2 COMBINED MONITORING REPORT

In accordance with Title V Permit Standard Condition 1.F, BAAQMD Rule 8-34-411 and §60.757(f) in the NSPS, this report is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report that is required to be submitted by Vasco Road. The report contains monitoring data for the operation of the landfill gas collection and control system (GCCS). The operational records have been reviewed and summarized. The timeframe included in this report is February 1, 2012 through July 31, 2012. The following table lists the rules and regulations that are required to be included in this Combined Report.

Table 2-1 Combined Report Requirements

RULE	REQUIREMENT	LOCATION IN REPORT
8-34-501.1 §60.757(f)(4)	All collection system downtime, including individual well shutdown times and the reason for the shutdown.	Section 2.1, Appendices C & D
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown.	Section 2.2, Appendix D
8-34-501.3, 8-34-507, §60.757(f)(1)	Continuous temperature for all operating flares and any enclosed combustor subject to Section 8-34-507.	Section 2.3, Appendix E
8-34-501.4, 8-34-505, 8-34-510	Testing performed to satisfy any of the requirements of this rule.	Section 2.4 & 2.10 Appendices F & J
8-34-501.5	Monthly landfill gas flow (LFG) rates and well concentration readings for facilities subject to 8-34-404.	Section 2.5, 2.11 Appendix K
8-34-501.6, 8-34-503, 8-34-506, §60.757(f)(5)	For operations subject to Section 8-34-503 and 8-34-506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in parts per million by volume (ppmv), date of discovery, the action taken to repair the leak, date of the repair, date of any required re-monitoring, and the re-monitored concentration in ppmv.	Section 2.6 & 2.7, Appendices G & H
8-34-501.7	Annual waste acceptance rate and current amount of waste in-place.	Section 2.8
8-34-501.8	Records of the nature, location, amount, and date of deposition of non-degradable wastes, for any landfill areas excluded from the collection system requirement as documented in the GCCS Design Plan.	Section 2.9

RULE	REQUIREMENT	LOCATION IN REPORT
8-34-501.9, 8-34-505, §60.757(f)(1)	For operations subject to Section 8-34-505, records of all monitoring dates and any excesses of the limits stated in Section 8-34-305 that are discovered by the operator, including well identification number, the measured excess, the action taken to repair the excess, and the date of repair.	Section 2.10, 2.10.1, Appendices J & K
8-34-501.10, 8-34-508, §60.757(f)(1)	Continuous gas flow rate records for any site subject to Section 8-34-508.	Section 2.11, Appendices E and L
8-34-501.11, 8-34-509	For operations subject to Section 8-34-509, records or key emission control system operating parameters.	Section 2.2.2
8-34-501.12	The records required above shall be made available and retained for a period of five years.	Section 1.2
§60.757(f)(2)	Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.	Section 2.2.1
§60.757(f)(6)	The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), (c)(4) of §60.755.	Section 2.12, Appendices A & C
§60.10 (d)(5)(i)	Startup, Shutdown, Malfunction Events	Section 4.0, Appendices C & D

2.1 Collection System operation *(BAAQMD 8-34-501.1 & §60.757(f)(4))*

Appendix A contains a current map of Vasco Road's existing GCCS. Section 2.1.1 includes the GCCS downtime for the reporting period. The information contained in Section 2.1.2 includes the wellfield SSM event information.

2.1.1 Collection System Downtime

During the period covered in this report, the GCCS was not shut down for more than five days on any one occasion. The downtime for the reporting period of February 1, 2012 through July 31, 2012 was 14.68 hours. The total downtime for the partial 2012 calendar was 14.68 hours, out of an allowable 240 hours per year.

2.1.2 Well Start-Up & Disconnection Log

There were forty-seven (47) wellfield SSM events that occurred during the reporting period. There were twenty (20) wells started-up and twenty-six (26) wells decommissioned during the reporting period. See Appendix C, Wellfield SSM Log for details of well disconnection and reconnection events. Start-up and Decommissioning Notifications were submitted to the BAAQMD and are included in Appendix B.

