2.0 SEMI-ANNUAL REPORT

In accordance with Title V Permit Standard Condition 1.F, BAAQMD Regulation 8-34-411 and 40 CFR §60.757(f) in NSPS, this report is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report that is required to be submitted by the NVWMA. The report contains monitoring data for the operation of the LFG collection and control system (GCCS). The operational records have been reviewed and summarized. The timeframe included in this report is December 1, 2011 through February 6, 2012. The following table lists the rules and regulations that are required to be included in this Combined Report.

Table 2-1 – Semi-Annual Report Requirements

Rule	Requirement	Report Location
8-34-501.1 §60.757(f)(4)	All collection system downtime, including individual well shutdown times and the reason for the shutdown *November 2009 excluded.	Section 2.1, Appendices A & C
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown. *November 2009 excluded.	Sections 2.1.1 & 2.2, Appendices A, B & 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	Testing performed to satisfy any of the requirements of this rule.	Sections 2.4 & 2.10, Appendices F & I
8-34-501.5	Monthly LFG flow rates and well concentration readings for facilities subject to 8-34-404.	Sections 2.5 and 2.11, Appendices K & L
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.	Sections 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 Collection and Control Design Plan.	Section 2.9
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, Appendices I & J
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 K & L
8-34-501.11, 8-34-509	For operations subject to Section 8-34-509, records of 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

Rule	Requirement	Report Location
§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 expension added pursuant to paragraphs (a)(3), (b), (c)(4) of §60.755.	Section 2.12, Site Map, Appendices C & M
§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))

Figure 1 is the site map dated December 2010 of the GCCS at the ACSL. The primary emission control devices for ACSL (Source S-1) are two IC engines owned and operated by Fortistar as Facility Number B1671. The IC engines are Sources S-2 and S-3. During periods when both IC engines are shut down, the NVWMA operates the enclosed A-2 backup flare.

Section 2.1.1 includes all periods when all three abatement devices were shut down simultaneously and the reason for the shutdown. The information contained in Section 2.1.2 includes the individual well shutdown times and the reason for the shutdown

2.1.1 Collection System Downtime

During the period covered in this report, the GCCS was shut down for a period of more than five consecutive days on one (1) occasion. The total downtime for the calendar year 2011 (January 1, 2011 through December 31, 2011) was 282.5 hours out of an allowable 240 hours per year per BAAQMD Regulation 8-34-113 The downtime for the partial year 2012 (January 1, 2012 through February 6, 2012) was 36.2 hours. The GCCS Downtime Logs for 2011 and 2012 are included in Appendix A.

Reports were submitted to the BAAQMD detailing two separate Reportable Compliance Activities (RCAs) related to system downtime. The BAAQMD was notified of system downtime greater than 5 consecutive days on December 7, 2011 and issued RCA No. 06C64 for the event. The required 10-day and 30-day follow-up reports for this RCA were submitted to the BAAQMD on December 16, 2011 and January 6, 2012, respectively. The BAAQMD was notified of yearly system downtime greater than 240 hours on December 30, 2011 and issued RCA No. 06C86 for the event. The required 10-day and 30-day follow-up reports for this RCA were submitted to the BAAQMD on January 11, 2012 and January 27, 2012, respectively. The NVWMA was issued Notice of Violation (NOV) No A50439 by the BAAQMD on February 7, 2012 for failure to maintain continuous operation of the GSSC and failure to submit notification of the shutdown within 96 hours after occurrence. All correspondence submitted to and received from BAAQMD during the report period are provided in Appendix M.

2.1.2 *Well Disconnection Log*

There were no well disconnections during the reporting period for well raising activities pursuant to BAAQMD Regulation 8-31-116 Limited Exemption, Well Raising. Two wells were taken offline for wellhead maintenance pursuant to BAAQMD Regulation 8-34-117 Limited Exemption, Gas Collection System Components on five separate occasions during December 2011. There were no more than five wells disconnected from the GCCS at any one time, and no wells were disconnected from the GCCS for longer than 24 consecutive hours. The well disconnection SSM Report for the current reporting period is included in Appendix C.

