

# SUNSHINE CANYON LANDFILL



A REPUBLIC SERVICES COMPANY

March 14, 2016

Ms. Cher Snyder  
South Coast Air Quality Management District  
21865 East Copley Drive  
Diamond Bar, California 91765

Mr. Renaldo Crooks  
California Air Resources Board  
P.O. Box 2815  
Sacramento, California 95182

Re: Sunshine Canyon Landfill  
CalRecycle Solid Waste Information System Number: 19-AA-2000  
2015 Landfill Methane Rule and Rule 1150.1(f)(3) Annual Report

Dear Sir or Madam:

As required by the California Air Resources Board (CARB) "Methane Emissions from Municipal Solid Waste Landfills" Subchapter 10, Article 4, Subarticle 6 Landfill Methane Rule (LMR) Section §95470(b)(3), and South Coast Air Quality Management District (AQMD) Rule 1150.1(f)(3), attached is the Annual Report for the Sunshine Canyon Landfill (Sunshine Canyon) for the reporting period of January 1, 2015 through December 31, 2015.

I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate, and complete.

Sincerely,

Sunshine Canyon Landfill

Rob Sherman  
Responsible Official

Attachments: Sunshine Canyon Landfill 2015 LMR and Rule 1150.1(f)(3) Annual Report

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Dear Sir or Madam:

As required by the California Air Resources Board (CARB), California Code of Regulations (CCR) Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 6, "Methane Emissions from Municipal Solid Waste Landfills", Section §95470(b)(3) Landfill Methane Rule (LMR) and South Coast Air Quality Management District (AQMD) Rule 1150.1(f)(3), attached is the 2015 Annual Report for the Sunshine Canyon Landfill (SCL). SCL, owned and operated by Browning-Ferris Industries of California, Inc., (BFI), is an active municipal solid waste (MSW) landfill located in Sylmar, California with at least 450,000 tons of waste-in-place (WIP) and an active gas collection and control system (GCCS). SCL is comprised of two (2) sides, a City-side and a County-side which was combined in 2009 and operate under one (1) Title V Permit.

Pursuant to CCR Title 17 §95468, SCL may request alternatives to the compliance measures, monitoring requirements, test methods and procedures of CCR Title 17 §95464, §95469, and §95471. An Alternative Compliance Option (ACO) Request was submitted on May 17, 2011 for alternatives to Rule 1150.1. Per correspondence from AQMD dated October 14, 2011, SCL provided Cornerstone comments from the AQMD regarding the 1150.1 ACO request, which was submitted to the AQMD on May 6, 2011. On November 3, 2011, Cornerstone submitted a draft response letter to SCL for review. The responses to AQMD's comments on the Plan were submitted to the AQMD on April 2, 2012. Republic is currently awaiting AQMD response.

The following section discusses the applicable annual reporting requirements pursuant to §95470(b)(3) and AQMD Rule 1150.1(f)(3) for the reporting period of January 1, 2015 through December 31, 2015.

**CCR §95470(b)(3) & AQMD Rule 1150.1(f)(3)**

Any owner or operator subject to the requirements of this sub-article, must prepare an annual report for the period of January 1 through December 31 of each year. Each annual report must be submitted to the Executive Officer by March 15 of the following year.

This annual report contains the following information:

**(A) MSW landfill name, owner and operator, address, and solid waste information system (SWIS) identification number.**

The facility information is listed below:

Facility Name: Sunshine Canyon Landfill  
Owned and Operated by BFI  
Facility Address: 14747 San Fernando Road  
Sylmar, CA 91342  
SWIS Number: 19-AA-2000

**(B) Total volume of landfill gas collected (reported in standard cubic feet).**

The total volume of landfill gas (LFG) collected from January 1, 2015 through December 31, 2015 was 2,889,387,207.0 standard cubic feet (scf).

Device ID	Total LFG Throughput Volume (scf)
Flare 1	1,022,536,669.0
Flare 3*	84,362,276.5
Flare 8**	0.0
Flare 9	554,668,915.5
Flare 10	1,227,819,346.0
Total	2,889,387,207.0

\*Flare 3 operates as a back-up flare to Flares 1, 9, 10 and the landfill gas to energy (LFGTE) plant. Flares 9 and 10 are back-up units to the LFGTE plant.

\*\*Flare 8 did not operate for the duration of 2015 and was decommissioned in March 2015.

**(C) Average composition of the landfill gas collected over the reporting period (reported in percent methane and percent carbon dioxide by volume).**

The average concentration of LFG collected through Flares 1, 3, 9, and 10 from January 1, 2015 through December 31, 2015 was 42.5 percent methane (CH<sub>4</sub>), 36.0

percent carbon dioxide (CO<sub>2</sub>), 1.3 percent oxygen (O<sub>2</sub>), and 20.2 percent balance gas. Flare 8 did not operate for the duration of 2015 and was decommissioned in March 2015. Refer to Table 1, 2015 Annual Average Landfill Gas Composition, for details.

**(D) *Gas control device type, year of installation, rating, fuel type, and total amount of landfill gas combusted in each control device.***

The McGill Enclosed Flare 1 operated January 1, 2015 through December 31, 2015 as a gas control device. Flare 1 was installed in approximately 1985. Flare 1 is rated at 105 Million British Thermal Units per hour (MMBTU/hr) and combusts LFG. A total of 1,022,536,669.0 scf LFG was combusted in 2015.

The McGill Enclosed Flare 3 operated January 1, 2015 through December 31, 2015 as a gas control device, Flare 3 is a back-up device, operating on an as-need basis. Flare 3 was installed in 1997. Flare 3 is rated at 105 MMBTU/hr and combusts LFG. A total of 84,362,276.5 scf LFG was combusted in 2015.

The McGill Enclosed Flare 8 was installed in 1998. Flare 8 was rated at 105 MMBTU/hr. Flare 8 did not operate for the duration of 2015 and was decommissioned in March 2015.

The John Zink Ultra Low Emissions (ZULE) Enclosed Flare 9 operated January 1, 2015 through December 31, 2015 as a gas control device, Flare 9 is a back-up device to the LFGTE Plant. Flare 9 was installed in 2012 and began operation on August 6, 2012. Flare 9 is rated at 136.7 MMBTU/hr and combusts LFG. A total amount of 554,668,915.5 scf LFG was combusted in 2015.

The ZULE Enclosed Flare 10 operated January 1, 2015 through December 31, 2015 as a gas control device, Flare 10 is a back-up device to the LFGTE Plant. Flare 10 was installed in 2013 and began operation on August 16, 2013. Flare 10 is rated at 136.7 MMBTU/hr and combusts LFG. A total amount of 1,227,819,346.0 scf LFG was combusted in 2015.

**(E) *The date that the gas collection and control system was installed and in full operation.***

The first phase of the GCCS system was installed and began operation in 1979. The GCCS in Unit 1 of the City side of the Landfill was installed and began operation in 1988. City side of SCL closed in 1991; County side of SCL began accepting waste in 1996, and is currently the active portion of SCL. The City-side and County-side of the landfill were combined in 2009, and operate under one Title V Permit. SCL currently has an active GCCS on both the City and County sides of the Landfill. See Appendix A, As-Built Map, for details.

**(F) *The percent methane destruction efficiency of each gas control device(s).***

Pursuant to the ACO submitted on May 17, 2011, the Amended April 1, 2011 Rule 1150.1 allows performance testing of at least one flare every year and then alternate all others such that each flare is source tested at least once every three (3) years.

Pursuant to the ACO submitted on May 17, 2011 for Rule 1150.1, a Performance Test for Flare 1 was most recently conducted on July 22, 2014. The results of the Performance Test indicate Flare 1 had 99.99 percent CH<sub>4</sub> destruction efficiency, which is in compliance with the required 99 percent destruction efficiency pursuant to §95464(b)(2)(A)(1). The 2014 Flare 1 Performance Test Report was included in Attachment B of the 2014 AB-32 (LMR) Report submitted on March 2, 2015.

Pursuant to the ACO submitted on May 17, 2011 for Rule 1150.1, a Performance Test for Flare 3 was last conducted on July 21, 2014. The results of the Performance Test indicate Flare 3 had 99.99 percent CH<sub>4</sub> destruction efficiency, which is in compliance with the required 99 percent destruction efficiency pursuant to §95464(b)(2)(A)(1). The 2014 Flare 3 Performance Test Report was included in Attachment B of the 2014 AB-32 (LMR) Report submitted on March 2, 2015.

The 2012 Performance Test for Flare 8 was conducted on December 10, 2012. The results of the Performance Test indicate Flare 8 had 99.99 percent CH<sub>4</sub> destruction efficiency, which is in compliance with the required 99 percent destruction efficiency pursuant to §95464(b)(2)(A)(1). The Flare 8 2012 Performance Test Report was included in Attachment B of the 2012 AB-32 (LMR) Report submitted on March 13, 2013.

The 2012 Performance Test for Flare 9 was conducted on December 17, 2012. The results of the Performance Test indicate Flare 9 had 99.99 percent CH<sub>4</sub> destruction efficiency, which is in compliance with the required 99 percent destruction efficiency pursuant to §95464(b)(2)(A)(1). The 2012 Flare 9 Performance Test Report was included in Attachment B of the 2012 AB-32 (LMR) Report submitted on March 13, 2013. SCL has been in contact with the AQMD about an extension on the source testing of Flare 9 in January 2016.

The 2013 Performance Test for Flare 10 was conducted on December 12, 2013. The results of the Performance Test indicate Flare 10 had 99.99 percent CH<sub>4</sub> destruction efficiency, which is in compliance with the required 99 percent destruction efficiency pursuant to §95464(b)(2)(A)(1). The 2013 Flare 10 Performance Test Report was submitted on March 11, 2014.

**(G) *Type and amount of supplemental fuels burned with the landfill gas in each device.***

No supplemental fuels were burned with the LFG in Flares 1, 3, 8, 9, and 10 at SCL from January 1, 2015 through December 31, 2015.

- (H) *Total volume of landfill gas shipped off-site, the composition of the landfill gas collected (reported in percent methane and percent carbon dioxide by volume), and the recipient of the gas.*

No LFG was shipped off-site of SCL from January 1, 2015 through December 31, 2015.

- (I) *Most recent topographic map of the site showing the areas with final cover and a geomembrane and the areas with final cover without a geomembrane with corresponding percentages over the landfill surface.*

The most recent as-built topographic map, dated August 2014 of the site is included in Attachment A.

- (J) *The information required by sections §95470(a)(1)(A), §95470(a)(1)(B) & Rule 1150.1(f)(1)(G), §95470(a)(1)(C) & Rule 1150.1(f)(1)(A)(ii), §95470(a)(1)(D), §95470(a)(1)(E) & Rule 1150.1(f)(1)(K), §95470(a)(1)(F) & Rule 1150.1(f)(1)(I), §95470(a)(1)(H) & Rule 1150.1(f)(1)(L), and §95470(a)(1)(K) & Rule 1150.1(f)(1)(A)(iii).*

The following section discusses the applicable annual reporting requirements pursuant to §95470(a)(1) and AQMD Rule 1150.1(f) for the reporting period of January 1, 2015 through December 31, 2015.

### **CCR §95470(a)(1) & AQMD Rule 1150.1(f)(1)**

An owner or operator must maintain the following records, whether in paper, electronic, or other format, for at least five (5) years.

#### **CCR §95470(a)(1)(A)**

*All gas collection system downtime exceeding five calendar days, including individual well shutdown and disconnection times, and the reason for the downtime.*

The GCCS was not shut down for more than five (5) days during 2015. Individual well shutdown and disconnection times and the reason for the downtime are included in the 2015 Well Startup, Shutdown, and Malfunction (SSM) Log, included in Attachment C.

#### **CCR §95470(a)(1)(B) & AQMD Rule 1150.1(f)(1)(G)**

*All gas control system downtime in excess of one hour, the reason for the downtime, and the length of time the gas control system was shutdown.*

There were no instances of GCCS downtime in excess of one (1) hour as there was 0.00 hours of GCCS downtime in 2015. GCCS Downtime is when all emission control devices are not operating. Refer to the GCCS Downtime Log, included in Attachment D, for details.

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### **CCR §95470(a)(1)(C) & AQMD Rule 1150.1(f)(1)(A)(ii)**

*Expected gas generation flow rate calculated pursuant to section 95471(e).*

The LFG generation flow rate was calculated pursuant to CCR §95471(e), using the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, Chapter 3, which is incorporated by reference herein, using a recovery rate of 75 percent. The CARB Landfill Emissions Tool Version 1.3 (release date: November 14, 2011) was implemented in order to calculate expected LFG generation rates. The LFG Generation Flow Rate Calculations and Results are included in Appendix E.

### **CCR §95470(a)(1)(D) & AQMD Rule 1150.1(f)(1)(C)&(D)**

*Records of all instantaneous surface readings of 200 ppmv [parts per million by volume] or greater; all exceedances of the limits in sections 95464(b)(1)(B) or 95465, including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the re-monitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion. For integrated samples and all remedial actions taken for exceedances of 25 ppmv TOC standard determined by integrated samples taken on numbered 50,000 square foot landfill grids.*

Instantaneous and integrated surface emissions monitoring (SEM) was conducted in 2015. The First, Second, Third, and Fourth Quarter 2015 AQMD 1150.1 Monitoring Reports were submitted to the AQMD under a separate cover. Due to the large file size, the reports are not included with this report. The cover letters for the First, Second, Third, and Fourth Quarter AQMD 1150.1 Quarterly Monitoring Reports are included in Attachment F.

A summary of wells installed as part of the GCCS expansion from January 1, 2015 through December 31, 2015 is included in Attachment C, 2015 Wellfield SSM Log.

### **CCR §95470(a)(1)(E) & AQMD Rule 1150.1(f)(1)(K)**

*Records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken.*

There were 45 initial recorded measurements of positive wellhead pressure in 2015. Refer to Table 2 for dates of measurement, Well IDs, and corrective action taken.

### **CCR §95470(a)(1)(F) & AQMD Rule 1150.1(f)(1)(I)**

#### ***Annual solid waste acceptance rate and the current amount of Waste-In-Place (WIP).***

The annual rate of solid waste acceptance in 2015 was 2,402,465.86 tons. The current amount of WIP for both County-side and City-side of SCL, as of December 31, 2015 is approximately 63,314,376.86 tons.

### **CCR §95470(a)(1)(H) & AQMD Rule 1150.1(f)(1)(L)(i)(I)**

#### ***Results of any source tests conducted pursuant to section 95464(b)(4).***

Pursuant to the ACO submitted on May 17, 2011, the Amended April 1, 2011 AQMD Rule 1150.1 allows performance testing of at least one (1) flare every year and then alternate all others such that each flare is source tested at least once every three (3) years.

Pursuant to the ACO submitted on May 17, 2011 for AQMD Rule 1150.1, a 2014 Performance Test for Flare 1 was conducted on July 22, 2014. The results of the source test was included in Attachment B of the 2014 AB-32 (LMR) Report submitted on March 2, 2015.

