TV Tracking #1038 (Semi-Annual)

1. ☐ RECEIVED IN ENFORCEMENT: 12/30/2024

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

December 17, 2024

Director of Compliance and Enforcement	Director of the Air Division
Bay Area Air Quality Management District	USEPA, Region IX
375 Beale Street, Suite 600	75 Hawthorne Street
San Francisco, CA 94105	San Francisco, CA 94105-3901
Attn: Title V Reports	Attn: Air & Tri-Sec ENF-2-1
Compliance@baaqmd.gov	r9.aeo@epa.gov

SUBJECT: Combined Title V Semi-Annual Partial 8-34 Annual Report 40 CFR 63 Subpart AAAA Semi-Annual Report
Altamont Landfill and Resource Recovery Facility
10840 Altamont Pass Road, Livermore, CA 94551
Plant Number A2066

Dear Sir or Madam:

The Altamont Landfill and Resource Recovery Facility (ALRRF) is pleased to submit the attached Combined Title V Semi-Annual and Partial 8-34 Annual Report for the period of June 1, 2024, through November 30, 2024, to the Bay Area Air Quality Management District (BAAQMD) and the United States Environmental Protection Agency (USEPA), Region IX. As required by 40 Code of Federal Regulations (CFR) Part 63 Subpart AAAA, the Semi-Annual Startup, Shutdown and Malfunction (SSM) Report is also enclosed. The Combined Title V Semi-Annual and Partial 8-34 Annual Report satisfies the requirements of the Title V Permit listed in Condition Number 19235, Part 23 and Standard Condition I.F.

Based on information and belief formed after reasonable inquiry, I certify under penalty of law that the statements included in this report are true, accurate, and complete.

Sincerely,

Blaine F Harrison

Blaine Harrison
District Manager

Attachments:
Combined Title V Semi-Annual and Partial 8-34 Annual Report

Combined Title V Semi-Annual and Partial 8-34 Annual Report

For the

Altamont Landfill & Resource Recovery Facility

Livermore, California

June 1, 2024, through November 30, 2024

Prepared for

Waste Management of Alameda County, Inc.
A Waste Management Company

December 17, 2024

For submittal to:

Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

United States Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Prepared By

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1 INTRODUCTION

1.1 PURPOSE

This document is a Combined Semi-Annual Title V Report and Partial Regulation 8, Rule 34 Annual Report for the Altamont Landfill and Resource Recovery Facility (ALRRF). This report is prepared pursuant to Bay Area Air Quality Management District's (BAAQMD) Regulation 8, Rule 34, Section 411, Title 40 Code of Federal Regulations (CFR) Part 60 Subpart WWW and Cc, New Source Performance Standards (NSPS) Emission Guidelines (EG), respectively, for municipal solid waste (MSW) landfills, and the ALRRF Title V Permit. This Report is being submitted as required by Condition Number 19235, Part 23 in the Title V Permit. The EG are applicable to landfills that have received refuse after 1987 and received no modification of design capacity since May 30, 1991. The BAAQMD Regulation 8-34-411 is applicable to all solid waste landfills that meet the applicability requirements of design capacity and non-methane organic compounds (NMOC) annual emissions rates as listed in the regulations cited above. The ALRRF meets these applicability conditions. This Combined Report meets the requirements of BAAQMD Regulation 8-34-411 and 40 CFR §60.757(f) and covers compliance activities conducted from June 1, 2024, through November 30, 2024. During the timeframe included in this report from June 1, 2024, through November 30, 2024, the site began compliance activities with specific conditions of 40 CFR part 63, Subpart AAAA (effective September 27, 2021) for wellhead temperature and pressure standards. During the timeframe included in this report from June 1, 2024, through November 30, 2024, the site recorded compliance activities with specific conditions of 40 CFR part 62, Subpart OOO for wellhead temperature standards. This Combined Report also includes the Semi-Annual Report of Startup, Shutdown and Malfunction (SSM) Plan activities pursuant to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, Subpart AAAA for Landfills.

1.2 RECORDKEEPING AND REPORTING

Records are maintained and available for inspection in accordance with BAAQMD Regulation 8-34-501.12 and 40 CFR §60.758. The primary location for records storage is at the ALRRF. The records will be maintained at this location for a minimum of five years.

This Combined Report is for the timeframe of June 1, 2024, through November 30, 2024. Section 2 of this report contains the requirements to satisfy both BAAQMD Regulation 8-34-411 and 40 CFR §60.757(f). Section 3 contains the requirements to satisfy both BAAQMD Regulation 8-34-413 and 40 CFR §60.758(g).

1.3 REPORT PREPARATION

This Combined Report has been prepared by Waste Management of Alameda County, Inc. It was prepared based on review of information provided by ALRRF.

2 SEMI-ANNUAL MONITORING REPORT

In accordance with Title V Permit Standard Condition 1.F, BAAQMD Regulation 8-34-411 and §60.757(f) in NSPS, this document is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report that is required to be submitted by the ALRRF. 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 June 1, 2024, through November 30, 2024. Table 2-1 lists the rules and regulations that are required to be included in this Combined Report.

Table 2-1. Semi-Annual Report Requirement

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 Appendix B
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown.	Section 2.2 Appendices A, C, D, & E
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 Appendices F & G
8-34-501.4, 8-34-505	Testing performed to satisfy any of the recordkeeping requirements of this rule, including wellhead monitoring.	Sections 2.4 & 2.11 Appendices I & M
8-34-501.5	Monthly landfill gas (LFG) flow rates and well concentration readings for facilities subject to 8-34-404.	Sections 2.4 & 2.7 Appendices F, G, H, M & O
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 J & K
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, Appendix L
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 2.11, Appendices M &N
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 2.12, Appendix F,G,H, I, & O
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 Appendices F & G
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 2.13, Appendices B & P
§60.10(d)(5)(i)	Startup, Shutdown, and Malfunction Events	Section 4, Appendices B, C, D, & E
§63	Subpart AAAA	Section 2.11

2.1 COLLECTION SYSTEM OPERATION *(BAAQMD 8-34-501.1 & §60.757(f)(4))*

Appendix A includes collection system downtime logs that list the time, duration, and the reason for each shutdown. Appendix B includes the Wellfield Start-Up, Shutdown, and Malfunction (SSM) events.

2.1.1 Collection System Downtime

During this reporting period, there were four instances in which all emission control devices did not operate. The total GCCS Downtime for the reporting period of June 1, 2024, through November 30, 2024, was 0.8 hours.

The total GCCS downtime for the partial 2024 calendar year is 3.7 hours out of the 240 hours allowed per year by BAAQMD Regulation 8-34-113. Each instance of collection system downtime is described in Appendix A.

2.1.2 Well Disconnection Log

As required by BAAQMD Regulation 8-34-116 and/or 8-34-117, no more than five (5) LFG collection wells or ten percent of the LFG collection wells of the GCCS were shut down at any one time. No LFG collection wells were disconnected from a vacuum source for longer than 24 hours during this reporting period unless fill was actively being placed or compacted in the immediate vicinity of the well pursuant to BAAQMD Regulation 8-34-116.

Appendix B includes the Wellfield SSM Log for the reporting period.

2.1.3 S-210 Liquefied Natural Gas Plant

The daily heat input limit for the S-210 Liquefied Natural Gas (LNG) Plant, pursuant to PTO Condition Number 24255, Part 2 is 1,950 MMBTU/day. As summarized in Table 2-2 below, the LNG Plant did not exceed the permitted daily heat input limit at any time during this reporting period. Appendix H includes heat input logs for the reporting period.

Table 2-2. S-210 LNG Plant Maximum Daily Heat Input Summary

Month/Year	6/2024	7/2024	8/2024	9/2024	10/2024	11/2024
LNG Plant*	0.0	0.0	0.0	0.0	0.0	0.0

* Maximum Daily Heat Input (MMBTU/day)

LNG Plant was shut down on June 30, 2023. Please refer to Appendix AD for more details.

2.2 EMISSION CONTROL DEVICE DOWNTIME *(BAAQMD 8-34-501.2 & §60.757(f)(3))*

The A-15 Flare (back-up flare) and A-16 Flare (LNG Plant Flare) SSM Logs, which list downtimes and the reasons for the shutdowns, are located in Appendix C. Appendix D contains the SSM Logs for Turbine Number 1 (S-6) and Turbine Number 2 (S-7). Appendix E contains the SSM Log for the LNG Plant (S-210).

The total downtime hours for the reporting period are summarized in Table 2-3:

Table 2-3. Emissions Control Device

Emission Control Device	Total Downtime June 1, 2024, through November 30, 2024 (Hours)
A-15 (Back-up Flare)[1]	4037.5
A-16 (LNG Plant Flare)	127.1
S-6 (Turbine Number 1)	51.0
S-7 (Turbine Number 2)	386.1
S-210 (LNG Plant)	4,391.0

1 – Used to control LFG when other device(s) are shut down

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

During the period encompassed by this report, LFG was not diverted through a bypass line. No bypass lines have been installed at the ALRRF.

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

S-6 and S-7 Turbines

The Key Emission Control System Operating Parameter (BAAQMD 8-34-509) for the S-6 and S-7 Turbines was determined to be combustion chamber discharge temperature, based on the Annual Source Test. The combustion temperature of both turbines is monitored on a continuous basis and shall not be less than 700 degrees Fahrenheit (°F) averaged over any three-hour period, pursuant to Title V Permit Condition Number 18773, Part 9.

The normal operating temperature of the turbines is 1,170°F. As required by Title V Permit Condition Number 18773, Part 9, continuous monitoring of the combustion temperature of the S-6 and S-7 Turbines started on December 1, 2003. The combustion temperature of the S-6 and S-7 Turbine was maintained between 700°F and 1,220°F averaged over any three-hour period during this reporting period.

The daily heat input permit limit for each turbine, pursuant to Title V Condition Number 18773, Part 8 is 1,378 MMBTU/day. As summarized in Table 2-4, the turbines did not exceed the permitted daily heat input limit at any time during this reporting period.

Table 2-4. Turbine S-6 and S-7 Maximum Daily Heat Input Summary

Month/Year	6/2024	7/2024	8/2024	9/2024	10/2024	11/2024
Turbine (S-6)*	1,072	1,047	1,013	1,055	1,054	1,083
Turbine (S-7)*	1,071	1,082	1,048	1,073	1,087	1,108

* Maximum Daily Heat Input (MMBTU/day)

Appendix F includes turbine combustion temperature deviation and heat input logs for S-6 and S-7.

Pursuant to BAAQMD Regulation 1 Rule 523, parametric periods of inoperation for the S-6 and S-7 Gas Turbines did not exceed 24 hours or 15 consecutive days. Parametric monitor periods of inoperation for the S-6 and S-7 Gas Turbines also did not exceed 30 calendar days per consecutive 12-month period. Please refer to Appendix AD for more details.

A-15 and A-16 Flares

The Daily Heat Input Permit Limits for the A-15 and A-16 Flares, pursuant to Title V Condition Number 19235, Part 4 are 1,704 MMBTU/day and 3,168 MMBTU/day, respectively. Table 2-5 below shows the maximum daily heat input measured during this reporting period.

The A-15 and A-16 Flares did not exceed the permitted daily heat input limit at any time during this reporting period.

Table 2-5. Flares A-15 and A-16 Maximum Daily Heat Input Summary

Month/Year	6/2024	7/2024	8/2024	9/2024	10/2024	11/2024
A-15 (Back-up Flare)[1]	674	0.0	986	12.0	568	0.0
A-16 Flare[1]	1,795	1,858	1,834	1,734	1,742	1,291

1 – Maximum Daily Heat Input (MMBTU/day)

Appendix G includes A-15 and A-16 Flare temperature deviation and heat input logs for the reporting period.

2.3 TEMPERATURE MONITORING RESULTS *(BAAQMD 8-34-501.3, 8-34-507, & §60.757(f)(1))*

The combustion zone temperature of the A-15 Flare is continuously monitored using a thermocouple and recorded by a Yokogawa data acquisition system with local digital display. The recorded graphs and tables showing operational data (flow, temperature, operation time) of the flare indicated that the three-hour average combustion zone temperature did not drop below 1,400°F while the flare was in operation during the reporting period. Pursuant to the updated PTO Condition 19235 Part 10(a) issued by the BAAQMD in 2024 PTO, the minimum three-hour average operating temperature for the A-15 Flare is 1,433°F. From June 1, 2024, through November 30, 2024, the A-15 Flare three-hour average operating temperature did not drop below 1,433°F.

The combustion zone temperature of the A-16 Flare is continuously monitored using a thermocouple and recorded by a Yokogawa data acquisition system with local digital display. The recorded graphs and tables showing operational data (flow, temperature, operation time) of the flare indicated that the three-hour average combustion zone temperature did not drop below 1,400°F while the flare was in operation during the reporting period. Pursuant to the updated PTO Condition 19235 Part 10(b) issued by the BAAQMD in 2024 PTO, the minimum three-hour average operating temperature for the A-16 Flare is 1,472°F. From June 1, 2024, through November 30, 2024, the A-16 Flare three-hour average operating temperature did not drop below 1,472°F.

2.4 MONTHLY COVER INTEGRITY MONITORING *(BAAQMD 8-34-501.4)*

During the June 1, 2024, through November 30, 2024, reporting period, site technicians noted the few locations with leachate seeps. These locations will be remediated after the affected areas have dried out and are safe to conduct remediation using heavy equipment. No other areas of concern were found during the reporting period. The Monthly Cover Integrity Monitoring Reports are included in Appendix I.

- June 28, 2024

- July 31, 2024
- August 30, 2024
- September 30, 2024
- October 31, 2024
- November 25, 2024

2.5 LESS THAN CONTINUOUS OPERATION *(BAAQMD 8-34-501.5)*

The ALRRF does not operate under BAAQMD 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))*

The information contained in Appendix J includes the Surface Emissions Monitoring (SEM) data for the quarterly monitoring events performed during this reporting period on the following dates:

- Third Quarter 2024 – September 9, 16, 17, 18 2024
- Fourth Quarter 2024 – October 29, and 30 and December 5, 2024

  A Thermo Scientific Toxic Vapor Analyzer 1000 (TVA1000) and Photovac Micro flame ionization detector (FID) were used to perform the SEM during the Third Quarter 2024 and Fourth Quarter 2024 events. The landfill surface was monitored along the path delineated on the SEM walking path map. Any areas suspected of having emission problems by visible observations were also monitored. Immediately prior to the Third and Fourth Quarter 2024 monitoring events, the monitoring equipment was calibrated using zero air and 500 parts per million by volume (ppmv) methane (CH_4) calibration gas.

- The Third Quarter 2024 SEM was performed on September 9, 16, 17, and 18, 2024, and seven (7) exceedances (FID readings greater than 500 ppm CH_4 above background measurements) were detected on September 17 and 18, 2024. Corrective actions were completed. The ten-day re-monitoring event was conducted on September 19, 2024, and no further exceedances were detected. The thirty-day follow-up monitoring event was conducted on October 14, 2024, and no exceedances were detected.

- The Fourth Quarter 2024 SEM was performed on October 29 and 30, 2024, and December 5, 2024, and twenty-three (23) exceedances (FID readings greater than 500 ppm CH_4 above background measurements) were detected on October 30, 2024, and December 5, 2024. Corrective actions were completed. The ten-day re-monitoring event was conducted on November 7 and December 6, 2024, and no further exceedances were detected. The thirty-day follow-up monitoring event was conducted at 19 locations on November 20, 2024, and no exceedances were detected. The thirty-day follow-up monitoring event at 4 locations will be conducted by January 3, 2025.

  See Appendix J for Third Quarter 2024 Report. The Fourth Quarter 2024 report will be included in the next semi-annual report.

2.7 COMPONENT LEAK TESTING *(BAAQMD 8-34-501.6 & 8-34-503)*

"Quarterly tests for operations subject to Sections 8-34-503 and 506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or Section 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in ppm by volume, date of discovery, the action taken to repair the leak, date of repair, date of any required re-monitoring, and the re-monitored concentration in ppm by volume."

The quarterly LFG component leak testing events for this reporting period were performed on:

- Third Quarter 2024 – August 15 and September 3, 2024
- Second Quarter 2024 – October 10 and November 4, 2024

A Thermo Scientific TVA1000 and Photovac Micro FID was used to perform both the Third and Fourth Quarter 2024 leak testing events. No leaks greater than 500 ppm_v were identified during the Third and Fourth Quarter 2024 monitoring events. See Appendix K for the Component Leak Testing Reports.

2.8 WASTE ACCEPTANCE RECORDS *(BAAQMD 8-34-501.7)*

The waste acceptance rate for this reporting period and the current waste in-place figures, which include waste placed through November 30, 2024, are as follows:

- Waste Acceptance Rate at Fill Area I and II between June 1, 2024, through November 30, 2024 = 517,853 tons
- Current Waste In-Place at Fill Area I as of November 30, 2024= 50,025,694 tons
- Current Waste In-Place at Fill Area II as of November 30,2024=5,720, 822 tons
- Total Combined Waste-In-Place at Fill Area I and II as of November 30, 2024, =55,746, 516 tons (Limit is 88,00,000 tons).

Pursuant to Permit to Operate Condition 19235 18D, the total cumulative amount of decomposable materials placed in existing Fill Area 1 shall not exceed 51, 020, 000 tons. The total combined cumulative amount of decomposable materials placed in Fill Area I and II shall not exceed 88,00,000 tons.

2.9 NON-DEGRADABLE WASTE ACCEPTANCE RECORDS *(BAAQMD 8-34-501.8)*

The ALRRF includes an approximately 8-acre landfill area on the eastern side of Unit 2 that has been historically segregated for asbestos disposal, as stated in the June 2003 Amended and Restated Collection and Control System Design Plan.

The amount of non-degradable asbestos waste that was placed in this area during June 1, 2024, through November 30, 2024, reporting period is 3,373 tons (Appendix L).

2.10 GREENWASTE GRINDING OPERATION *(BAAQMD 2-1-105.3)*

The ALRRF was issued PTO 17215 on July 21, 2008, incorporating the following 3 sources:

S-29 – Green Waste Stockpiles (subject to Condition Number 24061)
S-30 – Portable Green Waste Grinding Operation (subject to Condition Number 24062)

S-31 – Portable Diesel Engine for Green Waste Grinder (subject to Condition Number 24063)

Pursuant to PTO Condition Number 24063 Part 2, the S-31 engine did not use more than 76,205 gallons of fuel during any consecutive 12-month period. Pursuant to PTO 17215 Condition Number 24061 Part 1, the total amount of green waste received at S-29 from off-site locations did not exceed 68,040 tons during any consecutive 12-month period. No food wastes were stored or processed at S-29. Appendix AB details the total waste received and fuel usage data for the Portable Green Waste Operation.

Currently the grinding operation of accepted green waste is done at the site by third party.

2.11 WELLFIELD MONITORING DATA *(BAAQMD 8-34-501.4 & 8-34-505)*

Wellfield monitoring was conducted monthly pursuant to BAAQMD Regulation 8-34-505. The wellfield concentration readings for June 1, 2024, through November 30, 2024, are included in Appendix M. Effective September 27, 2021, the site began compliance activities with specific conditions of 40 CFR part 63, Subpart AAAA for wellhead temperature and pressure standards. Each well was monitored for the following:

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

The wellfield monitoring was performed on the following dates:

- June 3, 5, 6, 7, 10, 12, 13, 14, 17, 18, 19 and 24, 2024
- July 1, 2, 3, 5, 8, 9, 10, 11, 16, 22, 24, and 25, 2024
- August 2, 2, 5, 6, 7, 8, 9, 13, 14 and 19, 2024
- September 4, 5, 6, 9, 11, 12,13 16, 17 and 19, 2024
- October 4, 7, 8,9, 11, 14, 15, 18, 22, 23 and 24, 2024
- November 1, 4, 5, 6, 7, 8, 11, 12, 13, 14, and 26, 2024

2.11.1 Wellfield Deviations *(BAAQMD 8-34-501.9 & §60.757(f)(1))*

BAAQMD Regulation 8-34-305 (Wellhead Requirements) requires that each wellhead shall operate under a vacuum; wellhead temperature shall be less than 131°F (55 Degrees Celsius); and either the nitrogen concentration shall be less than 20 percent or the oxygen concentration shall be less than 5 percent. During this reporting period, there was one temperature exceedance associated with specific conditions of 40 CFR part 63, Subpart AAAA for wellhead temperature and pressure standards. All exceedances were corrected within 120-days.

Please refer to the Wellfield Deviation Log, included in Appendix N, for exceedance records for the reporting period.

2.12 GAS FLOW MONITORING RESULTS *(BAAQMD 8-34-501.10, 8-34-508, & §60.757(f)(1))*

The LFG flow rate for the A-15 Flare is measured with a Kurz thermal mass flow meter connected to a Yokogawa digital readout and data acquisition system. The Fluid Components International (FCI) flowmeter was replaced with a Kurz Flowmeter.

The LFG flow rate for the A-16 Flare is measured with a Rosemount Annubar flow meter connected to a Yokogawa digital readout and data acquisition system. Pursuant to BAAQMD Regulation 8-34-508 the flow is monitored continuously and recorded digitally at least every 15 minutes.

Both of the turbines (S-6 and S-7) are equipped with a Daniels flow meter. Pursuant to BAAQMD Regulation 8-34-508, the flow is monitored continuously and recorded digitally at least every 15 minutes.

Appendix O contains a summary of the monthly LFG flow rates for the flares, and turbines. Table 2-6, below, summarizes the total LFG flow for the reporting period.

During the reporting period, the source test results at flare A-16 exceeded the 200 ppmv total reduced sulfur (TRS) limit specified in PTO Condition 19235, Part 11. However, these results were inconsistent with prior sample results. Therefore, ALRRF conducted further investigation and performed source retest for TRS at flare A-16 on June 10, 2024. TRS results from the source retest were within permit limits. ALRRF submitted the Title V 10-day letter on May 3, 2024, and Title V 30-day letter on May 23 ,2024. Copies of submitted letters are included in Appendix P.

Table 2-6. Control Devices LFG Flow Summary

June 1, 2024, through November 30, 2024

Source	Average Flow (scfm)	CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Total Heat Input (MMBTU)
A-15 (Backup Flare)[1]	1,457	45.7	32,554,693	14,861,217	14,827
A-16 (LNG Plant Flare)[2]	2,086	49.4	533,594,381	263,462,226	262,856
S-6 (Turbine 1)[3]	1,360	48.9	354,093,633	173,147,182	175,398
S-7 (Turbine 2)[3]	1,429	48.9	344,104,909	168,291,759	170,479

Source	Average Flow (scfm)	CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Total Heat Input (MMBTU)
S-210 (LNG Plant)	N/A	NA	0.0	0.0	0.0

CH_4 – methane N/A – not available

1 – From Annual Source Test dated February 28, 2024.

2 – Annual Source Test dated March 6, 2024, average of condensate injection on and off.

3 – Monthly reading

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."

This section summarizes changes made to the ALRRF GCCS which were permitted by the BAAQMD and implemented for the reporting period. The Wellfield SSM Log listing well decommissions, and start-ups is located in Appendix B. Correspondence detailing the decommissioning and startup of wells can be found in Appendix P.

PTO Condition Number 19235, Part 1, which was assigned Application Number (AN) 30563 issued on November 12, 2020, allows the ALRRF to decommission up to one hundred (100) vertical wells and five (5) horizontal collectors and five (5) leachate collection system cleanout riser (LCRS), and to install up to one hundred and twenty (120) vertical wells and twenty (20) horizontal collectors and five (5) LCRS.

Table 2-7 below summarizes the status of permitted wellfield decommissioning and installations per the PTO Condition Number 19235 Part 1(b), as updated by Application Number (AN) 30563 issued on November 12, 2020.

Table 2-7. Wellfield Decommissioning and Installations per PTO Condition Number 19235, Part 1, Updated by Application Number (AN) 30563

As of November 30, 2024	Decommissioning Actions		Installations	
	Vertical Wells	Horizontal Collectors and LCRS	Vertical Wells	Horizontal Collectors and LCRS
Actions permitted under PTO Condition No. 19235 per AN 30563	100	10	120	25
Actions performed by WMAC per PTO Condition No. 19235	35	3	77	3
Remaining actions permitted under PTO Condition No. 19235	65	7	43	22

Per the updated PTO Condition Number 19235, Part 1, as of November 30, 2024, there were one hundred eighty-one (181) vertical wells, two (2) horizontal collector, and two (2) 2 leachate collection system cleanout risers (LCRS) installed at ALRRF.

2.14 MONITORING REPORTS

Section I.F of the Title V Permit requires the ALRRF to submit all monitoring records to the BAAQMD at least once every six months, except where more frequent reporting is required. Monitoring was conducted for the following sources during this reporting period.

2.14.1 A-6 and A-7 – Fogging System

Title V Permit Condition Number 18773, Part 4 allows discretionary operation of the turbines' fogging system (A-6 and A-7). Permit Condition Number 18773, Part 5 requires ALRRF to maintain operational records on the days each of the turbines and the fogging system are operated.

ALRRF did not operate the fogging system during this reporting period. A logbook for the fogging system is maintained at the ALRRF.

2.14.2 Sulfur Monitoring

Title V Permit Condition Number 18773, Part 10 requires that a monthly sulfur (as hydrogen sulfide [H_2S]) sample be collected. The sample must be taken at the main LFG header with a Draeger tube, and the reading shall not exceed 150 ppmv. Table 2-8, below, summarizes all H_2S samples collected during this reporting period.

Table 2-8. Monthly H_2S Sampling Results

Date	Location Sample Taken	H_2S Concentration
6/4/2024	Inlet to Turbines	90 ppmv
7/1/2024	Inlet to Turbines	80 ppmv
8/1/2024	Inlet to Turbines	75 ppmv
9/3/2024	Inlet to Turbines	80 ppmv
10/1/2024	Inlet to Turbines	70 ppmv
11/1/2024	Inlet to Turbines	60 ppmv

2.14.3 LFG Condensate Injection

Title V Permit Condition Number 19235, Part 3 allows injection of LFG condensate into Flares A-15 and A-16 providing that the condensate injection rate does not exceed 3,600 and 7,200 gallons during any day, respectively.

Table 2-9 below summarizes the maximum daily LFG condensate injection for every month during this reporting period:

Table 2-9. Monthly LFG Condensate Injection

Month/Year	A-15 Flare Maximum Daily LFG Condensate Injection[1]	A-16 Flare Maximum Daily LFG Condensate Injection[1]
June 2024	0.0	3,831
July 2024	0.0	3,498
August 2024	0.0	4,230
September 2024	0.0	4,975
October 2024	0.0	4,522
November 2024	0.0	4,367

1 – Permit limit for the A-15 Flare is 4,320 gallons per day. Permit limit for the A-16 Flare is 7,200 gallons per day.

As shown in Table 2-9, LFG condensate injection in the A-15 Flare did not exceed 4,320 gallons per day and the A-16 Flare did not exceed 7,200 gallons per day during this reporting period, in compliance with Permit Condition Number 19235, Part 3. Appendix Q contains daily condensate injection rate tables for the reporting period.

2.14.4 S-99 - Non-Retail Gasoline Dispensing Facility

Title V Permit Condition Number 25723 requires that a Static Pressure Performance Test (Leak Test) TP 206.3 be conducted on the S-99 Gasoline Dispensing Facility at least once in each consecutive 12-month period.

S-99 was out of service during the reporting period. ALRRF submitted an application for Authority to Construct Application (Replacement of Existing Above Ground Storage Tank with Split Tank at the Non-Retail Gasoline Dispensing Facility G#7123, Source S-99). BAAQMD approved the permit on August 8, 2023, and assigned ATC AN 31887. ALRRF plans to install the new tank by first quarter of 2025.

The ALRRF maintains monthly records of the gasoline throughput at S-99. Appendix R contains monthly throughput records for this reporting period. S-99 was out of service during the reporting period.

2.14.5 VOC-Laden Soil

Volatile organic compound laden (VOC-laden) soil is defined by the BAAQMD as any soil that contains VOCs, as defined in BAAQMD Regulation 8-40-206, at a concentration of 50 parts per million by weight (ppmw) or less. Condition Number 19235, Part 20 of the Title V Permit requires that ALRRF limit the quantity of low VOC-laden soil handled per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. On June 19, 2024, during routine data review, it was discovered that site exceeded the daily VOC limit on June 15 and 18, 2024. The exceedance was caused due to inadvertent miscommunication between WMAC staff. ALRRF submitted the Title V 10-day and 30-day written reports on June 28, 2024, and July 17, 2024. BAAQMD issued NOV A-59768 dated July 22, 2024. ALRRF submitted the 10-day NOV response letter on July 29, 2024. VOC-laden soil receipts, soil VOC concentrations, and emission calculations for this reporting period are located in Appendix S.

ALRRF accepted high VOC-contaminated soil exceeding 50 ppm volatile organic compounds by weight during this reporting period. All records required by the permit are available onsite.

2.14.6 S-19 - Transfer Tank with Siphon Pump

Title V Permit Condition Number 20774, Parts 1 and 3, limit the wastewater throughput from S-19 to 1,576,800 gallons in any consecutive 12-month period. Table 2-10 compares the actual consecutive 12-month rolling wastewater throughput for the S-19 transfer tank with the permit limit. During the reporting period, no wastewater was directed through S-19 (all wastewater went directly to S-12) and no waste material was collected from the siphon pump during this reporting period.

Table 2-10 Monthly 12-Month Rolling LFG Condensate Throughput

	Consecutive 12-Month S-19 Throughput (Gallons)	**Waste Material Collected from the Siphon Pump (Gallons)**
PERMIT LIMIT	**1,576,800**	**20,750**
June 2024	0	0
July 2024	0	0
August 2024	0	0
September 2024	0	0
October 2024	0	0
November 2024	0	0

The S-19 transfer tank is also subject to the requirements of BAAQMD Regulation 8, Rule 8 (Oil/Water Separators). This regulation requires an inspection and leak check (readings not to exceed 500 ppmv methane) of all gaskets, all flanges, tank condition, and connections of gauges and pipes on a quarterly basis.

The quarterly S-19 Inspection and Leak Checks were conducted on the following dates:

- Third Quarter 2024 – August 15, 2024
- Fourth Quarter 2024 – November 20, 2024

S-19 was in fair condition and no leaks were detected above the 500-ppmv limit during the Third and Fourth Quarter 2024 inspection.

All of the records for S-19 covering this reporting period are included in Appendices T, and are in full compliance with the terms of Permit Condition Number 20774 and the requirements of BAAQMD Regulation 8, Rule 8.

2.14.7 Diesel Engines S-199, S-200, S-201, S-231, S-224, S-225, S-228, S-235, and S-238

Fuel usage and operating hour records for all the engines are included in Appendix U.

Operating Hours of Diesel Engines S-199, S-200, and S-201

Emergency use diesel engines S-199, S-200 and S-201 commenced operation in March 2008. S-199, S-200, and S-201 operated in compliance pursuant to PTO Condition Number 22850, which limits operation of S-199, S-200, and S-201 to no more than 50 hours per calendar year for maintenance and testing. ALRRF operated these engines in compliance with Title V Permit for the reporting period.

Fuel Usage of Diesel Engines S-193

Title V Permit Condition Number 20801 requires that diesel fuel usage at remaining engine, S-193, not exceed the rates listed in the table below during any consecutive 12-month period.

ALRRF operated these engines in full compliance with Title V Permit Condition Number 20801 during the consecutive 12-month period ending on November 30, 2024, as follows in Table 2-11.

Table 2-11. Diesel Engines Fuel Usage

Engine	December 1 -2023 to November 30, 2024 Estimated Fuel Usage (Gallons)	Permit Limit (Gallons/year)
S-193	3.0	62,196

Operating Hours of Diesel Engines, S-228, S-S-224, S-225, S-231, S-235 and S-238

Pursuant to BAAQMD PTO Condition 26,225, 26734, 27606, and 27888, the total combined operating time for the S-228, S-224, S-225, S-231, S-235and S-238 diesel engines shall not exceed 29,200 hours during any consecutive 12-month period.

Daily operating records for S-231, S-235 S-228, S-238, S-224 and S-225 are maintained onsite at the ALRRF.

ALRRF operated in full compliance with the PTO Condition 26225, 26734, 27606 and 27888 during the 12-month consecutive period ending November 30, 2024. A summary of operating hours are listed below in Table 2-12. As of November 30, 2024, ALRRF, Tippers S-228, S-224 S-225, S-231, S-235 and S-238 were operational.

Table 2-12. Diesel Engines Operating Hours

Tipper Engine	Hours Operated June 1, 2024- November 30, 2024	Hours Operated in 12-Month Period Ending November 30, 2024	Operations Limits
S-231	828	3,537	7,300 Hours 12-Months*
S-228	1,105	2,211	7,300 Hours 12-Months*
S-224	0.0	0.0	14,600 Hours 12-Months*
S-225	0.0	0.0	
S-235	3,059	5,604	7,300 Hours 12-Months*
S-238	2,114	2,185	7,300 Hours 12-Months*
Combined S-228, S-224, S-225, S-231, S-235 and S-238	7,106	13,537	

* Limits according to BAAQMD 26,225, 26734, 27606, and 27888.

2.14.8 Carbon Monoxide Emissions Tracking

PTO Condition Number 24373 limits the rolling 12-month CO emissions rate for each non-mobile combustion device onsite and for the entire site as a whole.

CO Emissions for the A-15 and A-16 Flares; the S-6 and S-7 Turbines; the S-31, S-193, S-197, S-198, S-199, S-200, S-201, S-206, and S-208, portable diesel-fired engines; and other portable diesel-fired sources under 50 horsepower were calculated using CO emissions factors and monthly operating hours as stipulated in PTO Condition Number 24373. Please refer to Appendices O, U, and V for details. The maximum potential CO emissions for the portable diesel-fired engines as required by PTO Condition Number 24373 Part 3(b) can also be found in Appendix W.

ALRRF operated in full compliance with PTO Condition Numbers 24373 during the 12-month consecutive period ending November 30, 2024, as follows in Table 2-13.

Table 2-13. Site-Wide CO Emissions

Source	12-Month CO Emissions (Tons)	Rolling 12- Month Permit Limit (Tons)
A-15 (Backup Flare)	1.200	93.268
A-16 (LNG Plant Flare)	4.323	115.632
S-6 (Turbine 1)	19.970	56.064
S-7 (Turbine 2)	16.885	56.064
Portable Engines	3.478	N/A
Total (Site-wide)	45.857	225.0

2.14.9 S-140 SBR 1 and S-141 SBR 2 – Aerated Biological Reactors

Title V Permit Condition Number 20922 was revised on August 3, 2006, to include an alternative compliance demonstration method. Permit Condition Number 20922, Part 1 limits the quarterly average total organic carbon (TOC) concentration in the wastewater to less than 52 ppmw with a maximum daily throughput of 52,400 gallons to each tank. Alternatively, emissions of precursor organic compounds (POC) are limited to 10 pounds per day. Part 2 of the revised permit condition limits either the rolling 12-month wastewater throughput for S-140 and S-141 to 6,460,000 gallons or 12-month total POC emissions to less than 1,230 pounds. The rolling 12-month wastewater throughput for S-140 and S-141 was zero (0) gallons as of the end of this reporting period. See Appendix X for flow records for S-140 and S-141.

Table 2-14 below compares Permit Condition Number 20922 concentration limits for S-140 (SBR 1) and S-141 (SBR 2) followed by the actual analytical results for selected constituents obtained during the Third Quarter 2024 event on August 22, 2024, and Fourth Quarter 2024 event on November 19, 2024. For all Quarters, monitoring was completed by obtaining a sample at the LCRS and at the S-140 Reactor.

Table 2-14 Analytical Results Summary for LCRS and SBR1

Compound	Concentration Limit (ppbw)	Third Quarter 2024 Average (ppbw)	Fourth Quarter 2024 Average (ppbw	Annual Average Results (ppbw)
Benzene	80	2.7	ND	2.1
Chloroform	470	ND	ND	ND
1,4 Dichlorobenzene	1,020	6.1	5.0	5.0
Methylene Chloride	2,530	ND	ND	ND
Naphthalene	3,590	ND	ND	ND
Perchloroethylene (Tetracholoroethylene)	430	ND	ND	ND
Trichloroethylene (Trichloroethene)	1,290	ND	ND	ND
Vinyl Chloride	30	ND	ND	ND

ppbw – parts per billion by weight
ND – Non-Detect (below detection limit)

Table 2-15 presents the results of TOC testing by quarter and by annual average. Pursuant to Permit Condition Number 20922 if the TOC concentration exceeds the permit limit of 52 ppmw, POC emissions must be calculated using the equation in Permit Condition Number 20922, Part 5h.

Table 2-15. Total Organic Compounds Results Summary

Constituents	Concentration Limit (ppmw)	Third Quarter 2024 Average (ppbw)	Fourth Quarter 2024 Average (ppbw)
TOC concentration	52	0.026	0.183
Average Annual TOC Concentration	52	0.039	0.171

Appendix X contains the laboratory VOC analytical results and the monthly throughput records for S-140 and S-141. The monitored quarterly and annual concentrations are within the Permit Condition Number 20922 limits.

2.14.10 Non-Methane Organic Compound Content in Collected Landfill Gas

Pursuant to Permit Condition No. 19235, Part 17a, effective upon the commencement of waste disposal in Fill Area 2, the rolling three-year average NMOC concentration in LFG extracted from the site is limited to 600 ppmv expressed as C6, corrected to 50 percent methane content. Waste disposal operations commenced in Fill Area 2 in March 2019.

During June 2017, ALRRF submitted permit application for a change of condition to address the current NMOC concentrations and proposed a higher Fill Area 2 NMOC concentration as well as requested to revise the Fill Area 1 baseline fugitive POC emissions. Application Number AN 28727 was assigned. During September 2020, ALRRF submitted addendum to the previously submitted permit application for a change of condition to address the current NMOC concentrations and proposed a higher Fill Area 2 NMOC concentration as well as requested to revise the Fill Area 1 baseline fugitive POC emissions. The best estimate of the current NMOC concentration in the ALRRF LFG for FA1 is 1,262 ppmv as methane, based on site test data. ALRRF submitted a follow-up letter on September 20, 2024, to the previous submittals on September 23, 2021, September 21, 2022, and September 27, 2023. BAAQMD issued a new AN Number 32247.

3 PERFORMANCE TEST REPORT

In accordance with BAAQMD Rule 8-34-413 and 40 CFR §60.757(g) in the NSPS, a Performance Test Report is required to be submitted for the ALRRF containing performance and monitoring data for the operation of the GCCS. The following operational records have been reviewed, summarized, and are included in this Performance Test Report.

Table 3-1. Performance Test Requirement

Rule	Requirement	Location in Report
8-34-412, §60.8, §60.752(b)(2)(iii)(B), §60.754(d)	Compliance Demonstration Test	Section 3.1 Appendix AA
§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 Appendix Z
§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 Appendices I & Z
§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 AA

3.1 SOURCE TEST REPORTS *(BAAQMD 8-34-412)*

Compliance demonstration tests (source tests) were performed on the S-6 and S-7 Gas Turbines and A-16 Flare during 2023 and 2024.

Source tests for the S-6 and S-7 turbines were performed on December 6, 2023, by Blue Sky Environmental, Inc. (Blue Sky) pursuant to BAAQMD Regulation 8-34-412. The S-6 and S-7 Source Test Report was submitted to the BAAQMD on February 2, 2024, within 60 days of the test date.

The source test for the A-15 Flare was performed by Blue Sky on February 28, 2024, pursuant to 8-34-412. The A-15 Source Test Report was submitted to the BAAQMD on April 25, 2024, within 60 days of the test date.

The 2024 annual source test of the A-16 Flare, was performed by Blue Sky on March 6, 2024. The A-16 2024 Source Test Report was submitted to the BAAQMD on May 3, 2024, within 60 days of the test date. The A-16 2024 Source Test Amended Report was submitted to the BAAQMD on August 5, 2024, within 60 days of the TRS retest date.

The results from the source tests performed during this reporting period are summarized in the following sections. For brevity, only the source test summary results pages are included in Appendix Y. The complete source test reports were completed and submitted to the BAAQMD as detailed above and are available upon request.

3.1.1 A-15 Flare Test Results

The February 28, 2024, source test results for the A-15 Flare indicate that the flare is in compliance with 8-34-301.4 and PTO Condition Number 19235. As required by 8-34-301.3 and Condition Number 19235, the flare meets the NMOC emission rate of less than 30 ppmv as methane, corrected to 3 percent O_2. Table 3-2 shows the results of the February 28, 2024, source test. The 2024 source test was conducted without condensate injection. The last time condensate was injected into the A-15 Flare was during the 2011 Source Test. WM does not anticipate injecting any condensate into the system in the future.

Table 3-2. A-15 Source Test Results

Parameter	February 28, 2024 A-15 Flare Results (condensate on)	February 28, 2024 A-15 Flare Results (condensate off)	Permit Limit
NMOC (ppmv as CH_4 @ 3% O_2)	-	<2.4	30
NO_x Emission Rate (lb/MMBTU)	-	0.0348	0.06
CO Emission Rate (lb/MMBTU)	-	0.053	0.30
SO_2 Emission (ppmv)	-	9.60	300

3.1.2 A-16 Flare Test Results

The March 6, 2024, source test results for the A-16 Flare indicate that the flare is in compliance with 8-34-301.4 and PTO Condition Number 19235. As required by 8-34-301.3 and Condition Number 19235, the flare meets the NMOC emission rate of less than 30 ppmv as methane, corrected to 3 percent O_2. Table 3-3 shows the results of the source test.

The 2024 source test event was completed March 6, 2024. Results of the A-16 Flare 2024 source test event were submitted to the BAAQMD within 60 days of test date and are included in the semi-annual report.

During the reporting period, the source test results at flare A-16 exceeded the 200 ppmv total reduced sulfur (TRS) limit specified in PTO Condition 19235, Part 11. However, these results were inconsistent with prior sample results. Therefore, ALRRF conducted further investigation and performed source retest for TRS at flare A-16 on June 10, 2024. Results from the source retest event were within permit limit. See updated Table 3-3 ALRRF submitted the Title V 10-day letter on May 3, 2024; and Title V 30-day letter on May 23, 2024.

Table 3-3. A-16 Source Test Results

Parameter	March 6, 2024 and June 10, 2024* A-16 Flare Results (condensate on)	March 6, 2024 and June 10, 2024* A-16 Flare Results (condensate off)	Permit Limit
NMOC (ppmv as CH_4 @ 3% O_2)	<2.9	<2.3	30
NO_x Emission Rate (lb/MMBTU)	0.0504	0.0387	0.06
CO Emission Rate (lb/MMBTU)	<0.0171	0.0364	0.20

Parameter	March 6, 2024 and June 10, 2024* A-16 Flare Results (condensate on)	March 6, 2024 and June 10, 2024* A-16 Flare Results (condensate off)	Permit Limit
TRS Content (ppmv)*	97.7	76.4	200
SO_2 Emission Rate (ppmv)*	8.6	6.2	300

3.1.3 S-6 Gas Turbine Test Results

The December 6, 2023, source test results for the S-6 Gas Turbine indicate that the turbine is in compliance with 8-34-301.4 and Title V Permit Condition Number 18773 and that, as required by 8-34-301.4 and Condition Number 18773, the turbine meets the NMOC emission rate of less than 120 ppmv. The final results of the source test are shown in Table 3-4 below.

Table 3-4. S-6 Source Test Results

Parameter	December 6, 2023 S-6 Gas Turbine Results	Permit Limit
NMOC (ppmv as CH_4 @ 3% O_2)	4.6	120
NO_x Emission Rate (lb/MMBTU)	0.0999	0.1567
CO Emission Rate (lb/MMBTU)	0.106	0.2229
TRS Content (ppmv)	56.7	150

3.1.4 S-7 Gas Turbine Test Results

The December 6, 2023, source tests results for the S-7 Gas Turbine indicate that the turbine is in compliance with 8-34-301.4 and Title V Permit Condition Number 18773 and that, as required by 8-34-301.4 and Condition Number 18773, the turbine meets the NMOC emission rate of less than 120 ppmv. The final results of the source test are shown in Table 3-5 below.

Table 3-5. S-7 Source Test Results

Parameter	December 6, 2023 S-7 Gas Turbine Results	Permit Limit
NMOC (ppmv as CH_4 @ 3% O_2)	<4.2	120
NO_x Emission Rate (lb/MMBTU)	0.0970	0.1567
CO Emission Rate (lb/MMBTU)	0.0930	0.2229
TRS Content (ppmv)	85.3	150

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 LFG collection system updated on September 4, 2024, showing the locations of vertical wells, horizontal collectors, and other LFG extraction devices is included in Appendix Z.

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 will be based on establishing, maintaining, and documenting the LFG collection flow rate, as required by Title V Permit

Condition Number 19235, Part 2. Over the initial monitoring period covered by this Partial Annual Report, the sufficiency of the GCCS components was based as follows:

The existing GCCS has historically provided LFG wells and collectors spaced in accordance with standard industry practices. The installed density appears more than adequate for controlling surface emissions, based on continuous compliance and operational experience. This installation density also provides sufficient methane quality and flows to sustain the energy generating control devices. Additional LFG collectors are installed regularly, as required to maintain compliance and provide maximum available LFG extraction for fueling the energy generating control devices.

The total capacity of the LFG mover equipment exceeds the current EPA extraction rates 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-15 flare is used as a back-up control device.

The landfill operator will conduct 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 in accordance with the NSPS requirements.

On March 25, 2020, ALRRF submitted initial change of permit conditions request for future new well actions. On June 8, 2020, ALRRF submitted a revised change of permit conditions request for future new well actions, including the installation of install up to one hundred and twenty (120) vertical wells and twenty (20) horizontal trench collectors and five (5) clean-out risers (LCRS) and decommission up to one hundred (100) vertical wells, fifteen (15) horizontal trench collectors, and five (5) LCRS. The BAAQMD approved the application on November 12, 2020, which was assigned Application Number (AN) 30563.

Four (4) existing wells were decommissioned during the period of June 1, 2024, and November 30, 2024. No new wells were installed or started during the period of June 1, 2024, and November 30, 2024. Appendix B contains the Wellfield SSM Log for the wells that were started and decommissioned during the reporting period. See Appendix P for BAAQMD Correspondence for well start-up and decommissioning notifications and correspondence regarding AN 30563.

Compliance with §60.757(g)(2) is confirmed by performing quarterly SEM events. Refer to Section 2.6, Surface Emissions Monitoring, in this report for information pertaining to the surface emissions monitoring results. New wells will be installed as needed in the future to further control emissions.

3.4 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."

The GCCS Design Plan dated December 2000 (amended and restated in June 2003, August 2009, December 2010 and July 28, 2020) for ALRRF does not include asbestos or non-degradable waste areas that are excluded from the collection system. Therefore, §60.757(g)(3) is not applicable.

3.5 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."

The GCCS Design Plan dated December 2000 (amended and restated in June 2003, August 2009, December 2010 and July 28, 2020) for ALRRF does not include asbestos or non-degradable waste areas that are excluded from the collection system. The current 8-acre area that is segregated for asbestos disposal is covered by the GCCS. Therefore, §60.757(g)(4) is not applicable.

3.6 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 GCCS capacity will be increased as warranted and as required by regulations. See Appendix P for related correspondence.

3.7 COMPLIANCE WITH §60.757(g)(6)

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

In compliance with §60.752(b)(2)(ii)(A)(3) and (4), the GCCS was, and future expansions will be, designed to extract LFG at a sufficient rate to minimize the subsurface lateral migration and surface emissions of LFG. This is achieved by sizing and installing sufficient collection elements, transmission piping, blower(s), and control devices for the estimated maximum rate of LFG to be generated within the refuse at a given point in time. The GCCS will be operated to collect LFG at a sufficient rate, (per the definition in §60.751) by maintaining a negative gauge pressure at all wellheads sufficient to extract a LFG flow rate exceeding the LFG collection flow rate on a continuous basis, as established by the operator per Title V Permit Condition Number 19235, Part 2.

Compliance with §60.757(g)(6) is demonstrated by performing quarterly LFG migration monitoring.

The LFG migration monitoring during the reporting period was performed pursuant to the 2011 Landfill Gas Migration Monitoring Plan. The quarterly LFG migration monitoring results for this reporting period are included in Appendix AA.

The LFG migration monitoring and the structure monitoring event for this reporting period were conducted on the following dates:

- Third Quarter 2024– July 9, 12, and 16, 2024
- Fourth Quarter 2024– October 1 and 2, 2024

During the Third Quarter 2024, Probes GP 8C and GP 20C had higher methane values in July 2024. The methane values at Probes GP 8C and GP 20C have been previously shown to be naturally occurring and not related to landfill operations. During the Fourth Quarter

2024, Probes GP 15A had higher methane values in October 2024. ALRRF submitted the initial exceedance notification and the 60-day report to the LEA. No other exceedances of Subtitle D (40 CFR 258.23) and California Code of Regulations (CCR) Title 27, Division 2, Section 20919.5 were detected during the monitoring events. The results of monitoring can be found in Appendix AA.

4 STARTUP, SHUTDOWN, AND MALFUNCTION REPORT

4.1 SSM REPORTS FOR THE GCCS AT ALRRF

The NESHAP contained in 40 CFR part 63, AAAA for Municipal Solid Waste 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 a Startup, Shutdown, and Malfunction (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.

The following is information covering SSM events that occurred during this reporting period:

- During the reporting period, eight (8) wellfield SSM events occurred. The time and duration of each event is presented in the SSM Log contained in Appendix B.
- During the reporting period, ten (10) Backup Flare (A-15) SSM events occurred. A-15 was shut down to allow for continuous operation of the A-16 Flare. The time and duration of each event is presented in the SSM Log contained in Appendix C.
- During the reporting period, thirty-eight (38) Flare (A-16) SSM events occurred. A-16 was shut down and restarted to allow for construction in the wellfield, for forced utility outages and/or to perform routine maintenance tasks. The time and duration of each event is presented in the SSM Log contained in Appendix C.
- During the reporting period, twenty-one (21) Turbine Number 1 (S-6) SSM events occurred. S-6 was shut down and restarted during the period for forced utility outages and/or to perform routine maintenance tasks. The time and duration of each event is presented in the SSM Log contained in Appendix D.
- During the reporting period, twenty-four (24) Turbine Number 2 (S-7) SSM events occurred. S-7 was shut down and restarted during the period for forced utility outages and/or to perform routine maintenance tasks. The time and duration of each event is presented in the SSM Log contained in Appendix D.
- During the reporting period, no LNG Plant (S-210) SSM events occurred. S-210 was shut down on June 30, 2023. The time and duration of each event is presented in the SSM Log contained in Appendix E.
- During the reporting period forty-one (41) monitoring/recorder equipment SSM events occurred. The time and duration of each event is contained in Appendix AD.

- In all one hundred and forty-two (142) events, automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan and there were no deviations from the SSM Plan.

- No exceedances of any applicable emission limitation in the landfills NESHAP (63.10(d)(5)(i)) occurred during this reporting period.
- Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).

I certify the following:

> ***Based on information and belief formed after reasonable inquiry, information on the startup, shutdown, malfunction forms, all accompanying reports, and other required certifications are true, accurate, and complete.***

Blaine F Harrison

Signature of Responsible Official

12/17/2024

Date

Blaine Harrison

Name of Responsible Official

APPENDIX A
GAS COLLECTION SYSTEM DOWNTIME LOGS

ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY, Livermore, CA

June 1, 2024 - November 30, 2024 GCCS DOWNTIME LOG

START DATE & TIME	STOP DATE & TIME	DURATION (Hours)	Total Shutdown due to All Control Devices Shutdown (Hours)	Actions taken	Comments	APPLICABLE 8-34 EXEMPTION
9/1/24 23:32	9/1/24 23:50	0.3	0.3	Backup generator was started. Flare A16 was restarted.	**All control devices were shut down during Shutdown during Ralph Substation - 230 kV breaker trip.** Control device operators were onsite to inspect and manually restart the control devices. Visual inspection was conducted, checked PLC for any faults and abnormalities, and initiated device startup.See attached startup checklists A and B.	8-34-113, Inspection and Maintenance
9/2/24 1:44	9/2/24 1:50	0.1	0.1	Backup generator and flare shutdown during switchover to utility power.	**All control devices were shut down during Shutdown during Ralph Substation - 230 kV breaker trip.** Control device operators were onsite to inspect and manually restart the control devices. Visual inspection was conducted, checked PLC for any faults and abnormalities, and initiated device startup.See attached startup checklists A and B.	8-34-113, Inspection and Maintenance
10/21/24 6:42	10/21/24 6:52	0.2	0.2	Backup generator was started. Flare A16 was restarted.	**All control devices were shut down during Shutdown during 21.5 kv feeder trip.** Control device operators were onsite to inspect and manually restart the control devices. Visual inspection was conducted, checked PLC for any faults and abnormalities, and initiated device startup.See attached startup checklists A and B.	8-34-113, Inspection and Maintenance
10/21/24 7:34	10/21/24 7:48	0.2	0.2	Backup generator and flare shutdown during switchover to utility power.	**All control devices were shut down during Shutdown during 21.5 kv feeder trip.** Control device operators were onsite to inspect and manually restart the control devices. Visual inspection was conducted, checked PLC for any faults and abnormalities, and initiated device startup.See attached startup checklists A and B.	8-34-113, Inspection and Maintenance
TOTAL June 1, 2024 to November 30, 2024 (HOURS):		**0.8**	**0.8**			
TOTAL January 1, 2024 to November 30, 2024 (HOURS):		**3.7**	**3.7**			

APPENDIX B
WELLFIELD SSM LOG

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: Wellfield

Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

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) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	ibe Emission Standard(s
Well ID Number: ALLC0775 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/19/24 14:00	6/19/24 14:02	0.03	NA	Decommissioned pursuant to PTO Condition 19235 Part 1(b)(i) as updated by PTO AN 30563.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/19/2024	☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALLC0775 ☐ Startup Event ☐ Shutdown Event ☐ Malfunction Event						☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities		☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALLC0776 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/19/24 14:10	6/19/24 14:12	0.03	NA	Decommissioned pursuant to PTO Condition 19235 Part 1(b)(i) as updated by PTO AN 30563.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/19/2024	☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALLC0776 ☐ Startup Event ☐ Shutdown Event ☐ Malfunction Event						☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities		☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALLC0828 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/19/24 14:24	6/19/24 14:26	0.03	NA	Decommissioned pursuant to PTO Condition 19235 Part 1(b)(i) as updated by PTO AN 30563.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/19/2024	☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALLC0828 ☐ Startup Event ☐ Shutdown Event ☐ Malfunction Event						☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities		☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALLC0703 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	9/23/24 13:32	9/23/24 13:34	0.03	NA	Decommissioned pursuant to PTO Condition 19235 Part 1(b)(i) as updated by PTO AN 30563.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/23/2024	☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALLC0703 ☐ Startup Event ☐ Shutdown Event ☐ Malfunction Event						☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities		☐ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☐ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT0851 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	10/17/24 8:00	10/17/24 8:02	0.03	6 hours	Well offline during repairs.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☒ 117: Gas Collection ☐ 118: Construction Activities	10/17/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT0851 ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	10/17/24 13:40	10/17/24 13:42	0.03			☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/17/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT0814 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	10/17/24 8:00	10/17/24 8:02	0.03	6 hours	Well offline during repairs.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☒ 117: Gas Collection ☐ 118: Construction Activities	10/17/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT0814 ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	10/17/24 13:40	10/17/24 13:42	0.03			☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/17/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT20021 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	10/21/24 8:00	10/21/24 8:02	0.03	1 hours	Well offline during repairs.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☒ 117: Gas Collection ☐ 118: Construction Activities	10/21/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT20021 ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	10/21/24 9:00	10/21/24 9:02	0.03			☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/21/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT20027 ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	11/18/24 17:00	11/18/24 17:02	0.03	21 hours	Well offline during repairs.	☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☒ 117: Gas Collection ☐ 118: Construction Activities	11/18/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 3	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	
Well ID Number: ALT20027 ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	11/19/24 13:59	11/19/24 14:01	0.03			☐ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	11/19/2024	☒ Manual (Go to Section 9) ☐ Automatic (Go to Section 11)	Procedure No. 1 to 4	☐ Yes (Go to Section 11) ☒ No (Stop)	☐ Yes (Go to Section 12) ☐ No (Stop)	

Wells Offline-Pending

PTO - Permit to Operate   ATC - Authority to Construct

Total SSM Count for June 1, 2024 to November 30, 2024	8

(a) STANDARD OPERATING PROCEDURES

Shutdown

Procedure No. Procedure

1 Ensure that there are no unsafe conditions present, contact manager immediately

2 Initiate shutdown sequence below by one or more of the following (Note date and time in Section 1 of form above)

- a. Press Emergency Stop if necessary
- b. Close On/Off switch(es) or Push On/Off button(s)
- c. Close adjacent valves if necessary

3 Observe that system achieves normal shutdown ranges for levels, pressures, and temperatures (Note date and time in Section 2 of form above)

Startup

Procedure No. Procedure

1 Ensure that there are no unsafe conditions present

2 Ensure that the system is ready to start by one of the following:

- a. Valves are in correct position
- b. Levels, pressures, and temperatures are within normal starting range
- c. Alarms are cleared
- d. Power is on and available to control panel and ready to energize equipment.
- e. Emergency stop is de-energized

3 Initiate start sequence (Note time and date in section 1 of form above)

4 Observe that system achieves normal startup ranges for levels, pressures, and temperatures (Note time and date in Section 2 of form above)

Malfunction

EQUIPMENT	PURPOSE	MALFUNCTION EVENT	COMMON CAUSES	PROCEDURE NO. -TYPICAL RESPONSE ACTIONS
LFG Collection and Control System				
Blower or Other Gas Mover Equipment	Applies vacuum to wellfield to extract LFG and transport to control device	Loss of LFG Flow/Blower Malfunction	-Flame arrestor fouling/deterioration -Automatic valve problems -Blower failure (e.g., belt, motor, impeller, coupling, seizing, etc.) -Loss of power -Extraction piping failure -Condensate knock-out problems -Extraction piping blockages	1. Repair breakages in extraction piping 2. Clean flame arrestor 3. Repair blockages in extraction piping 4. Verify automatic valve operation, compressed air/nitrogen supply 5. Notify power utility, if appropriate 6. Provide/utilize auxiliary power source, if necessary 7. Repair Settlement in Collection Piping 8. Repair Blower 9. Activate back-up blower, if available 10. Clean knock-up pot/demister 11. Drain knock-out pot
Extraction Wells and Collection Piping	Conduits for extractions and movement of LFG flow	Collection well and pipe failures	-Break/crack in header or lateral piping -Leaks at wellheads, valves, flanges, Test ports, seals, couplings, etc. -Collection piping blockages -Problems due to settlement (e.g. pipe separation, deformation, development of low points)	12. Repair leaks or breaks in lines or wellheads 13. Follow procedures for loss of LFG flow/blower malfunction 14. Repair blockages in collection piping 15. Repair settlement in collection piping 16. Re-install, repair, or replace piping
Blower or Other Gas Mover Equipment And Control Device	Collection and control of LFG	Loss of electrical power	- Force majeure/Act of God (e.g., lightning, flood, earthquake, etc.) -Area-wide or local blackout or brown-out -Interruption in service (e.g. blown service fuse) -Electrical line failure -Breaker trip -Transformer failure -Motor starter failure/trip -Overdraw of power -Problems in electrical panel -Damage to electrical equipment from on-site operations	17. Check/reset breaker 18. Check/repair electrical panel components 19. Check/repair transformer 20. Check/repair motor starter 21. Check/repair electrical line 22. Test amperage to various equipment 23. Contact electricity supplier 24. Contact/contract electrician 25.Provide auxiliary power (if necessary)
LFG Control Device	Combusts LFG	Low temperature conditions at control device	-Problems with temperature - monitoring equipment -Problems/failure of -thermocouple and/or thermocouple wiring -Change of LFG flow -Change of LFG quality -Problems with air louvers -Problems with air/fuel controls -Change in atmospheric conditions	26. Check/repair temperature monitoring equipment 27. Check/repair thermocouple and/or wiring 28. Follow procedures for loss of flow/blower malfunction 29. Check/adjust louvers 30. Check/adjust air/fuel controls
LFG Control Device	Combusts LFG	Loss of Flame	-Problems/failure of thermocouple -Loss/change of LFG flow -Loss/change of LFG quality -Problems with air/fuel controls -Problems/failure of flame sensor -Problems with temperature monitoring equipment	31. Check/repair temperature monitoring equipment 32. Check/repair thermocouple 33. Follow procedures for loss of flow/blower malfunction 34. Check/adjust air/fuel controls 35. Check/adjust/repair flame sensor 36. Check/adjust LFG collectors

Flow Monitoring/ Recording Device	Measures and records gas flow from collection system to control	Malfunctions of Flow Monitoring/Recording Device	-Problems with orifice plate, pitot tube, or other in-line flow measuring device -Problems with device controls and/or wiring -Problems with chart recorder	37. Check/adjust/repair flow measuring device and/or wiring 38. Check/repair chart recorder 39. Replace paper in chart recorder
Temperature Monitoring/ Recording Device	Monitors and records combustion temperature of enclosed combustion device	Malfunctions of Temperature Monitoring/Recording Device	-Problems with thermocouple -Problems with device controls and/or wiring -Problems with chart recorder	40. Check/adjust/repair thermocouple 41. Check/adjust/repair controller and/or wiring 42. Check/adjust/repair electrical panel components 43. Check/repair chart recorder 44. Replace paper in chart recorder
Control Device	Combusts LFG	Other Control Device Malfunctions	-Control device smoking (i.e. visible emissions) -Problems with flare insulation -Problems with pilot light system -Problems with air louvers -Problems with air/fuel controllers -Problems with thermocouple -Problems with burners -Problems with flame arrester -Alarmed malfunction conditions not covered above -Unalarmed conditions discovered during inspection not covered above	45. Site-specific diagnosis procedures 46. Site-specific responses actions based on diagnosis 47. Open manual louvers 48. Clean pitot orifice 49. Clean/drain flame arrestor 50. Refill propane supply 51. Check/repair pilot sparking system
(b) For each permit limit exceedance complete an "SSM Plan Departure Form". Notify BAAQMD verbally or by fax within 2 working days after commencing the actions that an event inconsistent with the SSM Plan and which resulted in an exceedance of an applicable emission permit has occured. Follow up in writing to the agency within 7 working days after the end of the event.				

APPENDIX C

FLARES (A-15 AND A-16) SSM LOGS

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: A-15 Landfill Gas Flare (Standby)

Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June1, 2024 to November 30, 2024

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Downtime (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit	(12) Describe Emission
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	6/1/24 0:00	6/1/24 0:02	0.03	88.6	Flare was shutdown. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/1/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	6/4/24 16:34	6/4/24 16:44	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/4/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	6/5/24 15:14	6/5/24 15:16	0.03	497.0	Flare was started during VFD overheating issues at flare A16. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/5/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	6/26/24 8:12	6/26/24 8:22	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	6/26/24 8:16	6/26/24 8:18	0.03	0.2	Flare was started during maintenance on flare A16 VFD. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	6/26/24 8:30	6/26/24 8:40	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	6/26/24 13:42	6/26/24 13:44	0.03	1,197.6	Flare was shutdown to operate other control devices. Flare restarted during PG&E outage caused by DTT communication issues. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	8/15/24 11:16	8/15/24 11:26	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	8/16/24 4:02	8/16/24 4:04	0.03	1.8	Flare shutdown due to KOP alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/16/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11 X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	8/16/24 5:50	8/16/24 6:00	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/16/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	8/19/24 7:20	8/19/24 7:22	0.03	0.3	Flare shutdown due to KOP alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/19/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11 X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	8/19/24 7:36	8/19/24 7:46	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/19/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	8/26/24 7:58	8/26/24 8:00	0.03	0.7	Flare shutdown due to KOP alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/26/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11 X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	8/26/24 8:40	8/26/24 8:50	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare Startup Event x Shutdown Event Malfunction Event	8/28/24 12:42	8/28/24 12:44	0.03	697.6	Flare was shutdown to operate other control devices. Flare restarted during CPU upgrades. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/28/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	9/26/24 14:20	9/26/24 14:30	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11 No (Stop)	

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: A-15 Landfill Gas Flare (Standby)

Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June1, 2024 to November 30, 2024

Identify Flare & Check Applicable Event		(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Downtime (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption		(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)		(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?		(11) Did Event Cause Any Emission Limit		(12) Describe Emission
Component: A-15 Flare		9/26/24 14:52	9/26/24 14:54	0.03	317.0	Flare was shutdown to operate other control devices. Flare restarted during troubleshooting on CPU program at flare A16. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/26/2024	X	Manual (Go to Section 8)	Procedure 1 to 3		Yes (Go to Section 10)		Yes (Go to Section 11	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
Component: A-15 Flare		10/9/24 19:54	10/9/24 20:04	0.17			X	113: Inspection and Maintenance	10/9/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
Component: A-15 Flare		10/10/24 12:16	10/10/24 12:18	0.03	1,236.7	Flare was shutdown to operate other control devices.	X	113: Inspection and Maintenance	10/10/2024	X	Manual (Go to Section 8)	Procedure 1 to 3		Yes (Go to Section 10)		Yes (Go to Section 11	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
Component: A-15 Flare		11/30/24 23:59	12/1/24 0:09	0.17			X	113: Inspection and Maintenance	11/30/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11	
	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									

Notes: The A-15 SSM Log is maintained pursuant to Permit Condition No. 19235, Parts 2(b) and 15(a).
*The A-15 Flare is a standby flare and is shut down to allow for continuous operation of the A-16 Flare and Turbines.
There were 721 hours available for the A-15 Flare in November 2024 due to Daylight Saving Time.

