Ted St. John will recommend, at minimum, reduction of any invasive weeds that have sprouted in the area. This work will be done by an outside contractor in the first quarter.

4.0 Status Reports on Vegetated Areas Being Monitored

4.1 County

4.1.1 Sage Hill

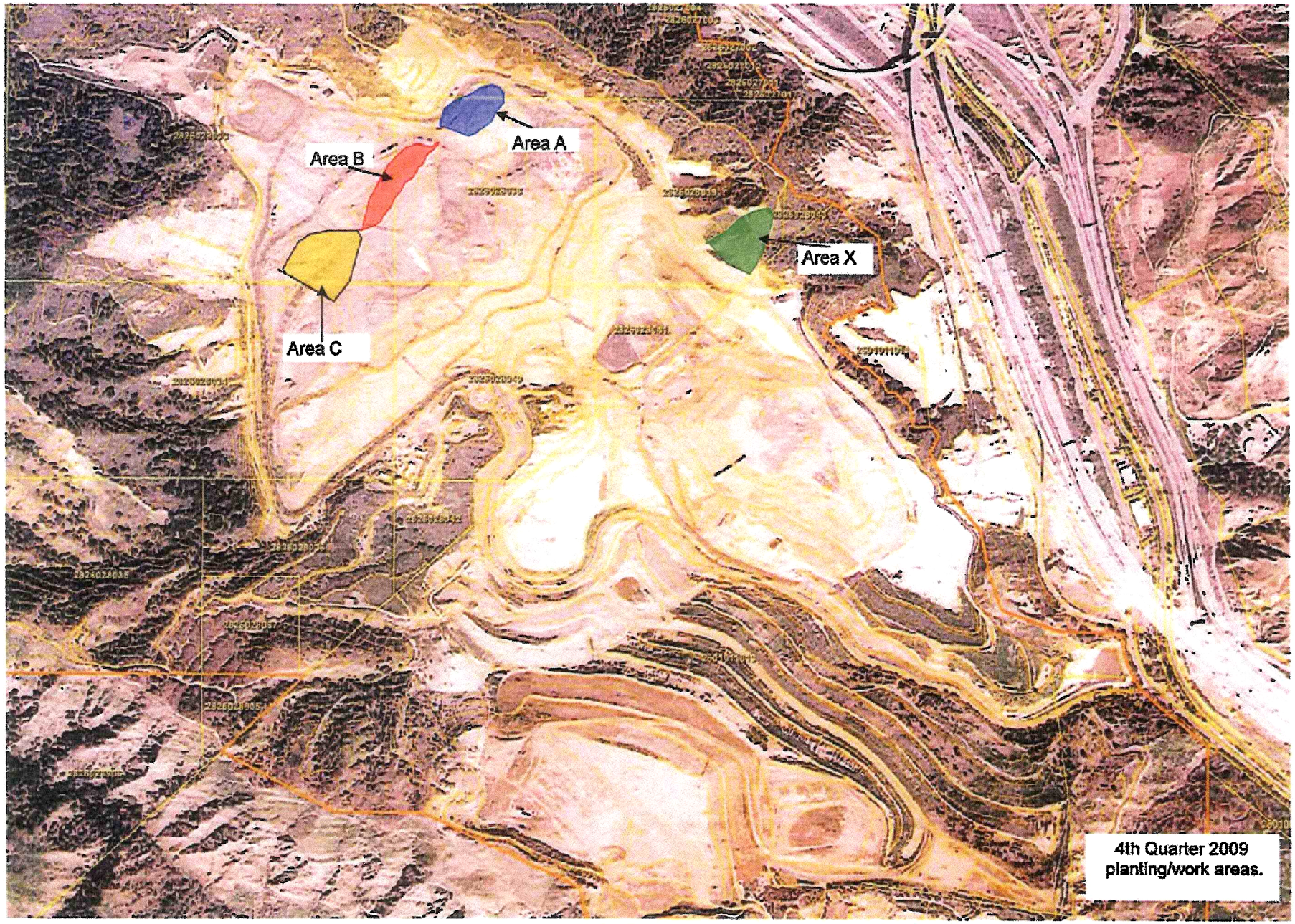
The Sage Hill monitoring frequency is now quarterly as per the planting plan. The area was monitored in the prior quarter by Chambers Group staff, and their written notes are provided in Appendix C.