2.2 Emission Control Device Downtime *(BAAQMD 8-34-501.2 & §60.757(f)(3))*

The emission control system consists of one flare (A-4), which began operation in June 2009. The control system was not bypassed at any time during the reporting period. Raw LFG was not emitted during the reporting period. The SSM log for the A-4 Flare is located in Appendix D. As indicated in Section 2.1.1, the total GCCS downtime for the reporting period of February 1, 2012 through July 31, 2012 was 14.68 hours out of an allowable 240 hours per year. The GCCS Downtime Log for the reporting period is included in Appendix D.

2.2.1 LFG Bypass Operations *(§60.757(f)(2))*

Title 40 CFR §60.757(f)(2) is not applicable at Vasco Road because a by-pass line has not been installed. LFG cannot be diverted from the control equipment.

2.2.2 Key Emission Control Operating Parameters *(BAAQMD 8-34-501.11 & 8-34-509)*

BAAQMD Regulation 8-34-501.11 and 8-34-509 are not applicable to the A-4 Flare because the A-4 Flare is subject to continuous temperature monitoring as required in BAAQMD Regulation 8-34-507 and §60.757(f)(1).

2.3 Temperature Monitoring Results *(BAAQMD 8-34-501.3, 8-34-507, & §60.757(f)(1))*

The combustion zone temperature of the flare is monitored with Thermo-Electric Thermocouples. The temperature is recorded every twenty seconds with a Yokogawa FX100 digital recorder, and the data is downloaded and archived. There were no temperature deviations during the reporting period. Appendix E contains the Flare Temperature Deviation/ Inoperative Monitor/Missing Data Report for February 1, 2012 through July 31, 2012.

2.4 Monthly Cover Integrity Monitoring *(BAAQMD 8-34-510)*

The cover integrity monitoring was performed on the following dates:

- February 17, 2012
- March 19, 2012
- April 2, 2012
- May 16, 2012
- June 12, 2012
- July 5, 2012

Please refer to the Monthly Cover Integrity Monitoring Logs, which are included in Appendix F.

2.5 Less Than Continuous Operation *(BAAQMD 8-34-501.5)*

Vasco Road does not operate under BAAQMD Regulation 8-34-404 (Less Than Continuous Operation) and, therefore, is not required to submit monthly LFG flow rates.

2.6 Surface Emissions Monitoring (BAAQMD 8-34-501.6, 8-34-506, §60.757(f)(5) & California Air Resources Board Assembly Bill 32 Methane Control Measure (CARB AB-32 LF MCM))

Quarterly Surface Emissions Monitoring (SEM), was conducted for First and Second Quarter 2012. Refer to the First and Second Quarter 2012 SEM Reports, located in Appendix G, for detailed results.

2.7 Component Leak Testing *(BAAQMD 8-34-501.6 & 8-34-503)*

Quarterly component leak testing, pursuant to BAAQMD Regulation 8-34-503, occurred during the reporting period on the following dates:

- First Quarter 2012 – February 9, 15, and 16, 2012
- Second Quarter 2012 – April 10, 19, and 24, 2012

Refer to the Quarterly LFG Component Leak Monitoring Reports, located in Appendix H, for detailed results.

2.8 Waste Acceptance Records *(BAAQMD 8-34-501.7)*

The amount of waste accepted during the reporting period of February 1, 2012 through July 31, 2012 was approximately 233,506.51 tons. The current Waste-In-Place as of July 31, 2012 is approximately 24,113,031 cubic yards.

2.9 Non-degradable waste acceptance records *(BAAQMD 8-34-501.8)*

The GCCS Design Plan for Vasco Road does not indicate non-degradable waste areas that are excluded from the collection system. Therefore, BAAQMD Regulation 8-34-501.8 is not applicable.