Pursuant to the ACO submitted on May 17, 2011 for AQMD Rule 1150.1, a 2014 Performance Test for Flare 3 was conducted on July 21, 2014. The results of the source test was included in Attachment B of the 2014 AB-32 (LMR) Report submitted on March 2, 2015.

The 2012 Performance Test for Flare 8 was conducted on December 10, 2012. The results of the source test were in included in Attachment B of the 2012 AB-32 (LMR) Report submitted on March 13, 2013.

The 2012 Performance Test for Flare 9 was conducted on December 17, 2012. The results of the source test were in included in Attachment B of the 2012 AB-32 (LMR) Report submitted on March 15, 2013.

The 2013 Performance Test for Flare 10 was conducted on December 12, 2013. The results of the source test were in included in Attachment B of the 2013 AB-32 (LMR) Report submitted on March 11, 2014.

### **AQMD Rule 1150.1(f)(1)(J)**

#### ***All records pertaining to non-degradable waste acceptance, including the nature, location, amount and the deposition for any landfill area excluded from the gas collection system.***

No non-degradable construction and demolition (C&D) material was accepted during the reporting period of January 2015 through December 2015. The gas collection system incorporates all areas where any type of waste was placed and does not exclude areas based on the waste characteristics.



### **AQMD 1150.1(f)(1)(H)(i-ii)**

*During construction that requires exposing solid waste material to the atmosphere.*

There were no instances during construction when solid waste material was exposed to the atmosphere at SCL from January 2015 through December 2015.

### **CCR §95470(a)(1)(K) & AQMD Rule 1150.1(f)(1)(L)**

*Records of the equipment operating parameters specified to be monitored under sections 95469(b)(1) and 95469(b)(2) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information:*

### **CCR §95470(a)(1)(K)(1) & AQMD Rule 1150.1(f)(1)(L)(i)(I)**

*For enclosed flares all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) and 95464(b)(3)(A) was determined.*

From January 1, 2015 to December 31, 2015, Flare 1 operating records indicate that the flare combustion zone temperature did not drop below 1,600 degrees Fahrenheit (°F) (flare set temperature of 1,640°F during the August 25, 2011 source test), determining compliance with Sections §95464(b)(2) and §95464(b)(3)(A) on a three-hour average basis while in operation. Flare 1 was source tested on July 22, 2014. Results of the source test were received after December 31, 2014, and the three-hour average temperature was determined as 1,644°F (limit based on average combustion temperature of 1,694°F during the July 22, 2014 source test) pursuant to A/N 541300 Condition Number 7. The Flare 1 Performance Test Report was included in Attachment B of the 2014 AB-32 (LMR) Report submitted on March 2, 2015. Flare operating records are kept on-site and available upon request.

From January 1, 2015 to December 31, 2015, Flare 3 operating records indicate that the flare combustion zone temperature did not drop below 1,600°F (flare set temperature of 1,650°F during the August 11, 2011 source test), determining compliance with Sections §95464(b)(2) and §95464(b)(3)(A) on a three-hour average basis while in operation. Flare 3 was source tested on July 21, 2014. Results of the source test were received after December 31, 2014, and the three-hour average temperature was determined as 1,600°F (limit based on average combustion temperature of 1,650°F during the July 22, 2014 source test) pursuant to A/N 541300 Condition Number 7. The Flare 1 Performance Test Report was included in Attachment B of the 2014 AB-32 (LMR) Report submitted on March 2, 2015. Flare operating records are kept on-site and available upon request.

From January 1, 2015 to December 31, 2015, Flare 8 operating records indicate that the flare combustion zone temperature did not drop below 1,652°F (limit established based on average combustion temperature during the December 10, 2012 source test), determining

compliance with Sections §95464(b)(2) and §95464(b)(3)(A) on a three-hour average basis while in operation. Flare operating records are kept on-site and available upon request.

From January 1, 2015 to December 31, 2015, the Flare 9 15-minute rolling average temperature did drop below 1,600°F, intermittently throughout the reporting period. Flare 9 returned to normal operating temperatures above 1,600°F following each temperature drop. AQMD was notified as necessary with each applicable temperature drop. Pursuant to Application Number (A/N) 526972 Condition Number 7, the Flare 9 combustion zone temperature shall not drop below 1,600°F averaged over any 15-minute period while the flare is in operation, except during periods of startup and shutdowns. Based on the most recent Flare 9 source test conducted on October 1, 2, and 3, 2012, the minimum allowable three (3) hour average combustion zone temperature limit is 1,617°F. Flare 9 did not drop below 1,617°F on a 3 hour average basis while in operation during the reporting period.

From January 1, 2015 to December 31, 2015, the Flare 10 15-minute rolling average temperature did drop below 1,600°F. Flare 10 returned to normal operating temperatures above 1,600°F following each temperature drop. AQMD was notified as necessary with each applicable temperature drop. Pursuant to A/N 541300 Condition Number 7, the Flare 10 combustion zone temperature shall not drop below 1,600°F averaged over any 15-minute period while the flare is in operation, except during periods of startup and shutdowns. Based on the most recent Flare 10 source test conducted on December 12, 2013, minimum allowable three (3) hour average temperature was determined as 1,653°F. Flare 10 did not drop below 1,653°F on a 3 hour average basis while in operation during the reporting period.

#### **CCR §95470(a)(1)(K)(2) & AQMD Rule 1150.1(f)(1)(L)(i)(II)**

*For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone pursuant to section 95464(b)(3)(A)2.*

There are no boilers or process heaters at the SCL.

#### **CCR §95470(a)(1)(K)(3) & AQMD Rule 1150.1(f)(1)(L)(iii)**

*For any owner or operator who uses a boiler or process heater with a design heat input capacity of 44 megawatts (150 MMBtu/hr) or greater to comply with section 95464(b)(3), all periods of operation of the boiler or process heater (e.g., steam use, fuel use, or monitoring data collected pursuant to other federal, State, local, or tribal regulatory requirements).*

There are no boilers or process heaters at the SCL.

#### **CCR §95470(a)(1)(K)(4)**

*For a gas control device other than an enclosed flare, demonstrate compliance by providing information describing the operation of the gas control device, the operating parameters*

*that would indicate proper performance and appropriate monitoring procedures as specified in 95469(b)(2).*

The only control devices operated at SCL from January 2015 through December 2015 were Flares 1, 3, 8, 9, and 10.

Tables:           Table 1 – Annual Average Landfill Gas Composition  
                      Table 2 – 2015 Wellfield Pressure Deviations

Enclosures:      Attachment A – As-Built and Topographic Maps  
                      Attachment B – 2015 Well SSM Log  
                      Attachment C – 2015 GCCS Downtime Log  
                      Attachment D – LFG Generation Flow Rate Calculations  
                      Attachment E – 1150.1 Quarterly Monitoring Report Covers

## **TABLES**

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**Annual Average Landfill Gas Composition  
Flares 1, 3, 9, and 10  
Sunshine Canyon Landfill, Sylmar, CA**

Device ID	Date Time	CH <sub>4</sub> % by Volume	CO <sub>2</sub> % by Volume	O <sub>2</sub> % by Volume	Balance % by Volume
5123GH10	1/6/2015 12:03	46.8	37.4	1.8	14.0
5123GH10	1/12/2015 8:04	45.6	36.6	2.4	15.4
5123GH10	1/23/2015 12:40	46.8	36.8	1.7	14.7
5123GH10	1/29/2015 8:03	46.0	38.3	1.9	13.8
5123GH10	2/6/2015 8:58	44.6	36.2	2.2	17.0
5123GH10	2/12/2015 7:38	46.6	36.5	2.1	14.8
5123GH10	2/27/2015 12:17	44.9	36.7	2.5	15.9
5123GH10	3/4/2015 13:22	45.1	36.2	0.8	17.9
5123GH10	3/11/2015 8:11	46.3	35.1	2.1	16.5
5123GH10	3/18/2015 7:31	46.0	36.8	1.9	15.3
5123GH10	3/24/2015 8:08	46.7	36.8	1.9	14.6
5123GH10	3/31/2015 14:04	47.3	37.5	1.4	13.8
5123GH10	4/9/2015 8:09	46.3	36.7	1.8	15.2
5123GH10	4/13/2015 8:04	45.9	36.6	1.7	15.8
5123GH10	4/23/2015 10:11	46.1	36.4	1.9	15.6
5123GH10	5/7/2015 10:26	48.1	38.3	1.3	12.3
5123GH10	6/8/2015 8:44	45.5	35.9	2.0	16.6
5123GH10	6/23/2015 8:49	46.1	36.5	1.4	16.0
5123GH10	6/29/2015 8:00	46.4	36.6	1.5	15.5
5123GH10	7/10/2015 9:23	46.3	37.2	1.5	15.0
5123GH10	7/16/2015 7:04	49.0	37.6	1.4	12.0
5123GH10	7/23/2015 13:17	45.4	36.7	0.9	17.0
5123GH10	7/28/2015 10:27	48.4	37.9	1.2	12.5
5123GH10	8/3/2015 10:44	47.4	37.7	1.4	13.5
5123GH10	8/14/2015 7:23	48.0	37.0	1.8	13.2
5123GH10	8/19/2015 8:12	47.7	39.1	2.2	11.0
5123GH10	8/24/2015 9:07	47.7	35.5	2.8	14.0
5123GH10	8/31/2015 8:24	44.6	36.5	2.4	16.5
5123GH10	9/9/2015 8:32	46.0	37.9	1.6	14.5
5123GH10	9/17/2015 8:36	47.9	38.3	1.6	12.2
5123GH10	9/21/2015 8:19	47.4	37.6	1.4	13.6
5123GH10	10/15/2015 12:42	46.7	37.7	1.6	14.0
5123GH10	10/22/2015 13:48	46.4	38.1	1.6	13.9
5123GH10	10/26/2015 12:37	47.5	38.1	1.4	13.0
5123GH10	11/5/2015 12:19	48.2	36.8	1.7	13.3
5123GH10	11/10/2015 12:48	47.8	38.1	1.8	12.3
5123GH10	11/20/2015 12:45	46.4	36.8	1.9	14.9
5123GH10	11/23/2015 12:32	48.4	36.4	1.8	13.4
5123GH10	12/3/2015 12:55	46.8	36.7	1.8	14.7
5123GH10	12/9/2015 13:23	47.4	36.8	1.7	14.1

Device ID	Date Time	CH <sub>4</sub> % by Volume	CO <sub>2</sub> % by Volume	O <sub>2</sub> % by Volume	Balance % by Volume
5123GH10	12/15/2015 13:09	46.7	37.1	1.9	14.3
5123GH10	12/22/2015 11:34	45.6	37.0	2.3	15.1
5123GH10	12/29/2015 12:33	53.3	41.5	1.9	3.3
5123GHG1	1/6/2015 12:21	39.1	33.6	2.3	25.0
5123GHG1	1/12/2015 8:35	38.6	35.8	0.9	24.7
5123GHG1	1/23/2015 12:16	41.6	36.7	0.4	21.3
5123GHG1	1/29/2015 8:14	41.8	36.9	0.1	21.2
5123GHG1	2/6/2015 8:38	37.0	35.6	0.8	26.6
5123GHG1	2/12/2015 8:00	36.1	34.5	0.7	28.7
5123GHG1	2/27/2015 13:05	36.2	35.2	0.3	28.3
5123GHG1	3/4/2015 10:08	34.9	33.3	0.8	31.0
5123GHG1	3/11/2015 8:38	35.9	32.9	0.3	30.9
5123GHG1	3/18/2015 8:04	35.0	33.7	0.4	30.9
5123GHG1	3/24/2015 8:42	34.9	32.8	1.8	30.5
5123GHG1	3/31/2015 14:02	33.4	29.2	4.3	33.1
5123GHG1	4/9/2015 9:04	37.7	34.7	0.5	27.1
5123GHG1	4/13/2015 8:33	35.9	34.0	0.6	29.5
5123GHG1	4/23/2015 8:12	36.4	34.3	0.8	28.5
5123GHG1	5/1/2015 8:20	36.3	33.9	0.9	28.9
5123GHG1	5/7/2015 6:36	37.8	34.9	1.4	25.9
5123GHG1	5/11/2015 8:12	37.2	34.0	0.9	27.9
5123GHG1	5/18/2015 8:29	36.1	33.9	0.9	29.1
5123GHG1	5/29/2015 8:14	37.9	34.5	0.7	26.9
5123GHG1	6/1/2015 10:04	37.8	33.6	0.8	27.8
5123GHG1	6/8/2015 9:11	35.7	33.4	0.8	30.1
5123GHG1	6/19/2015 9:05	35.7	32.8	0.9	30.6
5123GHG1	6/23/2015 8:18	36.7	33.5	1.0	28.8
5123GHG1	6/29/2015 8:40	37.2	34.3	0.6	27.9
5123GHG1	7/10/2015 8:58	35.3	34.1	0.8	29.8
5123GHG1	7/16/2015 7:25	37.5	34.3	0.4	27.8
5123GHG1	7/23/2015 6:55	34.3	33.4	1.0	31.3
5123GHG1	7/28/2015 9:53	37.8	35.0	0.3	26.9
5123GHG1	8/3/2015 9:55	37.3	34.9	0.4	27.4
5123GHG1	8/14/2015 6:26	38.3	35.0	0.8	25.9
5123GHG1	8/19/2015 8:29	41.6	38.5	0.5	19.4
5123GHG1	8/24/2015 6:43	39.9	36.0	1.0	23.1
5123GHG1	8/31/2015 7:59	40.7	36.1	1.0	22.2
5123GHG1	9/9/2015 8:03	40.8	36.6	0.8	21.8
5123GHG1	9/17/2015 7:47	38.0	35.1	0.7	26.2
5123GHG1	9/21/2015 7:49	37.7	34.7	0.7	26.9
5123GHG1	9/30/2015 12:56	40.6	36.5	0.6	22.3
5123GHG1	10/5/2015 12:27	37.4	34.6	0.4	27.6
5123GHG1	10/15/2015 12:11	38.4	37.0	0.6	24.0
5123GHG1	10/22/2015 13:05	37.8	36.3	0.5	25.4

Device ID	Date Time	CH <sub>4</sub> % by Volume	CO <sub>2</sub> % by Volume	O <sub>2</sub> % by Volume	Balance % by Volume
5123GHG1	10/26/2015 12:15	38.9	35.6	0.4	25.1
5123GHG1	11/5/2015 11:38	36.4	35.0	0.4	28.2
5123GHG1	11/10/2015 13:03	37.3	36.6	0.8	25.3
5123GHG1	11/20/2015 10:40	37.5	35.0	1.1	26.4
5123GHG1	11/23/2015 12:07	38.4	35.0	0.8	25.8
5123GHG1	12/3/2015 12:30	39.2	35.9	0.9	24.0
5123GHG1	12/9/2015 13:02	39.2	35.4	0.9	24.5
5123GHG1	12/15/2015 9:52	35.9	36.1	1.1	26.9
5123GHG1	12/22/2015 12:01	39.8	35.9	1.0	23.3
5123GHG1	12/29/2015 13:12	44.4	37.9	1.0	16.7
5123GHG3	4/9/2015 9:49	42.1	33.6	2.6	21.7
5123GHG9	3/11/2015 8:08	46.5	35.4	2.1	16.0
5123GHG9	4/9/2015 8:06	46.3	36.6	1.9	15.2
5123GHG9	4/13/2015 8:02	45.5	36.6	1.7	16.2
5123GHG9	5/1/2015 7:46	45.3	36.7	1.9	16.1
5123GHG9	5/7/2015 10:23	47.8	38.3	1.3	12.6
5123GHG9	5/11/2015 7:32	46.3	36.9	1.4	15.4
5123GHG9	5/18/2015 8:03	47.0	37.0	1.6	14.4
5123GHG9	5/29/2015 7:55	47.3	37.0	1.7	14.0
5123GHG9	6/1/2015 9:35	48.6	36.8	1.6	13.0
5123GHG9	6/8/2015 8:41	44.8	35.7	2.2	17.3
5123GHG9	6/19/2015 8:30	45.6	35.6	2.0	16.8
5123GHG9	6/23/2015 8:47	46.0	36.2	1.5	16.3
5123GHG9	9/30/2015 12:42	43.7	35.5	1.5	19.3
5123GHG9	10/5/2015 12:12	45.0	35.4	1.8	17.8
5123GHG9	11/5/2015 12:15	47.9	37.0	1.7	13.4
<b>Average</b>		<b>42.5</b>	<b>36.0</b>	<b>1.3</b>	<b>20.2</b>

%= percent

CH<sub>4</sub>= Methane

CO<sub>2</sub>= Carbon dioxide

O<sub>2</sub>= Oxygen

Flare 3 operates as a back-up flare to Flares 9 and 10.