4.2 City

4.2.1 City Upper Deck Sage

The monitoring frequency for City Upper Deck sage has been monthly, and will continue in that manner until the end of the first quarter in 2010. The City Sage area was monitored by Chambers Group staff in 2009, and their written notes are provided in Appendix C

Appendix A

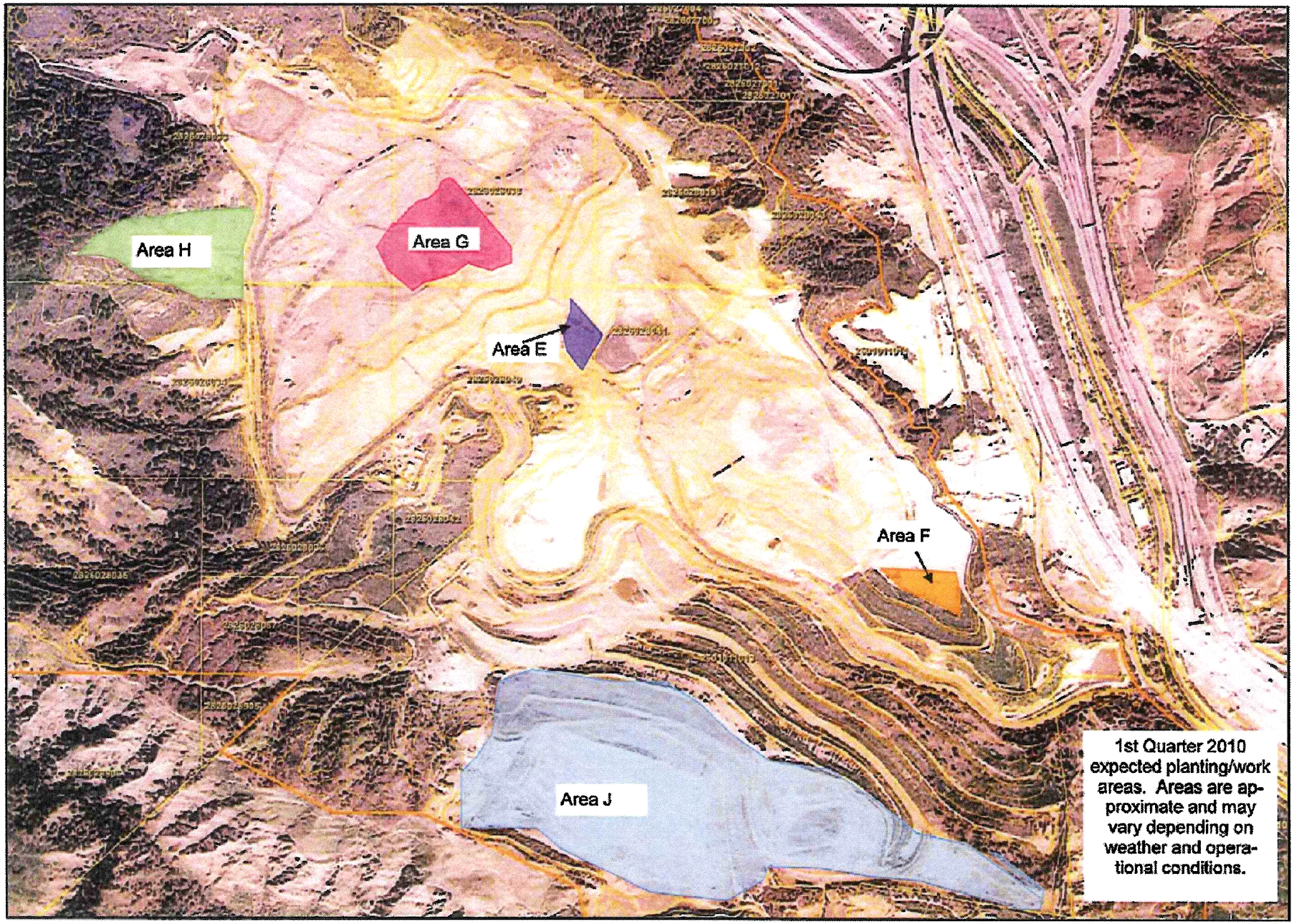

Area A
Area B
Area C
Area X
4th Quarter 2009
planting/work areas.