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

The primary emission control devices for ACSL Source S-1 are two IC Engines (S-2 and S-3) owned and operated by Fortistar as Facility Number B1671. During periods when both IC engines are shut down, the NVWMA operates the enclosed A-2 backup flare. No bypassing of the control system or emissions of raw LFG occurred during the reporting period. As indicated in Section 2.1.1, the total downtime of the entire control system was 282.5 hours for the 2011 calendar year to date (January 1, 2011 through December 31, 2011). Also indicated in Section 2.1.1, downtime for the partial 2012 reporting period of January 1, 2012 through February 6, 2012 was 36.2 hours. The 2011 GCCS Downtime Log and the partial 2012 GCCS Downtime Log are included in Appendix A. The Engine (S-2 and S-3) Downtime Log is included in Appendix B. The A-2 backup flare SSM report and runtime log are included in Appendix D.

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

40 CFR §60.757(f)(2) is not applicable at the ACSL because no bypass line is 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 Regulations 8-34-501.11 and 8-34-509 are not applicable to the A-2 backup flare because the A-2 backup flare is subject to continuous temperature monitoring as required in BAAQMD Regulation 8-34-507 and 40 CFR §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 backup flare is monitored with a Thermo-Electric Thermocouple. The Yokogawa FX100 Data Acquisition System monitors and digitally records (both in temporary and removable memory) the combustion zone temperature and LFG flow to the flare. By reviewing the Yokogawa data, Golder is able to verify the average combustion zone temperature during periods when the backup flare is in operation, as required by the Title V Permit Condition Number 12418, Part 8.

Effective December 14, 2011, the A-2 flare combustion zone 3-hour average minimum allowable operating temperature is 1,427°F. Pursuant to 40 CFR 60.752 b(2)(iii)(B)(2) in Subpart WWW of the NSPS the minimum combustion zone temperature is the 3-hour average temperature of the flare combustion zone 50°F (28 degrees C) below the average combustion temperature of the most recent performance test performed on December 14,2011 at an average temperature of 1477°F. Flare operating records indicate that the three-hour average combustion zone temperature of the A-2 flare did not drop below the minimum allowable temperature while the flare was in operation from December 1, 2011 through February 6, 2012. The backup flare temperature deviation report for the reporting period is included in Appendix E.

2.4 Monthly Cover Integrity Monitoring (BAAQMD 8-34-501.4)

The monthly cover integrity monitoring reports are included in Appendix F. The cover integrity monitoring was performed on the following dates:

- December 5, 2011
- January 24 and 25, 2012

No breaches of cover integrity (e.g. cover cracks or exposed garbage) were found during the reporting period. Small areas of ponded water were observed during monitoring in January. Follow-up monitoring in these areas a week later revealed no puddles or ponding.

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

The ACSL 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))

Quarterly surface emissions monitoring (SEM), pursuant to BAAQMD Regulation 8-34-506, occurred during the reporting period on the following dates:

- Fourth Quarter 2011, December 7 – 13

A Photovac Micro Flame Ionization Detector was used to monitor the path along the landfill surface according to the Landfill SEM Plan map. Any areas suspected of having emission problems by visible observations were also monitored. Immediately prior to the monitoring event, the Photovac instrument was zeroed and calibrated using zero air and a 500 parts per million (ppm) methane calibration gases. The third quarter 2011 SEM monitoring results are included in Appendix G

No surface methane concentrations greater than 500 ppmv were identified during the fourth quarter monitoring event.

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:

- Fourth Quarter 2011, December 5

A Photovac Micro Flame Ionization Detector was used to perform the leak testing. No component leaks that exceeded the 1,000 ppmv methane limit in BAAQMD Regulation 8-34-301.2 were detected during the fourth quarterly component leak test. Quarterly component leak test reports are included in Appendix H.

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

The ACSL is a closed landfill and does not accept waste. The current waste-in-place figure as reported to the BAAQMD in the Annual Data Update Form through November 30, 2010 is 4.23 million tons.