Flares 9 and 10 operate as back-ups to the gas to energy plant.

5123GHG1: Flare 1    5123GHG3: Flare 3    5123GH10: Flare 10    5123GHG9: Flare 9

Note: Flare 8 did not operate for the duration of 2015 and was decommissioned in March 2015.

**Sunshine Canyon Landfill  
2015 WELLFIELD DEVIATION REPORT - PRESSURE EXCEEDANCES**

REPORT PREPARED BY: Cornerstone  
 UPDATED DATE: 3/7/2016  
 LFG MONITORING DEVICE: GEM  
 MODEL: 2000.0  
 DATE LAST CALIBRATED: DAILY

Well ID	Date and Time	CH <sub>4</sub>	CO <sub>2</sub>	O <sub>2</sub>	Balance	Static Press.	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Days
		(%)	(%)	(%)	(%)	("WC)	(°F)		
CGW00428	12/16/15 13:43	57.3	42.3	0.3	0.1	2.38	114.1	Comments:"INCREASED VACUUM,,,,,,,,,"	
CGW00428	12/16/15 13:46	56.1	41.7	0.8	1.4	-2.52	125.2	Comments:"NO CHANGE,,,,,,,,,"	<1
CGW00428 had a pressure exceedance detected on 12/16/2015. The well was adjusted and re-monitored on the same day and no further exceedance was detected.									
CGW00572	1/7/15 8:43	55.5	44.4	0.0	0.1	0.6	80	NO CHANGE; NSPS CAI; VALVE COMPLETELY CLOSED; +000	
CGW00572	1/9/15 13:14	56.0	43.8	0.2	0.0	-0.4	133.3	NSPS CAI; +0.0	2
CGW00572 had a pressure exceedance detected on 1/7/2015. The well was adjusted and re-monitored on 1/9/2015 and no further exceedance was detected.									
CGW00572	1/16/15 8:52	56.5	43.3	0.0	0.2	0.0	76	NSPS CAI; BARELY OPEN; +000.1	
CGW00572	1/20/15 11:01	55.8	43.1	0.0	1.1	-1.3	135	NSPS CAI; +0.0	4
CGW00572 had a pressure exceedance detected on 1/16/2015. The well was adjusted and re-monitored on 1/20/2015 and no further exceedance was detected.									
CGW00572	2/4/15 14:15	57.0	42.8	0.1	0.1	1.7	128	<i>Adjusted pressure readings;</i> NSPS CAI; DECREASED VACUUM; VALVE COMPLETELY CLOSED; +000.0	
CGW00572	2/6/15 9:26	55.5	44.5	0.0	0.0	-0.4	116.1	INCREASED VACUUM; +11.0	2
CGW00572 had a pressure exceedance detected on 2/4/2015 at the adjusted pressure reading. The well was adjusted and re-monitored on 2/6/2015 and no further exceedance was detected.									
CGW00572	2/20/15 13:39	57.9	41.1	0.2	0.8	1.9	129	<i>Adjusted pressure reading;</i> NO CHANGE; NSPS CAI; VALVE COMPLETELY CLOSED; +0	
CGW00572	2/20/15 13:54	58.4	41.2	0.2	0.2	-0.2	137	NSPS CAI; VALVE COMPLETELY CLOSED; +0	<1
CGW00572 had a pressure exceedance detected on 2/20/2015 at the adjusted pressure reading. The well was adjusted and re-monitored on the same day and no further exceedance was detected.									
CGW00691	10/6/15 13:38	57.0	42.9	0.0	0.1	6.8	113.0	NO CHANGE; NSPS CAI; +100.0	
CGW00691	10/15/15 8:42	53.6	46.4	0.0	0.0	-20.7	113.9	NO CHANGE; +100.0	9
CGW00691 had a pressure exceedance detected on 10/6/2015. The well was adjusted and was re-monitored on 10/15/2015 and no further exceedance was detected.									
CGW00692	10/20/15 13:46	56.6	43.2	0.0	0.2	3.5	107.0	NO CHANGE; NSPS CAI; +100.0	
CGW00692	10/21/15 10:02	56.3	43.7	0.0	0.0	3.1	105.5	+100.0;NO CHANGE;NSPS CAI	
CGW00692	10/23/15 7:44	54.8	45.2	0.0	0.0	-49.9	108.0	+100.0;NO CHANGE	3
CGW00692 had a pressure exceedance detected on 10/20/2015. The well was adjusted and was re-monitored on the same day and on the dates noted above, but the well remained in exceedance. The well was re-monitored on 10/23/2015 and no further exceedance was detected.									



CGW00695	12/2/15 7:54	58.4	41.5	0.0	0.1	0.00	86.0	Comments:"NSPS CAI,,,,,,,,,"	
CGW00695	12/7/15 8:37	53.7	46.3	0.0	0.0	-54.99	107.3	Comments:"NO CHANGE,,,,,,,,,"	5
CGW00695 had a pressure exceedance detected on 12/2/2015. The well was adjusted and re-monitored on 12/7/2015 and no further exceedance was detected.									
CGW00731	10/8/15 11:48	45.6	31.4	3.5	19.5	12.5	106.0	DECREASED VACUUM; NSPS CAI; +032.0	
CGW00731	10/15/15 8:24	55.8	43.9	0.3	0.0	-12.5	84.9	INCREASED VACUUM; +40.0	7
CGW00731 had a pressure exceedance detected on 10/8/2015. The well was adjusted and re-monitored on 10/15/2015, and no further exceedance was detected.									
CGW00737	12/2/15 8:07	58.7	41.1	0.0	0.2	4.40	67.0	Comments:"NSPS CAI,,,,,,,,,"	
CGW00737	12/7/15 8:47	49.6	43.9	0.0	6.5	-38.51	117.2	Comments:"NO CHANGE,,,,,,,,,"	5
CGW00737 had a pressure exceedance detected on 12/2/2015. The well was adjusted and re-monitored on 12/7/2015 and no further exceedance was detected.									
CGW00909	12/28/15 7:59	29.6	22.9	10.6	36.9	11.02	81.6	Comments:"NO CHANGE,NSPS CAI,,,,,,,,,"	15 (as of January 1, 2016)
CGW00909 had a pressure exceedance detected on 12/28/2015. The well remains in exceedance.									
CGW0124S	2/6/15 9:45	3.2	15.8	6.2	74.8	0.0	88.8	<b>Adjusted pressure reading;</b> NSPS CAI; +0.0	
CGW0124S	2/13/15 9:51	5.6	21.1	2.0	71.3	-4.2	78	NO CHANGE; BARELY OPEN; +001.0	7
CGW0124S had a pressure exceedance detected on 2/6/2015 at the adjusted pressure reading. The well was adjusted and re-monitored on 2/13/2015 and no further exceedance was detected.									
CGW0124S	3/9/15 14:45	3.8	18.9	6.6	70.7	0.0	87	<b>Adjusted pressure reading;</b> NSPS CAI; DECREASED VACUUM; VALVE COMPLETELY CLOSED; +000.0	
CGW0124S	3/13/15 9:32	0.9	9.0	11.1	79.0	-1.0	80.4	NSPS CAI; NO CHANGE; 0.000000	4
CGW0124S had a pressure exceedance detected on 3/9/2015 at the adjusted pressure reading. The well was adjusted and re-monitored on 3/13/2015 and no further pressure exceedance was detected.									
CGW06054	2/20/15 13:06	6.6	4.4	18.0	71.0	0.0	75	NSPS CAI; BARELY OPEN; INCREASED VACUUM; +1	
CGW06054	3/2/15 8:23	31.6	23.5	8.7	36.2	-41.8	47	NO CHANGE; NSPS CAI; BARELY OPEN; +000.1	10
CGW06054 had a pressure exceedance detected on 2/20/2015. The well was adjusted and re-monitored on 3/2/2015 and no further exceedance was detected.									
GW000164	5/28/15 10:14	0.5	0.4	20.1	79.0	9.7	75	NO CHANGE; NSPS CAI; +100.0	
GW000164	6/1/15 7:27	57.7	41.8	0.4	0.1	-50.9	119	NO CHANGE; +100.0	4
GW000164 had a pressure exceedance detected on 5/28/2015. The well was adjusted and re-monitored on 6/1/2015 and no further exceedance was detected.									
GW000524	10/26/15 13:44	29.8	28.8	0.8	40.6	3.30	102.0	Comments:"DECREASED VACUUM,VALVE	
GW000524	11/4/15 8:40	38.4	35.2	0.7	25.7	-1.95	90.8	Comments:"NO CHANGE"	9
GW000524 had a pressure exceedance detected on 10/26/2015. The well was adjusted and was re-monitored on 11/4/2015 and no further exceedance was detected.									
GW000592	11/9/15 7:55	54.0	41.2	0.0	4.8	0.00	56.0	Comments:"INCREASED VACUUM,NSPS CAI"	
GW000592	11/17/15 9:32	36.6	34.8	0.0	28.6	-0.30	87.0	Comments:"NO CHANGE"	8
GW000592 had a pressure exceedance detected on 11/9/2015. The well was adjusted and was re-monitored on 11/17/2015 and no further exceedance was detected.									
GW000616	2/6/15 9:16	51.3	38.2	1.7	8.8	2.5	74	NO CHANGE; NSPS CAI; +001.0	
GW000616	2/11/15 8:58	0.8	3.1	19.3	76.8	-48.1	74	NSPS CAI; VALVE COMPLETELY CLOSED; +0	5
GW000616 had pressure exceedance detected on 2/6/2015. The well was adjusted and re-monitored on 2/11/2015 and no further exceedance was detected.									

GW000622	1/30/15 10:09	39.7	36.8	4.9	18.6	1.1	65	NO CHANGE; NSPS CAI; +001.0	
GW000622	2/6/15 8:48	28.4	22.6	10.1	38.9	-2.1	67	NO CHANGE; NSPS CAI; +001.0	7
GW000622 had a pressure exceedance detected on 1/30/2015. The well was adjusted and re-monitored on 2/6/2015 and no further exceedance was detected.									
GW000622	3/13/15 8:44	58.2	41.3	0.0	0.5	1.5	72	NO CHANGE; NSPS CAI; +001.0	
GW000622	3/23/15 14:42	31.5	18.5	9.7	40.3	-58.3	86	NO CHANGE; NSPS CAI; VALVE COMPLETELY CLOSED; +000.0	10
GW000622 had a pressure exceedance detected on 3/13/2015. The well was adjusted and re-monitored on 3/23/2015 and no further exceedance was detected.									
GW000623	1/23/15 12:29	54.6	45.2	0.0	0.2	9.9	73	NO CHANGE; NSPS CAI; +001.0	
GW000623	1/27/15 8:44	35.8	25.6	8.0	30.6	-5.4	59	NO CHANGE; NSPS CAI; BARELY OPEN; BLOCKAGE; +1	4
GW000623 had a pressure exceedance detected on 1/23/2015. The well was adjusted and re-monitored on 1/27/2015 and no further exceedance was detected.									
GW000624	1/23/15 12:26	33.4	23.9	8.5	34.2	16.3	71	NO CHANGE; NSPS CAI; +001.0	
GW000624	1/27/15 9:09	30.4	23.3	9.8	36.5	0.9	60	NSPS CAI; BARELY OPEN; INCREASED VACUUM; +2	
GW000624	1/30/15 8:37	0.4	0.4	20.8	78.4	-1.1	59	NO CHANGE; NSPS CAI; +001.0	7
GW000624 had a pressure exceedance detected on 1/23/2015. The well was adjusted and re-monitored on the dates noted above, but the well remained in exceedance. The well was re-monitored on 1/30/2015 and no further exceedance was detected.									
GW000628	10/12/15 8:28	47.0	36.6	0.0	16.4	0.0	80.0	+005.0;INCREASED VACUUM;NSPS CAI	
GW000628	10/15/15 10:10	23.4	31.5	0.0	45.1	-0.6	102.2	+0.0;NO CHANGE;SURGING IN HEADER	3
GW000628 had a pressure exceedance detected on 10/12/2015. The well was adjusted and re-monitored on 10/15/2015 and no further exceedance was detected.									
GW000667	3/9/15 7:42	52.3	44.6	0.0	3.1	0.0	105	INCREASED VACUUM; NSPS CAI; +005.0	
GW000667	3/9/15 7:42	52.3	44.6	0.0	3.1	-0.7	105	<b>Adjusted pressure reading;</b> INCREASED VACUUM; NSPS CAI; +005.0	<1
GW000667 had a pressure exceedance detected on 3/9/2015. The well was adjusted on the same day and no further exceedance was detected.									
GW000670	5/29/15 9:48	35.6	32.7	0.0	31.7	0.0	106	DECREASED VACUUM; VALVE COMPLETELY CLOSED; NSPS CAI; +000.0	
GW000670	6/1/15 8:09	38.0	31.2	4.5	26.3	-0.1	56	NO CHANGE; +000.0	3
GW000670 had a pressure exceedance detected on 5/29/2015. The well was adjusted and re-monitored on 6/1/2015 and no further exceedance was detected.									
GW000707	12/26/14 11:53	58	41.9	0.0	0.1	8.7	63	NO CHANGE; NSPS CAI; BLOCKAGE; +025.0	
GW000707	12/29/14 13:23	58.5	41.4	0.0	0.1	10.9	64	NO CHANGE; NSPS CAI; VALVE FULLY OPEN; +100	
GW000707	1/2/15 9:08	57.8	42.1	0.0	0.1	9.5	51	NO CHANGE; NSPS CAI; +025.0	
GW000707	1/29/15 10:38	40.5	30.5	5.6	23.4	-26.2	68	NSPS CAI; DECREASED VACUUM; BARELY OPEN; +001.0	34
GW000707 had a pressure exceedance detected on 12/26/2014. The well was adjusted and re-monitored on the dates noted above, but the well remained in exceedance. The well was re-monitored on 1/29/2015 and no further exceedance was detected.									