Total Downtime for June 1, 2024 to November 30, 2024 (Hours)*	4,037.5
Total Runtime for June 1, 2024 to November 30, 2024 (Hours)*	355.5
Total Count for June 1, 2024 to November 30, 2024	10

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: A-16 Landfill Gas Flare

Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/4/24 12:24	6/4/24 12:26	0.03	0.57	Flare shutdown caused due to overheating of VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/4/24 12:58	6/4/24 13:08	0.17			☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/4/24 13:36	6/4/24 13:38	0.03	0.47	Flare shutdown caused due to overheating of VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/4/24 14:04	6/4/24 14:14	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/4/24 14:36	6/4/24 14:38	0.03	0.23	Flare shutdown caused due to overheating of VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/4/24 14:50	6/4/24 15:00	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/4/24 15:16	6/4/24 15:18	0.03	0.57	Flare shutdown caused due to overheating of VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/4/24 15:50	6/4/24 16:00	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/4/24 16:18	6/4/24 16:20	0.03	16.13	Flare shutdown caused due to overheating of VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/4/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/5/24 8:26	6/5/24 8:36	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/5/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/5/24 11:24	6/5/24 11:26	0.03	0.57	Flare shutdown caused due to overheating of VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/5/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/5/24 11:58	6/5/24 12:08	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/5/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/5/24 12:26	6/5/24 12:28	0.03	1.60	Flare shutdown caused due to overheating of VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/5/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/5/24 14:02	6/5/24 14:12	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/5/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/11/24 11:16	6/11/24 11:18	0.03	1.10	Flare shutdown during maintenance on check valve. Gasket was replaced. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/11/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/11/24 12:22	6/11/24 12:32	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/11/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-16 Flare ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	6/26/24 7:54	6/26/24 7:56	0.03	5.80	Flare shutdown during maintenance and cleaning on VFD. Flare was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/26/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: A-15 Flare ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	6/26/24 13:42	6/26/24 13:52	0.17			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	6/26/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: A-16 Landfill Gas Flare

Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption		(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)		(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?		(11) Did Event Cause Any Emission Limit Exceedance		(12) Describe Emission
	Component: A-16 Flare	7/14/24 6:52	7/14/24 6:54	0.03	1.50	Flare shutdown due to low temperature alarm. Adjusted louvers. Flare was inspected and restarted.	X	113: Inspection and Maintenance	7/14/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	7/14/24 8:22	7/14/24 8:32	0.17			X	113: Inspection and Maintenance	7/14/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	7/15/24 5:14	7/15/24 5:16	0.03	0.77	Flare shutdown due to low temperature alarm. Adjusted louvers. Flare was inspected and restarted.	X	113: Inspection and Maintenance	7/15/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	7/15/24 6:00	7/15/24 6:10	0.17			X	113: Inspection and Maintenance	7/15/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	8/7/24 13:06	8/7/24 13:08	0.03	0.37	Flare shutdown due to overheating of VFD. Blower was switched. Flare was inspected and restarted.	X	113: Inspection and Maintenance	8/7/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	8/7/24 13:28	8/7/24 13:38	0.17			X	113: Inspection and Maintenance	8/7/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	8/12/24 3:36	8/12/24 3:38	0.03	3.37	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	8/12/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	8/12/24 6:58	8/12/24 7:08	0.17			X	113: Inspection and Maintenance	8/12/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	8/18/24 13:28	8/18/24 13:30	0.03	2.60	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	8/18/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	8/18/24 16:04	8/18/24 16:14	0.17			X	113: Inspection and Maintenance	8/18/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	8/28/24 21:18	8/28/24 21:20	0.03	9.37	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	8/28/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	8/29/24 6:40	8/29/24 6:50	0.17			X	113: Inspection and Maintenance	8/29/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/1/24 23:36	9/1/24 23:38	0.03	0.17	Flare shutdown during utility trip event. Generator restarted and flare was online. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/1/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/1/24 23:46	9/1/24 23:56	0.17			X	113: Inspection and Maintenance	9/1/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/2/24 1:44	9/2/24 1:46	0.03	1.27	Flare shutdown during switching over of power from generator to utility power. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/2/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/2/24 3:00	9/2/24 3:10	0.17			X	113: Inspection and Maintenance	9/2/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/6/24 8:22	9/6/24 8:24	0.03	0.73	Flare was shutdown during blower maintenance. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/6/2024	X	Manual (Go to Section 8)	Procedure 1 to 3		Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/6/24 9:06	9/6/24 9:16	0.17			X	113: Inspection and Maintenance	9/6/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: A-16 Landfill Gas Flare Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

	Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form		(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used		(10) Did Steps Taken Vary From Section 9?		(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission
	Component: A-16 Flare	9/6/24 9:10	9/6/24 9:12	0.03	0.30	Flare shutdown during startup sequence. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/6/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/6/24 9:28	9/6/24 9:38	0.17			X	113: Inspection and Maintenance	9/6/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/6/24 13:20	9/6/24 13:22	0.03	0.57	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/6/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/6/24 13:54	9/6/24 14:04	0.17			X	113: Inspection and Maintenance	9/6/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/9/24 21:10	9/9/24 21:12	0.03	0.37	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/9/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/9/24 21:32	9/9/24 21:42	0.17			X	113: Inspection and Maintenance	9/9/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/24/24 9:30	9/24/24 9:32	0.03	31.90	Flare was shutdown to install new louvers. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/24/2024	X	Manual (Go to Section 8)	Procedure 1 to 3		Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/25/24 17:24	9/25/24 17:34	0.17			X	113: Inspection and Maintenance	9/25/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/25/24 17:30	9/25/24 17:32	0.03	0.20	Flare shutdown during pilot error. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/25/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/25/24 17:42	9/25/24 17:52	0.17			X	113: Inspection and Maintenance	9/25/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/25/24 17:52	9/25/24 17:54	0.03	0.10	Flare shutdown during pilot error. Adjustments were made. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/25/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/25/24 17:58	9/25/24 18:08	0.17			X	113: Inspection and Maintenance	9/25/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	9/30/24 13:30	9/30/24 13:32	0.03	0.10	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	9/30/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	9/30/24 13:36	9/30/24 13:46	0.17			X	113: Inspection and Maintenance	9/30/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	10/9/24 10:16	10/9/24 10:18	0.03	0.77	Flare shutdown during repair on flame eye. Flare was inspected and restarted.	X	113: Inspection and Maintenance	10/9/2024	X	Manual (Go to Section 8)	Procedure 1 to 3		Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	10/9/24 11:02	10/9/24 11:12	0.17			X	113: Inspection and Maintenance	10/9/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-16 Flare	10/9/24 11:10	10/9/24 11:12	0.03	0.13	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	10/9/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
	Component: A-15 Flare	10/9/24 11:18	10/9/24 11:28	0.17			X	113: Inspection and Maintenance	10/9/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: A-16 Landfill Gas Flare

Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	10/9/24 11:22	10/9/24 11:24	0.03	0.07	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	10/9/24 11:26	10/9/24 11:36	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	10/9/24 11:34	10/9/24 11:36	0.03	0.27	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	10/9/24 11:50	10/9/24 12:00	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	10/9/24 14:24	10/9/24 14:26	0.03	0.50	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/9/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	10/9/24 14:54	10/9/24 15:04	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	10/9/24 17:26	10/9/24 17:28	0.03	18.90	Flare shutdown during vendor-APTIM program upgrade. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/9/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	10/10/24 12:20	10/10/24 12:30	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/10/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	10/10/24 12:24	10/10/24 12:26	0.03	0.27	Flare shutdown due to low temperature alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/10/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	10/10/24 12:40	10/10/24 12:50	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/10/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	10/21/24 6:42	10/21/24 6:44	0.03	0.17	Flare shutdown during utility trip event. Generator restarted. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	10/21/24 6:52	10/21/24 7:02	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	10/21/24 7:34	10/21/24 7:36	0.03	0.43	Flare shutdown during to switchover to utility power. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	10/21/24 8:00	10/21/24 8:10	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	11/15/24 10:32	11/15/24 10:34	0.03	0.63	Flare shutdown caused due to blower bearing high temperature alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/15/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	11/15/24 11:10	11/15/24 11:20	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/15/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-16 Flare Startup Event x Shutdown Event Malfunction Event	11/23/24 5:54	11/23/24 5:56	0.03	0.97	Flare shutdown caused due to blower bearing high temperature alarm. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/23/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: A-15 Flare x Startup Event Shutdown Event Malfunction Event	11/23/24 6:52	11/23/24 7:02	0.17			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/23/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: A-16 Landfill Gas Flare

Completed By: Dan Sanjose/ Garry Carpenter/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption		(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)		(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?		(11) Did Event Cause Any Emission Limit Exceedance		(12) Describe Emission
Component: A-16 Flare		11/23/24 10:36	11/23/24 10:38	0.03	21.43	Flare shutdown caused due to blower bearing high temperature alarm. Flare was inspected and restarted.	X	113: Inspection and Maintenance	11/23/2024		Manual (Go to Section 8)			Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection		X	Automatic (Go to Section 10)			No (Stop)	X	No (Stop)	
	Malfunction Event							118: Construction Activities									
Component: A-15 Flare		11/24/24 8:02	11/24/24 8:12	0.17			X	113: Inspection and Maintenance	11/24/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
Component: A-16 Flare		11/24/24 11:04	11/24/24 11:06	0.03	1.83	Flare shutdown to switch blowers. Flare was inspected and restarted.	X	113: Inspection and Maintenance	11/24/2024	X	Manual (Go to Section 8)	Procedure 1 to 3		Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
x	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
Component: A-15 Flare		11/24/24 12:54	11/24/24 13:04	0.17			X	113: Inspection and Maintenance	11/24/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
x	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									

Note The A-16 SSM Log is maintained pursuant to Permit Condition No. 19235, Part 2.
There were 721 hours available for the A-15 Flare in November 2024 due to Daylight Saving Time.

Total Downtime for January 1, 2024 to November 30, 2024 (Hours)*	231.1
Total Downtime for June 1, 2024 to November 30, 2024 (Hours)*	127.1
Total Runtime for June 1, 2024 to November 30, 2024 (Hours)*	4,265.9
Total Count for June 1, 2024 to November 30, 2024	38

(a) **STANDARD OPERATING PROCEDURES**

Shutdown

Procedure No.		Procedure
1		Ensure that there are no unsafe conditions present, contact manager immediately
2		Initiate shutdown sequence below by one or more of the following (Note date and time in Section 1 of form above)
	a.	Press Emergency Stop if necessary
	b.	Close On/Off switch(es) or Push On/Off button(s)
	c.	Close adjacent valves if necessary
3		Observe that system achieves normal shutdown ranges for levels, pressures, and temperatures (Note date and time in Section 2 of form above)

Startup

Procedure No.		Procedure
1		Ensure that there are no unsafe conditions present
2		Ensure that the system is ready to start by one of the following:
	a.	Valves are in correct position
	b.	Levels, pressures, and temperatures are within normal starting range
	c.	Alarms are cleared
	d.	Power is on and available to control panel and ready to energize equipment.
	e.	Emergency stop is de-energized
3		Initiate start sequence (Note time and date in section 1 of form above)
4		Observe that system achieves normal startup ranges for levels, pressures, and temperatures (Note time and date in Section 2 of form above)

Malfunction

EQUIPMENT	PURPOSE	MALFUNCTION EVENT	COMMON CAUSES	PROCEDURE NO. -TYPICAL RESPONSE ACTIONS
LFG Collection and Control System				
Blower or Other Gas Mover Equipment	Applies vacuum to wellfield to extract LFG and transport to control device	Loss of LFG Flow/Blower Malfunction	-Flame arrestor fouling/deterioration -Automatic valve problems -Blower failure (e.g., belt, motor, impeller, coupling, seizing, etc.) -Loss of power -Extraction piping failure -Condensate knock-out problems -Extraction piping blockages	1. Repair breakages in extraction piping 2. Clean flame arrestor 3. Repair blockages in extraction piping 4. Verify automatic valve operation, compressed air/nitrogen supply 5. Notify power utility, if appropriate 6. Provide/utilize auxiliary power source, if necessary 7. Repair Settlement in Collection Piping 8. Repair Blower 9. Activate back-up blower, if available 10. Clean knock-up pot/demister 11. Drain knock-out pot
Extraction Wells and Collection Piping	Conduits for extractions and movement of LFG flow	Collection well and pipe failures	-Break/crack in header or lateral piping -Leaks at wellheads, valves, flanges, Test ports, seals, couplings, etc. -Collection piping blockages -Problems due to settlement (e.g. pipe separation, deformation, development of low points)	12. Repair leaks or breaks in lines or wellheads 13. Follow procedures for loss of LFG flow/blower malfunction 14. Repair blockages in collection piping 15. Repair settlement in collection piping 16. Re-install, repair, or replace piping
Blower or Other Gas Mover Equipment And Control Device	Collection and control of LFG	Loss of electrical power	- Force majeure/Act of God (e.g., lightning, flood, earthquake, etc.) -Area-wide or local blackout or brown-out -Interruption in service (e.g. blown service fuse) -Electrical line failure -Breaker trip -Transformer failure -Motor starter failure/trip -Overdraw of power -Problems in electrical panel -Damage to electrical equipment from on-site operations	17. Check/reset breaker 18. Check/repair electrical panel components 19. Check/repair transformer 20. Check/repair motor starter 21. Check/repair electrical line 22. Test amperage to various equipment 23. Contact electricity supplier 24. Contact/contract electrician 25.Provide auxiliary power (if necessary)
LFG Control Device	Combusts LFG	Low temperature conditions at control device	-Problems with temperature - monitoring equipment -Problems/failure of -thermocouple and/or thermocouple wiring -Change of LFG flow -Change of LFG quality -Problems with air louvers -Problems with air/fuel controls -Change in atmospheric conditions	26. Check/repair temperature monitoring equipment 27. Check/repair thermocouple and/or wiring 28. Follow procedures for loss of flow/blower malfunction 29. Check/adjust louvers 30. Check/adjust air/fuel controls
LFG Control Device	Combusts LFG	Loss of Flame	-Problems/failure of thermocouple -Loss/change of LFG flow -Loss/change of LFG quality -Problems with air/fuel controls -Problems/failure of flame sensor -Problems with temperature monitoring equipment	31. Check/repair temperature monitoring equipment 32. Check/repair thermocouple 33. Follow procedures for loss of flow/blower malfunction 34. Check/adjust air/fuel controls 35. Check/adjust/repair flame sensor 36. Check/adjust LFG collectors

Flow Monitoring/ Recording Device	Measures and records gas flow from collection system to control	Malfunctions of Flow Monitoring/Recording Device	-Problems with orifice plate, pitot tube, or other in-line flow measuring device -Problems with device controls and/or wiring -Problems with chart recorder	37. Check/adjust/repair flow measuring device and/or wiring 38. Check/repair chart recorder 39. Replace paper in chart recorder
Temperature Monitoring/ Recording Device	Monitors and records combustion temperature of enclosed combustion device	Malfunctions of Temperature Monitoring/Recording Device	-Problems with thermocouple -Problems with device controls and/or wiring -Problems with chart recorder	40. Check/adjust/repair thermocouple 41. Check/adjust/repair controller and/or wiring 42. Check/adjust/repair electrical panel components 43. Check/repair chart recorder 44. Replace paper in chart recorder
Control Device	Combusts LFG	Other Control Device Malfunctions	-Control device smoking (i.e. visible emissions) -Problems with flare insulation -Problems with pilot light system -Problems with air louvers -Problems with air/fuel controllers -Problems with thermocouple -Problems with burners -Problems with flame arrester -Alarmed malfunction conditions not covered above -Unalarmed conditions discovered during inspection not covered above	45. Site-specific diagnosis procedures 46. Site-specific responses actions based on diagnosis 47. Open manual louvers 48. Clean pitot orifice 49. Clean/drain flame arrestor 50. Refill propane supply 51. Check/repair pilot sparking system

(b) For each permit limit exceedance complete an "SSM Plan Departure Form". Notify BAAQMD verbally or by fax within 2 working days after commencing the actions that an event inconsistent with the SSM Plan and which resulted in an exceedance of an applicable emission permit has occured. Follow up in writing to the agency within 7 working days after the end of the event.

APPENDIX D
TURBINES (S-6 AND S-7) SSM LOGS

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-6 Turbine Number 1 Completed By: Larry Lacerra/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	7/10/24 8:08	7/10/24 8:12	0.07	2.63	Shutdown during water wash. Changed desiccant. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/10/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	7/10/24 10:46	7/10/24 10:50	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/10/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	7/17/24 8:38	7/17/24 8:42	0.07	1.13	Shutdown to change Duplex oil filters. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/17/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	7/17/24 9:46	7/17/24 9:50	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/17/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	7/31/24 10:14	7/31/24 10:18	0.07	1.50	Shutdown during water wash. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/31/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	7/31/24 11:44	7/31/24 11:48	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/31/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	8/8/24 9:48	8/8/24 9:52	0.07	1.37	Shutdown to change Oil/Gas and final filters. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/8/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	8/8/24 11:10	8/8/24 11:14	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/8/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	8/8/24 21:02	8/8/24 21:06	0.07	2.30	Shutdown during 230 KV trip. Turbine #2 operating on island mode. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/8/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	8/8/24 23:20	8/8/24 23:24	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/8/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	9/1/24 23:32	9/1/24 23:36	0.07	2.30	Shutdown during Ralph Substation - 230 kV breaker trip. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	9/2/24 1:50	9/2/24 1:54	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/2/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	9/4/24 8:24	9/4/24 8:28	0.07	4.40	Shutdown during water wash, Roots oil & filter changed. Duplex oil filters changed. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/4/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	9/4/24 12:48	9/4/24 12:52	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/4/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	9/7/24 9:34	9/7/24 9:38	0.07	6.20	Shutdown during Howden Lube Oil Differential Pressure Low. Lube oil pump failed. Replaced gearbox (seal leaking, noisy bearings). Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/7/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	9/7/24 15:46	9/7/24 15:50	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/7/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	9/12/24 6:46	9/12/24 6:50	0.07	2.57	Shutdown during skid lube oil pump gearbox mounts welding. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/12/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	9/12/24 9:20	9/12/24 9:24	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/12/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-6 Turbine Number 1

Completed By: Larry Lacerra/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	9/26/24 8:14	9/26/24 8:18	0.07	1.77	Shutdown during water wash. Radiator flushed, belts changed. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	9/26/24 10:00	9/26/24 10:04	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/26/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	10/15/24 8:26	10/15/24 8:30	0.07	2.0	Shutdown during water wash, and maintenance on Turbine oil and final filters. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/15/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	10/15/24 10:28	10/15/24 10:32	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/15/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	10/21/24 6:40	10/21/24 6:44	0.07	1.1	Shutdown during 21.5 kv feeder trip. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	10/21/24 7:48	10/21/24 7:52	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	10/21/24 9:12	10/21/24 9:16	0.07	1.2	Shutdown to shimm and adjust lube oil pump. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	10/21/24 10:26	10/21/24 10:30	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/21/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	10/31/24 3:40	10/31/24 3:44	0.07	2.8	Shutdown during Ralph Substation - 230 kV breaker trip. Turbine #2 on island mode. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/31/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	10/31/24 6:30	10/31/24 6:34	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/31/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	11/1/24 23:40	11/1/24 23:44	0.07	3.2	Shutdown during Ralph Substation - 230 kV breaker trip. Turbine #2 on island mode. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/1/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	11/2/24 2:50	11/2/24 2:54	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/2/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	11/5/24 8:14	11/5/24 8:18	0.07	2.9	Shutdown to water wash. Duplex oil filters changed. Replaced lube oil pump. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/5/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	11/5/24 11:06	11/5/24 11:10	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/5/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-6 Turbine Startup Event X Shutdown Event Malfunction Event	11/13/24 21:56	11/13/24 22:00	0.07	2.0	Shutdown due to Howden Lube Oil Level Low. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/13/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-6 Turbine X Startup Event Shutdown Event Malfunction Event	11/13/24 23:54	11/13/24 23:58	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/13/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 Turbine Number 1

Completed By: Larry Lacerra/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption		(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)		(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?		(11) Did Event Cause Any Emission Limit Exceedance		(12) Describe Emission
Component: S-6 Turbine		11/15/24 10:02	11/15/24 10:06	0.07	1.0	Shutdown during water wash. Turbine was inspected and restarted.	X	113: Inspection and Maintenance	11/15/2024	X	Manual (Go to Section 8)	Procedure 1 to 3		Yes (Go to Section 10)		Yes (Go to Section 11)	
	Startup Event							116: Well Raising									
X	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									
Component: S-6 Turbine		11/15/24 11:02	11/15/24 11:06	0.07			X	113: Inspection and Maintenance	11/15/2024	X	Manual (Go to Section 8)	Procedure 1 to 4		Yes (Go to Section 10)		Yes (Go to Section 11)	
X	Startup Event							116: Well Raising									
	Shutdown Event							117: Gas Collection			Automatic (Go to Section 10)		X	No (Stop)		No (Stop)	
	Malfunction Event							118: Construction Activities									

Notes: The S-6 SSM Log is maintained pursuant to Permit Condition No. 18773, Part 8
There were 721 hours available for the Turbine S-7 in November 2024 due to Daylight Saving Time.

Total Downtime for January 1, 2024 to November 30, 2024 (Hours)*	83.6
Total Downtime for June 1, 2024 to November 30, 2024 (Hours)*	51.0
Total Runtime for June 1, 2024 to November 30, 2024 (Hours)*	4,342.0
Total Count for June 1, 2024 to November 30, 2024	21

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-7 Turbine Number 2 Completed By: Larry Lacerra/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission Standard(s) Exceeded
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	6/9/24 4:40	6/9/24 4:44	0.07	2.30	Shutdown during Emergency Fire Detection (malfunctioning heat probe). Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/9/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
X Startup Event Shutdown Event Malfunction Event	6/9/24 6:58	6/9/24 7:02	0.07			116: Well Raising 117: Gas Collection 118: Construction Activities	6/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	6/10/24 6:40	6/10/24 6:44	0.07	0.73	Shutdown during Emergency Fire Detection (malfunctioning heat probe). Failed Z2084 Flex I/O replaced. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/10/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	6/10/24 7:24	6/10/24 7:28	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/10/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	6/10/24 9:56	6/10/24 10:00	0.07	3.47	Shutdown during Emergency Fire Detected (malfunctioning heat probe removed from circuit). Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/10/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	6/10/24 13:24	6/10/24 13:28	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/10/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	6/11/24 8:16	6/11/24 8:20	0.07	2.17	Shutdown during water wash. Duplex oil filters changed. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/11/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	6/11/24 10:26	6/11/24 10:30	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/11/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	7/9/24 8:12	7/9/24 8:16	0.07	4.30	Shutdown during water wash. Changed desiccant. Shimmed lube oil pump. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	7/9/24 12:30	7/9/24 12:34	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/9/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	7/31/24 8:14	7/31/24 8:18	0.07	1.53	Shutdown during water wash. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/31/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	7/31/24 9:46	7/31/24 9:50	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/31/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	8/7/24 8:14	8/7/24 8:18	0.07	3.60	Shutdown to change Duplex oil filters and Oil/Gas and final filters. Changed radiator belts. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/7/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	8/7/24 11:50	8/7/24 11:54	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/7/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	8/14/24 13:36	8/14/24 13:40	0.07	335.53	Shutdown during PG&E forced outage. DTT line not communicating . Turbine #1 on island mode. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/14/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	8/28/24 13:08	8/28/24 13:12	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/28/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: S-7 Turbine Startup Event X Shutdown Event Malfunction Event	9/1/24 23:32	9/1/24 23:36	0.07	2.60	Shutdown during Ralph Substation - 230 kV breaker trip. Turbine was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-7 Turbine X Startup Event Shutdown Event Malfunction Event	9/2/24 2:08	9/2/24 2:12	0.07			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/2/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-7 Turbine Number 2 Completed By: Larry Lacerra/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission Standard(s) Exceeded
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	9/5/24 8:28	9/5/24 8:32	0.07	1.97	Shutdown during water wash, Roots oil & filter change. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/5/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	9/5/24 10:26	9/5/24 10:30	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/5/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	9/13/24 7:42	9/13/24 7:46	0.07	3.23	Shutdown to replace radiator shaft bearings. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/13/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	9/13/24 10:56	9/13/24 11:00	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/13/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	9/20/24 13:00	9/20/24 13:04	0.07	0.47	Shutdown to replace radiator belts (fan# 1). Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/20/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	9/20/24 13:28	9/20/24 13:32	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/20/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	9/23/24 20:18	9/23/24 20:22	0.07	1.87	Shutdown during Howden Lube Oil Temp High Alarm-TAHH-445. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/23/2024	☐ Manual (Go to Section 8) ☒ Automatic (Go to Section 10)		☐ Yes (Go to Section 10) ☐ No (Stop)	☐ Yes (Go to Section 11) ☒ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	9/23/24 22:10	9/23/24 22:14	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/23/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	9/25/24 8:06	9/25/24 8:10	0.07	2.90	Shutdown during water wash. Radiators flushed, lube oil pump shimmed and adjusted. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/25/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	9/25/24 11:00	9/25/24 11:04	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	9/25/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	10/2/24 8:24	10/2/24 8:28	0.07	4.23	Shutdown to install new lube oil pump and sprocket and chain. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/2/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	10/2/24 12:38	10/2/24 12:42	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/2/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	10/3/24 7:26	10/3/24 7:30	0.07	1.27	Shutdown to replace relief valve gasket, shaft seal leaking when pump started. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/3/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	10/3/24 8:42	10/3/24 8:46	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/3/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	10/4/24 7:16	10/4/24 7:20	0.07	1.40	Shutdown to install reworked pump. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/4/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	10/4/24 8:40	10/4/24 8:44	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/4/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☐ Startup Event ☒ Shutdown Event ☐ Malfunction Event	10/8/24 8:12	10/8/24 8:16	0.07	2.43	Shutdown to change duplex and 8 plex oil filters. Turbine was inspected and restarted.	☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/8/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 3	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	
Component: S-7 Turbine ☒ Startup Event ☐ Shutdown Event ☐ Malfunction Event	10/8/24 10:38	10/8/24 10:42	0.07			☒ 113: Inspection and Maintenance ☐ 116: Well Raising ☐ 117: Gas Collection ☐ 118: Construction Activities	10/8/2024	☒ Manual (Go to Section 8) ☐ Automatic (Go to Section 10)	Procedure 1 to 4	☐ Yes (Go to Section 10) ☒ No (Stop)	☐ Yes (Go to Section 11) ☐ No (Stop)	

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-7 Turbine Number 2

Completed By: Larry Lacerra/Rajan Phadnis

Altamont Landfill and Resource Recovery Facility - Livermore, CA
SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event (Startup and Shutdown Events Only)	(9) Procedures Used	(10) Did Steps Taken Vary From Section 9?	(11) Did Event Cause Any Emission Limit Exceedance	(12) Describe Emission Standard(s) Exceeded
Component: S-7 Turbine	10/14/24 8:10	10/14/24 8:14	0.07	3.40	Shutdown during water wash, and maintenance on Turbine oil and final filters. BUOS tested. Turbine was inspected and restarted.	X 113: Inspection and Maintenance	10/14/2024	X Manual (Go to Section 8)	Procedure 1 to 3	Yes (Go to Section 10)	Yes (Go to Section 11)	
Startup Event						116: Well Raising						
X Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	10/14/24 11:34	10/14/24 11:38	0.07			X 113: Inspection and Maintenance	10/14/2024	X Manual (Go to Section 8)	Procedure 1 to 4	Yes (Go to Section 10)	Yes (Go to Section 11)	
X Startup Event						116: Well Raising						
Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	10/14/24 11:38	10/14/24 11:42	0.07	0.07	Shutdown during startup sequence. Turbine was inspected and restarted.	X 113: Inspection and Maintenance	10/14/2024	Manual (Go to Section 8)		Yes (Go to Section 10)	Yes (Go to Section 11)	
Startup Event						116: Well Raising						
X Shutdown Event						117: Gas Collection		X Automatic (Go to Section 10)		No (Stop)	X No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	10/14/24 11:42	10/14/24 11:46	0.07			X 113: Inspection and Maintenance	10/14/2024	X Manual (Go to Section 8)	Procedure 1 to 4	Yes (Go to Section 10)	Yes (Go to Section 11)	
X Startup Event						116: Well Raising						
Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	10/21/24 6:40	10/21/24 6:44	0.07	1.43	Shutdown during 21.5 kv feeder trip. Turbine was inspected and restarted.	X 113: Inspection and Maintenance	10/21/2024	Manual (Go to Section 8)		Yes (Go to Section 10)	Yes (Go to Section 11)	
Startup Event						116: Well Raising						
X Shutdown Event						117: Gas Collection		X Automatic (Go to Section 10)		No (Stop)	X No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	10/21/24 8:06	10/21/24 8:10	0.07			X 113: Inspection and Maintenance	10/21/2024	X Manual (Go to Section 8)	Procedure 1 to 4	Yes (Go to Section 10)	Yes (Go to Section 11)	
X Startup Event						116: Well Raising						
Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	11/6/24 8:16	11/6/24 8:20	0.07	2.33	Shutdown to Water wash. Changed oil/gas filters. Replaced leaking o-ring on turbine oil pump. Turbine was inspected and restarted.	X 113: Inspection and Maintenance	11/6/2024	X Manual (Go to Section 8)	Procedure 1 to 3	Yes (Go to Section 10)	Yes (Go to Section 11)	
Startup Event						116: Well Raising						
X Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	11/6/24 10:36	11/6/24 10:40	0.07			X 113: Inspection and Maintenance	11/6/2024	X Manual (Go to Section 8)	Procedure 1 to 4	Yes (Go to Section 10)	Yes (Go to Section 11)	
X Startup Event						116: Well Raising						
Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	11/7/24 8:42	11/7/24 8:46	0.07	1.50	Shutdown to change lube oil pump, sprocket & chain (leaking mechanical seal). Turbine was inspected and restarted.	X 113: Inspection and Maintenance	11/7/2024	X Manual (Go to Section 8)	Procedure 1 to 3	Yes (Go to Section 10)	Yes (Go to Section 11)	
Startup Event						116: Well Raising						
X Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	11/7/24 10:12	11/7/24 10:16	0.07			X 113: Inspection and Maintenance	11/7/2024	X Manual (Go to Section 8)	Procedure 1 to 4	Yes (Go to Section 10)	Yes (Go to Section 11)	
X Startup Event						116: Well Raising						
Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	11/15/24 8:06	11/15/24 8:10	0.07	1.37	Shutdown during water wash. Turbine was inspected and restarted.	X 113: Inspection and Maintenance	11/15/2024	X Manual (Go to Section 8)	Procedure 1 to 3	Yes (Go to Section 10)	Yes (Go to Section 11)	
Startup Event						116: Well Raising						
X Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						
Component: S-7 Turbine	11/15/24 9:28	11/15/24 9:32	0.07			X 113: Inspection and Maintenance	11/15/2024	X Manual (Go to Section 8)	Procedure 1 to 4	Yes (Go to Section 10)	Yes (Go to Section 11)	
X Startup Event						116: Well Raising						
Shutdown Event						117: Gas Collection		Automatic (Go to Section 10)		X No (Stop)	No (Stop)	
Malfunction Event						118: Construction Activities						

Notes The S-7 SSM Log is maintained pursuant to Permit Condition No. 18773, Part 8
There were 721 hours available for the Turbine S-7 in November 2024 due to Daylight Saving Time.

Total Downtime for January 1, 2024 to November 30, 2024 (Hours)*	475.5
Total Downtime for June 1, 2024 to November 30, 2024 (Hours)*	386.1
Total Runtime for June 1, 2024 to November 30, 2024 (Hours)*	4,006.9
Total Count for June 1, 2024 to November 30, 2024	24

A. ALRRF FLARE INSPECTION, MAINTENANCE AND STARTUP CHECKLIST

After each shutdown event technicians go through the following checklist and restart the flares.

1	Alarms and investigate
2	PLC and Yokogawa controls
3	Louver Operation
4	Blower Skid
5	Condensate Injection system
6	Compressor Operation
7	Temperature and flow on the PLC

B. ALRRF TURBINE INSPECTION, MAINTENANCE AND STARTUP CHECKLIST

After each shutdown event Turbine plant managers go through the following checklist prior to restart of control devices.

1	Compressor controls
2	Turbine Controls
3	Compressor skids and turbines
4	Fire pump, controls and alarm panel
5	Air Compressor
6	Temperature and flow on the PLC

APPENDIX E
LNG PLANT (S-210) SSM LOGS

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-210 Liquefied Natural Gas (LNG) Plant

Completed By: Steven Shurtz

Altamont Landfill and Resource Recovery Facility - Livermore, CA

SSMP REPORT - From June 1, 2024 to November 30, 2024

Identify Flare & 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)	(8) Procedures Used	(9) Did Steps Taken Vary From Section 8?	(10) Did Event Cause Any Emission Limit Exceedance	(11) Describe Emission Standard(s) Exceeded
Component: S-210 LNG Plant Startup Event X Shutdown Event Malfunction Event	6/1/24 0:00	6/1/24 0:02	0.03	4,391.0	LNG Plant was shutdown.	6/1/2024	Manual (Go to Section 8) X Automatic (Go to Section 10)		Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) X No (Stop)	
Component: S-210 LNG Plant Startup Event Shutdown Event Malfunction Event	11/30/24 23:59	12/1/24 0:01	0.03			11/30/2024	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	Yes (Go to Section 10) X No (Stop)	Yes (Go to Section 11) No (Stop)	

Total Downtime for June 1, 2024 to November 30, 2024 (Hours)*	4,391.0
Total Runtime for June 1, 2024 to November 30, 2024 (Hours)*	0.0
Total Count for June 1, 2024 to November 30, 2024	NA

Note: S-210 SSM Log compiled pursuant to the ALRRF SSM Plan (June 2009).

APPENDIX F

TURBINES (S-6 AND S-7) COMBUSTION TEMPERATURE REPORTS AND HEAT INPUT LOGS

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-6 Turbine
Heat Input Rate
MONTH: June-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
6/1/2024	24.00	51.1	1,332	1,918,793	980,562	1,013.0	993
6/2/2024	24.00	50.6	1,339	1,928,434	975,624	1,013.0	988
6/3/2024	24.00	50.8	1,347	1,939,246	985,573	1,013.0	998
6/4/2024	24.00	51.7	1,302	1,875,257	969,593	1,013.0	982
6/5/2024	24.00	51.9	1,266	1,823,388	947,242	1,013.0	960
6/6/2024	22.90	51.8	1,279	1,758,018	911,366	1,013.0	923
6/7/2024	24.00	52.0	1,325	1,907,335	992,438	1,013.0	1,005
6/8/2024	24.00	52.4	1,353	1,948,847	1,021,572	1,013.0	1,035
6/9/2024	22.03	52.6	1,349	1,783,628	938,673	1,013.0	951
6/10/2024	20.60	52.3	1,315	1,625,656	850,656	1,013.0	862
6/11/2024	24.00	52.1	1,305	1,879,061	979,282	1,013.0	992
6/12/2024	21.90	52.2	1,341	1,761,729	920,030	1,013.0	932
6/13/2024	24.00	52.7	1,378	1,985,011	1,046,088	1,013.0	1,060
6/14/2024	24.00	53.2	1,382	1,990,532	1,058,138	1,013.0	1,072
6/15/2024	24.00	52.8	1,381	1,988,069	1,050,073	1,013.0	1,064
6/16/2024	24.00	52.3	1,369	1,971,570	1,030,924	1,013.0	1,044
6/17/2024	24.00	52.3	1,365	1,965,164	1,026,969	1,013.0	1,040
6/18/2024	24.00	52.2	1,345	1,936,286	1,011,601	1,013.0	1,025
6/19/2024	24.00	52.0	1,383	1,991,593	1,035,952	1,013.0	1,049
6/20/2024	24.00	52.3	1,387	1,997,865	1,044,921	1,013.0	1,059
6/21/2024	24.00	52.6	1,360	1,958,195	1,030,420	1,013.0	1,044
6/22/2024	24.00	52.6	1,326	1,909,965	1,003,887	1,013.0	1,017
6/23/2024	24.00	52.9	1,320	1,901,387	1,005,502	1,013.0	1,019
6/24/2024	24.00	52.9	1,334	1,920,343	1,016,634	1,013.0	1,030
6/25/2024	24.00	52.7	1,336	1,923,348	1,013,615	1,013.0	1,027
6/26/2024	24.00	51.1	1,396	2,010,114	1,027,008	1,013.0	1,040
6/27/2024	24.00	51.7	1,383	1,992,087	1,030,015	1,013.0	1,043
6/28/2024	24.00	42.5	1,350	1,944,223	826,762	1,013.0	838
6/29/2024	24.00	43.9	1,344	1,935,419	849,960	1,013.0	861
6/30/2024	24.00	49.7	1,346	1,938,576	962,851	1,013.0	975
Totals/ Average	**711.43**	**51.5**	**1,345**	**57,409,139**	**29,543,932**	**1,013.0**	**29,928**
						Max	**1,072**

Notes:

1) The S-6 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.
2) The daily heat input limit for S-6 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-6 Turbine

Heat Input Rate

MONTH: July-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
7/1/2024	24.00	49.8	1,322	1,904,238	948,972	1,013.0	961
7/2/2024	24.00	50.0	1,275	1,836,041	918,579	1,013.0	931
7/3/2024	24.00	50.1	1,279	1,841,381	923,136	1,013.0	935
7/4/2024	24.00	50.1	1,294	1,864,021	933,106	1,013.0	945
7/5/2024	24.00	49.8	1,314	1,892,375	942,593	1,013.0	955
7/6/2024	24.00	49.8	1,305	1,878,983	935,175	1,013.0	947
7/7/2024	24.00	49.9	1,318	1,898,017	946,482	1,013.0	959
7/8/2024	24.00	49.9	1,335	1,922,077	959,606	1,013.0	972
7/9/2024	24.00	49.9	1,362	1,961,295	978,734	1,013.0	991
7/10/2024	21.37	49.8	1,350	1,730,935	862,478	1,013.0	874
7/11/2024	24.00	49.7	1,335	1,921,707	955,046	1,013.0	967
7/12/2024	24.00	49.7	1,338	1,926,948	957,202	1,013.0	970
7/13/2024	24.00	49.7	1,359	1,957,609	973,218	1,013.0	986
7/14/2024	24.00	49.9	1,384	1,993,546	995,098	1,013.0	1,008
7/15/2024	24.00	49.9	1,406	2,024,593	1,009,336	1,013.0	1,022
7/16/2024	24.00	49.9	1,438	2,070,547	1,033,896	1,013.0	1,047
7/17/2024	22.87	49.2	1,430	1,961,404	964,534	1,013.0	977
7/18/2024	24.00	48.4	1,415	2,037,041	986,243	1,013.0	999
7/19/2024	24.00	47.9	1,427	2,055,414	983,616	1,013.0	996
7/20/2024	24.00	46.6	1,455	2,095,804	977,426	1,013.0	990
7/21/2024	24.00	45.2	1,471	2,118,688	957,689	1,013.0	970
7/22/2024	24.00	45.2	1,423	2,049,604	927,246	1,013.0	939
7/23/2024	24.00	45.5	1,354	1,950,031	887,996	1,013.0	900
7/24/2024	24.00	46.5	1,366	1,966,553	914,020	1,013.0	926
7/25/2024	24.00	47.1	1,355	1,951,694	919,275	1,013.0	931
7/26/2024	24.00	47.9	1,356	1,953,216	934,928	1,013.0	947
7/27/2024	24.00	48.4	1,413	2,034,693	983,894	1,013.0	997
7/28/2024	24.00	48.4	1,397	2,011,747	973,666	1,013.0	986
7/29/2024	24.00	48.1	1,406	2,025,061	973,452	1,013.0	986
7/30/2024	24.00	47.9	1,398	2,013,248	963,658	1,013.0	976
7/31/2024	22.50	47.9	1,381	1,864,775	892,901	1,013.0	905
Totals/ Average	**738.73**	**48.6**	**1,370**	**60,713,286**	**29,513,204**	**1,013.0**	**29,897**
						Max	**1,047**

Notes:

1) The S-6 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-6 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-6 Turbine

Heat Input Rate

MONTH: August-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
8/1/2024	24.00	48.0	1,377	1,982,510	952,443	1,013.0	965
8/2/2024	24.00	48.1	1,384	1,992,880	959,201	1,013.0	972
8/3/2024	24.00	47.7	1,363	1,963,372	936,889	1,013.0	949
8/4/2024	24.00	47.8	1,385	1,994,857	953,837	1,013.0	966
8/5/2024	24.00	48.4	1,401	2,017,724	977,099	1,013.0	990
8/6/2024	24.00	48.2	1,368	1,969,568	949,805	1,013.0	962
8/7/2024	24.00	48.0	1,334	1,920,268	922,531	1,013.0	935
8/8/2024	20.33	48.8	1,352	1,649,744	805,097	1,013.0	816
8/9/2024	24.00	49.4	1,381	1,989,163	983,277	1,013.0	996
8/10/2024	24.00	49.9	1,378	1,984,401	991,097	1,013.0	1,004
8/11/2024	24.00	49.8	1,385	1,993,935	993,435	1,013.0	1,006
8/12/2024	24.00	50.0	1,391	2,002,736	1,000,417	1,013.0	1,013
8/13/2024	24.00	50.1	1,379	1,986,177	995,982	1,013.0	1,009
8/14/2024	24.00	50.2	1,132	1,630,605	817,848	1,013.0	828
8/15/2024	24.00	49.3	748	1,077,410	531,357	1,013.0	538
8/16/2024	24.00	48.1	736	1,059,159	509,633	1,013.0	516
8/17/2024	24.00	48.8	715	1,029,834	502,647	1,013.0	509
8/18/2024	24.00	49.4	710	1,022,284	504,867	1,013.0	511
8/19/2024	24.00	49.2	737	1,061,284	522,353	1,013.0	529
8/20/2024	24.00	49.0	735	1,058,735	519,086	1,013.0	526
8/21/2024	24.00	48.7	732	1,054,102	513,805	1,013.0	520
8/22/2024	24.00	48.8	731	1,052,035	513,035	1,013.0	520
8/23/2024	24.00	48.7	735	1,058,935	516,101	1,013.0	523
8/24/2024	24.00	48.2	733	1,055,027	508,896	1,013.0	516
8/25/2024	24.00	47.8	739	1,063,611	507,980	1,013.0	515
8/26/2024	24.00	47.3	750	1,079,672	510,784	1,013.0	517
8/27/2024	24.00	47.0	752	1,083,238	508,588	1,013.0	515
8/28/2024	24.00	47.2	1,019	1,467,456	692,490	1,013.0	701
8/29/2024	24.00	48.8	1,368	1,969,832	960,625	1,013.0	973
8/30/2024	24.00	49.7	1,377	1,983,175	984,773	1,013.0	998
8/31/2024	24.00	49.5	1,377	1,982,854	980,961	1,013.0	994
Totals/ Average	**740.33**	**48.7**	**1,087**	**48,236,583**	**23,526,941**	**1,013.0**	**23,833**
						Max	**1,013**

Notes:

1) The S-6 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-6 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-6 Turbine

Heat Input Rate

MONTH: September-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
9/1/2024	23.53	49.5	1,389	1,960,879	971,609	1,013.0	984
9/2/2024	22.17	49.5	1,389	1,847,966	914,878	1,013.0	927
9/3/2024	24.00	49.5	1,360	1,958,826	968,796	1,013.0	981
9/4/2024	19.60	49.3	1,345	1,582,115	780,514	1,013.0	791
9/5/2024	24.00	49.4	1,380	1,986,806	981,890	1,013.0	995
9/6/2024	24.00	49.3	1,361	1,959,505	966,851	1,013.0	979
9/7/2024	17.80	49.3	1,351	1,442,951	711,932	1,013.0	721
9/8/2024	24.00	49.5	1,353	1,948,596	964,822	1,013.0	977
9/9/2024	24.00	49.5	1,377	1,982,409	980,966	1,013.0	994
9/10/2024	24.00	49.4	1,430	2,059,236	1,017,461	1,013.0	1,031
9/11/2024	24.00	49.4	1,426	2,053,306	1,015,065	1,013.0	1,028
9/12/2024	21.43	49.2	1,394	1,792,826	882,750	1,013.0	894
9/13/2024	24.00	49.1	1,378	1,984,683	974,536	1,013.0	987
9/14/2024	24.00	49.2	1,412	2,032,856	999,212	1,013.0	1,012
9/15/2024	24.00	48.7	1,439	2,071,987	1,009,403	1,013.0	1,023
9/16/2024	24.00	49.3	1,467	2,112,539	1,041,573	1,013.0	1,055
9/17/2024	24.00	48.4	1,465	2,109,730	1,020,746	1,013.0	1,034
9/18/2024	24.00	48.4	1,435	2,066,610	1,000,390	1,013.0	1,013
9/19/2024	24.00	48.9	1,427	2,054,903	1,004,537	1,013.0	1,018
9/20/2024	24.00	49.0	1,428	2,056,758	1,008,027	1,013.0	1,021
9/21/2024	24.00	48.8	1,422	2,047,999	999,852	1,013.0	1,013
9/22/2024	24.00	48.7	1,412	2,033,438	990,081	1,013.0	1,003
9/23/2024	24.00	48.7	1,376	1,980,850	964,047	1,013.0	977
9/24/2024	24.00	48.6	1,378	1,984,833	965,087	1,013.0	978
9/25/2024	24.00	48.3	1,387	1,997,429	964,440	1,013.0	977
9/26/2024	22.23	50.1	1,380	1,841,481	922,540	1,013.0	935
9/27/2024	24.00	49.6	1,385	1,994,439	988,714	1,013.0	1,002
9/28/2024	24.00	49.0	1,414	2,035,509	997,782	1,013.0	1,011
9/29/2024	24.00	48.7	1,458	2,099,890	1,023,220	1,013.0	1,037
9/30/2024	24.00	48.2	1,423	2,049,556	988,686	1,013.0	1,002
Totals/ Average	**702.77**	**49.1**	**1,401**	**59,130,911**	**29,020,408**	**1,013.0**	**29,398**
						Max	**1,055**

Notes:

1) The S-6 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-6 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-6 Turbine

Heat Input Rate

MONTH: October-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
10/1/2024	24.00	48.2	1,394	2,007,228	966,603	1,013.0	979
10/2/2024	24.00	47.7	1,375	1,979,671	944,983	1,013.0	957
10/3/2024	24.00	47.8	1,375	1,980,029	946,517	1,013.0	959
10/4/2024	24.00	47.9	1,395	2,009,400	963,317	1,013.0	976
10/5/2024	24.00	47.7	1,402	2,018,526	963,049	1,013.0	976
10/6/2024	24.00	47.6	1,394	2,006,950	955,092	1,013.0	968
10/7/2024	24.00	47.6	1,388	1,998,641	950,567	1,013.0	963
10/8/2024	24.00	47.7	1,406	2,023,948	964,517	1,013.0	977
10/9/2024	24.00	47.8	1,456	2,096,763	1,001,265	1,013.0	1,014
10/10/2024	24.00	47.6	1,456	2,097,193	997,493	1,013.0	1,010
10/11/2024	24.00	47.9	1,469	2,115,911	1,013,401	1,013.0	1,027
10/12/2024	24.00	48.0	1,476	2,124,807	1,019,096	1,013.0	1,032
10/13/2024	24.00	47.8	1,449	2,086,976	997,592	1,013.0	1,011
10/14/2024	24.00	48.0	1,469	2,114,759	1,015,151	1,013.0	1,028
10/15/2024	21.97	47.9	1,461	1,925,118	923,069	1,013.0	935
10/16/2024	24.00	48.0	1,474	2,122,802	1,019,262	1,013.0	1,033
10/17/2024	24.00	47.9	1,476	2,125,064	1,017,310	1,013.0	1,031
10/18/2024	24.00	48.0	1,486	2,139,209	1,027,191	1,013.0	1,041
10/19/2024	24.00	47.8	1,490	2,145,671	1,024,724	1,013.0	1,038
10/20/2024	24.00	47.3	1,493	2,150,074	1,016,614	1,013.0	1,030
10/21/2024	21.63	47.0	1,453	1,886,489	886,517	1,013.0	898
10/22/2024	24.00	47.8	1,474	2,122,446	1,014,479	1,013.0	1,028
10/23/2024	24.00	48.0	1,456	2,096,378	1,005,328	1,013.0	1,018
10/24/2024	24.00	48.0	1,456	2,097,101	1,007,508	1,013.0	1,021
10/25/2024	24.00	48.2	1,452	2,091,543	1,008,417	1,013.0	1,022
10/26/2024	24.00	48.2	1,459	2,100,949	1,012,875	1,013.0	1,026
10/27/2024	24.00	48.5	1,470	2,117,431	1,026,230	1,013.0	1,040
10/28/2024	24.00	48.2	1,489	2,144,802	1,033,255	1,013.0	1,047
10/29/2024	24.00	48.2	1,496	2,154,282	1,038,751	1,013.0	1,052
10/30/2024	24.00	48.1	1,503	2,164,254	1,040,402	1,013.0	1,054
10/31/2024	21.17	48.0	1,483	1,883,623	903,712	1,013.0	915
Totals/ Average	**736.77**	**47.9**	**1,451**	**64,128,038**	**30,704,288**	**1,013.0**	**31,103**
						Max	**1,054**

Notes:

1) The S-6 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-6 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-6 Turbine
Heat Input Rate
MONTH: November-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
11/1/2024	23.67	48.1	1,491	2,117,341	1,018,220	1,013.0	1,031
11/2/2024	21.17	48.1	1,479	1,878,807	904,615	1,013.0	916
11/3/2024	25.00	45.1	1,503	2,254,584	1,016,166	1,013.0	1,029
11/4/2024	24.00	47.8	1,494	2,151,347	1,029,010	1,013.0	1,042
11/5/2024	21.13	47.9	1,472	1,866,606	893,959	1,013.0	906
11/6/2024	24.00	48.2	1,499	2,158,759	1,041,222	1,013.0	1,055
11/7/2024	24.00	48.0	1,507	2,170,459	1,040,990	1,013.0	1,055
11/8/2024	24.00	47.8	1,503	2,163,990	1,033,769	1,013.0	1,047
11/9/2024	24.00	47.9	1,493	2,149,800	1,029,913	1,013.0	1,043
11/10/2024	24.00	48.1	1,499	2,159,076	1,038,132	1,013.0	1,052
11/11/2024	24.00	48.0	1,521	2,190,172	1,050,773	1,013.0	1,064
11/12/2024	24.00	47.9	1,535	2,211,050	1,059,154	1,013.0	1,073
11/13/2024	22.03	47.6	1,518	2,006,326	955,746	1,013.0	968
11/14/2024	24.00	47.9	1,508	2,171,796	1,039,768	1,013.0	1,053
11/15/2024	23.00	48.0	1,513	2,088,105	1,002,571	1,013.0	1,016
11/16/2024	24.00	47.9	1,532	2,205,811	1,057,362	1,013.0	1,071
11/17/2024	24.00	47.7	1,522	2,192,347	1,044,699	1,013.0	1,058
11/18/2024	24.00	47.8	1,553	2,237,001	1,068,885	1,013.0	1,083
11/19/2024	24.00	47.2	1,541	2,219,260	1,047,776	1,013.0	1,061
11/20/2024	24.00	47.6	1,485	2,138,378	1,016,989	1,013.0	1,030
11/21/2024	24.00	47.9	1,475	2,123,800	1,017,345	1,013.0	1,031
11/22/2024	24.00	47.9	1,470	2,116,941	1,014,746	1,013.0	1,028
11/23/2024	24.00	48.2	1,522	2,191,190	1,056,690	1,013.0	1,070
11/24/2024	24.00	47.7	1,493	2,150,598	1,025,040	1,013.0	1,038
11/25/2024	24.00	48.5	1,498	2,157,029	1,046,694	1,013.0	1,060
11/26/2024	24.00	48.4	1,510	2,175,112	1,053,531	1,013.0	1,067
11/27/2024	24.00	48.2	1,527	2,199,407	1,060,620	1,013.0	1,074
11/28/2024	24.00	48.0	1,535	2,210,878	1,061,224	1,013.0	1,075
11/29/2024	24.00	47.8	1,533	2,207,270	1,055,405	1,013.0	1,069
11/30/2024	24.00	47.8	1,536	2,212,437	1,057,396	1,013.0	1,071
Totals/ Average	**712.00**	**47.8**	**1,509**	**64,475,677**	**30,838,410**	**1,013.0**	**31,239**
						Max	**1,083**

Notes:
1) The S-6 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.
2) The daily heat input limit for S-6 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.
% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-7 Turbine
Heat Input Rate
MONTH: June-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
6/1/2024	24.00	51.1	1,318	1,897,224	969,539	1,013.0	982
6/2/2024	24.00	50.6	1,322	1,904,108	963,317	1,013.0	976
6/3/2024	24.00	50.8	1,330	1,915,260	973,383	1,013.0	986
6/4/2024	24.00	51.7	1,287	1,853,193	958,185	1,013.0	971
6/5/2024	24.00	51.9	1,252	1,802,420	936,349	1,013.0	949
6/6/2024	24.00	51.8	1,267	1,824,740	945,955	1,013.0	958
6/7/2024	24.00	52.0	1,303	1,875,930	976,097	1,013.0	989
6/8/2024	24.00	52.4	1,334	1,920,972	1,006,960	1,013.0	1,020
6/9/2024	21.70	52.6	1,343	1,749,014	920,456	1,013.0	932
6/10/2024	19.80	52.3	1,322	1,570,871	821,989	1,013.0	833
6/11/2024	21.83	52.1	1,300	1,702,416	887,223	1,013.0	899
6/12/2024	24.00	52.2	1,342	1,932,699	1,009,316	1,013.0	1,022
6/13/2024	24.00	52.7	1,351	1,945,129	1,025,070	1,013.0	1,038
6/14/2024	24.00	53.2	1,363	1,962,136	1,043,043	1,013.0	1,057
6/15/2024	24.00	52.8	1,365	1,966,119	1,038,479	1,013.0	1,052
6/16/2024	24.00	52.3	1,349	1,942,932	1,015,949	1,013.0	1,029
6/17/2024	24.00	52.3	1,346	1,937,767	1,012,652	1,013.0	1,026
6/18/2024	24.00	52.2	1,325	1,908,253	996,955	1,013.0	1,010
6/19/2024	24.00	52.0	1,364	1,964,353	1,021,783	1,013.0	1,035
6/20/2024	24.00	52.3	1,364	1,964,192	1,027,309	1,013.0	1,041
6/21/2024	24.00	52.6	1,338	1,926,218	1,013,593	1,013.0	1,027
6/22/2024	24.00	52.6	1,297	1,868,078	981,871	1,013.0	995
6/23/2024	24.00	52.9	1,307	1,882,531	995,530	1,013.0	1,008
6/24/2024	24.00	52.9	1,337	1,925,792	1,019,519	1,013.0	1,033
6/25/2024	24.00	52.7	1,377	1,983,067	1,045,087	1,013.0	1,059
6/26/2024	24.00	51.1	1,436	2,068,038	1,056,603	1,013.0	1,070
6/27/2024	24.00	51.7	1,420	2,044,581	1,057,157	1,013.0	1,071
6/28/2024	24.00	42.5	1,394	2,007,497	853,669	1,013.0	865
6/29/2024	24.00	43.9	1,394	2,007,973	881,822	1,013.0	893
6/30/2024	24.00	49.7	1,396	2,010,098	998,374	1,013.0	1,011
Totals/ Average	**711.33**	**51.5**	**1,341**	**57,263,601**	**29,453,238**	**1,013.0**	**29,836**
						Max	**1,071**

Notes:

1) The S-7 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-7 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-7 Turbine

Heat Input Rate

MONTH: July-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
7/1/2024	24.00	49.8	1,376	1,982,020	987,735	1,013.0	1,001
7/2/2024	24.00	50.0	1,332	1,918,040	959,603	1,013.0	972
7/3/2024	24.00	50.1	1,307	1,881,582	943,290	1,013.0	956
7/4/2024	24.00	50.1	1,344	1,935,653	968,964	1,013.0	982
7/5/2024	24.00	49.8	1,337	1,925,526	959,105	1,013.0	972
7/6/2024	24.00	49.8	1,298	1,868,782	930,098	1,013.0	942
7/7/2024	24.00	49.9	1,356	1,952,431	973,617	1,013.0	986
7/8/2024	24.00	49.9	1,369	1,970,795	983,928	1,013.0	997
7/9/2024	19.70	49.9	1,406	1,662,221	829,489	1,013.0	840
7/10/2024	24.00	49.8	1,416	2,038,895	1,015,926	1,013.0	1,029
7/11/2024	24.00	49.7	1,366	1,967,099	977,605	1,013.0	990
7/12/2024	24.00	49.7	1,372	1,975,522	981,331	1,013.0	994
7/13/2024	24.00	49.7	1,393	2,005,714	997,134	1,013.0	1,010
7/14/2024	24.00	49.9	1,423	2,048,620	1,022,589	1,013.0	1,036
7/15/2024	24.00	49.9	1,454	2,093,947	1,043,911	1,013.0	1,057
7/16/2024	24.00	49.9	1,486	2,140,062	1,068,607	1,013.0	1,082
7/17/2024	24.00	49.2	1,495	2,152,136	1,058,328	1,013.0	1,072
7/18/2024	24.00	48.4	1,461	2,103,227	1,018,287	1,013.0	1,032
7/19/2024	24.00	47.9	1,474	2,122,576	1,015,757	1,013.0	1,029
7/20/2024	24.00	46.6	1,503	2,164,381	1,009,409	1,013.0	1,023
7/21/2024	24.00	45.2	1,527	2,198,467	993,751	1,013.0	1,007
7/22/2024	24.00	45.2	1,388	1,999,379	904,524	1,013.0	916
7/23/2024	24.00	45.5	1,367	1,967,942	896,153	1,013.0	908
7/24/2024	24.00	46.5	1,419	2,043,106	949,601	1,013.0	962
7/25/2024	24.00	47.1	1,349	1,943,245	915,296	1,013.0	927
7/26/2024	24.00	47.9	1,405	2,022,992	968,327	1,013.0	981
7/27/2024	24.00	48.4	1,448	2,085,105	1,008,271	1,013.0	1,021
7/28/2024	24.00	48.4	1,448	2,085,763	1,009,489	1,013.0	1,023
7/29/2024	24.00	48.1	1,455	2,095,438	1,007,282	1,013.0	1,020
7/30/2024	24.00	47.9	1,452	2,090,402	1,000,589	1,013.0	1,014
7/31/2024	22.47	47.9	1,434	1,933,425	925,772	1,013.0	938
Totals/ Average	**738.17**	**48.6**	**1,408**	**62,374,493**	**30,323,767**	**1,013.0**	**30,718**
						Max	**1,082**

Notes:

1) The S-7 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-7 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-7 Turbine

Heat Input Rate

MONTH: August-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
8/1/2024	24.00	48.0	1,442	2,076,699	997,694	1,013.0	1,011
8/2/2024	24.00	48.1	1,454	2,094,356	1,008,043	1,013.0	1,021
8/3/2024	24.00	47.7	1,422	2,047,657	977,108	1,013.0	990
8/4/2024	24.00	47.8	1,442	2,076,840	993,037	1,013.0	1,006
8/5/2024	24.00	48.4	1,455	2,095,109	1,014,573	1,013.0	1,028
8/6/2024	24.00	48.2	1,377	1,983,250	956,403	1,013.0	969
8/7/2024	20.40	48.0	1,324	1,620,793	778,658	1,013.0	789
8/8/2024	24.00	48.8	1,353	1,947,829	950,567	1,013.0	963
8/9/2024	24.00	49.4	1,430	2,058,868	1,017,733	1,013.0	1,031
8/10/2024	24.00	49.9	1,425	2,052,457	1,025,087	1,013.0	1,038
8/11/2024	24.00	49.8	1,432	2,062,261	1,027,477	1,013.0	1,041
8/12/2024	24.00	50.0	1,416	2,039,297	1,018,680	1,013.0	1,032
8/13/2024	24.00	50.1	1,432	2,062,299	1,034,154	1,013.0	1,048
8/14/2024	13.60	50.2	1,443	1,177,346	590,511	1,013.0	598
8/15/2024	0.00	49.3	N/A	-	0	1,013.0	0
8/16/2024	0.00	48.1	N/A	-	0	1,013.0	0
8/17/2024	0.00	48.8	N/A	-	0	1,013.0	0
8/18/2024	0.00	49.4	N/A	-	0	1,013.0	0
8/19/2024	0.00	49.2	N/A	-	0	1,013.0	0
8/20/2024	0.00	49.0	N/A	-	0	1,013.0	0
8/21/2024	0.00	48.7	N/A	-	0	1,013.0	0
8/22/2024	0.00	48.8	N/A	-	0	1,013.0	0
8/23/2024	0.00	48.7	N/A	-	0	1,013.0	0
8/24/2024	0.00	48.2	N/A	-	0	1,013.0	0
8/25/2024	0.00	47.8	N/A	-	0	1,013.0	0
8/26/2024	0.00	47.3	N/A	-	0	1,013.0	0
8/27/2024	0.00	47.0	N/A	-	0	1,013.0	0
8/28/2024	10.87	47.2	1,347	878,175	414,409	1,013.0	420
8/29/2024	24.00	48.8	1,388	1,998,037	974,380	1,013.0	987
8/30/2024	24.00	49.7	1,389	2,000,700	993,476	1,013.0	1,006
8/31/2024	24.00	49.5	1,391	2,003,555	991,202	1,013.0	1,004
Totals/ Average	**404.87**	**48.7**	**1,409**	**34,275,528**	**16,763,193**	**1,013.0**	**16,981**
						Max	**1,048**

Notes:

1) The S-7 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-7 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-7 Turbine

Heat Input Rate
MONTH: September-24

Date	Runtime (Hours)	CH$_4$ (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH$_4$ Volume (scf)	Heating Value of CH$_4$ (btu/scf)	Heat Input (MMBTU/Day)
9/1/2024	23.53	49.5	1,402	1,979,873	981,020	1,013.0	994
9/2/2024	21.87	49.5	1,389	1,822,231	902,137	1,013.0	914
9/3/2024	24.00	49.5	1,379	1,985,789	982,132	1,013.0	995
9/4/2024	24.00	49.3	1,375	1,980,408	977,007	1,013.0	990
9/5/2024	22.03	49.4	1,401	1,852,672	915,601	1,013.0	928
9/6/2024	24.00	49.3	1,400	2,016,312	994,881	1,013.0	1,008
9/7/2024	24.00	49.3	1,395	2,008,190	990,813	1,013.0	1,004
9/8/2024	24.00	49.5	1,402	2,019,538	999,948	1,013.0	1,013
9/9/2024	24.00	49.5	1,396	2,010,646	994,939	1,013.0	1,008
9/10/2024	24.00	49.4	1,446	2,082,304	1,028,859	1,013.0	1,042
9/11/2024	24.00	49.4	1,458	2,099,851	1,038,075	1,013.0	1,052
9/12/2024	24.00	49.2	1,429	2,057,320	1,012,981	1,013.0	1,026
9/13/2024	20.77	49.1	1,352	1,684,363	827,070	1,013.0	838
9/14/2024	24.00	49.2	1,327	1,910,429	939,035	1,013.0	951
9/15/2024	24.00	48.7	1,452	2,090,613	1,018,477	1,013.0	1,032
9/16/2024	24.00	49.3	1,487	2,140,954	1,055,582	1,013.0	1,069
9/17/2024	24.00	48.4	1,468	2,114,072	1,022,847	1,013.0	1,036
9/18/2024	24.00	48.4	1,427	2,054,562	994,558	1,013.0	1,007
9/19/2024	24.00	48.9	1,387	1,997,581	976,515	1,013.0	989
9/20/2024	23.53	49.0	1,406	1,984,949	972,833	1,013.0	985
9/21/2024	24.00	48.8	1,337	1,925,518	940,055	1,013.0	952
9/22/2024	24.00	48.7	1,142	1,644,541	800,727	1,013.0	811
9/23/2024	22.13	48.7	1,252	1,662,292	809,010	1,013.0	820
9/24/2024	24.00	48.6	1,360	1,958,825	952,441	1,013.0	965
9/25/2024	21.10	48.3	1,416	1,792,437	865,461	1,013.0	877
9/26/2024	24.00	50.1	1,406	2,024,195	1,014,075	1,013.0	1,027
9/27/2024	24.00	49.6	1,431	2,060,619	1,021,522	1,013.0	1,035
9/28/2024	24.00	49.0	1,454	2,094,201	1,026,552	1,013.0	1,040
9/29/2024	24.00	48.7	1,510	2,173,933	1,059,299	1,013.0	1,073
9/30/2024	24.00	48.2	1,477	2,126,673	1,025,887	1,013.0	1,039
Totals/ Average	**706.97**	**49.1**	**1,399**	**59,355,891**	**29,140,340**	**1,013.0**	**29,519**
						Max	**1,073**

Notes:

1) The S-7 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-7 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH$_4$** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-7 Turbine

Heat Input Rate

MONTH: October-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
10/1/2024	24.00	48.2	1,423	2,048,924	986,682	1,013.0	1,000
10/2/2024	19.77	47.7	1,409	1,670,994	797,638	1,013.0	808
10/3/2024	22.73	47.8	1,426	1,945,704	930,109	1,013.0	942
10/4/2024	22.60	47.9	1,453	1,970,254	944,551	1,013.0	957
10/5/2024	24.00	47.7	1,470	2,116,342	1,009,717	1,013.0	1,023
10/6/2024	24.00	47.6	1,460	2,101,971	1,000,312	1,013.0	1,013
10/7/2024	24.00	47.6	1,457	2,098,332	997,980	1,013.0	1,011
10/8/2024	21.57	47.7	1,454	1,881,588	896,675	1,013.0	908
10/9/2024	24.00	47.8	1,509	2,173,180	1,037,756	1,013.0	1,051
10/10/2024	24.00	47.6	1,508	2,172,127	1,033,134	1,013.0	1,047
10/11/2024	24.00	47.9	1,515	2,181,113	1,044,629	1,013.0	1,058
10/12/2024	24.00	48.0	1,525	2,196,558	1,053,509	1,013.0	1,067
10/13/2024	24.00	47.8	1,494	2,151,824	1,028,590	1,013.0	1,042
10/14/2024	20.53	48.0	1,507	1,857,066	891,450	1,013.0	903
10/15/2024	24.00	47.9	1,524	2,194,524	1,052,246	1,013.0	1,066
10/16/2024	24.00	48.0	1,530	2,203,827	1,058,166	1,013.0	1,072
10/17/2024	24.00	47.9	1,528	2,199,746	1,053,061	1,013.0	1,067
10/18/2024	24.00	48.0	1,530	2,203,339	1,057,985	1,013.0	1,072
10/19/2024	24.00	47.8	1,530	2,203,394	1,052,291	1,013.0	1,066
10/20/2024	24.00	47.3	1,546	2,226,746	1,052,867	1,013.0	1,067
10/21/2024	22.57	47.0	1,530	2,072,210	973,793	1,013.0	986
10/22/2024	24.00	47.8	1,533	2,207,375	1,055,073	1,013.0	1,069
10/23/2024	24.00	48.0	1,516	2,182,702	1,046,725	1,013.0	1,060
10/24/2024	24.00	48.0	1,507	2,170,235	1,042,644	1,013.0	1,056
10/25/2024	24.00	48.2	1,501	2,161,058	1,041,933	1,013.0	1,055
10/26/2024	24.00	48.2	1,513	2,178,907	1,050,459	1,013.0	1,064
10/27/2024	24.00	48.5	1,522	2,191,364	1,062,062	1,013.0	1,076
10/28/2024	24.00	48.2	1,539	2,216,455	1,067,774	1,013.0	1,082
10/29/2024	24.00	48.2	1,543	2,222,003	1,071,404	1,013.0	1,085
10/30/2024	24.00	48.1	1,550	2,232,613	1,073,264	1,013.0	1,087
10/31/2024	24.00	48.0	1,459	2,100,413	1,007,722	1,013.0	1,021
Totals/ Average	**729.77**	**47.9**	**1,500**	**65,732,888**	**31,472,202**	**1,013.0**	**31,881**
						Max	**1,087**

Notes:

1) The S-7 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-7 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-7 Turbine

Heat Input Rate
MONTH: November-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU/Day)
11/1/2024	24.00	48.1	1,526	2,197,637	1,056,834	1,013.0	1,071
11/2/2024	24.00	48.1	1,425	2,052,618	988,302	1,013.0	1,001
11/3/2024	25.00	45.1	1,480	2,219,477	1,000,343	1,013.0	1,013
11/4/2024	24.00	47.8	1,473	2,120,586	1,014,296	1,013.0	1,027
11/5/2024	24.00	47.9	1,458	2,098,924	1,005,221	1,013.0	1,018
11/6/2024	21.67	48.2	1,463	1,902,320	917,536	1,013.0	929
11/7/2024	22.50	48.0	1,486	2,006,281	962,247	1,013.0	975
11/8/2024	24.00	47.8	1,496	2,154,280	1,029,131	1,013.0	1,043
11/9/2024	24.00	47.9	1,546	2,226,876	1,066,838	1,013.0	1,081
11/10/2024	24.00	48.1	1,549	2,229,919	1,072,195	1,013.0	1,086
11/11/2024	24.00	48.0	1,572	2,263,333	1,085,874	1,013.0	1,100
11/12/2024	24.00	47.9	1,586	2,283,124	1,093,679	1,013.0	1,108
11/13/2024	24.00	47.6	1,573	2,265,419	1,079,170	1,013.0	1,093
11/14/2024	24.00	47.9	1,563	2,251,298	1,077,830	1,013.0	1,092
11/15/2024	22.63	48.0	1,565	2,124,869	1,020,223	1,013.0	1,033
11/16/2024	24.00	47.9	1,536	2,211,163	1,059,928	1,013.0	1,074
11/17/2024	24.00	47.7	1,523	2,192,523	1,044,783	1,013.0	1,058
11/18/2024	24.00	47.8	1,543	2,222,364	1,061,891	1,013.0	1,076
11/19/2024	24.00	47.2	1,526	2,197,468	1,037,487	1,013.0	1,051
11/20/2024	24.00	47.6	1,468	2,114,037	1,005,413	1,013.0	1,018
11/21/2024	24.00	47.9	1,488	2,142,957	1,026,521	1,013.0	1,040
11/22/2024	24.00	47.9	1,512	2,177,549	1,043,798	1,013.0	1,057
11/23/2024	24.00	48.2	1,563	2,250,244	1,085,169	1,013.0	1,099
11/24/2024	24.00	47.7	1,528	2,200,937	1,049,033	1,013.0	1,063
11/25/2024	24.00	48.5	1,504	2,166,120	1,051,105	1,013.0	1,065
11/26/2024	24.00	48.4	1,492	2,148,482	1,040,632	1,013.0	1,054
11/27/2024	24.00	48.2	1,503	2,164,208	1,043,646	1,013.0	1,057
11/28/2024	24.00	48.0	1,510	2,174,948	1,043,977	1,013.0	1,058
11/29/2024	24.00	47.8	1,507	2,169,622	1,037,404	1,013.0	1,051
11/30/2024	24.00	47.8	1,509	2,172,927	1,038,512	1,013.0	1,052
Totals/ Average	**715.80**	**47.8**	**1,516**	**65,102,510**	**31,139,019**	**1,013.0**	**31,544**
						Max	**1,108**

Notes:

1) The S-7 heat input log is maintained pursuant to Permit Condition No. 18773, Part 8.