2.9 Non-Degradable Waste Acceptance Records

The Collection and Control System Design Plan for the ACSL 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 BAAQMD Regulation 8-34-505. The LFG concentration readings at each well for the reporting period of December 1, 2011 through February 6, 2012 are included in Appendix I. Each well was monitored to demonstrate compliance with the following requirements:

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

The wellhead monitoring was performed during this report period on the following dates:

- December 21 and 22, 2011
- January 24, 25, and 27, 2012

Four wellhead deviations were detected. For the wells that deviated from BAAQMD Regulation 8-34-305 limits, corrective action was taken and the wells were re-monitored pursuant to BAAQMD Regulation 8-34-414. The wellhead deviation reports, including the well identification number, date of initial

exceedance. parameter exceeded, duration of exceedance, and corrective actions taken are included in Appendix J.

One well could not be brought into compliance within the 15-day limit established by BAAQMD Regulation 8-34-414 and was added to the 120-day list for repair. This well had additional corrective actions undertaken, was repaired, and was monitored in compliance with BAAMQD operating standards within 120 days of the initial exceedance. The following table lists the wells that exceeded the 15-day limit established by BAAQMD Regulation 8-34-414.

Table 2-2 - Wellhead Deviations

Well ID	Initial Deviation Date	Oxygen (%) >5%	Positive Pressure ("WC)	Temp (°F) >131°F	Duration of Deviation (Days)	Status / Action
L-02	12/21/11	8.4			21	Compliant

"WC = inches of water column

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

The A-2 backup flare gas flow rate is measured with a Fluid Components International (FCI) flow meter. Model ST-98. The Yokogawa FX100 monitors and digitally records the gas flow rates of the flare. The backup flare flow meter meets the requirements of BAAQMD Regulation 8-34-508 by recording at least every 15 minutes.

The monthly LFG flow rates and heat input calculations for the A-2 backup flare are included in Appendix K (BAAQMD Regulation 8-34-501.5). The heat input calculations are based on LFG methane concentrations as measured during the most recent compliant flare source test conducted on the December 14,2011 (40.3 percent methane). The backup flare LFG flow and heat input calculations are summarized on a monthly basis in Appendix L. Table 2-3 displays a summary of the total LFG flow for the reporting period.

Table 2-3 – Total LFG flow for December 1, 2011 through February 6, 2012

Emission Control Device	Total Runtime (hours)	Average Flow (scfm)	Average CH_4 (%)	Total LFG Volume (scf)	Heat Input (MMBtu)
A-2 Flare	768.4	527	42.2/40.3	24,313,378	10,007.6

Scfm = standard cubic feet per minute
CH_4 = methane (as determined during source tests)
MMBtu = million British thermal units

2.12 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."

This section summarizes the changes made to the GCCS, which were permitted by BAAQMD and were implemented during the reporting period. The GCCS was not expanded during this reporting period.

3.0 PERFORMANCE TEST REPORT

In accordance with BAAQMD Regulation 8-34-413 and 40 CFR §60.757(g), a Performance Test Report is required to be submitted from subject facilities containing performance and monitoring data for the operation of the GCCS. The operational records listed in Table 3-1 have been reviewed, summarized, and are included in this Performance Test Report. The most recent annual Compliance Demonstration Test (source test) was performed on December 14, 2011. A copy of the source test report dated January 9, 2012 was provided to BAAQMD and the U.S. Environmental Protection Agency (EPA) under separate cover. A copy of the source test report is also included in this Semi-Annual Report.

Table 3-1 – Performance Test Requirements

Rule	Requirement	Report Location
8-34-412, §60 8. §60.752(b)(2)(iii)(B), §60.754(d)	Compliance Demonstration Test.	Section 3 1
§60.757(g)(1)	A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for future collection system expansion.	Section 3.2, Figure 1
§60.757(g)(2)	The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based	Section 3.3
§60.757(g)(3)	The documentation of the presence of asbestos or non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non-degradable material.	Section 3.4
§60 757(g)(4)	The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area.	Section 3.5
§60.757(g)(5)	The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill.	Section 3.6
§60.757(g)(6)	The provisions for the control of off-site migration.	Section 3.7, Appendix N

3.1 A-2 Backup Flare Source Test Results (BAAQMD 8-34-412)

Air Science Technologies, Inc. performed the 2011 annual source test for the A-2 backup flare on December 14, 2011 pursuant to BAAQMD Regulation 8-34-412. Copies of the source test report were submitted to BAAQMD and the U.S. Environmental Protection Agency (EPA).