GW000758	11/23/15 9:37	57.9	42.1	0.0	0.0	2.97	96.4	Comments:"NO CHANGE,NSPS CAI"	
GW000758	12/1/15 8:20	56.4	43.6	0.0	0.0	2.74	78.5	Comments:"NO CHANGE,NSPS CAI,,,,,"	
GW000758	12/7/15 9:42	55.3	44.7	0.0	0.0	2.39	94.6	Comments:"NO CHANGE,NSPS CAI,,,,,"	
GW000758	12/9/15 8:03	55.2	44.8	0.0	0.0	-47.94	72.7	Comments:"NO CHANGE,,,,,"	<b>16</b>
GW000758 had a pressure exceedance detected on 11/23/2015. The well was adjusted and re-monitored on the dates noted above, but the well remained in exceedance. The well was re-monitored on 12/9/2015 and no further exceedance was detected.									
GW000774	5/29/15 10:09	27.6	31.0	0.0	41.4	0.0	112	DECREASED VACUUM; VALVE COMPLETELY CLOSED; NSPS CAI; +000.0	
GW000774	6/1/15 8:03	50	42.7	0.1	7.2	-0.2	64	NO CHANGE; +001.0	<b>3</b>
GW000774 had a pressure exceedance detected on 5/29/2015. The well was adjusted and re-monitored on 6/1/2015 and no further exceedance was detected.									
GW000777	5/29/15 9:22	37.4	34.8	0.0	27.8	0.0	81	DECREASED VACUUM; VALVE COMPLETELY CLOSED; NSPS CAI; +000.0	
GW000777	6/1/15 8:20	46.5	39.4	0.0	14.1	-0.2	62	NO CHANGE; +001.0	<b>3</b>
GW000777 had a pressure exceedance detected on 5/29/2015. The well was adjusted and re-monitored on 6/1/2015 and no further exceedance was detected.									
GW000781	12/24/15 10:02	57.1	39.0	0.9	3.0	0.50	55.0	Comments:"NO CHANGE,WATER IN,,,,,"	
GW000781	12/28/15 8:25	38.7	35.5	2.3	23.5	-6.50	112.6	Comments:"DECREASED VACUUM,,,,,"	<b>4</b>
GW000781 had a pressure exceedance detected on 12/24/2015. The well was adjusted and re-monitored on 12/28/2015 and no further exceedance was detected.									
GW000784	5/29/15 9:55	37.4	35.1	0.0	27.5	0.0	105	DECREASED VACUUM; VALVE COMPLETELY CLOSED; NSPS CAI; +000.0	
GW000784	6/1/15 8:15	38.1	35.4	0.0	26.5	-0.2	88	NO CHANGE; +000.0	<b>3</b>
GW000784 had a pressure exceedance detected on 5/29/2015. The well was adjusted and re-monitored on 6/1/2015 and no further exceedance was detected.									
GW000790	4/6/15 13:56	54.4	45.5	0.0	0.1	0.0	125	NO CHANGE; BARELY OPEN; NSPS CAI; +000.1	
GW000790	4/14/15 15:45	56.4	43.5	0.0	0.1	-0.3	128	NO CHANGE; BARELY OPEN; +001.0	<b>8</b>
GW000790 had a pressure exceedance detected on 4/6/2015. The well was adjusted and re-monitored on 4/14/2015 and no further exceedance was detected.									
GW000802	1/27/15 9:38	57.8	42.1	0	0.1	7.4	76	NO CHANGE; NSPS CAI; +020.0	
GW000802	1/30/15 9:14	58.5	41.4	0	0.1	-41.7	80	NO CHANGE; +100.0	<b>3</b>
GW000802 had a pressure exceedance detected on 1/27/2015. The well was adjusted and re-monitored on 1/30/2015 and no further exceedance was detected.									
GW000803	11/21/14 13:35	59.0	40.9	0.0	0.1	4.9	119	NO CHANGE; NSPS CAI; +035.0	
GW000803	11/25/14 9:20	58.7	40.8	0.3	0.2	5.0	115	NO CHANGE; NSPS CAI; +040.0	
GW000803	11/28/14 10:03	58.5	41.4	0.0	0.1	6.2	111	NO CHANGE; NSPS CAI; BLOCKAGE; +040.0	
GW000803	12/11/14 12:46	59.0	40.9	0.0	0.1	9.6	115	NO CHANGE; NSPS CAI; +100.0	
GW000803	12/15/14 9:37	65.7	34.2	0.0	0.1	11.7	60	NO CHANGE; NSPS CAI; +100.0	
GW000803	12/26/14 13:01	58.7	41.2	0.0	0.1	11.6	115	NO CHANGE; +100.0	
GW000803	12/29/14 13:15	59.4	40.5	0.0	0.1	16.7	67	NO CHANGE; NSPS CAI; VALVE FULLY OPEN; +100.0	<b>64</b>
GW000803 had a pressure exceedance detected on 11/21/2014. The well was re-monitored on the dates noted above, but the well remained in exceedance. The well was decommissioned in January 2015, refer to Appendix G for further details.									

GW000810	1/27/15 9:34	56.9	43	0	0.1	1.4	63	NSPS CAI; VALVE COMPLETELY CLOSED; +000.0	
GW000810	1/30/15 10:02	48	39.8	0	12.2	-3.4	78	NO CHANGE; +020.0	3
GW000810 had a pressure exceedance detected on 1/27/2015. The well was adjusted and re-monitored on 1/30/2015 and no further exceedance was detected.									
GW000811	9/25/15 13:20	58.4	41.5	0.0	0.1	9.4	109.0	NO CHANGE; NSPS CAI; +100.0	
GW000811	10/1/15 9:26	57.1	42.9	0.0	0.0	11.5	80.6	NO CHANGE; NSPS CAI; +100.0	
GW000811	10/15/15 7:50	56.5	43.4	0.0	0.1	4.4	83.0	NO CHANGE; BARELY OPEN; BLOCKAGE; NSPS CAI; +001.0	
GW000811	10/21/15 11:31	56.7	43.3	0.0	0.0	0.9	84.0	+100.0;NSPS CAI;VALVE FULLY OPEN	
GW000811	10/23/15 8:38	58.6	41.2	0.1	0.1	11.7	80.9	+0.0;NO CHANGE;NSPS CAI	
GW000811	10/28/15 14:06	54.5	41.1	0.8	3.6	-43.5	98.4	Comments:"INCREASED VACUUM,,,,,,"	34
GW000811 had a pressure exceedance detected on 9/25/2015. The well was adjusted and re-monitored on the dates noted above, but the well remained in exceedance. The well was re-monitored on 10/28/2015 and no further exceedance was detected.									
GW000812	9/25/15 13:26	58.0	41.9	0.0	0.1	4.1	111.0	NO CHANGE; NSPS CAI; +100.0	
GW000812	10/1/15 9:23	57.9	42.1	0.0	0.0	8.9	84.5	NO CHANGE; NSPS CAI; +100.0	
GW000812	10/15/15 7:43	57.5	42.4	0.0	0.1	2.4	77.0	NO CHANGE; VALVE FULLY OPEN; BLOCKAGE; NSPS CAI; +100.0	
GW000812	10/21/15 11:38	57.9	41.3	0.0	0.8	-6.5	95.6	+100.0;NO CHANGE;VALVE FULLY OPEN	26
GW000812 had a pressure exceedance detected on 9/25/2015. The well was adjusted and re-monitored on the dates noted above, but the well remained in exceedance. The well was re-monitored on 10/21/2015 and no further exceedance was detected.									
GW000815	11/25/15 10:18	55.1	41.2	0.0	3.7	0.30	66.0	Comments:"NO CHANGE,BLOCKAGE,WATER IN,NSPS CAI"	
GW000815	12/1/15 8:48	48.1	44.2	0.1	7.6	-2.79	111.5	Comments:"INCREASED VACUUM,SURGING IN	6
GW000815 had a pressure exceedance detected on 11/25/2015. The well was adjusted and re-monitored on 12/1/2015 and no further exceedance was detected.									
GW000816	1/13/15 9:06	53.6	46.3	0.0	0.1	0.5	75	NO CHANGE; NSPS CAI; +100.0	
GW000816	1/16/15 10:10	46.8	53.1	0.0	0.1	2.1	73	NO CHANGE; NSPS CAI; +100.0	
GW000816	1/23/15 8:21	42.2	57.7	0.0	0.1	-18.2	114	NO CHANGE; +070.0	17
GW000816 had a pressure exceedance detected on 1/13/2015. The well was adjusted and re-monitored on 1/16/2015, but the well remained in exceedance. The well was adjusted and re-monitored on 1/23/2015 and no further exceedance was detected.									
GW006003	11/6/14 9:49	51.3	42.6	0.0	6.1	13.4	79	NO CHANGE; NSPS CAI; BLOCKAGE; +045.0	
GW006003	11/7/14 9:45	59.2	40.7	0.0	0.1	4.9	93	NO CHANGE; NSPS CAI; +045.0	
GW006003	11/14/14 9:13	61.4	38.5	0.0	0.1	13.6	67	NO CHANGE; NSPS CAI; +050.0	
GW006003	11/21/14 8:55	62.8	37.1	0.0	0.1	13.9	64	NO CHANGE; NSPS CAI; +100.0	
GW006003	11/28/14 9:38	70.8	29.1	0.0	0.1	15.5	85	NSPS CAI; NO CHANGE; BLOCKAGE; +100.0	
GW006003	12/11/14 9:27	57.5	42.4	0.0	0.1	17.2	58	NO CHANGE; NSPS CAI; +100.0	
GW006003	12/11/14 9:27	57.5	42.4	0.0	0.1	17.2	58	<b>Adjusted pressure reading;</b> NO CHANGE; NSPS CAI; +100.0	
GW006003	12/26/14 11:47	64.6	35.3	0.0	0.1	18.4	64	NO CHANGE; NSPS CAI; VALVE FULLY OPEN; BLOCKAGE; +100.0	

GW006003	3/5/15 14:20	39.9	25.1	6.8	28.2	-29.9	77	NO CHANGE; NSPS CAI; BARELY OPEN; +000.1	118
GW006003 had a pressure exceedance detected on 11/6/2014. The well was adjusted and re-monitored on the dates noted above, but the well remains in exceedance. The well was not monitored in January and February 2015, as it was inaccessible. The well was re-monitored on 3/5/2015 and no further exceedance was detected.									
GW007001	12/21/15 14:02	52.0	47.9	0.0	0.1	0.00	126.0	Comments:"NO CHANGE,NSPS CAI,,,,,"	
GW007001	12/28/15 8:32	51.9	48.1	0.0	0.0	-0.44	57.7	Comments:"INCREASED VACUUM,,,,,"	7
GW007001 had a pressure exceedance detected on 12/21/2015. The well was adjusted and was re-monitored on 12/28/2015, and no further exceedance was detected.									
GW007009	2/11/15 9:20	51.4	46.7	0.0	1.9	0.0	76	NSPS CAI; INCREASED VACUUM; +005.0	
GW007009	2/11/15 9:20	51.4	46.7	0.0	1.9	-0.2	76	<b>Adjusted pressure reading;</b> NSPS CAI; INCREASED VACUUM; +005.0	<1
GW007009 had a pressure exceedance detected on 2/11/2015. The well was adjusted and re-monitored on the same day and no further exceedance was detected.									
GW007009	4/6/15 10:23	49.0	42.4	0.0	8.6	0.0	84	INCREASED VACUUM; NSPS CAI; +007.0	
GW007009	4/14/15 15:38	42.7	38.2	0.1	19.0	-0.2	101	NO CHANGE; +015.0	8
GW007009 had a pressure exceedance detected on 4/6/2015. The well was adjusted and re-monitored on 4/14/2015 and no further exceedance was detected.									
GW007020	3/9/15 14:22	52.0	44.0	0.0	4.0	0.0	111	INCREASED VACUUM; NSPS CAI; +015.0	
GW007020	3/9/15 14:22	52.0	44.0	0.0	4.0	-0.3	111	<b>Adjusted pressure reading;</b> INCREASED VACUUM; NSPS CAI; +015.0	<1
GW007020 had a pressure exceedance detected on 3/9/2015. The well was adjusted on the same day and no further exceedance was detected.									
GW007034	3/9/15 12:58	44.3	36.0	0.0	19.7	0.0	80	NSPS CAI; +000.0	
GW007034	3/9/15 12:58	44.3	36.0	0.0	19.7	-0.1	80	<b>Adjusted pressure reading;</b> NSPS CAI; +000.0	<1
GW007034 had a pressure exceedance detected on 3/9/2015. The well was adjusted on the same day and no further exceedance was detected.									

GEM 5000 used for wells with temperature readings to the tenths, all other readings obtained by GEM 2000.