2) The daily heat input limit for S-7 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBtu/Day.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY, Livermore, CA
S-6 TEMPERATURE REPORT From June 1, 2024 THROUGH November 30, 2024
KEY EMISSION CONTROL SYSTEM OPERATING PARAMETERS (BAAQMD Reg 8, Rule 34, Section 509)

REPORT PREPARED BY: Rajan Phadnis **DATE:** 12/01/24

TEMPERATURE SENSING DEVICE: Thermocouple

DATE/TIME	TEMPERATURE (°F)	EXPLANATION (If below 700°F)	CAUSE	EXPLANATION	DURATION OF DEVIATION (Hours)	ACTION TAKEN

COMMENTS:

No temperature deviations occurred during June 2024
No temperature deviations occurred during July 2024
No temperature deviations occurred during August 2024
No temperature deviations occurred during September 2024
No temperature deviations occurred during October 2024
No temperature deviations occurred during November 2024

Notes: The S-6 temperature report is maintained pursuant to Permit Condition No. 18773, Part 9.
The combustion chamber discharge temperature for each Gas Turbine shall be maintained between 700°F and 1220°F, averaged over any 3-hour period.

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY, Livermore, CA
S-7 TEMPERATURE REPORT From June 1, 2024 THROUGH November 30, 2024
KEY EMISSION CONTROL SYSTEM OPERATING PARAMETERS (BAAQMD Reg 8, Rule 34, Section 509)

REPORT PREPARED BY: Rajan Phadnis **DATE:** 12/01/24
TEMPERATURE SENSING DEVICE: Thermocouple

DATE/TIME	TEMPERATURE (°F)	EXPLANATION (If below 700°F)	CAUSE	EXPLANATION	DURATION OF DEVIATION (Hours)	ACTION TAKEN
COMMENTS:						
No temperature deviations occurred during June 2024 No temperature deviations occurred during July 2024 No temperature deviations occurred during August 2024 No temperature deviations occurred during September 2024 No temperature deviations occurred during October 2024 No temperature deviations occurred during November 2024						

Not The S-7 temperature report is maintained pursuant to Permit Condition No. 18773, Part 9.
The combustion chamber discharge temperature for each Gas Turbine shall be maintained between 700°F and 1220°F, averaged over any 3-hour period.

APPENDIX G

FLARES (A-15 AND A-16) TEMPERATURE DEVIATION REPORTS AND HEAT INPUT LOGS

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-15 Landfill Gas Flare
Heat Input Rate
MONTH: June-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
6/1/2024	0.00	45.7	N/A	0	0	997.7	0
6/2/2024	0.00	45.7	N/A	0	0	997.7	0
6/3/2024	0.00	45.7	N/A	0	0	997.7	0
6/4/2024	7.43	45.7	1,772	790,107	360,684	997.7	360
6/5/2024	15.23	45.7	1,619	1,479,440	675,364	997.7	674
6/6/2024	0.00	45.7	N/A	0	0	997.7	0
6/7/2024	0.00	45.7	N/A	0	0	997.7	0
6/8/2024	0.00	45.7	N/A	0	0	997.7	0
6/9/2024	0.00	45.7	N/A	0	0	997.7	0
6/10/2024	0.00	45.7	N/A	0	0	997.7	0
6/11/2024	0.00	45.7	N/A	0	0	997.7	0
6/12/2024	0.00	45.7	N/A	0	0	997.7	0
6/13/2024	0.00	45.7	N/A	0	0	997.7	0
6/14/2024	0.00	45.7	N/A	0	0	997.7	0
6/15/2024	0.00	45.7	N/A	0	0	997.7	0
6/16/2024	0.00	45.7	N/A	0	0	997.7	0
6/17/2024	0.00	45.7	N/A	0	0	997.7	0
6/18/2024	0.00	45.7	N/A	0	0	997.7	0
6/19/2024	0.00	45.7	N/A	0	0	997.7	0
6/20/2024	0.00	45.7	N/A	0	0	997.7	0
6/21/2024	0.00	45.7	N/A	0	0	997.7	0
6/22/2024	0.00	45.7	N/A	0	0	997.7	0
6/23/2024	0.00	45.7	N/A	0	0	997.7	0
6/24/2024	0.00	45.7	N/A	0	0	997.7	0
6/25/2024	0.00	45.7	N/A	0	0	997.7	0
6/26/2024	5.27	45.7	1,787	564,585	257,733	997.7	257
6/27/2024	0.00	45.7	N/A	0	0	997.7	0
6/28/2024	0.00	45.7	N/A	0	0	997.7	0
6/29/2024	0.00	45.7	N/A	0	0	997.7	0
6/30/2024	0.00	45.7	N/A	0	0	997.7	0
Totals/ Average	**27.93**	**45.7**	**1,726**	**2,834,132**	**1,293,781**	997.7	**1,291**
						Max	**674**

NOTES: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-15 flare is 1,704 MMBtu.
2) Starting May 2021, the average methane percentage from the March 4, 2021 source test will be used. It is an average of the methane percentages taken during the test.
% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-15 Landfill Gas Flare
Heat Input Rate
MONTH: July-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
7/1/2024	0.00	45.7	N/A	0	0	997.7	0
7/2/2024	0.00	45.7	N/A	0	0	997.7	0
7/3/2024	0.00	45.7	N/A	0	0	997.7	0
7/4/2024	0.00	45.7	N/A	0	0	997.7	0
7/5/2024	0.00	45.7	N/A	0	0	997.7	0
7/6/2024	0.00	45.7	N/A	0	0	997.7	0
7/7/2024	0.00	45.7	N/A	0	0	997.7	0
7/8/2024	0.00	45.7	N/A	0	0	997.7	0
7/9/2024	0.00	45.7	N/A	0	0	997.7	0
7/10/2024	0.00	45.7	N/A	0	0	997.7	0
7/11/2024	0.00	45.7	N/A	0	0	997.7	0
7/12/2024	0.00	45.7	N/A	0	0	997.7	0
7/13/2024	0.00	45.7	N/A	0	0	997.7	0
7/14/2024	0.00	45.7	N/A	0	0	997.7	0
7/15/2024	0.00	45.7	N/A	0	0	997.7	0
7/16/2024	0.00	45.7	N/A	0	0	997.7	0
7/17/2024	0.00	45.7	N/A	0	0	997.7	0
7/18/2024	0.00	45.7	N/A	0	0	997.7	0
7/19/2024	0.00	45.7	N/A	0	0	997.7	0
7/20/2024	0.00	45.7	N/A	0	0	997.7	0
7/21/2024	0.00	45.7	N/A	0	0	997.7	0
7/22/2024	0.00	45.7	N/A	0	0	997.7	0
7/23/2024	0.00	45.7	N/A	0	0	997.7	0
7/24/2024	0.00	45.7	N/A	0	0	997.7	0
7/25/2024	0.00	45.7	N/A	0	0	997.7	0
7/26/2024	0.00	45.7	N/A	0	0	997.7	0
7/27/2024	0.00	45.7	N/A	0	0	997.7	0
7/28/2024	0.00	45.7	N/A	0	0	997.7	0
7/29/2024	0.00	45.7	N/A	0	0	997.7	0
7/30/2024	0.00	45.7	N/A	0	0	997.7	0
7/31/2024	0.00	45.7	N/A	0	0	997.7	0
Totals/ Average	**0.00**	**45.7**	**0**	**0**	**0**	997.7	**0**
						Max	**0**

NOTES: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-15 flare is 1,704 MMBtu.
2) Starting May 2021, the average methane percentage from the March 4, 2021 source test will be used. It is an average of the methane percentages taken during the test.
% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-15 Landfill Gas Flare
Heat Input Rate
MONTH: August-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
8/1/2024	0.00	45.7	N/A	0	0	997.7	0
8/2/2024	0.00	45.7	N/A	0	0	997.7	0
8/3/2024	0.00	45.7	N/A	0	0	997.7	0
8/4/2024	0.00	45.7	N/A	0	0	997.7	0
8/5/2024	0.00	45.7	N/A	0	0	997.7	0
8/6/2024	0.00	45.7	N/A	0	0	997.7	0
8/7/2024	0.00	45.7	N/A	0	0	997.7	0
8/8/2024	0.00	45.7	N/A	0	0	997.7	0
8/9/2024	0.00	45.7	N/A	0	0	997.7	0
8/10/2024	0.00	45.7	N/A	0	0	997.7	0
8/11/2024	0.00	45.7	N/A	0	0	997.7	0
8/12/2024	0.00	45.7	N/A	0	0	997.7	0
8/13/2024	0.00	45.7	N/A	0	0	997.7	0
8/14/2024	0.00	45.7	N/A	0	0	997.7	0
8/15/2024	12.73	45.7	1,502	1,147,739	523,943	997.7	523
8/16/2024	22.20	45.7	1,501	1,999,048	912,565	997.7	910
8/17/2024	24.00	45.7	1,502	2,162,487	987,175	997.7	985
8/18/2024	24.00	45.7	1,502	2,162,804	987,320	997.7	985
8/19/2024	23.73	45.7	1,500	2,135,953	975,063	997.7	973
8/20/2024	24.00	45.7	1,502	2,162,799	987,318	997.7	985
8/21/2024	24.00	45.7	1,502	2,162,685	987,266	997.7	985
8/22/2024	24.00	45.7	1,502	2,162,332	987,105	997.7	985
8/23/2024	24.00	45.7	1,502	2,162,511	987,186	997.7	985
8/24/2024	24.00	45.7	1,502	2,162,392	987,132	997.7	985
8/25/2024	24.00	45.7	1,502	2,162,667	987,257	997.7	985
8/26/2024	23.30	45.7	1,506	2,105,374	961,103	997.7	959
8/27/2024	24.00	45.7	1,503	2,164,298	988,002	997.7	986
8/28/2024	12.70	45.7	1,510	1,150,324	525,123	997.7	524
8/29/2024	0.00	45.7	N/A	0	0	997.7	0
8/30/2024	0.00	45.7	N/A	0	0	997.7	0
8/31/2024	0.00	45.7	N/A	0	0	997.7	0
Totals/ Average	**310.67**	**45.7**	**1,503**	**28,003,414**	**12,783,558**	997.7	**12,754**
						Max	**986**

NOTES: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-15 flare is 1,704 MMBtu.

2) Starting May 2021, the average methane percentage from the March 4, 2021 source test will be used. It is an average of the methane percentages taken during the test.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-15 Landfill Gas Flare
Heat Input Rate
MONTH: September-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
9/1/2024	0.00	45.7	N/A	0	0	997.7	0
9/2/2024	0.00	45.7	N/A	0	0	997.7	0
9/3/2024	0.00	45.7	N/A	0	0	997.7	0
9/4/2024	0.00	45.7	N/A	0	0	997.7	0
9/5/2024	0.00	45.7	N/A	0	0	997.7	0
9/6/2024	0.00	45.7	N/A	0	0	997.7	0
9/7/2024	0.00	45.7	N/A	0	0	997.7	0
9/8/2024	0.00	45.7	N/A	0	0	997.7	0
9/9/2024	0.00	45.7	N/A	0	0	997.7	0
9/10/2024	0.00	45.7	N/A	0	0	997.7	0
9/11/2024	0.00	45.7	N/A	0	0	997.7	0
9/12/2024	0.00	45.7	N/A	0	0	997.7	0
9/13/2024	0.00	45.7	N/A	0	0	997.7	0
9/14/2024	0.00	45.7	N/A	0	0	997.7	0
9/15/2024	0.00	45.7	N/A	0	0	997.7	0
9/16/2024	0.00	45.7	N/A	0	0	997.7	0
9/17/2024	0.00	45.7	N/A	0	0	997.7	0
9/18/2024	0.00	45.7	N/A	0	0	997.7	0
9/19/2024	0.00	45.7	N/A	0	0	997.7	0
9/20/2024	0.00	45.7	N/A	0	0	997.7	0
9/21/2024	0.00	45.7	N/A	0	0	997.7	0
9/22/2024	0.00	45.7	N/A	0	0	997.7	0
9/23/2024	0.00	45.7	N/A	0	0	997.7	0
9/24/2024	0.00	45.7	N/A	0	0	997.7	0
9/25/2024	0.00	45.7	N/A	0	0	997.7	0
9/26/2024	0.53	45.7	853	27,286	12,456	997.7	12
9/27/2024	0.00	45.7	N/A	0	0	997.7	0
9/28/2024	0.00	45.7	N/A	0	0	997.7	0
9/29/2024	0.00	45.7	N/A	0	0	997.7	0
9/30/2024	0.00	45.7	N/A	0	0	997.7	0
Totals/ Average	**0.53**	**45.7**	**853**	**27,286**	**12,456**	997.7	**12**
						Max	**12**

NOTES: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-15 flare is 1,704 MMBtu.
2) Starting May 2021, the average methane percentage from the March 4, 2021 source test will be used. It is an average of the methane percentages taken during the test.
% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-15 Landfill Gas Flare
Heat Input Rate
MONTH: October-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
10/1/2024	0.00	45.7	N/A	0	0	997.7	0
10/2/2024	0.00	45.7	N/A	0	0	997.7	0
10/3/2024	0.00	45.7	N/A	0	0	997.7	0
10/4/2024	0.00	45.7	N/A	0	0	997.7	0
10/5/2024	0.00	45.7	N/A	0	0	997.7	0
10/6/2024	0.00	45.7	N/A	0	0	997.7	0
10/7/2024	0.00	45.7	N/A	0	0	997.7	0
10/8/2024	0.00	45.7	N/A	0	0	997.7	0
10/9/2024	4.10	45.7	1,801	443,097	202,274	997.7	202
10/10/2024	12.27	45.7	1,694	1,246,764	569,148	997.7	568
10/11/2024	0.00	45.7	N/A	0	0	997.7	0
10/12/2024	0.00	45.7	N/A	0	0	997.7	0
10/13/2024	0.00	45.7	N/A	0	0	997.7	0
10/14/2024	0.00	45.7	N/A	0	0	997.7	0
10/15/2024	0.00	45.7	N/A	0	0	997.7	0
10/16/2024	0.00	45.7	N/A	0	0	997.7	0
10/17/2024	0.00	45.7	N/A	0	0	997.7	0
10/18/2024	0.00	45.7	N/A	0	0	997.7	0
10/19/2024	0.00	45.7	N/A	0	0	997.7	0
10/20/2024	0.00	45.7	N/A	0	0	997.7	0
10/21/2024	0.00	45.7	N/A	0	0	997.7	0
10/22/2024	0.00	45.7	N/A	0	0	997.7	0
10/23/2024	0.00	45.7	N/A	0	0	997.7	0
10/24/2024	0.00	45.7	N/A	0	0	997.7	0
10/25/2024	0.00	45.7	N/A	0	0	997.7	0
10/26/2024	0.00	45.7	N/A	0	0	997.7	0
10/27/2024	0.00	45.7	N/A	0	0	997.7	0
10/28/2024	0.00	45.7	N/A	0	0	997.7	0
10/29/2024	0.00	45.7	N/A	0	0	997.7	0
10/30/2024	0.00	45.7	N/A	0	0	997.7	0
10/31/2024	0.00	45.7	N/A	0	0	997.7	0
Totals/ Average	**16.37**	**45.7**	**1,748**	**1,689,861**	**771,422**	997.7	**770**
						Max	**568**

NOTES: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-15 flare is 1,704 MMBtu.
2) Starting May 2021, the average methane percentage from the March 4, 2021 source test will be used. It is an average of the methane percentages taken during the test.
% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-15 Landfill Gas Flare
Heat Input Rate
MONTH: November-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
11/1/2024	0.00	45.7	N/A	0	0	997.7	0
11/2/2024	0.00	45.7	N/A	0	0	997.7	0
11/3/2024	0.00	45.7	N/A	0	0	997.7	0
11/4/2024	0.00	45.7	N/A	0	0	997.7	0
11/5/2024	0.00	45.7	N/A	0	0	997.7	0
11/6/2024	0.00	45.7	N/A	0	0	997.7	0
11/7/2024	0.00	45.7	N/A	0	0	997.7	0
11/8/2024	0.00	45.7	N/A	0	0	997.7	0
11/9/2024	0.00	45.7	N/A	0	0	997.7	0
11/10/2024	0.00	45.7	N/A	0	0	997.7	0
11/11/2024	0.00	45.7	N/A	0	0	997.7	0
11/12/2024	0.00	45.7	N/A	0	0	997.7	0
11/13/2024	0.00	45.7	N/A	0	0	997.7	0
11/14/2024	0.00	45.7	N/A	0	0	997.7	0
11/15/2024	0.00	45.7	N/A	0	0	997.7	0
11/16/2024	0.00	45.7	N/A	0	0	997.7	0
11/17/2024	0.00	45.7	N/A	0	0	997.7	0
11/18/2024	0.00	45.7	N/A	0	0	997.7	0
11/19/2024	0.00	45.7	N/A	0	0	997.7	0
11/20/2024	0.00	45.7	N/A	0	0	997.7	0
11/21/2024	0.00	45.7	N/A	0	0	997.7	0
11/22/2024	0.00	45.7	N/A	0	0	997.7	0
11/23/2024	0.00	45.7	N/A	0	0	997.7	0
11/24/2024	0.00	45.7	N/A	0	0	997.7	0
11/25/2024	0.00	45.7	N/A	0	0	997.7	0
11/26/2024	0.00	45.7	N/A	0	0	997.7	0
11/27/2024	0.00	45.7	N/A	0	0	997.7	0
11/28/2024	0.00	45.7	N/A	0	0	997.7	0
11/29/2024	0.00	45.7	N/A	0	0	997.7	0
11/30/2024	0.00	45.7	N/A	0	0	997.7	0
Totals/ Average	**0.00**	**45.7**	**0**	**0**	**0**	997.7	**0**
						Max	**0**

NOTES: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-15 flare is 1,704 MMBtu.
2) Starting May 2021, the average methane percentage from the March 4, 2021 source test will be used. It is an average of the methane percentages taken during the test.
% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-16 Landfill Gas Flare

Heat Input Rate

MONTH: June-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Landfill Gas Volume (scf)	Byproduct Gas (BPG) Volume (scf)	Total Throughput (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
6/1/2024	24.00	49.4	2,260	3,254,484	0	3,254,484	1,606,901	997.7	1,603
6/2/2024	24.00	49.4	2,226	3,205,453	0	3,205,453	1,582,692	997.7	1,579
6/3/2024	24.00	49.4	2,233	3,216,106	0	3,216,106	1,587,952	997.7	1,584
6/4/2024	14.47	49.4	2,255	1,957,402	0	1,957,402	966,467	997.7	964
6/5/2024	13.40	49.4	2,291	1,842,343	0	1,842,343	909,657	997.7	908
6/6/2024	24.00	49.4	2,397	3,451,095	0	3,451,095	1,703,978	997.7	1,700
6/7/2024	24.00	49.4	2,347	3,379,238	0	3,379,238	1,668,499	997.7	1,665
6/8/2024	24.00	49.4	2,277	3,279,398	0	3,279,398	1,619,203	997.7	1,615
6/9/2024	24.00	49.4	2,336	3,363,527	0	3,363,527	1,660,741	997.7	1,657
6/10/2024	24.00	49.4	2,337	3,365,873	0	3,365,873	1,661,900	997.7	1,658
6/11/2024	22.90	49.4	2,585	3,551,193	0	3,551,193	1,753,402	997.7	1,749
6/12/2024	24.00	49.4	2,530	3,643,641	0	3,643,641	1,799,048	997.7	1,795
6/13/2024	24.00	49.4	2,359	3,397,030	0	3,397,030	1,677,284	997.7	1,673
6/14/2024	24.00	49.4	2,387	3,436,634	0	3,436,634	1,696,838	997.7	1,693
6/15/2024	24.00	49.4	2,392	3,443,790	0	3,443,790	1,700,371	997.7	1,696
6/16/2024	24.00	49.4	2,392	3,444,222	0	3,444,222	1,700,585	997.7	1,697
6/17/2024	24.00	49.4	2,396	3,449,960	0	3,449,960	1,703,418	997.7	1,699
6/18/2024	24.00	49.4	2,415	3,477,374	0	3,477,374	1,716,953	997.7	1,713
6/19/2024	24.00	49.4	2,315	3,334,041	0	3,334,041	1,646,183	997.7	1,642
6/20/2024	24.00	49.4	2,308	3,323,173	0	3,323,173	1,640,817	997.7	1,637
6/21/2024	24.00	49.4	2,312	3,329,752	0	3,329,752	1,644,065	997.7	1,640
6/22/2024	24.00	49.4	2,360	3,399,019	0	3,399,019	1,678,266	997.7	1,674
6/23/2024	24.00	49.4	2,371	3,413,841	0	3,413,841	1,685,584	997.7	1,682
6/24/2024	24.00	49.4	2,482	3,573,725	0	3,573,725	1,764,527	997.7	1,760
6/25/2024	24.00	49.4	2,492	3,588,131	0	3,588,131	1,771,640	997.7	1,768
6/26/2024	18.20	49.4	2,350	2,566,163	0	2,566,163	1,267,043	997.7	1,264
6/27/2024	24.00	49.4	2,326	3,348,807	0	3,348,807	1,653,473	997.7	1,650
6/28/2024	24.00	49.4	2,331	3,356,652	0	3,356,652	1,657,347	997.7	1,654
6/29/2024	24.00	49.4	2,348	3,380,682	0	3,380,682	1,669,212	997.7	1,665
6/30/2024	24.00	49.4	2,359	3,397,195	0	3,397,195	1,677,365	997.7	1,674
Totals/ Average	**692.97**	**49.4**	**2,359**	**98,169,944**	**0**	**98,169,944**	**48,471,410**	997.7	**48,360**
								Max	**1,795**

NOTE: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-16 flare is 3,168 MMBtu.

2) Starting May 2023, the average methane percentage from the March 8, 9, and 13, 2023 source test will be used. Starting May 2024, the average methane percentage from the March 6, 2024 source test will be used.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units **MMBTU** - million British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-16 Landfill Gas Flare
Heat Input Rate
MONTH: July-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Landfill Gas Volume (scf)	Byproduct Gas (BPG) Volume (scf)	Total Throughput (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
7/1/2024	24.00	49.4	2,337	3,364,895	0	3,364,895	1,661,417	997.7	1,658
7/2/2024	24.00	49.4	2,570	3,700,831	0	3,700,831	1,827,285	997.7	1,823
7/3/2024	24.00	49.4	2,524	3,633,892	0	3,633,892	1,794,234	997.7	1,790
7/4/2024	24.00	49.4	2,619	3,771,656	0	3,771,656	1,862,255	997.7	1,858
7/5/2024	24.00	49.4	2,521	3,630,456	0	3,630,456	1,792,538	997.7	1,788
7/6/2024	24.00	49.4	2,492	3,587,884	0	3,587,884	1,771,518	997.7	1,767
7/7/2024	24.00	49.4	2,403	3,460,818	0	3,460,818	1,708,779	997.7	1,705
7/8/2024	24.00	49.4	2,355	3,390,497	0	3,390,497	1,674,058	997.7	1,670
7/9/2024	24.00	49.4	2,374	3,418,772	0	3,418,772	1,688,019	997.7	1,684
7/10/2024	24.00	49.4	2,423	3,489,815	0	3,489,815	1,723,096	997.7	1,719
7/11/2024	24.00	49.4	2,471	3,557,626	0	3,557,626	1,756,578	997.7	1,753
7/12/2024	24.00	49.4	2,378	3,425,008	0	3,425,008	1,691,098	997.7	1,687
7/13/2024	24.00	49.4	2,124	3,058,609	0	3,058,609	1,510,188	997.7	1,507
7/14/2024	22.50	49.4	2,080	2,807,459	0	2,807,459	1,386,183	997.7	1,383
7/15/2024	23.23	49.4	2,145	2,990,474	0	2,990,474	1,476,547	997.7	1,473
7/16/2024	24.00	49.4	2,537	3,652,762	0	3,652,762	1,803,551	997.7	1,799
7/17/2024	24.00	49.4	2,614	3,764,862	0	3,764,862	1,858,901	997.7	1,855
7/18/2024	24.00	49.4	2,611	3,760,300	0	3,760,300	1,856,648	997.7	1,852
7/19/2024	24.00	49.4	2,612	3,761,032	0	3,761,032	1,857,010	997.7	1,853
7/20/2024	24.00	49.4	2,537	3,652,853	0	3,652,853	1,803,596	997.7	1,799
7/21/2024	24.00	49.4	2,410	3,470,040	0	3,470,040	1,713,332	997.7	1,709
7/22/2024	24.00	49.4	2,386	3,435,512	0	3,435,512	1,696,284	997.7	1,692
7/23/2024	24.00	49.4	2,401	3,457,415	0	3,457,415	1,707,099	997.7	1,703
7/24/2024	24.00	49.4	2,249	3,238,285	0	3,238,285	1,598,903	997.7	1,595
7/25/2024	24.00	49.4	2,193	3,158,467	0	3,158,467	1,559,493	997.7	1,556
7/26/2024	24.00	49.4	2,128	3,064,849	0	3,064,849	1,513,269	997.7	1,510
7/27/2024	24.00	49.4	1,925	2,772,644	0	2,772,644	1,368,993	997.7	1,366
7/28/2024	24.00	49.4	1,961	2,823,773	0	2,823,773	1,394,238	997.7	1,391
7/29/2024	24.00	49.4	1,899	2,734,015	0	2,734,015	1,349,920	997.7	1,347
7/30/2024	24.00	49.4	1,989	2,864,040	0	2,864,040	1,414,120	997.7	1,411
7/31/2024	24.00	49.4	2,154	3,101,557	0	3,101,557	1,531,394	997.7	1,528
Totals/ Average	**741.73**	**49.4**	**2,336**	**104,001,098**	**0**	**104,001,098**	**51,350,542**	997.7	**51,232**
								Max	**1,858**

NOTE: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-16 flare is 3,168 MMBtu.
2) Starting May 2023, the average methane percentage from the March 8, 9, and 13, 2023 source test will be used. Starting May 2024, the average methane percentage from the March 6, 2024 source test will be used.

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-16 Landfill Gas Flare
Heat Input Rate
MONTH: August-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Landfill Gas Volume (scf)	Byproduct Gas (BPG) Volume (scf)	Total Throughput (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
8/1/2024	24.00	49.4	2,015	2,901,863	0	2,901,863	1,432,795	997.7	1,429
8/2/2024	24.00	49.4	2,039	2,936,302	0	2,936,302	1,449,799	997.7	1,446
8/3/2024	24.00	49.4	2,070	2,981,449	0	2,981,449	1,472,090	997.7	1,469
8/4/2024	24.00	49.4	1,918	2,761,612	0	2,761,612	1,363,546	997.7	1,360
8/5/2024	24.00	49.4	1,913	2,754,768	0	2,754,768	1,360,167	997.7	1,357
8/6/2024	24.00	49.4	2,038	2,935,314	0	2,935,314	1,449,311	997.7	1,446
8/7/2024	23.63	49.4	2,222	3,151,423	0	3,151,423	1,556,015	997.7	1,552
8/8/2024	24.00	49.4	2,182	3,142,547	0	3,142,547	1,551,633	997.7	1,548
8/9/2024	24.00	49.4	2,055	2,959,711	0	2,959,711	1,461,357	997.7	1,458
8/10/2024	24.00	49.4	1,981	2,852,884	0	2,852,884	1,408,611	997.7	1,405
8/11/2024	24.00	49.4	1,806	2,600,737	0	2,600,737	1,284,114	997.7	1,281
8/12/2024	20.63	49.4	1,994	2,467,995	0	2,467,995	1,218,573	997.7	1,216
8/13/2024	24.00	49.4	1,977	2,847,151	0	2,847,151	1,405,781	997.7	1,403
8/14/2024	24.00	49.4	2,252	3,243,214	0	3,243,214	1,601,337	997.7	1,598
8/15/2024	24.00	49.4	2,586	3,723,460	0	3,723,460	1,838,458	997.7	1,834
8/16/2024	24.00	49.4	2,445	3,521,215	0	3,521,215	1,738,600	997.7	1,735
8/17/2024	24.00	49.4	2,321	3,341,659	0	3,341,659	1,649,944	997.7	1,646
8/18/2024	21.40	49.4	2,179	2,797,715	0	2,797,715	1,381,372	997.7	1,378
8/19/2024	24.00	49.4	2,367	3,408,197	0	3,408,197	1,682,797	997.7	1,679
8/20/2024	24.00	49.4	2,336	3,364,082	0	3,364,082	1,661,015	997.7	1,657
8/21/2024	24.00	49.4	2,301	3,314,051	0	3,314,051	1,636,313	997.7	1,633
8/22/2024	24.00	49.4	2,244	3,230,772	0	3,230,772	1,595,194	997.7	1,592
8/23/2024	24.00	49.4	2,231	3,212,026	0	3,212,026	1,585,938	997.7	1,582
8/24/2024	24.00	49.4	2,240	3,224,905	0	3,224,905	1,592,297	997.7	1,589
8/25/2024	24.00	49.4	2,273	3,273,522	0	3,273,522	1,616,301	997.7	1,613
8/26/2024	24.00	49.4	2,181	3,140,351	0	3,140,351	1,550,548	997.7	1,547
8/27/2024	24.00	49.4	2,154	3,101,321	0	3,101,321	1,531,277	997.7	1,528
8/28/2024	21.30	49.4	2,049	2,618,631	0	2,618,631	1,292,949	997.7	1,290
8/29/2024	17.33	49.4	1,943	2,020,352	0	2,020,352	997,549	997.7	995
8/30/2024	24.00	49.4	1,722	2,479,755	0	2,479,755	1,224,379	997.7	1,222
8/31/2024	24.00	49.4	1,692	2,436,546	0	2,436,546	1,203,045	997.7	1,200
Totals/ Average	**728.30**	**49.4**	**2,120**	**92,745,530**	**0**	**92,745,530**	**45,793,105**	997.7	**45,688**
								Max	**1,834**

NOTE: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-16 flare is 3,168 MMBtu.
2) Starting May 2023, the average methane percentage from the March 8, 9, and 13, 2023 source test will be used. Starting May 2024, the average methane percentage from the March 6, 2024 source test will be used.

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-16 Landfill Gas Flare
Heat Input Rate
MONTH: September-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Landfill Gas Volume (scf)	Byproduct Gas (BPG) Volume (scf)	Total Throughput (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
9/1/2024	23.83	49.4	1,642	2,348,424	0	2,348,424	1,159,534	997.7	1,157
9/2/2024	22.73	49.4	1,893	2,581,667	0	2,581,667	1,274,698	997.7	1,272
9/3/2024	24.00	49.4	1,762	2,537,379	0	2,537,379	1,252,831	997.7	1,250
9/4/2024	24.00	49.4	2,078	2,991,736	0	2,991,736	1,477,170	997.7	1,474
9/5/2024	24.00	49.4	2,011	2,896,106	0	2,896,106	1,429,952	997.7	1,427
9/6/2024	22.40	49.4	2,076	2,790,583	0	2,790,583	1,377,850	997.7	1,375
9/7/2024	24.00	49.4	2,166	3,119,483	0	3,119,483	1,540,245	997.7	1,537
9/8/2024	24.00	49.4	2,004	2,886,299	0	2,886,299	1,425,110	997.7	1,422
9/9/2024	23.63	49.4	2,143	3,038,956	0	3,038,956	1,500,485	997.7	1,497
9/10/2024	24.00	49.4	2,128	3,063,973	0	3,063,973	1,512,837	997.7	1,509
9/11/2024	24.00	49.4	2,099	3,022,665	0	3,022,665	1,492,441	997.7	1,489
9/12/2024	24.00	49.4	2,255	3,247,782	0	3,247,782	1,603,592	997.7	1,600
9/13/2024	24.00	49.4	2,304	3,317,499	0	3,317,499	1,638,015	997.7	1,634
9/14/2024	24.00	49.4	2,036	2,931,156	0	2,931,156	1,447,258	997.7	1,444
9/15/2024	24.00	49.4	2,018	2,906,128	0	2,906,128	1,434,901	997.7	1,432
9/16/2024	24.00	49.4	1,697	2,443,741	0	2,443,741	1,206,597	997.7	1,204
9/17/2024	24.00	49.4	1,861	2,680,318	0	2,680,318	1,323,407	997.7	1,320
9/18/2024	24.00	49.4	2,101	3,024,861	0	3,024,861	1,493,525	997.7	1,490
9/19/2024	24.00	49.4	2,138	3,079,270	0	3,079,270	1,520,390	997.7	1,517
9/20/2024	24.00	49.4	2,174	3,131,227	0	3,131,227	1,546,043	997.7	1,542
9/21/2024	24.00	49.4	2,246	3,234,808	0	3,234,808	1,597,186	997.7	1,594
9/22/2024	24.00	49.4	2,358	3,395,194	0	3,395,194	1,676,377	997.7	1,673
9/23/2024	24.00	49.4	2,404	3,461,940	0	3,461,940	1,709,333	997.7	1,705
9/24/2024	9.50	49.4	2,325	1,325,022	0	1,325,022	654,230	997.7	653
9/25/2024	6.30	49.4	2,448	925,200	0	925,200	456,818	997.7	456
9/26/2024	24.00	49.4	2,444	3,519,800	0	3,519,800	1,737,901	997.7	1,734
9/27/2024	24.00	49.4	2,383	3,431,936	0	3,431,936	1,694,518	997.7	1,691
9/28/2024	24.00	49.4	2,303	3,316,425	0	3,316,425	1,637,485	997.7	1,634
9/29/2024	24.00	49.4	2,182	3,141,838	0	3,141,838	1,551,283	997.7	1,548
9/30/2024	23.90	49.4	2,275	3,262,274	0	3,262,274	1,610,748	997.7	1,607
Totals/ Average	**684.30**	**49.4**	**2,132**	**87,053,690**	**0**	**87,053,690**	**42,982,759**	997.7	**42,884**
								Max	**1,734**

NOTE. 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-16 flare is 3,168 MMBtu.

2) Starting May 2023, the average methane percentage from the March 8, 9, and 13, 2023 source test will be used. Starting May 2024, the average methane percentage from the March 6, 2024 source test will be used.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units **MMBTU** - million British thermal units

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-16 Landfill Gas Flare

Heat Input Rate
MONTH: October-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Landfill Gas Volume (scf)	Byproduct Gas (BPG) Volume (scf)	Total Throughput (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
10/1/2024	24.00	49.4	2,353	3,388,032	0	3,388,032	1,672,841	997.7	1,669
10/2/2024	24.00	49.4	2,455	3,535,349	0	3,535,349	1,745,579	997.7	1,742
10/3/2024	24.00	49.4	2,390	3,441,312	0	3,441,312	1,699,148	997.7	1,695
10/4/2024	24.00	49.4	2,317	3,336,294	0	3,336,294	1,647,295	997.7	1,644
10/5/2024	24.00	49.4	2,226	3,206,159	0	3,206,159	1,583,041	997.7	1,579
10/6/2024	24.00	49.4	2,230	3,211,194	0	3,211,194	1,585,527	997.7	1,582
10/7/2024	24.00	49.4	2,217	3,192,588	0	3,192,588	1,576,340	997.7	1,573
10/8/2024	24.00	49.4	2,234	3,217,569	0	3,217,569	1,588,675	997.7	1,585
10/9/2024	15.70	49.4	2,062	1,942,151	0	1,942,151	958,937	997.7	957
10/10/2024	11.40	49.4	2,054	1,404,769	0	1,404,769	693,605	997.7	692
10/11/2024	24.00	49.4	1,863	2,682,931	0	2,682,931	1,324,697	997.7	1,322
10/12/2024	24.00	49.4	1,835	2,643,010	0	2,643,010	1,304,986	997.7	1,302
10/13/2024	24.00	49.4	1,909	2,748,500	0	2,748,500	1,357,072	997.7	1,354
10/14/2024	24.00	49.4	1,997	2,875,856	0	2,875,856	1,419,954	997.7	1,417
10/15/2024	24.00	49.4	1,927	2,774,764	0	2,774,764	1,370,040	997.7	1,367
10/16/2024	24.00	49.4	1,758	2,532,005	0	2,532,005	1,250,177	997.7	1,247
10/17/2024	24.00	49.4	1,725	2,483,595	0	2,483,595	1,226,275	997.7	1,223
10/18/2024	24.00	49.4	1,714	2,468,035	0	2,468,035	1,218,592	997.7	1,216
10/19/2024	24.00	49.4	1,724	2,482,183	0	2,482,183	1,225,578	997.7	1,223
10/20/2024	24.00	49.4	1,744	2,511,170	0	2,511,170	1,239,890	997.7	1,237
10/21/2024	23.40	49.4	1,970	2,765,936	0	2,765,936	1,365,681	997.7	1,363
10/22/2024	24.00	49.4	1,763	2,539,171	0	2,539,171	1,253,716	997.7	1,251
10/23/2024	24.00	49.4	1,782	2,566,371	0	2,566,371	1,267,146	997.7	1,264
10/24/2024	24.00	49.4	1,738	2,502,660	0	2,502,660	1,235,688	997.7	1,233
10/25/2024	24.00	49.4	1,696	2,442,546	0	2,442,546	1,206,007	997.7	1,203
10/26/2024	24.00	49.4	1,755	2,527,552	0	2,527,552	1,247,979	997.7	1,245
10/27/2024	24.00	49.4	1,726	2,484,818	0	2,484,818	1,226,879	997.7	1,224
10/28/2024	24.00	49.4	1,661	2,391,479	0	2,391,479	1,180,793	997.7	1,178
10/29/2024	24.00	49.4	1,644	2,367,926	0	2,367,926	1,169,163	997.7	1,166
10/30/2024	24.00	49.4	1,627	2,342,767	0	2,342,767	1,156,741	997.7	1,154
10/31/2024	24.00	49.4	1,864	2,684,245	0	2,684,245	1,325,346	997.7	1,322
Totals/ Average	**722.50**	**49.4**	**1,934**	**83,692,937**	**0**	**83,692,937**	**41,323,388**	997.7	**41,228**
								Max	**1,742**

NOTE: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-16 flare is 3,168 MMBtu.

2) Starting May 2023, the average methane percentage from the March 8, 9, and 13, 2023 source test will be used. Starting May 2024, the average methane percentage from the March 6, 2024 source test will be used.

Altamont Landfill and Resource Recovery Facility
Livermore, CA

A-16 Landfill Gas Flare

Heat Input Rate

MONTH: November-24

Date	Runtime (Hours)	CH_4 (%)	Average Flow (scfm)	Landfill Gas Volume (scf)	Byproduct Gas (BPG) Volume (scf)	Total Throughput (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
11/1/2024	24.00	49.4	1,627	2,343,237	0	2,343,237	1,156,973	997.7	1,154
11/2/2024	24.00	49.4	1,820	2,620,486	0	2,620,486	1,293,865	997.7	1,291
11/3/2024	25.00	49.4	1,588	2,381,451	0	2,381,451	1,175,841	997.7	1,173
11/4/2024	24.00	49.4	1,611	2,320,528	0	2,320,528	1,145,761	997.7	1,143
11/5/2024	24.00	49.4	1,817	2,616,849	0	2,616,849	1,292,069	997.7	1,289
11/6/2024	24.00	49.4	1,789	2,576,088	0	2,576,088	1,271,943	997.7	1,269
11/7/2024	24.00	49.4	1,683	2,423,392	0	2,423,392	1,196,550	997.7	1,194
11/8/2024	24.00	49.4	1,624	2,338,599	0	2,338,599	1,154,683	997.7	1,152
11/9/2024	24.00	49.4	1,649	2,373,998	0	2,373,998	1,172,162	997.7	1,169
11/10/2024	24.00	49.4	1,626	2,342,107	0	2,342,107	1,156,415	997.7	1,154
11/11/2024	24.00	49.4	1,532	2,205,823	0	2,205,823	1,089,125	997.7	1,087
11/12/2024	24.00	49.4	1,517	2,184,684	0	2,184,684	1,078,688	997.7	1,076
11/13/2024	24.00	49.4	1,623	2,336,762	0	2,336,762	1,153,776	997.7	1,151
11/14/2024	24.00	49.4	1,576	2,269,768	0	2,269,768	1,120,698	997.7	1,118
11/15/2024	23.37	49.4	1,689	2,367,960	0	2,367,960	1,169,180	997.7	1,166
11/16/2024	24.00	49.4	1,479	2,129,197	0	2,129,197	1,051,291	997.7	1,049
11/17/2024	24.00	49.4	1,497	2,156,139	0	2,156,139	1,064,594	997.7	1,062
11/18/2024	24.00	49.4	1,446	2,082,689	0	2,082,689	1,028,328	997.7	1,026
11/19/2024	24.00	49.4	1,486	2,139,623	0	2,139,623	1,056,439	997.7	1,054
11/20/2024	24.00	49.4	1,579	2,274,282	0	2,274,282	1,122,927	997.7	1,120
11/21/2024	24.00	49.4	1,613	2,322,964	0	2,322,964	1,146,963	997.7	1,144
11/22/2024	24.00	49.4	1,626	2,341,341	0	2,341,341	1,156,037	997.7	1,153
11/23/2024	9.63	49.4	1,592	920,446	0	920,446	454,470	997.7	453
11/24/2024	14.13	49.4	2,077	1,761,109	0	1,761,109	869,548	997.7	868
11/25/2024	24.00	49.4	1,640	2,361,797	0	2,361,797	1,166,137	997.7	1,163
11/26/2024	24.00	49.4	1,553	2,235,849	0	2,235,849	1,103,950	997.7	1,101
11/27/2024	24.00	49.4	1,629	2,345,290	0	2,345,290	1,157,987	997.7	1,155
11/28/2024	24.00	49.4	1,661	2,391,555	0	2,391,555	1,180,830	997.7	1,178
11/29/2024	24.00	49.4	1,665	2,397,768	0	2,397,768	1,183,898	997.7	1,181
11/30/2024	24.00	49.4	1,645	2,369,401	0	2,369,401	1,169,892	997.7	1,167
Totals/ Average	**696.13**	**49.4**	**1,632**	**67,931,182**	**0**	**67,931,182**	**33,541,021**	997.7	**33,464**
								Max	**1,291**

NOTE: 1) Pursuant to Permit Condition No. 19235, Part 4, the daily heat input limit to the A-16 flare is 3,168 MMBtu.

2) Starting May 2023, the average methane percentage from the March 8, 9, and 13, 2023 source test will be used. Starting May 2024, the average methane percentage from the March 6, 2024 source test will be used.

% - Percent **CH_4** - methane **scfm** - standard cubic feet per minute **scf** - standard cubic feet **btu** - British thermal units **MMBTU** - million British thermal units

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY, Livermore, CA
A-15 TEMPERATURE REPORT From June 1, 2024 THROUGH November 30, 2024

REPORT PREPARED BY: Rajan Phadnis **DATE:** 12/01/24
TEMPERATURE SENSING DEVICE: Thermocouple **MODEL:** Type K

DATE	TIME (Hours)	TEMPERATURE (°F)	CAUSE	EXPLANATION	ACTION TAKEN
No temperature deviations occurred during June 2024					
No temperature deviations occurred during July 2024					
No temperature deviations occurred during August 2024					
No temperature deviations occurred during September 2024					
No temperature deviations occurred during October 2024					
No temperature deviations occurred during November 2024					
COMMENTS:					
The 3-hour average flare combustion zone temperature did not drop below 1,400°F while the flare was in operation					

Notes: 1) Pursuant to Permit Condition No. 19235, Part 10, the combustion zone temperature of the A-15 shall be maintained at a minimum of 50°F below the average combustion zone temperature determined during the most recent source test, provided that the minimum combustion zone temperature is not less than 1,400°F.

2) Pursuant to Permit Condition No. 19235, Part 10(a), the three-hour average minimum combustion zone temperature for the A-15 Flare is 1,433°F.

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY, Livermore, CA
A-16 TEMPERATURE REPORT From June 1, 2024 THROUGH November 30, 2024

REPORT PREPARED BY: Rajan Phadnis **DATE:** 12/01/24
TEMPERATURE SENSING DEVICE: Thermocouple **MODEL:** Type K

DATE	TIME (Hours)	TEMPERATURE (°F)	CAUSE	EXPLANATION	ACTION TAKEN
No temperature deviations occurred during June 2024					
No temperature deviations occurred during July 2024					
No temperature deviations occurred during August 2024					
No temperature deviations occurred during September 2024					
No temperature deviations occurred during October 2024					
No temperature deviations occurred during November 2024					
COMMENTS:					
The 3-hour average flare combustion zone temperature did not drop below 1,400°F while the flare was in operation					

Notes:

1) Pursuant to Permit Condition No. 19235, Part 10, the combustion zone temperature of the A-16 Flare shall be maintained at a minimum of 50°F below the average combustion zone temperature determined during the most recent source test, provided that the minimum combustion zone temperature is not less than 1,400°F.

2) Pursuant to Permit Condition No. 19235, Part 10(b), the three-hour average minimum combustion zone temperature for the A-16 Flare is 1,472°F.

APPENDIX H
LNG PLANT (S-210) HEAT INPUT LOGS

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-210 LNG Plant
Heat Input Rate
MONTH: June-24

Date	Average Exit CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
6/1/2024	NA	NA	NA	1,013.0	NA
6/2/2024	NA	NA	NA	1,013.0	NA
6/3/2024	NA	NA	NA	1,013.0	NA
6/4/2024	NA	NA	NA	1,013.0	NA
6/5/2024	NA	NA	NA	1,013.0	NA
6/6/2024	NA	NA	NA	1,013.0	NA
6/7/2024	NA	NA	NA	1,013.0	NA
6/8/2024	NA	NA	NA	1,013.0	NA
6/9/2024	NA	NA	NA	1,013.0	NA
6/10/2024	NA	NA	NA	1,013.0	NA
6/11/2024	NA	NA	NA	1,013.0	NA
6/12/2024	NA	NA	NA	1,013.0	NA
6/13/2024	NA	NA	NA	1,013.0	NA
6/14/2024	NA	NA	NA	1,013.0	NA
6/15/2024	NA	NA	NA	1,013.0	NA
6/16/2024	NA	NA	NA	1,013.0	NA
6/17/2024	NA	NA	NA	1,013.0	NA
6/18/2024	NA	NA	NA	1,013.0	NA
6/19/2024	NA	NA	NA	1,013.0	NA
6/20/2024	NA	NA	NA	1,013.0	NA
6/21/2024	NA	NA	NA	1,013.0	NA
6/22/2024	NA	NA	NA	1,013.0	NA
6/23/2024	NA	NA	NA	1,013.0	NA
6/24/2024	NA	NA	NA	1,013.0	NA
6/25/2024	NA	NA	NA	1,013.0	NA
6/26/2024	NA	NA	NA	1,013.0	NA
6/27/2024	NA	NA	NA	1,013.0	NA
6/28/2024	NA	NA	NA	1,013.0	NA
6/29/2024	NA	NA	NA	1,013.0	NA
6/30/2024	NA	NA	NA	1,013.0	NA
Total/ Average		**0**	**0**	1,013.0	**0**
				Maximum	**0**

Notes:

1) The LNG Plant (S-210) heat input log is maintained pursuant to Permit Condition No. 24255, Part 4.

2) The daily heat input limit for S-210 pursuant to Permit Condition No. 24255, Part 2 is 1,950 MMBtu/Day. S-210 was shutdown on June 30, 2023.

% - Percent **CH_4** - methane **btu** - British thermal units **MMBTU** - million British thermal units **scf** - standard cubic

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-210 LNG Plant
Heat Input Rate
MONTH: July-24

Date	Average Exit CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
7/1/2024	NA	NA	NA	1,013.0	NA
7/2/2024	NA	NA	NA	1,013.0	NA
7/3/2024	NA	NA	NA	1,013.0	NA
7/4/2024	NA	NA	NA	1,013.0	NA
7/5/2024	NA	NA	NA	1,013.0	NA
7/6/2024	NA	NA	NA	1,013.0	NA
7/7/2024	NA	NA	NA	1,013.0	NA
7/8/2024	NA	NA	NA	1,013.0	NA
7/9/2024	NA	NA	NA	1,013.0	NA
7/10/2024	NA	NA	NA	1,013.0	NA
7/11/2024	NA	NA	NA	1,013.0	NA
7/12/2024	NA	NA	NA	1,013.0	NA
7/13/2024	NA	NA	NA	1,013.0	NA
7/14/2024	NA	NA	NA	1,013.0	NA
7/15/2024	NA	NA	NA	1,013.0	NA
7/16/2024	NA	NA	NA	1,013.0	NA
7/17/2024	NA	NA	NA	1,013.0	NA
7/18/2024	NA	NA	NA	1,013.0	NA
7/19/2024	NA	NA	NA	1,013.0	NA
7/20/2024	NA	NA	NA	1,013.0	NA
7/21/2024	NA	NA	NA	1,013.0	NA
7/22/2024	NA	NA	NA	1,013.0	NA
7/23/2024	NA	NA	NA	1,013.0	NA
7/24/2024	NA	NA	NA	1,013.0	NA
7/25/2024	NA	NA	NA	1,013.0	NA
7/26/2024	NA	NA	NA	1,013.0	NA
7/27/2024	NA	NA	NA	1,013.0	NA
7/28/2024	NA	NA	NA	1,013.0	NA
7/29/2024	NA	NA	NA	1,013.0	NA
7/30/2024	NA	NA	NA	1,013.0	NA
7/31/2024	NA	NA	NA	1,013.0	NA
Total/ Average		**0**	**0**	1,013.0	**0**
				Maximum	**0**

Notes:

1) The LNG Plant (S-210) heat input log is maintained pursuant to Permit Condition No. 24255, Part 4.
2) The daily heat input limit for S-210 pursuant to Permit Condition No. 24255, Part 2 is 1,950 MMBtu/Day. S-210 was shutdown on June 30, 2023.

% - Percent **CH_4** - methane **btu** - British thermal units **MMBTU** - million British thermal units **scf** - standard cubic
The LNG Plant (S-210) was permanently shutdown starting June 30, 2023, and is in decomissioning stage.

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-210 LNG Plant
Heat Input Rate
MONTH: August-24

Date	Average Exit CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
8/1/2024	NA	NA	NA	1,013.0	NA
8/2/2024	NA	NA	NA	1,013.0	NA
8/3/2024	NA	NA	NA	1,013.0	NA
8/4/2024	NA	NA	NA	1,013.0	NA
8/5/2024	NA	NA	NA	1,013.0	NA
8/6/2024	NA	NA	NA	1,013.0	NA
8/7/2024	NA	NA	NA	1,013.0	NA
8/8/2024	NA	NA	NA	1,013.0	NA
8/9/2024	NA	NA	NA	1,013.0	NA
8/10/2024	NA	NA	NA	1,013.0	NA
8/11/2024	NA	NA	NA	1,013.0	NA
8/12/2024	NA	NA	NA	1,013.0	NA
8/13/2024	NA	NA	NA	1,013.0	NA
8/14/2024	NA	NA	NA	1,013.0	NA
8/15/2024	NA	NA	NA	1,013.0	NA
8/16/2024	NA	NA	NA	1,013.0	NA
8/17/2024	NA	NA	NA	1,013.0	NA
8/18/2024	NA	NA	NA	1,013.0	NA
8/19/2024	NA	NA	NA	1,013.0	NA
8/20/2024	NA	NA	NA	1,013.0	NA
8/21/2024	NA	NA	NA	1,013.0	NA
8/22/2024	NA	NA	NA	1,013.0	NA
8/23/2024	NA	NA	NA	1,013.0	NA
8/24/2024	NA	NA	NA	1,013.0	NA
8/25/2024	NA	NA	NA	1,013.0	NA
8/26/2024	NA	NA	NA	1,013.0	NA
8/27/2024	NA	NA	NA	1,013.0	NA
8/28/2024	NA	NA	NA	1,013.0	NA
8/29/2024	NA	NA	NA	1,013.0	NA
8/30/2024	NA	NA	NA	1,013.0	NA
8/31/2024	NA	NA	NA	1,013.0	NA
Total/ Average		**0**	**0**	1,013.0	**0**
				Maximum	**0**

Notes:

1) The LNG Plant (S-210) heat input log is maintained pursuant to Permit Condition No. 24255, Part 4.

2) The daily heat input limit for S-210 pursuant to Permit Condition No. 24255, Part 2 is 1,950 MMBtu/Day. S-210 was shutdown on June 30, 2023.

% - Percent **CH_4** - methane **btu** - British thermal units **MMBTU** - million British thermal units **scf** - standard cubic

The LNG Plant (S-210) was permanently shutdown starting June 30, 2023, and is in decomissioning stage.

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-210 LNG Plant
Heat Input Rate
MONTH: September-24

Date	Average Exit CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
9/1/2024	NA	NA	NA	1,013.0	NA
9/2/2024	NA	NA	NA	1,013.0	NA
9/3/2024	NA	NA	NA	1,013.0	NA
9/4/2024	NA	NA	NA	1,013.0	NA
9/5/2024	NA	NA	NA	1,013.0	NA
9/6/2024	NA	NA	NA	1,013.0	NA
9/7/2024	NA	NA	NA	1,013.0	NA
9/8/2024	NA	NA	NA	1,013.0	NA
9/9/2024	NA	NA	NA	1,013.0	NA
9/10/2024	NA	NA	NA	1,013.0	NA
9/11/2024	NA	NA	NA	1,013.0	NA
9/12/2024	NA	NA	NA	1,013.0	NA
9/13/2024	NA	NA	NA	1,013.0	NA
9/14/2024	NA	NA	NA	1,013.0	NA
9/15/2024	NA	NA	NA	1,013.0	NA
9/16/2024	NA	NA	NA	1,013.0	NA
9/17/2024	NA	NA	NA	1,013.0	NA
9/18/2024	NA	NA	NA	1,013.0	NA
9/19/2024	NA	NA	NA	1,013.0	NA
9/20/2024	NA	NA	NA	1,013.0	NA
9/21/2024	NA	NA	NA	1,013.0	NA
9/22/2024	NA	NA	NA	1,013.0	NA
9/23/2024	NA	NA	NA	1,013.0	NA
9/24/2024	NA	NA	NA	1,013.0	NA
9/25/2024	NA	NA	NA	1,013.0	NA
9/26/2024	NA	NA	NA	1,013.0	NA
9/27/2024	NA	NA	NA	1,013.0	NA
9/28/2024	NA	NA	NA	1,013.0	NA
9/29/2024	NA	NA	NA	1,013.0	NA
9/30/2024	NA	NA	NA	1,013.0	NA
Total/ Average		**0**	**0**	1,013.0	**0**
				Maximum	**0**

Notes:
1) The LNG Plant (S-210) heat input log is maintained pursuant to Permit Condition No. 24255, Part 4.
2) The daily heat input limit for S-210 pursuant to Permit Condition No. 24255, Part 2 is 1,950 MMBtu/Day. S-210 was shutdown on June 30, 2023.
% - Percent **CH_4** - methane **btu** - British thermal units **MMBTU** - million British thermal units **scf** - standard cubic

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-210 LNG Plant
Heat Input Rate
MONTH: October-24

Date	Average Exit CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
10/1/2024	NA	NA	NA	1,013.0	NA
10/2/2024	NA	NA	NA	1,013.0	NA
10/3/2024	NA	NA	NA	1,013.0	NA
10/4/2024	NA	NA	NA	1,013.0	NA
10/5/2024	NA	NA	NA	1,013.0	NA
10/6/2024	NA	NA	NA	1,013.0	NA
10/7/2024	NA	NA	NA	1,013.0	NA
10/8/2024	NA	NA	NA	1,013.0	NA
10/9/2024	NA	NA	NA	1,013.0	NA
10/10/2024	NA	NA	NA	1,013.0	NA
10/11/2024	NA	NA	NA	1,013.0	NA
10/12/2024	NA	NA	NA	1,013.0	NA
10/13/2024	NA	NA	NA	1,013.0	NA
10/14/2024	NA	NA	NA	1,013.0	NA
10/15/2024	NA	NA	NA	1,013.0	NA
10/16/2024	NA	NA	NA	1,013.0	NA
10/17/2024	NA	NA	NA	1,013.0	NA
10/18/2024	NA	NA	NA	1,013.0	NA
10/19/2024	NA	NA	NA	1,013.0	NA
10/20/2024	NA	NA	NA	1,013.0	NA
10/21/2024	NA	NA	NA	1,013.0	NA
10/22/2024	NA	NA	NA	1,013.0	NA
10/23/2024	NA	NA	NA	1,013.0	NA
10/24/2024	NA	NA	NA	1,013.0	NA
10/25/2024	NA	NA	NA	1,013.0	NA
10/26/2024	NA	NA	NA	1,013.0	NA
10/27/2024	NA	NA	NA	1,013.0	NA
10/28/2024	NA	NA	NA	1,013.0	NA
10/29/2024	NA	NA	NA	1,013.0	NA
10/30/2024	NA	NA	NA	1,013.0	NA
10/31/2024	NA	NA	NA	1,013.0	NA
Total/ Average		**0**	**0**	1,013.0	**0**
				Maximum	**0**

Notes:
1) The LNG Plant (S-210) heat input log is maintained pursuant to Permit Condition No. 24255, Part 4.
2) The daily heat input limit for S-210 pursuant to Permit Condition No. 24255, Part 2 is 1,950 MMBtu/Day. S-210 was shutdown on June 30, 2023.
% - Percent **CH_4** - methane **btu** - British thermal units **MMBTU** - million British thermal units **scf** - standard cubic

Altamont Landfill and Resource Recovery Facility
Livermore, CA

S-210 LNG Plant
Heat Input Rate
MONTH: November-24

Date	Average Exit CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Heating Value of CH_4 (btu/scf)	Heat Input (MMBTU)/Day
11/1/2024	NA	NA	NA	1,013.0	NA
11/2/2024	NA	NA	NA	1,013.0	NA
11/3/2024	NA	NA	NA	1,013.0	NA
11/4/2024	NA	NA	NA	1,013.0	NA
11/5/2024	NA	NA	NA	1,013.0	NA
11/6/2024	NA	NA	NA	1,013.0	NA
11/7/2024	NA	NA	NA	1,013.0	NA
11/8/2024	NA	NA	NA	1,013.0	NA
11/9/2024	NA	NA	NA	1,013.0	NA
11/10/2024	NA	NA	NA	1,013.0	NA
11/11/2024	NA	NA	NA	1,013.0	NA
11/12/2024	NA	NA	NA	1,013.0	NA
11/13/2024	NA	NA	NA	1,013.0	NA
11/14/2024	NA	NA	NA	1,013.0	NA
11/15/2024	NA	NA	NA	1,013.0	NA
11/16/2024	NA	NA	NA	1,013.0	NA
11/17/2024	NA	NA	NA	1,013.0	NA
11/18/2024	NA	NA	NA	1,013.0	NA
11/19/2024	NA	NA	NA	1,013.0	NA
11/20/2024	NA	NA	NA	1,013.0	NA
11/21/2024	NA	NA	NA	1,013.0	NA
11/22/2024	NA	NA	NA	1,013.0	NA
11/23/2024	NA	NA	NA	1,013.0	NA
11/24/2024	NA	NA	NA	1,013.0	NA
11/25/2024	NA	NA	NA	1,013.0	NA
11/26/2024	NA	NA	NA	1,013.0	NA
11/27/2024	NA	NA	NA	1,013.0	NA
11/28/2024	NA	NA	NA	1,013.0	NA
11/29/2024	NA	NA	NA	1,013.0	NA
11/30/2024	NA	NA	NA	1,013.0	NA
Total/ Average		**0**	**0**	1,013.0	**0**
				Maximum	**0**

Notes: 1) The LNG Plant (S-210) heat input log is maintained pursuant to Permit Condition No. 24255, Part 4.

2) The daily heat input limit for S-210 pursuant to Permit Condition No. 24255, Part 2 is 1,950 MMBtu/Day. S-210 was shutdown on June 30, 2023.

% - Percent **CH_4** - methane **btu** - British thermal units **MMBTU** - million British thermal units **scf** - standard cubic

The LNG Plant (S-210) was permanently shutdown starting June 30, 2023, and is in decomissioning stage.

APPENDIX I
MONTHLY COVER INTEGRITY MONITORING REPORTS

MONTHLY COVER MONITORING REPORT

LOCATION: Altamont Landfill and Resource Recovery Facility, Livermore, CA
INSPECTION DATE: 6.28.2024
TECHNICIAN: Dan San Jose / Garry Carpenter

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		x	
Dead vegetation		x	
Erosion on cap system		x	
Erosion on side slopes		x	
Ponding of water on cap		x	
Surface cracking		x	
Acceptable vegetation	x		
Exposed waste		x	

REPAIR AREAS:

GPS Coordinates		**Date of Repair**	**COMMENTS**
Northing	**Easting**		

Note: Monthly cover integrity monitoring is performed pursuant to BAAQMD Regulation 8-34-501.4

MONTHLY COVER MONITORING REPORT

LOCATION: Altamont Landfill and Resource Recovery Facility, Livermore, CA
INSPECTION DATE: 7.31.2024
TECHNICIAN: Dan San Jose / Garry Carpenter

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		x	
Dead vegetation		x	
Erosion on cap system		x	
Erosion on side slopes		x	
Ponding of water on cap	x		Seeps noted near 2 wells
Surface cracking		x	
Acceptable vegetation	x		
Exposed waste		x	

REPAIR AREAS:

GPS Coordinates		Date of Repair	COMMENTS
Northing	Easting		
Seep near Well 579		-	
Seep near Well 87		-	

Note: Monthly cover integrity monitoring is performed pursuant to BAAQMD Regulation 8-34-501.4

MONTHLY COVER MONITORING REPORT

LOCATION: Altamont Landfill and Resource Recovery Facility, Livermore, CA
INSPECTION DATE: 8.30.2024
TECHNICIAN: Dan San Jose / Garry Carpenter

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		x	
Dead vegetation		x	
Erosion on cap system		x	
Erosion on side slopes		x	
Ponding of water on cap		x	
Surface cracking		x	
Acceptable vegetation	x		
Exposed waste		x	

REPAIR AREAS:

GPS Coordinates		Date of Repair	COMMENTS
Northing	Easting		
Seep near Well 579		8.8.24	Repairs were completed. Drainage pipe was unblocked. Soil was added.
Seep near Well 87		8.8.24	Repairs were completed. Drainage pipe was unblocked.