The results of the source test for the A-2 backup flare indicated that the backup flare was in compliance with BAAQMD Regulation 8-34-301.3 and Title V Permit Condition Number 12418, Parts 13 and 14 for all parameters with the exception of the NOx concentration limit of 45 ppmv @ 3 percent oxygen. As required by BAAQMD Regulation 8-34-301.3, the backup flare meets the non-methane organic compound

(NMOC) emission rate of less than 30 ppmv. Table 3-2 shows the results of the A-2 backup flare source test, averaged from three test runs.

Table 3-2 – Backup Flare Source Test Results

Condition	A-2 Backup Flare Average Results	Permit/B-34 Limit	Compliance Status
Heat Input (MMBtu/day)	324	576	In Compliance
Temperature (°F)	1,477	>1,400	In Compliance
NOx, ppmv @ 3% O_2	49.55	45	Exceeded
CO, ppmv @ 3% O_2	<5.0	247	In Compliance
Outlet NMOC Concentration (ppmv @ 3% O_2, dry)	0.66	30	In Compliance

*Averaged over any 3-hour period.

MMBtu/day = million British thermal units per day
NOx = oxides of nitrogen
O_2 = oxygen
CO = carbon monoxide

The results of the LFG characterization test taken during the A-2 backup flare source test on December 14, 2011 indicated that the LFG flare was in compliance with Title V Permit Condition Number 12418, Parts 8 and 10 through 14. The LFG met nearly all the permitted concentration limits, with the exception of the limit for NOx. Tables 3-3a and 3-3b show the results of the LFG characterization test and the permit limits for each compound.

Table 3-3a – LFG Characterization Test Results – Sulfur Compounds

Sulfur Compounds	Permit Limits (ppmv)	Result (ppmv)
Carbon Disulfide	NA	ND
Carbonyl Sulfide	NA	ND
Dimethyl Sulfide	NA	190
Ethyl Mercapton	NA	ND
Hydrogen Sulfide	200	7.6
Methyl Mercapton	NA	ND

Table 3-3b – LFG Characterization Test Results – Organic Compounds

Organic Compounds	Permit Limits (ppbv)	Results (ppbv)
Acrylonitrile	12,000	ND
Benzene	4,000	290
Carbon Tetrachloride	100	ND
Chlorobenzene	NA	56
Chlorodifluoromethane	NA	ND
Chloroethane	NA	ND
Chloroform	500	ND
1,1-Dichloroethane	5,000	ND
1,1-Dichloroethene	NA	ND
1,2-Dichloroethane	1,000	ND
1,4-Dichlorobenzene	3,500	42
Dichlorodifluoromethane	NA	ND
Dichlorofluoromethane	NA	ND
Ethylbenzene	NA	1,100
Ethylene Dibromide (1,2-Dibromomethane)	100	ND
Fluorotrichloromethane	NA	ND
Hexane	NA	240
2-Propanol (Isopropyl Alcohol)	NA	1,000
Methyl Ethyl Ketone	NA	950
Dichloromethane (Methylene Chloride)	28,000	13
Perchloroethylene (Tetrachloroethylene)	7,500	20
Toluene	NA	1,000
1,1,1-Trichloroethane	NA	ND
1,1,2,2-Tetrachloroethane	2,000	ND
Trichloroethylene	5,500	11
Vinyl Chloride	14,500	63
Xylenes	NA	1,990

Ppmv = parts per million by volume
ppbv = parts per billion by volume
ND = not detected
NA = not applicable

Air Science Technologies, Inc. performed the 2012 annual source test for the A-2 backup flare on December 14, 2011 pursuant to BAAQMD Regulation 8-34-412. However, the draft source test report received by Golder on January 9, 2012 indicated that the flare emissions exceeded the BAAQMD limit for NOx. Golder submitted an RCA Notification Form to the BAAQMD on January 9, 2012. BAAQMD issued RCA No. 06D01 for this event. Flare repairs were initiated and a retest will be scheduled when corrected action is complete. Golder submitted the 10-day follow-up letter to BAAQMD on January 18, 2012 and the 30-day follow-up letter on February 7, 2012.