2.10 Wellhead Monitoring Data *(BAAQMD 8-34-501.4 & 8-34-505)*

Wellhead monitoring was performed on a monthly basis pursuant to 8-34-505. The well readings for February 1, 2012 through July 31, 2012 are included in Appendix I. Each well was monitored in accordance with the following requirements:

- 8-34-305.1 – Each wellhead shall operate under a vacuum;
- 8-34-305.2 – The LFG temperature in each wellhead shall be less than 55 degrees Celsius (°C) (131 degrees Fahrenheit [°F]); and
- 8-34-305.4 – The oxygen concentration in each wellhead shall be less than 5 percent by volume.

Wellhead monitoring was performed on the following dates:

- February 10, 17, and 21, 2012
- March 9, 12, 15, 19, and 26, 2012
- April 3 and 16, 2012
- May 7, 8, and 16, 2012
- June 8 and 12, 2012
- July 5 and 6, 2012

2.10.1 Wellhead Deviations *(BAAQMD 8-34-501.9 & §60.757(f)(1))*

There were fourteen (14) wells with readings that exceeded the limits set forth in BAAQMD Regulation 8-34-305 during the reporting period. Corrective action for wells was initiated within the required 5-day time period and re-monitoring was completed within 15 days of the deviation pursuant to BAAQMD Regulation 8-34-414. See Appendix J, Wellfield Deviation Log, for more detail.

2.10.2 Higher Operating Value (HOV) Wells

As of July 31, 2012, the following wells are approved to operate at a HOV for temperature and oxygen pursuant to Title V Permit Condition Number 818 Part 3b(i-ii):

Temperature HOV Wells
Pursuant to Title V Permit Condition 818, Part 3(b)(i), the following wells are approved to operate at a temperate HOV of 140°F: EW-9, EW-33A and EW-44. The following decommissioned wells were HOV approved: OEW-HA, OEW-HB, OEW-14, EW-43, EW-45, EW-52, EW-53, EW-54, EW-57 and EW-58.

Oxygen HOV Wells
Pursuant to Title V Permit Condition 818, Part 3(b)(ii), the oxygen concentration limit does not apply to the wells listed below, provided that the oxygen concentration in the LFG at the main header does not exceed five percent oxygen by volume (dry basis) and the methane concentration is greater than 35 percent by volume (dry basis): EW-9, EW-27, EW-31, EW-32A, EW-33A, EW-35, EW-36, EW-36A, EW-38, EW-40, EW-41, EW-42A, HZ-09-02, HZ-09-03, HZ-09-04, HZ-09-05, HZ-09-06, HZ-09-07 and HZ-09-08. The following decommissioned wells were approved for higher oxygen concentration in the LFG: OEW-6, OEW-10, OEW-11, OEW-13, OEW-14, OEW-HA, OEW-HB, EW-15, EW-16, EW-26, EW-29, EW-29A, EW-32, EW-33, EW-43, EW-51, EW-58, HZ-09-02, HZ-09-03, HZ-09-04, HZ-09-05, HZ-09-06, HZ-09-07 and HZ-09-08.

The following wells are approved for both the temperature and oxygen HOV listed above: EW-9 and EW-33A.The following decommissioned wells were approved for both the temperature and oxygen HOV: OEW-HA, OEW-HB, OEW-14, EW-43 and EW-58.

2.11 Gas Flow Monitoring Results *(BAAQMD 8-34-501.10, 8-34-508, & §60.757(f)(1)*

The flare LFG flow rate is measured with a Rosemount Model Number 3051CD0A02A1AB2E5H2L404 flow meter. The General Electric data panel displays the LFG flow and the digital Yokogawa data recorder records LFG flow every twenty seconds and the data is downloaded and saved to a compact flash card. The flare flow meter meets the requirements of BAAQMD Regulation 8-34-508 by recording data at least every 15 minutes. The flow meter is maintained and calibrated pursuant to manufacturer's recommendations. The flow data for the flare is available for review at Vasco Road. Appendix K contains a summary of the monthly LFG flow rates for the flare. No deviations of the flare flow were identified during the monitoring period. Table 2-2 below is a summary of the total LFG flow for the reporting period of February 1, 2012 through July 31, 2012.