Note: Monthly cover integrity monitoring is performed pursuant to BAAQMD Regulation 8-34-501.4

MONTHLY COVER MONITORING REPORT

LOCATION: Altamont Landfill and Resource Recovery Facility, Livermore, CA
INSPECTION DATE: 9.30.2024
TECHNICIAN: Dan San Jose / Garry Carpenter

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		x	
Dead vegetation		x	
Erosion on cap system		x	
Erosion on side slopes		x	
Ponding of water on cap	x		Seeps noted near well 821 and on front face
Surface cracking		x	
Acceptable vegetation	x		
Exposed waste		x	

REPAIR AREAS:

GPS Coordinates		**Date of Repair**	**COMMENTS**
Northing	**Easting**		
Seep on bench near well 821 westside of front face		-	
Seep on front face along old haul road		-	

Note: Monthly cover integrity monitoring is performed pursuant to BAAQMD Regulation 8-34-501.4

MONTHLY COVER MONITORING REPORT

LOCATION: Altamont Landfill and Resource Recovery Facility, Livermore, CA
INSPECTION DATE: 10.31.2024
TECHNICIAN: Dan San Jose / Garry Carpenter

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		x	
Dead vegetation		x	
Erosion on cap system		x	
Erosion on side slopes		x	
Ponding of water on cap	x		Seeps noted near well 821 and 822, and along old haul road
Surface cracking		x	
Acceptable vegetation	x		
Exposed waste		x	

REPAIR AREAS:

GPS Coordinates		Date of Repair	COMMENTS
Northing	Easting		
Seep on bench near well 821 westside of front face		-	Remediation will be conducted after the affected areas have dried out and are safe for using heavy equipment
Seep on front face along old haul road		-	Remediation will be conducted after the affected areas have dried out and are safe for using heavy equipment
Seep on bench below old haul road near well 822		-	Remediation will be conducted after the affected areas have dried out and are safe for using heavy equipment

Note: Monthly cover integrity monitoring is performed pursuant to BAAQMD Regulation 8-34-501.4

MONTHLY COVER MONITORING REPORT

LOCATION: Altamont Landfill and Resource Recovery Facility, Livermore, CA
INSPECTION DATE: 11.25.2024
TECHNICIAN: Dan San Jose / Garry Carpenter

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		x	
Dead vegetation		x	
Erosion on cap system		x	
Erosion on side slopes		x	
Ponding of water on cap	x		Seeps noted near well 821,well 822, and along old haul road
Surface cracking		x	
Acceptable vegetation	x		
Exposed waste		x	

REPAIR AREAS:

GPS Coordinates		**Date of Repair**	**COMMENTS**
Northing	**Easting**		
Seep on bench near well 821 westside of front face		-	Remediation will be conducted after the affected areas have dried out and are safe for using heavy equipment
Seep on front face along old haul road		-	Remediation will be conducted after the affected areas have dried out and are safe for using heavy equipment
Seep on bench below old haul road near well 822		-	Remediation will be conducted after the affected areas have dried out and are safe for using heavy equipment

Note: Monthly cover integrity monitoring is performed pursuant to BAAQMD Regulation 8-34-501.4

APPENDIX J
SURFACE EMISSIONS MONITORING REPORTS

Altamont Landfill and Resource Recovery Facility
10840 Altamont Pass Road,
Livermore, CA 94551

November 1, 2024

Blaine Harrison
Altamont Landfill and Resource Recovery Facility
10840 Altamont Road
Livermore, California 94551

Re: Third Quarter 2024 Surface Emissions and Component Leak Monitoring Report for the Altamont Landfill and Resource Recovery Facility

Dear Mr. Harrison:

This monitoring report for the "Altamont Landfill and Resource Recovery Facility (ALRRF)" contains the results of the Third Quarter 2024 Integrated and Instantaneous Surface Emissions Monitoring (SEM) and Component Leak Monitoring. Initial surface emissions monitoring was performed by RES Environmental, Inc. (RES). Re-monitoring of surface emissions and site-wide component leak monitoring, wherever applicable was conducted by ALRRF personnel.

APPLICABLE REQUIREMENTS

The monitoring discussed in this report was conducted in accordance with the following requirements:

Surface Emission Monitoring (SEM)

- New Source Performance Standard (NSPS), Title 40 of the Code of Federal Regulations (CFR) §60.755 (c) and (d), 40 CFR 60, Appendix A Method 21, promulgated by the United States Environmental Protection Agency (USEPA).
- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95460 to §95476, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).
- Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34, Section 303 (Landfill Surface Requirements) and Section 607 (Landfill Surface Inspection procedures).
- United States Environmental Protection Agency's (USEPA) *Standards of Performance for Municipal Solid Waste Landfills*; 40 Code of Federal Regulations (CFR) Part 63, Subpart AAAA-National Emission Standards for Hazardous Air Pollutants (NESHAP).

Component Leak

- Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34, Section 301 (Landfill Gas Collection and Emission Control System Requirements) and Section 602 (Collection and Control System Leak Inspection procedures).
- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95464, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).

ALRRF Plan and Alternative Compliance Measures

An Alternative Compliance Option (ACO) Request was submitted to the California Air Resources Board (CARB) on May 16, 2011. After receipt of comments, this ACO was amended, restated, and submitted to BAAQMD on July 1, 2016. SEM and Component Leak monitoring was conducted per the methods outlined in the July 1, 2016, ACO.

PROCEDURES

General

The surface of the ALRRF Fill Area 1 disposal area has been divided into one-hundred and ninety-three (193), approximately 50,000 square foot monitoring grids. The current surface of the ALRRF Fill Area II disposal area has been divided into forty-five (45), approximately 50,000 square foot monitoring grids. The entire landfill surface is monitored with the exception of active portions of the Landfill, slope areas, and as requested in the approved ACO, areas containing only asbestos-containing waste, inert waste and/or non-decomposable waste which are excluded for safety as allowed by CCR Title 17 §95466.

Field personnel walked the surface of the landfill following the 25-foot walking pattern as depicted the 2011 ALRRF AB-32 SEM Plan, which traverses each monitoring grid. Additionally, in accordance with the provisions of 40 CFR 60.753(d) and 60.755(c)(1-3), the entire perimeter of the landfill surface was monitored. During the event, special attention was given to monitoring unusual cover conditions (stressed vegetation, cracks, seeps, etc.) and any areas with unusual odors.

Instantaneous Surface Emissions Monitoring

The Instantaneous SEM was conducted using a Toxic Vapor Analyzer (TVA) 1000 flame ionization detector (FID), which was calibrated to 500 parts per million by volume (ppm_v) methane, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a) and NSPS. The FID was calibrated prior to use in accordance with the United States Environmental Protection Agency (USEPA) Method 21 requirements. The Instantaneous SEM procedures followed the requirements of 40 CFR 60.755 (c) and (d) and CCR Title 17 §95471(c)(2).

RES personnel walked the surface of the landfill on a grid-by-grid basis with the wand tip held at 2 inches from the landfill surface. While sampling the grid; the technicians also checked any surface impoundments (wells or otherwise) for leaks. Technicians also checked any surface cracks, seeps, or other areas that show evidence of surface emissions (odors or distressed vegetation). Active and sloped areas excluded for safety were documented on field data sheets and maps.

All instantaneous surface monitoring was performed in accordance with the applicable requirements referenced in this report. Any detections of methane above 200 ppm_v (areas of concern) or 500 ppm_v (exceedances) for instantaneous were recorded, flagged, and marked on an SEM Map, which, wherever required, is included in the Appendices of this report. Applicable corrective action and re-monitoring timelines are listed below:

- Corrective actions must be initiated within 5 days of the initial exceedance and re-monitoring shall be conducted within 10 days of the initial exceedance.
    - If the re-monitoring event shows the exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance.
    - If the 1-month re-monitoring event shows the location is still corrected, all re-monitoring requirements have been completed.
- If either the first 10-day or 1-month re-monitoring events show a second exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.
- If the second 10-day re-monitoring event shows the second exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance. If the 1-month re-monitoring event shows the area is still corrected, monitoring requirements have been completed.

If any location shows three exceedances, an additional well shall be installed within 120 days of the initial exceedance.

Integrated Surface Emissions Monitoring

The Integrated surface monitoring was conducted using a TVA 1000 calibrated to 25 ppm_v for the integrated monitoring, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a). The field technician traversed the grid walking path over a continuous 25-minute period using the TVA 1000 held within 3 inches above the landfill surface. The Integrated monitoring procedures followed the requirements of CCR Title 17 §95471(c)(3).

Grids with results greater than 25 ppm_v were recorded, marked on the SEM map, and flagged for remediation. Any grids with integrated concentrations greater than 25 ppm_v are subject to the following re-monitoring timeline:

- Re-monitoring shall be conducted within 10 days of the initial exceedance.
- If the 10-day re-monitoring event shows the exceedance is corrected, all re-monitoring requirements have been completed.

- If either the first 10-day re-monitoring event shows a second grid exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.
- If the second 10-day re-monitoring event shows the second exceedance is corrected, all re-monitoring requirements have been completed.
- The second 10-day re-monitoring event shows a third grid exceedance, an additional well shall be installed within 120 days of the third exceedance.

Component Leak Monitoring Procedures

ALRRF personnel monitored the exposed LFG components under positive pressure (pipes, wellheads, valves, blowers, and other mechanical appurtenances) using a TVA 1000 calibrated to 500 ppm_v. All leaks measured one half inch or less from the component exceeding the compliance limit of 500 ppm_v per requirements outlined in pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B) and 1,000 ppm_v per requirements outlined in BAAQMD 8-34-303 were recorded. Applicable corrective action and re-monitoring timelines are listed below:

- Leaks between 500 and 999 ppm_v must be corrected and re-monitored within 10 days of the initial exceedance.
- Leaks at or above 1000 ppm_v must be corrected and re-monitored within 7 days of the initial exceedance.

THIRD QUARTER 2024 SEM AND COMPONENT LEAK RESULTS

The following is a summary of the SEM and component leak monitoring results completed for the Third Quarter 2024.

Instantaneous Surface Emissions Monitoring Results

The Instantaneous surface monitoring was performed on September 9, 16, 17, and 18, 2024, in accordance with the NSPS, BAAQMD 8-34, NESHAP, and CCR Title 17 §95469 and ACO. Results and data from the monitoring are presented in Attachment A.

Initial Monitoring Event Exceedances of 500 ppm_v

There were 7 exceedances of 500 ppm_v as methane detected on September 17, and 18, 2024. Corrective actions to initiate repairs of the exceedances were completed within five days for all locations (September 19, 2024).

Ten-Day Re-Monitoring Results

The 10-day re-monitoring event was completed on September 19, 2024. All locations were observed at less than 500 ppm_v.

One-Month Re-Monitoring Results

The 1-month re-monitoring event was completed on October 14, 2024. All locations were observed at less than 500 ppm_v.

Readings between 200 ppm_v and 499 ppm_v (Initial and Re-monitored)

There were no readings between 200 ppm_v and 499 ppm_v as methane detected during the initial monitoring event on September 9, 16, 17, and 18, 2024. Pursuant to CCR Title 17 §95471(c), instantaneous surface emissions exceeding 200 ppm_v but below 500 ppm_v are required to be recorded.

Integrated Surface Emissions Monitoring Results

The Integrated surface sampling (ISS) was performed on September 10, 11, 17, and 18, 2024, in accordance with the ACO and requirements outlined in CCR Title 17 §95469.

Initial Monitoring Event Exceedances of 25 ppm_v

There were no grids with exceedances of 25 ppm_v as methane detected during the initial monitoring event on September 10, 11, 17, and 18, 2024.

The average methane concentration of each grid was recorded during the monitoring event per applicable requirements. See Attachment B, Integrated SEM 25 ppm_v Exceedances and Monitoring Log, and SEM Map included in Attachment B, for details.

Component Leak Monitoring Results

Component leak monitoring was conducted per the applicable requirements on August 15, 2024, and September 3, 2024. No leaks greater than 500 ppm_v were identified. LNG Plant has been decommissioned. Please see Attachment C, for details.

WEATHER CONDITIONS

Wind Speed Conductions during the Surface Emission Monitoring Events

Wind speeds during initial monitoring were monitored using a portable weather station. The station has a strip chart that records the wind speed and direction. After completion of monitoring, the strip chart is reviewed by RES office staff to determine the average and maximum wind speeds during the monitoring and the average wind direction during each grid and ensure that the wind speed requirements are met (no gusts greater than 20 mph, average wind speed cannot exceed 10 mph). The average wind speed recorded during the re-monitoring event was 16 mph. These values are documented in the field data sheets. The chart data is scanned and included in Attachment D.

Precipitation Requirements

Per the ALRRF's ACO, the initial monitoring event was carefully scheduled so that it could be conducted in compliance with the precipitation requirements (no measurable precipitation within

24 hours). Re-monitoring events are required to adhere to strict timelines. Any conflicts with precipitation requirements are discussed in the results section of this document.

EQUIPMENT CALIBRATION

The portable analyzers were calibrated to meet the instrument specifications requirements of U.S. EPA Method 21. The calibration gas used was methane, diluted to a nominal concentration of 25 ppm_v in air for integrated sample analyses and 500 ppm_v in air for instantaneous monitoring to comply with the requirements.

All analyzers were calibrated prior to use with required response time and precision related instrument checks. Calibration records include the following: One time response time test record; One time response factor determination for methane; Calibration Precision test records (test to be performed every 3 months); and Daily Instrument Calibration and Background test records for each gas meter that was used during the quarterly monitoring event. The calibration log records are included in Attachment E.

All monitoring was completed in accordance with the applicable regulatory requirements or approved alternatives. If you have any questions regarding this report, please do not hesitate to contact me at rphadnis@wm.com.

Thank you,
Waste Management

Rajan Phadnis
Environmental Protection Specialist

Attachment A – Instantaneous Surface Emission Monitoring Event Records

- Monitoring Logs and Exceedances
- SEM Map

Attachment B – Integrated Surface Emission Monitoring Event Records

- Monitoring Logs and Exceedances
- SEM Map

Attachment C – Component Leak Monitoring Event Records

- Component Leak Exceedances and Monitoring Logs

Attachment D – Weather Station Data

- Strip Chart Data

Attachment E – Calibration Records

- Instrument and Gas Calibration Records

Attachment A

Instantaneous Surface Emission Monitoring Event Records

Table A.1
Instantaneous Landfill Surface Emissions Monitoring
Initial Monitoring Event Areas of Concern

2024 QUARTER: 3
PERFORMED BY: RES
LANDFILL NAME: Altamont Landfill and Resource Recovery Facility

Flag Number	Grid Number	Date of Monitoring	Concentration of Emission (ppmv)	Comments
O1	81	9/17/2024	8,000	LS2
O2	81	9/17/2024	900	VZMA
O3	36	9/17/2024	1,000	Well 824
O4	114	9/17/2024	2,000	Well 762
O5	46	9/17/2024	610	Well 800
O6	14	9/18/2024	645	Well 517
O7	9	9/18/2024	750	Well 820

Table A.2
Instantaneous Landfill Surface Emissions Monitoring
Exceedance and Monitoring Logs (NSPS/BAAQMD 8-34)

2024 QUARTER: 3
INITIAL MONITORING PERFORMED BY:RES
FOLLOW-UP MONITORING PERFORMED BY: ALRRF
LANDFILL NAME: Altamont Landfill and Resource Recovery Facility

Initial Monitoring Event			Corrective action within 5 days		1st 10-day Follow-Up			1st 30-day Follow-Up			
Flag Number	Monitoring Date	Field Reading	Repair Date	Repair Action Taken	Monitoring Date	No Exced. <500 ppm	Exced. >500 ppm	Monitoring Date	No Exced. <500 ppm	Exced. >500 ppm	Comments
O1	9/17/2024	8,000	9/19/2024	Added soil and compacted	9/19/2024	295		10/14/2024	273		LS2
O2	9/17/2024	900	9/19/2024	Added soil and compacted	9/19/2024	98		10/14/2024	78		VZMA
O3	9/17/2024	1,000	9/19/2024	Compacted soil/tuned	9/19/2024	41		10/14/2024	43		Well 824
O4	9/17/2024	2,000	9/19/2024	Compacted soil/tuned	9/19/2024	78		10/14/2024	51		Well 762
O5	9/17/2024	610	9/19/2024	Compacted soil	9/19/2024	22		10/14/2024	12		Well 800
O6	9/18/2024	645	9/19/2024	Compacted soil/tuned	9/19/2024	63		10/14/2024	59		Well 517
O7	9/18/2024	750	9/19/2024	Compacted soil	9/19/2024	20		10/14/2024	15		Well 820

Table A.3
Instantaneous Landfill Surface Emissions Monitoring
Exceedance and Monitoring Logs (AB-32)

2024 QUARTER: 3
INITIAL MONITORING PERFORMED BY: RES
FOLLOW-UP MONITORING PERFORMED BY: ALRRF
LANDFILL NAME: Altamont Landfill and Resource Recovery Facility

Initial Monitoring Event			**1st Re-mon 10-day Follow-Up**			**2nd Re-mon Event - 10 Days**			
Flag Number	Monitoring Date	Field Reading	Monitoring Date	No Exced. <500 ppm	Exced. >500 ppm	Monitoring Date	No Exced. <500 ppm	Exced. >500 ppm	**Comments**
O1	9/17/2024	8,000	9/19/2024	295					LS2
O2	9/17/2024	900	9/19/2024	98					VZMA
O3	9/17/2024	1,000	9/19/2024	41					Well 824
O4	9/17/2024	2,000	9/19/2024	78					Well 762
O5	9/17/2024	610	9/19/2024	22					Well 800
O6	9/18/2024	645	9/19/2024	63					Well 517
O7	9/18/2024	750	9/19/2024	20					Well 820

Table A.4
Instantaneous Landfill Surface Emissions Monitoring
Areas of Concern Greater than 200 ppmv

2024 QUARTER: **3**

INITIAL MONITORING PERFORMED BY: RES

FOLLOW-UP MONITORING PERFORMED BY: NA

LANDFILL NAME: **Altamont Landfill and Resource Recovery Facility**

Initial Monitoring Event			**Re-mon Event**		**Comments**
Exceedance Flag No.	Monitoring Date	Field Reading	Monitoring Date	Reading ppm	
None					

Instantaneous Landfill Surface Emissions Monitoring
Exceedance and Monitoring Logs (NSPS/BAAQMD 8-34)

2024 Quarter: 3rd Quarter
INITIAL MONITORING PERFORMED BY: RES
FOLLOW-UP MONITORING PERFORMED BY: Garry Carpenter
LANDFILL NAME: ALRRF

Wind Speed : 5 MPH
Wind Direction : SE

Wind Speed : 8MPH
Wind Direction : E

Initial Monitoring Event			Corrective action within 5 days		1st 10-day Follow-Up			1st 30-day Follow-Up			Comments
Flag Number	**Monitoring Date**	**Field Reading**	**Repair Date**	**Repair Action Taken**	**Monitoring Date**	**No Exced. <500 ppm**	**Exced. >500 ppm**	**Monitoring Date**	**No Exced. <500 ppm**	**Exced. >500 ppm**	
O1	9/17/2024	8,000	9/19/2024	Added and compacted dirt	9/19/2024	295		10/14/2024	273		LS2 Grid 81
O2	9/17/2024	900	9/19/2024	Added and compacted dirt	9/19/2024	98		10/14/2024	78		VZMA Grid 81
O3	9/17/2024	1,000	9/19/2024	compacted dirt/ icreased becs	9/19/2024	41		10/14/2024	43		Well 824 Grid 36
O4	9/17/2024	2,000	9/19/2024	compacted dirt/ increased becs	9/19/2024	78		10/14/2024	51		Well 762 Grid114
O5	9/17/2024	610	9/19/2024	compcted dirt around well	9/19/2024	22		10/14/2024	12		Well 800 Grid 46
O6	9/18/2024	645	9/19/2024	compcted dirt/ increased becs	9/19/2024	63		10/14/2024	59		Well 517 Grid 14
O7	9/18/2024	750	9/19/2024	compacted dirt around well	9/19/2024	20		10/14/2024	15		Well 820 Grid 9

Orange Flag Landfill Surface Emissions Monitoring
Exceedances and Monitoring Log

Site: Altamont

Quarter / Year: 3RD 2024
Technician: LEISHWADE
Instrument: TVA1000
Calibration Standard: 500 ppm

Page of Pages

Initial Monitoring Event				First Re-Monitoring Event - 10 Days			Second Re-Monitoring Event - 10 Days			30-Day Follow-up Monitoring			Comments
Flag Number	Grid Number	Field Reading (ppm)	Date Monitored	Date Monitored	No Excd. <500 ppm	Excd. >500 ppm	Date Monitored	No Excd. <500 ppm	Excd. >500 ppm	Date Monitored	No Excd. <500 ppm	Excd. >500 ppm	
O- 1	81	8,000	9-17-24										LS2
O- 2	81	900	↓										UZMA
O- 3	36	1,000											Well 824
O- 4	114	2,000											Well 762
O- 5	46	610											Well 800
O- 6	14	645	9-18-24										Well 517
O- 7	9	750	↓										Well 820
O-													
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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEISH WADE / Daniel Isag / JERRY MUNOZ / LUIS AREVALO / Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-9-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 96 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
15	LW	1100	1115	85.07	3	4	16	
24		1115	1130	67.38	2	4	16	
30		1130	1145	52.10	1	2	2	
36		1145	1200	138	1	3	4	
37		1200	1210	75.02	1	4	14	
43		1210	1220	34.26	1	3	12	
49		1220	1235	41.55	1	3	14	
48		1235	1245	72.68	1	3	4	
55		1245	1255	84.30	2	4	4	
56		1255	1310	51.22	4	6	5	
62		1310	1325	60.31	4	5	5	
61		1325	1335	92.04	2	4	6	
67		1335	1350	70.16	1	3	6	
68		1350	1400	59.13	1	3	4	
69		1400	1415	42.80	3	6	10	
21	JM	1100	1115	58.36	3	4	16	
22		1115	1130	40.72	2	4	16	
23		1130	1145	61.47	1	2	2	
28		1145	1200	38.92	1	3	4	
27		1215	1230	20.88	1	3	14	
26		1230	1245	49.62	1	3	4	
32		1245	1300	34.88	1	3	5	
33		1300	1315	62.71	2	4	5	
34		1315	1330	108	4	5	5	
41		1330	1345	80.66	1	3	6	
40		1345	1400	54.62	1	3	4	
39		1415	1430	38.27	2	3	1	
45		1430	1445	24.31	2	4	16	
46		1445	1500	35.66	3	5	16	
47		1500	1515	40.74	4	6	16	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leigh Wadt — Daniel Long
Jerry Munoz — Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-9-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 96 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
7	AC	1100	1115	85.12	3	4	16	
16	↓	1115	1130	34.22	2	4	16	
20		1130	1145	25.77	1	2	2	
25		1145	1200	34.27	1	3	4	
31		1200	1215	50.18	1	4	14	
38		1215	1230	61.10	1	3	14	
44		1230	1245	42.16	1	3	4	
50		1245	1300	38.22	1	3	5	
51		1300	1315	46.81	2	4	5	
58		1315	1330	62.44	4	5	5	
57		1330	1345	38.18	1	3	6	
63		1345	1400	24.26	1	3	4	
64		1400	1415	35.12	3	6	10	
71		1415	1430	48.32	2	3	1	
70	↓	1430	1445	29.17	2	4	16	
52	DL	1110	1125	24.81	2	4	16	
53	↓	1125	1140	47.98	1	2	2	
60		1145	1200	32.12	1	3	4	
59		1200	1215	57.84	1	4	14	
65		1215	1230	40.12	1	3	12	
66		1230	1245	32.27	1	3	4	
73		1245	1300	48.62	1	3	5	
72		1300	1315	50.39	2	4	5	
79		1315	1330	30.17	4	5	5	
80		1330	1345	22.38	1	3	6	
87		1345	1400	70.14	1	3	4	
86		1400	1415	45.32	3	6	10	
92		1415	1430	38.66	2	3	1	
93		1430	1445	44.91	2	4	16	
100	↓	1445	1500	34.78	3	5	16	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishwoor | Daniel Lens
Jenny Alnuz | Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-9-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 96 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
1	LA	1100	1115	34.16	3	4	16	
2	↓	1115	1130	47.48	2	4	16	
3		1130	1145	107	1	2	2	
6		1145	1200	92	1	3	4	
5		1200	1215	122	1	4	14	
4		1215	1230	54.31	1	3	14	
8		1230	1245	35.27	1	3	14	
9		1245	1305	64.12	1	3	5	
10		1305	1320	114	2	4	5	
13		1320	1335	75	4	5	5	
12		1335	1350	82	1	3	6	
11		1350	1405	47.12	1	3	4	
17		1405	1420	32.24	3	6	10	
18		1420	1435	41.86	2	3	1	
19		1435	1450	109	2	4	16	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishwade — Daniel Lara
Jerry Munoz — Luis Arguelo
Anthony Canales

Cal. Gas Exp. Date: 12-10-24

Date: 9-16-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
153	LW	1110	1125	60.12	4	5	6	
154		1125	1135	78.82	2	3	8	
155		1135	1145	50.07	1	2	9	
156		1145	1200	38.27	2	3	6	
164		1200	1215	25.46	2	3	6	
163		1215	1225	44.10	1	3	8	
162		1225	1235	57.38	3	3	6	
161		1235	1245	70.54	1	2	10	
160		1245	1255	48.37	2	2	9	
159		1255	1310	14.56	2	3	10	
165		1310	1320	62.34	1	2	8	
166		1320	1330	80.59	2	3	8	
167		1330	1340	64.22	2	3	8	
168		1340	1350	40.13	1	2	7	
176		1350	1405	38.66	2	3	8	
175		1405	1415	42.27	2	2	7	
174		1415	1425	107	2	2	8	
173		1425	1435	124	2	2	6	
172		1435	1445	80.12	1	2	8	
171		1445	1500	16.54	2	2	8	
14	JM	1100	1115	30.08	1	2	8	
29		1115	1130	40.17	2	3	8	
35		1131	1146	61.70	1	2	9	
42		1146	1201	55.40	2	3	6	
54		1202	1217	40.70	2	3	6	
74		1217	1232	51.06	3	3	8	
94		1235	1250	40.20	2	2	9	
101		1251	1306	33.60	2	3	10	
108		1310	1325	41.07	1	2	8	
116		1325	1340	50.09	2	3	6	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishwade　Daniel Lara
Jerry Munoz　Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-16-24　Instrument Used: TVA1000　Grid Spacing: 25'

Temperature: 70　Precip: 0　Upwind BG: 2.6　Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
115		1342	1357	38.07	1	2	7	
123		1400	1415	39.70	2	2	8	
124		1415	1430	51.70	2	2	8	
131		1430	1445	66.78	2	2	8	
132		1445	1500	54.56	2	2	8	
139		1500	1515	40.30	2	2	4	
146		1515	1530	51.09	2	2	4	
158		1530	1545	35.75	2	2	4	
170		1545	1600	39.60	3	3	4	
188		1600	1615	50.09	2	3	4	
75	AC	1100	1115	47.01	1	2	8	
76		1115	1130	67.48	2	3	8	
77		1130	1145	66.41	1	2	9	
78		1145	1200	63.08	2	3	6	
85		1200	1215	39.49	2	3	6	
84		1215	1230	36.43	3	3	8	
83		1230	1245	35.06	2	2	9	
82		1245	1300	37.01	2	3	10	
81		1300	1315	35.06	2	3	10	
88		1315	1330	39.11	2	3	8	
89		1330	1345	48.16	2	3	8	
90		1345	1400	62.11	1	2	7	
91		1400	1415	68.06	2	2	8	
99		1415	1430	30.07	2	2	8	
98		1430	1445	32.11	2	2	8	
97		1445	1500	47.64	2	2	8	
96		1500	1515	52.88	2	2	4	
95		1515	1530	56.44	2	2	4	
102		1530	1545	31.07	2	2	4	
103		1545	1600	34.22	3	3	4	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishwade | Daniel Lara
Jerry Munoz | Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-16-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION AVG SPEED	WIND INFORMATION MAX. SPEED	WIND INFORMATION DIRECTION 16 POINT	REMARKS
125	DL	1105	1120	48.10	1	2	8	
126		1120	1135	51.61	2	3	8	
133		1135	1150	37.22	1	2	9	
134		1150	1205	40.55	2	3	6	
136		1205	1220	45.17	2	3	6	
137		1220	1235	50.65	3	3	8	
138		1235	1250	51.18	2	2	9	
145		1250	1305	62.79	2	3	10	
144		1305	1320	59.01	1	2	8	
143		1320	1335	62.99	2	3	8	
142		1335	1350	57.03	2	3	8	
141		1350	1405	55.43	1	2	7	
140		1405	1420	56.19	2	3	6	
147		1420	1435	52.82	2	2	8	
148		1435	1450	49.51	1	2	8	
149		1450	1505	45.97	2	2	8	
150		1505	1520	40.88	2	2	5	
151		1520	1535	32.18	2	2	4	
152		1535	1550	35.81	2	2	4	
157		1550	1605	41.31	3	3	4	
104	LA	1100	1115	45.71	1	2	8	
105		1115	1130	60.02	2	3	8	
106		1130	1145	65.36	1	2	9	
107		1145	1200	33.58	2	3	6	
114		1200	1215	70.27	2	3	6	
113		1215	1230	41.89	3	3	8	
112		1230	1245	57.16	2	2	9	
111		1245	1300	62.12	2	3	10	
110		1300	1315	41.27	2	3	10	
109		1315	1330	67.16	2	3	8	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishwade Deniel Lara
Jerry Munoz Luis Arevelo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-16-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
117	↓	1330	1345	30.21	1	2	7	
118		1345	1400	44.73	2	3	8	
119		1400	1415	40.18	2	2	7	
120		1415	1430	33.36	2	2	8	
121		1430	1445	52.47	2	2	8	
122		1445	1500	66.07	2	2	9	
130		1500	1515	69.40	2	2	4	
129		1515	1530	31.67	2	2	4	
128		1530	1545	55.59	2	2	4	
127		1545	1600	47.30	3	3	4	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishwade | Daniel Lara
Jerry Munoz | Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 12-10-24

Date: 9-17-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
177	AC	0720	6735	66.10	3	5	4	
179		0735	0750	76.42	4	5	4	
180		0750	0805	101	4	5	4	
181		0805	0820	64.75	5	6	4	
187		0820	0835	68.30	5	6	4	
186		0835	0845	72.87	5	6	4	
185		0845	0855	76.46	4	6	4	
184		0855	0910	84.13	5	6	4	
183		0910	0925	56.47	5	6	4	
182		0925	0940	72.64	5	6	4	
193		0940	0955	92.11	5	6	6	
189		0955	1010	66.89	4	5	4	
190		1010	1025	62.52	4	5	4	
192		1025	1035	65.35	4	5	4	
194	↓	1040	1100	72.13	4	5	4	
214	DL	0615	0630	33.14	5	5	4	
215		0630	0645	32.70	4	5	4	
216		0645	0700	19.69	4	5	4	
218		0700	0715	10.30	4	5	4	
217		0715	0730	12.10	3	5	4	
221		0730	0745	15.84	4	5	4	
222		0745	0800	17.36	4	5	4	
223		0800	0815	18.32	5	6	4	
226		0815	0830	13.09	4	6	5	
225		0830	0845	12.01	5	6	4	
224		0845	0900	15.56	4	6	4	
227		0900	0915	15.72	5	6	4	
228		0915	0930	19.50	5	6	4	
229		0930	0945	16.83	4	6	4	
231	↓	0945	1000	19.91	4	5	5	

Attach Calibration Sheet
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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishwade | Daniel Lara
Jerry Munoz | Luis Arevalo
Anthony canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-17-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
230		1010	1025	36.12	4	5	4	
233		1025	1040	38.55	4	5	4	
234		1040	1055	12.43	4	6	4	
236		1205	1220	13.27	5	7	5	
235		1230	1245	24.11	5	7	5	
195	LA	0630	0645	10.34	4	5	4	
197		0645	0700	10.62	4	5	4	
196		0700	0715	15.28	4	5	4	
198		0715	0730	12.07	3	5	4	
199		0730	0745	20.56	4	5	4	
202		0745	0800	8.10	4	5	4	
201		0800	0815	14.41	5	6	4	
200		0815	0830	10.38	4	6	5	
203		0830	0845	23.05	5	6	4	
204		0845	0910	48.60	4	6	4	
205		0900	0915	54.03	5	6	4	
206		0915	0930	19.14	5	6	4	
209		0930	0945	10.69	4	6	4	
208		0945	1000	31.22	4	5	4	
207		1000	1015	43.49	4	5	4	
210		1015	1030	18.58	4	5	4	
211		1030	1045	30.26	3	4	4	
212		1045	1100	36.74	3	5	4	
213		1215	1230	25.18	7	10	4	
219		1230	1245	39.63	5	8	6	

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Leishunor

Cal. Gas Exp. Date:

Date: 9-17-24 Instrument Used: Grid Spacing:

Temperature: Precip: Upwind BG: Downwind BG:

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
135								steep-veg
178								↓
169								↓
191								↓
220								construction
237								↓
238								↓
232								↓

Attach Calibration Sheet
Attach site map showing grid ID

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ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024
Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-17-24		ALHC0824	1000
9-17-24		ALHC0825	36.40
9-17-24		ALLC0695	62.10
9-17-24		ALLC0700	29.31
9-18-24		ALLC0703	70.13
9-18-24		ALLC0709	15.58
9-9-24		ALLC0734	65.30
↓		ALLC0736	44.67
↓		ALLC0737	32.10
9-17-24		ALLC0738	45.70
↓		ALLC0739	15.60
↓		ALLC0740	14.75
↓		ALLC0743	20.16
↓		ALLC0744	12.14
↓		ALLC0745	45.70
↓		ALLC0746	27.10
↓		ALLC0747	32.58
↓		ALLC0748	13.56
↓		ALLC0749	26.41
9-18-24		ALLC0755	11.15
9-17-24		ALLC0775	24.11
9-17-24		ALLC0776	18.65
9-18-24		ALLC0777	18.60
↓		ALLC0778	24.18
↓		ALLC0779	13.38
↓		ALLC0780	19.50
↓		ALLC0781	24.10
↓		ALLC0783	10.57
↓		ALLC0784	16.11
↓		ALLC0785	32.10
↓		ALLC0786	110
9-17-24		ALLC0787	20.15
↓		ALLC0788	24.11
↓		ALLC0789	32.16
9-18-24		ALLC0790	37.21
↓		ALLC0791	46.20
↓		ALLC0792	40.51
↓		ALLC0793	30.40
↓		ALLC0794	31.77

ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024
Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-18-24		ALLC0796	50.39
9-17-24		ALLC0797	72.14
9-18-24		ALLC0798	24.15
9-17-24		ALLC0800	610
		ALLC0801	36.08
		ALLC0802	21.50
		ALLC0803	18.71
		ALLC0804	14.66
		ALLC0805	17.64
		ALLC0806	14.58
		ALLC0807	37.12
↓		ALLC0808	13.22
9-18-24		ALLC0811	21.40
		ALLC0812	31.66
↓		ALLC0813	12.40
		ALLC0814	27.32
9-17-24		ALLC0815	27.28
		ALLC0816	21.22
↓		ALLC0817	32.41
9-18-24		ALLC0819	104
↓		ALLC0820	750
9-17-24		ALLC0821	62.13
		ALLC0822	40.39
↓		ALLC0826	21.32
9-18-24		ALLC0827	142
9-9-24		ALLC0828	31.55
9-18-24		ALLC0830	15.57
9-17-24		ALLC0831	40.11
9-18-24		ALLC0832	28.17
9-17-24		ALLC0833	56.10
		ALLC0834	40.77
		ALLC0835	38.20
		ALLC0836	39.15
		ALLC0837	50.42
		ALLC0838	60.13
		ALLC0839	52.11
		ALLC0840	64.39
↓		ALLC0841	42.16

ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024
Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-9-24		ALTAFP03	32.24
		ALTAFP04	60.18
		ALTAFP05	45.37
		ALTAFP06	58.22
		ALTAFP07	31.56
		ALTAFP08	40.21
		ALTAFP09	39.88
		ALTAFP10	72.20
		ALTAFP11	54.81
		ALTAFP12	108
		ALTAFP13	52
		ALTAFP14	75
		ALTAFP15	98
		ALTAFP16	59
		ALTAFP17	112
		ALTAFP18	154
		ALTAFP19	30.12
		ALTAFP21	40.77
		ALTAFP22	88
		ALTAFP23	65.13
		ALTAFP24	70
		ALTAFP25	68
		ALTAFP26	54.13
		ALTAFP27	80.10
		ALTAFP28	60.44
		ALTAFP29	40.36
		ALTAFP30	85
		ALTAFP31	113
		ALTAFP32	92
		ALTAFP33	78
		ALTAFP34	50.33
		ALTAFP35	85
		ALTAFP36	59.26
		ALTAFP37	43.81
		ALTAFP38	70
		ALTAFP39	89
		ALTAFP41	98
		ALTAFP42	104
		ALTAFP43	62
		ALTAFP44	59

ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024
Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-9-24		ALTAFP45	94
		ALTAFP46	107
		ALTAFP47	83
		ALTAFP48	65
		ALTAFP49	102
		ALTAFP50	54.18
		ALTAFP51	47.26
		ALTAFP52	75.03
		ALTAFP53	60.88
		ALTAFP54	45.32
		ALTAFP55	61.90
		ALTAFP56	85
		ALTAFP57	110 Not in App
		ALTAFP58	134 ↓
		ALTAFP59	72
		ALTAFP60	89
		ALTAFP61	67
		ALTAFP62	105
		ALTAFP63	49.12
		ALTAFP64	36.21
		ALTAFP65	54.98
		ALTAFP66	97
		ALTAFP67	128
		ALTAFP68	84
		ALTAFP69	72
		ALTAFP70	80
		ALTAFP71	66
		ALTAFP72	94
		ALTAFP73	107
		ALTAFP74	54
		ALTAFP75	38
		ALTAFP76	91
		ALTAFP77	74
		ALTAFP78	116
		ALTAFP79	85
		ALTAFP80	64
		ALTAFP81	117
		ALTAFP82	94
		ALTAFP83	108
↓		ALTAFP84	72

ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024
Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-18-24		ALTA0759	45.06
↓		ALTA0760	70.13
9-17-24		ALTA0761	18.57
		ALTA0762	2,000
↓		ALTA0764	21.50
9-18-24		ALTA0765	20.30
9-17-24		ALTA0766	18.77
		ALTA0767	21.70
		ALTA0769	34.28
		ALTA0770	54.67
		ALTA0771	20.22
↓		ALTA0772	65.13
9-17-24		ALTA0733	30.04
9-17-24		ALTA0850	27.49
↓		ALTA0851	30.22
9-18-24		ALTA0852	18.98
		ALTA0853	27.06
		ALTA0854	18.16
		ALTA0855	27.13
		ALTA0856	22.13
		ALTA0857	17.22
↓		ALTA0858	15.40
9-17-24		ALTA0859	11.40
		ALTA0860	9.75
		ALTA0861	10.14
		ALT0862A	13.50
		ALTA0863	70.45
		ALTA0864	46.31
		ALTA0865	30.12
		ALTA0866	34.12
		ALTA0867	37.19
		ALTA0868	32.10
		ALTA0869	24.58
↓		ALTA0870	21.50
9-17-24		ALTA0872	34.10
9-17-24		ALTA0873	46.15
9-17-24		ALTA0875	21.40
		ALTA0876	52.26
		ALTA0877	19.67
↓		ALTA0880	52.40
9-9-24		ALTAFP02	40.17

ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024
Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-18-24		ALTA0472	16.57
9-17-24		ALTA0483	115
↓		ALTA0488	50.13
9-18-24		ALTA0491	21.03
9-9-24		ALTA0508	24.22
9-18-24		ALTA0517	645
9-17-24		ALTA0518	60.32
↓		ALTA0529	106
9-17-24		ALTA0541	75.12
↓		ALTA0545	107
		ALTA0551	26.04
		ALTA0578	40.31
		ALTA0579	34.11
		ALTA0589	75.11
9-17-24		ALTA0611	24.32
↓		ALTA0612	75.18
		ALTA0624	26.38
9-18-24		ALTA0629	17.80
9-17-24		ALTA0639	60.13
↓		ALTA0650	45.44
		ALTA0651	38.46
		ALTA0652	27.15
		ALTA0654	13.58
		ALTA0664	50.21
		ALTA0668	13.27
		ALTA0669	38.11
9-18-24		ALTA0678	80.22
↓		ALTA0682	40.75
9-17-24		ALTA0686	14.51
↓		ALTA0712	31.44
		ALTA0713	20.18
		ALTA0714	26.57
9-17-24		ALTA0733	30.04
↓		ALTA0751	19.22
		ALTA0753	10.12
		ALTA0755	11.15
		ALTA0756	15.07

ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024

Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-9-24		ALTAFP85	138
↓		ALTAFP86	106
		ALTAFP87	98
		ALTAFP88	117
9-17-24		ALTOTC15	64.22
↓		ALUC0824	1,000
		VD2	110
		VZMA	900
		LS2	8,000
		ALLCSVE1	10.30
9-18-24		WELL 880	52.40
9-17-24		WELL 686	14.51
9-9-24		WELL 879	54.10
↓		WELL 878	36.41

ALTAMONT (S04305)
PENETRATION SCAN RESULTS, EXCEEDANCES, AND CORRECTIVE ACTIONS

Year: 2024
Quarter: 3RD

IME Date	Time	IME Location ID	IME Concentration (ppm)
9-17-24		ALLC0842	30.12
9-18-24		ALLC0843	38.10
		ALLC0844	24.66
↓		ALLC0845	15.71
9-9-24		ALLC0846	104
		ALLC0847	32.20
		ALLC0848	64.10
↓		ALLC0849	41.66
9-18-24		ALT20001	35.50
		ALT20002	20.17
		ALT20003	71.22
		ALT20004	18.75
		ALT20005	28.66
		ALT20006	44.17
		ALT20007	35.13
		ALT20008	49.12
		ALT20009	35.80
		ALT20010	60.32
		ALT20011	40.11
		ALT20012	17.52
		ALT20013	11.74
		ALT20014	28.60
		ALT20015	51.75
		ALT20016	40.30
		ALT20017	32.17
		ALT20018	60.72
		ALT20019	41.17
		ALT20020	55.06
		ALT20021	81.36
		ALT20022	40.17
		ALT20023	90.41
		ALT20024	52.60
		ALT20025	34.75
		ALT20026	30.70
		ALT20027	21.85
		ALT20028	31.55
↓		ALT20029	47.16
9-17-24		ALTA0003	24.11
		ALTA0054	38.10
		ALTA0056	117
		ALTA0059	90.17
		ALTA0087	33.15
↓		ALTA0108	22.45

LEGEND

EXISTING 10' CONTOUR

EXISTING LFG EXTRACTION WELL

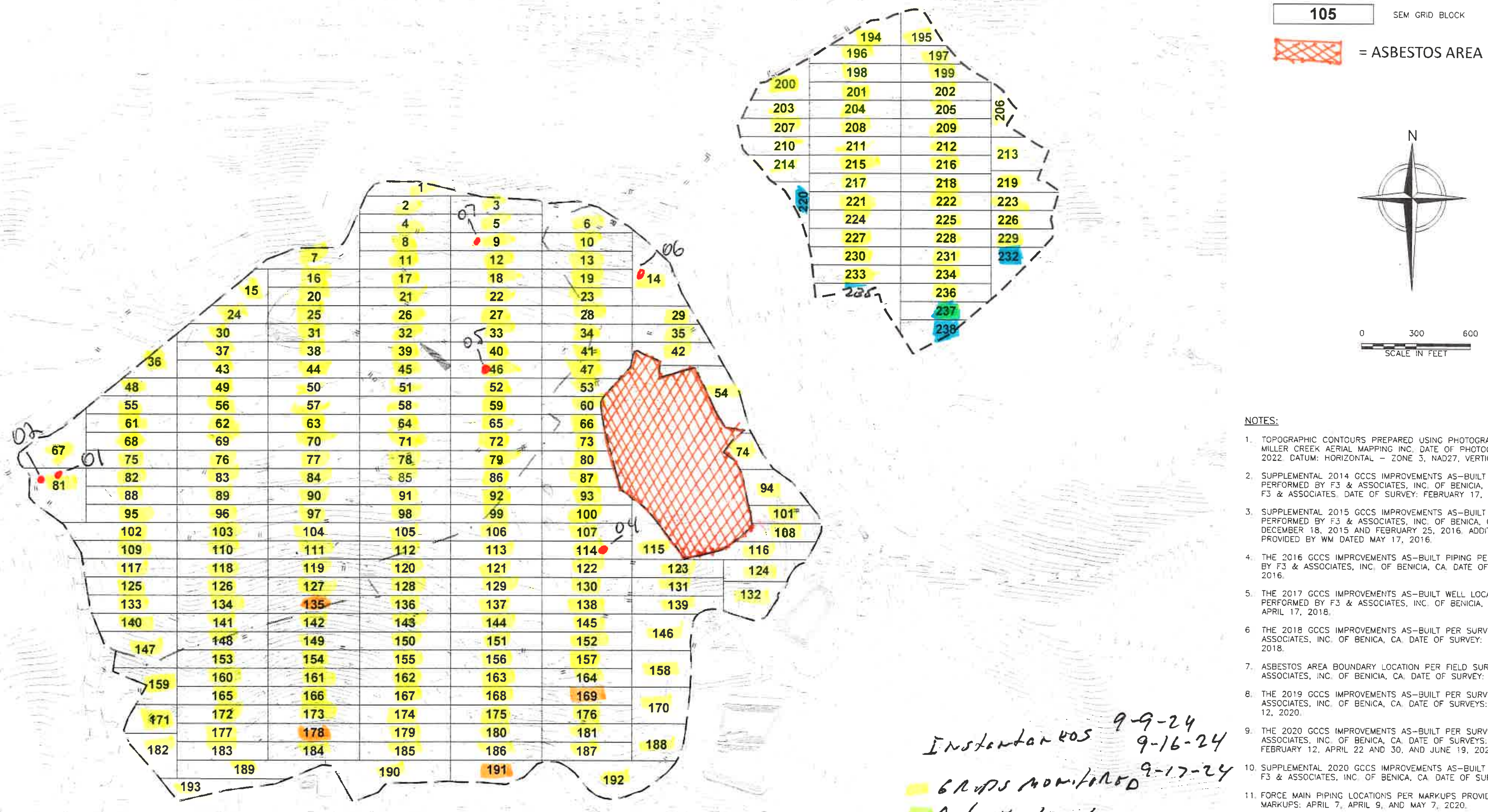
EXISTING CONDENSATE INJECTION WELL

EXISTING LOCAL CONTROL WELL

EXISTING REMOTE WELLHEAD

105 SEM GRID BLOCK

▨ = ASBESTOS AREA NOT MONITORED



NOTES:

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL – ZONE 3, NAD27, VERTICAL – NGVD29.
2. SUPPLEMENTAL 2014 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA PROVIDED BY EMAIL FROM F3 & ASSOCIATES. DATE OF SURVEY: FEBRUARY 17, 2015.
3. SUPPLEMENTAL 2015 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: DECEMBER 18, 2015 AND FEBRUARY 25, 2016. ADDITIONAL FIELD MARKUPS PROVIDED BY WM DATED MAY 17, 2016.
4. THE 2016 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: DECEMBER 22, 2016.
5. THE 2017 GCCS IMPROVEMENTS AS-BUILT WELL LOCATIONS PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE SURVEYS RECEIVED: APRIL 17, 2018.
6. THE 2018 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: JUNE 26 AND JULY 30, 2018.
7. ASBESTOS AREA BOUNDARY LOCATION PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: APRIL 7, 2016.
8. THE 2019 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JANUARY 31 AND FEBRUARY 12, 2020.
9. THE 2020 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JANUARY 7 AND 30, FEBRUARY 12, APRIL 22 AND 30, AND JUNE 19, 2020.
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11. FORCE MAIN PIPING LOCATIONS PER MARKUPS PROVIDED BY WM. DATE OF MARKUPS: APRIL 7, APRIL 9, AND MAY 7, 2020.
12. THE 2021 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: NOVEMBER 23, 2021, DECEMBER 9, 2021, DECEMBER 13, 2021, AND MARCH 8, 2022.
13. THE 2022 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS. JUNE 8, 2023

Instantaneous 9-9-24
9-16-24
9-17-24

🟨 Grids monitored

🟩 Active - trash

🟧 Steep slopes - VEG

🟦 Construction

FINAL RECORD DRAWINGS

WASTE MANAGEMENT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 07/07/23
DRAWN BY JJK
DESIGNED BY CME
CHECKED BY AMN
APPROVED BY EJS

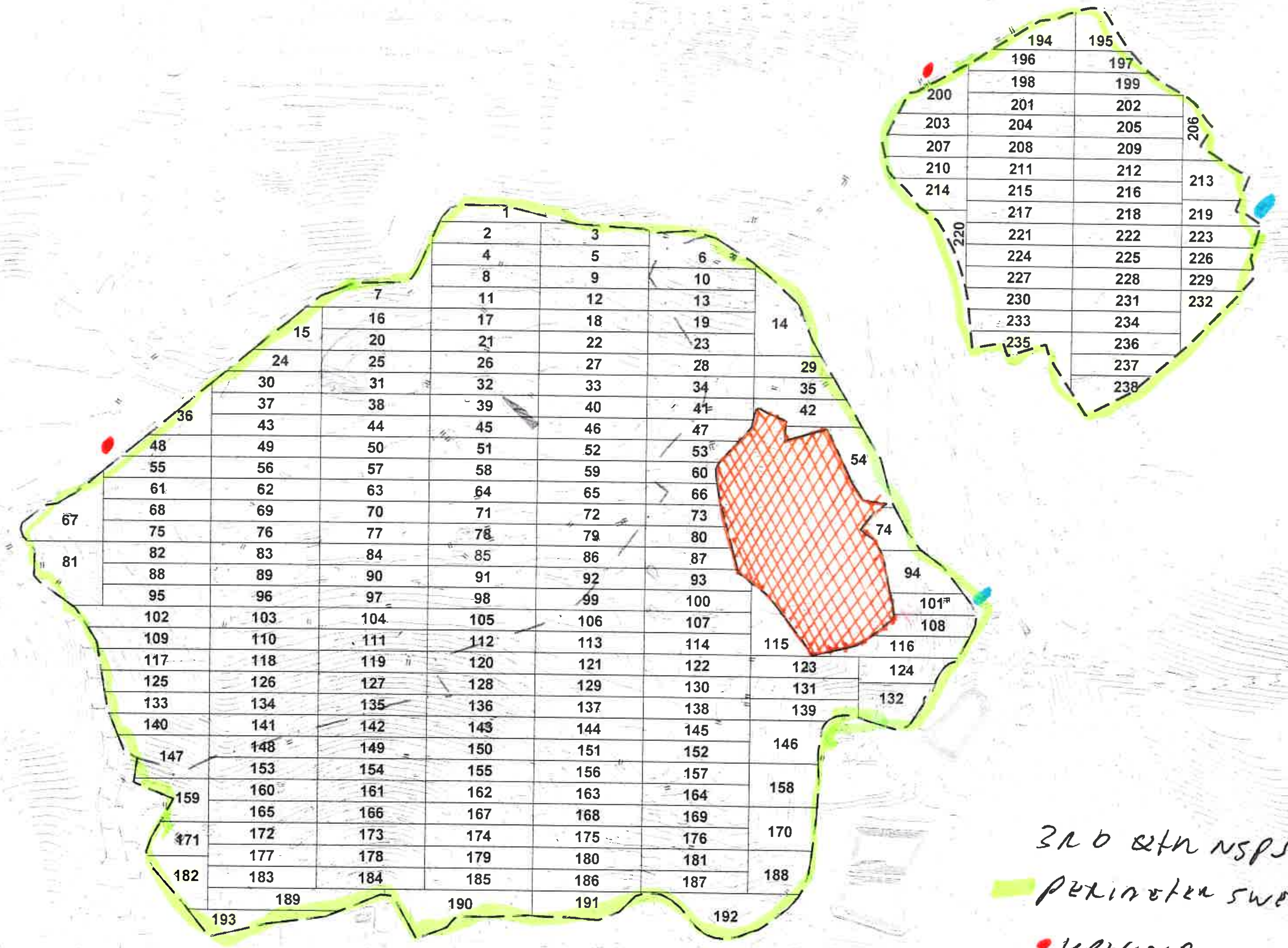
TETRA TECH

ALTAMONT LANDFILL AND
RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY, CALIFORNIA

2023 GCCS IMPROVEMENTS
SEM GRID MAP

SHEET NO.
7

PROJECT NO.
230018



3rD Qtr NSPS

🟩 Perimeter Sweep

● upwind

● Downwind

LEGEND

EXISTING 10' CONTOUR

EXISTING LFG EXTRACTION WELL

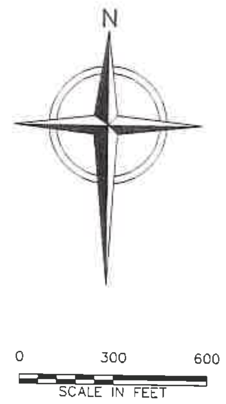
EXISTING CONDENSATE INJECTION WELL

EXISTING LOCAL CONTROL WELL

EXISTING REMOTE WELLHEAD

105 SEM GRID BLOCK

▨ = ASBESTOS AREA NOT MONITORED



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FINAL RECORD DRAWINGS

WASTE MANAGEMENT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 07/07/23
DRAWN BY JJK
DESIGNED BY CME
CHECKED BY AMN
APPROVED BY PJS

TETRA TECH

ALTAMONT LANDFILL AND
RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY, CALIFORNIA

2023 GCCS IMPROVEMENTS
SEM GRID MAP

SHEET NO.
7

PROJECT NO.
230018

Attachment B

Integrated Surface Emission Monitoring Event Records

Table B.1
Integrated Landfill Surface Monitoring
Exceedances and Monitoring Log

2024 QUARTER: 3

INITIAL MONITORING PERFORMED BY: RES

FOLLOW-UP MONITORING PERFORMED BY: NA

LANDFILL NAME: **Altamont Landfill and Resource Recovery Facility**

Initial Monitoring Event			1st Re-mon Event - 10 Days			Comments
Exceedance Grid ID No.	Monitoring Date	Field Reading	Monitoring Date	No Exced. <25 ppm	No Exced. >25 ppm	
No exceedances						

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Leigh Wade | Daniel King
Jerry Munoz | Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-10-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 60 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
36	LW	0610	0615	15.22	4	6	16	
48		0615	0625	17.31	5	7	16	
55		0625	0640	14.80	5	7	16	
61		0640	0655	12.74	5	7	16	
67		0655	0720	14.20	5	8	16	
68		0720	0745	11.65	5	8	16	
75		0750	0815	13.51	6	8	16	
82		0815	0840	10.62	5	7	16	
81		0840	0905	7.84	6	10	16	
83		0905	0930	9.21	6	6	16	
84		0930	0955	6.88	7	10	16	
90		1000	1025	8.60	7	10	16	
89		1025	1050	7.38	5	8	1	
88		1100	1125	11.62	6	8	16	
95		1125	1150	13.51	7	10	16	
96		1300	1325	10.80	7	11	15	
97		1325	1350	12.66	7	10	15	
104		1350	1415	9.51	7	9	15	
103		1415	1440	7.80	7	10	15	
102		1440	1505	7.58	7	10	14	
26	JM	0600	0625	8.70	5	7	16	
27		0626	0651	7.80	5	7	16	
28		0651	0715	13.20	5	8	16	
34		0715	0740	19.70	5	8	16	
33		0740	0805	9.02	5	9	16	
32		0810	0835	8.90	6	11	16	
39		0835	0900	7.60	6	10	16	
40		0901	0926	7.20	6	8	16	
41		0926	0952	18.60	7	10	16	
47		0952	1017	8.07	7	8	16	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 4

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Carl Wade | Daniel Icas
Jerry Munoz | Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-10-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
46		1020	1045	9.06	5	8	1	
45		1045	1110	9.75	7	9	16	
51		1110	1135	7.55	6	9	16	
52		1135	1200	7.11	7	9	15	
53		1300	1325	8.17	7	11	15	
60		1325	1350	10.07	7	10	15	
59		1350	1415	8.90	7	9	15	
58		1415	1440	7.60	7	10	15	
64		1440	1505	8.06	7	9	15	
65		1506	1531	7.08	6	10	14	
15	AC	0601	0626	18.65	5	7	16	
20		0630	0655	9.42	5	7	16	
25		0656	0721	8.37	5	8	16	
24		0723	0748	16.07	5	8	16	
30		0749	0814	1741	6	8	16	
31		0815	0840	7.62	5	7	16	
38		0840	0905	8.78	6	10	16	
37		0905	0930	14.62	6	8	16	
43		0935	1000	16.21	6	9	16	
44		1001	1026	8.01	7	10	16	
50		1026	1051	7.06	5	8	1	
49		1051	1116	18.44	7	9	16	
56		1116	1141	19.01	7	10	16	
57		1300	1325	9.62	7	9	15	
63		1325	1350	8.21	7	10	15	
62		1350	1415	19.41	7	9	15	
69		1415	1440	22.42	7	10	15	
70		1441	1506	7.01	7	10	15	
77		1506	1531	7.48	6	10	14	
76		1531	1556	11.82	6	10	15	

Attach Calibration Sheet
Attach site map showing grid ID

Page 2 of 4

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Leighwade Daniel Lens
Jerry Mead Luis Arevelo
Anthony Canelos

Cal. Gas Exp. Date: 11-10-24

Date: 9-10-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 75 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
66	DL	0600	0625	10.25	5	7	16	
73		0625	0650	9.30	5	7	16	
72		0700	0725	8.50	5	8	16	
71		0725	0750	7.60	6	8	16	
78		0800	0825	10.07	6	8	16	
75		0825	0850	9.80	6	9	16	
80		0850	0915	8.70	5	8	16	
87		0915	0940	10.30	6	9	16	
86		0940	1005	10.20	6	9	16	
85		1005	1030	8.20	7	10	16	
91		1030	1055	8.05	5	10	16	
92		1055	1115	9.10	7	9	16	
93		1115	1145	9.30	7	10	16	
100		1300	1325	9.25	7	9	15	
99		1350	1425	10.05	7	9	15	
98		1415	1440	10.52	7	10	15	
105		1440	1505	11.00	7	10	15	
106		1505	1530	13.21	6	10	14	
107		1530	1555	11.37	8	10	15	
115		1555	1610	12.50	7	11	15	
1	LA	0600	0625	8.10	5	7	16	
2		0625	0650	7.04	5	7	16	
3		0650	0715	14.26	5	8	16	
6		0720	0745	16.01	5	8	16	
5		0745	0810	11.17	6	6	16	
4		0810	0835	7.20	6	11	16	
8		0845	0910	7.07	6	10	16	
9		0910	0935	10.04	6	8	16	
10		0935	1000	16.50	6	9	16	
13		1010	1035	20.41	7	10	16	

Attach Calibration Sheet
Attach site map showing grid ID

Page 3 of 4

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Luis Lozano / Daniel Lens
Jerry Alvarez / Luis Acevedo
Anthony Carcelus

Cal. Gas Exp. Date: 11-10-24

Date: 9-10-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 75 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
12		1035	1100	14.06	7	10	16	
11		1100	1125	7.22	6	8	16	
7		1135	1200	11.02	7	9	15	
16		1205	1230	9.10	7	11	15	
17		1330	1355	7.38	7	10	15	
18		1355	1420	8.40	7	9	15	
19		1420	1445	15.23	7	10	15	
23		1450	1515	10.26	7	10	14	
22		1515	1540	17.21	7	10	14	
21		1540	1605	19.51	7	11	15	

Attach Calibration Sheet
Attach site map showing grid ID

Page 4 of 4

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Leishwade / Daniel Jens / Jerry Munoz / Luis Arevalo / Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-11-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
157	LW	0600	0625	5.81	4	6	6	
158	↓	0625	0650	7.13	6	10	7	
164		0650	0715	6.31	5	10	7	
163		0720	0745	8.13	5	8	7	
162		0745	0810	7.25	6	9	7	
161		0810	0835	9.77	5	7	7	
166		0835	0900	11.42	6	9	7	
167		0910	0935	13.20	5	7	10	
168		0935	1000	10.07	5	8	10	
170		1005	1030	9.64	5	8	7	
176		1030	1055	8.32	5	7	10	
175		1055	1120	10.81	5	10	10	
174		1220	1245	12.64	4	6	11	
173		1245	1310	10.51	4	7	12	
177		1320	1345	11.4	4	6	10	
14	JM	0610	0635	8.07	5	6	6	
29	↓	0636	0701	7.29	5	9	7	
35		0702	0727	8.17	5	8	7	
42		0730	0755	9.60	5	7	9	
54		0755	0820	5.70	5	9	8	
74		0821	0846	7.10	5	10	8	
94		0846	0912	4.20	5	8	8	
101		0915	0940	6.80	4	6	10	
108		0940	1005	5.50	5	8	10	
116		1005	1030	4.20	5	8	7	
124		1031	1056	7.50	5	7	10	
123		1056	1121	4.10	5	10	10	
131		1235	1300	6.17	5	8	11	
132		1305	1330	9.35	5	7	10	
139		1335	1400	8.20	4	6	10	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 3

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Leighnnoe; Denis Illers
Jerry Munoz; Luis Arevalo
Anthony Canales

Cal. Gas Exp. Date: 11-10-24

Date: 9-11-24 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
133	AC	0615	0640	8.35	5	6	6	
134		0640	0705	9.16	4	9	7	
141		0707	0732	7.42	5	10	8	
140		0733	0758	7.08	5	10	8	
147		0800	0825	8.96	5	8	7	
148		0825	0850	9.16	5	10	8	
153		0851	0916	7.02	5	8	8	
160		0917	0942	8.81	4	6	10	
159		0942	1007	8.78	4	6	10	
165		1008	1033	9.41	4	6	8	
172		1035	1100	7.01	4	6	10	
171		1101	1126	6.42	5	10	10	
142		1231	1256	8.64	5	8	11	
149		1258	1323	12.01	5	8	10	
154		1324	1349	11.54	5	7	10	
109	LA	0610	0635	9.41	5	7	6	
110		0635	0700	9.38	5	10	7	
111		0700	0725	11.12	5	8	7	
112		0725	0750	7.26	5	8	7	
113		0750	0815	8.63	4	7	8	
114		0815	0840	10.45	5	9	7	
122		0850	0915	7.09	5	8	8	
121		0915	0940	7.47	4	6	10	
120		0940	1005	10.32	4	6	10	
119		1005	1030	7.05	4	6	8	
118		1030	1055	9.23	4	7	8	
117		1055	1120	11.29	5	10	10	
125		1250	1315	11.01	5	9	10	
126		1315	1340	8.12	2	5	10	
127		1340	1405	10.56	4	6	10	

Attach Calibration Sheet
Attach site map showing grid ID

Page 2 of 3

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Leishmaoe ______ Daniel Llera ______ ______
Jerry Munoz ______ Luis Arevalo ______ ______
Anthony Canales ______ ______ Cal. Gas Exp. Date: 11-10-24

Date: 9-11-24 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
128	DL	0610	0635	8.20	4	6	6	
129		0635	0700	7.69	5	9	7	
130		0700	0725	8.30	5	8	7	
138		0725	0750	9.10	5	7	9	
137		0800	0825	8.15	5	9	8	
136		0825	0850	6.40	5	10	8	
143		0850	0915	7.29	5	8	8	
144		0920	0945	7.34	4	6	16	
145		0945	1010	8.20	4	6	10	
146		1010	1035	7.65	4	6	8	
152		1035	1055	7.30	5	7	16	
151		1055	1120	8.25	5	10	10	
150		1230	1255	12.51	5	8	11	
155		1300	1325	13.04	5	8	10	
156		1325	1350	13.17	5	7	10	

Attach Calibration Sheet
Attach site map showing grid ID

Page 3 of 3

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: JeRRY MUNOZ

Cal. Gas Exp. Date: 11-10-24

Date: 9-17-24 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
179	JM	0720	0730	10.03				
180	↓	0730	0740	13.09				
181		0740	0750	11.07				
188		0750	0800	12.01				
187		0800	0810	14.20				
186		0810	0820	13.21				
185		0820	0830	11.15				
184		0830	0840	10.09				
183		0840	0850	15.00				
182		0850	0900	14.03				
193		0900	0910	13.09				
189		0910	0920	11.70				
190		0921	0931	12.22				
192		0931	0941	10.35				

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Leighwaor ____________ ____________
____________ ____________ ____________
____________ ____________ Cal. Gas Exp. Date: ______

Date: 9-17-24 Instrument Used: ____________ Grid Spacing: ____________

Temperature: ________ Precip: ________ Upwind BG: ________ Downwind BG: ________

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
135								Steep-Veg
178								↓
181								↓
169								↓
220								construction
237								↓
238								↓
232								↓

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Jerry Munoz | Luis Arevalo
Anthony Canelis
Ben Lara

Cal. Gas Exp. Date: 11-10-24

Date: 9-18-24 Instrument Used: TVA1000 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
194	JM	0600	0625	7.01	3	3	16	
195		0625	0650	7.77	2	3	16	
197		0651	0716	9.25	2	3	16	
196		0716	0741	8.27	2	3	15	
200		0742	0807	7.35	2	3	2	
198		0810	0835	9.40	4	5	2	
199		0835	0900	8.09	2	4	4	
206		0902	0927	7.55	4	6	7	
202		0930	0955	9.23	5	6	8	
201		0955	1020	9.07	2	4	8	
203		1022	1047	8.25	3	5	9	
215	AC	0600	0625	8.47	1	2	16	
214		0625	0650	9.16	2	3	16	
217		0650	0715	9.84	2	3	16	
218		0715	0740	6.75	2	3	15	
219		0740	0805	6.85	2	3	2	
223		0810	0835	9.13	4	5	2	
222		0835	0900	8.94	2	4	4	
221		0900	0925	8.00	4	6	7	
224		0930	0955	7.62	5	6	8	
225		1000	1025	8.33	2	4	8	
226	DL	0600	0625	7.77	1	2	16	
229		0625	0650	8.10	2	3	16	
228		0650	0715	6.46	2	3	16	
227		0715	0740	8.79	2	3	15	
230		0740	0805	9.01	2	3	2	
231		0805	0830	8.55	4	5	2	
234		0830	0855	8.78	2	4	4	
233		0855	0920	8.41	4	5	2	
235		0920	0945	9.22	4	5	2	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 2

ALTAMONT LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Jerry Alvarez Luis Arevalo
Anthony Canales
Don Lane

Cal. Gas Exp. Date: 11-10-24

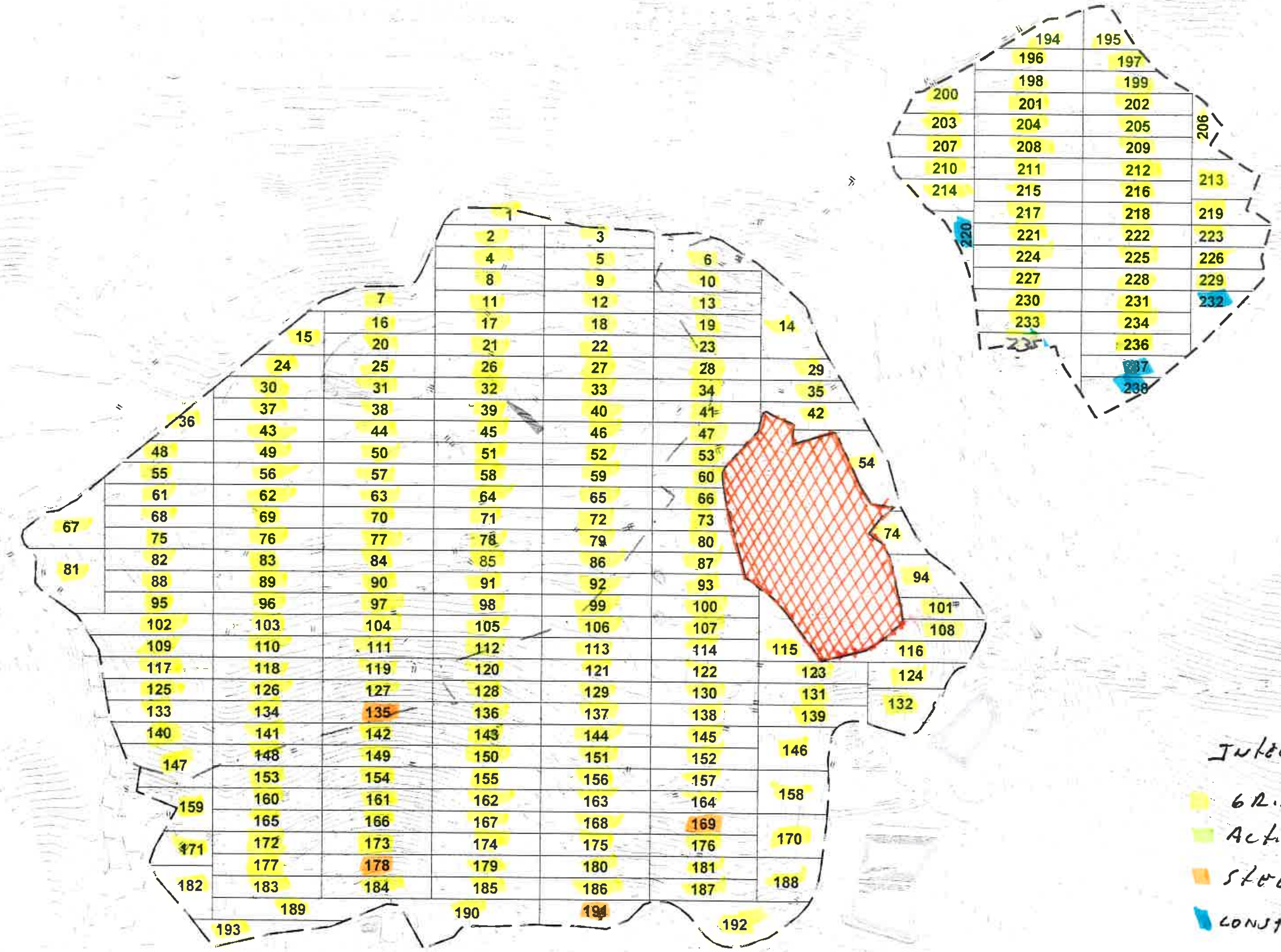
Date: 9-18-24 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.6 Downwind BG: 3.4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
236	↓	0945	1010	8.31	5	7	7	
204	CA	0600	0625	9.31	3	3	16	
205		0625	0650	7.56	2	3	16	
209		0650	0715	8.07	2	3	16	
208		0715	0740	10.85	2	3	15	
207		0740	0805	9.02	2	3	2	
210		0805	0830	9.25	4	5	2	
211		0830	0855	7.63	2	4	4	
217		0855	0920	10.50	4	6	7	
219		0945	1010	8.74	2	4	8	
216		1010	1035	10.52	5	7	6	

Attach Calibration Sheet
Attach site map showing grid ID

Page 2 of 2



LEGEND

EXISTING 10' CONTOUR

EXISTING LFG EXTRACTION WELL

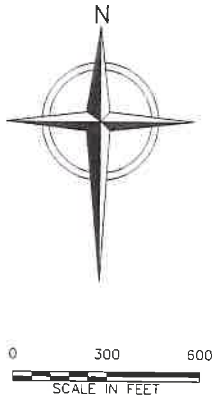
EXISTING CONDENSATE INJECTION WELL

EXISTING LOCAL CONTROL WELL

EXISTING REMOTE WELLHEAD

105 SEM GRID BLOCK

▨ = ASBESTOS AREA NOT MONITORED



9-10-24
9-11-24
9-17-24
Integrated 9-18-24

🟨 GRIDS MONITORED
🟩 Active-trash
🟧 STEEP-VEG
🟦 CONSTRUCTION

NOTES:

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL – ZONE 3, NAD27, VERTICAL – NGVD29.
2. SUPPLEMENTAL 2014 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA PROVIDED BY EMAIL FROM F3 & ASSOCIATES. DATE OF SURVEY: FEBRUARY 17, 2015.
3. SUPPLEMENTAL 2015 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: DECEMBER 18, 2015 AND FEBRUARY 25, 2016. ADDITIONAL FIELD MARKUPS PROVIDED BY WM DATED MAY 17, 2016.
4. THE 2016 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: DECEMBER 22, 2016.
5. THE 2017 GCCS IMPROVEMENTS AS-BUILT WELL LOCATIONS PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE SURVEYS RECEIVED: APRIL 17, 2018.
6. THE 2018 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: JUNE 26 AND JULY 30, 2018.
7. ASBESTOS AREA BOUNDARY LOCATION PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: APRIL 7, 2016.
8. THE 2019 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JANUARY 31 AND FEBRUARY 12, 2020.
9. THE 2020 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JANUARY 7 AND 30, FEBRUARY 12, APRIL 22 AND 30, AND JUNE 19, 2020.
10. SUPPLEMENTAL 2020 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: JULY 31, 2020.
11. FORCE MAIN PIPING LOCATIONS PER MARKUPS PROVIDED BY WM. DATE OF MARKUPS: APRIL 7, APRIL 9, AND MAY 7, 2020.
12. THE 2021 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: NOVEMBER 23, 2021, DECEMBER 9, 2021, DECEMBER 13, 2021, AND MARCH 8, 2022.
13. THE 2022 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JUNE 8, 2023

FINAL RECORD DRAWINGS

WASTE MANAGEMENT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 07/07/23
DRAWN BY JJK
DESIGNED BY CME
CHECKED BY AMN
APPROVED BY PJS

TETRA TECH

ALTAMONT LANDFILL AND
RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY, CALIFORNIA

2023 GCCS IMPROVEMENTS
SEM GRID MAP

SHEET NO.
7

PROJECT NO
230018

Attachment C

Component Leak Monitoring Event Records

Table C.1
AB-32 Component Leak Monitoring
Summary of Component Leaks Greater than 500 ppmv

2024 QUARTER: **3**

INITIAL MONITORING PERFORMED BY: ALRRF

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: **Altamont Landfill and Resource Recovery Facility**

Location	Initial Monitoring			Corrective Action		10-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	8/15/2024	ND						
A16- Flare Station	8/15/2024	ND						
S6 and S7 Turbines	9/3/2024	ND						

Note: LNG Plant was has been decommissioned.