3.2 Compliance with §60.757(g)(1)

"A diagram of the collection system showing collection system positioning including wells, horizontal collectors..."

A map of the GCCS, revised December 2011 and showing the positioning of all vertical wells, horizontal collectors, and other gas extraction devices is included in Figure 1.

3.3 Compliance with §60.757(g)(2)

"The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based."

In general, the sufficient capacities of the GCCS components are based on establishing, maintaining, and documenting that the surface emissions of NMOCs and subsurface LFG migration are controlled within compliance limits. Over the initial monitoring period covered by this Semi-Annual Report, the sufficiency of the GCCS components was described as follows:

The existing GCCS has historically provided LFG wells and collectors spaced in accordance with standard industry practices. The installed collector density appears more than adequate for controlling surface emissions and subsurface LFG migration, based on continuous compliance and operational experience.

The total capacity of the LFG mover equipment exceeds the current EPA Model AP-42 projections of LFG generation and the historic LFG extraction rates determined to be continuously available from the landfill. Sufficient LFG control device and mover capacity is provided such that the A-2 backup flare is only required to operate as a stand-by unit when the Fortistar IC engines are down.

The ACSL operator conducts routine monitoring in accordance with NSPS requirements. If the GCCS at the landfill does not meet the measures of performance set forth in the NSPS, the GCCS will be adjusted or modified as required.

3.4 Demonstrating Compliance with §60.757(g)(2)

"The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based."

Compliance with 40 CFR §60.757(g)(2) is maintained by performing quarterly surface emissions monitoring. Refer to Section 2.4, Surface Emissions Monitoring for information pertaining to the surface emissions monitoring results. The gas extraction rate during the past 12 months was approximately 324 scfm for IC engines (S-2 and S-3) along with the A-2 backup flare. The gas generation flow rates over time were estimated using the EPA's LFG generation model. The EPA equations are provided in 40 CFR §60.755, and the LFG generation and extraction estimates for the landfill using these equations and 45 percent recovery efficiency are summarized in Table 3-4.

The LFG extraction was approximately 43 percent of the estimated LFG generation rate from December 1, 2011 through February 6, 2012. Quarterly surface emission monitoring indicates that LFG extraction and recovery efficiency is sufficient to maintain compliance and prevent surface methane concentration exceedances. Both the LFG model and the observed LFG recovery indicate that LFG generation will continue to decrease in the future. The low calculated collection efficiency along with the low methane concentration of the collected LFG and the lack of surface methane concentration exceedances suggest that the LFG generation model has overestimated the amount of LFG being produced. The predicted future recovery assumes that the LFG model estimates continue to be higher than the actual generation rate.

Table 3-4 – LFG Generation and Extraction Estimates

Year	EPA with AP-42 Expected Generation (scfm)	Recovery Efficiency (%)	Expected LFG Recovery (scfm)
2011 (current)	856	43[a]	365[b]
2020	654	45[c]	294
2025 (end of post closure)	563	45[c]	253

[a] Calculated recovery efficiency
[b] Observed LFG recovery
[c] Assumed recovery efficiency

The existing GCCS conveyance piping and emission control devices have sufficient capacity to handle all current and future LFG flow rates (based on actual flow rate and well vacuum data).

3.5 Compliance with §60.757(g)(3)

"The documentation of the presence of asbestos or non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non-degradable material."

No segregated areas or accumulations of asbestos material are documented for the site in the GCCS Design Plan. Therefore, 40 CFR §60.757(g)(3) is not applicable.

3.6 Compliance with §60.757(g)(4)

"The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area."

No non-productive areas have been excluded from the coverage of the GCCS. Therefore, §60.757(g)(4) is not applicable

3.7 Compliance with §60.757(g)(5)

"The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill."