Table 2-2 Total LFG Flow for February 1, 2012 through July 31, 2012

Emission Control Device	Average Flow (scfm)	Average CH_4 (%)*	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heat Input (MMBTU)
A-4 Flare	2,014.6	43.7	525,547,711.7	229,712,783.1	232,699.0

scfm = standard cubic feet per minute
CH_4 = methane
scf = standard cubic feet
*Methane content determined from the June 9, 2011 Source Test. Starting June 1, 2012 methane content was determined from the May 31, 2012 Source Test.
MMBTU = million British thermal units

2.12 Compliance with Title V Permit Condition Number 818 Part 12

Pursuant to Title V Permit Condition Number 818, Part 12, quarterly hydrogen sulfide (H_2S) readings were taken using Draeger tubes. The First and Second Quarter 2012 H_2S readings and quarterly averages are included in Appendix N, H_2S Quarterly Monitoring.

2.13 Compliance with §60.757(f)(6)

"The date of installation and the location of each well or collection system expansion added pursuant to (a)(3), (b), (c)(4) of §60.755."

The GCCS was modified pursuant to Title V Permit Number A3294 during the reporting period.

There were 26 wells decommissioned and 20 wells started-up during the reporting period pursuant to Application Number 23493. Well Decommissioning and Startup Notification Letters were submitted to the BAAQMD and are included in Appendix B.

Application Number 23493 still allows for the replacement unlimited vertical wells, installation of up to sixty-four (64) new vertical wells, installation of up to 20 new

horizontal collectors, the decommissioning of up to sixty-nine (69) vertical wells, and the decommissioning of up to three (3) horizontal collectors.

As of August 1, 2012, Vasco Road consists of eighty (80) vertical wells and no horizontal collectors.

2.14 Compliance with Title V Permit Condition Number 7523 for S-7 Non-Retail Gasoline Dispensing Facility G#9551

Vasco Road's gasoline throughput for the period of February 1, 2012 through July 31, 2012 is 1,229.7 gallons. Vasco Road's annual gasoline throughput for the period of August 1, 2011 through July 31, 2012 is 2,616.1 gallons. Appendix O contains monthly throughput records for this reporting period. This is within the limit of 400,000 gal per any consecutive 12-month period pursuant to BAAQMD Toxic Section Policy. Monthly gasoline throughput totals for the reporting period are listed in Table 2-3:

Table 2-3 Gasoline Throughput for S-7

Month	Total Throughput (gallons)	Rolling 12-Month Fuel Usage (gallons)
February 2012	275.1	2,649.5
March 2012	137.5	2,574.4
April 2012	178.6	2,569.1
May 2012	233.0	2,618.8
June 2012	194.1	2,585.0
July 2012	211.4	2,616.1
TOTAL:	1,229.7	

These records are maintained at Vasco Road and can be made available upon request.

4 STARTUP, SHUTDOWN, MALFUNCTION (SSM) PLAN

SSM Log for the GCCS at Vasco Road

The NESHAP contained in 40 CFR Part 63, AAAA for MSW landfills to control hazardous air pollutants include the regulatory requirements for submittal of a semi-annual report (under 40 CFR §63.10(d)(5) of the general provisions) if an SSM event occurred during the reporting period. The reports required by §63.1980(a) of the NESHAP and §60.757(f) of the NSPS summarize the GCCS exceedances. These two semi-annual reports contain similar information and have been combined as allowed by §63.10(d)(5)(i) of the General Provisions.

NESHAP 40 CFR part 63, AAAA became effective on January 16, 2004. Those SSM events that occurred during the NSPS semi-annual reporting period are reported in this section (February 1, 2012 through July 31, 2012). The following information is included as required:

- During the reporting period, eight (8) A-4 Flare SSM events occurred. The A-4 Flare was shut down and restarted during the reporting period due to the reasons noted in Appendix D, Flare SSM Log.
- During the reporting period, 47 Wellfield SSM events occurred. Details are included in Appendix C, Well SSM Log.
- There were 55 events in total. In all 55 events, automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan. There were no deviations from the SSM plan.
- Exceedances were not identified during the reporting period in any applicable emission limitation in the landfills NESHAP (§63.10(d)(5)(i)).
- Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).