ND= No exceedances detected

Table C.2
BAAQMD Component Leak Monitoring
Summary of Component Leaks Greater than 1,000 ppmv

2024 QUARTER: **3**

INITIAL MONITORING PERFORMED BY: ALRRF

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: **Altamont Landfill and Resource Recovery Facility**

Location	Initial Monitoring			Corrective Action		7-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	8/15/2024	ND						
A16- Flare Station	8/15/2024	ND						
S6 and S7 Turbines	9/3/2024	ND						

Note: LNG Plant was has been decommissioned.

ND= No exceedances detected

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	Turbine Gas skids
INSTRUMENT:	FID
MAKE:	Photovac
MODEL:	MicroFiD I/S
S/N:	CZPD312
DATE OF SAMPLING:	9/3/2024
TECHNICIAN:	L.LaCerra

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Roots Flex Couplings			Howden Compressor	InterstageVessel			Oil/Gas Separator Vessel			Gas Separator Vessel		Cooling Towers/ Heat Exchanger Piping		
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 1	# 2	# 3
Compressor skid # 1																					
TEST DATE	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24
LEAK CONCENTRATION FOUND (ppm)	10.0 PPM			11.0 PPM			4.0 PPM			4.0 PPM	2.0 PPM			6.0 PPM			1.0 PPM		3.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					
Compressor skid # 2																					
TEST DATE	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24
LEAK CONCENTRATION FOUND (ppm)	7.0 PPM			4.0 PPM			12.0 PPM			2.0 PPM	3.0 PPM			9.0 PPM			5.0 PPM		5.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					

Comments:

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	Turbine Gas skids
INSTRUMENT:	FID
MAKE:	Photovac
MODEL:	MicroFiD I/S
S/N:	CZPD312
DATE OF SAMPLING:	9/3/2024
TECHNICIAN:	L.LaCerra

LOCATION OF LEAK(S)	Bolted connections			Pipes (flanged, unions)			Inlet piping and valves			Sensors, transducers			Propane tank & piping			Gas manifold and piping				
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 3	# 4	# 5
Turbine 1																				
TEST DATE	9/3/24			9/3/24			9/3/24			9/3/24			9/3/24			9/3/24				
LEAK CONCENTRATION FOUND (ppm)	2.0 PPM			2.0 PPM			7.0 PPM			3.0 PPM			2.0 PPM			6.0 PPM				
ACTION TAKEN																				
REPAIR DATE																				
RE-TEST DATE																				
RE-TEST CONCENTRATION (ppm)																				
Turbine 2	9/3/24			9/3/24			9/3/24			9/3/24			9/3/24			9/3/24				
TEST DATE																				
LEAK CONCENTRATION FOUND (ppm)	5.0 PPM			7.0 PPM			5.0 PPM			5.0 PPM			6.0 PPM			4.0 PPM				
ACTION TAKEN																				
REPAIR DATE																				
RE-TEST DATE																				
RE-TEST CONCENTRATION (ppm)																				

Comments:

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	A16 Flare
INSTRUMENT:	Photovac
MAKE:	Thermo scientific
MODEL:	Micro FID
S/N:	CZPD312
DATE OF SAMPLING:	08.15.24
TECHNICIAN:	Garry Carpenter

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Flare Valves, Sensors and Piping			Blowers			LNG Valves, Sensors and Piping to LNG Isolation Valve			Header to Landfill			Propane Tanks and Piping		IC Engine Valves and Sensors			IC Engine Compression Skid			IC Engine Manifold Piping and Metal Container		
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	#2	#3	# 1	# 2	# 3	#1	# 2	#1	#2	#3	#1	#2	#3	#1	#2	#3
A-16																													
TEST DATE	08.15.24			08.15,24			08.15,24			08.15,24			08.15,24			08.15,24			08.15,24		N/A			N/A			N/A		
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D			N/D			N/D										
ACTION TAKEN																													
REPAIR DATE																													
RE-TEST DATE																													
RE-TEST CONCENTRATION (ppm)																													

Comments: LNG Plant was decommissioned in 2023.

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	A15
INSTRUMENT:	FID
MAKE:	Photovac
MODEL:	Micro FID
S/N:	CZPD312
DATE OF SAMPLING:	08.15,24
TECHNICIAN:	Garry Carpenter

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Discharge Blower			Flame Arrestor			Header Pipe to Flare & Sensors		Propane Tank and Piping	
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 1	# 2
A-15 Flare Station																
TEST DATE	08.15,24			08.15,24			08.15,24			08.15,24			08.15,24		08.15,24	
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D		N/D	
ACTION TAKEN																
REPAIR DATE																
RE-TEST DATE																
RE-TEST CONCENTRATION (ppm)																

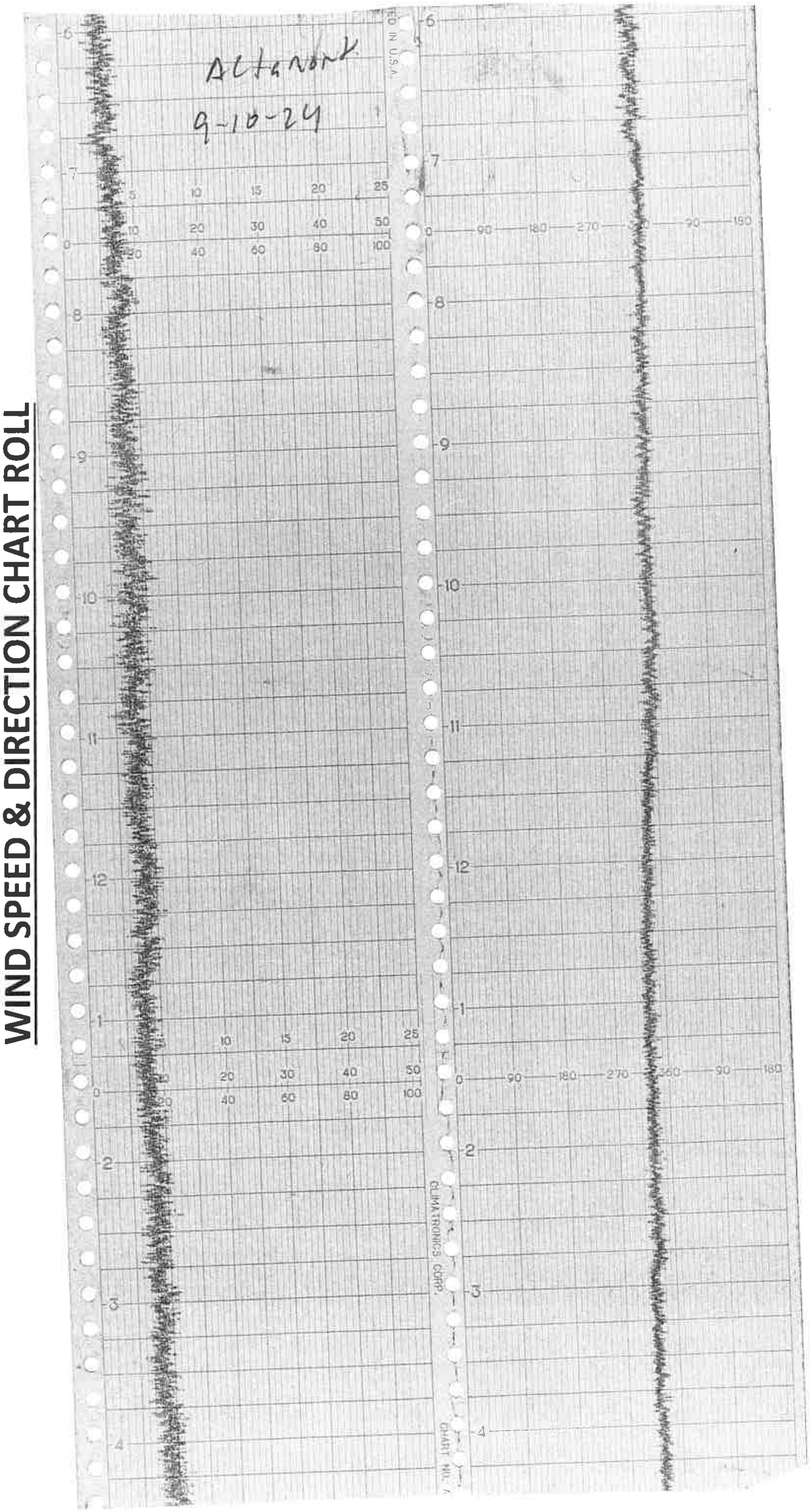
Comments: **Bolt connections (expansion chamber) were tightened.**

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

Attachment D

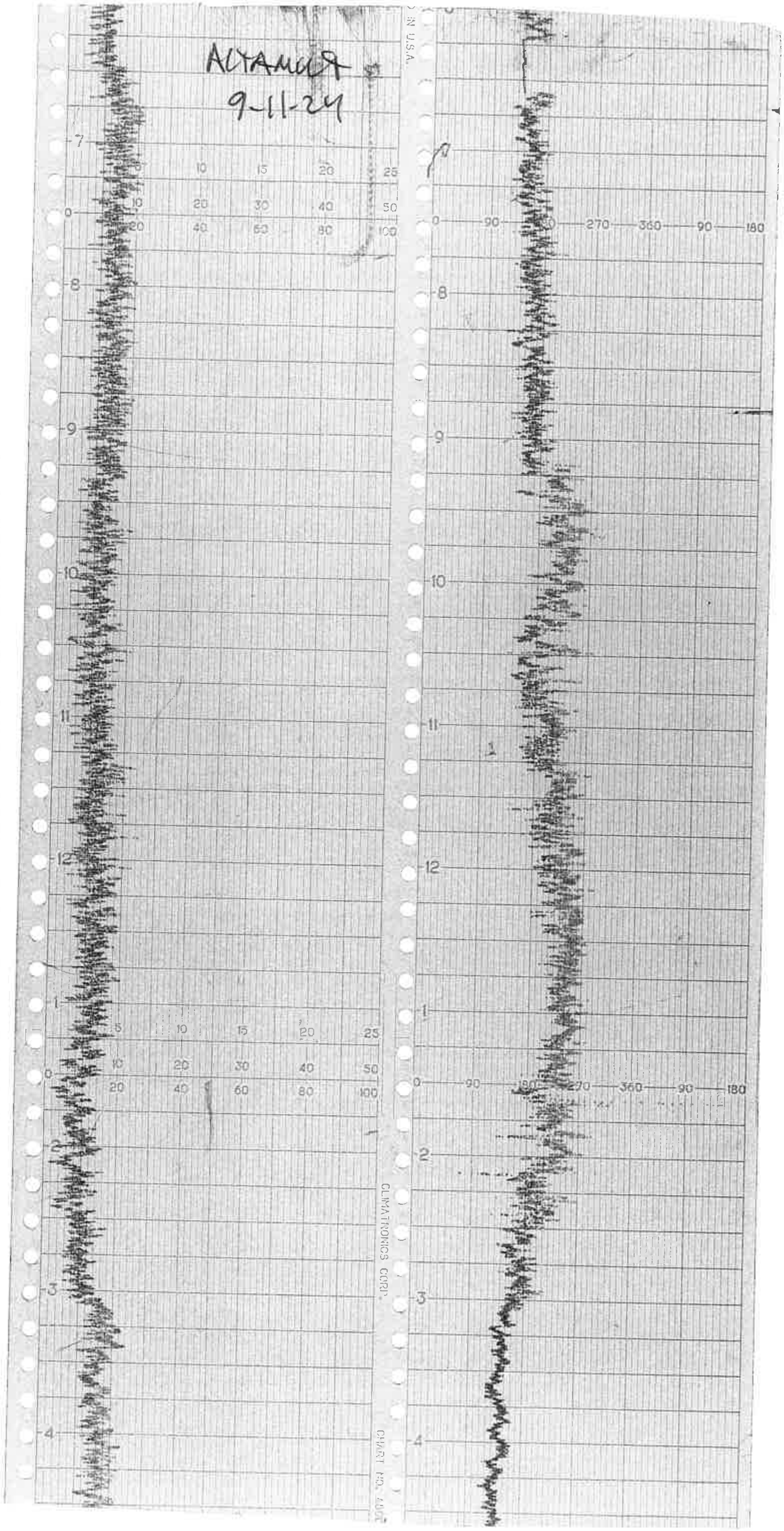
Weather Station Data

WIND SPEED & DIRECTION CHART ROLL



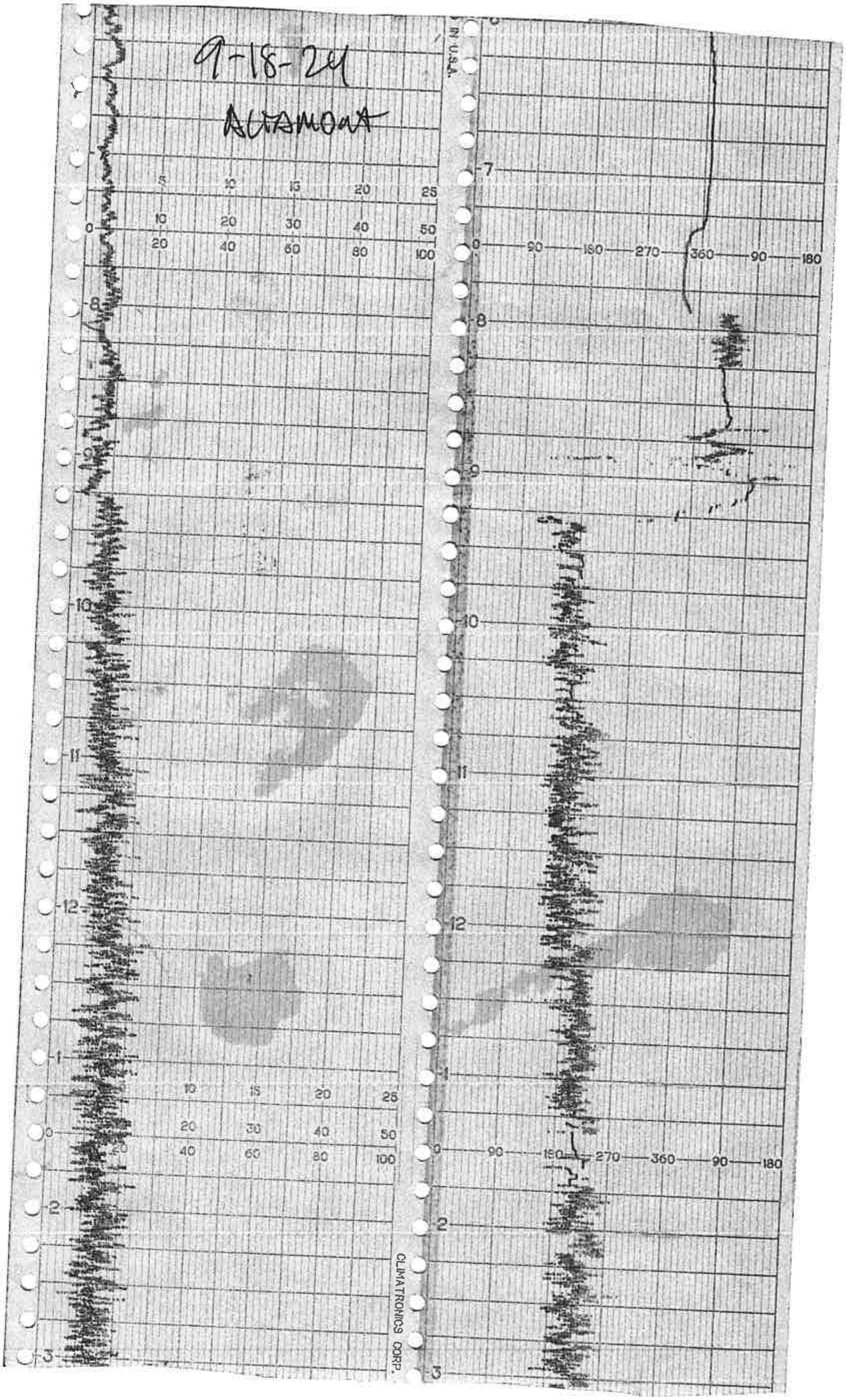
Altamont
9-10-24

WIND SPEED & DIRECTION CHART ROLL



ALTAMONT
9-11-24

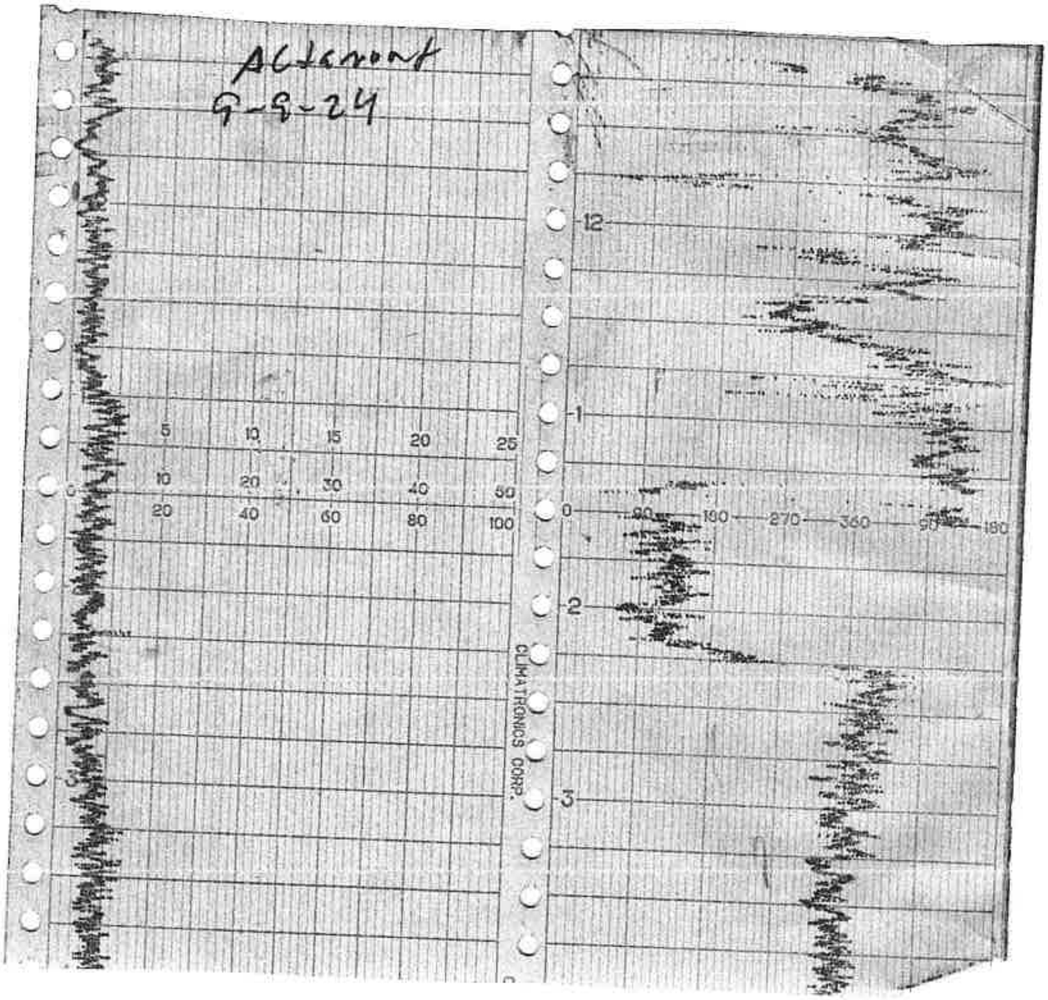
WIND SPEED & DIRECTION CHART ROLL



9-18-24

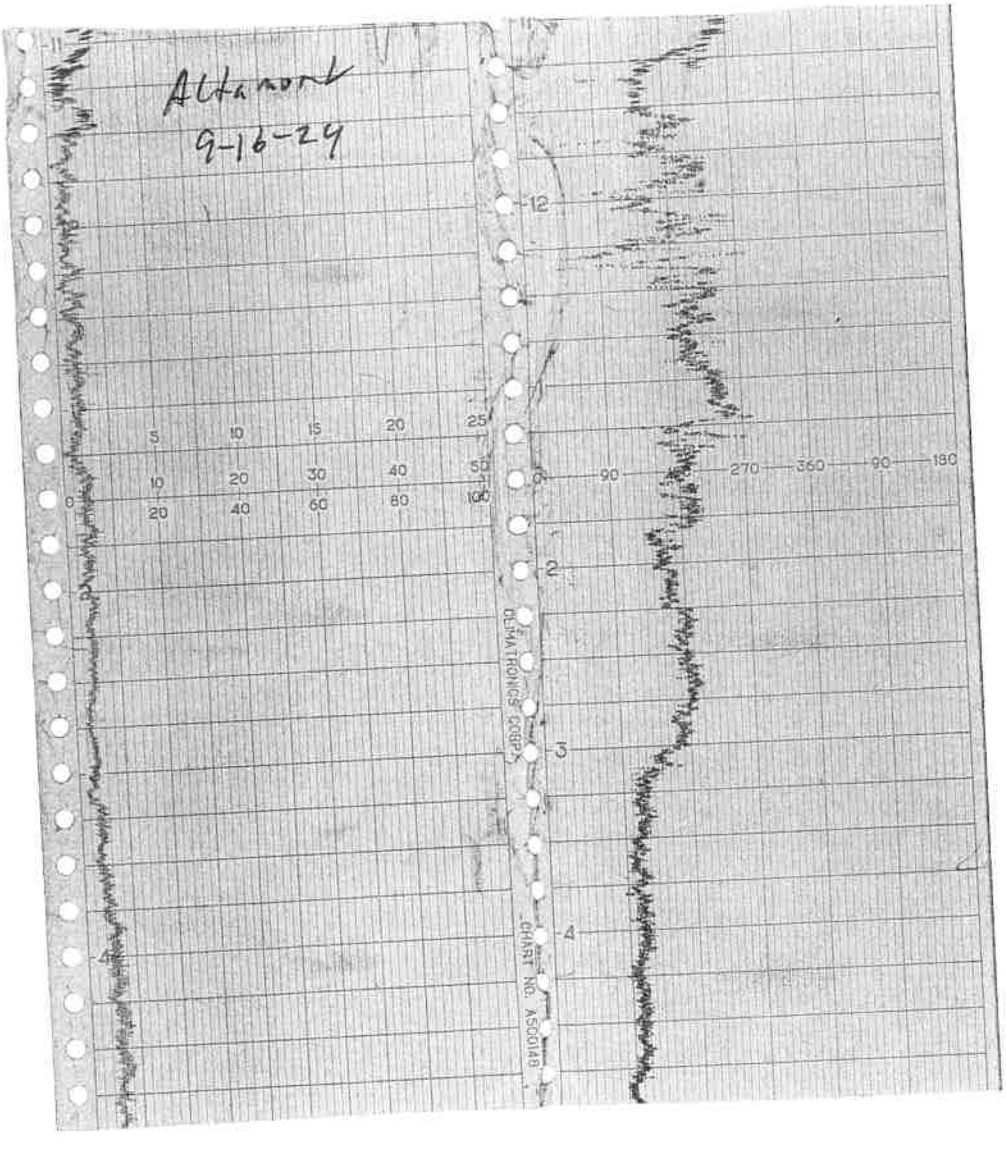
ALTAMONT

WIND SPEED & DIRECTION CHART ROLL



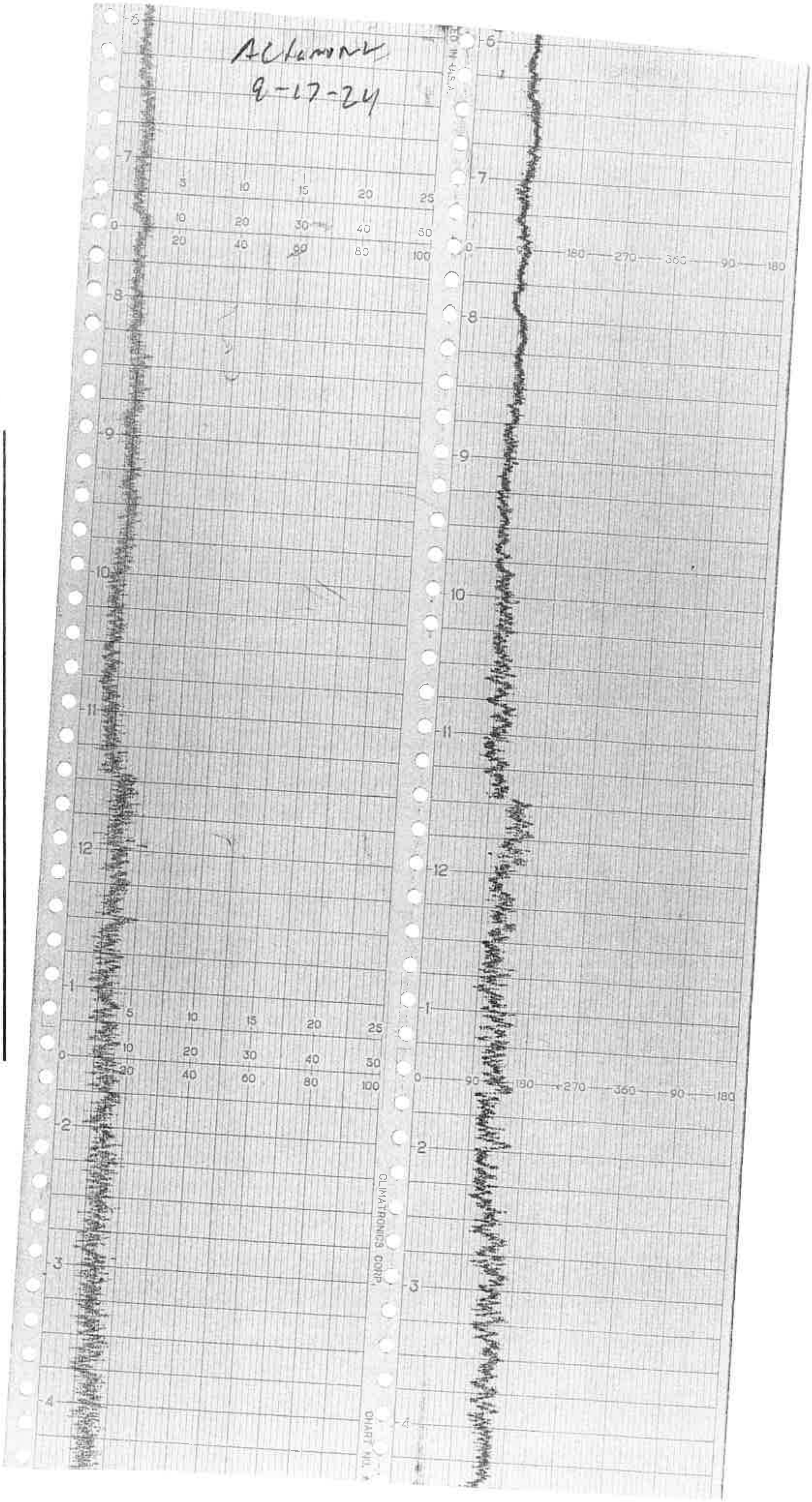
Altamont
9-8-24

WIND SPEED & DIRECTION CHART ROLL



Altamont
9-16-24

WIND SPEED & DIRECTION CHART ROLL



Altamont
9-17-24

RES
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CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 10 SERIAL #: 1036346773

MONITORING DATE: 9-18-24 TIME: 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	505 ppm	455 ppm	4
#2	500 ppm	450 ppm	4
#3	500 ppm	450 ppm	4
Calculate Response Time (1+2+3) / 3			4 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 **ppm**

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.11 ppm	505 ppm	5
#2	0.06 ppm	500 ppm	0
#3	0.04 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.33 #DIV/0! Must be less than 10%

Performed By: Leishman Date/Time: 9-18-24- 0550

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16-POINT WIND DIRECTION INDEX

NO	DIRECTION	DEGREES		
		FROM	CENTER	TO
16	NORTH (N)	348.8	360.0	011.3
1	NORTH-NORTHEAST (NNE)	011.3	022.5	033.8
2	NORTHEAST (NE)	033.8	045.0	056.3
3	EAST-NORTHEAST (ENE)	056.3	067.5	078.8
4	EAST (E)	078.8	090.0	101.3
5	EAST-SOUTHEAST (ESE)	101.3	112.5	123.8
6	SOUTHEAST (SE)	123.8	135.0	146.3
7	SOUTH-SOUTHEAST (SSE)	146.3	157.5	168.8
8	SOUTH (S)	168.8	180.0	191.3
9	SOUTH-SOUTHWEST (SSW)	191.3	202.5	213.8
10	SOUTHWEST (SW)	213.8	225.0	236.3
11	WEST-SOUTHWEST (WSW)	236.3	247.5	258.8
12	WEST (W)	258.8	270.0	281.3
13	WEST-NORTHWEST (WNW)	281.3	292.5	303.8
14	NORTHWEST (NW)	303.8	315.0	326.3
15	NORTH-NORTHWEST (NNW)	326.3	337.5	348.8

Attachment E

Calibration Records

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo

MODEL: WAWRS EQUIPMENT #: 10 SERIAL #: 1036346773

MONITORING DATE: 9-9-24 TIME: 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	**Downwind Background Reading:** (Highest in 30 seconds)	**Background Value:** (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	**Stabilized Reading Using Calibration Gas**	**90% of the Stabilized Reading**	**Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas**
#1	508 ppm	458 ppm	6
#2	500 ppm	450 ppm	6
#3	500 ppm	451 ppm	6
Calculate Response Time **(1+2+3) / 3**			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = **500** **ppm**

Measurement #	**Meter Reading for Zero Air (A)**	**Meter Reading for Calibration Gas (B)**	**Calculate Precision [STD – (B)]**
#1	0.11 ppm	508 ppm	8
#2	0.06 ppm	500 ppm	0
#3	0.05 ppm	500 ppm	0
Calculate Precision $\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$			0.53 #DIV/0! Must be less than 10%

Performed By: LEIGH WARD Date/Time: 9-9-24 -1050

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo
MODEL: TVA1000 EQUIPMENT #: 11 SERIAL #: 1036342772
MONITORING DATE: 9-9-24 TIME: 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind + Downwind})}{2}$
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	490 ppm	440 ppm	5
#2	501 ppm	451 ppm	5
#3	500 ppm	450 ppm	5
Calculate Response Time $\frac{(1+2+3)}{3}$			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 **ppm**

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.16 ppm	490 ppm	10
#2	0.12 ppm	501 ppm	1
#3	0.09 ppm	500 ppm	0
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.73 #DIV/0! Must be less than 10%

Performed By: Jerry Munoz Date/Time: 9-9-24 - 1050

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 12 SERIAL #: 1036246741

MONITORING DATE: 9-9-24 TIME: 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	**Downwind Background Reading:** (Highest in 30 seconds)	**Background Value:** (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	495 ppm	445 ppm	4
#2	500 ppm	450 ppm	4
#3	500 ppm	450 ppm	4
Calculate Response Time (1+2+3) / 3			4 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.10 ppm	495 ppm	5
#2	0.05 ppm	500 ppm	0
#3	0.03 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.33 #DIV/0! Must be less than 10%

Performed By: Anthony Canales Date/Time: 9-9-24 -1050

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 13 SERIAL #: 1102746775

MONITORING DATE: 9-9-24 TIME: 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	485 ppm	439 ppm	6
#2	502 ppm	452 ppm	6
#3	500 ppm	450 ppm	6
	Calculate Response Time $\frac{(1+2+3)}{3}$		6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 **ppm**

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.12 ppm	485 ppm	11
#2	0.08 ppm	502 ppm	2
#3	0.06 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.86 #DIV/0! Must be less than 10%

Performed By: Daniel Isla Date/Time: 9-9-24-1050

RES
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CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 16 SERIAL #: 1102746776

MONITORING DATE: 9-9-24 TIME: 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	490 ppm	440 ppm	6
#2	500 ppm	450 ppm	6
#3	500 ppm	450 ppm	6
Calculate Response Time (1+2+3) / 3			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.15 ppm	490 ppm	10
#2	0.11 ppm	500 ppm	0
#3	0.07 ppm	500 ppm	0
Calculate Precision	[STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1		0.66 #DIV/0! Must be less than 10%

Performed By: Luis Arevalo Date/Time: 9-9-24 1050

RES

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INSTANTANEOUS

LANDFILL NAME Altamont INSTRUMENT MAKE tHermo
MODEL tVA1000 EQUIPMENT # 10 SERIAL # 1036346773
MONITORING DATE 9-16-24 TIME 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	504 ppm	454 ppm	5
#2	501 ppm	451 ppm	5
#3	500 ppm	450 ppm	5
Calculate Response Time (1+2+3) / 3			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.10 ppm	504 ppm	4
#2	0.08 ppm	501 ppm	1
#3	0.06 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.33 #DIV/0! Must be less than 10%

Performed By

Date/Time 9-16-24 -1050

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INSTANTANEOUS

LANDFILL NAME Altamont INSTRUMENT MAKE THermo

MODEL TVA1000 EQUIPMENT # 11 SERIAL # 1036346774

MONITORING DATE 9-16-24 TIME 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	490 ppm	440 ppm	7
#2	502 ppm	452 ppm	7
#3	500 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.15 ppm	490 ppm	10
#2	0.07 ppm	512 ppm	2
#3	0.05 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.80 #DIV/0! Must be less than 10%

Performed By: Jerry Ahauz Date/Time 9-16-24- 1050

RES

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INSTANTANEOUS

LANDFILL NAME Altamont INSTRUMENT MAKE tHermo

MODEL TVA1000 EQUIPMENT # 12 SERIAL # 103624674/

MONITORING DATE 9-16-24 TIME 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	506 ppm	456 ppm	6
#2	498 ppm	448 ppm	6
#3	500 ppm	450 ppm	6
Calculate Response Time (1+2+3) / 3			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.17 ppm	506 ppm	6
#2	0.11 ppm	498 ppm	2
#3	0.09 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.53 #DIV/0! Must be less than 10%

Performed By Anthon canales Date/Time 9-16-24-1050

RES

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME Altamont INSTRUMENT MAKE tHermo
MODEL tVA1000 EQUIPMENT # 13 SERIAL # 1102746775
MONITORING DATE 9-16-24. TIME 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	504 ppm	454 ppm	5
#2	500 ppm	450 ppm	5
#3	500 ppm	450 ppm	5
	Calculate Response Time $\frac{(1+2+3)}{3}$		5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.09 ppm	504 ppm	4
#2	0.07 ppm	500 ppm	0
#3	0.04 ppm	500 ppm	0
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.26 #DIV/0! Must be less than 10%

Performed By Dew Jens Date/Time 9-16-24-1050

RES

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME ALtamint INSTRUMENT MAKE tHermo

MODEL tVA1000 EQUIPMENT # 16 SERIAL # 1102746776

MONITORING DATE 9-16-24 TIME 1050

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	492 ppm	442 ppm	6
#2	500 ppm	450 ppm	6
#3	500 ppm	450 ppm	6
Calculate Response Time $\frac{(1+2+3)}{3}$			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.12 ppm	492 ppm	8
#2	0.07 ppm	500 ppm	0
#3	0.04 ppm	500 ppm	0
Calculate Precision $\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{500} \times \frac{100}{1}$			0.53 #DIV/0! Must be less than 10%

Performed By Luis Angvalo Date/Time 9-16-24-1050

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 10 SERIAL #: 1036346773

MONITORING DATE: 9-17-24 TIME: 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	**Downwind Background Reading:** (Highest in 30 seconds)	**Background Value:** (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	**Stabilized Reading Using Calibration Gas**	**90% of the Stabilized Reading**	**Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas**
#1	504 ppm	454 ppm	4
#2	500 ppm	450 ppm	4
#3	500 ppm	450 ppm	4
	Calculate Response Time (1+2+3) / 3		4 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 **ppm**

Measurement #	**Meter Reading for Zero Air (A)**	**Meter Reading for Calibration Gas (B)**	**Calculate Precision [STD – (B)]**
#1	0.13 ppm	504 ppm	4
#2	0.09 ppm	500 ppm	0
#3	0.06 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.26 #DIV/0! Must be less than 10%

Performed By: Leishwood Date/Time: 9-17-24-0550

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Alliant INSTRUMENT MAKE: Thermo
MODEL: TVA1000 EQUIPMENT #: 12 SERIAL #: 1036246741
MONITORING DATE: 9-17-24 TIME: 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	495 ppm	445 ppm	5
#2	500 ppm	450 ppm	5
#3	500 ppm	450 ppm	5
Calculate Response Time (1+2+3) / 3			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 **ppm**

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.13 ppm	455 ppm	5
#2	0.08 ppm	500 ppm	0
#3	0.06 ppm	500 ppm	8
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.33 #DIV/0! Must be less than 10%

Performed By: Anthony Canales Date/Time: 9-17-24-0550

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Altamont INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 13 SERIAL #: 1102746775

MONITORING DATE: 9-17-24 TIME: 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	**Downwind Background Reading:** (Highest in 30 seconds)	**Background Value:** (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	**Stabilized Reading Using Calibration Gas**	**90% of the Stabilized Reading**	**Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas**
#1	497 ppm	447 ppm	6
#2	504 ppm	454 ppm	6
#3	500 ppm	450 ppm	6
	Calculate Response Time $\frac{(1+2+3)}{3}$		6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = **500** **ppm**

Measurement #	**Meter Reading for Zero Air (A)**	**Meter Reading for Calibration Gas (B)**	**Calculate Precision [STD – (B)]**
#1	0.16 ppm	497 ppm	3
#2	0.08 ppm	504 ppm	4
#3	0.04 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.46 #DIV/0! Must be less than 10%

Performed By: Den Iers Date/Time: 9-17-24-0550

RES

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INSTANTANEOUS

LANDFILL NAME Altamont INSTRUMENT MAKE tHermo

MODEL tVA1000 EQUIPMENT # 16 SERIAL # 1102746776

MONITORING DATE 9-17-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	450 ppm	440 ppm	7
#2	500 ppm	450 ppm	7
#3	500 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.10 ppm	450 ppm	10
#2	0.06 ppm	500 ppm	0
#3	0.05 ppm	500 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		0.66 #DIV/0! Must be less than 10%

Performed By LUIS AREVALO Date/Time 9-17-24-0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo
MODEL TVA1000 EQUIPMENT # 10 SERIAL # 1036341773
MONITORING DATE 9-10-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{\text{(Upwind + Downwind)}}{2}$
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24 ppm	21.6 ppm	5
#2	25 ppm	22.5 ppm	5
#3	25 ppm	22.5 ppm	5
Calculate Response Time $\frac{(1+2+3)}{3}$			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.12 ppm	24 ppm	1
#2	0.09 ppm	25 ppm	0
#3	0.07 ppm	25 ppm	0
Calculate Precision	$\frac{\text{[STD-B1] + [STD-B2] + [STD-B3]}}{3} \text{ X } \frac{1}{25} \text{ X } \frac{100}{1}$		1.3 #DIV/0! Must be less than 10%

Performed By

Date/Time 9-10-24-0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE tHermo
MODEL TVA1000 EQUIPMENT # 11 SERIAL # 1036346722
MONITORING DATE 9-10-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	23 ppm	20.7 ppm	6
#2	25 ppm	22.5 ppm	6
#3	25 ppm	22.5 ppm	6
Calculate Response Time $\frac{(1+2+3)}{3}$			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.11 ppm	23 ppm	2
#2	0.07 ppm	25 ppm	0
#3	0.04 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		2.6 #DIV/0! Must be less than 10%

Performed By Jerry [illegible] Date/Time 9-10-24- 0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo
MODEL TVA1000 EQUIPMENT # 12 SERIAL # 1036246741
MONITORING DATE 9-10-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	**Downwind Background Reading:** (Highest in 30 seconds)	**Background Value:** (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	**Stabilized Reading Using Calibration Gas**	**90% of the Stabilized Reading**	**Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas**
#1	24 ppm	21.6 ppm	4
#2	24 ppm	21.6 ppm	4
#3	25 ppm	22.5 ppm	4
Calculate Response Time (1+2+3) / 3			4 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	**Meter Reading for Zero Air (A)**	**Meter Reading for Calibration Gas (B)**	**Calculate Precision [STD – (B)]**
#1	0.15 ppm	24 ppm	1
#2	0.07 ppm	24 ppm	1
#3	0.04 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		2.6 #DIV/0! Must be less than 10%

Performed By Anthony Canales Date/Time 9-10-24-0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo

MODEL TVA 1000 EQUIPMENT # 13 SERIAL # 1102746775

MONITORING DATE 9-10-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	23 ppm	20.7 ppm	6
#2	24 ppm	21.6 ppm	6
#3	25 ppm	22.5 ppm	6
Calculate Response Time $\frac{(1+2+3)}{3}$			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.28 ppm	23 ppm	2
#2	0.14 ppm	24 ppm	1
#3	0.09 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		4.0 #DIV/0! Must be less than 10%

Performed By Daniel Date/Time 9-10-24 - 0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo
MODEL TVA1000 EQUIPMENT # 16 SERIAL # 1102746776
MONITORING DATE 9-10-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24 ppm	21.6 ppm	5
#2	25 ppm	22.5 ppm	5
#3	25 ppm	22.5 ppm	5
Calculate Response Time	$\frac{(1+2+3)}{3}$		5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.15 ppm	24 ppm	1
#2	0.08 ppm	25 ppm	0
#3	0.07 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		1.3 #DIV/0! Must be less than 10%

Performed By Luis Arevelo Date/Time 9-10-24 -0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE tHermo

MODEL TVA1000 EQUIPMENT # 10 SERIAL # 1036346773

MONITORING DATE 9-11-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24 ppm	21.6 ppm	4
#2	25 ppm	22.5 ppm	4
#3	25 ppm	22.5 ppm	4
Calculate Response Time (1+2+3) / 3			4 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.12 ppm	24 ppm	1
#2	0.02 ppm	25 ppm	0
#3	0.04 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		1.3 #DIV/0! Must be less than 10%

Performed By

Date/Time 9-11-24-0550

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo
MODEL TVA1000 EQUIPMENT # 11 SERIAL # 1036346772
MONITORING DATE 9-11-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	23 ppm	20.7 ppm	6
#2	25 ppm	22.5 ppm	6
#3	25 ppm	22.5 ppm	6
Calculate Response Time $\frac{(1+2+3)}{3}$			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.15 ppm	23 ppm	2
#2	0.41 ppm	25 ppm	0
#3	0.07 ppm	25 ppm	0
Calculate Precision $\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$			2.6 #DIV/0! Must be less than 10%

Performed By Jenny Zhao Date/Time 9-11-24-0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE: tHermo

MODEL tvA1000 EQUIPMENT # 12 SERIAL # 1036246741

MONITORING DATE 9-11-24 TIME: 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24 ppm	21.6 ppm	5
#2	25 ppm	22.5 ppm	5
#3	25 ppm	22.5 ppm	5
Calculate Response Time (1+2+3) / 3			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.18 ppm	24 ppm	1
#2	0.11 ppm	25 ppm	0
#3	0.07 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		1.3 #DIV/0! Must be less than 10%

Performed By Anthony Canales Date/Time 9-11-24-0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo

MODEL TVA1000 EQUIPMENT # 13 SERIAL # 1102746775

MONITORING DATE 9-11-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24 ppm	21.6 ppm	5
#2	25 ppm	22.5 ppm	5
#3	25 ppm	22.5 ppm	5
Calculate Response Time $\frac{(1+2+3)}{3}$			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.13 ppm	24 ppm	1
#2	0.07 ppm	25 ppm	0
#3	0.15 ppm	25 ppm	0
Calculate Precision $\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$			1.3 #DIV/0! Must be less than 10%

Performed By Daniel [illegible] Date/Time 9-11-24-0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo

MODEL TVA1000 EQUIPMENT # 16 SERIAL # 1102746776

MONITORING DATE 9-11-24 TIME 0550

Calibration Procedure:

1 Allow instrument to zero itself while introducing air
2 Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3 Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	23 ppm	20.7 ppm	7
#2	24 ppm	21.6 ppm	7
#3	25 ppm	22.5 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.14 ppm	23 ppm	2
#2	0.11 ppm	24 ppm	1
#3	0.09 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		4.0 #DIV/0! Must be less than 10%

Performed By: LUIS AVULARI Date/Time: 9-11-24 - 0550

RES

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo

MODEL TVA1000 EQUIPMENT # 11 SERIAL # 1036346772

MONITORING DATE 9-17-24 TIME 0550

Calibration Procedure:

1 Allow instrument to zero itself while introducing air
2 Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3 Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	**Downwind Background Reading:** (Highest in 30 seconds)	**Background Value:** (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	**Stabilized Reading Using Calibration Gas**	**90% of the Stabilized Reading**	**Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas**
#1	24 ppm	21.6 ppm	5
#2	25 ppm	22.5 ppm	5
#3	25 ppm	22.5 ppm	5
Calculate Response Time (1+2+3) / 3			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = **25 ppm**

Measurement #	**Meter Reading for Zero Air (A)**	**Meter Reading for Calibration Gas (B)**	**Calculate Precision [STD – (B)]**
#1	0.16 ppm	24 ppm	1
#2	0.10 ppm	25 ppm	0
#3	0.08 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		1.3 #DIV/0! Must be less than 10%

Performed By Jerry Munoz Date/Time 9-17-24 – 0550

RES

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo

MODEL TVA 1000 EQUIPMENT # 11 SERIAL # 1036346772

MONITORING DATE 9-18-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{\text{(Upwind + Downwind)}}{2}$
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24 ppm	21.6 ppm	6
#2	24 ppm	21.6 ppm	6
#3	25 ppm	22.5 ppm	6
Calculate Response Time $\frac{(1+2+3)}{3}$			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.11 ppm	24 ppm	1
#2	0.07 ppm	24 ppm	1
#3	0.05 ppm	25 ppm	0
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		2.6 #DIV/0! Must be less than 10%

Performed By Jerry Munoz Date/Time 9-18-24 - 0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo
MODEL TVA1000 EQUIPMENT # 12 SERIAL # 1036246741
MONITORING DATE 9-18-24 TIME 0850

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24 ppm	21.6 ppm	5
#2	25 ppm	22.5 ppm	5
#3	25 ppm	22.5 ppm	5
Calculate Response Time (1+2+3) / 3			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.20 ppm	24 ppm	1
#2	0.14 ppm	25 ppm	0
#3	0.07 ppm	25 ppm	0
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		1.3 #DIV/0! Must be less than 10%

Performed By Anthony Canelos Date/Time 9-18-24 0850

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Abcrond INSTRUMENT MAKE tHam

MODEL tvA1000 EQUIPMENT # 13 SERIAL # 1102746775

MONITORING DATE 9-18-24 TIME

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	23 ppm	20.7 ppm	7
#2	24 ppm	21.6 ppm	7
#3	25 ppm	22.5 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.17 ppm	23 ppm	2
#2	0.13 ppm	24 ppm	1
#3	0.09 ppm	25 ppm	0
Calculate Precision	[STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1		4.0 #DIV/0! Must be less than 10%

Performed By DAN IAKS Date/Time 9-18-24-0550

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo
MODEL TVA1000 EQUIPMENT # 16 SERIAL # 1102746776
MONITORING DATE 9-18-24 TIME 0550

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: **(Highest in 30 seconds)**	**Downwind Background Reading:** **(Highest in 30 seconds)**	**Background Value:** $\frac{\text{(Upwind + Downwind)}}{2}$
2.6 ppm	3.4 ppm	3.0 ppm

Background Value = 3.0 **ppm**

INSTRUMENT RESPONSE TIME RECORD

Measurement #	**Stabilized Reading Using Calibration Gas**	**90% of the Stabilized Reading**	**Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas**
#1	24 ppm	21.6 ppm	6
#2	25 ppm	22.5 ppm	6
#3	25 ppm	22.5 ppm	6
Calculate Response Time $\frac{(1+2+3)}{3}$			6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 **ppm**

Measurement #	**Meter Reading for Zero Air (A)**	**Meter Reading for Calibration Gas (B)**	**Calculate Precision [STD – (B)]**
#1	0.11 ppm	24 ppm	1
#2	0.08 ppm	25 ppm	0
#3	0.04 ppm	25 ppm	0
Calculate Precision $\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$			1.3 #DIV/0! Must be less than 10%

Performed By Luis Arevalo Date/Time 9-18-24 0550

CALIBRATION PRECISION TEST RECORD

Date: 8-15-24

Expiration Date (3 months): 11-15-24

Time: 10:50 AM _______ PM

Instrument Make: PhotoVac Model: Micro FID S/N: CZPD312

Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)

Meter Reading for Calibration Gas: 500 ppm (b)

Measurement #2:

Meter Reading for Zero Air: 0 ppm (c)

Meter Reading for Calibration Gas: 500 ppm (d)

Measurement #3:

Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 500 ppm (f)

Calculate Precision:

$$\frac{\{|(500) - (b)| + |(500) - (d)| + |(500) - (f)|\}}{3} \times \frac{1}{500} \times 100$$

______ % (must be < than 10%)

Performed By: Gary Carpenter

RESPONSE TIME TEST RECORD

Date: 8-15-24

Expiration Date (3 months): 11-15-24

Time: 10:47 AM _______ PM

Instrument Make: PhotoVac Model: Micro FID S/N: 6ZPD312

Measurement #1:

Stabilized Reading Using Calibration Gas: 500 ppm
90% of the Stabilized Reading: 450 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (a)

Measurement #2:

Stabilized Reading Using Calibration Gas: 500 ppm
90% of the Stabilized Reading: 450 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 501 ppm
90% of the Stabilized Reading: 451 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = \underline{\quad 2 \quad}$$ seconds (must be less than 30 seconds)

Performed By: Gary Carpenter

RESPONSE TIME TEST RECORD

Date: 10.10.24

Expiration Date (3 months): 1-10-25

Time: 10:12 AM ________ PM

Instrument Make: PhotoVac Model: Micro FID S/N: C2PD312

Measurement #1:

Stabilized Reading Using Calibration Gas: 500 ppm
90% of the Stabilized Reading: 450 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (a)

Measurement #2:

Stabilized Reading Using Calibration Gas: 501 ppm
90% of the Stabilized Reading: 451 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 501 ppm
90% of the Stabilized Reading: 451 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} =$$ 2 seconds (must be less than 30 seconds)

Performed By: ____________________

CALIBRATION PRECISION TEST RECORD

Date: 10-10-24

Expiration Date (3 months): 1-10-25

Time: 10:10 AM ______ PM

Instrument Make: Photo Vac Model: Micro FID S/N: CZPD312

Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)

Meter Reading for Calibration Gas: 500 ppm (b)

Measurement #2:

Meter Reading for Zero Air: 0 ppm (c)

Meter Reading for Calibration Gas: 500 ppm (d)

Measurement #3:

Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 500 ppm (f)

Calculate Precision:

$$\frac{\{|(500) - (b)| + |(500) - (d)| + |(500) - (f)|\}}{3} \times \frac{1}{500} \times 100$$

______ % (must be < than 10%)

Performed By: Gary Carpenter

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill Date: 10/4.24

Time: 8:55 AM _______ PM

Instrument Make: PhotoVac Model: Micro FID S/N: CZPD312

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.

   Stable Reading = 500 ppm
3. Adjust meter to read 500 ppm.

Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 1 ppm (a)
2. Downwind Reading (highest in 30 seconds): 0 ppm (b)

Calculate Background Value:

$\frac{(a) + (b)}{2}$ Background = .5 ppm

Performed By: Barry Carpenter

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill Date: 9-19-24

Time: ______ AM 1:15 PM

Instrument Make: PhotoVac Model: MicroFID S/N: C2PD312

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.

   Stable Reading = 501 ppm

3. Adjust meter to read 500 ppm.

Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 1.0 ppm (a)
2. Downwind Reading (highest in 30 seconds): 1.0 ppm (b)

Calculate Background Value:

$\frac{(a) + (b)}{2}$ Background = 1 ppm

Performed By: Garry Carpenter

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill Date: 8-15-24

Time: 10:53 AM ________ PM

Instrument Make: PhotoVac Model: MicroF-ID S/N: CZPD312

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.

   Stable Reading = 500 ppm
3. Adjust meter to read 500 ppm.

Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 1.4 ppm (a)
2. Downwind Reading (highest in 30 seconds): 1.6 ppm (b)

Calculate Background Value:

$\frac{(a) + (b)}{2}$ Background = 1.5 ppm

Performed By: Gary Carpenter

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill Date: 9-3-24

Time: 10:30 AM ______ PM

Instrument Make: PhotoVac Model: Micro FID S/N: CZPD312

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.

   Stable Reading = 500 ppm
3. Adjust meter to read 500 ppm.

Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 2 ppm (a)
2. Downwind Reading (highest in 30 seconds): 1 ppm (b)

Calculate Background Value:

$\frac{(a) + (b)}{2}$ Background = 1.5 ppm

Performed By: Barry Carpenter

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT CALIBRATION LOG

Site:

Purpose:

Operator:

Date: 9-7-24 Time: 0900

Model # TVA 1000

Serial # #10 1036346773

INSTRUMENT INTEGRITY CHECKLIST

Battery test	[✓ Pass] / Fail
Reading following ignition	2.6 ppm
Leak test	[✓ Pass] / Fail / NA
Clean system check (check valve chatter)	[✓ Pass] / Fail / NA
H_2 supply pressure gauge (acceptable range 9.5 - 12)	[✓ Pass] / Fail / NA
Date of last factory calibration	7-7-24
Factory calibration record w/instrument within 3 months	[✓ Pass] / Fail

INSTRUMENT CALIBRATION

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy
500	500	100%

RESPONSE TIME

Calibration Gas, ppm 500

90% of Calibration Gas, ppm 450

Time required to attain 90% of Cal Gas ppm

1. 6
2. 5
3. 5

Average 5.3

Equal to or less than 30 seconds? [✓ Y] N

Instrument calibrated to CH_4 gas.

Comments:

RES
Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site:

Purpose:

Operator:

Date: 9-7-24 Time: 0915

Model # TVA 1000

Serial # #11 1036346774

INSTRUMENT INTEGRITY CHECKLIST

Battery test	[✓ Pass] / Fail
Reading following ignition	2.5 ppm
Leak test	[✓ Pass] / Fail / NA
Clean system check (check valve chatter)	[✓ Pass] / Fail / NA
H_2 supply pressure gauge (acceptable range 9.5 - 12)	[✓ Pass] / Fail / NA
Date of last factory calibration	7-7-24
Factory calibration record w/instrument within 3 months	[✓ Pass] / Fail

INSTRUMENT CALIBRATION

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy
500	500	100%

RESPONSE TIME

Calibration Gas, ppm 500

90% of Calibration Gas, ppm 450

Time required to attain 90% of Cal Gas ppm

1. 6
2. 6
3. 5

Average 5.6

Equal to or less than 30 seconds? [✓ Y] N

Instrument calibrated to CH_4 gas.

Comments:

RES
Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site:

Purpose:

Operator:

Date: 9-7-24 Time: 0930

Model # TVA 1000

Serial # #12 1036246741

INSTRUMENT INTEGRITY CHECKLIST

Battery test	[✓ Pass] / Fail
Reading following ignition	2.3 ppm
Leak test	[✓ Pass] / Fail / NA
Clean system check (check valve chatter)	[✓ Pass] / Fail / NA
H_2 supply pressure gauge (acceptable range 9.5 - 12)	[✓ Pass] / Fail / NA
Date of last factory calibration	7-7-24
Factory calibration record w/instrument within 3 months	[✓ Pass] / Fail

INSTRUMENT CALIBRATION

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy
500	500	100%

RESPONSE TIME

Calibration Gas, ppm 500
90% of Calibration Gas, ppm 450
Time required to attain 90% of Cal Gas ppm
1. 6
2. 6
3. 5

Average 5.6
Equal to or less than 30 seconds? [✓ Y] N
Instrument calibrated to CH4 gas.

Comments:

RES
Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site:

Purpose:

Operator:

Date: 9-7-24 Time: 1000

Model # TVA 1000

Serial # #13 1102746775

INSTRUMENT INTEGRITY CHECKLIST	
Battery test	[✓ Pass] / Fail
Reading following ignition	2.4 ppm
Leak test	[✓ Pass] / Fail / NA
Clean system check (check valve chatter)	[✓ Pass] / Fail / NA
H_2 supply pressure gauge (acceptable range 9.5 - 12)	[✓ Pass] / Fail / NA
Date of last factory calibration	7-7-24
Factory calibration record w/instrument within 3 months	[✓ Pass] / Fail

INSTRUMENT CALIBRATION

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy
500	500	100%

RESPONSE TIME

Calibration Gas, ppm 500

90% of Calibration Gas, ppm 450

Time required to attain 90% of Cal Gas ppm

1. 7
2. 6
3. 6

Average 6.3

Equal to or less than 30 seconds? [✓ Y] N

Instrument calibrated to CH_4 gas.

Comments:

RES
Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site:

Purpose:

Operator:

Date: 9-7-24

Time: 1045

Model # TVA 1000

Serial # #16 1102746776

INSTRUMENT INTEGRITY CHECKLIST	
Battery test	[✓ Pass] / Fail
Reading following ignition	2.3 ppm
Leak test	[✓ Pass] / Fail / NA
Clean system check (check valve chatter)	[✓ Pass] / Fail / NA
H_2 supply pressure gauge (acceptable range 9.5 - 12)	[✓ Pass] / Fail / NA
Date of last factory calibration	7-7-24
Factory calibration record w/instrument within 3 months	[✓ Pass] / Fail

INSTRUMENT CALIBRATION

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy
500	500	100

RESPONSE TIME

Calibration Gas, ppm 500

90% of Calibration Gas, ppm 450

Time required to attain 90% of Cal Gas ppm

1. 6
2. 5
3. 6

Average 5.6

Equal to or less than 30 seconds? [✓ Y] N

Instrument calibrated to CH4 gas.

Comments:

RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit # 10

SERIAL NUMBER: 1036346773

TECHNICIAN:

DATE: 7-7-24

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID

METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	499	+/- 125
10000	10000	10,112	+/- 2500
< 1	ZERO GAS	0.54	< 3

PID

ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.

RES
Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #11

SERIAL NUMBER: 1036346774

TECHNICIAN: DATE: 7-7-24

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0,53	< 3

PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.

RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: NTES vault #12

SERIAL NUMBER: 1036246741

TECHNICIAN:

DATE: 7-7-24

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.63	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.

RES
Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Cart #13

SERIAL NUMBER: 1102746775

TECHNICIAN:

DATE: 7-2-24

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,003	+/- 2500
< 1	ZERO GAS	0.01	< 3

PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.

RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #16

SERIAL NUMBER: 1102746776

TECHNICIAN:

DATE: 7-7-24

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.63	< 3

PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.

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Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd
Sterling Hights MI 48312

Cust Number 07152
Order Number 75836320
PO Number 04C23328

Lot Number 4-236-82
Norlab Part# J1002
Cylinder Size 103 Liter
Number of Cyl 2

Customer Part# N/A

Date on Manufacture 8/29/2024
Expires 08/2028
Analytical Accuracy Certified

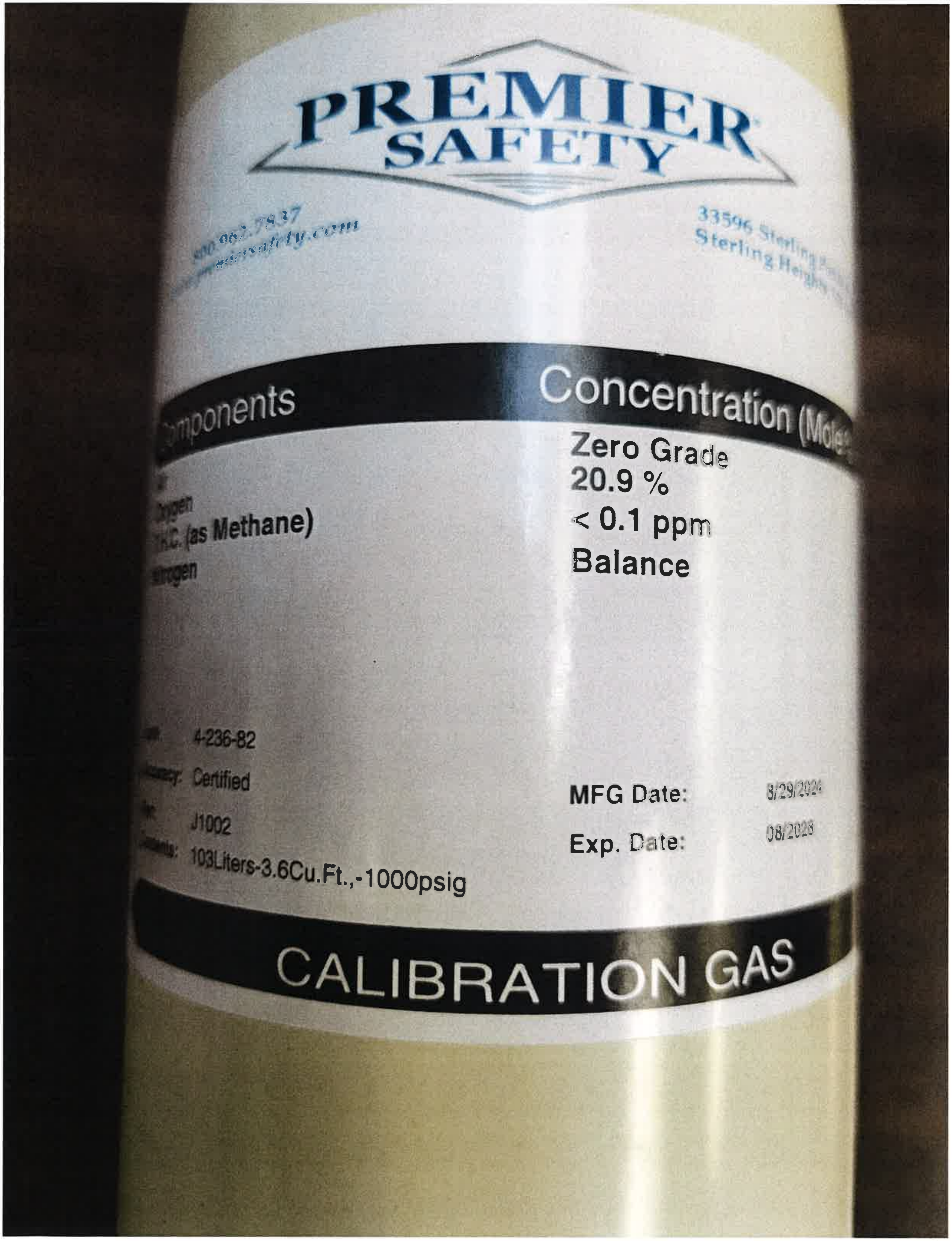
	Reported	**Requested**
Component	**Concentration**	**Concentration**
Air	Zero Grade	Zero Grade
Oxygen	20.9 %	20.9 %
T.H.C. (as Methane)	< 0.1 ppm	< 0.1 ppm
Nitrogen	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

Minor constituents tested with standards traceable to NIST by mass or comparison to SRM's (Standard Reference Materials).