The present gas mover equipment capacity is adequate to move the maximum flow rate expected over the life of the landfill.

3.8 Compliance with §60.757(g)(6)

"The provisions for the control of off-site migration."

The first quarter 2012 gas migration monitoring was performed on January 20, 2012. Perimeter probe monitoring results show one location (Gas Migration Probe MP-4R) above the 5 percent methane by volume limit as stated in the Subtitle D (40 CFR 258.23) and California Code of Regulations Title 27, Division 2, Section 20919.5. The structure monitoring results show no detection of methane in the on-site structures. The LFG migration monitoring results for the first quarter 2012 event are included in Appendix N.

The NVWMA reported the initial exceedances pursuant to the California Integrated Waste Management Board (CIWMB) requirements of California Code of Regulations Title 27, Division 2, Section 20919.5. The required 60-day notification letters for methane detection in gas migration probes were submitted to the Local Enforcement Agency (LEA) on September 2 and October 29, 2009 along with descriptions of remediation activities. Copies of the 60-day letters were included in the Semi-Annual Report for June 1, 2009 through November 30, 2009.

Due to continued methane concentrations in excess of the 5 percent limit, the NVWMA and Shaw submitted a request to and received approval from CalRecycle and the LEA to remove gas migration probes MP-1, MP-3R, MP-4R, MP-5R, MP-6R, and MP-7R from Title 27 compliance monitoring. The NVWMA is required to continue monitoring all probes but only MP-2R is required to meet the 5 percent methane concentration limit. The request was submitted August 23, 2011 and approved October 14, 2011.

3.9 Demonstrating Compliance with §60.757(g)(6)

"The provisions for the control of off-site migration."

The ACSL operator will continue surface and perimeter monitoring in accordance with the approved monitoring plans. If the GCCS at the landfill does not meet the measures of performance set forth in the NSPS, the GCCS will be adjusted or modified in accordance with the NSPS requirements.

4.0 STARTUP, SHUTDOWN, MALFUNCTION PLAN REPORT

The SSM Plan Report for the Collection and Control Systems at the Napa Vallejo Waste Management Authority's American Canyon Sanitary Landfill is below.

The NESHAP, contained in 40 CFR part 63, AAAA for Municipal Solid Waste landfills to control hazardous air pollutants, include regulatory requirements for submittal of a semi-annual report (under 40

CFR 63.10(d)(5) of the general provisions) if an SSM Plan event occurred during the reporting period. The reports required by 40 CFR §63.1980(a) of the NESHAP and 40 CFR §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 40 CFR §63.10(d)(5)(i) of the General Provisions.

NESHAP 40 CFR Part 63, AAAA became effective on January 16, 2004. SSM Plan events that occurred during December 1, 2011 through February 6, 2012 are included in this Combined Report. The following information is included as required:

- During the reporting period, thirty-five (35) backup flare SSM events occurred. The backup LFG control device (A-2 backup flare) was started and shut down during the period to control LFG from the landfill due to Fortistar engine shutdowns or reduced operations. The time and duration of each of these events are presented in Table 4-1. The SSM forms are contained in Appendix D.
- During the reporting period, seven (7) wellfield SSM events occurred. The time and duration of each of these events are presented in Table 4-2. The SSM forms are contained in Appendix C.
- Automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan.
- No exceedances of any applicable emission limitation in the landfills NESHAP (63.10(d)(5)(i)) occurred.

Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).