Projects underway 4th Quarter 2009

Area	Color Code	Installed by	Details	Status
A		BFI	Interim Slopes. Interim seed mix, amendments, and greenwaste mulch applied.	Completed
B		BFI	Interim Slopes. Greenwaste mulch applied to stabilize surface and provide seed source.	Completed
C		BFI	Interim Slopes. Greenwaste mulch applied to stabilize surface and provide seed source.	Completed
X		Landscape Development	Long Term cut slopes. Coastal Sage Scrub seeds under jute mat.	Completed.

All areas on maps are approximate. Future projections depend on operational patterns and weather conditions and may vary.

Appendix B


Area H
Area G
Area E
Area F
Area J
1st Quarter 2010 expected planting/work areas. Areas are approximate and may vary depending on weather and operational conditions.

Projects planned for 1st Quarter 2010

Area	Color Code	To Be Installed By	Details	Status
E		BFI or Contractor	Interim Slopes. Interim seed mix, amendments, and greenwaste mulch to be applied.	To be installed by end of quarter
F		BFI or Contractor	Interim Slopes. Interim seed mix, amendments, and greenwaste mulch to be applied.	To be installed by end of quarter.
G		BFI or Contractor	Interim Slopes. Interim seed mix, amendments, and greenwaste mulch to be applied.	To be installed by end of quarter.
H		Contractor	Sage Area. Test plots to address soil issues will be designed and installed.	To be installed by end of quarter.
J		Contractor	Sage Area. Spring weed removal under direction of restoration specialist.	To be completed by end of quarter.

All areas on maps are approximate. Future projections depend on operational patterns and weather conditions and may vary.

Appendix C

SCL Comments on Monitoring Reports

City Sage: As described in the text of the quarterly report, springtime weed removal is planned for first quarter 2010 and will be directed by the restoration specialist.

County Sage: The irrigation has been turned off for the winter and will be resumed when directed by the restoration specialist. Weed removal and minor erosion has not been a priority for the restoration specialist, rather the focus of first quarter 2010 will be installing test plots to determine how to better grow plants in the poor soil areas.

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QUARTERLY PROGRESS REPORT
for the Sunshine Canyon Landfill Mitigation Sites
County Side Mitigation Area
Prepared by Chambers Group
on behalf of Browning-Ferris Industries and Compliance Plus.

Date: January 7, 2010 Completed by: Kun Liu

Inspection Date: December 31, 2009
Inspected by: Kun Liu

Original to: Becky Van Sickle, Maria Gutzeit, and Kurt Bratton
Copies to: Tiffany Leo, Heather Clayton, and Mike McEntee

SEED MIX

CONDITIONS:

- ☐ Dense cover of plants from seedlings
- ☐ Moderate cover of plants from seedlings
- ☒ Sparse cover of plants from seedlings
- ☐ No germination yet

- ☐ Dense cover of native plants from seed mix
- ☒ Moderate cover of native plants from seed mix
- ☒ Sparse cover of native plants from seed mix
- ☐ No cover of native plants from seed mix

COMMENTS:

New germination of California sagebrush (*Artemisia californica*) and telegraph weed (*Heterotheca grandiflora*) were observed during this visit. There was moderate cover of native seedlings on the lower slope in the center. There were some intermediate California sagebrush plants on the northern and southern slopes where the soil was moist.