NSPS= New Source Performance Standards

CAI= Corrective action initiated

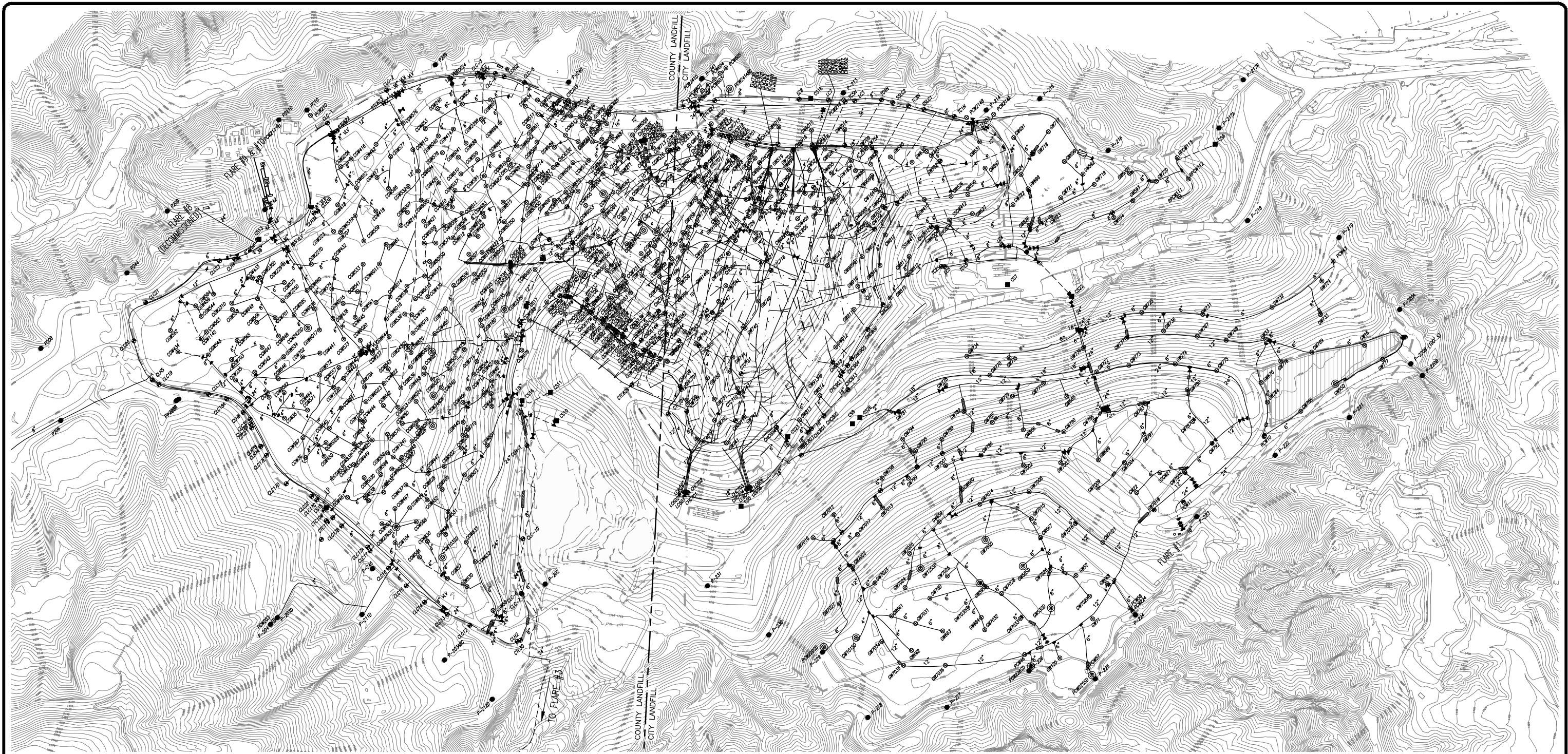
Comments in **bold** added by Cornerstone

***ATTACHMENT A***

**AS-BUILT AND TOPOGRAPHIC MAPS**

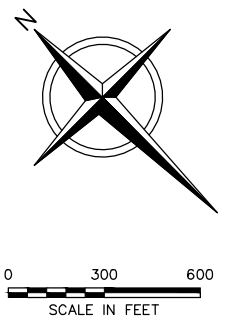
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File: X:\PROJECTS\SUNSHINE CANYON\REF\GIS\GIS\_2015\_GCCS-2.dwg Layout: SHIT 1 User: russell.williams Feb 25, 2016 - 2:01 pm



**LEGEND**

- |  |   |  |   |
|--|---|--|---|
|  | APPROXIMATE SAGE AREA LIMITS              |  | EXISTING HEADER ACCESS RISER                  |
|  | APPROXIMATE COUNTY LINE                   |  | EXISTING COUNTY LINER COLLECTOR WELLHEAD      |
|  | APPROXIMATE LIMITS OF LINER               |  | EXISTING COUNTY HORIZONTAL COLLECTOR WELLHEAD |
|  | APPROXIMATE LIMITS OF UNLINED WASTE       |  | EXISTING DEWATERING WELL                      |
|  | EXISTING 10' CONTOUR                      |  | EXISTING COUNTY TRENCH COLLECTOR WELLHEAD     |
|  | EXISTING LFG HEADER - ABOVEGROUND         |  | EXISTING CITY LINER COLLECTOR WELLHEAD        |
|  | EXISTING LFG HEADER - BELOWGROUND         |  | EXISTING CITY TRENCH COLLECTOR WELLHEAD       |
|  | EXISTING HORIZONTAL COLLECTOR             |  | EXISTING CONTROL VALVE                        |
|  | EXISTING LFG EXTRACTION WELL              |  | EXISTING BLIND FLANGE                         |
|  | EXISTING LFG EXTRACTION WELL WITH PUMP    |  | EXISTING FLANGE CONNECTION                    |
|  | EXISTING DUAL CASING WELL                 |  | EXISTING REDUCER FITTING                      |
|  | EXISTING DUAL CASING WELL WITH PUMP       |  | EXISTING CONDENSATE DRIPLEG                   |
|  | EXISTING PROBE CONTROL COLLECTOR WELLHEAD |  | EXISTING CONDENSATE PUMP STATION              |
|  | EXISTING REMOTE WELLHEAD                  |  | EXISTING GAS MONITORING PROBE                 |
|  |   |  | EXISTING LEACHATE CLEANOUT RISER              |



**NOTES:**

1. THE TOPOGRAPHIC BASE MAP WAS PROVIDED BY REPUBLIC SERVICES, INC. ON APRIL 2, 2015. SUPPLEMENTAL SURVEYS PREPARED BY PINNACLE LAND SURVEYING, INC.: DATED JULY 2, JULY 31, SEPTEMBER 2, OCTOBER 2, OCTOBER 31, NOVEMBER 2, NOVEMBER 9, DECEMBER 1, 2015, AND FEBRUARY 1, 2016.
2. THE GCCS AS-BUILT WAS PROVIDED BY BAS, DATED DECEMBER 23, 2014 AND INCLUDES SUPPLEMENTAL AS-BUILT INFORMATION PROVIDED BY PINNACLE LAND SURVEYING, INC. IN GCCS AS-BUILT FILE DATED JANUARY 31, SEPTEMBER 8, OCTOBER 1, 2015, JANUARY 22, AND FEBRUARY 22, 2016.

**DRAFT-AS BUILT**

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
DATE OF ISSUE	2/25/2016	DRAWN BY RAW	CHECKED BY PJS	DESIGNED BY CGCK	APPROVED BY MED	

**cornerstone environmental**

PREPARED BY:  
CORNERSTONE ENVIRONMENTAL GROUP, LLC

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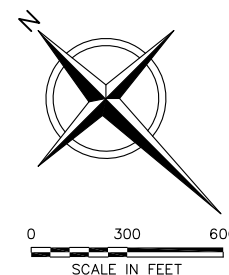
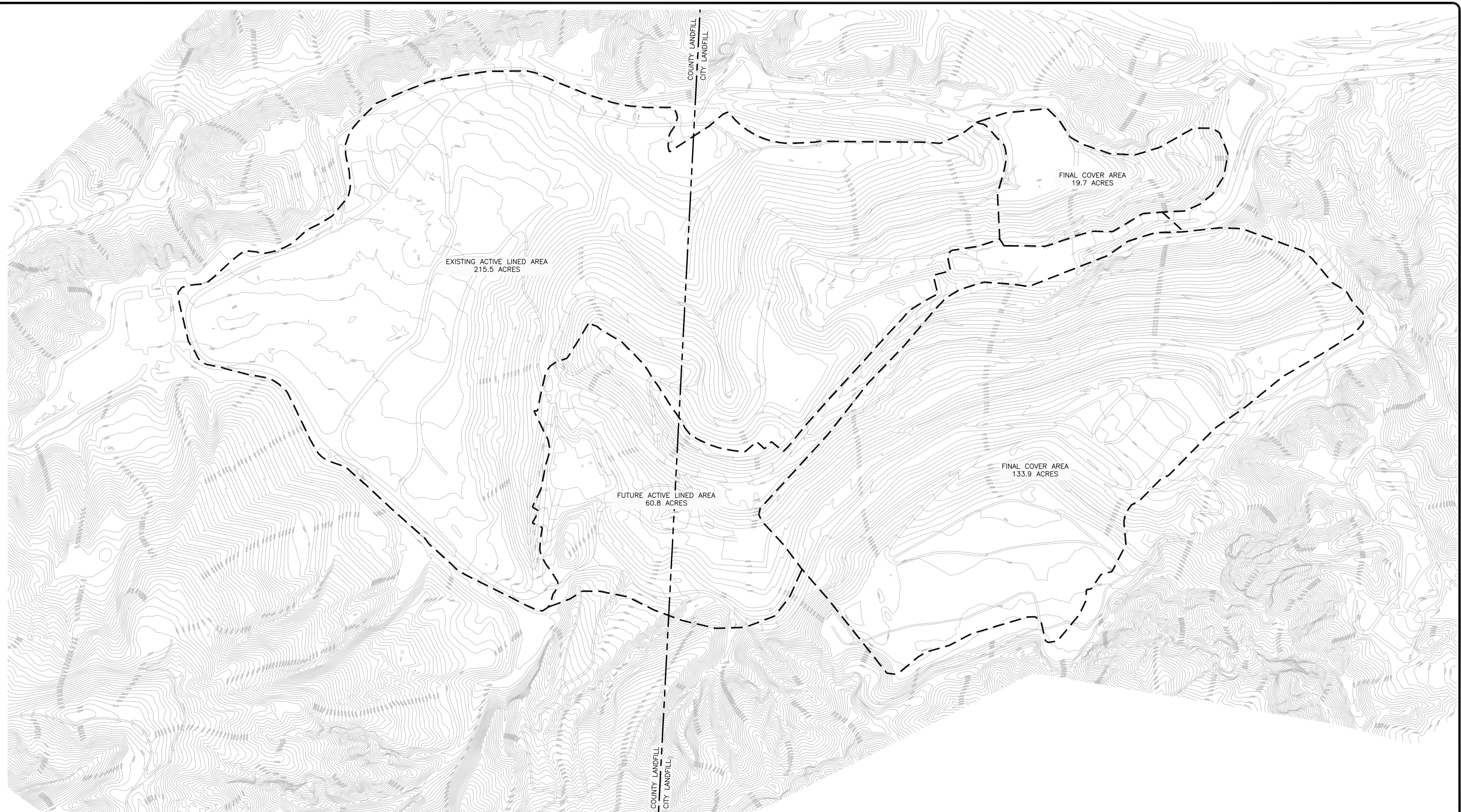
SUNSHINE CANYON LANDFILL  
LOS ANGELES COUNTY, CALIFORNIA

**GCCS AS-BUILT SITE PLAN**

SHEET NO.  
**1**

PROJECT NO.  
160240

1" 1/2" 0" 1" File: K:\PROJECTS\SUNSHINE CANYON COMPLIANCE\As-Built\2015 As-Built.dwg Layout: TDD User: Christian.Kolomonak Feb 27, 2015 - 11:02am



TOTAL EXISTING WASTE FOOTPRINT:	369.1 ACRES
TOTAL APPROVED PLUS CLOSED FOOTPRINT:	429.9 ACRES
TOTAL AREA WITH FINAL COVER - NO GEOMEMBRANE:	153.6 ACRES
PERCENTAGE WITH FINAL COVER:	
-OF EXISTING WASTE FOOTPRINT	42%
-OF APPROVED PLUS CLOSED FOOTPRINT	36%

**NOTE:**  
 1. THE COMPILED TOPOGRAPHIC MAP WAS PROVIDED BY REPUBLIC SERVICES, INC. ON APRIL 9, 2014.

**DRAFT**

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
DATE OF ISSUE	2/27/2015	DRAWN BY CGCK	CHECKED BY PJS	DESIGNED BY CGCK	APPROVED BY MED	

**cornerstone**  
 environmental

PREPARED BY:  
 CORNERSTONE ENVIRONMENTAL GROUP, LLC

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SUNSHINE CANYON LANDFILL  
 LOS ANGELES COUNTY, CALIFORNIA

**TOPOGRAPHIC MAP  
 FINAL COVER AND LINED AREAS**

SHEET NO.  
**1**

PROJECT NO.  
 150060



***ATTACHMENT B***

**2015 WELLFIELD SSM LOG**

---

**CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG**

**AFFECTED EQUIPMENT: Wellfield**

**SUNSHINE CANYON LANDFILL, Sylmar, California**

**SSMP REPORT - From January 1, 2015 through December 31, 2015**

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW006003*	11/6/14 9:49	11/6/14 9:51	0.03	2,860.52 hours	Well disconnected due to excavation, active fill and/or construction activities.	11/6/2014	X	Manual
X							Automatic	
Well ID Number: GW006003*	3/5/15 14:20	3/5/15 14:22	0.03			3/5/2015	X	Manual
X							Automatic	
Well ID Number: GW000620*	12/22/14 12:13	12/22/14 12:15	0.03	1,897.88 hours	Well disconnected due to excavation, active fill and/or construction activities.	12/22/2014	X	Manual
X							Automatic	
Well ID Number: GW000620*	3/11/15 14:06	3/11/15 14:08	0.03			3/11/2015	X	Manual
X							Automatic	
Well ID Number: GW000164*	1/13/15 13:39	1/13/15 13:41	0.03	2,063.97 hours	Well disconnected due to excavation, active fill and/or construction activities.	1/13/2015	X	Manual
X							Automatic	
Well ID Number: GW000164*	4/9/15 13:37	4/9/15 13:39	0.03			4/9/2015	X	Manual
X							Automatic	
Well ID Number: GW000803**	1/23/15	1/23/15	0.03	Vertical well decommissioned; Subject to New Source Performance Standards (NSPS).	1/23/2015	X	Manual	
X						Automatic		
Well ID Number:								Manual
X							Automatic	