NIST Traceable Numbers are available upon request.

Approved: David Reed Date Signed: 8/29/2024
David Reed
Lab Technician



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33596 Sterling
Sterling Heights

mponents	Concentration (Mol
	Zero Grade
ygen	20.9 %
H.C. (as Methane)	< 0.1 ppm
trogen	Balance

4-236-82
ccuracy: Certified
J1002
ntents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 8/29/2024
Exp. Date: 08/2028

CALIBRATION GAS

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Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd
Sterling Hights MI 48312

Cust Number	07152
Order Number	69679439
PO Number	04906817

Lot Number	2-154-85
Norlab Part#	J1002
Cylinder Size	103 Liter
Number of Cyl	1

Date on Manufacture	6/13/2022
Expires	06/2025
Analytical Accuracy	Certified

Customer Part# N/A

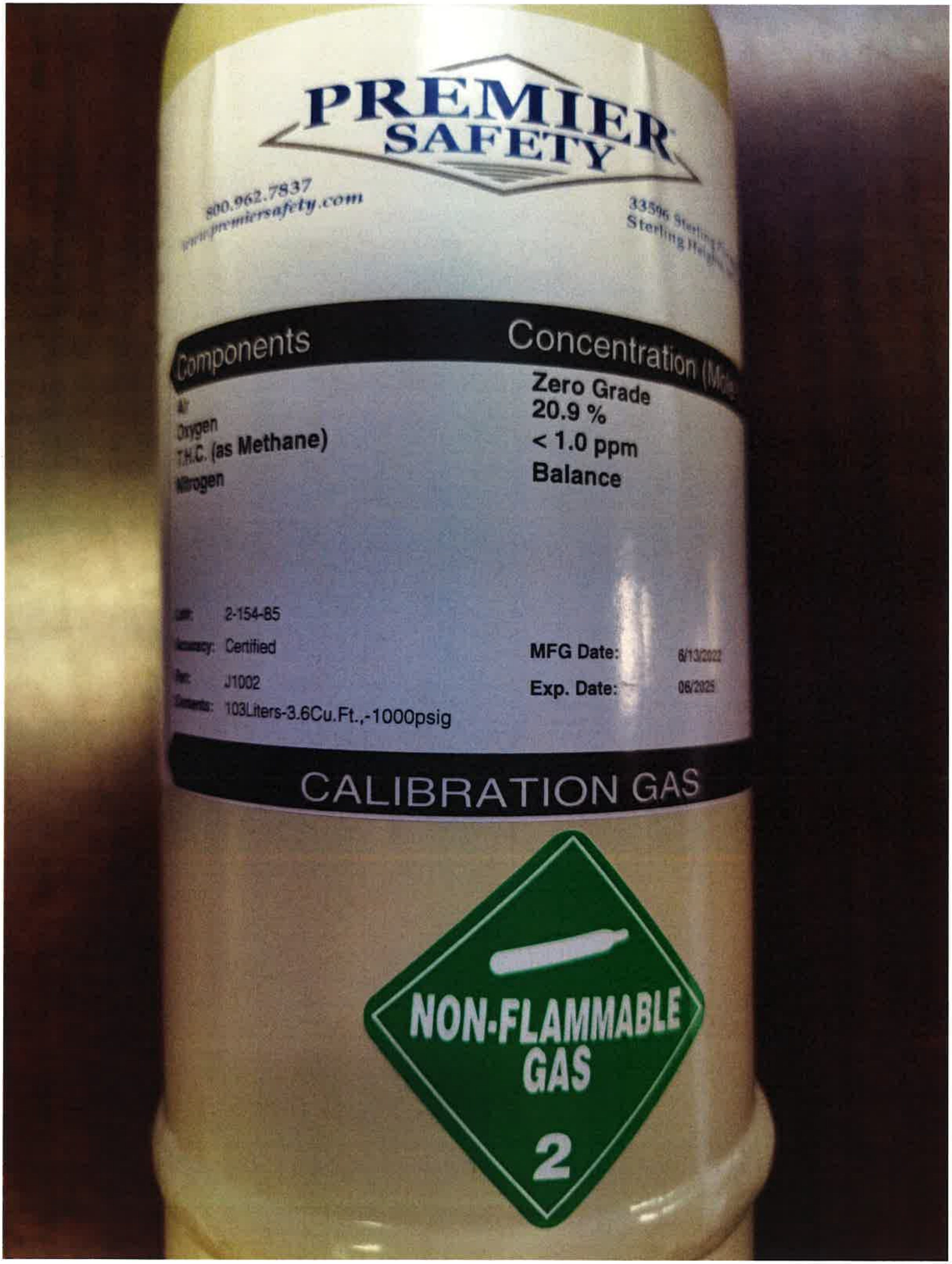
Component	**Reported Concentration**	**Requested Concentration**
Air	Zero Grade	Zero Grade
Oxygen	20.9 %	20.9 %
T.H.C. (as Methane)	< 1.0 ppm	< 1.0 ppm
Nitrogen	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

Minor constituents tested with standards traceable to NIST by mass or comparison to SRM's (Standard Reference Materials).

NIST Traceable Numbers are available upon request.

Approved: ______________________ Date Signed: 6/13/2022
David Reed
Lab Technician



PREMIER
SAFETY

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Components	Concentration (Mo
Air	Zero Grade
Oxygen	20.9 %
T.H.C. (as Methane)	< 1.0 ppm
Nitrogen	Balance

Lot: 2-154-85
Accuracy: Certified
[illegible]: J1002
Contents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 6/13/2022
Exp. Date: 06/2025

CALIBRATION GAS

NON-FLAMMABLE
GAS
2

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CERTIFICATE OF ANALYSIS

Premier Safety & Service

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Sterling Hights MI 48312

Cust Number	07152
Order Number	75275610
PO Number	04B84126

Lot Number	4-176-81
Norlab Part#	J197125PA
Cylinder Size	103 Liter
Number of Cyl	3

Date on Manufacture	6/25/2024
Expires	06/2028
Analytical Accuracy	+/- 5 %

Customer Part# N/A

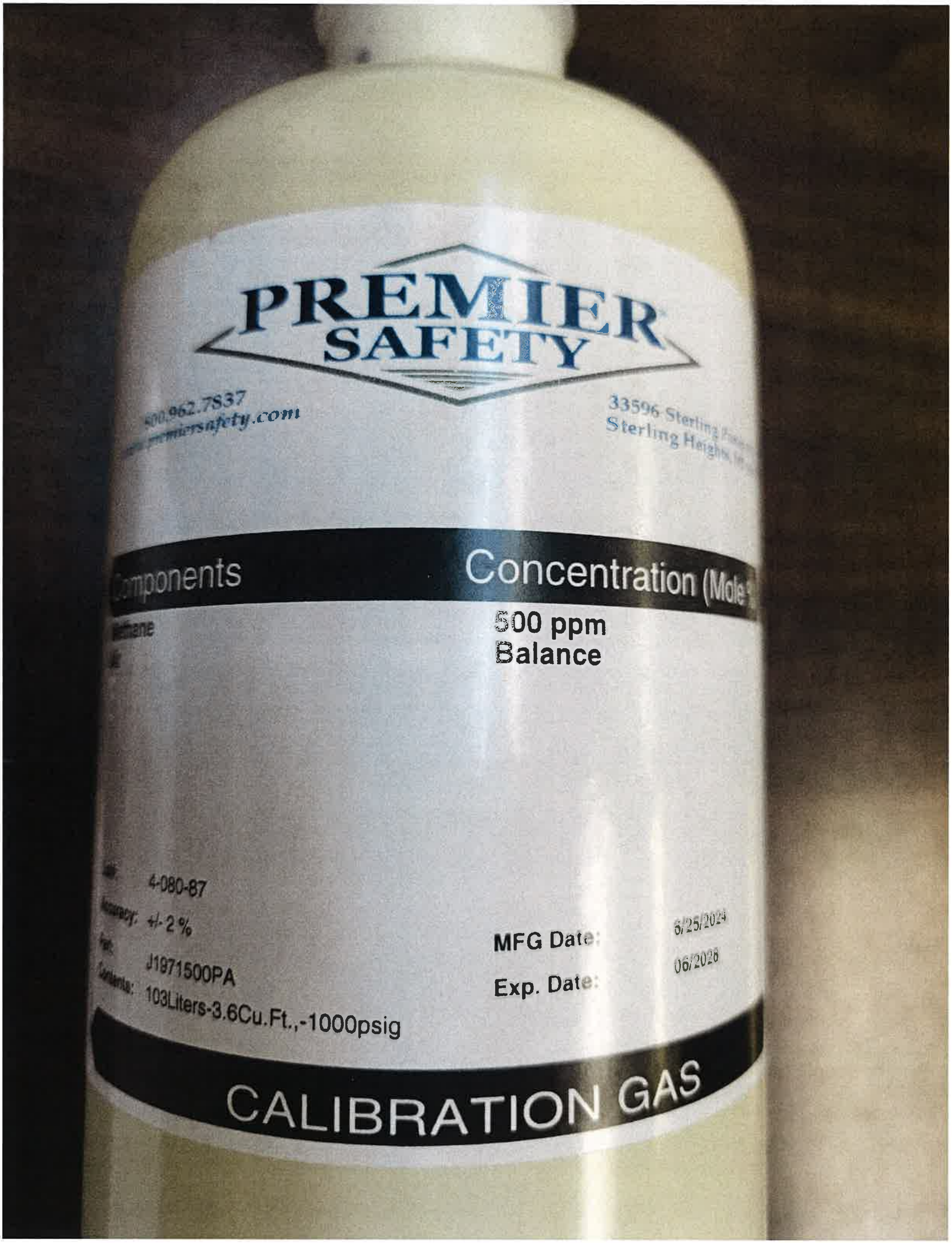
Component	**Reported Concentration**	**Requested Concentration**
Methane	25 ppm	25 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs. NIST Traceable Numbers are available upon request.

Approved: ______________________ Date Signed: 6/25/2024
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-3038 • 800-657-6672



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CERTIFICATE OF ANALYSIS

Composition	Certification	Analytical Accuracy
Methane	25 ppm	± 5%
Air	Balance	

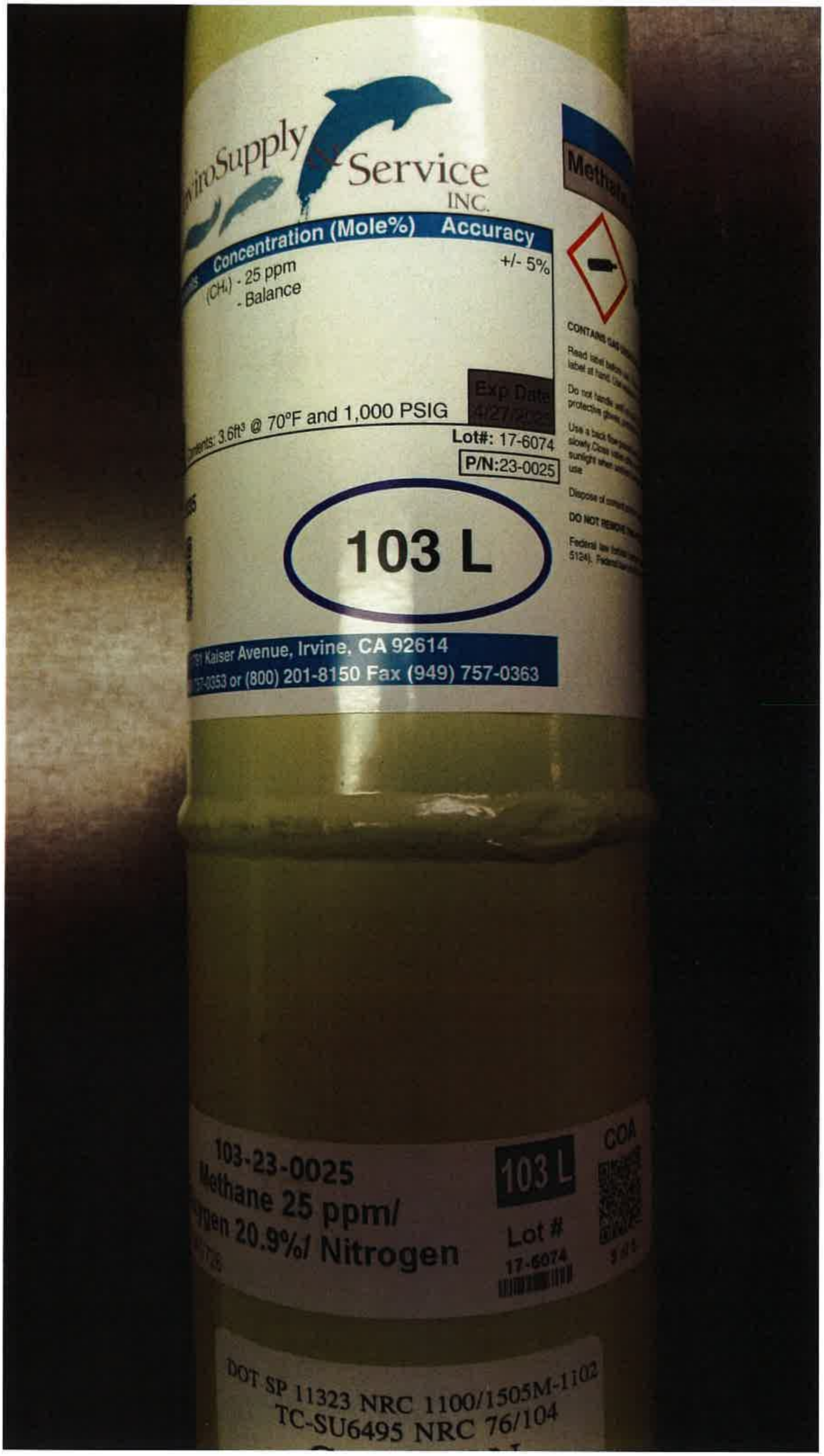
Lot # 17-6074

Mfg. Date: 10/16/2017
Parent Cylinder ID Number: 17161

Method of Preparation:
Gravimetric/Pressure Transfilled

Method of Analysis:
The parent mix was prepared gravimetrically and is traceable to the NIST by certified weights (ID #CA10814) used to calibrate the scale.

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 10/16/2017


viroSupply
Service
INC.
Concentration (Mole%)
Accuracy
(CH₄) - 25 ppm
- Balance
+/- 5%
Exp Date
4/27/2025
ntents: 3.6ft³ @ 70°F and 1,000 PSIG
Lot#: 17-6074
P/N:23-0025
103 L
Kaiser Avenue, Irvine, CA 92614
757-0053 or (800) 201-8150 Fax (949) 757-0363
Metha
CONTAINS GAS
DO NOT REMOVE
103-23-0025
Methane 25 ppm/
ygen 20.9%/ Nitrogen
103 L
Lot #
17-6074
COA
DOT SP 11323 NRC 1100/1505M-1102
TC-SU6495 NRC 76/104

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CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd
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Cust Number	07152
Order Number	73732858
PO Number	04B70733

Lot Number	3-340-62
Norlab Part#	J197125PA
Cylinder Size	103 Liter
Number of Cyl	5

Date on Manufacture	12/7/2023
Expires	12/2027
Analytical Accuracy	+/- 5 %

Customer Part# N/A

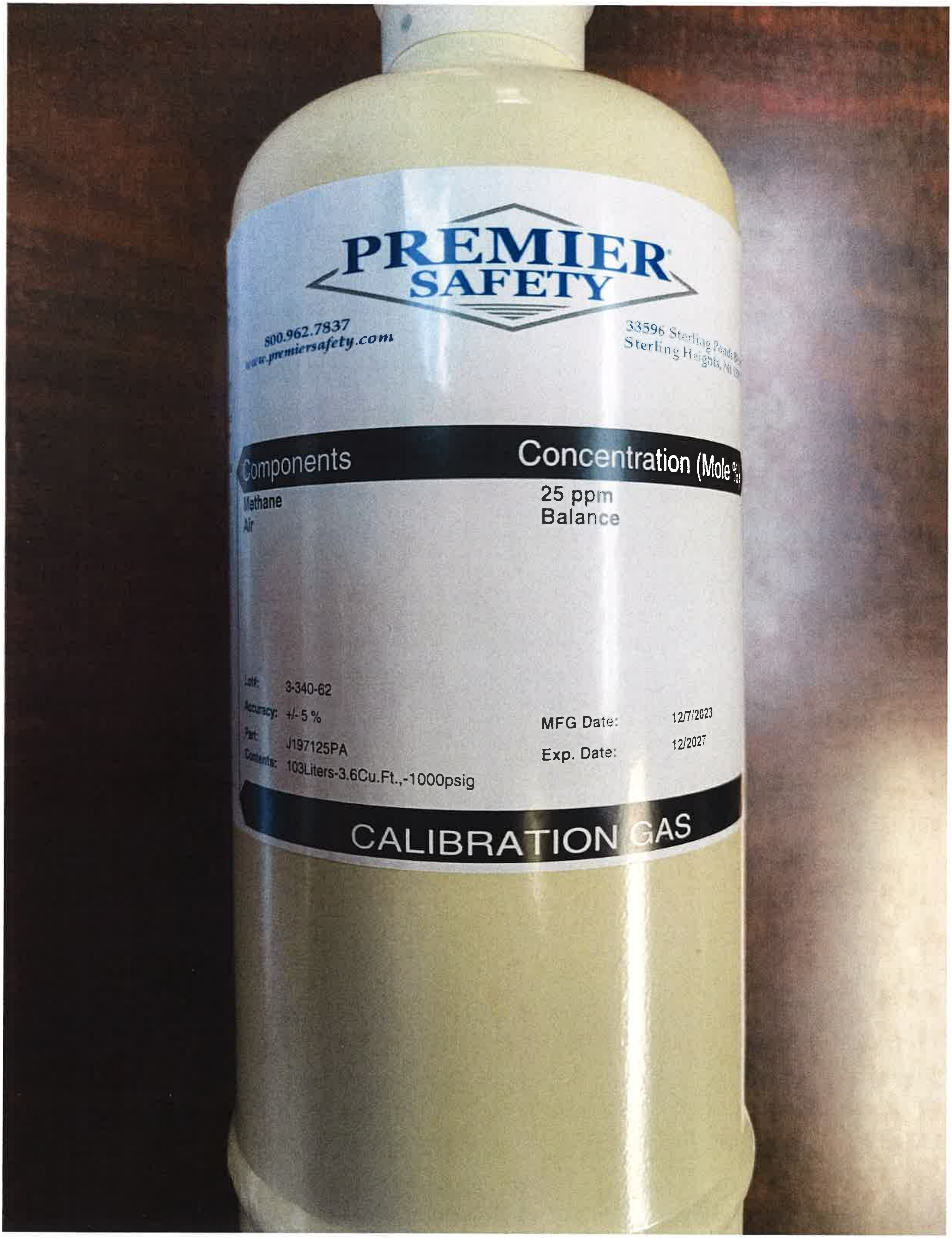
Component	**Reported Concentration**	**Requested Concentration**
Methane	25 ppm	25 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs. NIST Traceable Numbers are available upon request.

Approved: ______________________ Date Signed: 12/7/2023
Aaron Schwenken
Lab Manager

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-3038 • 800-657-6672



800.962.7837
www.premiersafety.com

33596 Sterling Ponds
Sterling Heights, MI

Components	Concentration (Mole
Methane	25 ppm
Air	Balance

Lot#: 3-340-62
Accuracy: +/- 5 %
Part: J197125PA
Contents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 12/7/2023
Exp. Date: 12/2027

CALIBRATION GAS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd
Sterling Hights MI 48312

Cust Number 07152
Order Number 75275610
PO Number 04B84126

Lot Number 4-080-87
Norlab Part# J1971500PA
Cylinder Size 103 Liter
Number of Cyl 5

Customer Part# N/A

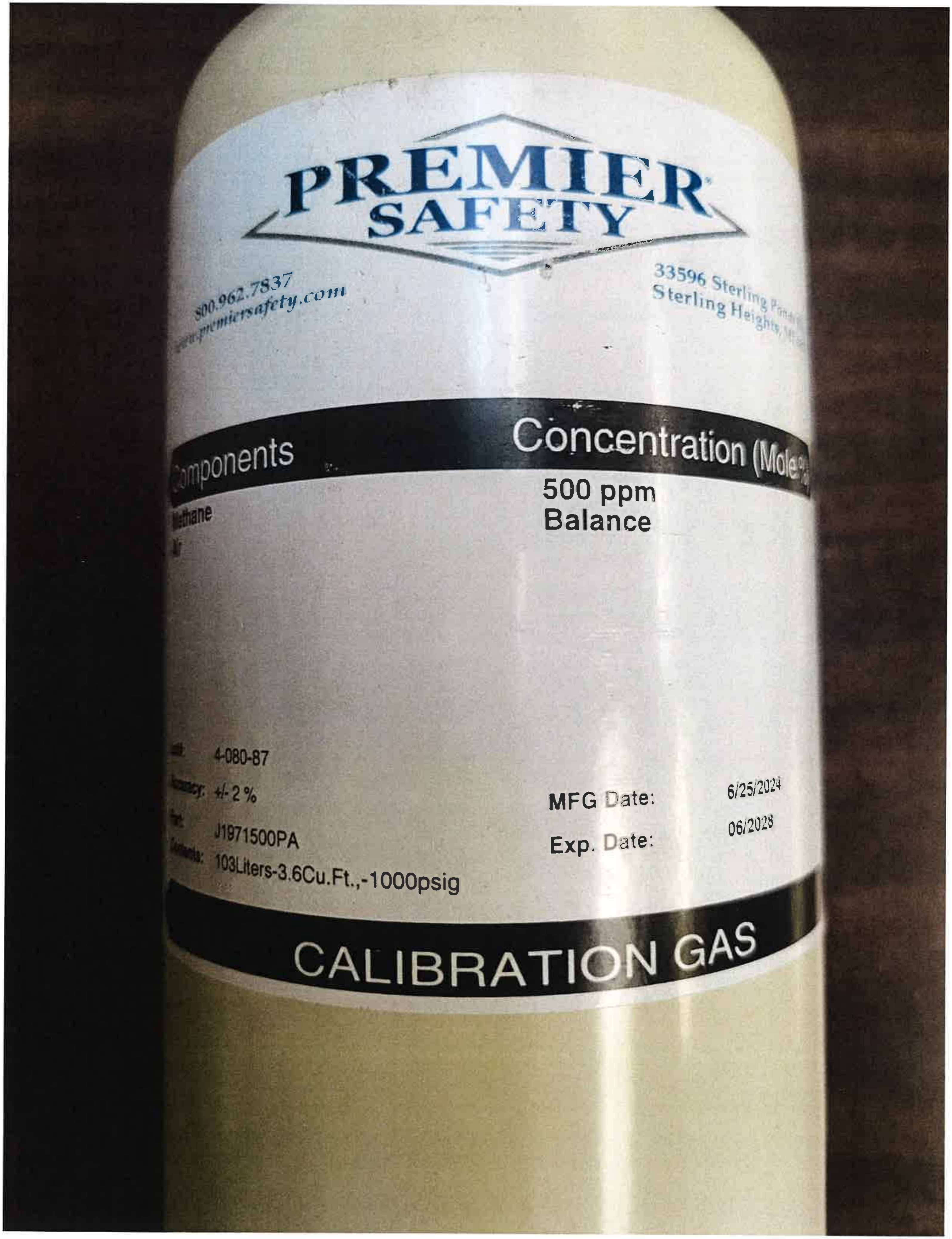
Date on Manufacture 6/25/2024
Expires 06/2028
Analytical Accuracy +/- 2 %

Component	**Reported Concentration**	**Requested Concentration**
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs. NIST Traceable Numbers are available upon request.

Approved: Date Signed: 6/25/2024
David Reed
Lab Technician



PREMIER SAFETY

800.962.7837
premiersafety.com

33596 Sterling Pon
Sterling Heights, MI

omponents	Concentration (Mole
Methane	500 ppm
Ai	Balance

4-080-87
ccuracy: +/- 2 %
J1971500PA
ontents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 6/25/2024
Exp. Date: 06/2028

CALIBRATION GAS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd
Sterling Hights MI 48312

Cust Number	07152
Order Number	69671309
PO Number	08361523

Lot Number	2-108-80
Norlab Part#	J1971500PA
Cylinder Size	103 Liter
Number of Cyl	1
Customer Part#	N/A

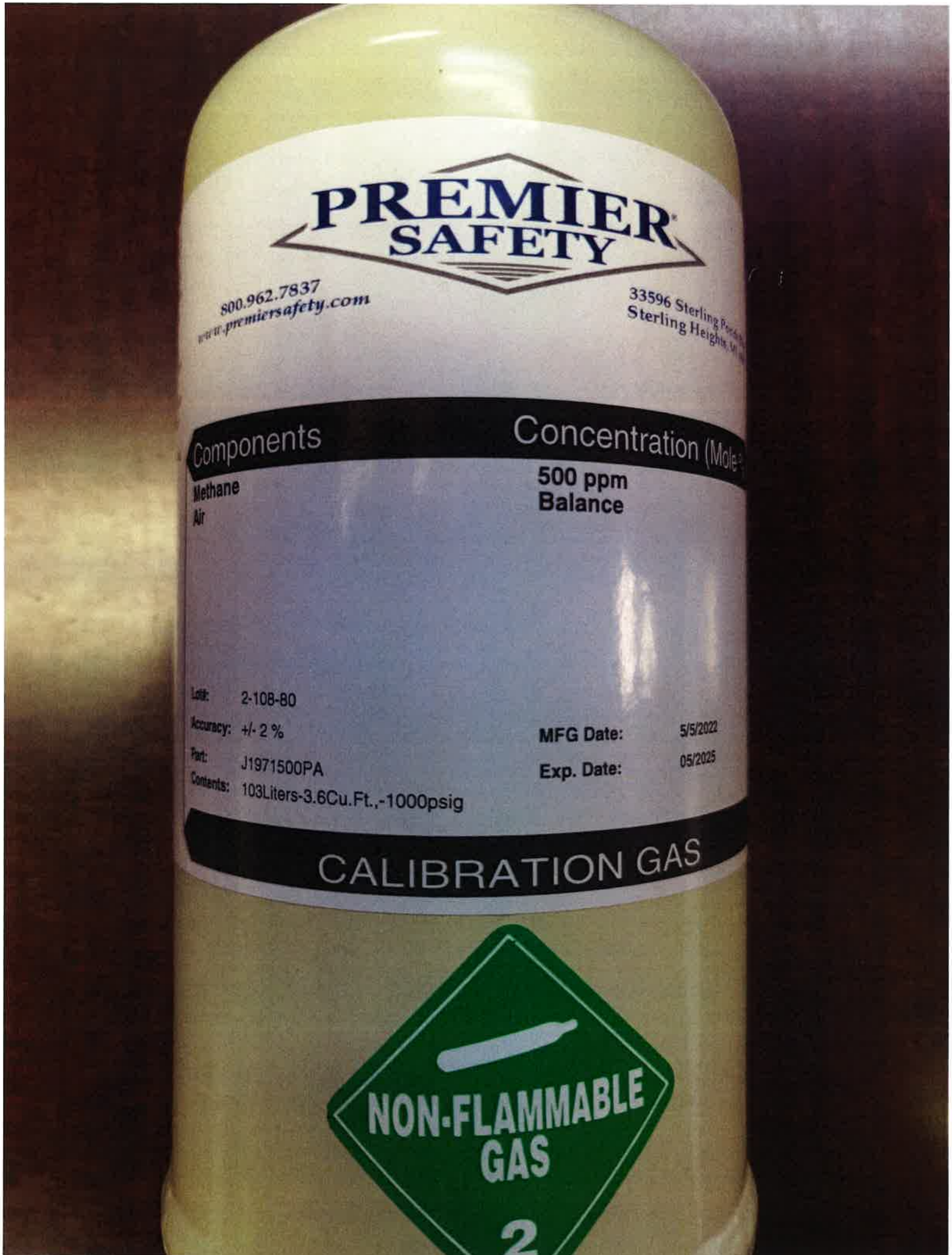
Date on Manufacture	6/10/2022
Expires	06/2025
Analytical Accuracy	+/- 2 %

Component	**Reported Concentration**	**Requested Concentration**
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs. NIST Traceable Numbers are available upon request.

Approved: ______________________ Date Signed: 6/10/2022
David Reed
Lab Technician



PREMIER SAFETY

800.962.7837
www.premiersafety.com

33596 Sterling
Sterling Heights, MI

Components	Concentration (Mole
Methane	500 ppm
Air	Balance

Lot#: 2-108-80

Accuracy: +/- 2 %

Part: J1971500PA

Contents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 5/5/2022

Exp. Date: 05/2025

CALIBRATION GAS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Norco, Inc
Twin Falls Warehouse
203 S. Park Ave. West
Twin Falls, ID 83301

Cust Number	WH012
Order Number	71846398
PO Number	04A35563

Lot Number	3-088-88
Norlab Part#	J1971500PA
Cylinder Size	103 Liter
Number of Cyl	5

Date on Manufacture	4/7/2023
Expires	04/2027
Analytical Accuracy	+/- 2 %

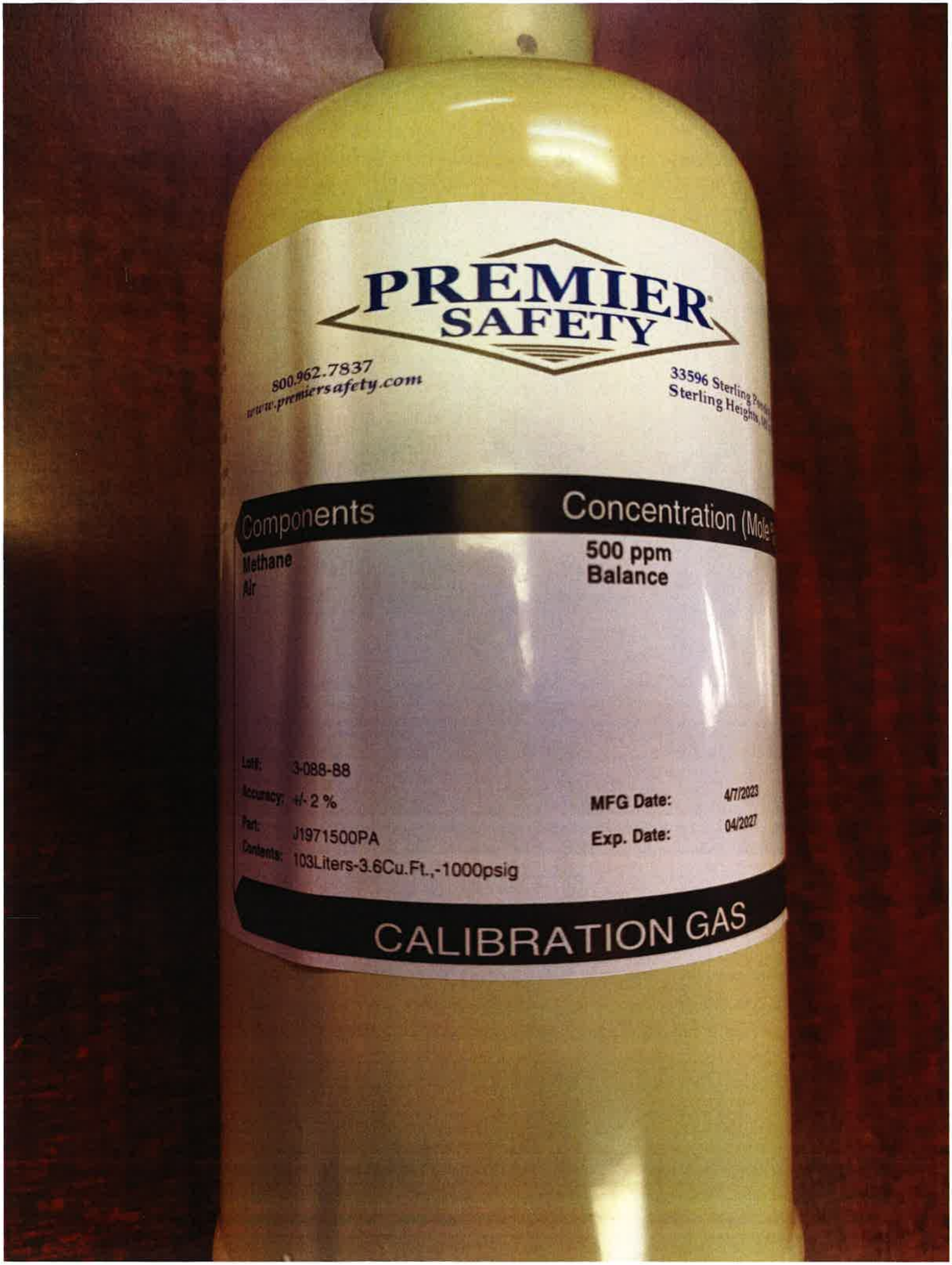
Customer Part# N/A

Component	**Reported Concentration**	**Requested Concentration**
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs. NIST Traceable Numbers are available upon request.

Approved: _______________ Date Signed: 4/7/2023
Jeff Korn
Lab Technician



PREMIER SAFETY

800.962.7837
www.premiersafety.com

33596 Sterling
Sterling Heights,

Components	Concentration (Mole
Methane	500 ppm
Air	Balance

Lot#: 3-088-88
Accuracy: +/- 2 %
Part: J1971500PA
Contents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 4/7/2023
Exp. Date: 04/2027

CALIBRATION GAS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd
Sterling Hights MI 48312

Cust Number	07152
Order Number	73732858
PO Number	04B70733

Lot Number	3-340-61
Norlab Part#	J1971500PA
Cylinder Size	103 Liter
Number of Cyl	5

Date on Manufacture	12/7/2023
Expires	12/2027
Analytical Accuracy	+/- 2 %

Customer Part# N/A

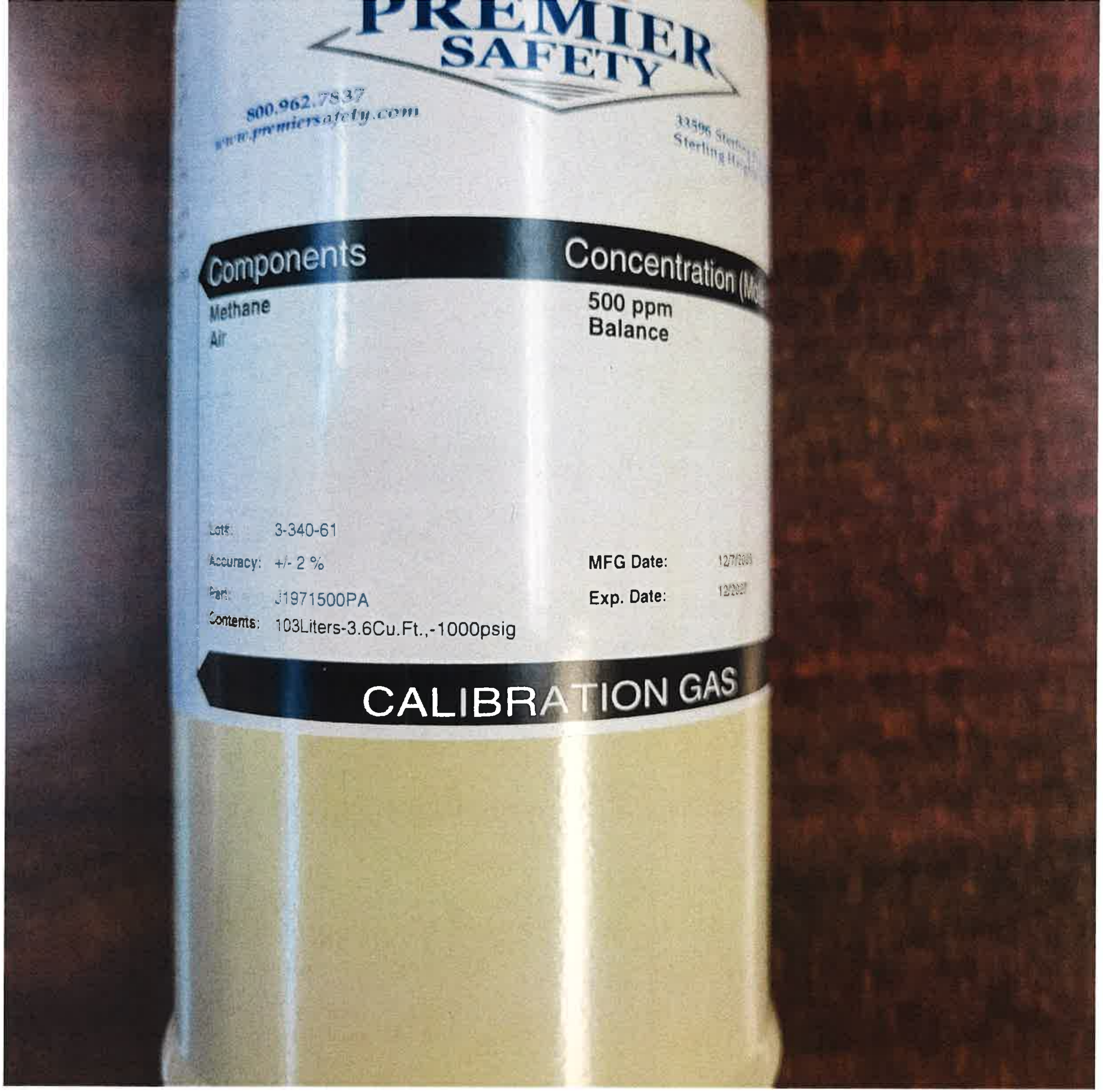
Component	**Reported Concentration**	**Requested Concentration**
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs. NIST Traceable Numbers are available upon request.

Approved: ______________________ Date Signed: 12/7/2023

Aaron Schwenken
Lab Manager



PREMIER SAFETY

800.962.7837
www.premiersafety.com

33596 Ster
Sterling Hei

Components	Concentration (Mo
Methane	500 ppm
Air	Balance

Lots: 3-340-61

Accuracy: +/- 2 %

Part: J1971500PA

Contents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 12/7/20[illegible]

Exp. Date: 12/20[illegible]

CALIBRATION GAS

APPENDIX K
COMPONENT LEAK REPORTS

Table C.1

AB-32 Component Leak Monitoring

Summary of Component Leaks Greater than 500 ppmv

2024 QUARTER: 3

INITIAL MONITORING PERFORMED BY: ALRRF

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: Altamont Landfill and Resource Recovery Facility

Location	Initial Monitoring			Corrective Action		10-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	8/15/2024	ND						
A16- Flare Station	8/15/2024	ND						
S6 and S7 Turbines	9/3/2024	ND						

Note: LNG Plant was has been decommissioned.

ND= No exceedances detected

Table C.2
BAAQMD Component Leak Monitoring
Summary of Component Leaks Greater than 1,000 ppmv

2024 QUARTER: **3**

INITIAL MONITORING PERFORMED BY: ALRRF

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: **Altamont Landfill and Resource Recovery Facility**

Location	Initial Monitoring			Corrective Action		7-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	8/15/2024	ND						
A16- Flare Station	8/15/2024	ND						
S6 and S7 Turbines	9/3/2024	ND						

Note: LNG Plant was has been decommissioned.

ND= No exceedances detected

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	Turbine Gas skids
INSTRUMENT:	FID
MAKE:	Photovac
MODEL:	MicroFiD I/S
S/N:	CZPD312
DATE OF SAMPLING:	9/3/2024
TECHNICIAN:	L.LaCerra

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Roots Flex Couplings			Howden Compressor	InterstageVessel			Oil/Gas Separator Vessel			Gas Separator Vessel		Cooling Towers/ Heat Exchanger Piping		
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 1	# 2	# 3
Compressor skid # 1																					
TEST DATE	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24
LEAK CONCENTRATION FOUND (ppm)	10.0 PPM			11.0 PPM			4.0 PPM			4.0 PPM	2.0 PPM			6.0 PPM			1.0 PPM		3.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					
Compressor skid # 2																					
TEST DATE	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24	9/3/24
LEAK CONCENTRATION FOUND (ppm)	7.0 PPM			4.0 PPM			12.0 PPM			2.0 PPM	3.0 PPM			9.0 PPM			5.0 PPM		5.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					

Comments:

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT: Turbine Gas skids
INSTRUMENT: FID
MAKE: Photovac
MODEL: MicroFiD I/S
S/N: CZPD312
DATE OF SAMPLING: 9/3/2024
TECHNICIAN: L.LaCerra

LOCATION OF LEAK(S)	Bolted connections			Pipes (flanged, unions)			Inlet piping and valves			Sensors, transducers			Propane tank & piping			Gas manifold and piping				
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 3	# 4	# 5
Turbine 1																				
TEST DATE	9/3/24			9/3/24			9/3/24			9/3/24			9/3/24			9/3/24				
LEAK CONCENTRATION FOUND (ppm)	2.0 PPM			2.0 PPM			7.0 PPM			3.0 PPM			2.0 PPM			6.0 PPM				
ACTION TAKEN																				
REPAIR DATE																				
RE-TEST DATE																				
RE-TEST CONCENTRATION (ppm)																				
Turbine 2	9/3/24			9/3/24			9/3/24			9/3/24			9/3/24			9/3/24				
TEST DATE																				
LEAK CONCENTRATION FOUND (ppm)	5.0 PPM			7.0 PPM			5.0 PPM			5.0 PPM			6.0 PPM			4.0 PPM				
ACTION TAKEN																				
REPAIR DATE																				
RE-TEST DATE																				
RE-TEST CONCENTRATION (ppm)																				

Comments:

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT: A16 Flare
INSTRUMENT: Photovac
MAKE: Thermo scientific
MODEL: Micro FID
S/N: CZPD312
DATE OF SAMPLING: 08.15.24
TECHNICIAN: Garry Carpenter

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Flare Valves, Sensors and Piping			Blowers			LNG Valves, Sensors and Piping to LNG Isolation Valve			Header to Landfill			Propane Tanks and Piping		IC Engine Valves and Sensors			IC Engine Compression Skid			IC Engine Manifold Piping and Metal Container		
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	#2	#3	# 1	# 2	# 3	#1	# 2	#1	#2	#3	#1	#2	#3	#1	#2	#3
A-16																													
TEST DATE	08.15.24			08.15,24			08.15,24			08.15,24			08.15,24			08.15,24			08.15,24		N/A			N/A			N/A		
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D			N/D			N/D										
ACTION TAKEN																													
REPAIR DATE																													
RE-TEST DATE																													
RE-TEST CONCENTRATION (ppm)																													

Comments: LNG Plant was decommissioned in 2023.

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT: A15
INSTRUMENT: FID
MAKE: Photovac
MODEL: Micro FID
S/N: CZPD312
DATE OF SAMPLING: 08.15,24
TECHNICIAN: Garry Carpenter

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Discharge Blower			Flame Arrestor			Header Pipe to Flare & Sensors		Propane Tank and Piping	
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 1	# 2
A-15 Flare Station																
TEST DATE	08.15,24			08.15,24			08.15,24			08.15,24			08.15,24		08.15,24	
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D		N/D	
ACTION TAKEN																
REPAIR DATE																
RE-TEST DATE																
RE-TEST CONCENTRATION (ppm)																

Comments: **Bolt connections (expansion chamber) were tightened.**

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

Table C.1
AB-32 Component Leak Monitoring
Summary of Component Leaks Greater than 500 ppmv

2024 QUARTER: **4**

INITIAL MONITORING PERFORMED BY: ALRRF

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: **Altamont Landfill and Resource Recovery Facility**

Location	Initial Monitoring			Corrective Action		10-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	10/10/2024	ND						
A16- Flare Station	10/10/2024	ND						
S6 and S7 Turbines	11/4/2024	ND						

Note: LNG Plant was has been decommissioned.

ND= No exceedances detected

Table C.2
BAAQMD Component Leak Monitoring
Summary of Component Leaks Greater than 1,000 ppmv

2024 QUARTER: **4**

INITIAL MONITORING PERFORMED BY: ALRRF

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: **Altamont Landfill and Resource Recovery Facility**

Location	Initial Monitoring			Corrective Action		7-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	10/10/2024	ND						
A16- Flare Station	10/10/2024	ND						
S6 and S7 Turbines	11/4/2024	ND						

Note: LNG Plant was has been decommissioned.

ND= No exceedances detected

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	A15
INSTRUMENT:	FID
MAKE:	Photovac
MODEL:	Micro FID
S/N:	CZPD312
DATE OF SAMPLING:	10.10.24
TECHNICIAN:	Garry Carpenter

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Discharge Blower			Flame Arrestor			Header Pipe to Flare & Sensors		Propane Tank and Piping	
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 1	# 2
A-15 Flare Station																
TEST DATE	10.10.24			10.10.24			10.10.24			10.10.24			10.10.24		10.10.24	
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D		N/D	
ACTION TAKEN																
REPAIR DATE																
RE-TEST DATE																
RE-TEST CONCENTRATION (ppm)																

Comments: **Bolt connections (expansion chamber) were tightened.**

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	A16 Flare
INSTRUMENT:	Photovac
MAKE:	Thermo scientific
MODEL:	Micro FID
S/N:	CZPD312
DATE OF SAMPLING:	10.10.24
TECHNICIAN:	Garry Carpenter

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Flare Valves, Sensors and Piping			Blowers			LNG Valves, Sensors and Piping to LNG Isolation Valve			Header to Landfill			Propane Tanks and Piping		IC Engine Valves and Sensors			IC Engine Compression Skid			IC Engine Manifold Piping and Metal Container		
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	#2	#3	# 1	# 2	# 3	#1	# 2	#1	#2	#3	#1	#2	#3	#1	#2	#3
A-16																													
TEST DATE	10.10.24			10.10.24			10.10.24			10.10.24			10.10.24			10.10.24			10.10.24		N/A			N/A			N/A		
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D			N/D			N/D	N/D									
ACTION TAKEN																													
REPAIR DATE																													
RE-TEST DATE																													
RE-TEST CONCENTRATION (ppm)																													
LNG Plant																													

Comments: LNG Plant was decommissioned.

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	Turbine Gas skids
INSTRUMENT:	Toxic Vapor Analyzer
MAKE:	Thermo Scientific
MODEL:	TVA1000B-81020
S/N:	936338909
DATE OF SAMPLING:	11/4/2024
TECHNICIAN:	L.LaCerra

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Roots Flex Couplings			Howden Compressor	InterstageVessel			Oil/Gas Separator Vessel			Gas Separator Vessel		Cooling Towers/ Heat Exchanger Piping		
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 1	# 2	# 3
Compressor skid # 1																					
TEST DATE	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24
LEAK CONCENTRATION FOUND (ppm)	13.0 PPM			9.0 PPM			2.0 PPM			2.0 PPM	11.0 PPM			16.0 PPM			1.0 PPM		2.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					
Compressor skid # 2																					
TEST DATE	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24	11/4/24
LEAK CONCENTRATION FOUND (ppm)	6.0 PPM			3.0 PPM			10.0 PPM			2.0 PPM	14.0 PPM			6.0 PPM			3.0 PPM		2.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					

Comments:

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.

Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).

Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

QUARTERLY LFG COMPONENT LEAK MONTORING

EQUIPMENT:	Turbine Gas skids
INSTRUMENT:	Toxic Vapor Analyzer
MAKE:	Thermo Scientific
MODEL:	TVA1000B-81020
S/N:	936338909
DATE OF SAMPLING:	11/4/2024
TECHNICIAN:	L.LaCerra

LOCATION OF LEAK(S)	Bolted connections			Pipes (flanged, unions)			Inlet piping and valves			Sensors, transducers			Propane tank & piping			Gas manifold and piping				
	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	#1	# 2	# 3	# 1	# 2	# 3	# 4	# 5
Turbine 1																				
TEST DATE	11/4/24			11/4/24			11/4/24			11/4/24			11/4/24			11/4/24				
LEAK CONCENTRATION FOUND (ppm)	2.0 PPM			4.0 PPM			6.0 PPM			4.0 PPM			2.0 PPM			2.0 PPM				
ACTION TAKEN																				
REPAIR DATE																				
RE-TEST DATE																				
RE-TEST CONCENTRATION (ppm)																				
Turbine 2	11/4/24			11/4/24			11/4/24			11/4/24			11/4/24			11/4/24				
TEST DATE																				
LEAK CONCENTRATION FOUND (ppm)	4.0 PPM			10.0 PPM			12.0 PPM			9.0 PPM			5.0 PPM			3.0 PPM				
ACTION TAKEN																				
REPAIR DATE																				
RE-TEST DATE																				
RE-TEST CONCENTRATION (ppm)																				

Comments:

Note: In the event that an exceedance is detected, please intiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.
Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).
Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

APPENDIX L
NON-DEGRADABLE WASTE ACCEPTANCE RECORD

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

FRIABLE ASBESTOS REPORT

JUNE 1, 2024 -NOVEMBER 30, 2024

Material Name	ORIGIN NAME	LOADS	TONNAGE AMOUNT
FACW	ALAMEDA	1	0.02
FACW	FREMONT	1	2.77
FACW	Hayward	2	0.11
FACW	OAKLAND	3	0.97
FACW	San Jose	1	0.07
FACW	South San Francisco	1	0.09
WM-Asb Friable	ALAMEDA	2	11.35
WM-Asb Friable	ALAMEDA	42	351.00
WM-Asb Friable	ALAMEDA	3	20.10
WM-Asb Friable	Alamo	1	6.43
WM-Asb Friable	Antioch	2	10.01
WM-Asb Friable	Atherton	4	7.21
WM-Asb Friable	Bay Point	1	9.32
WM-Asb Friable	BELMONT	1	3.69
WM-Asb Friable	BELMONT	1	0.59
WM-Asb Friable	BELMONT	2	10.89
WM-Asb Friable	BELMONT	2	7.21
WM-Asb Friable	BELMONT	1	0.20
WM-Asb Friable	BELMONT	1	10.83
WM-Asb Friable	BENICIA	1	0.88
WM-Asb Friable	BENICIA	1	3.85
WM-Asb Friable	BERKELEY	2	3.28
WM-Asb Friable	BERKELEY	2	10.33
WM-Asb Friable	BERKELEY	4	8.28
WM-Asb Friable	BERKELEY	1	3.40
WM-Asb Friable	BERKELEY	2	0.56
WM-Asb Friable	BERKELEY	7	58.74
WM-Asb Friable	BERKELEY	1	0.52
WM-Asb Friable	BERKELEY	5	30.68
WM-Asb Friable	BERKELEY	8	29.60
WM-Asb Friable	BERKELEY	4	16.34
WM-Asb Friable	Brisbane	1	3.59
WM-Asb Friable	Burlingame	1	11.68
WM-Asb Friable	Burlingame	1	0.22
WM-Asb Friable	Burlingame	2	4.81
WM-Asb Friable	Calistoga	2	10.35
WM-Asb Friable	CAMPBELL	1	3.94
WM-Asb Friable	CAMPBELL	2	7.82
WM-Asb Friable	CAMPBELL	2	3.42

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

FRIABLE ASBESTOS REPORT

JUNE 1, 2024 -NOVEMBER 30, 2024

Material Name	ORIGIN NAME	LOADS	TONNAGE AMOUNT
WM-Asb Friable	Castro Valley	4	37.82
WM-Asb Friable	Castro Valley	1	5.69
WM-Asb Friable	Castro Valley	2	11.45
WM-Asb Friable	CLAYTON	1	2.88
WM-Asb Friable	CONCORD	8	27.52
WM-Asb Friable	CONCORD	2	0.93
WM-Asb Friable	CONCORD	4	17.21
WM-Asb Friable	Cupertino	2	18.22
WM-Asb Friable	Cupertino	1	3.50
WM-Asb Friable	Cupertino	6	29.08
WM-Asb Friable	Cupertino	5	59.01
WM-Asb Friable	Daly City	2	18.94
WM-Asb Friable	Daly City	1	1.67
WM-Asb Friable	Daly City	1	0.53
WM-Asb Friable	Daly City	1	0.49
WM-Asb Friable	Danville	1	5.64
WM-Asb Friable	Danville	1	5.70
WM-Asb Friable	DIXON	1	0.39
WM-Asb Friable	Dublin	1	2.17
WM-Asb Friable	EAST PALO ALTO	1	8.52
WM-Asb Friable	El Cerrito	1	4.59
WM-Asb Friable	El Cerrito	1	2.88
WM-Asb Friable	El Sobrante	1	10.34
WM-Asb Friable	Fair Fax	1	1.28
WM-Asb Friable	FAIRFIELD	1	7.39
WM-Asb Friable	FAIRFIELD	1	3.49
WM-Asb Friable	FOSTER CITY	1	5.59
WM-Asb Friable	FREMONT	6	32.69
WM-Asb Friable	FREMONT	1	3.28
WM-Asb Friable	FREMONT	7	37.28
WM-Asb Friable	FREMONT	3	15.76
WM-Asb Friable	FREMONT	1	1.05
WM-Asb Friable	Gilroy	1	7.77
WM-Asb Friable	Gilroy	4	21.80
WM-Asb Friable	Greenbrae	1	0.22
WM-Asb Friable	Hayward	3	22.76
WM-Asb Friable	Hayward	3	17.11
WM-Asb Friable	Hayward	1	0.00
WM-Asb Friable	Hayward	2	7.64

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

FRIABLE ASBESTOS REPORT

JUNE 1, 2024 -NOVEMBER 30, 2024

Material Name	ORIGIN NAME	LOADS	TONNAGE AMOUNT
WM-Asb Friable	HILLSBOROUGH	2	12.55
WM-Asb Friable	HILLSBOROUGH	1	8.04
WM-Asb Friable	HILLSBOROUGH	4	5.81
WM-Asb Friable	LAFAYETTE	1	0.38
WM-Asb Friable	Larkspur	1	0.65
WM-Asb Friable	Livermore	2	6.77
WM-Asb Friable	Livermore	1	0.06
WM-Asb Friable	Livermore	2	8.75
WM-Asb Friable	Los Altos	2	13.81
WM-Asb Friable	Los Altos	1	0.19
WM-Asb Friable	Los Altos	1	1.90
WM-Asb Friable	Los Altos	1	4.40
WM-Asb Friable	Los Altos	1	7.01
WM-Asb Friable	Los Altos Hills	1	3.23
WM-Asb Friable	Los Gatos	2	10.23
WM-Asb Friable	Los Gatos	1	2.81
WM-Asb Friable	Los Gatos	2	18.52
WM-Asb Friable	Martinez	3	4.01
WM-Asb Friable	Martinez	3	11.84
WM-Asb Friable	Menlo Park	1	5.71
WM-Asb Friable	Menlo Park	1	1.25
WM-Asb Friable	Menlo Park	1	4.33
WM-Asb Friable	Menlo Park	1	5.44
WM-Asb Friable	Menlo Park	1	2.80
WM-Asb Friable	Mill Valley	1	1.30
WM-Asb Friable	Millbrae	2	8.58
WM-Asb Friable	Millbrae	1	4.06
WM-Asb Friable	Milpitas	1	9.53
WM-Asb Friable	Milpitas	2	6.98
WM-Asb Friable	Milpitas	1	9.46
WM-Asb Friable	Milpitas	1	0.90
WM-Asb Friable	Milpitas	3	16.38
WM-Asb Friable	MONTARA	1	8.42
WM-Asb Friable	MORAGA	1	2.45
WM-Asb Friable	Morgan Hill	1	6.18
WM-Asb Friable	Moss Beach	1	0.94
WM-Asb Friable	Mountain View	1	2.01
WM-Asb Friable	Mountain View	1	3.99
WM-Asb Friable	Mountain View	8	38.61

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

FRIABLE ASBESTOS REPORT

JUNE 1, 2024 -NOVEMBER 30, 2024

Material Name	ORIGIN NAME	LOADS	TONNAGE AMOUNT
WM-Asb Friable	Napa	1	0.18
WM-Asb Friable	Napa	2	13.49
WM-Asb Friable	NEWARK	1	2.78
WM-Asb Friable	NEWARK	1	0.83
WM-Asb Friable	Novato	2	0.38
WM-Asb Friable	Novato	1	1.04
WM-Asb Friable	Novato	1	4.22
WM-Asb Friable	Novato	1	2.61
WM-Asb Friable	Novato	2	15.48
WM-Asb Friable	OAKLAND	1	1.11
WM-Asb Friable	OAKLAND	5	27.32
WM-Asb Friable	OAKLAND	2	9.92
WM-Asb Friable	OAKLAND	1	0.29
WM-Asb Friable	OAKLAND	2	14.52
WM-Asb Friable	OAKLAND	1	0.28
WM-Asb Friable	OAKLAND	8	39.62
WM-Asb Friable	OAKLAND	10	42.96
WM-Asb Friable	OAKLAND	1	8.48
WM-Asb Friable	ORINDA	1	5.78
WM-Asb Friable	ORINDA	1	5.45
WM-Asb Friable	PACHECO	5	29.05
WM-Asb Friable	Pacifica	1	6.51
WM-Asb Friable	Palo Alto	1	10.71
WM-Asb Friable	Palo Alto	1	2.67
WM-Asb Friable	Palo Alto	1	8.56
WM-Asb Friable	Palo Alto	1	7.77
WM-Asb Friable	Palo Alto	4	4.57
WM-Asb Friable	PETALUMA	1	3.30
WM-Asb Friable	Piedmont	1	3.41
WM-Asb Friable	Piedmont	1	6.08
WM-Asb Friable	PITTSBURG	1	4.46
WM-Asb Friable	PITTSBURG	5	19.33
WM-Asb Friable	Pleasant Hill	1	3.71
WM-Asb Friable	Pleasanton	1	3.38
WM-Asb Friable	Pleasanton	1	0.29
WM-Asb Friable	Pleasanton	2	9.98
WM-Asb Friable	Pleasanton	1	12.17
WM-Asb Friable	Redwood City	1	3.99
WM-Asb Friable	Redwood City	2	4.12

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

FRIABLE ASBESTOS REPORT

JUNE 1, 2024 -NOVEMBER 30, 2024

Material Name	ORIGIN NAME	LOADS	TONNAGE AMOUNT
WM-Asb Friable	RICHMOND	2	19.21
WM-Asb Friable	RICHMOND	1	1.74
WM-Asb Friable	RICHMOND	1	9.49
WM-Asb Friable	RICHMOND	2	12.73
WM-Asb Friable	RICHMOND	3	4.99
WM-Asb Friable	RICHMOND	1	10.42
WM-Asb Friable	RODEO	1	2.23
WM-Asb Friable	RODEO	4	8.97
WM-Asb Friable	San Bruno	1	2.24
WM-Asb Friable	San Bruno	3	22.14
WM-Asb Friable	San Bruno	1	0.15
WM-Asb Friable	San Bruno	1	3.25
WM-Asb Friable	SAN CARLOS	2	7.63
WM-Asb Friable	SAN CARLOS	1	0.50
WM-Asb Friable	SAN CARLOS	1	3.62
WM-Asb Friable	SAN CARLOS	1	5.06
WM-Asb Friable	San Francisco	13	33.12
WM-Asb Friable	San Francisco	16	105.82
WM-Asb Friable	San Francisco	1	2.48
WM-Asb Friable	San Francisco	1	0.49
WM-Asb Friable	San Francisco	1	0.03
WM-Asb Friable	San Francisco	4	10.06
WM-Asb Friable	San Francisco	1	0.15
WM-Asb Friable	San Francisco	1	2.25
WM-Asb Friable	San Francisco	5	7.67
WM-Asb Friable	San Francisco	11	45.42
WM-Asb Friable	San Francisco	83	358.65
WM-Asb Friable	San Francisco	3	1.70
WM-Asb Friable	San Jose	13	70.39
WM-Asb Friable	San Jose	1	3.63
WM-Asb Friable	San Jose	4	4.46
WM-Asb Friable	San Jose	1	6.10
WM-Asb Friable	San Jose	18	76.64
WM-Asb Friable	San Jose	2	0.18
WM-Asb Friable	San Jose	18	130.53
WM-Asb Friable	San Jose	1	5.54
WM-Asb Friable	SAN LEANDRO	2	12.14
WM-Asb Friable	SAN LEANDRO	2	16.38
WM-Asb Friable	SAN LEANDRO	4	20.79

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

FRIABLE ASBESTOS REPORT

JUNE 1, 2024 -NOVEMBER 30, 2024

Material Name	ORIGIN NAME	LOADS	TONNAGE AMOUNT
WM-Asb Friable	SAN LEANDRO	2	20.41
WM-Asb Friable	SAN LEANDRO	5	20.07
WM-Asb Friable	San Lorenzo	1	4.76
WM-Asb Friable	San Lorenzo	1	2.88
WM-Asb Friable	SAN MARTIN	1	4.31
WM-Asb Friable	San Mateo	1	6.61
WM-Asb Friable	San Mateo	2	0.77
WM-Asb Friable	San Mateo	1	0.18
WM-Asb Friable	San Mateo	1	0.63
WM-Asb Friable	San Mateo	3	18.41
WM-Asb Friable	San Pablo	1	0.44
WM-Asb Friable	San Pablo	4	25.58
WM-Asb Friable	San Pablo	1	0.74
WM-Asb Friable	San Pablo	1	6.14
WM-Asb Friable	San Pablo	1	2.74
WM-Asb Friable	San Rafael	1	0.65
WM-Asb Friable	San Rafael	1	4.78
WM-Asb Friable	San Rafael	1	2.90
WM-Asb Friable	San Rafael	1	6.45
WM-Asb Friable	San Rafael	1	7.32
WM-Asb Friable	San Ramon	1	9.81
WM-Asb Friable	San Ramon	1	1.07
WM-Asb Friable	San Ramon	1	4.16
WM-Asb Friable	SANTA CLARA	1	3.45
WM-Asb Friable	SANTA CLARA	1	0.79
WM-Asb Friable	SANTA CLARA	1	2.79
WM-Asb Friable	SANTA CLARA	5	28.27
WM-Asb Friable	Santa Rosa	2	11.68
WM-Asb Friable	Santa Rosa	2	12.32
WM-Asb Friable	Santa Rosa	1	4.38
WM-Asb Friable	Saratoga	1	5.37
WM-Asb Friable	Saratoga	1	7.35
WM-Asb Friable	Sausalito	1	0.76
WM-Asb Friable	SONOMA	1	1.59
WM-Asb Friable	South San Francisco	2	11.50
WM-Asb Friable	South San Francisco	5	60.84
WM-Asb Friable	St. Helena	4	25.97
WM-Asb Friable	STANFORD	1	6.56
WM-Asb Friable	STANFORD	1	5.67

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

FRIABLE ASBESTOS REPORT

JUNE 1, 2024 -NOVEMBER 30, 2024

Material Name	ORIGIN NAME	LOADS	TONNAGE AMOUNT
WM-Asb Friable	STANFORD	2	9.33
WM-Asb Friable	STANFORD	4	27.88
WM-Asb Friable	STANFORD	2	0.37
WM-Asb Friable	STANFORD	7	54.44
WM-Asb Friable	STANFORD	2	20.28
WM-Asb Friable	SUNNYVALE	4	34.20
WM-Asb Friable	SUNNYVALE	1	0.40
WM-Asb Friable	SUNNYVALE	4	21.54
WM-Asb Friable	SUNNYVALE	2	10.34
WM-Asb Friable	SUNNYVALE	3	3.66
WM-Asb Friable	Travis AFB	1	0.31
WM-Asb Friable	UNION CITY	2	11.32
WM-Asb Friable	Vacaville	1	2.20
WM-Asb Friable	Vacaville	1	0.28
WM-Asb Friable	Vallejo	1	3.73
WM-Asb Friable	Vallejo	1	0.24
WM-Asb Friable	Vallejo	1	0.26
WM-Asb Friable	Vallejo	3	14.56
WM-Asb Friable	Vallejo	1	5.94
WM-Asb Friable	WALNUT CREEK	5	33.32
WM-Asb Friable	WALNUT CREEK	4	17.59
WM-Asb Friable	WALNUT CREEK	1	4.09
SUM		**697**	**3,372.88**

APPENDIX M
MONTHLY WELLHEAD MONITORING DATA

Altamont Landfill and Resource Recovery Facility

Wellfield Monitoring Report - June 2024
REPORT PREPARED BY: Rajan Phadnis
UPDATED DATE: 7/1/2024
FLOW SENSING DEVICE: LANDTEC GEM
MODEL: 5000
DATE LAST CALIBRATED: DAILY