CONTAINER PLANTS

PLANT HEALTH ISSUES:

- ☒ Stunted growth
- ☐ Mechanical damage
- ☐ Disease/pests
- ☒ Substantial dieback/mortality
- ☐ Excessive herbivory

HEIGHT:

- ☐ 0" – 12"
- ☒ 12" – 24"
- ☐ 24" +

COMMENTS:

Laurel sumac (*Malosma laurina*) was doing the best among the container plants. Laurel sumac plants with favorable soil conditions have shown noticeable growth since the last visit. No significant growth of monkey flower (*Mimulus* sp.) and giant wild rye (*Leymus condensatus*) has been observed. Needle grasses (*Nassella* sp.) were resuming growth. Most surviving container plants were close to the erosion rills or on flat areas that collect irrigation runoff.

OVERALL NATIVE PLANT CONDITIONS			
PLANT COVER: ☐ Dense ☒ Moderate ☒ Minimal	**PLANT HEALTH ISSUES** ☐ Disease/pests ☒ Plant stress ☐ Excessive herbivory	**HEIGHT** ☒ 0" – 12" ☒ 12" – 24" ☐ 24" +	**SPECIES RICHNESS** ☐ Low ☒ Medium ☐ High

COMMENTS:

The county sage hill has been divided into three segments by two V-ditches. These slopes are designated here as the southern, middle, and northern segments. The middle slope had higher cover of native plants than the southern and northern slopes. The native plant cover was medium to high on the lower portion of the middle slope. California bush sunflower (*Encelia californica*) was flowering. California sagebrush, California buckwheat (*Eriogonum fasciculatum*), and deer weed (*Lotus scoparius*) plants were turning green.

The native plant cover was minimal on the southern and northern slopes. Most of the plants established in erosion rills, flat areas, and areas around sprinklers are mature now. These areas have received enough water to leach excessive salts, which prevent plant germination and growth. A field trial of soil amendments is recommended on those barren slopes to find out effective soil amendments that will improve soil conditions for native plant growth.

WEED CONDITIONS	
CONDITIONS: ☐ Dense weed coverage ☒ Moderate weed coverage (seedlings in high density) ☒ Minimal weed coverage	☐ Weeds flowering ☐ Weeds setting seed

COMMENTS:

Weeds were growing in locally favorable spots such as erosion rills, container plant pits and areas close to the irrigation sprinklers. Annual grasses were resuming growth in favorable spots. The fennel (*Foeniculum vulgare*) observed during the last visit in November had been removed from the site.

IRRIGATION SYSTEM	
REPAIRS NEEDED: ☐ Over-irrigation ☐ Under-irrigation (last 2-3 weeks) ☐ Inoperative head ☐ Inoperative controller ☐ Leaking components ☐ Damaged components	**WAYPOINTS:**
COMMENTS: The irrigation system was not working during this site visit. No leakage was observed.	
MISCELLANEOUS	
CONDITIONS: ☒ Trash ☐ Vandalism ☒ Erosion	
COMMENTS: Erosion rills have developed around the pipes and sprinklers that had been leaking since the installation of the irrigation system. Application of wood chips, compost or an erosion blanket would help to decrease the velocity of water flow, increase the water infiltration rate, and boost leaching of excessive salts. These effects potentially improve soil properties for native plant growth. No vandalism was observed. Minimal trash was observed on site.	

December 31, 2009 Site Visit Photos

The southern slopes have unfavorable soil conditions and minimal vegetative cover.

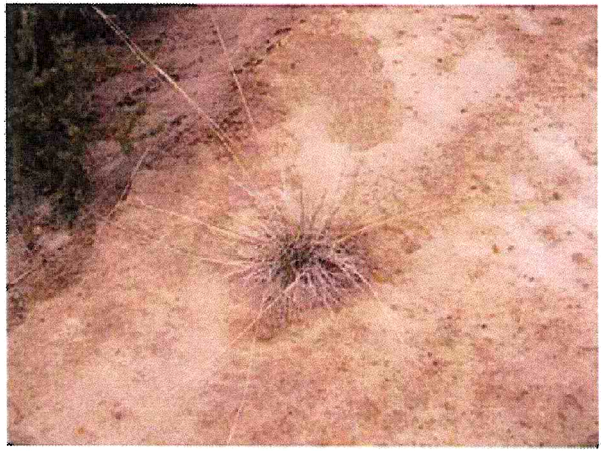
The middle slopes have better soil conditions and higher vegetative cover

The northern slopes have unfavorable soil conditions and minimal vegetative cover.