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000806**	1/23/15	1/23/15	0.03		Vertical well decommissioned; Subject to NSPS.	1/23/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000726*	1/27/15 9:59	1/27/15 10:01	0.03	8,126.02 hours as of January 1, 2016	Well disconnected due to excavation, active fill and/or construction activities.	1/27/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000727*	1/27/15 10:06	1/27/15 10:08	0.03	8,125.90 hours as of January 1, 2016	Well disconnected due to excavation, active fill and/or construction activities.	1/27/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CHC00901	1/27/15 13:08	1/27/15 13:10	0.03		Horizontal Collector Decommissioned; Not Subject to NSPS.	1/27/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CHC00902	1/29/15 11:00	1/29/15 11:02	0.03		Horizontal Collector Decommissioned; Not Subject to NSPS.	1/29/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CHC00903	2/25/15 12:43	2/25/15 12:45	0.03		Horizontal collector Started-up; Not subject to New Source Performance Standards (NSPS).	2/25/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CHC00904	2/25/15 12:56	2/25/15 12:58	0.03		Horizontal collector Started-up; Not subject to NSPS.	2/25/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CHC00905	2/25/15 13:05	2/25/15 13:07	0.03		Horizontal collector Started-up; Not subject to NSPS.	2/25/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CHC00906	2/25/15 13:16	2/25/15 13:18	0.03		Horizontal collector Started-up; Not subject to NSPS.	2/25/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CHC00907	2/25/15 13:24	2/25/15 13:26	0.03		Horizontal collector Started-up; Not subject to NSPS.	2/25/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CTC00738*	2/26/15 11:30	2/26/15 11:32	0.03		Trench Collector Decommissioned; Not subject to New Source Performance Standards (NSPS).	2/26/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000805*	3/6/13 12:30	3/6/13 12:32	0.03		Vertical well decommissioned; subject to New Source Performance Standards (NSPS).	3/6/2013	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW006002*	3/6/13 13:20	3/6/13 13:22	0.03		Vertical well decommissioned; subject to NSPS.	3/6/2013	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000620*	3/11/15 14:06	3/11/15 14:08	0.03	7,089.90 hours as of January 1, 2016	Well disconnected due to excavation, active fill and/or construction activities.	3/11/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000901*	4/28/15 7:23	4/28/15 7:25	0.03		Vertical well started-up; Subject to new source performance standards (NSPS).	4/28/2015	X	Manual
X							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)			
Well ID Number: GW000747*	4/29/15 9:10	4/29/15 9:12	0.03	5,711.18 hours	Well disconnected due to excavation, active fill and/or construction activities.	4/29/2015	X	Manual		
X							Automatic			
Well ID Number: GW000747*	12/23/15 8:21	12/23/15 8:23	0.03			12/23/2015	X	Manual		
X							Automatic			
Well ID Number: GW000749*	5/28/15 8:19	5/28/15 8:21	0.03	1,150.97 hours	Well disconnected due to excavation, active fill and/or construction activities.	5/28/2015	X	Manual		
X							Automatic			
Well ID Number:	7/15/15 7:17	7/15/15 7:19	0.03			7/15/2015	X	Manual		
							Automatic			
Well ID Number: CHC00806*	5/28/15 8:22	5/28/15 8:24	0.03	1,151.72 hours	Well disconnected due to excavation, active fill and/or construction activities.	5/28/2015	X	Manual		
X							Automatic			
Well ID Number:	7/15/15 8:05	7/15/15 8:07	0.03			7/15/2015	X	Manual		
							Automatic			
Well ID Number: GW000744*	5/28/15 8:28	5/28/15 8:30	0.03	1,151.07 hours	Well disconnected due to excavation, active fill and/or construction activities.	5/28/2015	X	Manual		
X							Automatic			
Well ID Number:	7/15/15 7:32	7/15/15 7:34	0.03			7/15/2015	X	Manual		
							Automatic			
Well ID Number: GW000750*	5/28/15 8:32	5/28/15 8:34	0.03		Well disconnected due to excavation, active fill and/or construction activities.	5/28/2015	X	Manual		
X							Automatic			
Well ID Number:										Manual

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000742*	6/1/15 7:03	6/1/15 7:05	0.03	1,056.92 hours	Well disconnected due to excavation, active fill and/or construction activities.	6/1/2015	X	Manual
X							Automatic	
Well ID Number: GW000742*	7/15/15 7:58	7/15/15 8:00	0.03			7/15/2015	X	Manual
X							Automatic	
Well ID Number: CGW0603R*	6/2/15 13:24	6/2/15 13:26	0.03	Vertical well started-up; Subject to new source performance standards (NSPS).	6/2/2015	X	Manual	
X						Automatic		
Well ID Number:								Manual
Well ID Number: CGW0516R*	6/2/15 13:55	6/2/15 13:57	0.03	Vertical well started-up; Subject to NSPS.	6/2/2015	X	Manual	
X						Automatic		
Well ID Number:								Manual
Well ID Number: CGW0711R*	6/2/15 14:10	6/2/15 14:12	0.03	Vertical well started-up; Subject to NSPS.	6/2/2015	X	Manual	
X						Automatic		
Well ID Number:								Manual
Well ID Number: CGW0124S*	6/3/15 14:30	6/3/15 14:32	0.03	Vertical well decommissioned; Subject to NSPS.	6/3/2015	X	Manual	
X						Automatic		
Well ID Number:								Manual

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000519*	6/9/15 8:57	6/9/15 8:59	0.03	1,537.05 hours	Well disconnected due to excavation, active fill and/or construction activities.	6/9/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000519*	8/12/15 10:00	8/12/15 10:02	0.03			8/12/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000521*	6/9/15 8:46	6/9/15 8:48	0.03	1,540.08 hours	Well disconnected due to excavation, active fill and/or construction activities.	6/9/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000521*	8/12/15 12:51	8/12/15 12:53	0.03			8/12/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000902*	6/12/15 10:44	6/12/15 10:46	0.03	Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual	
X Startup Event							Automatic	
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000903*	6/12/15 10:57	6/12/15 10:59	0.03	Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual	
X Startup Event							Automatic	
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Malfunction Event								
Well ID Number: CGW00902*	6/12/15 12:47	6/12/15 12:49	0.03	Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual	
X Startup Event							Automatic	
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Malfunction Event								



Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CGW00904*	6/12/15 13:11	6/12/15 13:13	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number: CGW00905*	6/12/15 13:16	6/12/15 13:18	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number: CGW00906*	6/12/15 13:20	6/12/15 13:22	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number: GW000907*	6/12/15 14:02	6/12/15 14:04	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number: GW000908*	6/12/15 14:11	6/12/15 14:13	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X Startup Event								Automatic
Shutdown Event								
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Shutdown Event								
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CGW00907*	6/12/15 14:36	6/12/15 14:38	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X							Startup Event	
							Shutdown Event	
								Automatic
								Manual
								Automatic
Well ID Number:								Manual
								Automatic
Well ID Number: CGW00908*	6/12/15 14:42	6/12/15 14:44	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X							Startup Event	
							Shutdown Event	
								Automatic
								Manual
								Automatic
Well ID Number:								Manual
								Automatic
Well ID Number: CGW00909*	6/12/15 14:46	6/12/15 14:48	0.03		Vertical well started-up; Subject to NSPS.	6/12/2015	X	Manual
X							Startup Event	
							Shutdown Event	
								Automatic
								Manual
								Automatic
Well ID Number:								Manual
								Automatic
Well ID Number: GW00164R*	7/1/15 11:04	7/1/15 11:06	0.03		Vertical well started-up; Subject to NSPS.	7/1/2015	X	Manual
X							Startup Event	
							Shutdown Event	
								Automatic
								Manual
								Automatic
Well ID Number:								Manual
								Automatic
Well ID Number: CGW0541R*	7/1/15 12:50	7/1/15 12:52	0.03		Vertical well started-up; Subject to new source performance standards (NSPS).	7/1/2015	X	Manual
X							Startup Event	
							Shutdown Event	
								Automatic
								Manual
								Automatic
Well ID Number:								Manual
								Automatic

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CHC00601*	7/9/15 10:20	7/9/15 10:22	0.03	2,184.73 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/9/2015	X	Manual
X							Automatic	
Well ID Number: CHC00601	10/8/15 11:04	10/8/15 11:06	0.03			10/8/2015	X	Manual
X							Automatic	
Well ID Number: GW000723*	7/13/15 12:57	7/13/15 12:59	0.03	1,775.82 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/13/2015	X	Manual
X							Automatic	
Well ID Number: GW000723*	9/25/15 12:46	9/25/15 12:48	0.03			9/25/2015	X	Manual
X							Automatic	
Well ID Number: GW000628*	7/13/15 13:01	7/13/15 13:03	0.03	1,775.80 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/13/2015	X	Manual
X							Automatic	
Well ID Number: GW000628*	9/25/15 12:49	9/25/15 12:51	0.03			9/25/2015	X	Manual
X							Automatic	
Well ID Number: GW000593*	7/13/15 13:12	7/13/15 13:14	0.03	1,771.15 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/13/2015	X	Manual
X							Automatic	
Well ID Number: GW000593*	9/25/15 8:21	9/25/15 8:23	0.03			9/25/2015	X	Manual
X							Automatic	
Well ID Number: GW000594*	7/13/15 13:17	7/13/15 13:19	0.03	1,771.15 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/13/2015	X	Manual
X							Automatic	
Well ID Number: GW000594*	9/25/15 8:26	9/25/15 8:28	0.03			9/25/2015	X	Manual
X							Automatic	

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000913*	7/14/15 7:45	7/14/15 7:47	0.03		Vertical well started-up; Subject to NSPS.	7/14/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000912*	7/14/15 7:51	7/14/15 7:53	0.03		Vertical well started-up; Subject to NSPS.	7/14/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000911*	7/14/15 7:56	7/14/15 7:58	0.03		Vertical well started-up; Subject to NSPS.	7/14/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000910*	7/14/15 8:01	7/14/15 8:03	0.03		Vertical well started-up; Subject to NSPS.	7/14/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW00164R*	7/16/15 8:38	7/16/15 8:40	0.03	2,449.07 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/16/2015	X	Manual
							Automatic	
Well ID Number: GW00164R	10/26/15 9:42	10/26/15 9:44	0.03			10/26/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)			
Well ID Number: GW000616*	7/16/15 11:33	7/16/15 11:35	0.03		Vertical well decommissioned; Subject to NSPS.	7/16/2015	X	Manual		
X							Automatic			
Well ID Number:									Manual	
								Automatic		
Well ID Number: GW00909*	7/17/15 12:50	7/17/15 12:52	0.03		Vertical well started-up; Subject to NSPS.	7/17/2015	X	Manual		
X							Automatic			
Well ID Number:									Manual	
								Automatic		
Well ID Number: CHC0605W**	7/21/15 9:52	7/21/15 9:54	0.03	1,055.42 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/21/2015	X	Manual		
X							Automatic			
Well ID Number: CHC0605W**	9/3/15 9:17	9/3/15 9:19	0.03					9/3/2015	X	Manual
X									Automatic	
Well ID Number: TC00002S**	7/28/15 14:10	7/28/15 14:12	0.03	1,535.57 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/28/2015	X	Manual		
X							Automatic			
Well ID Number: TC00002S**	9/30/15 13:44	9/30/15 13:46	0.03					9/30/2015	X	Manual
X									Automatic	
Well ID Number: LC000005**	7/29/15 8:36	7/29/15 8:38	0.03	1,396.90 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/29/2015	X	Manual		
X							Automatic			
Well ID Number: LC000005**	9/25/15 13:30	9/25/15 13:32	0.03					9/25/2015	X	Manual
X									Automatic	

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000812**	7/29/15 8:40	7/29/15 8:42	0.03	1,396.77 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/29/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000812**	9/25/15 13:26	9/25/15 13:28	0.03			9/25/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000811**	7/29/15 8:46	7/29/15 8:48	0.03	1,396.57 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/29/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000811**	9/25/15 13:20	9/25/15 13:22	0.03			9/25/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: SSGW0411**	7/29/15 8:53	7/29/15 8:55	0.03	1,009.58 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/29/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: SSGW0411**	9/9/15 10:28	9/9/15 10:30	0.03			9/9/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000551*	7/29/15 10:31	7/29/15 10:33	0.03	1,370.78 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/29/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000551*	9/24/15 13:18	9/24/15 13:20	0.03			9/24/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000816**	7/29/15 10:40	7/29/15 10:42	0.03	1,371.15 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/29/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000816**	9/24/15 13:49	9/24/15 13:51	0.03			9/24/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000815**	7/29/15 12:28	7/29/15 12:30	0.03	1,005.63 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/29/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000815**	9/9/15 10:06	9/9/15 10:08	0.03			9/9/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000817**	7/31/15 13:29	7/31/15 13:31	0.03	1,320.17 hours	Well disconnected due to excavation, active fill and/or construction activities.	7/31/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000817**	9/24/15 13:39	9/24/15 13:41	0.03			9/24/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000904*	8/6/15 11:24	8/6/15 11:26	0.03	Vertical well started up. Subject to NSPS.	8/6/2015	X	Manual	
X Startup Event							Automatic	
Malfunction Event								
Well ID Number:								Manual
Startup Event								Automatic
Malfunction Event								
Well ID Number: CHC00806*	8/12/15 14:00	8/12/15 14:02	0.03	2,468.05 hours	Well disconnected due to excavation, active fill and/or construction activities.	8/12/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CHC00806*	11/23/15 10:03	11/23/15 10:05	0.03			11/23/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000745*	8/12/15 14:00	8/12/15 14:02	0.03	3,186.52 hours	Well disconnected due to excavation, active fill and/or construction activities.	8/12/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: GW000745*	12/23/15 8:31	12/23/15 8:33	0.03			12/23/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)			
Well ID Number: GW000746*	8/12/15 14:00	8/12/15 14:02	0.03	3,186.90 hours	Well disconnected due to excavation, active fill and/or construction activities.	8/12/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										
Well ID Number: GW000746*	12/23/15 8:54	12/23/15 8:56	0.03			12/23/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										
Well ID Number: GW000748*	8/12/15 14:00	8/12/15 14:02	0.03	3,394.00 hours as of January 1, 2016	Well disconnected due to excavation, active fill and/or construction activities.	8/12/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										
Well ID Number:										Manual
Startup Event										Automatic
Shutdown Event										
Malfunction Event										
Well ID Number: CGW00581*	8/24/15 15:00	8/24/15 15:02	0.03		Vertical well decommissioned; Subject to NSPS.	8/24/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										
Well ID Number:										Manual
Startup Event										Automatic
Shutdown Event										
Malfunction Event										
Well ID Number: CHC00704*	9/9/15 10:57	9/9/15 10:59	0.03	1,534.85 hours	Well disconnected due to excavation, active fill and/or construction activities.	9/9/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										
Well ID Number: CHC00704*	11/12/15 9:48	11/12/15 9:50	0.03			11/12/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										
Well ID Number: GW000915*	9/10/15 7:28	9/10/15 7:30	0.03	1,493.98 hours	Well unable to be monitored due to liquids.	9/10/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										
Well ID Number: GW000915*	11/11/15 13:27	11/11/15 13:29	0.03			11/11/2015	X	Manual		
X Startup Event								Automatic		
Malfunction Event										



Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CGW00903*	9/14/15 12:12	9/14/15 12:14	0.03	1,219.78 hours	Well unable to be monitored due to liquids.	9/14/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CGW00903*	11/4/15 7:59	11/4/15 8:01	0.03			11/4/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CHC00611*	9/14/15 13:59	9/14/15 14:01	0.03	1,219.88 hours	Well unable to be monitored due to liquids.	9/14/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CHC00611*	11/4/15 9:52	11/4/15 9:54	0.03			11/4/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CGW00585*	9/18/15 13:43	9/18/15 13:45	0.03	1,073.48 hours	Well unable to be monitored due to liquids.	9/18/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CGW00585*	11/2/15 7:12	11/2/15 7:14	0.03			11/2/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CHC00911*	9/24/15 13:42	9/24/15 13:44	0.03	Horizontal well start-up. Not subject to NSPS.	9/24/2015	X	Manual	
X Startup Event							Automatic	
Malfunction Event								
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CHC00913*	9/24/15 13:57	9/24/15 13:59	0.03	1,487.35 hours	Well unable to be monitored due to liquids.	9/24/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								
Well ID Number: CHC00913*	11/25/15 13:18	11/25/15 13:20	0.03			11/25/2015	X	Manual
X Startup Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CHC00915*	9/24/15 14:17	9/24/15 14:19	0.03		Horizontal well start-up. Not subject to NSPS.	9/24/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CHC00916*	9/24/15 14:22	9/24/15 14:24	0.03		Horizontal well start-up. Not subject to NSPS.	9/24/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CHC00917*	9/24/15 14:29	9/24/15 14:31	0.03		Horizontal well start-up. Not subject to NSPS.	9/24/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CHC00918*	9/24/15 14:33	9/24/15 14:35	0.03		Horizontal well start-up. Not subject to NSPS.	9/24/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: LC000901*	9/24/15 15:03	9/24/15 15:05	0.03		Liner collector start-up. Not subject to NSPS.	9/24/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: LC000902*	9/24/15 15:08	9/24/15 15:10	0.03		Liner collector start-up. Not subject to NSPS.	9/24/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CGW00915*	10/9/15 9:28	10/9/15 9:30	0.03		Vertical well started up.	10/9/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: CGW00916*	10/9/15 9:35	10/9/15 9:37	0.03		Vertical well started up.	10/9/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000923*	10/9/15 13:01	10/9/15 13:03	0.03		Vertical well started up.	10/9/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								
Well ID Number: GW000922*	10/9/15 13:05	10/9/15 13:07	0.03		Vertical well started up.	10/9/2015	X	Manual
							Automatic	
Well ID Number:								
Startup Event								Manual
Shutdown Event								Automatic
Malfunction Event								