Wellhead ID Number	Date and Time	CH_4 (% by Volume)	CO_2 (% by Volume)	O_2 (% by Volume)	BALANCE GAS (% by Volume)	INITIAL TEMPERATURE (°F)	ADJUSTED TEMPERATURE (°F)	INITIAL STATIC PRESSURE ("WC)	ADJUSTED STATIC PRESSURE ("WC)
ALHC0824	6/24/2024 10:40	51.8	37.1	1.3	9.8	84.1	84.0	-0.1	-0.1
ALLC0695	6/17/2024 12:24	48.8	36.1	1.1	14.0	118.5	118.6	-53.8	-50.1
ALLC0700	6/17/2024 9:59	48.4	33.8	3.3	14.5	74.8	74.6	-73.9	-73.9
ALLC0703	6/24/2024 12:34	53.8	37.2	1.0	8.0	116.1	116.4	-11.2	-22.7
ALLC0709	6/13/2024 10:20	55.4	37.5	0.6	6.5	115.3	115.3	-28.6	-35.5
ALLC0734	6/12/2024 11:03	56.8	40.4	0.9	1.9	112.7	112.8	-57.6	-57.6
ALLC0736	6/12/2024 11:33	49.4	37.9	0.0	12.7	105.2	105.4	-18.0	-18.0
ALLC0737	6/12/2024 11:38	55.8	39.1	0.9	4.2	107.2	108.4	-63.2	-63.2
ALLC0738	6/10/2024 9:39	51.8	48.2	0.0	0.0	82.8	82.9	-78.6	-78.6
ALLC0739	6/13/2024 9:15	47.2	34.7	3.5	14.6	76.0	75.5	-86.4	-86.5
ALLC0740	6/13/2024 9:35	51.8	42.2	0.0	6.0	123.7	125.5	-4.6	-7.5
ALLC0743	6/10/2024 9:44	52.9	47.1	0.0	0.0	111.3	111.5	-76.7	-76.7
ALLC0744	6/13/2024 9:09	56.6	43.4	0.0	0.0	80.0	80.0	-79.2	-79.3
ALLC0745	6/13/2024 9:42	40.3	36.9	0.0	22.8	117.0	117.0	-2.5	-2.5
ALLC0746	6/13/2024 9:20	54.1	45.9	0.0	0.0	111.9	112.1	-85.5	-85.5
ALLC0747	6/17/2024 10:11	50.5	40.5	0.9	8.1	119.6	119.7	-71.6	-71.6
ALLC0748	6/17/2024 10:04	58.7	39.1	0.6	1.6	110.1	111.1	-74.7	-74.7
ALLC0749	6/17/2024 9:51	54.3	37.7	0.2	7.8	118.6	119.1	-37.8	-45.3
ALLC0775	6/14/2024 13:20	23.6	19.8	8.2	48.4	113.9	114.6	-63.3	-63.7
ALLC0775	6/19/2024 13:59	NSPS/EG Corrective Action Completed (CAC)- Well decommissioned							
ALLC0776	6/13/2024 12:40	2.2	5.0	15.8	77.0	81.8	81.6	-74.3	-75.0
ALLC0776	6/19/2024 14:09	NSPS/EG Corrective Action Completed (CAC)- Well decommissioned							
ALLC0777	6/6/2024 12:06	46.9	37.2	0.0	15.9	117.1	115.9	-4.7	-2.7
ALLC0778	6/7/2024 8:56	48.7	34.5	0.2	16.6	100.6	99.6	-25.1	-8.0
ALLC0779	6/3/2024 12:00	55.8	44.2	0.0	0.0	107.8	109.3	-1.9	-3.9
ALLC0780	6/3/2024 11:56	45.5	36.2	0.0	18.3	106.2	103.9	-2.0	-1.1
ALLC0781	6/3/2024 12:14	50.3	39.6	0.0	10.1	110.5	110.5	-0.8	-0.8
ALLC0783	6/7/2024 9:18	56.7	38.9	0.0	4.4	115.6	115.8	-0.8	-0.8
ALLC0784	6/7/2024 9:29	27.4	26.1	0.0	46.5	96.6	96.6	-0.8	-0.7
ALLC0785	6/7/2024 9:05	47.9	34.5	0.9	16.7	107.4	105.3	-6.7	-3.2
ALLC0786	6/7/2024 9:14	58.5	38.5	0.0	3.0	120.0	120.3	-3.3	-4.6
ALLC0787	6/3/2024 11:22	54.7	40.3	0.0	5.0	109.9	110.1	-7.7	-8.7
ALLC0788	6/3/2024 11:28	56.1	39.3	0.1	4.5	108.5	108.5	-56.7	-57.1
ALLC0789	6/3/2024 11:49	55.8	41.0	0.0	3.2	116.6	117.8	-2.5	-4.0
ALLC0790	6/6/2024 11:51	48.5	36.2	1.9	13.4	103.3	103.1	-57.5	-59.6
ALLC0791	6/6/2024 11:32	49.0	41.0	0.1	9.9	103.9	103.9	-42.4	-42.5
ALLC0792	6/6/2024 11:36	44.3	37.7	0.0	18.0	112.6	111.7	-7.2	-3.5
ALLC0793	6/17/2024 11:03	43.8	34.5	0.0	21.7	108.4	108.5	-81.1	-75.7
ALLC0794	6/12/2024 8:59	56.0	39.9	0.0	4.1	115.1	115.1	-57.5	-53.6
ALLC0796	6/6/2024 11:15	50.3	44.8	0.0	4.9	129.1	129.1	-27.0	-29.7
ALLC0797	6/6/2024 11:10	47.5	51.1	0.0	1.4	111.5	111.5	-1.1	-1.1
ALLC0798	6/6/2024 11:27	42.7	45.2	0.0	12.1	125.1	125.0	-0.5	-0.5
ALLC0800	6/17/2024 11:08	52.6	42.2	0.0	5.2	110.9	111.1	-1.6	-2.4
ALLC0801	6/11/2024 10:13	50.3	49.7	0.0	0.0	124.5	124.5	-6.0	-8.4
ALLC0803	6/3/2024 11:16	43.3	38.1	0.7	17.9	113.0	113.1	-1.2	-1.2
ALLC0804	6/3/2024 11:12	52.7	43.1	0.0	4.2	106.2	106.6	-1.7	-2.3
ALLC0805	6/12/2024 11:42	48.5	36.6	0.0	14.9	92.4	92.5	-1.4	-1.3
ALLC0806	6/12/2024 11:45	43.4	36.6	0.0	20.0	106.3	106.4	-1.0	-1.0
ALLC0807	6/12/2024 11:50	27.1	29.2	2.2	41.5	105.1	104.2	-3.9	-3.8
ALLC0811	6/17/2024 10:38	48.4	36.5	0.0	15.1	98.8	98.8	-1.0	-1.0
ALLC0812	6/6/2024 11:56	49.1	40.7	0.0	10.2	111.3	112.6	-0.9	-1.5
ALLC0812	6/6/2024 11:56	49.1	40.7	0.0	10.2	111.3	112.6	-0.9	-1.5

ALLC0813	6/12/2024 10:31	36.6	28.4	0.0	35.0	101.9	101.9	-1.1	-1.1
ALLC0814	6/5/2024 9:55	52.6	37.5	0.4	9.5	122.9	123.8	-1.0	-2.6
ALLC0815	6/13/2024 10:46	48.9	37.6	0.3	13.2	110.2	110.3	-21.8	-21.8
ALLC0816	6/14/2024 13:10	57.9	40.0	0.8	1.3	91.9	92.0	-80.1	-80.1
ALLC0817	6/13/2024 10:34	54.0	39.5	0.3	6.2	119.0	119.1	-10.4	-15.3
ALLC0819	6/12/2024 9:13	55.0	45.0	0.0	0.0	106.2	107.1	-3.6	-4.8
ALLC0820	6/12/2024 9:17	51.5	39.5	1.8	7.2	103.9	104.3	-55.4	-55.4
ALLC0821	6/17/2024 13:50	51.0	37.6	0.3	11.1	105.0	105.0	-22.5	-32.8
ALLC0822	6/19/2024 11:21	10.4	64.8	0.5	24.3	125.5	126.7	-1.6	-24.6
ALLC0822	6/19/2024 11:25	11.4	65.5	0.3	22.8	126.9	126.8	-26.2	-8.0
ALLC0826	6/12/2024 11:38	51.7	39.3	0.0	9.0	101.9	101.9	-82.9	-83.2
ALLC0827	6/12/2024 9:22	57.3	42.7	0.0	0.0	92.7	92.7	-56.8	-57.4
ALLC0828	6/12/2024 10:57	60.7	36.9	1.1	1.3	86.2	86.2	-67.3	-67.3
ALLC0828	6/19/2024 14:23	NSPS/EG Corrective Action Completed (CAC)- Well decommissioned							
ALLC0830	6/13/2024 9:34	56.5	37.8	1.4	4.3	106.6	106.5	-80.3	-80.3
ALLC0831	6/12/2024 11:23	29.6	31.3	0.0	39.1	100.9	101.0	-0.8	-0.8
ALLC0832	6/6/2024 11:41	46.6	40.9	0.0	12.5	125.4	125.5	-8.8	-9.2
ALLC0833	6/6/2024 11:04	34.5	35.5	0.3	29.7	114.6	114.5	-0.2	-0.2
ALLC0834	6/13/2024 11:54	56.4	43.6	0.0	0.0	124.2	124.3	-85.1	-85.2
ALLC0835	6/13/2024 11:50	54.7	44.9	0.0	0.4	124.5	124.5	-85.1	-85.2
ALLC0836	6/13/2024 11:46	52.5	45.9	0.0	1.6	129.8	129.9	-84.7	-84.7
ALLC0837	6/13/2024 11:42	54.9	45.0	0.0	0.1	127.6	127.4	-84.8	-85.4
ALLC0838	6/14/2024 11:04	44.7	39.6	2.8	12.9	79.1	79.0	-56.3	-58.2
ALLC0839	6/14/2024 10:55	41.9	42.1	0.0	16.0	129.7	128.6	-6.2	-4.5
ALLC0840	6/14/2024 10:47	39.7	39.5	0.0	20.8	123.6	123.6	-2.8	-2.8
ALLC0841	6/19/2024 11:10	65.6	32.3	0.3	1.8	77.1	77.1	-83.8	-83.8
ALLC0842	6/17/2024 12:55	37.4	32.8	0.4	29.4	113.5	113.5	-4.9	-4.0
ALLC0843	6/13/2024 9:11	50.2	36.0	0.8	13.0	75.0	75.1	-9.4	-14.0
ALLC0844	6/13/2024 9:14	40.2	32.7	0.5	26.6	86.0	86.1	-7.5	-5.3
ALLC0845	6/13/2024 9:18	58.9	37.6	1.3	2.2	80.8	80.8	-76.6	-76.6
ALLC0846	6/17/2024 10:20	49.8	37.5	2.2	10.5	74.9	74.9	-71.4	-71.1
ALLC0847	6/12/2024 11:51	44.4	32.2	2.1	21.3	114.2	114.3	-3.2	-3.2
ALLC0848	6/12/2024 11:55	35.8	31.3	0.6	32.3	105.2	105.2	-14.1	-14.2
ALLC0849	6/12/2024 12:02	30.3	30.3	0.4	39.0	119.2	119.6	-25.0	-25.1
ALT20001	6/18/2024 11:04	45.2	38.3	0.6	15.9	103.3	103.5	-0.8	-0.5
ALT20003	6/10/2024 9:31	52.9	42.0	0.2	4.9	123.1	123.6	-27.4	-41.0
ALT20004	6/10/2024 9:44	46.1	39.5	0.1	14.3	105.7	105.9	-5.2	-5.2
ALT20005	6/10/2024 9:49	49.8	43.2	0.0	7.0	108.8	108.9	-3.1	-3.1
ALT20006	6/10/2024 9:40	53.2	41.6	0.0	5.2	123.4	123.8	-7.3	-12.5
ALT20007	6/10/2024 9:35	49.3	39.0	0.3	11.4	106.2	106.5	-9.6	-11.5
ALT20008	6/5/2024 10:56	35.5	32.8	3.0	28.7	124.1	122.9	-2.8	-2.6
ALT20009	6/5/2024 11:01	53.0	42.1	0.0	4.9	129.1	129.1	-35.8	-40.2
ALT20010	6/17/2024 10:09	47.5	40.9	0.0	11.6	128.5	128.5	-3.0	-2.9
ALT20011	6/5/2024 11:08	43.9	38.6	0.0	17.5	129.3	129.2	-5.7	-4.6
ALT20012	6/5/2024 11:14	48.3	40.9	0.0	10.8	133.3	132.6	-2.0	-1.2
ALT20012	6/5/2024 11:14	CO was 40 ppm							
ALT20013	6/5/2024 11:23	44.6	41.2	0.0	14.2	132.4	132.4	-1.1	-1.0
ALT20014	6/5/2024 11:27	44.0	39.5	0.0	16.5	117.7	117.7	-0.9	-0.9
ALT20015	6/5/2024 11:32	48.3	40.0	0.1	11.6	121.5	121.4	-4.5	-3.3
ALT20016	6/10/2024 9:26	54.1	43.9	0.1	1.9	126.3	126.5	-10.0	-10.1
ALT20017	6/10/2024 9:21	49.5	43.2	0.4	6.9	135.0	135.7	-6.0	-7.4
ALT20018	6/5/2024 9:33	54.4	44.4	0.0	1.2	132.9	132.9	-5.3	-5.7
ALT20018	6/5/2024 9:34	54.0	44.4	0.0	1.6	132.9	132.9	-6.1	-6.1
ALT20018	6/5/2024 9:40	CO was 20 ppm							
ALT20018	6/10/2024 9:55	53.3	43.8	0.0	2.9	132.3	132.3	-4.7	-4.9
ALT20018	6/10/2024 10:00	CO was 20 ppm							
ALT20018	6/18/2024 10:45	51.3	43.7	0.2	4.8	132.5	132.5	-6.5	-6.5
ALT20018	6/18/2024 10:50	CO was 20 ppm							
ALT20019	6/5/2024 10:03	54.6	45.2	0.0	0.2	132.4	132.3	-3.1	-3.2
ALT20019	6/5/2024 10:05	54.4	45.2	0.0	0.4	132.4	132.4	-3.5	-3.5

ALT20019	6/5/2024 10:10	CO was 20 ppm							
ALT20019	6/10/2024 10:06	53.5	44.0	0.0	2.5	132.0	132.1	-3.1	-3.4
ALT20019	6/10/2024 10:12	CO was 20 ppm							
ALT20019	6/18/2024 10:55	49.8	43.0	0.2	7.0	132.3	132.3	-4.6	-4.6
ALT20019	6/19/2024 11:00	CO was 20 ppm							
ALT20020	6/5/2024 10:29	55.0	44.7	0.0	0.3	129.6	128.9	-5.9	-7.1
ALT20021	6/4/2024 12:10	47.3	41.8	0.1	10.8	118.1	118.2	-20.5	-18.3
ALT20022	6/4/2024 12:17	49.7	42.8	0.1	7.4	113.7	113.8	-8.8	-10.3
ALT20023	6/4/2024 12:27	51.1	44.2	0.2	4.5	119.4	119.6	-9.5	-7.4
ALT20024	6/4/2024 12:38	52.2	44.1	0.0	3.7	126.9	127.0	-3.7	-7.0
ALT20025	6/4/2024 13:01	55.8	44.1	0.0	0.1	120.7	120.7	-2.1	-6.0
ALT20026	6/4/2024 13:10	53.2	42.8	0.1	3.9	127.8	127.9	-1.0	-1.4
ALT20027	6/4/2024 13:14	55.1	43.0	0.1	1.8	117.1	117.1	-8.1	-9.3
ALT20028	6/5/2024 10:32	51.4	42.0	0.8	5.8	125.3	125.4	-5.4	-6.3
ALT20029	6/5/2024 10:36	55.5	43.5	0.0	1.0	125.0	125.3	-7.1	-10.8
ALTA0003	6/18/2024 11:31	56.5	36.9	1.4	5.2	112.8	113.2	-80.8	-80.8
ALTA0054	6/18/2024 11:25	58.4	39.0	0.4	2.2	78.6	78.6	-44.3	-44.3
ALTA0056	6/18/2024 11:20	56.7	38.5	1.2	3.6	108.0	108.4	-60.8	-60.9
ALTA0059	6/18/2024 10:03	54.4	38.5	1.6	5.5	90.5	90.5	-77.1	-77.1
ALTA0087	6/17/2024 12:40	58.5	40.0	0.2	1.3	126.2	126.2	-78.1	-78.1
ALTA0087	6/17/2024 14:04	58.4	40.9	0.0	0.7	126.3	126.4	-80.5	-80.5
ALTA0108	6/18/2024 9:54	54.7	40.1	0.6	4.6	86.7	86.7	-5.5	-7.4
ALTA0201	6/14/2024 9:10	55.3	42.1	0.0	2.6	108.6	108.5	-87.5	-87.4
ALTA0472	6/3/2024 11:08	55.5	40.5	0.0	4.0	112.9	113.0	-81.3	-82.4
ALTA0483	6/17/2024 10:40	50.6	39.3	0.9	9.2	121.9	122.4	-75.5	-76.4
ALTA0488	6/17/2024 12:29	47.9	41.0	0.9	10.2	128.9	128.8	-79.9	-81.0
ALTA0491	6/13/2024 9:30	53.5	36.2	2.3	8.0	115.9	117.9	-79.5	-80.0
ALTA0508	6/12/2024 11:15	56.1	38.4	0.8	4.7	110.7	111.0	-66.9	-66.8
ALTA0517	6/12/2024 11:21	56.8	38.3	0.5	4.4	111.4	111.4	-73.2	-73.2
ALTA0518	6/18/2024 11:40	55.5	39.9	0.0	4.6	122.0	122.1	-3.0	-3.2
ALTA0529	6/14/2024 11:17	56.0	42.2	0.2	1.6	80.8	80.8	-86.5	-86.0
ALTA0541	6/13/2024 9:54	51.2	35.8	0.9	12.1	118.8	118.9	-24.2	-25.7
ALTA0545	6/17/2024 12:35	34.8	49.2	0.0	16.0	125.0	124.9	-1.9	-1.9
ALTA0551	6/19/2024 11:33	54.2	40.6	0.2	5.0	86.5	88.3	-5.0	-14.4
ALTA0578	6/17/2024 10:23	50.2	37.1	0.8	11.9	105.2	106.3	-49.0	-49.7
ALTA0579	6/14/2024 11:23	41.7	49.9	0.0	8.4	95.7	95.9	-85.3	-85.3
ALTA0589	6/19/2024 10:53	33.6	28.4	3.8	34.2	93.9	94.0	-16.2	-11.9
ALTA0611	6/13/2024 10:05	50.0	36.5	1.4	12.1	125.6	125.6	-53.3	-53.3
ALTA0612	6/13/2024 9:59	51.4	39.5	1.8	7.3	126.8	126.8	-69.2	-69.2
ALTA0624	6/17/2024 14:07	49.5	36.4	0.8	13.3	83.6	83.5	-6.9	-7.0
ALTA0629	6/13/2024 10:15	59.4	39.1	0.6	0.9	115.6	116.3	-30.8	-35.8
ALTA0639	6/13/2024 12:16	49.1	43.6	0.0	7.3	138.8	138.8	-81.9	-81.5
ALTA0650	6/14/2024 10:36	40.8	37.7	4.5	17.0	75.7	75.7	-86.6	-86.3
ALTA0651	6/14/2024 10:41	52.8	47.2	0.0	0.0	92.2	92.1	-81.7	-81.1
ALTA0652	6/13/2024 12:11	51.0	41.5	0.0	7.5	131.8	131.7	-29.2	-29.2
ALTA0654	6/10/2024 9:49	45.0	48.2	1.7	5.1	104.9	104.7	-58.5	-57.0
ALTA0664	6/14/2024 10:26	40.0	32.5	0.1	27.4	66.8	66.7	-86.6	-85.8
ALTA0669	6/17/2024 10:07	30.2	28.8	3.3	37.7	86.5	85.8	-76.4	-76.4
ALTA0678	6/7/2024 9:08	57.6	41.2	0.6	0.6	84.4	84.8	-85.2	-85.2
ALTA0682	6/12/2024 11:26	56.8	40.2	0.7	2.3	123.6	123.7	-71.9	-73.3
ALTA0686	6/17/2024 10:18	55.1	38.1	0.8	6.0	77.8	77.9	-77.3	-76.5
ALTA0712	6/13/2024 12:45	51.5	37.7	3.2	7.6	128.3	128.4	-72.8	-72.0
ALTA0713	6/17/2024 11:14	55.3	41.0	0.0	3.7	124.0	124.1	-77.0	-78.1
ALTA0714	6/13/2024 10:51	55.4	38.4	1.0	5.2	126.6	127.1	-70.3	-70.0
ALTA0733	6/11/2024 9:46	CO was 20 ppm							
ALTA0733	6/11/2024 9:46	51.1	46.5	0.0	2.4	143.7	142.8	-6.6	-9.3
ALTA0751	6/12/2024 11:34	55.2	42.2	0.0	2.6	107.4	111.1	-0.4	-1.6
ALTA0753	6/13/2024 9:46	52.5	43.2	0.0	4.3	127.4	127.6	-11.7	-12.9
ALTA0755	6/12/2024 11:54	40.5	38.6	0.0	20.9	126.1	126.2	-7.7	-7.0
ALTA0756	6/12/2024 10:49	54.0	46.0	0.0	0.0	106.5	106.2	-57.0	-61.4

ALTA0759	6/12/2024 9:09	48.1	41.6	0.0	10.3	127.8	127.9	-27.8	-23.6
ALTA0760	6/12/2024 9:04	53.2	44.3	0.3	2.2	134.7	134.7	-40.5	-40.5
ALTA0761	6/13/2024 10:37	48.0	36.9	0.3	14.8	117.7	117.8	-11.0	-11.0
ALTA0762	6/13/2024 12:36	56.9	40.3	0.7	2.1	125.3	125.3	-63.0	-64.4
ALTA0764	6/12/2024 11:03	49.4	39.3	0.0	11.3	115.7	115.7	-6.3	-6.3
ALTA0765	6/13/2024 9:25	45.9	35.3	0.6	18.2	101.5	101.7	-39.9	-39.9
ALTA0766	6/12/2024 10:43	57.4	42.6	0.0	0.0	92.3	92.3	-76.2	-76.6
ALTA0767	6/12/2024 11:19	52.1	40.5	0.0	7.4	127.4	128.3	-2.2	-2.4
ALTA0769	6/11/2024 9:53	45.4	54.5	0.1	0.0	106.4	106.5	-57.8	-57.8
ALTA0770	6/13/2024 10:42	54.4	38.2	0.2	7.2	122.2	122.2	-7.6	-8.6
ALTA0771	6/14/2024 13:25	51.8	37.8	1.1	9.3	122.2	122.3	-58.4	-60.7
ALTA0772	6/17/2024 9:45	51.0	37.5	0.5	11.0	124.6	124.7	-19.6	-19.8
ALTA0851	6/12/2024 10:54	54.0	45.9	0.0	0.1	116.9	117.7	-3.2	-4.0
ALTA0852	6/12/2024 10:39	49.7	50.3	0.0	0.0	117.7	122.4	-0.2	-0.9
ALTA0853	6/12/2024 10:35	54.3	42.8	0.0	2.9	114.4	115.2	-7.6	-11.1
ALTA0854	6/5/2024 10:07	49.7	40.8	0.0	9.5	126.3	126.7	-1.6	-2.2
ALTA0856	6/7/2024 9:26	51.1	39.7	0.0	9.2	127.8	129.5	-0.4	-0.5
ALTA0857	6/3/2024 12:11	52.8	41.6	0.1	5.5	117.3	117.4	-81.7	-80.3
ALTA0858	6/3/2024 12:06	50.2	49.8	0.0	0.0	133.1	133.0	-0.2	-1.2
ALTA0859	6/13/2024 10:26	53.8	45.6	0.0	0.6	122.3	129.4	-2.8	-11.7
ALTA0860	6/13/2024 10:31	37.7	38.0	0.5	23.8	125.7	125.8	-29.3	-29.3
ALTA0861	6/17/2024 13:31	36.4	36.5	0.0	27.1	124.8	124.7	-0.1	-0.1
ALTA0862	6/11/2024 10:19	38.6	40.3	0.0	21.1	119.2	118.8	-5.7	-4.4
ALTA0863	6/10/2024 9:27	53.6	45.3	0.0	1.1	110.5	110.5	-78.2	-78.3
ALTA0864	6/11/2024 8:18	52.5	33.0	1.6	12.9	81.3	81.3	-75.2	-75.2
ALTA0865	6/14/2024 10:09	52.8	45.5	0.1	1.6	75.7	75.6	-86.8	-86.7
ALTA0866	6/13/2024 11:58	52.7	45.6	0.0	1.7	125.5	127.3	-11.2	-21.6
ALTA0867	6/13/2024 12:05	39.9	35.8	0.0	24.3	133.6	133.6	-56.6	-47.3
ALTA0868	6/10/2024 12:22	18.9	16.6	13.2	51.3	95.6	95.3	-26.6	-26.6
ALTA0868	6/10/2024 12:24	19.6	16.7	13.3	50.4	94.9	94.9	-26.4	-26.4
ALTA0870	6/17/2024 12:45	54.9	40.0	1.2	3.9	115.8	116.1	-81.0	-81.1
ALTA0870	6/17/2024 13:54	56.9	43.0	0.0	0.1	115.7	115.3	-83.8	-83.7
ALTA0872	6/14/2024 13:15	50.5	36.5	2.8	10.2	83.6	83.7	-79.9	-79.9
ALTA0873	6/14/2024 13:01	52.0	37.2	2.7	8.1	123.2	123.5	-78.9	-78.9
ALTA0875	6/14/2024 10:18	51.5	48.5	0.0	0.0	95.5	95.9	-86.5	-86.5
ALTA0877	6/14/2024 10:13	55.3	44.1	0.6	0.0	69.3	69.3	-86.4	-86.5
ALTA0878	6/12/2024 11:10	52.7	37.5	1.4	8.4	84.6	84.5	-68.4	-68.0
ALTA0879	6/12/2024 11:58	42.3	34.5	0.3	22.9	111.2	111.4	-38.5	-33.8
ALTA0880	6/10/2024 10:23	33.0	67.0	0.0	0.0	126.8	126.8	-33.1	-33.0

Altamont Landfill and Resource Recovery Facility

Wellfield Monitoring Report - July 2024
REPORT PREPARED BY: Rajan Phadnis
UPDATED DATE: 8/1/2024
FLOW SENSING DEVICE: LANDTEC GEM
MODEL: 5000
DATE LAST CALIBRATED: DAILY

Wellhead ID Number	Date and Time	CH_4 (% by Volume)	CO_2 (% by Volume)	O_2 (% by Volume)	BALANCE GAS (% by Volume)	INITIAL TEMPERATURE (°F)	ADJUSTED TEMPERATURE (°F)	INITIAL STATIC PRESSURE ("WC)	ADJUSTED STATIC PRESSURE ("WC)
ALHC0824	7/11/2024 10:33	45.0	30.4	4.4	20.2	98.0	95.6	0.0	-0.1
ALLC0695	7/9/2024 6:49	50.6	38.1	0.6	10.7	116.9	117.8	-44.0	-51.1
ALLC0700	7/5/2024 7:11	45.5	33.1	4.2	17.2	81.4	81.4	-67.8	-67.8
ALLC0703	7/3/2024 5:54	8.4	7.9	15.7	68.0	100.8	101.8	-8.7	-23.7
ALLC0703	7/3/2024 6:00	10.7	8.9	15.1	65.3	101.3	101.7	-26.2	-6.9
ALLC0703	7/16/2024 9:03	8.8	8.5	15.8	66.9	100.1	101.7	-6.0	-22.4
ALLC0703	7/16/2024 9:07	10.2	9.4	15.2	65.2	102.0	101.7	-23.1	-4.0
ALLC0709	7/1/2024 9:36	51.6	37.0	0.2	11.2	116.4	116.4	-35.5	-40.8
ALLC0734	7/3/2024 6:59	57.4	40.1	0.9	1.6	112.7	112.7	-48.8	-48.8
ALLC0736	7/3/2024 6:14	48.7	37.1	0.4	13.8	105.5	105.6	-17.4	-21.4
ALLC0737	7/3/2024 6:07	49.7	34.7	3.6	12.0	110.2	111.1	-56.4	-56.5
ALLC0738	7/8/2024 9:13	54.5	45.5	0.0	0.0	85.6	85.5	-87.4	-87.4
ALLC0739	7/5/2024 9:48	59.0	41.0	0.0	0.0	83.5	83.8	-86.3	-85.1
ALLC0740	7/5/2024 9:37	37.6	36.5	0.0	25.9	123.6	122.1	-8.4	-6.5
ALLC0743	7/8/2024 9:07	56.0	44.0	0.0	0.0	108.1	108.8	-83.8	-85.7
ALLC0744	7/5/2024 9:43	54.4	41.6	0.0	4.0	89.7	89.4	-78.0	-78.0
ALLC0745	7/5/2024 9:33	30.9	32.0	0.0	37.1	119.4	119.4	-3.1	-3.1
ALLC0746	7/5/2024 9:53	55.6	44.3	0.0	0.1	115.0	115.0	-84.8	-84.5
ALLC0747	7/5/2024 7:24	50.2	40.6	0.9	8.3	119.6	119.7	-72.5	-72.5
ALLC0748	7/5/2024 7:17	59.8	40.1	0.0	0.1	113.0	113.0	-75.7	-75.7
ALLC0749	7/5/2024 7:02	44.8	35.3	0.3	19.6	118.9	119.0	-40.5	-35.0
ALLC0777	7/2/2024 9:49	56.8	39.6	0.0	3.6	116.0	117.5	-2.3	-3.5
ALLC0778	7/2/2024 9:43	59.2	40.8	0.0	0.0	100.7	101.3	-7.3	-23.5
ALLC0779	7/2/2024 8:22	43.7	39.3	0.0	17.0	110.3	110.3	-4.7	-3.3
ALLC0780	7/2/2024 8:06	54.9	39.2	0.0	5.9	99.3	107.1	-0.5	-2.8
ALLC0781	7/2/2024 8:18	33.2	34.2	0.0	32.6	112.0	112.0	-1.3	-1.3
ALLC0783	7/2/2024 9:20	46.8	38.0	0.0	15.2	116.6	116.6	-1.3	-1.2
ALLC0784	7/2/2024 9:09	28.3	27.3	0.0	44.4	100.3	100.3	-0.7	-0.7
ALLC0785	7/2/2024 9:16	59.1	40.8	0.1	0.0	106.2	108.5	-0.5	-3.2
ALLC0786	7/2/2024 9:25	52.8	39.2	0.0	8.0	120.9	120.9	-5.1	-6.6
ALLC0787	7/2/2024 7:47	50.7	40.7	0.0	8.6	111.0	111.3	-8.1	-10.1
ALLC0788	7/2/2024 7:51	52.7	38.8	0.0	8.5	110.0	109.9	-47.3	-59.1
ALLC0789	7/2/2024 7:58	46.0	39.4	0.0	14.6	118.8	118.4	-3.8	-3.1
ALLC0790	7/2/2024 10:03	46.7	33.9	2.7	16.7	100.2	100.3	-67.9	-66.6
ALLC0791	7/3/2024 11:01	51.5	39.5	0.0	9.0	104.2	104.1	-46.1	-61.0
ALLC0792	7/10/2024 8:52	59.4	40.6	0.0	0.0	113.0	114.5	-3.4	-6.6
ALLC0793	7/2/2024 10:12	45.1	35.7	0.0	19.2	109.3	108.9	-61.0	-63.8
ALLC0793	7/3/2024 10:57	38.0	37.8	0.0	24.2	127.7	127.8	-0.8	-0.8
ALLC0794	7/3/2024 10:39	53.3	40.3	0.0	6.4	117.8	117.7	-52.0	-53.9
ALLC0796	7/3/2024 10:45	50.4	42.2	0.0	7.4	127.4	127.4	-32.7	-32.7
ALLC0797	7/3/2024 10:51	45.1	47.4	0.0	7.5	112.4	112.3	-1.3	-1.3
ALLC0798	7/11/2024 8:23	26.9	31.1	0.9	41.1	127.3	127.3	-1.1	-1.1
ALLC0800	7/3/2024 11:25	50.7	42.9	0.0	6.4	114.1	114.4	-3.7	-5.1
ALLC0800	7/10/2024 9:11	35.9	37.6	0.3	26.2	123.5	123.6	-0.8	-0.8
ALLC0801	7/5/2024 8:14	46.9	43.5	0.0	9.6	124.2	124.2	-11.0	-8.9
ALLC0803	7/2/2024 7:41	36.8	36.3	0.8	26.1	117.1	117.2	-1.2	-1.1
ALLC0804	7/2/2024 7:36	45.9	42.0	0.0	12.1	107.8	107.5	-2.6	-1.8
ALLC0805	7/5/2024 10:15	41.7	35.1	0.0	23.2	99.8	99.7	-1.6	-1.7
ALLC0806	7/5/2024 10:01	41.8	36.1	0.0	22.1	107.7	108.0	-1.2	-1.2
ALLC0807	7/5/2024 10:07	31.8	32.0	1.9	34.3	110.2	109.4	-4.3	-3.7
ALLC0811	7/2/2024 9:54	44.0	36.4	0.0	19.6	103.3	103.3	-0.9	-0.9
ALLC0812	7/2/2024 9:59	46.3	37.7	0.0	16.0	114.3	114.3	-2.4	-2.4

ALLC0813	7/3/2024 11:30	16.4	26.3	0.0	57.3	104.6	105.3	-1.4	-1.4
ALLC0814	7/5/2024 8:31	32.4	29.7	1.8	36.1	121.2	120.9	-4.3	-2.7
ALLC0815	7/1/2024 10:06	44.7	35.9	0.9	18.5	110.8	110.5	-21.7	-20.7
ALLC0816	7/10/2024 6:45	55.0	40.9	0.1	4.0	89.2	89.4	-82.2	-83.2
ALLC0817	7/1/2024 9:44	47.6	38.1	0.2	14.1	119.1	119.3	-15.8	-13.2
ALLC0819	7/3/2024 10:23	54.3	45.7	0.0	0.0	110.8	110.8	-3.5	-3.5
ALLC0820	7/3/2024 10:15	53.2	40.5	1.5	4.8	109.3	109.4	-51.0	-50.9
ALLC0821	7/10/2024 10:33	51.4	36.7	0.3	11.6	105.7	105.8	-20.1	-28.6
ALLC0822	7/10/2024 10:44	15.5	66.9	0.0	17.6	127.7	127.8	-3.7	-4.0
ALLC0826	7/5/2024 9:04	47.1	38.1	0.0	14.8	101.6	101.6	-85.4	-85.4
ALLC0827	7/3/2024 10:10	56.5	43.5	0.0	0.0	94.3	94.4	-52.6	-52.5
ALLC0830	7/8/2024 7:45	57.6	39.2	1.0	2.2	106.7	106.8	-80.5	-80.4
ALLC0831	7/5/2024 8:59	15.9	27.1	0.0	57.0	106.0	106.1	-1.5	-1.5
ALLC0832	7/2/2024 10:08	52.6	41.0	0.0	6.4	126.3	126.6	-9.1	-18.7
ALLC0833	7/10/2024 9:16	42.0	36.6	0.0	21.4	112.8	112.3	-0.2	-0.1
ALLC0834	7/8/2024 9:55	57.2	42.8	0.0	0.0	125.3	125.3	-86.8	-86.3
ALLC0835	7/8/2024 9:50	55.4	44.0	0.0	0.6	125.1	125.1	-86.9	-86.9
ALLC0836	7/8/2024 9:46	53.5	45.2	0.0	1.3	129.8	129.8	-85.9	-86.5
ALLC0837	7/8/2024 9:42	55.0	45.0	0.0	0.0	129.2	129.3	-86.1	-86.1
ALLC0838	7/11/2024 10:42	32.2	25.7	7.9	34.2	106.8	106.7	-68.7	-68.5
ALLC0838	7/11/2024 10:46	30.9	23.7	8.6	36.8	106.7	106.7	-70.5	-65.8
ALLC0838	7/25/2024 8:04	46.9	36.9	4.0	12.2	79.8	79.9	-69.9	-68.5
ALLC0839	7/10/2024 10:11	49.4	40.9	0.0	9.7	128.2	128.4	-2.8	-9.7
ALLC0840	7/9/2024 13:09	41.5	35.2	0.0	23.3	125.2	124.9	-2.8	-1.5
ALLC0841	7/11/2024 7:28	50.9	26.8	2.7	19.6	77.1	77.2	-82.4	-82.8
ALLC0842	7/8/2024 9:38	47.6	35.9	0.4	16.1	113.0	113.2	-2.8	-2.7
ALLC0843	7/3/2024 7:22	50.0	36.6	0.2	13.2	79.4	79.0	-11.7	-18.9
ALLC0844	7/3/2024 7:16	46.3	34.9	0.0	18.8	88.0	87.3	-3.6	-8.4
ALLC0844	7/3/2024 7:19	45.7	34.5	0.2	19.6	87.2	87.8	-10.2	-5.3
ALLC0845	7/3/2024 7:12	58.5	38.2	0.9	2.4	83.2	83.2	-61.9	-61.9
ALLC0846	7/9/2024 6:37	52.5	36.1	3.3	8.1	65.9	65.8	-71.6	-71.6
ALLC0847	7/3/2024 6:45	46.2	32.8	1.5	19.5	88.8	88.8	-2.8	-2.8
ALLC0848	7/3/2024 6:41	37.9	32.2	0.2	29.7	105.3	105.3	-12.4	-12.4
ALLC0849	7/3/2024 6:35	33.4	31.1	0.5	35.0	119.4	120.1	-20.9	-58.8
ALLC0849	7/3/2024 6:38	33.2	31.4	0.8	34.6	121.0	121.6	-61.5	-38.1
ALT20001	7/9/2024 8:33	48.8	39.2	0.4	11.6	100.8	101.0	-0.7	-0.6
ALT20001	7/24/2024 9:47	47.1	38.1	0.6	14.2	103.3	103.5	-0.8	-0.7
ALT20003	7/2/2024 9:01	45.1	39.5	0.6	14.8	122.9	123.0	-45.7	-40.8
ALT20004	7/2/2024 8:45	29.8	28.6	3.6	38.0	96.8	96.9	-3.7	-3.6
ALT20005	7/2/2024 8:40	40.7	40.2	0.2	18.9	103.6	104.1	-3.6	-3.6
ALT20006	7/2/2024 8:50	48.1	39.3	0.5	12.1	124.2	124.3	-13.6	-11.6
ALT20007	7/2/2024 8:54	41.2	34.7	0.4	23.7	107.5	107.6	-13.4	-12.0
ALT20008	7/2/2024 8:23	28.6	29.2	4.9	37.3	124.4	124.0	-1.8	-1.7
ALT20009	7/2/2024 8:09	45.5	38.2	1.0	15.3	128.0	128.1	-39.8	-34.2
ALT20010	7/2/2024 8:29	47.3	39.7	0.1	12.9	129.2	128.9	-2.5	-17.5
ALT20010	7/2/2024 8:32	49.2	40.5	0.3	10.0	128.9	128.9	-20.6	-20.7
ALT20011	7/2/2024 8:04	42.2	37.7	0.2	19.9	128.3	128.3	-3.8	-3.3
ALT20012	7/2/2024 7:54	45.8	40.5	0.2	13.5	127.6	126.9	-1.0	-1.0
ALT20012	7/2/2024 8:00	CO was 20 ppm							
ALT20013	7/2/2024 7:58	45.0	40.0	0.6	14.4	130.7	130.9	-1.0	-1.0
ALT20014	7/2/2024 7:43	38.3	36.8	0.6	24.3	116.3	116.2	-0.8	-0.8
ALT20015	7/2/2024 7:48	49.7	39.3	0.4	10.6	121.2	121.4	-3.3	-4.5
ALT20016	7/2/2024 9:10	52.0	43.1	0.1	4.8	127.6	127.6	-9.2	-9.2
ALT20017	7/2/2024 9:06	44.3	41.3	0.3	14.1	136.5	136.7	-7.3	-7.5
ALT20018	7/2/2024 9:33	50.2	42.6	0.0	7.2	132.9	132.9	-6.0	-6.0
ALT20018	7/2/2024 9:38	CO was 20 ppm							
ALT20019	7/2/2024 9:42	48.0	40.9	0.2	10.9	132.6	132.6	-4.1	-4.1
ALT20019	7/2/2024 9:50	CO was 20 ppm							
ALT20020	7/2/2024 9:23	56.1	43.9	0.0	0.0	129.5	129.6	-6.3	-6.3
ALT20021	7/2/2024 5:36	45.0	40.1	0.7	14.2	118.5	118.5	-15.1	-13.3

ALT20021	7/22/2024 10:15	37.0	37.9	0.2	24.9	118.9	118.9	-18.1	-9.7
ALT20022	7/2/2024 5:41	43.1	38.0	1.5	17.4	114.4	114.3	-10.9	-8.4
ALT20022	7/22/2024 10:18	36.1	37.0	0.3	26.6	114.9	115.1	-22.7	-16.4
ALT20023	7/2/2024 5:45	51.1	43.7	0.4	4.8	121.0	121.4	-8.4	-12.9
ALT20023	7/22/2024 10:01	40.6	39.7	0.5	19.2	121.6	121.3	-37.8	-28.4
ALT20024	7/2/2024 5:49	50.1	43.5	0.2	6.2	127.0	126.9	-6.2	-6.6
ALT20024	7/22/2024 9:56	32.5	35.5	0.4	31.6	125.9	126.1	-30.8	-22.2
ALT20025	7/2/2024 5:55	53.0	42.5	0.7	3.8	121.3	121.3	-4.9	-6.2
ALT20025	7/22/2024 9:51	35.1	33.4	2.8	28.7	121.0	121.3	-19.8	-15.5
ALT20026	7/2/2024 5:59	49.5	40.5	1.2	8.8	127.8	127.8	-1.8	-1.8
ALT20026	7/22/2024 9:46	35.1	33.0	2.5	29.4	127.9	127.8	-6.3	-5.1
ALT20027	7/2/2024 6:03	55.8	43.4	0.3	0.5	117.5	117.5	-6.0	-6.9
ALT20027	7/22/2024 9:41	43.2	38.4	1.6	16.8	117.2	117.4	-26.2	-19.9
ALT20028	7/2/2024 9:15	56.1	43.9	0.0	0.0	124.7	124.9	-5.6	-6.3
ALT20029	7/2/2024 9:18	56.6	43.3	0.0	0.1	124.6	124.6	-5.5	-7.3
ALTA0003	7/8/2024 9:43	60.7	38.8	0.6	-0.1	111.5	111.7	-81.0	-83.5
ALTA0054	7/10/2024 11:08	59.4	39.4	0.0	1.2	79.1	79.1	-41.0	-40.5
ALTA0056	7/10/2024 11:01	59.8	40.2	0.0	0.0	108.9	108.9	-55.2	-55.2
ALTA0059	7/11/2024 8:54	59.0	40.6	0.3	0.1	101.6	101.7	-79.5	-79.5
ALTA0087	7/8/2024 7:30	51.3	36.0	2.3	10.4	123.6	123.9	-80.3	-81.0
ALTA0108	7/11/2024 9:06	44.7	38.1	0.3	16.9	89.3	89.1	-11.1	-9.9
ALTA0108	7/24/2024 6:25	44.0	39.1	0.3	16.6	88.6	89.0	-10.3	-8.4
ALTA0201	7/10/2024 7:46	57.5	38.6	0.0	3.9	108.6	108.8	-87.5	-87.9
ALTA0472	7/2/2024 7:24	56.2	41.1	0.0	2.7	114.6	114.6	-81.1	-81.8
ALTA0483	7/10/2024 6:56	44.9	35.7	3.8	15.6	122.1	123.0	-75.6	-76.6
ALTA0488	7/8/2024 7:01	49.7	42.4	0.9	7.0	126.8	127.1	-83.2	-83.2
ALTA0491	7/8/2024 7:42	50.1	36.3	2.4	11.2	116.1	116.9	-79.9	-79.9
ALTA0508	7/3/2024 6:49	58.6	38.8	0.6	2.0	110.7	110.9	-57.1	-57.1
ALTA0517	7/3/2024 6:19	54.8	36.4	1.4	7.4	110.6	111.1	-66.2	-66.3
ALTA0518	7/8/2024 9:49	53.0	38.7	0.2	8.1	121.4	121.4	-4.0	-4.6
ALTA0529	7/10/2024 10:25	57.3	39.0	0.0	3.7	91.3	91.2	-65.3	-65.2
ALTA0541	7/1/2024 9:15	50.7	35.6	0.6	13.1	119.2	119.3	-28.1	-27.5
ALTA0545	7/8/2024 7:35	34.5	49.8	0.2	15.5	123.0	123.0	-2.0	-2.0
ALTA0551	7/10/2024 8:10	58.1	41.8	0.0	0.1	77.0	78.9	-4.4	-11.5
ALTA0578	7/5/2024 7:35	46.9	36.3	1.1	15.7	106.0	108.4	-46.7	-39.4
ALTA0579	7/8/2024 7:09	40.3	43.2	1.6	14.9	97.3	95.9	-85.1	-76.4
ALTA0589	7/11/2024 7:04	44.3	33.5	1.8	20.4	94.0	94.8	-14.3	-12.9
ALTA0611	7/1/2024 9:26	51.2	37.3	0.8	10.7	125.8	126.2	-52.8	-57.3
ALTA0612	7/1/2024 9:20	54.6	42.3	0.4	2.7	129.5	129.6	-67.8	-67.8
ALTA0624	7/10/2024 10:56	44.6	32.7	2.2	20.5	87.4	87.4	-7.0	-7.0
ALTA0629	7/1/2024 9:32	43.0	31.0	4.7	21.3	115.6	116.6	-45.5	-42.6
ALTA0639	7/8/2024 10:21	48.9	42.2	0.0	8.9	138.6	138.7	-82.9	-82.9
ALTA0650	7/10/2024 10:05	43.7	36.0	3.9	16.4	89.3	89.2	-66.8	-66.8
ALTA0651	7/9/2024 13:04	57.1	42.9	0.0	0.0	92.6	92.7	-79.5	-81.8
ALTA0652	7/8/2024 10:15	51.3	40.4	0.0	8.3	131.0	130.6	-29.2	-29.1
ALTA0654	7/10/2024 8:22	50.4	47.9	0.8	0.9	106.9	107.1	-64.6	-66.8
ALTA0664	7/9/2024 12:50	44.6	31.4	4.2	19.8	87.1	87.3	-85.5	-85.4
ALTA0669	7/5/2024 7:21	47.8	51.7	0.0	0.5	86.1	86.0	-77.1	-77.2
ALTA0678	7/2/2024 9:30	56.2	42.6	0.5	0.7	92.7	92.8	-84.2	-84.2
ALTA0682	7/3/2024 6:23	56.1	38.7	1.2	4.0	123.4	123.6	-61.4	-64.1
ALTA0686	7/5/2024 7:30	29.0	28.9	2.5	39.6	75.9	75.9	-77.1	-77.5
ALTA0712	7/1/2024 10:22	54.0	40.9	0.9	4.2	129.1	129.1	-68.7	-71.1
ALTA0713	7/1/2024 10:14	51.0	37.4	1.3	10.3	124.3	124.3	-73.5	-74.6
ALTA0714	7/1/2024 9:56	53.9	38.0	1.2	6.9	127.5	127.7	-70.3	-70.3
ALTA0733	7/8/2024 8:46	47.0	40.5	0.0	12.5	143.9	143.2	-13.8	-11.9
ALTA0733	7/8/2024 8:50	46.9	40.1	0.0	13.0	142.4	142.5	-10.9	-10.9
ALTA0733	7/8/2024 8:50	CO was 20 ppm							
ALTA0751	7/5/2024 9:09	44.4	39.0	0.0	16.6	111.4	111.3	-2.0	-1.5
ALTA0753	7/5/2024 9:29	46.1	40.5	0.0	13.4	128.1	127.9	-18.5	-16.4
ALTA0755	7/5/2024 10:10	42.2	39.2	0.1	18.5	123.6	121.6	-3.6	-2.5

ALTA0756	7/5/2024 8:21	54.2	45.8	0.0	0.0	103.4	104.2	-69.3	-74.7
ALTA0756	7/24/2024 7:57	55.0	44.7	0.0	0.3	110.9	111.4	-74.4	-80.1
ALTA0759	7/3/2024 10:30	50.5	41.9	0.0	7.6	128.6	128.5	-19.9	-19.9
ALTA0760	7/3/2024 10:34	54.5	45.5	0.0	0.0	135.1	135.1	-35.5	-35.5
ALTA0761	7/1/2024 9:48	42.4	35.4	0.4	21.8	118.5	118.8	-11.3	-10.0
ALTA0762	7/1/2024 10:18	53.7	39.7	1.3	5.3	125.8	125.8	-60.8	-61.8
ALTA0764	7/5/2024 8:39	48.9	39.0	0.0	12.1	116.1	115.4	-6.6	-5.1
ALTA0765	7/8/2024 7:50	48.3	35.7	0.6	15.4	99.0	100.2	-25.4	-28.7
ALTA0766	7/5/2024 8:08	57.3	42.7	0.0	0.0	92.9	93.1	-85.0	-84.0
ALTA0767	7/5/2024 8:54	47.5	39.9	0.0	12.6	132.0	129.5	-3.0	-2.6
ALTA0769	7/8/2024 8:37	41.5	44.6	3.2	10.7	108.3	108.0	-85.8	-85.8
ALTA0770	7/1/2024 9:52	46.5	36.9	0.3	16.3	122.7	122.7	-11.3	-10.5
ALTA0771	7/5/2024 6:41	53.4	39.7	0.0	6.9	121.7	121.8	-61.6	-65.6
ALTA0772	7/5/2024 6:57	48.3	37.5	0.0	14.2	124.4	124.4	-21.3	-21.3
ALTA0851	7/5/2024 8:26	47.6	42.8	0.0	9.6	117.9	117.6	-8.2	-7.6
ALTA0852	7/5/2024 8:03	45.4	41.0	1.6	12.0	124.6	124.7	-1.6	-1.6
ALTA0853	7/5/2024 7:59	49.0	41.9	0.0	9.1	114.3	117.6	-6.8	-12.3
ALTA0854	7/2/2024 8:49	43.9	40.6	0.0	15.5	128.7	127.0	-3.3	-2.6
ALTA0856	7/2/2024 8:57	38.8	37.1	0.0	24.1	129.1	129.1	-0.6	-0.6
ALTA0857	7/2/2024 8:31	50.0	41.5	0.0	8.5	117.8	117.9	-79.8	-80.8
ALTA0858	7/2/2024 8:26	44.1	43.9	0.0	12.0	135.2	135.2	-2.2	-1.5
ALTA0859	7/8/2024 8:01	46.9	40.1	0.4	12.6	124.6	123.7	-7.9	-7.7
ALTA0860	7/8/2024 8:07	38.8	37.4	0.4	23.4	125.0	125.1	-28.2	-27.8
ALTA0861	7/8/2024 8:17	38.8	37.4	0.0	23.8	124.9	124.7	-0.5	-0.5
ALTA0862	7/8/2024 8:23	45.1	39.8	0.0	15.1	116.4	114.3	-3.1	-1.7
ALTA0863	7/8/2024 9:24	52.5	40.3	0.0	7.2	110.3	110.3	-86.7	-86.7
ALTA0864	7/11/2024 8:14	50.3	29.3	3.6	16.8	92.7	92.8	-87.2	-87.2
ALTA0865	7/8/2024 9:38	44.7	33.4	4.4	17.5	82.0	81.9	-87.6	-87.6
ALTA0866	7/8/2024 10:00	44.6	40.0	0.0	15.4	124.7	124.4	-32.7	-20.8
ALTA0867	7/8/2024 10:08	49.4	40.4	0.0	10.2	134.1	131.5	-30.3	-20.2
ALTA0868	7/8/2024 7:17	49.7	48.1	0.7	1.5	78.4	78.1	-82.7	-82.0
ALTA0870	7/8/2024 7:26	51.9	40.1	0.3	7.7	111.5	111.4	-84.2	-84.3
ALTA0872	7/1/2024 10:36	43.8	34.3	3.2	18.7	93.2	93.3	-77.9	-77.9
ALTA0873	7/1/2024 10:41	44.7	33.5	4.7	17.1	123.9	124.4	-75.1	-73.4
ALTA0875	7/9/2024 12:42	52.1	39.5	1.6	6.8	108.8	94.6	-82.7	-82.0
ALTA0877	7/9/2024 12:36	52.3	35.9	2.8	9.0	86.2	86.0	-83.0	-81.6
ALTA0878	7/3/2024 6:55	57.4	39.1	0.9	2.6	88.4	88.4	-57.1	-57.1
ALTA0879	7/3/2024 6:31	46.9	36.0	0.5	16.6	111.4	111.4	-26.7	-26.7
ALTA0880	7/8/2024 8:29	36.9	63.1	0.0	0.0	129.1	129.1	-69.4	-68.8

Altamont Landfill and Resource Recovery Facility

Wellfield Monitoring Report - August 2024
REPORT PREPARED BY: Rajan Phadnis
UPDATED DATE: 9/1/2024
FLOW SENSING DEVICE: LANDTEC GEM

MODEL: 5000

DATE LAST CALIBRATED: DAILY

Wellhead ID Number	Date and Time	CH_4 (% by Volume)	CO_2 (% by Volume)	O_2 (% by Volume)	BALANCE GAS (% by Volume)	INITIAL TEMPERATURE (°F)	ADJUSTED TEMPERATURE (°F)	INITIAL STATIC PRESSURE ("WC)	ADJUSTED STATIC PRESSURE ("WC)
ALHC0824	8/19/2024 9:41	43.2	32.4	4.8	19.6	79.8	79.7	-0.6	-0.1
ALLC0695	8/5/2024 12:06	48.9	41.2	0.0	9.9	117.5	118.1	-47.7	-57.9
ALLC0700	8/9/2024 10:22	56.7	43.3	0.0	0.0	85.4	85.4	-74.8	-74.8
ALLC0703	8/7/2024 8:42	9.1	10.0	13.1	67.8	106.7	107.8	-1.0	-17.9
ALLC0703	8/7/2024 8:44	10.9	10.4	13.2	65.5	108.3	108.7	-20.2	-1.4
ALLC0709	8/8/2024 9:44	49.5	37.5	0.1	12.9	117.0	117.0	-41.8	-45.3
ALLC0734	8/7/2024 8:00	54.4	40.0	1.4	4.2	106.3	108.2	-54.8	-55.9
ALLC0736	8/7/2024 8:33	42.7	35.5	0.0	21.8	106.7	106.8	-26.7	-20.3
ALLC0737	8/7/2024 8:37	58.8	41.2	0.0	0.0	87.0	87.0	-60.3	-60.3
ALLC0738	8/7/2024 9:45	52.8	46.6	0.5	0.1	95.9	96.0	-66.6	-66.5
ALLC0739	8/6/2024 12:10	48.5	35.1	3.0	13.4	85.7	88.1	-83.1	-83.0
ALLC0740	8/6/2024 12:20	49.3	40.9	0.0	9.8	128.4	127.8	-4.4	-2.8
ALLC0743	8/7/2024 9:41	51.8	43.1	1.3	3.8	124.0	124.3	-65.4	-62.4
ALLC0744	8/6/2024 12:15	54.5	41.4	0.2	3.9	106.1	106.7	-74.6	-75.8
ALLC0745	8/7/2024 8:28	39.1	37.6	0.0	23.3	119.3	119.3	-2.5	-2.5
ALLC0746	8/6/2024 12:05	54.7	45.3	0.0	0.0	115.2	115.1	-82.0	-82.5
ALLC0747	8/9/2024 10:33	50.3	45.1	0.0	4.6	119.2	119.2	-74.0	-74.0
ALLC0748	8/9/2024 10:25	57.7	42.3	0.0	0.0	111.5	111.9	-76.1	-76.2
ALLC0749	8/9/2024 10:17	49.1	39.3	0.0	11.6	118.5	118.8	-41.3	-41.1
ALLC0777	8/1/2024 13:50	50.3	36.0	0.0	13.7	118.3	117.9	-4.3	-3.8
ALLC0778	8/1/2024 11:31	49.5	36.5	0.0	14.0	102.2	102.2	-20.6	-14.1
ALLC0779	8/1/2024 10:46	51.9	40.9	0.0	7.2	109.9	110.6	-2.4	-3.9
ALLC0780	8/1/2024 10:42	36.1	31.9	0.0	32.0	109.7	108.4	-2.8	-1.5
ALLC0781	8/1/2024 11:01	39.2	33.9	0.0	26.9	112.2	112.3	-1.2	-1.1
ALLC0783	8/1/2024 11:06	50.4	37.2	0.0	12.4	116.6	116.6	-0.9	-0.9
ALLC0784	8/1/2024 11:35	20.1	25.3	0.0	54.6	100.5	100.6	-0.9	-0.9
ALLC0785	8/1/2024 11:27	47.7	34.7	0.7	16.9	106.5	106.0	-5.4	-4.0
ALLC0786	8/1/2024 11:13	51.0	36.7	0.0	12.3	121.1	121.1	-6.4	-6.3
ALLC0787	8/1/2024 10:08	51.0	38.3	0.0	10.7	110.7	110.9	-10.8	-12.2
ALLC0788	8/1/2024 10:15	56.3	38.4	0.1	5.2	107.7	107.5	-70.3	-72.0
ALLC0789	8/1/2024 10:21	58.1	41.2	0.0	0.7	118.3	120.4	-2.3	-4.1
ALLC0790	8/1/2024 14:07	52.7	36.9	0.0	10.4	104.0	104.3	-72.4	-69.2
ALLC0791	8/2/2024 11:00	40.4	36.8	0.0	22.8	103.3	103.6	-61.7	-46.8
ALLC0792	8/2/2024 11:05	39.1	34.8	0.0	26.1	117.5	117.0	-8.5	-4.8
ALLC0793	8/1/2024 14:17	37.2	31.8	0.0	31.0	109.1	109.2	-81.5	-76.7
ALLC0794	8/2/2024 11:12	40.7	34.8	0.1	24.4	119.7	119.8	-30.4	-24.8
ALLC0796	8/2/2024 10:47	48.0	41.6	0.0	10.4	129.8	129.7	-33.4	-29.6
ALLC0797	8/2/2024 10:42	42.4	47.1	0.0	10.5	111.7	111.7	-1.4	-1.4
ALLC0798	8/2/2024 10:55	27.9	34.1	0.1	37.9	128.9	128.9	-1.1	-1.1
ALLC0800	8/2/2024 10:32	46.1	41.0	0.0	12.9	114.3	114.2	-4.9	-3.6
ALLC0801	8/2/2024 9:47	50.1	46.6	0.0	3.3	124.4	124.5	-6.5	-6.5
ALLC0803	8/1/2024 10:01	52.3	43.3	0.0	4.4	115.6	120.5	-1.4	-2.4
ALLC0804	8/1/2024 9:57	51.7	42.5	0.0	5.8	106.7	107.1	-1.4	-2.1
ALLC0805	8/6/2024 13:45	44.6	36.5	0.0	18.9	98.7	98.7	-1.2	-1.1
ALLC0806	8/6/2024 13:48	43.6	38.0	0.0	18.4	109.7	109.7	-1.1	-1.1
ALLC0807	8/6/2024 13:53	42.4	39.1	1.3	17.2	108.3	106.9	-2.8	-2.2
ALLC0811	8/1/2024 13:55	43.7	34.5	0.0	21.8	105.5	105.8	-0.9	-0.9
ALLC0812	8/1/2024 14:00	40.2	34.5	0.0	25.3	115.1	115.0	-2.4	-2.2
ALLC0813	8/2/2024 10:27	26.7	25.7	0.0	47.6	106.0	106.0	-1.3	-1.3
ALLC0814	8/2/2024 10:07	48.2	36.1	1.3	14.4	119.5	119.5	-0.7	-0.7
ALLC0815	8/5/2024 9:45	46.1	40.3	0.0	13.6	110.2	109.3	-17.6	-16.3

ALLC0816	8/5/2024 11:46	55.2	44.8	0.0	0.0	91.5	91.9	-82.9	-82.8
ALLC0817	8/5/2024 10:05	52.6	43.1	0.0	4.3	119.1	119.2	-10.4	-16.4
ALLC0819	8/7/2024 8:08	50.8	44.0	2.6	2.6	109.4	109.5	-2.4	-2.4
ALLC0820	8/6/2024 11:34	53.7	42.1	1.0	3.2	109.6	109.6	-68.7	-68.7
ALLC0821	8/8/2024 10:54	44.9	40.5	0.3	14.3	106.1	106.0	-25.5	-26.3
ALLC0822	8/14/2024 9:14	12.7	66.8	0.0	20.5	126.2	126.3	-5.5	-5.4
ALLC0826	8/6/2024 11:58	52.9	39.5	0.0	7.6	101.8	101.7	-82.5	-82.5
ALLC0827	8/6/2024 11:39	56.8	43.2	0.0	0.0	95.6	95.6	-72.1	-72.2
ALLC0830	8/8/2024 12:35	58.8	39.4	0.0	1.8	107.6	107.8	-79.0	-79.0
ALLC0831	8/6/2024 11:50	25.3	30.4	0.0	44.3	110.5	110.5	-1.4	-1.4
ALLC0832	8/1/2024 14:13	38.8	33.9	0.0	27.3	126.7	126.4	-24.4	-12.7
ALLC0833	8/2/2024 10:37	46.2	39.1	0.0	14.7	110.7	110.7	0.0	0.0
ALLC0834	8/8/2024 8:19	51.6	48.4	0.0	0.0	124.0	124.0	-85.2	-84.5
ALLC0835	8/8/2024 8:14	50.4	49.6	0.0	0.0	124.4	124.4	-85.7	-84.5
ALLC0836	8/8/2024 8:08	48.9	51.1	0.0	0.0	128.8	128.8	-84.5	-84.1
ALLC0837	8/8/2024 8:06	50.1	49.9	0.0	0.0	126.5	126.5	-84.4	-84.4
ALLC0838	8/14/2024 9:08	40.1	35.0	4.7	20.2	76.1	76.1	-56.5	-56.5
ALLC0839	8/8/2024 10:24	31.1	37.7	0.0	31.2	129.2	120.9	-13.1	-6.7
ALLC0840	8/8/2024 10:17	39.6	41.8	0.0	18.6	124.4	124.3	-2.0	-1.8
ALLC0841	8/15/2024 7:39	59.9	32.2	0.0	7.9	65.7	65.9	-49.1	-49.1
ALLC0842	8/14/2024 9:27	57.8	41.8	0.0	0.4	111.7	112.8	-1.4	-3.3
ALLC0843	8/8/2024 7:39	50.0	38.1	0.0	11.9	73.1	73.2	-52.6	-63.6
ALLC0844	8/8/2024 7:36	42.3	34.8	0.0	22.9	86.0	86.1	-5.0	-3.6
ALLC0845	8/8/2024 7:33	59.5	40.5	0.1	-0.1	80.4	80.5	-79.4	-79.5
ALLC0846	8/13/2024 10:50	46.1	32.9	3.5	17.5	81.0	81.0	-70.9	-70.9
ALLC0847	8/7/2024 9:26	44.7	32.4	1.5	21.4	115.4	115.5	-2.9	-2.9
ALLC0848	8/7/2024 9:19	36.7	32.2	0.0	31.1	107.2	107.2	-13.4	-13.4
ALLC0849	8/7/2024 9:15	27.6	30.3	0.0	42.1	119.7	120.8	-34.6	-27.8
ALT20001	8/7/2024 7:45	47.5	40.1	0.1	12.3	101.3	102.0	-0.7	-0.6
ALT20003	8/13/2024 7:25	46.3	39.9	0.6	13.2	122.9	122.9	-38.9	-34.7
ALT20004	8/13/2024 7:17	45.4	39.0	0.4	15.2	103.3	102.8	-25.0	-15.1
ALT20005	8/13/2024 7:20	40.2	39.2	0.3	20.3	98.3	98.1	-4.6	-4.6
ALT20006	8/13/2024 7:09	50.3	39.6	0.3	9.8	123.2	123.6	-10.2	-13.5
ALT20007	8/13/2024 7:28	44.7	36.2	0.4	18.7	106.0	106.2	-8.9	-8.2
ALT20008	8/14/2024 9:38	18.8	20.9	4.8	55.5	120.0	119.8	-2.4	-2.4
ALT20009	8/6/2024 9:23	43.6	37.7	1.0	17.7	128.7	128.9	-36.0	-24.7
ALT20010	8/13/2024 8:05	37.1	31.4	3.5	28.0	129.8	129.1	-22.4	-15.1
ALT20011	8/6/2024 9:18	39.0	37.3	0.0	23.7	127.6	127.7	-2.8	-2.7
ALT20012	8/6/2024 8:50	42.6	40.8	0.1	16.5	127.8	127.8	-1.1	-1.1
ALT20013	8/6/2024 8:53	43.7	40.6	0.0	15.7	131.1	131.1	-1.0	-1.0
ALT20014	8/6/2024 8:45	34.2	35.6	0.0	30.2	115.6	115.6	-1.5	-0.9
ALT20015	8/6/2024 8:42	44.1	38.3	0.3	17.3	123.4	123.2	-5.2	-3.1
ALT20016	8/13/2024 7:38	51.8	43.8	0.0	4.4	126.8	127.2	-9.8	-9.7
ALT20017	8/13/2024 7:33	42.8	40.9	0.0	16.3	135.5	135.5	-7.9	-7.8
ALT20018	8/7/2024 7:22	49.3	43.2	0.0	7.5	132.7	132.8	-6.1	-6.1
ALT20018	8/13/2024 7:55	49.9	42.5	0.0	7.6	131.8	131.9	-6.7	-6.7
ALT20019	8/7/2024 7:28	44.3	41.2	0.0	14.5	132.9	133.1	-4.3	-4.2
ALT20019	8/13/2024 7:46	45.6	40.5	0.2	13.7	132.4	132.4	-4.1	-4.0
ALT20020	8/13/2024 7:50	55.5	44.5	0.0	0.0	129.2	129.2	-7.5	-7.5
ALT20021	8/6/2024 7:59	49.9	41.1	0.0	9.0	118.2	118.9	-3.6	-8.0
ALT20022	8/6/2024 8:16	48.3	41.4	0.0	10.3	115.7	115.7	-5.5	-5.8
ALT20023	8/6/2024 7:49	49.3	43.9	0.1	6.7	122.0	122.1	-10.2	-14.0
ALT20024	8/6/2024 7:36	44.7	41.4	0.1	13.8	126.6	126.6	-8.6	-6.4
ALT20025	8/6/2024 7:28	53.3	42.6	0.0	4.1	122.1	122.1	-6.2	-8.8
ALT20026	8/6/2024 7:19	49.7	40.7	0.9	8.7	126.6	127.2	-0.8	-1.0
ALT20027	8/6/2024 7:14	53.6	42.9	0.3	3.2	117.7	117.7	-15.2	-19.4
ALT20028	8/7/2024 7:37	55.0	45.0	0.0	0.0	124.5	124.6	-6.8	-6.8
ALT20029	8/7/2024 7:33	55.6	44.4	0.0	0.0	124.0	124.0	-6.5	-7.2
ALTA0003	8/13/2024 13:40	58.3	36.1	0.2	5.4	113.1	113.1	-83.2	-83.2
ALTA0054	8/14/2024 9:05	58.3	40.0	0.0	1.7	77.8	77.8	-46.8	-46.8