Close up of the dense vegetation on the middle slope at the bottom where soil conditions are favorable for native plant growth.

December 31, 2009 Site Visit Photos

California sagebrush (*Artemisia californica*) seedling on the lower slope.



A stressed needle grass (*Nassella* sp.) installed as a container plant was resuming growth.

A telegraph weed (*Heterotheca grandiflora*) seedling on the middle slopes.

A pre-existing deerweed (*Lotus scoparius*) is turning green.

December 31, 2009 Site Visit Photos

Exotic grasses are common weeds on site.

California bush sunflower (*Encelia californica*) is flowering.

Erosion rills developed after the heavy rain in December 2009.

This laurel sumac (*Malosma laurina*) has new growth since the last visit. California sagebrush (*Artemisia californica*) had turned green in this season.

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PROGRESS REPORT
for the Sunshine Canyon Landfill Mitigation Sites
City Side Mitigation Area
Prepared by Chambers Group
on behalf of Browning-Ferris Industries and Compliance Plus.

Date: January 13, 2010 Completed by: Kun Liu

Inspection Date: December 31, 2009
Inspected by: Kun Liu

Original to: Becky VanSickle, Maria Gutzeit, Kurt Bratton
Copies to: Tiffany Leo, Heather Clayton, Mike McEntee

SEED MIX

CONDITIONS

- ☐ No germination
- ☒ New germination

- ☐ Dense cover of native plants from seed mix
- ☐ Moderate cover of native plants from seed mix
- ☒ Sparse cover of native plants from seed mix
- ☐ No cover of native plants from seed mix

COMMENTS:

Many newly germinated seedlings were observed on the side slopes. However, less germination was observed on the top deck. The germination of species in the seed mix was quite patchy. Germination of seed mix species was found on the drainage area and on the less compacted areas on the top deck. The California poppy (*Eschscholzia californica*), California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), orange bush monkey-flower (*Mimulus aurantiacus*), miniature lupine (*Lupinus bicolor*), California buckwheat (*Eriogonum fasciculatum*), and small fescue (*Vulpia microstachys*) that germinated this season had obtained noticeable growth. Germination of clover (*Trifolium* sp.), pigweed (*Amaranthus* sp.), and coast goldfields (*Lasthenia californica*) was observed during this survey. Royal penstemon (*Penstemon spectabilis*) is the only species included in the seed mix that was not observed during the survey. Seedlings of California poppy were common on all the side slopes. Intermediate California sagebrush plants that germinated this season were abundant on the top slope facing the landfill operation.
Intermediate deerweed (*Lotus scoparius*), California buckwheat, and brittlebush (*Encelia farinosa*) were observed on the slopes.

OVERALL NATIVE PLANT CONDITIONS

PLANT COVER	PLANT HEALTH ISSUES	HEIGHT	SPECIES RICHNESS
☐ Dense	☐ Disease/pests	☐ 0" – 12"	☐ Low
☒ Moderate	☐ Plant stress	☒ 12" – 24"	☐ Medium
☒ Minimal	☐ Excessive herbivory	☐ 24" +	☒ High

COMMENTS:

The pre-existing native species, including California sagebrush, deerweed, California buckwheat, coastal goldenbush (*Isocoma menziesii*), black sage, and white sage (*Salvia apiana*) looked healthy. California sagebrush seedlings had obtained noticeable growth since the last visit in October. Native dove weed (*Eremocarpus setigerus*) was seen in minimal quantities onsite because this annual species senesces after flowering. No herbivory was observed during this survey. Needlegrass (*Nassella* sp.) was resuming growth.