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000921*	10/9/15 13:10	10/9/15 13:12	0.03		Vertical well started up.	10/9/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: GW000919*	10/13/15 9:27	10/13/15 9:29	0.03		Vertical well started up.	10/13/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: GW000920*	10/13/15 9:31	10/13/15 9:33	0.03		Vertical well started up.	10/13/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: GW000918*	10/13/15 10:24	10/13/15 10:26	0.03		Vertical well started up.	10/13/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CHC00912*	10/14/15 13:01	10/14/15 13:03	0.03		Horizontal well started up.	10/14/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CGW0515R*	10/20/15 7:48	10/20/15 7:50	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW00913*	10/20/15 7:59	10/20/15 8:01	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW00912*	10/20/15 8:05	10/20/15 8:07	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW0510R*	10/20/15 8:10	10/20/15 8:12	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW00911*	10/20/15 8:17	10/20/15 8:19	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: CGW00910*	10/20/15 8:22	10/20/15 8:24	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW0691R*	10/20/15 8:31	10/20/15 8:33	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW0581R*	10/20/15 8:41	10/20/15 8:43	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW0422R*	10/20/15 8:48	10/20/15 8:50	0.03		Vertical well started up.	10/20/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic
Well ID Number: CGW00914*	10/23/15 7:33	10/23/15 7:35	0.03		Vertical well started up.	10/23/2015	X	Manual
X							Startup Event	
							Shutdown Event	
							Malfunction Event	
Well ID Number:								Manual
								Automatic

Identify Well & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Date Form Completed	(7) Type of Event (Startup and Shutdown Events Only)	
Well ID Number: GW000916*	10/26/15 8:14	10/26/15 8:16	0.03	1,058.35 hours	Well disconnected due to excavation, active fill and/or construction activities.	10/26/2015	X	Manual
X							Automatic	
Well ID Number: GW000916*	12/9/15 10:35	12/9/15 10:37	0.03			12/9/2015	X	Manual
X							Automatic	
Well ID Number: GW000154*	10/27/15 10:30	10/27/15 10:32	0.03		Vertical well was decommissioned.	10/27/2015	X	Manual
X							Automatic	
Well ID Number:								Manual
							Automatic	
Well ID Number: GW00163R*	11/25/15 8:41	11/25/15 8:43	0.03	879.32 hours as of January 1, 2016	Well disconnected due to excavation, active fill and/or construction activities.	11/25/2015	X	Manual
X							Automatic	
Well ID Number:								Manual
							Automatic	
Well ID Number: GW000696*	11/25/15 8:49	11/25/15 8:51	0.03	879.18 hours as of January 1, 2016	Well disconnected due to excavation, active fill and/or construction activities.	11/25/2015	X	Manual
X							Automatic	
Well ID Number:								Manual
							Automatic	

***ATTACHMENT C***

**GCCS DOWNTIME LOG**

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**Emission Control Devices  
Gas Collection and Control System (GCCS) Downtime Summary**

Sunshine Canyon Landfill, Sylmar, CA GCCS DOWNTIME REPORT Period January 1 through December 31, 2015				
SHUTDOWN DATE/TIME	START-UP DATE/TIME	TOTAL DOWNTIME (hours)	COMMENTS OR REASONS	ACTION TAKEN
There was no GCCS Downtime during the reporting period.				

<b><u>Combined Emission Control Devices</u></b> 2015 TOTAL DOWNTIME (HOURS): <b>0.00</b>
---

GCCS Downtime is when all emission control devices are not operating. Per direction from SCL personnel, no GCCS downtime is accrued unless Cornerstone is notified by SCL technicians that all onsite combustion devices (Flares 1, 3, 8, 9 and 10 and internal combustion [IC] engines Sunshine Gas Producers [SGP]) emission control devices are not operating.

***ATTACHMENT D***

**LFG GENERATION FLOW RATE CALCULATIONS**

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### Data Input: Lanfill Characteristics

Landfill Name: <input type="text" value="Sunshine Canyon L"/>	Year Opened: <input type="text" value="1958"/>	<a href="#">Click for lists of k values</a>
State/Country: <input type="text" value="CA"/>	If Closed, Year: <input type="text"/>	k Value: <input type="text" value="0.030"/>
City/County: <input type="text" value="Sylmar, LA County"/>	M Value: <input type="text"/>	

### Data Input: Waste Deposit History

Year	Waste			Daily Cover			
	Waste Deposited			Greenwaste & Compost		Sludge	
	Tons	% ANDOC		Tons	% ANDOC	Tons	% ANDOC
1900							
1901							
1902							
1903							
1904							
1905							
1906							
1907							
1908							
1909							
1910							
1911							
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1950							
1951							

### Data Input: Lanfill Characteristics

Landfill Name: <input type="text" value="Sunshine Canyon L"/>	Year Opened: <input type="text" value="1958"/>	<a href="#">Click for lists of k values</a>
State/Country: <input type="text" value="CA"/>	If Closed, Year: <input type="text"/>	k Value: <input type="text" value="0.030"/>
City/County: <input type="text" value="Sylmar, LA County"/>	M Value: <input type="text"/>	

### Data Input: Waste Deposit History

Year	Waste		Daily Cover			
	Waste Deposited		Greenwaste & Compost		Sludge	
	Tons	% ANDOC	Tons	% ANDOC	Tons	% ANDOC
1952						
1953						
1954						
1955						
1956						
1957						
1958	93,000	10.45%				
1959	100,000	10.45%				
1960	110,000	10.45%				
1961	121,000	10.45%				
1962	133,000	10.45%				
1963	146,000	10.45%				
1964	161,000	10.45%				
1965	177,000	10.44%				
1966	195,000	10.44%				
1967	215,000	10.44%				
1968	237,000	10.44%				
1969	261,000	10.44%				
1970	287,000	10.44%				
1971	316,000	10.44%				
1972	348,000	10.44%				
1973	383,000	10.44%				
1974	421,000	10.44%				
1975	463,000	10.34%				
1976	509,000	10.34%				
1977	560,000	10.34%				
1978	616,000	10.34%				
1979	678,000	10.34%				
1980	746,000	10.34%				
1981	821,000	10.34%				
1982	903,000	10.34%				
1983	2,000,000	10.34%				
1984	2,000,000	10.34%				
1985	2,000,000	11.02%				
1986	2,000,000	11.02%				
1987	2,000,000	11.02%				
1988	2,000,000	11.02%				
1989	2,000,000	11.02%				
1990	1,000,000	11.02%				
1991	1,000,000	11.02%				
1992		11.02%				
1993		11.62%				
1994		11.62%				
1995		11.62%				
1996	225,882	8.42%				
1997	886,141	8.42%				
1998	1,107,415	8.42%				
1999	1,042,980	8.42%				
2000	1,485,832	8.42%				
2001	1,651,272	8.42%				
2002	1,863,679	8.42%				
2003	1,904,803	7.45%				

### Data Input: Lanfill Characteristics

Landfill Name:	<input type="text" value="Sunshine Canyon L"/>	Year Opened:	<input type="text" value="1958"/>	<a href="#">Click for lists of k values</a>
State/Country:	<input type="text" value="CA"/>	If Closed, Year:	<input type="text"/>	k Value: <input type="text" value="0.030"/>
City/County:	<input type="text" value="Sylmar, LA County"/>	M Value:		

### Data Input: Waste Deposit History

Year	Waste			Daily Cover			
	Waste Deposited			Greenwaste & Compost		Sludge	
	Tons	% ANDOC		Tons	% ANDOC	Tons	% ANDOC
2004	1,766,600	7.45%					
2005	2,128,198	7.45%					
2006	2,206,477	7.45%					
2007	3,038,813	7.52%					
2008	1,918,155	7.52%					
2009	2,514,712	7.52%					
2010	2,618,256	7.52%					
2011	2,531,244	7.52%					
2012	2,296,920	7.52%					
2013	2,349,694	7.52%					
2014	2,374,838	7.52%					
2015							
2016							
2017							
2018							
2019							
2020							
2021							

## Model Output: Lanfill Characteristics

**Landfill Name:** Sunshine Canyon

**Year Opened:** 1958

**State:** CA

**If Closed, Year:**

**k Value:** 0.030

**City/County:** Sylmar, LA County

**M Value:** 6

## Model Output: Methane and Carbon Dioxide Emissions (metric tonnes of CO<sub>2</sub> equivalent)

Year	CH <sub>4</sub>	CO <sub>2</sub>								
			0	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000
1900			1900							
1901			1901							
1902			1902							
1903			1903							
1904			1904							
1905			1905							
1906			1906							
1907			1907							
1908			1908							
1909			1909							
1910			1910							
1911			1911							
1912			1912							
1913			1913							
1914			1914							
1915			1915							
1916			1916							
1917			1917							
1918			1918							
1919			1919							
1920			1920							
1921			1921							
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1943			1943							
1944			1944							
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1948			1948							
1949			1949							
1950			1950							
1951			1951							

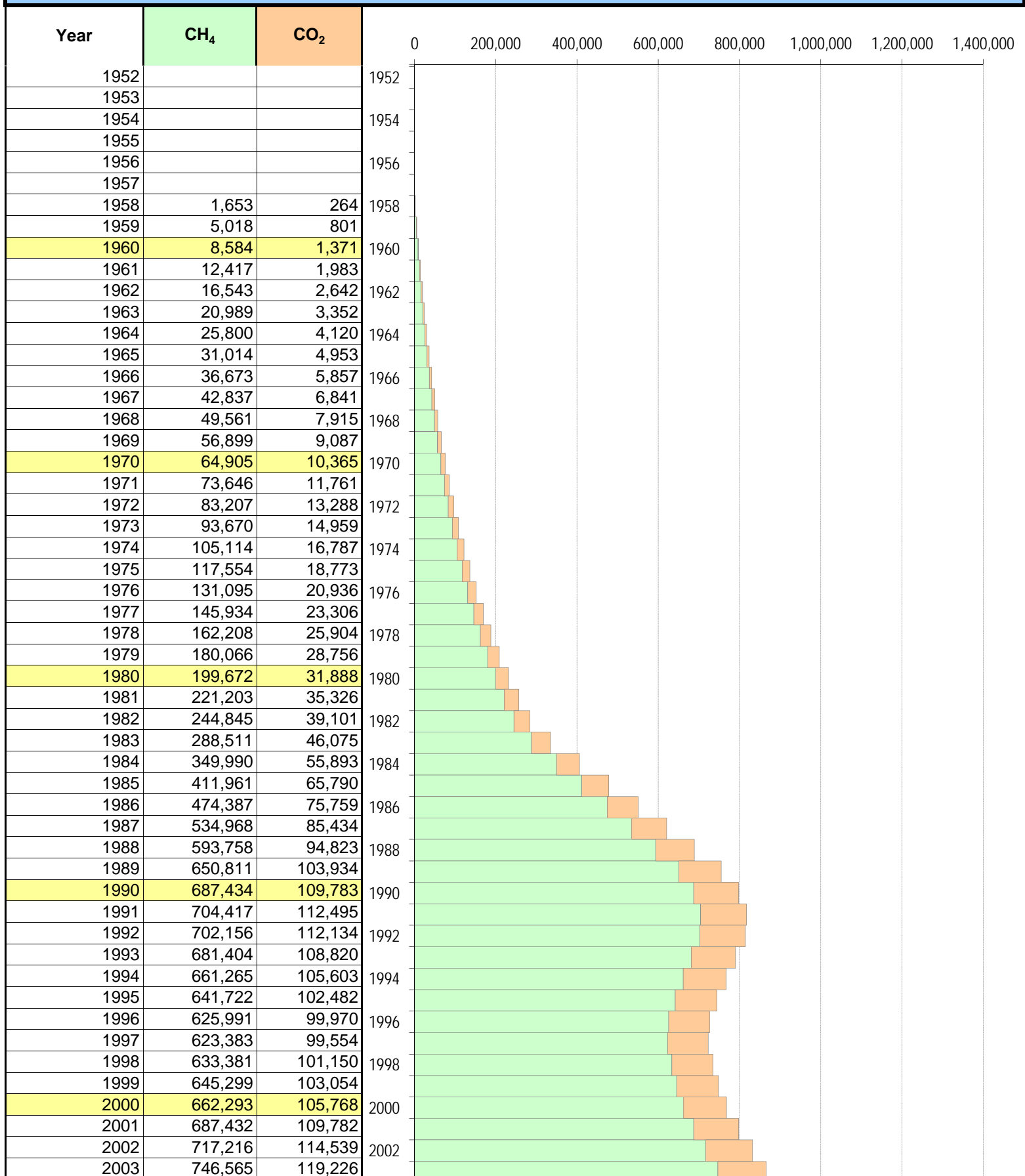
## Model Output: Landfill Characteristics