Table 4-1 – Startup, Shutdown, Malfunction Events for the A-2 Backup Flare

Event No.	Event Start Date/Time (Flare Startup)	Event End Date/Time (Flare Shutdown)	Flare Runtime (hrs)	Cause of Event
1	12/5/11 12:28	12/6/11 11:50	23.37	LFG control during engine shutdown.
2	12/6/11 12:30	12/6/11 12:38	0.13	LFG control during engine shutdown.
3	12/6/11 12:58	12/6/11 17:10	4.20	LFG control during engine shutdown.
4	12/7/11 9:34	12/7/11 11:34	2.00	LFG control during engine shutdown.
5	12/7/11 11:46	12/7/11 13:00	1.23	LFG control during engine shutdown.
6	12/7/11 13:52	12/7/11 15:48	1.93	LFG control during engine shutdown.
7	12/8/11 8:54	12/8/11 10:06	1.20	LFG control during engine shutdown.
8	12/8/11 10:34	12/8/11 11:14	0.67	LFG control during engine shutdown.
9	12/8/11 11:40	12/8/11 11:46	0.10	LFG control during engine shutdown.
10	12/8/11 12:32	12/8/11 17:04	4.53	LFG control during engine shutdown.
11	12/8/11 17:34	12/9/11 11:50	18.27	LFG control during engine shutdown.
12	12/9/11 12:16	12/9/11 19:38	7.37	LFG control during engine shutdown.
13	12/10/11 10:04	12/10/11 17:08	7.07	LFG control during engine shutdown.
14	12/11/11 9:42	12/12/11 12:08	26.43	LFG control during engine shutdown.
15	12/12/11 12:38	12/13/11 14:10	25.53	LFG control during engine shutdown.
16	12/13/11 15:00	12/13/11 15:18	0.30	LFG control during engine shutdown.
17	12/13/11 15:26	12/13/11 15:42	0.27	LFG control during engine shutdown.
18	12/13/11 16:00	12/13/11 17:06	1.10	LFG control during engine shutdown.
19	12/13/11 17:26	12/14/11 9:30	16.07	LFG control during engine shutdown.
20	12/14/11 9:50	12/14/11 13:02	3.20	LFG control during engine shutdown.
21	12/14/11 13:20	12/14/11 13:56	0.60	LFG control during engine shutdown.
22	12/14/11 14:04	12/14/11 18:26	4.37	LFG control during engine shutdown.
23	12/15/11 8:18	12/15/11 14:26	6.13	LFG control during engine shutdown.
24	12/15/11 14:46	12/16/11 3:12	12.43	LFG control during engine shutdown.
25	12/16/11 8:18	12/21/11 10:22	122.07	LFG control during engine shutdown.
26	12/21/11 10:46	12/21/11 12:12	1.43	LFG control during engine shutdown.
27	12/21/11 12:42	12/21/11 13:24	0.70	LFG control during engine shutdown.
28	12/21/11 13:34	12/27/11 10:38	141.07	LFG control during engine shutdown.
29	12/27/11 10:46	1/2/12 19:52	153.10	LFG control.
30	1/2/12 19:58	1/3/12 9:20	13.37	Supplemental LFG control.
31	1/3/12 9:48	1/3/12 17:08	7.33	Supplemental LFG control.
32	1/9/12 10:50	1/12/12 10:02	71.20	Supplemental LFG control.
33	1/29/12 15:20	1/30/12 13:28	22.13	LFG control during engine downtime.
34	1/30/12 15:56	2/1/12 14:14	46.30	LFG control during engine downtime.
35	2/1/12 17:42	2/2/12 14:56	21.23	Supplemental LFG control

Table 4-2 – Startup, Shutdown, Malfunction Events for the Wellfield

Event No.	Well ID	Event Start Date/Time (Well Shutdown)	Event End Date/Time (Well Startup)	Duration (hrs)	Cause of Event
1	GS-80	12/8/11 9:45	12/8/11 10:05	0.33	Well maintenance and adjustment due to system air leak.
2	L-08	12/14/11 10:00	12/14/11 17:00	7.00	Well maintenance and adjustment due to system air leak.
3	L-08	12/21/11 8:00	12/21/11 17:00	9.00	Well maintenance and adjustment due to system air leak.
4	L-08	12/27/11 15:00	12/28/11 12:00	21.00	Well maintenance and adjustment due to system air leak.
5	L-08	12/28/11 14:00	12/28/11 17:30	3.50	Well maintenance and adjustment due to system air leak.
6	L-40	12/30/11 10:00	12/30/11 10:20	0.33	Well maintenance and adjustment due to system air leak.
7	L-39	12/30/11 10:30	12/30/11 10:50	0.33	Well maintenance and adjustment due to system air leak.