WEED CONDITIONS	
CONDITIONS ☐ Dense weed coverage ☒ Moderate weed coverage (seedlings in high density) ☐ Minimal weed coverage	☒ Weeds germinating ☒ Weeds flowering ☐ Weeds setting seed

COMMENTS:

Germination of exotic annual grasses

and other weeds was observed on all of the slopes and the top deck. New germination of Russian thistle (*Salsola tragus*) was observed on the lower slopes. The lower slope facing the active landfill had high cover of exotic annual grasses. Bermuda grass (*Cynodon dactylon*), an exotic perennial, was growing in large patches at the bottom of the lower slopes and in several places on the upper slopes facing the landfill. To control Bermuda grass chemically, herbicide can be applied when the plants are actively growing, but before flowering. Winter vetch (*Vicia villosa*) was still in bloom on the lower slopes. Non-native prickly sow thistle (*Sonchus asper* var. *asper*) and wild radish (*Raphanus sativus*) were flowering. Seedlings of lamb's quarters and shortpod mustard (*Hirschfeldia incana*) were observed in high densities on the slopes. Cheeseweed (*Malva parviflora*) was observed in high densities on the upper slope facing the landfill operation. Additional mowing (string-trimming) is encouraged throughout the mitigation area to remove these exotic seedlings before flowering and the setting of seeds occurs. Weed control will reduce competition for resources with native seedlings.

MISCELLANEOUS

CONDITIONS

☐ Trash ☐ Vandalism ☒ Erosion

COMMENTS:

Most of the plastic bags blown onto the site had been removed. Several erosion rills were observed on the top deck and sides of the roads during the survey.

Poles were installed around part of the perimeter of the top deck. The installation of poles had disturbed some of the topsoil on the top deck.

December 31, 2009 Site Visit Photos

Photo depicting the slope that faces the office. Exotic annual grasses were abundant.

The upper slope facing the landfill operation area. Exotic annual grasses were abundant.

Germination was abundant on the drainage area on the top deck.

Overview of the top deck.

December 31, 2009 Site Visit Photos

Intermediate California sagebrush (*Artemisia californica*) plants from the seed mix were abundant on one of the upper slopes facing the landfill operation.

Native seedling unidentified during the last survey appears to be a member of the Boraginaceae family, perhaps a popcorn flower (*Cryptantha* sp.). Flowers are necessary to determine the species.

Needlegrass (*Nassella* sp.) was resuming growth.

Cheeseweed (*Malva parviflora*) was observed in high densities on the upper slope facing the landfill operation.

December 31, 2009 Site Visit Photos

Poles were installed around part of the perimeter of the top deck. The installation of poles had disturbed some of the topsoil.

Germination of a clover (*Trifolium* sp.).

An erosion rill had developed after the last rain.

White sage (*Salvia apiana*) has obtained noticeable growth since the last visit in November.

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PROGRESS REPORT
for the Sunshine Canyon Landfill Mitigation Sites
City Side Mitigation Area
Prepared by Chambers Group
on behalf of Browning-Ferris Industries and Compliance Plus.

Date: November 2, 2009 Completed by: Kun Liu

Inspection Date: October 28, 2009
Inspected by: Kun Liu

Original to: Becky VanSickle, Maria Gutzeit, Kurt Bratton
Copies to: Tiffany Leo, Ted St. John

SEED MIX

CONDITIONS:

- ☐ No germination
- ☒ New germination

- ☐ Dense cover of native plants from seed mix
- ☐ Moderate cover of native plants from seed mix
- ☒ Sparse cover of native plants from seed mix
- ☐ No cover of native plants from seed mix

COMMENTS:

New germination of California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*) was observed during this survey.

OVERALL NATIVE PLANT CONDITIONS

PLANT COVER:

- ☐ Dense
- ☒ Moderate
- ☒ Minimal

PLANT HEALTH ISSUES

- ☐ Disease/pests
- ☐ Plant stress
- ☐ Excessive herbivory

HEIGHT

- ☐ 0" – 12"
- ☒ 12" – 24"
- ☐ 24" +

SPECIES RICHNESS

- ☒ Low
- ☐ Medium
- ☐ High

COMMENTS:

Pre-existing natives, including California sagebrush (*Artemisia californica*), deerweed (*Lotus scoparius*), California buckwheat (*Eriogonum fasciculatum*), coastal goldenbush (*Isocoma monziosii*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*) look healthy. California sagebrush was turning green. False Jimson weed (*Datura wrightii*) was setting seeds. Fragrant everlasting (*Gnaphalium canescens*) observed during last visit on the lower slope had obtained noticeable growth. False Jimson weed (*Datura wrightii*) from natural recruitment on the slopes were bearing fruit. Common horseweed (*Conyza canadensis.*), which appeared as volunteers, were setting seeds. Dove weed (*Eremocarpus setigerus*) is the most abundant native volunteer. They had barely grown since last visit.