**Landfill Name:** Sunshine Canyon  
**State:** CA  
**City/County:** Sylmar, LA County

**Year Opened:** 1958  
**If Closed, Year:**

**k Value:** 0.030  
**M Value:** 6

## Model Output: Methane and Carbon Dioxide Emissions (metric tonnes of CO<sub>2</sub> equivalent)



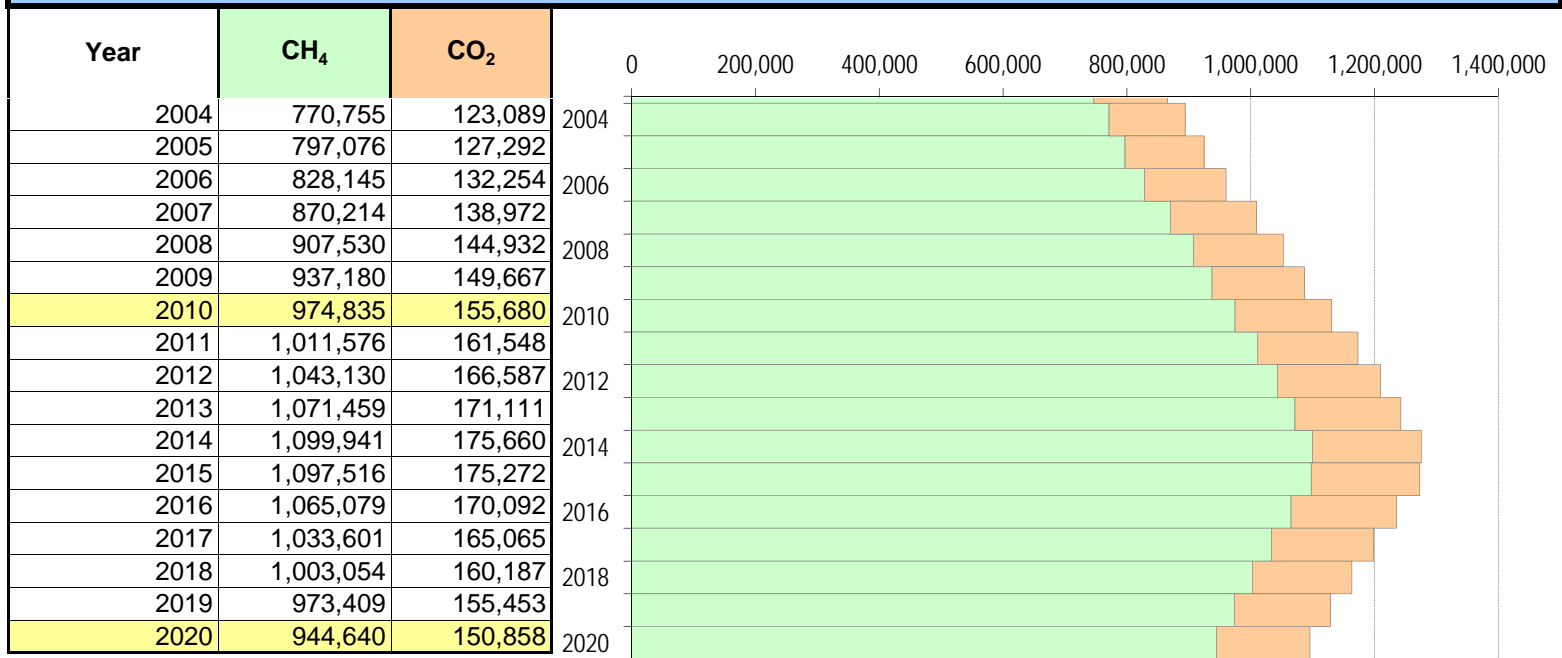
### Model Output: Lanfill Characteristics

**Landfill Name:** Sunshine Canyon  
**State:** CA  
**City/County:** Sylmar, LA County

**Year Opened:** 1958  
**If Closed, Year:**

**k Value:** 0.030  
**M Value:** 6

### Model Output: Methane and Carbon Dioxide Emissions (metric tonnes of CO<sub>2</sub> equivalent)





## Model Output: Landfill Characteristics

**Landfill Name:** Sunshine Canyon

**Year Opened:** 1958

**State:** CA

**If Closed, Year:**

**k Value:** 0.030

**City/County:** Sylmar, LA County

**M Value:** 6

## Model Output: Landfill Gas Captured and Captured Gas Heat (graph values in MMbtu/hr)

Year	Landfill Gas Captured (scf/min)	Captured Gas Heat (MMbtu/hr)	
1900			0.0      50.0      100.0      150.0      200.0      250.0      300.0
1901			
1902			
1903			
1904			
1905			
1906			
1907			
1908			
1909			
1910			
1911			
1912			
1913			
1914			
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1950			
1951			

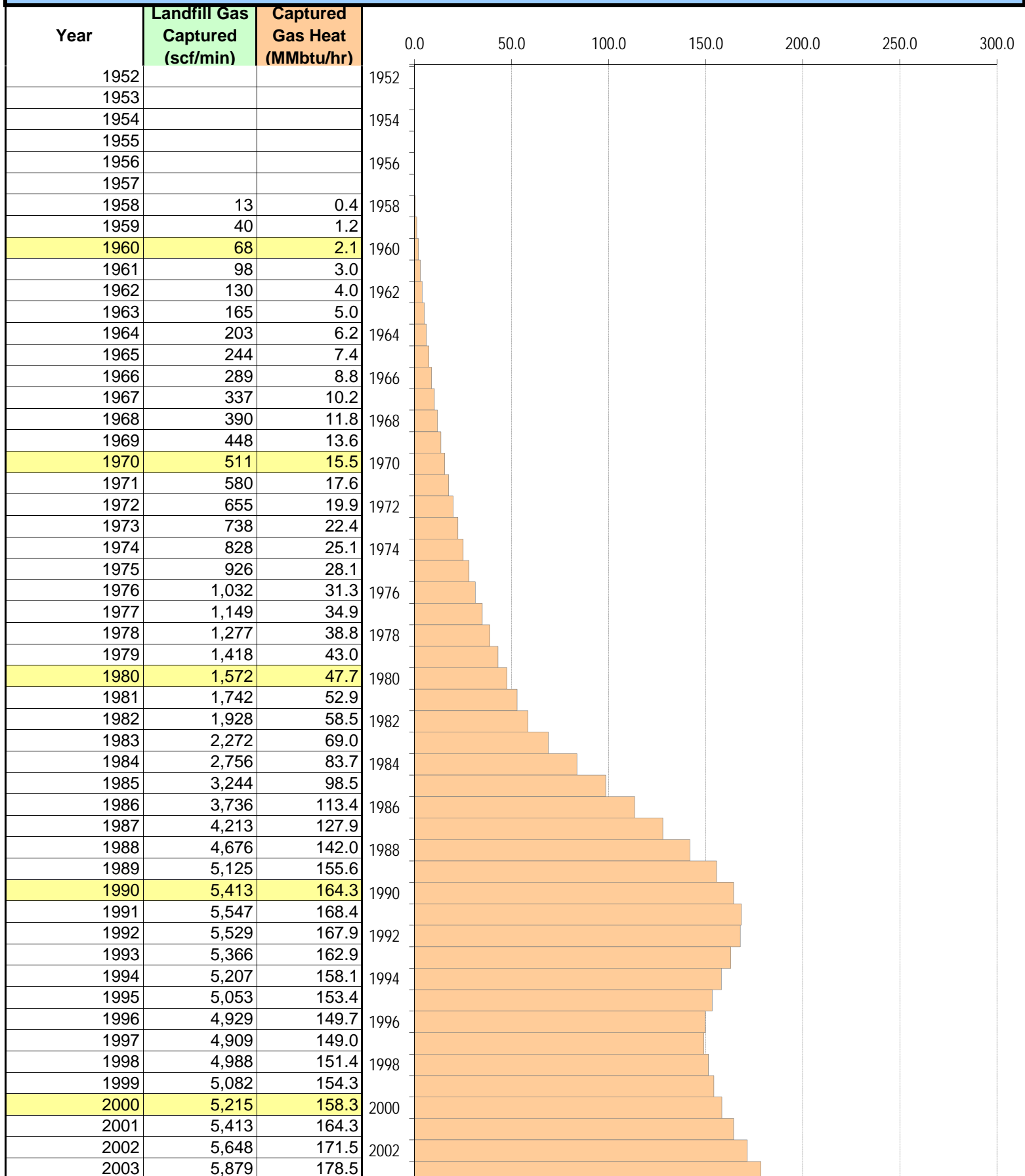
### Model Output: Lanfill Characteristics

**Landfill Name:** Sunshine Canyon  
**State:** CA  
**City/County:** Sylmar, LA County

**Year Opened:** 1958  
**If Closed, Year:**

**k Value:** 0.030  
**M Value:** 6

### Model Output: Landfill Gas Captured and Captured Gas Heat (graph values in MMbtu/hr)



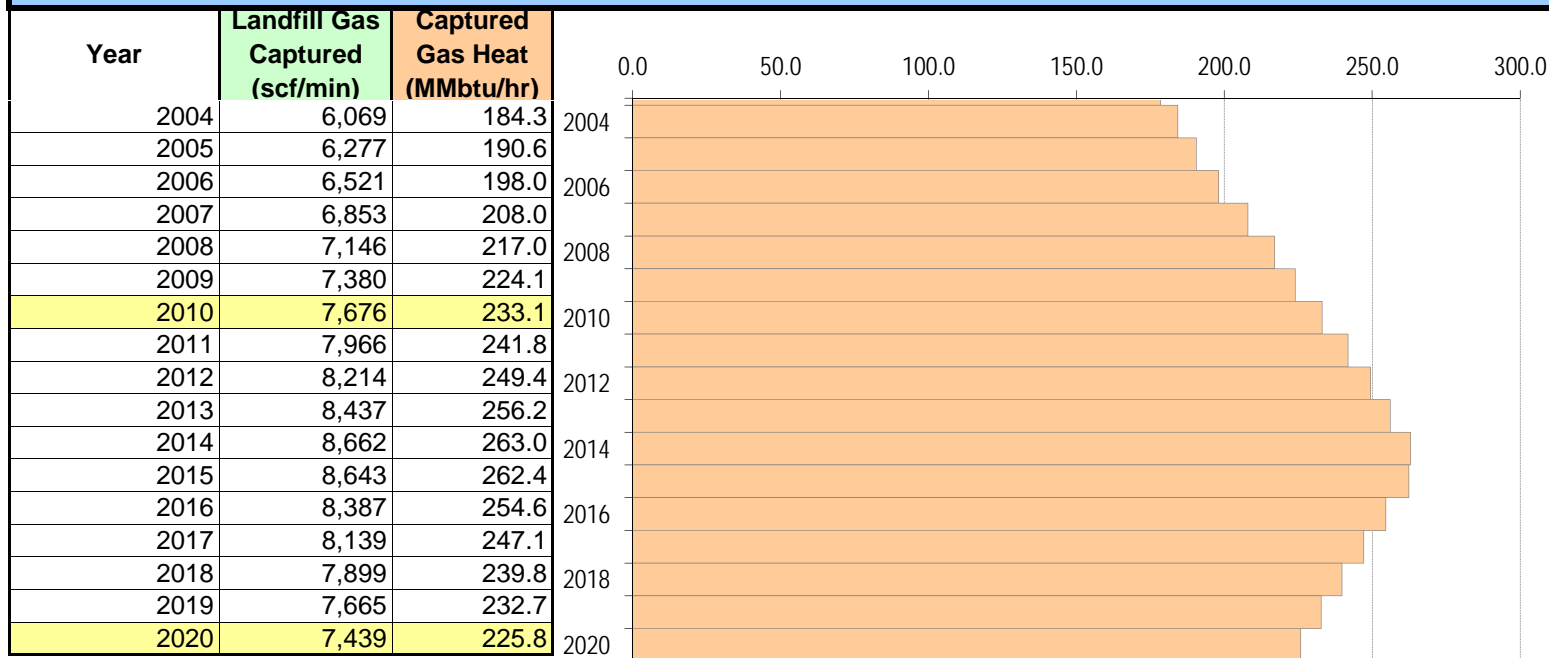
### Model Output: Landfill Characteristics

**Landfill Name:** Sunshine Canyon  
**State:** CA  
**City/County:** Sylmar, LA County

**Year Opened:** 1958  
**If Closed, Year:**

**k Value:** 0.030  
**M Value:** 6

### Model Output: Landfill Gas Captured and Captured Gas Heat (graph values in MMbtu/hr)



***ATTACHMENT E***

**1150.1 QUARTERLY MONITORING REPORT COVERS**

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# SUNSHINE CANYON LANDFILL

May 13, 2015

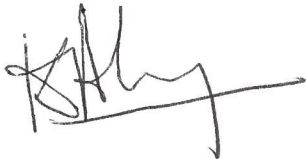
Mr. Ed Pupka  
South Coast Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, CA 91765-4182

Re: Sunshine Canyon City/County Landfill, Facility ID# 049111  
Rule 1150.1 First Quarter 2015 Quarterly Monitoring Report, and Rule  
431.1 Sulfur Monitoring Data

Dear Mr. Pupka,

Attached please find the Rule 1150.1 and Rule 431.1 Quarterly Monitoring Reports for the First Quarter of 2015 for Sunshine Canyon Landfill. Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Achaya Kelapanda', with a long horizontal stroke extending to the right.

Achaya Kelapanda  
Environmental Manager

Attachment: Sunshine Canyon City/County Landfill, Rule 1150.1 and Rule 431.1  
Quarterly Monitoring Report, First Quarter, 2015

# SUNSHINE CANYON LANDFILL

August 13, 2015

Mr. Ed Pupka  
South Coast Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, CA 91765-4182

Re: Sunshine Canyon City/County Landfill, Facility ID# 049111  
Rule 1150.1 Second Quarter 2015 Quarterly Monitoring Report, and Rule  
431.1 Sulfur Monitoring Data

Dear Mr. Pupka,

Attached please find the Rule 1150.1 and Rule 431.1 Quarterly Monitoring Reports for the Second Quarter of 2015 for Sunshine Canyon Landfill. Please do not hesitate to contact me if you have any questions.

Sincerely,



Achaya Kelapanda  
Environmental Manager

Attachment: Sunshine Canyon City/County Landfill, Rule 1150.1 and Rule 431.1  
Quarterly Monitoring Report, Second Quarter, 2015

# SUNSHINE CANYON LANDFILL

November 12, 2015

Mr. Ed Pupka  
South Coast Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, CA 91765-4182

Re: Sunshine Canyon City/County Landfill, Facility ID# 049111  
Rule 1150.1 Third Quarter 2015 Quarterly Monitoring Report  
Rule 431.1 Sulfur Monitoring Data

Dear Mr. Pupka,

Attached please find the Rule 1150.1 and Rule 431.1 Quarterly Monitoring Reports for the Third Quarter of 2015 for Sunshine Canyon Landfill. Please do not hesitate to contact me if you have any questions.

Sincerely,



Patti K. Costa, P.E.  
Environmental Manager

Attachment: Sunshine Canyon City/County Landfill, Rule 1150.1 and Rule 431.1  
Quarterly Monitoring Report, Third Quarter, 2015

# SUNSHINE CANYON LANDFILL

February 9, 2016

Mr. Ed Pupka  
South Coast Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, CA 91765-4182

Re: Sunshine Canyon City/County Landfill, Facility ID# 049111  
Rule 1150.1 Fourth Quarter 2015 Quarterly Monitoring Report  
Rule 431.1 Sulfur Monitoring Data

Dear Mr. Pupka,

Attached please find the Rule 1150.1 and Rule 431.1 Quarterly Monitoring Reports for the Fourth Quarter of 2015 for Sunshine Canyon Landfill. Please do not hesitate to contact me if you have any questions.

Sincerely,



Matthew D. Eaton  
Environmental Manager

Attachment: Sunshine Canyon City/County Landfill, Rule 1150.1 and Rule 431.1  
Quarterly Monitoring Report, Fourth Quarter, 2015