Seedlings of fragrant everlasting and coyote bush (*Baccharis pilularis*) were present.

Sparse cover of natives from the seed mix was observed at the time of the survey.

WEED CONDITIONS	
CONDITIONS: ☐ Dense weed coverage ☐ Moderate weed coverage (seedlings in high density) ☒ Minimal weed coverage	☒ Weeds germinating ☐ Weeds flowering ☒ Weeds setting seed
COMMENTS: Germination of exotic annual grasses was observed on all the slopes. Bermuda grass (*Cynodon dactylon*), an exotic perennial, was growing in big patches at the bottom of the lower slopes and several places on the upper slopes facing the landfill operation. To control bermuda grass chemically, herbicide can be applied when the plants are actively growing but before flowering. Winter vetch (*Vicia villosa*) has returned to the lower slopes. The slopes facing the office that had been trimmed were covered with dry biomass lamb's quarters (*Chenopodium album*). The lower slopes facing the landfill operation have not been trimmed and cleared of lamb's quarter. Some of them are setting seeds. Trimming is encouraged for those slopes to reduce the high cover of lamb's quarter; however removal of dry biomass is not necessary. Russian thistle (*Salsola tragus*) has not been trimmed on the lower and the upper slopes.	
MISCELLANEOUS	
CONDITIONS: ☐ Trash ☐ Vandalism ☐ Erosion	
COMMENTS: Little or no trash was observed in the planting areas.	

October 28 2009 Site Visit Photos

The slope that faces the office has been cleared of lamb's quarters (*Chenopodium album*). Pre-existing California sagebrush (*Artemisia californica*) is turning green.

The lower slope facing the landfill operation

This upper slope facing the operations area has not been completely cleared of lamb's quarters.

Overview of the top deck

October 28 2009 Site Visit Photos

New growth of California sagebrush and germination of exotic annual grass seedlings.

Seedling of California buckwheat (*Eriogonum fasciculatum*)

Russian thistle (*Salsola tragus*) on the lower slopes. It is an exotic weed that grows on highly disturbed sites.

Annual grass is growing back. This photo was taken at the bottom of the lower slope facing landfill operation.

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PROGRESS REPORT
for the Sunshine Canyon Landfill Mitigation Sites
City Side Mitigation Area
Prepared by Chambers Group
on behalf of Browning-Ferris Industries and Compliance Plus.

Date: December 3, 2009 Completed by: Kun Liu

Inspection Date: November 30, 2009
Inspected by: Kun Liu

Original to: Becky VanSickle, Maria Gutzeit, Kurt Bratton
Copies to: Tiffany Leo, Mike McEntee

SEED MIX

CONDITIONS

- ☐ No germination
- ☒ New germination

- ☐ Dense cover of native plants from seed mix
- ☐ Moderate cover of native plants from seed mix
- ☒ Sparse cover of native plants from seed mix
- ☐ No cover of native plants from seed mix

COMMENTS:

Many newly germinated seedlings were observed on the side slopes. However, less germination was observed on the top deck. Germination of coast goldfields (*Lasthenia californica*), California poppy (*Eschscholzia californica*), California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), orange bush monkey-flower (*Mimulus aurantiacus*), miniature lupine (*Lupinus bicolor*), California buckwheat (*Eriogonum fasciculatum*), and small fescue (*Vulpia microstachys*) were observed during this survey. Royal penstemon (*Penstemon spectabilis*) is the only species included in the seed mix that was not observed during the survey. Seedlings of coast goldfields), California poppy, and California sagebrush were frequently encountered during the survey.

Intermediate deerweed (*Lotus scoparius*), California buckwheat, and brittlebush (*Encelia farinosa*) were observed on the slopes.

OVERALL NATIVE PLANT CONDITIONS

PLANT COVER

- ☐ Dense
- ☒ Moderate
- ☒ Minimal

PLANT HEALTH ISSUES

- ☐ Disease/pests
- ☐ Plant stress
- ☐ Excessive herbivory

HEIGHT

- ☐ 0" – 12"
- ☒ 12" – 24"
- ☐ 24" +

SPECIES RICHNESS

- ☐ Low
- ☐ Medium
- ☒ High

COMMENTS:

The pre-existing native species, including California sagebrush, deerweed, California buckwheat, coastal goldenbush (*Isocoma menziesii*), black sage, and white sage (*Salvia apiana*) looked healthy. California sagebrush and California buckwheat seedlings had obtained noticeable growth since the last visit in October. Jimson weed (*Datura wrightii*) was flowering at the time of the survey in November. Some native dove weed (*Eremocarpus setigerus*) had been mistakenly mowed on the lower slope facing the landfill. Dove weed was seen in minimal quantities onsite. A California poppy seedling exhibited pruning by herbivores.

WEED CONDITIONS	
CONDITIONS ☐ Dense weed coverage ☒ Moderate weed coverage (seedlings in high density) ☐ Minimal weed coverage	☒ Weeds germinating ☒ Weeds flowering ☐ Weeds setting seed
COMMENTS: Germination of exotic annual grasses and other weeds was observed on all of the slopes. The lower slope facing the active landfill had high cover of exotic annual grasses. Bermuda grass (*Cynodon dactylon*), an exotic perennial, was growing in large patches at the bottom of the lower slopes and in several places on the upper slopes facing the landfill. To control Bermuda grass chemically, herbicide can be applied when the plants are actively growing but before flowering. Winter vetch (*Vicia villosa*) and common knotweed (*Polygonum arenastrum*) were flowering on the lower slopes. The lower slopes facing the landfill had been recently mowed and were covered with dry biomass of lamb's quarters (*Chenopodium album*). Russian thistle (*Salsola tragus*) had been removed from the lower and the upper slopes. Seedlings of lamb's quarters and shortpod mustard (*Hirschfeldia incana*) were observed in high densities on the slopes. Additional mowing (string-trimming) is encouraged throughout the mitigation area to remove these exotic seedlings before flowering occurs, which will reduce competition for resources with native seedlings.	
MISCELLANEOUS	
CONDITIONS ☒ Trash ☐ Vandalism ☐ Erosion	
COMMENTS: Some plastic bags had blown onto the site.	

November 30, 2009 Site Visit Photos

Photo depicting the slope that faces the office. Exotic annual grasses exhibit high germination rates.

The lower slope facing the landfill operations area.

This upper slope facing the operations area had been recently cleared of lamb's quarters (*Chenopodium album*).

Overview of the top deck.

November 30, 2009 Site Visit Photos

California sagebrush (*Artemisia californica*) had obtained noticeable growth since the last visit in October.

California buckwheat (*Eriogonum fasciculatum*) had obtained noticeable growth since the last visit in October.

Seedling of miniature lupine (*Lupinus bicolor*) on the lower slopes.

Bermuda grass (*Cynodon dactylon*) and winter vetch (*Vicia villosa*) were abundant. This photo was taken at the bottom of the lower slope facing landfill operations area.

November 30, 2009 Site Visit Photos

Seedlings of one of the natives. They are too young to tell the species.

Seedling of black sage (*Salvia mellifera*) from the seed mix

Volunteer of white sage (*Salvia apiana*)

Seedling of orange bush monkey-flower (*Mimulus aurantiacus*) from the seed mix.

November 30, 2009 Site Visit Photos

California poppy (*Eschscholzia californica*) seedling showing signs of herbivory.

Brittlebush (*Encelia farinosa*) from the seed mix

Seedling of small fescue (*Vulpia microstachys*) on in the center of the photo. Seedlings of non-native bur clover (*Medicago polymorpha*) on the left, and California poppy on the right of the photo.

Exotic annual grasses. This photo was taken at the bottom of the lower slope facing landfill operations area.

Appendix D

(nothing to report this quarter)