ALTA0056	8/13/2024 13:47	57.2	38.1	0.1	4.6	109.4	109.3	-63.5	-63.5
ALTA0056	8/14/2024 9:00	59.0	41.0	0.0	0.0	107.4	107.8	-63.9	-63.1
ALTA0059	8/14/2024 8:46	57.4	41.2	0.6	0.8	81.9	83.4	-81.6	-80.4
ALTA0087	8/14/2024 9:20	57.6	41.4	0.0	1.0	125.5	125.9	-81.2	-80.7
ALTA0108	8/14/2024 8:37	50.6	40.0	0.2	9.2	87.1	87.4	-7.3	-8.5
ALTA0201	8/13/2024 11:05	53.2	35.0	0.5	11.3	109.5	109.4	-84.6	-84.6
ALTA0472	8/1/2024 9:52	54.8	39.1	0.0	6.1	116.4	115.8	-84.2	-83.7
ALTA0483	8/8/2024 10:22	53.2	41.3	0.0	5.5	118.6	118.8	-63.6	-63.0
ALTA0488	8/8/2024 10:32	50.2	43.5	0.0	6.3	126.0	126.8	-65.7	-65.7
ALTA0491	8/8/2024 12:31	60.2	39.8	0.1	-0.1	121.0	121.1	-79.3	-79.3
ALTA0508	8/7/2024 8:11	57.9	40.4	0.0	1.7	111.5	111.6	-64.5	-64.4
ALTA0517	8/7/2024 8:18	56.7	38.7	0.0	4.6	111.3	111.5	-69.9	-70.4
ALTA0518	8/13/2024 8:39	50.0	38.5	0.0	11.5	119.7	120.1	-4.3	-4.7
ALTA0529	8/8/2024 10:40	53.0	42.3	0.0	4.7	82.0	81.9	-67.9	-67.9
ALTA0541	8/5/2024 13:30	50.7	38.2	0.0	11.1	109.9	116.5	-28.1	-28.5
ALTA0545	8/13/2024 8:31	34.3	48.9	0.4	16.4	122.8	122.7	-2.5	-2.5
ALTA0551	8/14/2024 9:32	47.7	37.5	2.9	11.9	79.8	79.5	-20.2	-18.7
ALTA0578	8/9/2024 10:44	54.2	42.1	0.0	3.7	103.8	105.7	-26.9	-49.2
ALTA0579	8/8/2024 10:41	40.9	46.3	0.0	12.8	104.8	104.9	-67.0	-67.0
ALTA0589	8/15/2024 7:50	47.2	35.4	0.9	16.5	95.5	95.7	-12.0	-12.4
ALTA0611	8/8/2024 8:59	51.6	39.0	0.0	9.4	124.9	124.9	-61.8	-67.3
ALTA0612	8/8/2024 8:52	56.5	43.2	0.1	0.2	126.2	126.2	-70.4	-70.4
ALTA0624	8/13/2024 13:33	44.5	32.5	1.1	21.9	87.9	88.1	-7.6	-5.9
ALTA0629	8/8/2024 9:06	59.4	40.6	0.0	0.0	113.3	115.8	-33.5	-37.7
ALTA0639	8/14/2024 8:36	48.4	40.7	0.1	10.8	137.0	137.8	-82.7	-82.7
ALTA0650	8/8/2024 10:07	37.7	37.4	4.9	20.0	81.6	81.6	-70.9	-71.5
ALTA0651	8/8/2024 10:12	51.3	48.7	0.0	0.0	91.8	91.8	-66.5	-67.6
ALTA0652	8/8/2024 8:40	47.8	46.0	0.0	6.2	137.0	136.9	-28.6	-26.4
ALTA0654	8/7/2024 9:35	48.5	49.6	0.7	1.2	130.5	132.2	-58.4	-58.4
ALTA0664	8/8/2024 9:55	35.8	33.5	4.5	26.2	71.8	72.2	-73.3	-73.3
ALTA0669	8/9/2024 10:30	33.1	41.0	4.3	21.6	77.1	77.0	-78.7	-78.7
ALTA0678	8/1/2024 11:20	57.0	40.7	0.3	2.0	88.7	89.1	-85.7	-85.9
ALTA0682	8/7/2024 8:22	56.9	40.8	0.2	2.1	124.0	124.1	-67.3	-68.0
ALTA0686	8/9/2024 10:39	43.1	35.3	2.3	19.3	74.8	75.1	-74.5	-75.4
ALTA0712	8/5/2024 11:35	53.8	44.8	0.0	1.4	128.4	128.6	-74.2	-74.8
ALTA0713	8/5/2024 11:28	54.4	41.9	0.0	3.7	123.1	123.3	-77.6	-77.2
ALTA0714	8/5/2024 9:49	54.7	43.0	0.0	2.3	126.3	126.5	-76.5	-76.5
ALTA0733	8/7/2024 9:26	49.0	44.9	0.0	6.1	144.8	144.8	-8.2	-8.3
ALTA0733	8/7/2024 9:28	48.9	44.5	0.0	6.6	144.5	143.8	-8.2	-6.8
ALTA0733	8/7/2024 9:28	CO was 20 ppm							
ALTA0751	8/6/2024 11:46	51.6	42.8	0.0	5.6	111.4	111.5	-0.8	-0.8
ALTA0753	8/6/2024 14:04	52.0	42.8	0.0	5.2	128.4	128.6	-9.7	-11.1
ALTA0755	8/6/2024 13:58	52.3	46.8	0.0	0.9	117.1	123.1	-0.4	-2.1
ALTA0756	8/2/2024 9:41	53.2	46.8	0.0	0.0	107.3	107.1	-83.3	-83.3
ALTA0759	8/6/2024 10:20	48.1	42.3	0.0	9.6	129.1	129.0	-22.9	-17.6
ALTA0760	8/6/2024 10:14	54.4	43.4	0.3	1.9	135.4	135.4	-46.3	-46.3
ALTA0761	8/5/2024 10:03	48.3	40.9	0.0	10.8	116.2	116.3	-7.2	-7.2
ALTA0762	8/5/2024 11:31	55.3	44.7	0.0	0.0	124.8	124.9	-67.2	-64.0
ALTA0764	8/2/2024 9:34	57.1	42.4	0.0	0.5	112.8	114.1	-3.1	-4.2
ALTA0765	8/8/2024 12:39	45.8	35.0	0.4	18.8	102.9	103.1	-32.3	-29.1
ALTA0766	8/2/2024 10:15	56.6	43.4	0.0	0.0	97.4	97.5	-86.0	-86.0
ALTA0767	8/7/2024 8:02	55.5	44.4	0.1	0.0	130.6	130.6	-1.1	-1.1
ALTA0769	8/7/2024 9:14	43.9	55.7	0.4	0.0	118.2	118.0	-66.9	-66.9
ALTA0770	8/5/2024 9:54	51.2	41.1	0.0	7.7	121.5	121.7	-8.2	-9.1
ALTA0771	8/5/2024 11:57	45.2	39.2	0.4	15.2	119.3	119.5	-63.8	-60.0
ALTA0772	8/9/2024 10:12	48.7	39.2	0.0	12.1	124.6	124.6	-21.0	-21.0
ALTA0851	8/2/2024 10:03	52.6	47.4	0.0	0.0	117.1	118.2	-2.7	-3.6
ALTA0852	8/2/2024 10:19	51.3	48.7	0.0	0.0	128.2	129.0	-6.9	-5.3
ALTA0853	8/2/2024 10:23	47.6	41.7	0.0	10.7	118.6	118.0	-10.5	-8.8
ALTA0854	8/1/2024 11:50	44.2	39.9	0.0	15.9	127.2	124.1	-1.6	-1.2

ALTA0856	8/1/2024 11:43	38.9	34.9	0.0	26.2	129.1	129.1	-0.6	-0.6
ALTA0857	8/1/2024 10:56	50.9	39.8	0.0	9.3	117.9	117.9	-83.0	-82.4
ALTA0858	8/1/2024 10:51	50.4	45.6	0.0	4.0	134.1	134.1	-1.2	-1.2
ALTA0859	8/7/2024 8:34	52.9	46.7	0.0	0.4	127.3	131.8	-2.2	-13.1
ALTA0860	8/7/2024 8:39	40.3	40.5	0.3	18.9	127.2	127.0	-21.9	-20.5
ALTA0861	8/7/2024 8:43	49.0	42.5	0.0	8.5	125.8	125.9	-0.2	-0.2
ALTA0862	8/7/2024 9:05	52.1	47.9	0.0	0.0	115.2	119.5	-0.9	-2.7
ALTA0863	8/8/2024 7:47	48.8	40.9	0.1	10.2	109.1	109.1	-84.5	-84.5
ALTA0864	8/8/2024 7:53	53.6	46.4	0.0	0.0	87.1	87.1	-85.1	-85.1
ALTA0865	8/8/2024 8:00	47.3	41.3	2.8	8.6	80.5	80.4	-81.7	-81.7
ALTA0866	8/8/2024 8:26	48.2	51.8	0.0	0.0	119.7	127.0	-3.7	-15.2
ALTA0867	8/8/2024 8:34	49.6	50.4	0.0	0.0	131.3	132.5	-15.5	-17.1
ALTA0868	8/8/2024 10:46	50.0	50.0	0.0	0.0	92.3	92.3	-62.6	-62.1
ALTA0870	8/13/2024 11:31	56.9	39.3	0.3	3.5	117.7	118.0	-82.5	-82.6
ALTA0872	8/5/2024 11:50	34.0	32.6	3.7	29.7	79.9	79.8	-83.1	-83.1
ALTA0873	8/5/2024 11:41	53.6	44.0	0.0	2.4	122.9	123.1	-78.8	-78.8
ALTA0875	8/8/2024 9:49	52.1	47.5	0.4	0.0	88.9	88.8	-73.7	-73.7
ALTA0877	8/8/2024 9:44	54.3	44.3	0.8	0.6	70.5	70.6	-76.0	-76.0
ALTA0878	8/7/2024 8:06	57.8	40.9	0.4	0.9	89.7	89.8	-69.8	-69.9
ALTA0879	8/7/2024 9:11	44.7	35.6	0.0	19.7	110.7	110.9	-24.7	-19.3
ALTA0880	8/7/2024 9:09	33.1	66.9	0.0	0.0	129.8	129.8	-54.5	-54.4

Altamont Landfill and Resource Recovery Facility

Wellfield Monitoring Report - September 2024
REPORT PREPARED BY: Rajan Phadnis
UPDATED DATE: 10/1/2024
FLOW SENSING DEVICE: LANDTEC GEM
MODEL: 5000
DATE LAST CALIBRATED: DAILY

Wellhead ID Number	Date and Time	CH_4 (% by Volume)	CO_2 (% by Volume)	O_2 (% by Volume)	BALANCE GAS (% by Volume)	INITIAL TEMPERATURE (°F)	ADJUSTED TEMPERATURE (°F)	INITIAL STATIC PRESSURE ("WC)	ADJUSTED STATIC PRESSURE ("WC)
ALHC0824	9/19/2024 7:46	54.1	35.8	2.4	7.7	69.3	74.0	-0.2	-0.7
ALLC0695	9/13/2024 8:34	47.8	38.8	0.0	13.4	118.4	118.3	-48.3	-48.2
ALLC0700	9/3/2024 10:31	58.9	41.1	0.0	0.0	90.9	90.8	-69.2	-69.2
ALLC0703	9/11/2024 8:37	6.5	10.3	12.1	71.1	99.0	102.4	-3.8	-22.9
ALLC0703	9/11/2024 8:40	6.4	10.0	12.5	71.1	103.1	103.6	-22.4	-3.4
ALLC0703	9/23/2024 13:37	NSPS/EG Corrective Action Completed (CAC)							
ALLC0709	9/6/2024 7:56	44.6	35.5	0.0	19.9	118.0	118.6	-46.0	-35.0
ALLC0734	9/11/2024 7:55	56.1	43.9	0.0	0.0	109.8	109.7	-58.1	-58.0
ALLC0736	9/11/2024 8:25	52.3	40.6	0.0	7.1	102.2	103.0	-14.0	-20.0
ALLC0737	9/11/2024 8:31	56.7	43.3	0.0	0.0	108.4	108.7	-70.3	-70.3
ALLC0738	9/11/2024 10:43	49.4	43.6	1.8	5.2	118.3	117.9	-81.2	-77.5
ALLC0739	9/9/2024 11:39	47.7	34.9	3.2	14.2	93.5	93.7	-57.8	-58.6
ALLC0740	9/11/2024 9:42	51.4	43.4	0.0	5.2	123.6	125.8	-2.4	-4.1
ALLC0743	9/11/2024 10:35	53.5	46.5	0.0	0.0	122.6	122.5	-78.6	-82.8
ALLC0744	9/9/2024 11:31	52.6	41.4	0.0	6.0	110.8	110.8	-48.9	-50.1
ALLC0745	9/11/2024 9:46	37.3	37.5	0.0	25.2	116.1	116.1	-2.9	-2.8
ALLC0746	9/9/2024 11:45	54.5	45.5	0.0	0.0	118.2	118.2	-57.6	-58.0
ALLC0747	9/3/2024 10:43	50.6	41.8	0.0	7.6	119.4	119.5	-73.9	-73.9
ALLC0748	9/3/2024 10:34	58.9	40.1	0.0	1.0	110.9	111.5	-75.5	-75.5
ALLC0749	9/3/2024 10:25	50.3	37.6	0.0	12.1	118.8	119.0	-41.3	-47.9
ALLC0777	9/5/2024 8:23	51.8	40.1	0.0	8.1	115.6	116.7	-3.4	-4.7
ALLC0778	9/4/2024 11:53	54.2	44.4	0.0	1.4	103.6	103.8	-12.4	-20.5
ALLC0779	9/3/2024 10:27	49.9	40.3	0.0	9.8	110.5	110.7	-3.6	-5.2
ALLC0780	9/3/2024 10:23	58.2	39.1	0.0	2.7	105.9	108.9	-0.6	-2.2
ALLC0781	9/3/2024 10:41	49.3	37.0	0.0	13.7	111.2	111.2	-0.5	-0.5
ALLC0783	9/4/2024 11:32	54.2	45.2	0.0	0.6	116.7	116.8	-0.3	-0.3
ALLC0784	9/4/2024 11:28	27.9	31.7	0.0	40.4	102.9	102.9	-0.5	-0.5
ALLC0785	9/4/2024 11:42	52.0	43.0	0.2	4.8	107.8	108.2	-2.2	-3.4
ALLC0786	9/4/2024 11:37	51.5	43.7	0.0	4.8	121.7	121.6	-5.1	-6.1
ALLC0787	9/3/2024 10:10	52.8	38.4	0.0	8.8	110.4	110.9	-7.4	-10.7
ALLC0788	9/3/2024 10:14	55.5	38.7	0.1	5.7	107.9	107.8	-68.4	-71.9
ALLC0789	9/3/2024 10:19	53.0	40.0	0.0	7.0	118.7	119.5	-3.2	-5.8
ALLC0790	9/5/2024 8:38	54.1	41.3	0.0	4.6	102.6	102.5	-56.8	-61.1
ALLC0791	9/16/2024 13:14	49.5	40.7	0.0	9.8	104.2	104.2	-45.6	-56.8
ALLC0792	9/5/2024 12:09	57.2	42.8	0.0	0.0	116.7	117.8	-1.7	-3.8
ALLC0793	9/5/2024 12:18	42.5	37.0	0.0	20.5	109.9	109.9	-64.7	-61.1
ALLC0794	9/5/2024 12:01	48.8	41.2	0.0	10.0	120.8	120.8	-22.5	-22.0
ALLC0796	9/4/2024 10:26	46.6	47.5	0.0	5.9	128.9	128.7	-24.1	-20.5
ALLC0797	9/4/2024 10:20	39.5	52.3	0.0	8.2	112.4	112.4	-1.1	-1.1
ALLC0798	9/4/2024 10:32	40.1	45.5	1.0	13.4	122.6	122.7	-0.3	-0.3
ALLC0800	9/5/2024 12:23	51.2	45.0	0.0	3.8	114.2	114.4	-1.8	-2.5
ALLC0801	9/9/2024 10:43	51.4	46.4	0.0	2.2	124.9	124.9	-5.7	-7.8
ALLC0803	9/3/2024 10:06	43.9	36.1	0.7	19.3	115.6	115.7	-0.9	-0.9
ALLC0804	9/3/2024 10:02	52.9	42.0	0.0	5.1	106.3	106.9	-0.7	-1.6
ALLC0805	9/9/2024 11:50	44.4	36.9	0.0	18.7	100.8	101.0	-1.1	-1.1
ALLC0806	9/9/2024 11:54	43.5	38.1	0.0	18.4	109.4	109.5	-0.9	-0.9
ALLC0807	9/9/2024 11:58	33.8	35.5	1.7	29.0	109.8	109.4	-2.5	-2.1
ALLC0811	9/5/2024 8:29	54.1	41.1	0.0	4.8	99.8	103.8	-0.9	-1.4
ALLC0812	9/5/2024 8:33	47.5	41.8	0.0	10.7	111.5	110.8	-1.3	-1.1
ALLC0813	9/5/2024 12:27	29.6	29.1	0.0	41.3	99.8	102.7	-0.7	-0.7
ALLC0814	9/4/2024 10:58	49.6	45.0	0.6	4.8	119.5	121.4	-0.2	-1.2
ALLC0815	9/12/2024 9:40	44.7	38.5	0.0	16.8	110.6	110.3	-13.8	-13.0
ALLC0816	9/12/2024 10:00	56.7	43.3	0.0	0.0	90.9	94.0	-76.4	-76.4

ALLC0817	9/12/2024 9:54	46.8	39.4	0.0	13.8	119.5	119.6	-15.7	-12.7
ALLC0819	9/5/2024 11:43	51.8	48.2	0.0	0.0	111.5	112.0	-1.3	-1.7
ALLC0820	9/5/2024 11:38	53.1	44.6	0.7	1.6	113.5	113.7	-62.6	-62.6
ALLC0821	9/13/2024 11:11	57.4	39.4	0.0	3.2	106.4	106.7	-20.6	-30.7
ALLC0822	9/18/2024 13:12	14.0	63.3	1.3	21.4	118.4	118.2	-8.9	-8.9
ALLC0826	9/9/2024 11:23	50.1	39.7	0.0	10.2	103.3	103.3	-59.0	-60.0
ALLC0827	9/5/2024 11:34	48.7	39.1	2.7	9.5	93.1	93.2	-69.2	-69.2
ALLC0830	9/13/2024 8:14	58.7	41.2	0.0	0.1	104.9	105.0	-68.5	-68.4
ALLC0831	9/9/2024 11:18	19.8	29.1	0.0	51.1	113.0	113.0	-2.2	-2.2
ALLC0832	9/5/2024 12:14	48.9	42.0	0.0	9.1	126.9	126.9	-10.1	-10.2
ALLC0833	9/4/2024 10:15	46.8	44.0	0.0	9.2	111.4	111.4	-0.2	-0.2
ALLC0834	9/11/2024 11:40	55.1	44.9	0.0	0.0	124.4	124.4	-83.5	-83.0
ALLC0835	9/11/2024 11:32	51.1	45.0	0.0	3.9	124.6	124.6	-83.2	-83.2
ALLC0836	9/11/2024 11:28	51.5	46.7	0.0	1.8	128.9	129.0	-82.7	-82.7
ALLC0837	9/11/2024 11:24	52.9	47.1	0.0	0.0	129.0	129.0	-82.6	-83.1
ALLC0838	9/13/2024 10:23	44.1	35.1	4.0	16.8	95.1	95.1	-28.0	-28.9
ALLC0839	9/12/2024 9:46	44.2	46.0	0.0	9.8	128.8	128.8	-3.6	-3.6
ALLC0840	9/12/2024 9:41	42.9	43.5	0.0	13.6	124.4	124.4	-1.6	-1.5
ALLC0841	9/17/2024 9:47	60.3	39.7	0.0	0.0	70.5	70.5	-86.4	-86.4
ALLC0842	9/13/2024 11:18	46.6	37.1	0.0	16.3	114.4	114.3	-4.0	-3.0
ALLC0843	9/11/2024 9:49	44.7	37.3	0.0	18.0	74.2	74.2	-55.8	-56.3
ALLC0844	9/11/2024 9:46	44.2	35.8	0.0	20.0	86.4	86.4	-3.6	-3.6
ALLC0845	9/11/2024 9:39	58.5	41.1	0.0	0.4	80.8	80.9	-77.5	-77.0
ALLC0846	9/16/2024 12:52	57.5	41.4	0.5	0.6	65.5	65.4	-71.6	-70.4
ALLC0847	9/11/2024 9:13	42.1	32.8	1.1	24.0	113.3	114.4	-2.5	-2.3
ALLC0848	9/11/2024 9:07	39.6	34.3	0.0	26.1	105.1	105.2	-12.9	-12.9
ALLC0849	9/11/2024 8:56	40.4	35.4	0.0	24.2	118.3	118.4	-20.1	-71.0
ALLC0849	9/11/2024 9:00	41.6	37.0	0.0	21.4	120.4	120.6	-75.4	-67.1
ALT20001	9/13/2024 7:54	47.8	40.2	0.5	11.5	101.0	101.3	-0.6	-0.5
ALT20003	9/4/2024 10:50	44.3	39.2	0.0	16.5	96.8	96.8	-27.9	-23.2
ALT20004	9/4/2024 10:40	23.5	28.8	0.0	47.7	106.7	106.7	-10.4	-10.4
ALT20005	9/4/2024 10:47	39.0	39.3	0.0	21.7	114.4	114.4	-3.4	-3.4
ALT20006	9/4/2024 10:37	45.8	38.5	0.0	15.7	124.5	124.7	-13.4	-11.0
ALT20007	9/4/2024 10:56	41.4	33.6	1.2	23.8	107.3	107.3	-5.7	-5.2
ALT20008	9/5/2024 8:23	18.1	19.7	8.8	53.4	120.1	126.9	-1.0	-1.8
ALT20008	9/5/2024 8:28	24.8	27.3	4.1	43.8	127.8	127.4	-2.0	-2.0
ALT20009	9/13/2024 7:43	50.9	43.3	0.0	5.8	128.4	128.7	-27.5	-32.9
ALT20010	9/5/2024 7:39	39.8	36.2	0.3	23.7	130.8	129.6	-12.0	-8.9
ALT20011	9/5/2024 7:49	48.5	40.1	0.0	11.4	126.0	127.6	-2.1	-3.0
ALT20012	9/5/2024 7:56	47.7	42.4	0.0	9.9	127.0	131.2	-0.8	-2.7
ALT20012	9/5/2024 7:59	47.0	42.4	0.0	10.6	133.4	133.2	-3.6	-2.2
ALT20013	9/5/2024 8:02	45.6	41.0	0.3	13.1	129.1	129.5	-0.8	-0.8
ALT20014	9/5/2024 8:07	44.0	38.9	0.1	17.0	112.5	112.6	-0.3	-0.3
ALT20015	9/5/2024 8:10	53.5	41.8	0.0	4.7	121.3	121.8	-2.0	-3.8
ALT20016	9/5/2024 8:40	49.9	43.5	0.0	6.6	81.9	81.8	-8.4	-8.4
ALT20017	9/5/2024 8:38	43.0	41.3	0.0	15.7	136.2	136.4	-6.0	-5.9
ALT20018	9/13/2024 7:32	48.9	43.0	0.0	8.1	132.4	132.6	-6.5	-6.6
ALT20019	9/4/2024 8:26	43.0	39.5	0.0	17.5	133.2	133.5	-3.5	-3.6
ALT20020	9/13/2024 7:38	54.2	45.8	0.0	0.0	128.8	128.8	-7.0	-7.0
ALT20021	9/4/2024 7:27	51.8	42.3	0.0	5.9	119.4	119.6	-9.3	-11.7
ALT20022	9/4/2024 7:31	52.1	43.5	0.0	4.4	115.9	116.2	-6.1	-8.0
ALT20023	9/4/2024 7:35	50.6	44.3	0.0	5.1	122.8	123.0	-11.4	-14.6
ALT20024	9/4/2024 7:39	49.2	43.4	0.0	7.4	126.9	127.2	-6.1	-7.7
ALT20025	9/4/2024 7:43	53.6	43.7	0.0	2.7	122.9	122.8	-7.9	-9.6
ALT20026	9/4/2024 7:47	48.7	41.1	0.4	9.8	126.8	126.9	-1.0	-1.1
ALT20027	9/4/2024 7:50	55.8	44.2	0.0	0.0	118.8	118.8	-15.2	-20.0
ALT20028	9/4/2024 8:10	54.7	45.3	0.0	0.0	124.7	124.8	-6.9	-6.9
ALT20029	9/4/2024 8:07	55.0	45.0	0.0	0.0	124.0	124.0	-5.0	-6.9
ALTA0003	9/13/2024 11:32	60.1	39.3	0.1	0.5	114.9	114.9	-71.3	-71.1
ALTA0054	9/13/2024 10:34	57.2	40.2	0.0	2.6	79.1	79.1	-33.9	-33.9

ALTA0056	9/13/2024 10:29	59.1	40.8	0.0	0.1	108.7	108.7	-44.0	-44.7
ALTA0059	9/13/2024 10:02	57.3	42.7	0.0	0.0	94.5	94.6	-57.6	-57.5
ALTA0087	9/13/2024 11:01	58.6	40.6	0.0	0.8	126.7	126.7	-62.3	-61.3
ALTA0108	9/13/2024 9:58	43.3	39.2	0.4	17.1	79.9	75.4	-8.4	-7.1
ALTA0201	9/17/2024 10:22	54.0	42.1	0.0	3.9	109.1	109.0	-85.5	-85.4
ALTA0472	9/3/2024 9:57	54.0	38.7	0.2	7.1	86.6	85.8	-82.5	-82.8
ALTA0483	9/12/2024 10:21	52.5	42.5	0.0	5.0	127.3	127.4	-69.5	-69.9
ALTA0483	9/13/2024 8:23	52.2	41.2	0.0	6.6	111.7	115.3	-63.8	-64.5
ALTA0488	9/13/2024 10:45	49.3	43.4	0.1	7.2	127.5	127.2	-58.3	-58.1
ALTA0491	9/13/2024 8:10	58.5	41.5	0.0	0.0	117.5	118.5	-68.6	-68.5
ALTA0508	9/11/2024 8:08	57.9	42.0	0.0	0.1	109.9	110.0	-71.7	-71.6
ALTA0517	9/11/2024 8:16	57.7	40.8	0.0	1.5	109.2	109.5	-80.5	-80.5
ALTA0518	9/13/2024 11:39	48.6	38.5	0.0	12.9	122.4	122.4	-4.2	-4.2
ALTA0529	9/12/2024 10:08	44.3	35.9	3.4	16.4	79.3	79.4	-78.6	-78.6
ALTA0541	9/6/2024 7:25	49.8	36.2	0.0	14.0	119.0	119.0	-32.0	-33.1
ALTA0545	9/13/2024 10:55	33.9	51.0	0.0	15.1	126.5	126.6	-1.9	-1.9
ALTA0551	9/19/2024 8:31	44.8	34.9	4.5	15.8	65.8	66.1	-10.9	-11.4
ALTA0578	9/3/2024 10:53	49.0	37.5	0.5	13.0	109.1	110.2	-49.1	-50.3
ALTA0579	9/13/2024 10:37	40.6	46.0	0.0	13.4	97.5	101.4	-59.3	-59.3
ALTA0589	9/17/2024 9:42	35.3	30.2	2.8	31.7	101.1	100.7	-23.4	-18.6
ALTA0611	9/6/2024 7:46	49.6	37.9	0.0	12.5	87.8	87.1	-68.7	-73.0
ALTA0612	9/6/2024 7:37	56.0	43.5	0.0	0.5	126.3	126.6	-72.6	-72.7
ALTA0624	9/18/2024 13:02	51.9	38.1	1.2	8.8	84.2	84.3	-20.8	-22.3
ALTA0629	9/6/2024 7:51	54.0	39.0	0.0	7.0	80.0	79.8	-49.1	-54.5
ALTA0639	9/11/2024 12:01	45.2	43.9	0.0	10.9	138.7	138.8	-80.6	-80.6
ALTA0650	9/12/2024 9:31	40.0	39.1	4.6	16.3	74.8	75.0	-74.0	-74.5
ALTA0651	9/12/2024 9:36	50.4	49.6	0.0	0.0	92.6	92.5	-69.7	-70.2
ALTA0652	9/11/2024 11:57	51.4	43.8	0.0	4.8	137.4	137.5	-22.3	-22.4
ALTA0654	9/11/2024 10:29	47.7	52.3	0.0	0.0	121.7	122.5	-76.3	-76.2
ALTA0664	9/16/2024 13:23	44.9	35.7	1.9	17.5	78.1	78.0	-84.6	-84.7
ALTA0669	9/3/2024 10:39	28.1	28.8	2.8	40.3	92.5	91.4	-78.5	-78.5
ALTA0678	9/4/2024 11:48	52.4	46.4	0.2	1.0	98.5	98.6	-64.4	-64.4
ALTA0682	9/11/2024 8:20	56.3	43.7	0.0	0.0	122.4	123.1	-77.3	-77.6
ALTA0686	9/3/2024 10:48	53.8	39.7	0.1	6.4	88.5	88.7	-72.1	-73.9
ALTA0712	9/12/2024 8:22	56.5	42.5	0.0	1.0	127.1	127.2	-58.2	-58.1
ALTA0713	9/12/2024 8:30	53.5	40.4	0.0	6.1	121.8	121.9	-62.2	-61.6
ALTA0714	9/12/2024 9:50	56.3	41.0	0.4	2.3	128.0	128.1	-67.6	-67.7
ALTA0733	9/16/2024 12:34	52.8	47.2	0.0	0.0	138.2	138.4	-2.1	-4.8
ALTA0751	9/9/2024 11:10	49.1	41.8	0.0	9.1	111.6	111.8	-0.9	-1.7
ALTA0753	9/11/2024 9:37	48.1	42.3	0.0	9.6	127.7	127.4	-16.8	-15.2
ALTA0755	9/9/2024 12:02	44.3	42.4	0.0	13.3	126.4	126.5	-4.5	-3.9
ALTA0756	9/9/2024 10:48	53.7	45.8	0.0	0.5	112.4	112.4	-62.6	-62.6
ALTA0759	9/5/2024 11:46	50.4	46.5	0.0	3.1	128.8	128.9	-11.8	-13.6
ALTA0760	9/5/2024 11:51	50.3	47.0	0.5	2.2	135.9	135.9	-43.7	-43.7
ALTA0761	9/12/2024 8:38	45.0	35.9	0.4	18.7	115.8	116.0	-6.9	-7.0
ALTA0762	9/12/2024 8:26	57.2	42.8	0.0	0.0	125.7	125.8	-51.3	-50.1
ALTA0764	9/9/2024 11:03	46.0	39.7	0.0	14.3	117.6	117.6	-7.7	-6.2
ALTA0765	9/13/2024 8:06	52.2	39.0	0.0	8.8	100.1	100.7	-16.9	-18.9
ALTA0766	9/17/2024 10:14	55.0	43.1	0.7	1.2	83.7	83.7	-83.8	-83.8
ALTA0767	9/13/2024 10:10	56.7	41.3	0.1	1.9	133.0	133.3	-1.4	-1.6
ALTA0769	9/11/2024 10:23	44.5	54.8	0.7	0.0	109.6	109.8	-83.3	-83.3
ALTA0770	9/12/2024 9:45	48.0	38.7	0.0	13.3	122.0	122.1	-11.2	-11.2
ALTA0771	9/12/2024 10:16	48.9	39.7	0.0	11.4	80.7	80.8	-56.4	-56.4
ALTA0772	9/3/2024 10:21	46.8	37.3	0.0	15.9	125.3	125.5	-21.6	-19.5
ALTA0851	9/16/2024 13:06	51.0	49.0	0.0	0.0	114.3	117.2	-2.6	-4.5
ALTA0852	9/5/2024 12:37	48.9	51.1	0.0	0.0	126.9	126.8	-0.1	-0.1
ALTA0853	9/5/2024 12:32	51.9	48.1	0.0	0.0	117.6	119.5	-2.9	-6.4
ALTA0854	9/4/2024 11:04	47.4	52.6	0.0	0.0	129.0	128.9	-0.3	-0.3
ALTA0856	9/4/2024 10:53	42.6	42.6	0.0	14.8	129.0	128.7	-0.4	-0.4
ALTA0857	9/3/2024 10:36	53.1	40.8	0.0	6.1	117.8	117.8	-80.9	-81.1

ALTA0858	9/3/2024 10:32	51.3	46.1	0.0	2.6	134.0	134.0	-0.8	-1.7
ALTA0859	9/11/2024 9:52	41.8	39.9	0.7	17.6	124.4	122.6	-10.9	-8.8
ALTA0860	9/11/2024 10:02	42.9	42.2	0.2	14.7	120.8	122.3	-12.9	-13.0
ALTA0861	9/11/2024 10:06	38.8	42.1	0.0	19.1	123.6	123.7	-0.3	-0.3
ALTA0862	9/11/2024 10:11	36.8	39.8	0.0	23.4	116.4	114.6	-4.7	-2.8
ALTA0863	9/11/2024 11:13	47.7	37.7	0.1	14.5	109.1	109.0	-83.3	-83.2
ALTA0864	9/12/2024 9:04	36.6	29.7	4.7	29.0	69.2	69.0	-64.6	-64.6
ALTA0865	9/11/2024 11:21	55.3	44.7	0.0	0.0	84.6	84.2	-79.8	-79.9
ALTA0866	9/11/2024 11:45	42.0	42.0	0.0	16.0	125.1	124.4	-21.6	-14.9
ALTA0867	9/11/2024 11:51	52.6	47.4	0.0	0.0	130.3	130.5	-12.1	-20.0
ALTA0868	9/12/2024 10:13	42.0	37.2	3.6	17.2	91.4	90.4	-74.8	-75.5
ALTA0870	9/13/2024 11:06	57.0	43.0	0.0	0.0	119.1	119.3	-66.3	-66.0
ALTA0872	9/12/2024 10:04	46.3	38.8	1.7	13.2	87.5	87.7	-76.9	-76.9
ALTA0873	9/12/2024 10:08	56.1	43.8	0.0	0.1	124.4	124.6	-75.6	-76.2
ALTA0875	9/12/2024 9:23	50.1	49.9	0.0	0.0	84.7	84.8	-69.3	-69.3
ALTA0877	9/12/2024 9:13	55.1	44.0	0.9	0.0	68.0	67.9	-63.1	-63.1
ALTA0878	9/11/2024 8:03	45.8	34.0	3.4	16.8	56.6	56.6	-72.5	-72.6
ALTA0879	9/11/2024 8:51	55.4	41.1	0.0	3.5	108.0	108.5	-14.1	-21.4
ALTA0880	9/11/2024 10:16	32.8	67.2	0.0	0.0	128.7	128.8	-64.6	-65.3

Altamont Landfill and Resource Recovery Facility

Wellfield Monitoring Report - October 2024
REPORT PREPARED BY: Rajan Phadnis
UPDATED DATE: 11/1/2024
FLOW SENSING DEVICE: LANDTEC GEM
MODEL: 5000
DATE LAST CALIBRATED: DAILY

Wellhead ID Number	Date and Time	CH_4 (% by Volume)	CO_2 (% by Volume)	O_2 (% by Volume)	BALANCE GAS (% by Volume)	INITIAL TEMPERATURE (°F)	ADJUSTED TEMPERATURE (°F)	INITIAL STATIC PRESSURE ("WC)	ADJUSTED STATIC PRESSURE ("WC)
ALHC0824	10/24/2024 8:31	59.7	40.0	0.3	0.0	75.5	77.2	-0.1	-0.2
ALLC0695	10/9/2024 11:12	48.0	38.2	0.0	13.8	117.9	118.0	-45.4	-45.4
ALLC0700	10/14/2024 9:32	57.7	42.3	0.0	0.0	76.4	76.2	-65.5	-65.5
ALLC0709	10/9/2024 8:45	48.8	36.8	0.0	14.4	119.8	119.9	-33.2	-33.6
ALLC0734	10/8/2024 9:59	58.4	41.1	0.0	0.5	114.9	115.1	-36.9	-36.5
ALLC0736	10/8/2024 10:26	42.9	34.8	0.0	22.3	106.6	106.9	-23.3	-21.3
ALLC0737	10/8/2024 10:30	58.8	40.0	0.0	1.2	98.6	103.7	-53.5	-53.5
ALLC0738	10/14/2024 14:00	55.5	44.5	0.0	0.0	106.6	105.1	-82.2	-83.2
ALLC0739	10/9/2024 9:20	50.0	37.1	2.9	10.0	72.4	74.9	-84.7	-85.4
ALLC0740	10/9/2024 10:03	47.1	42.1	0.0	10.8	127.7	127.2	-4.9	-3.6
ALLC0743	10/14/2024 13:56	56.9	43.1	0.0	0.0	124.4	124.3	-76.9	-79.2
ALLC0744	10/9/2024 9:12	50.7	42.0	0.0	7.3	106.6	106.9	-76.5	-76.0
ALLC0745	10/9/2024 9:58	37.0	36.3	0.0	26.7	115.8	115.8	-2.3	-2.3
ALLC0746	10/9/2024 9:29	53.4	46.6	0.0	0.0	113.2	113.0	-84.4	-84.4
ALLC0747	10/14/2024 9:43	47.8	42.6	0.0	9.6	119.1	119.1	-64.2	-64.2
ALLC0748	10/14/2024 9:36	54.1	39.6	0.2	6.1	106.3	106.8	-66.1	-66.1
ALLC0749	10/14/2024 9:27	45.8	37.0	0.0	17.2	118.7	118.8	-37.5	-31.2
ALLC0777	10/4/2024 10:52	42.3	38.9	0.0	18.8	118.4	118.4	-6.3	-3.9
ALLC0778	10/4/2024 10:38	45.8	39.3	0.0	14.9	104.1	104.4	-23.4	-7.3
ALLC0779	10/4/2024 9:47	37.5	39.0	0.0	23.5	111.0	111.0	-5.5	-4.0
ALLC0780	10/4/2024 9:41	27.6	31.2	0.0	41.2	113.3	113.1	-7.2	-5.6
ALLC0781	10/4/2024 9:51	41.2	38.7	0.0	20.1	110.8	110.8	-1.0	-1.0
ALLC0783	10/4/2024 10:32	46.6	40.2	0.0	13.2	116.9	116.9	-0.7	-0.7
ALLC0784	10/4/2024 10:21	18.5	27.4	0.0	54.1	101.9	102.0	-0.9	-0.9
ALLC0785	10/4/2024 10:47	45.3	37.9	0.5	16.3	106.6	105.7	-5.5	-2.9
ALLC0786	10/21/2024 14:01	52.0	38.0	0.0	10.0	121.8	121.7	-6.3	-7.3
ALLC0787	10/4/2024 8:59	44.6	40.2	0.0	15.2	110.6	110.3	-10.9	-8.1
ALLC0788	10/4/2024 9:04	43.7	39.5	0.0	16.8	109.1	109.1	-59.7	-43.7
ALLC0789	10/4/2024 9:36	33.9	34.4	1.0	30.7	119.3	119.0	-8.5	-5.7
ALLC0790	10/4/2024 11:07	50.0	39.6	0.0	10.4	104.5	104.6	-68.8	-69.6
ALLC0791	10/4/2024 11:26	44.2	40.3	0.0	15.5	104.7	104.8	-55.5	-40.9
ALLC0792	10/4/2024 11:23	48.0	40.0	0.0	12.0	119.6	119.6	-4.5	-4.5
ALLC0793	10/4/2024 11:12	36.3	35.3	0.0	28.4	110.1	110.1	-69.0	-66.8
ALLC0794	10/9/2024 13:55	50.8	39.6	0.0	9.6	116.5	118.3	-12.3	-12.3
ALLC0796	10/9/2024 14:00	50.6	43.8	0.0	5.6	129.3	129.3	-21.6	-21.6
ALLC0797	10/9/2024 14:04	42.2	48.0	0.0	9.8	112.7	112.6	-1.1	-1.1
ALLC0798	10/9/2024 14:20	47.3	44.5	0.0	8.2	121.2	123.1	-0.3	-0.3
ALLC0800	10/4/2024 11:37	47.4	44.5	0.0	8.1	114.2	114.2	-3.2	-3.1
ALLC0801	10/14/2024 13:25	50.5	43.6	0.2	5.7	125.3	125.3	-6.4	-7.7
ALLC0803	10/4/2024 8:42	42.5	43.2	0.0	14.3	108.0	108.3	-1.5	-1.5
ALLC0804	10/4/2024 8:37	40.0	41.1	0.0	18.9	107.6	107.4	-2.2	-1.6
ALLC0805	10/9/2024 9:36	42.3	36.5	0.0	21.2	86.5	86.6	-1.1	-1.1
ALLC0806	10/9/2024 9:40	44.4	39.7	0.0	15.9	104.8	104.8	-1.4	-1.3
ALLC0807	10/9/2024 9:45	40.8	40.6	1.6	17.0	103.9	103.0	-3.3	-2.9
ALLC0811	10/4/2024 10:57	45.4	40.7	0.0	13.9	109.2	109.2	-1.8	-1.8
ALLC0812	10/4/2024 11:02	48.3	40.3	0.0	11.4	112.4	112.4	-1.1	-1.1
ALLC0813	10/4/2024 11:41	23.1	28.2	0.0	48.7	104.4	105.0	-1.5	-1.5
ALLC0814	10/23/2024 14:00	13.2	12.5	12.7	61.6	96.3	94.6	-2.4	-1.4
ALLC0814	10/23/2024 14:03	11.8	11.0	13.5	63.7	95.6	95.6	-1.0	-1.0
ALLC0815	10/9/2024 9:19	44.3	38.0	0.0	17.7	109.7	108.0	-11.1	-8.7
ALLC0816	10/9/2024 10:08	57.4	42.6	0.0	0.0	95.2	95.1	-76.9	-76.9
ALLC0817	10/9/2024 9:06	41.5	36.1	0.0	22.4	119.1	118.9	-12.3	-8.5
ALLC0819	10/9/2024 13:32	53.5	46.5	0.0	0.0	107.3	107.4	-0.7	-0.7

ALLC0820	10/9/2024 13:27	55.3	43.4	0.6	0.7	109.6	109.8	-65.0	-65.0
ALLC0821	10/15/2024 10:50	46.0	36.6	0.5	16.9	106.5	106.6	-25.7	-20.6
ALLC0822	10/22/2024 10:59	9.3	62.9	0.0	27.8	128.0	128.0	-0.6	-0.5
ALLC0826	10/9/2024 9:09	40.4	37.3	0.0	22.3	100.8	100.8	-84.9	-84.9
ALLC0827	10/9/2024 13:24	56.9	42.9	0.1	0.1	92.8	92.8	-72.9	-73.0
ALLC0830	10/15/2024 9:36	56.6	39.6	0.0	3.8	106.7	106.9	-68.7	-68.7
ALLC0831	10/9/2024 9:02	14.7	26.7	0.0	58.6	106.9	107.4	-2.3	-2.3
ALLC0832	10/4/2024 11:16	44.3	40.3	0.0	15.4	126.8	126.6	-10.0	-10.1
ALLC0833	10/15/2024 8:58	51.8	40.2	0.0	8.0	111.5	112.1	-0.1	-0.1
ALLC0834	10/21/2024 10:47	56.1	43.9	0.0	0.0	125.8	125.8	-80.6	-81.0
ALLC0835	10/21/2024 10:42	50.5	43.7	0.0	5.8	126.2	126.2	-79.5	-79.5
ALLC0836	10/21/2024 10:37	50.8	45.5	0.0	3.7	130.5	130.6	-79.1	-79.1
ALLC0837	10/21/2024 10:33	53.7	46.3	0.0	0.0	130.7	130.7	-78.5	-78.5
ALLC0838	10/18/2024 10:54	37.8	33.6	4.3	24.3	71.5	71.4	-54.5	-55.4
ALLC0839	10/15/2024 10:27	44.8	41.6	0.0	13.6	128.6	128.6	-3.5	-3.5
ALLC0840	10/15/2024 10:23	42.2	38.8	0.0	19.0	124.5	124.6	-1.5	-1.5
ALLC0841	10/23/2024 9:29	59.9	35.4	0.6	4.1	72.7	73.0	-85.5	-85.1
ALLC0842	10/18/2024 11:21	54.1	37.6	0.0	8.3	112.5	113.0	-2.3	-3.8
ALLC0843	10/15/2024 10:19	38.8	33.5	0.0	27.7	75.5	75.6	-46.7	-42.8
ALLC0844	10/15/2024 10:22	28.8	27.1	1.8	42.3	87.0	87.0	-5.7	-5.6
ALLC0845	10/15/2024 10:25	60.6	39.3	0.0	0.1	81.0	81.1	-66.4	-66.4
ALLC0846	10/15/2024 10:32	53.5	35.4	3.0	8.1	77.2	77.1	-68.2	-67.7
ALLC0847	10/8/2024 10:51	47.6	33.2	0.9	18.3	114.6	114.6	-1.3	-1.3
ALLC0848	10/8/2024 10:48	38.2	31.4	0.0	30.4	107.4	107.4	-13.1	-13.1
ALLC0849	10/8/2024 10:44	24.1	27.9	0.3	47.7	119.0	119.9	-63.9	-46.3
ALT20001	10/15/2024 8:51	48.3	38.6	0.7	12.4	100.1	100.3	-0.5	-0.4
ALT20003	10/7/2024 9:28	46.8	41.3	0.0	11.9	124.4	124.4	-22.8	-17.6
ALT20004	10/7/2024 9:19	28.4	32.1	0.0	39.5	106.4	106.0	-8.3	-4.3
ALT20005	10/7/2024 9:24	40.6	41.0	0.0	18.4	112.7	112.7	-2.9	-3.0
ALT20006	10/7/2024 9:14	49.7	41.6	0.0	8.7	124.5	124.7	-10.3	-12.9
ALT20007	10/7/2024 9:33	44.7	37.7	0.0	17.6	109.9	110.0	-3.7	-3.0
ALT20008	10/15/2024 9:01	24.6	27.9	3.8	43.7	128.1	126.4	-2.8	-2.8
ALT20009	10/7/2024 9:55	44.3	40.6	0.0	15.1	129.7	129.4	-36.0	-30.7
ALT20010	10/15/2024 8:57	42.7	37.3	0.4	19.6	129.5	129.3	-4.3	-4.3
ALT20011	10/7/2024 9:51	35.8	36.7	0.0	27.5	129.1	129.1	-4.0	-3.3
ALT20012	10/7/2024 9:59	38.5	40.1	0.0	21.4	133.5	133.5	-2.5	-2.0
ALT20013	10/7/2024 10:03	41.3	41.1	0.0	17.6	130.2	130.8	-0.9	-1.2
ALT20014	10/7/2024 10:07	39.1	39.2	0.0	21.7	114.5	114.6	-0.4	-0.4
ALT20015	10/7/2024 10:11	41.9	38.9	0.0	19.2	124.6	124.7	-4.4	-3.5
ALT20016	10/4/2024 9:05	49.3	44.4	0.0	6.3	129.1	129.1	-8.5	-8.5
ALT20017	10/4/2024 9:08	40.9	40.9	0.3	17.9	136.9	137.1	-4.8	-4.8
ALT20018	10/4/2024 9:11	46.5	42.4	0.0	11.1	132.7	132.8	-6.2	-6.2
ALT20019	10/4/2024 9:15	41.9	39.8	0.0	18.3	133.8	134.1	-3.7	-3.6
ALT20020	10/4/2024 9:01	53.8	45.4	0.0	0.8	128.4	128.4	-6.6	-6.6
ALT20021	10/4/2024 8:01	46.8	41.7	0.0	11.5	120.0	120.1	-11.7	-10.9
ALT20022	10/4/2024 8:05	48.1	42.8	0.0	9.1	116.8	116.8	-6.3	-6.4
ALT20023	10/4/2024 8:10	49.2	44.8	0.3	5.7	123.4	123.6	-10.8	-11.7
ALT20024	10/4/2024 8:19	45.3	43.0	0.0	11.7	127.7	127.9	-4.6	-5.8
ALT20025	10/4/2024 8:23	52.2	44.3	0.0	3.5	123.6	123.6	-6.4	-6.5
ALT20026	10/4/2024 8:28	47.7	41.5	0.6	10.2	126.9	127.0	-0.9	-0.8
ALT20027	10/4/2024 8:32	54.9	44.3	0.0	0.8	119.0	119.1	-14.3	-14.4
ALT20028	10/4/2024 8:43	54.6	45.4	0.0	0.0	124.4	124.4	-6.2	-6.2
ALT20029	10/4/2024 8:41	54.7	45.3	0.0	0.0	123.3	123.3	-3.9	-3.3
ALTA0003	10/18/2024 13:04	60.1	37.3	0.2	2.4	114.1	114.3	-83.0	-81.9
ALTA0054	10/18/2024 13:36	54.2	37.2	0.4	8.2	78.9	78.9	-41.2	-41.2
ALTA0056	10/18/2024 13:41	59.1	39.0	0.1	1.8	108.9	108.9	-60.7	-61.1
ALTA0059	10/22/2024 11:24	55.1	38.8	0.7	5.4	95.3	95.3	-78.6	-78.1
ALTA0087	10/15/2024 11:00	57.1	41.2	0.0	1.7	126.1	126.2	-80.1	-80.1
ALTA0108	10/22/2024 11:11	46.5	39.2	0.3	14.0	91.7	91.7	-7.2	-6.4

ALTA0201	10/11/2024 7:48	55.8	39.6	0.1	4.5	108.9	109.2	-86.4	-86.4
ALTA0472	10/4/2024 8:31	52.5	41.7	0.0	5.8	124.3	124.3	-65.6	-65.3
ALTA0483	10/9/2024 11:02	52.7	41.5	0.0	5.8	119.9	120.0	-59.7	-58.9
ALTA0488	10/9/2024 11:18	49.5	43.5	0.0	7.0	126.8	127.5	-59.0	-59.0
ALTA0491	10/15/2024 9:33	59.2	40.6	0.1	0.1	117.1	117.5	-69.4	-69.4
ALTA0508	10/8/2024 10:10	57.8	38.6	0.0	3.6	111.1	111.5	-55.3	-55.3
ALTA0517	10/8/2024 10:15	56.8	37.4	0.0	5.8	111.3	111.7	-60.0	-60.0
ALTA0518	10/15/2024 9:26	47.9	38.3	0.1	13.7	120.6	120.8	-3.9	-4.0
ALTA0529	10/15/2024 10:43	44.0	31.9	3.8	20.3	79.3	79.3	-83.1	-83.1
ALTA0541	10/9/2024 8:21	49.0	36.0	0.1	14.9	118.8	119.0	-36.9	-36.3
ALTA0545	10/21/2024 14:09	33.0	52.7	0.0	14.3	126.5	126.4	-2.0	-1.9
ALTA0551	10/23/2024 13:41	42.7	34.8	4.5	18.0	88.3	88.3	-9.3	-9.5
ALTA0578	10/14/2024 9:55	50.3	38.9	0.6	10.2	103.8	104.4	-40.7	-54.7
ALTA0579	10/9/2024 11:25	35.8	41.4	1.6	21.2	97.1	99.7	-75.1	-75.1
ALTA0589	10/23/2024 12:52	52.8	40.5	0.1	6.6	100.6	101.7	-5.1	-8.0
ALTA0611	10/9/2024 8:34	48.1	38.2	0.0	13.7	123.6	123.7	-71.4	-71.2
ALTA0612	10/9/2024 8:28	55.6	44.4	0.0	0.0	122.7	123.6	-76.0	-76.1
ALTA0624	10/22/2024 10:45	36.7	33.1	0.0	30.2	83.9	84.1	-27.6	-24.7
ALTA0629	10/9/2024 8:40	52.5	38.5	0.0	9.0	114.5	115.2	-59.9	-63.6
ALTA0639	10/21/2024 11:08	44.5	42.5	0.0	13.0	139.1	139.1	-77.8	-77.8
ALTA0650	10/15/2024 10:14	41.0	35.8	4.7	18.5	74.3	74.3	-71.8	-71.8
ALTA0651	10/15/2024 10:18	54.9	45.1	0.0	0.0	95.1	95.3	-67.3	-67.3
ALTA0652	10/21/2024 11:03	50.6	42.0	0.0	7.4	137.7	137.8	-21.8	-21.7
ALTA0654	10/14/2024 13:50	48.7	48.1	0.5	2.7	126.2	125.3	-75.4	-74.1
ALTA0664	10/15/2024 10:02	56.6	42.0	0.4	1.0	72.6	72.6	-71.7	-71.8
ALTA0669	10/14/2024 9:39	27.4	30.8	2.1	39.7	73.2	73.1	-68.4	-68.4
ALTA0678	10/4/2024 10:43	53.3	46.7	0.0	0.0	109.6	110.3	-80.3	-81.0
ALTA0682	10/8/2024 10:19	58.5	39.6	0.0	1.9	123.9	124.0	-59.1	-59.1
ALTA0686	10/14/2024 9:49	32.8	29.7	3.3	34.2	78.6	77.7	-66.0	-67.5
ALTA0712	10/9/2024 9:58	54.8	43.0	0.0	2.2	128.8	129.0	-75.6	-73.8
ALTA0713	10/9/2024 9:43	50.7	39.6	0.0	9.7	123.6	123.9	-77.6	-78.8
ALTA0714	10/9/2024 9:22	57.8	41.2	0.0	1.0	127.2	127.6	-77.4	-77.4
ALTA0733	10/14/2024 1:42	CO was 20 ppm							
ALTA0733	10/14/2024 13:42	49.3	41.4	0.0	9.3	143.2	143.3	-7.8	-7.8
ALTA0751	10/9/2024 8:54	36.7	37.0	0.0	26.3	110.5	110.0	-4.0	-3.1
ALTA0753	10/9/2024 9:54	54.4	44.4	0.0	1.2	126.9	127.7	-7.6	-9.2
ALTA0755	10/9/2024 9:48	48.1	46.2	0.0	5.7	112.1	112.2	-1.5	-1.5
ALTA0756	10/11/2024 11:08	52.4	46.3	0.0	1.3	112.3	112.4	-78.8	-79.9
ALTA0759	10/9/2024 13:45	48.5	43.3	0.0	8.2	128.2	128.0	-16.9	-14.1
ALTA0760	10/9/2024 13:49	48.0	42.9	1.3	7.8	135.8	135.9	-45.8	-45.8
ALTA0761	10/9/2024 9:10	34.9	32.9	0.0	32.2	117.6	117.4	-29.0	-22.9
ALTA0762	10/9/2024 9:54	57.6	42.4	0.0	0.0	125.8	126.0	-66.3	-67.5
ALTA0764	10/21/2024 13:51	49.2	41.4	0.0	9.4	114.4	115.0	-3.9	-5.0
ALTA0765	10/15/2024 9:40	46.2	35.8	0.4	17.6	98.3	98.4	-23.1	-23.1
ALTA0766	10/11/2024 11:01	56.1	43.9	0.0	0.0	90.1	90.1	-83.1	-83.2
ALTA0767	10/11/2024 10:38	38.6	38.1	0.0	23.3	133.4	133.1	-5.4	-5.2
ALTA0769	10/14/2024 13:35	46.6	51.1	0.8	1.5	107.6	107.7	-82.6	-82.5
ALTA0770	10/9/2024 9:16	41.7	36.2	0.0	22.1	121.4	121.4	-12.2	-11.0
ALTA0771	10/9/2024 10:58	44.1	36.9	0.0	19.0	120.7	120.8	-63.0	-52.8
ALTA0772	10/14/2024 9:22	47.2	37.1	0.4	15.3	124.5	125.0	-16.2	-14.5
ALTA0851	10/21/2024 13:43	45.6	42.6	0.0	11.8	117.4	117.3	-10.6	-10.0
ALTA0852	10/11/2024 10:57	46.3	42.6	0.6	10.5	124.7	125.3	-2.2	-2.7
ALTA0853	10/11/2024 10:52	41.8	40.3	0.0	17.9	121.0	121.3	-20.1	-18.4
ALTA0854	10/4/2024 10:06	49.5	47.9	0.0	2.6	129.4	128.0	-0.9	-0.9
ALTA0856	10/4/2024 10:17	34.5	37.5	0.0	28.0	128.3	128.3	-0.7	-0.7
ALTA0857	10/4/2024 8:47	48.6	42.2	0.3	8.9	117.8	118.0	-73.0	-72.5
ALTA0858	10/4/2024 8:52	37.1	41.9	0.1	20.9	134.0	133.9	-5.1	-3.6
ALTA0859	10/9/2024 10:10	49.5	50.5	0.0	0.0	107.7	119.5	-1.3	-5.7
ALTA0860	10/9/2024 10:15	36.8	38.5	0.2	24.5	124.9	124.9	-27.3	-27.2
ALTA0861	10/9/2024 10:20	41.1	40.2	0.0	18.7	123.6	123.6	-0.4	-0.4

ALTA0862	10/9/2024 10:25	50.0	43.7	0.0	6.3	111.1	114.6	-1.1	-2.2
ALTA0863	10/14/2024 14:08	44.4	36.2	0.2	19.2	109.3	109.3	-83.3	-83.3
ALTA0864	10/18/2024 10:41	59.0	40.9	0.1	0.0	95.0	95.3	-85.6	-85.6
ALTA0865	10/21/2024 10:29	52.3	40.4	1.7	5.6	85.0	84.8	-74.0	-74.0
ALTA0866	10/21/2024 10:52	51.4	45.9	0.0	2.7	125.6	127.3	-7.4	-13.0
ALTA0867	10/21/2024 10:58	52.1	44.6	0.0	3.3	133.0	133.4	-19.9	-22.8
ALTA0868	10/22/2024 10:32	47.1	43.5	0.9	8.5	79.5	79.3	-81.7	-80.8
ALTA0870	10/15/2024 10:55	56.0	44.0	0.0	0.0	118.0	118.1	-80.2	-81.0
ALTA0872	10/9/2024 10:05	37.1	34.1	1.8	27.0	86.1	86.2	-83.3	-83.4
ALTA0873	10/9/2024 10:13	57.1	42.9	0.0	0.0	122.4	122.9	-71.1	-71.0
ALTA0875	10/15/2024 10:07	45.8	37.0	2.7	14.5	89.6	89.7	-72.0	-72.0
ALTA0877	10/15/2024 9:14	57.6	41.3	0.7	0.4	64.3	64.2	-74.4	-73.8
ALTA0878	10/8/2024 10:04	59.1	40.1	0.0	0.8	93.9	93.9	-55.9	-55.8
ALTA0879	10/8/2024 10:38	44.0	34.7	0.0	21.3	108.7	108.9	-17.7	-14.3
ALTA0880	10/15/2024 8:52	34.0	66.0	0.0	0.0	128.6	128.6	-55.1	-55.1

Altamont Landfill and Resource Recovery Facility

Wellfield Monitoring Report - November 2024
REPORT PREPARED BY: Rajan Phadnis
UPDATED DATE: 12/1/2024
FLOW SENSING DEVICE: LANDTEC GEM
MODEL: 5000
DATE LAST CALIBRATED: DAILY

Wellhead ID Number	Date and Time	CH_4 (% by Volume)	CO_2 (% by Volume)	O_2 (% by Volume)	BALANCE GAS (% by Volume)	INITIAL TEMPERATURE (°F)	ADJUSTED TEMPERATURE (°F)	INITIAL STATIC PRESSURE ("WC)	ADJUSTED STATIC PRESSURE ("WC)
ALHC0824	11/13/2024 9:45	45.0	40.6	3.8	10.6	67.6	68.0	-0.2	-0.2
ALLC0695	11/7/2024 9:14	48.4	37.9	0.0	13.7	116.2	116.6	-52.2	-53.1
ALLC0700	11/6/2024 10:22	59.5	40.4	0.1	0.0	74.9	74.5	-67.9	-67.5
ALLC0709	11/5/2024 10:06	45.8	34.8	0.0	19.4	122.3	122.8	-31.0	-21.4
ALLC0734	11/5/2024 8:25	52.3	39.4	1.0	7.3	105.9	107.7	-31.4	-42.0
ALLC0736	11/5/2024 8:54	48.6	37.5	0.0	13.9	103.8	104.9	-17.1	-20.8
ALLC0737	11/5/2024 8:57	56.9	39.7	1.0	2.4	109.5	109.5	-66.1	-66.7
ALLC0738	11/8/2024 10:48	45.7	40.4	3.0	10.9	110.3	114.1	-84.7	-80.2
ALLC0739	11/7/2024 13:58	49.8	35.6	3.0	11.6	78.2	75.1	-84.9	-84.9
ALLC0740	11/8/2024 9:55	47.1	42.6	0.0	10.3	126.6	127.3	-3.4	-8.4
ALLC0743	11/8/2024 10:43	53.4	46.6	0.0	0.0	123.2	123.2	-79.7	-82.6
ALLC0744	11/7/2024 13:52	48.3	39.0	0.0	12.7	111.1	111.1	-77.1	-75.8
ALLC0745	11/8/2024 9:48	35.8	37.0	0.0	27.2	117.2	118.5	-2.4	-2.8
ALLC0746	11/7/2024 14:03	55.3	44.7	0.0	0.0	115.1	115.1	-84.2	-84.2
ALLC0747	11/6/2024 10:32	47.3	39.2	0.0	13.5	119.0	119.1	-65.7	-65.6
ALLC0748	11/6/2024 10:24	51.5	37.6	0.0	10.9	101.6	102.1	-66.8	-66.8
ALLC0749	11/6/2024 10:13	53.9	38.1	0.0	8.0	120.7	120.8	-12.6	-18.1
ALLC0777	11/5/2024 9:57	54.9	44.3	0.0	0.8	111.9	113.5	-1.5	-2.7
ALLC0778	11/5/2024 9:51	53.7	46.3	0.0	0.0	91.3	94.8	-4.7	-18.1
ALLC0779	11/4/2024 13:45	47.3	45.6	0.0	7.1	109.5	109.5	-2.4	-2.4
ALLC0780	11/4/2024 13:40	33.0	35.8	0.0	31.2	112.3	110.9	-4.1	-2.3
ALLC0781	11/4/2024 13:49	44.1	41.4	0.0	14.5	110.5	110.6	-0.5	-0.5
ALLC0783	11/4/2024 13:16	50.9	44.0	0.0	5.1	114.5	115.2	0.0	-0.2
ALLC0784	11/5/2024 9:19	33.3	33.4	0.0	33.3	92.7	92.7	-0.2	-0.2
ALLC0785	11/5/2024 9:28	53.5	46.5	0.0	0.0	98.8	101.7	-0.2	-1.8
ALLC0786	11/4/2024 13:05	46.3	41.0	0.0	12.7	122.2	122.4	-8.2	-6.4
ALLC0787	11/4/2024 13:30	49.7	44.1	0.0	6.2	110.5	110.5	-8.1	-8.5
ALLC0788	11/4/2024 13:26	43.3	37.8	2.2	16.7	108.5	107.9	-19.1	-13.5
ALLC0789	11/4/2024 13:35	43.5	40.5	0.0	16.0	117.8	117.1	-3.7	-3.0
ALLC0790	11/11/2024 14:00	49.5	37.2	0.0	13.3	99.5	99.6	-72.3	-67.1
ALLC0791	11/6/2024 10:15	51.4	44.0	0.0	4.6	104.1	103.9	-33.2	-43.2
ALLC0792	11/11/2024 14:07	52.8	39.5	0.1	7.6	117.0	118.3	-4.0	-7.4
ALLC0793	11/6/2024 9:49	38.4	36.6	0.0	25.0	107.3	107.3	-64.8	-60.1
ALLC0794	11/5/2024 10:28	51.4	44.7	0.0	3.9	115.8	115.8	-8.5	-8.6
ALLC0796	11/6/2024 10:01	49.5	46.0	0.0	4.5	128.4	128.5	-20.8	-20.8
ALLC0797	11/6/2024 10:05	41.6	51.6	0.0	6.8	107.6	107.6	-1.0	-1.0
ALLC0798	11/6/2024 10:10	45.5	45.0	0.0	9.5	106.6	107.1	0.0	-0.1
ALLC0800	11/6/2024 11:15	51.2	46.8	0.0	2.0	111.6	112.1	-2.5	-4.0
ALLC0801	11/6/2024 11:45	46.4	48.8	0.0	4.8	125.2	124.9	-8.3	-5.6
ALLC0803	11/4/2024 12:51	41.3	42.7	0.1	15.9	111.9	112.1	-0.2	-0.2
ALLC0804	11/4/2024 12:47	44.4	44.8	0.0	10.8	107.3	107.2	-0.6	-0.5
ALLC0805	11/7/2024 13:10	44.0	34.9	0.0	21.1	85.6	85.7	-1.0	-0.9
ALLC0806	11/7/2024 13:14	42.4	37.2	0.0	20.4	106.6	106.6	-1.1	-1.1
ALLC0807	11/7/2024 13:18	40.7	39.1	2.2	18.0	89.9	90.0	-0.8	-0.8
ALLC0811	11/5/2024 10:03	47.3	42.8	0.0	9.9	102.4	101.7	-0.7	-0.5
ALLC0812	11/5/2024 10:19	52.6	45.8	0.0	1.6	106.1	111.1	-0.3	-1.5
ALLC0813	11/6/2024 11:26	26.0	30.6	0.0	43.4	101.0	101.0	-1.4	-1.3
ALLC0814	11/4/2024 13:56	16.7	16.2	12.4	54.7	98.0	98.1	-1.2	-0.6
ALLC0815	11/11/2024 14:14	47.8	40.6	0.0	11.6	109.9	108.5	-7.5	-6.4
ALLC0816	11/6/2024 9:20	58.4	41.6	0.0	0.0	91.1	92.2	-75.4	-75.8
ALLC0817	11/12/2024 8:35	51.0	42.0	0.0	7.0	119.7	120.2	-7.8	-11.7
ALLC0819	11/6/2024 10:49	50.8	47.2	1.0	1.0	99.8	99.9	-0.8	-0.8
ALLC0820	11/6/2024 10:54	51.1	44.6	1.4	2.9	102.5	103.0	-63.2	-63.2

ALLC0821	11/6/2024 9:52	56.6	37.7	0.2	5.5	104.3	104.9	-14.6	-26.3
ALLC0822	11/14/2024 10:51	9.6	64.6	0.0	25.8	128.1	129.3	-1.8	-7.3
ALLC0822	11/14/2024 10:58	9.9	65.4	0.0	24.7	129.5	128.5	-9.0	-3.0
ALLC0826	11/7/2024 13:40	44.3	35.8	0.0	19.9	99.9	100.0	-84.9	-84.9
ALLC0827	11/6/2024 10:59	53.6	44.4	0.9	1.1	88.3	88.4	-72.5	-71.9
ALLC0830	11/1/2024 13:33	55.1	39.9	0.0	5.0	106.5	106.8	-84.6	-82.8
ALLC0831	11/7/2024 13:34	16.5	26.6	0.0	56.9	109.0	109.0	-1.9	-1.9
ALLC0832	11/6/2024 9:44	45.0	40.4	0.0	14.6	124.2	124.3	-9.0	-9.1
ALLC0833	11/8/2024 9:11	43.8	38.7	0.0	17.5	114.5	114.4	-0.1	-0.1
ALLC0834	11/8/2024 13:43	55.4	44.6	0.0	0.0	124.3	124.3	-84.7	-83.3
ALLC0835	11/8/2024 11:18	50.6	44.7	0.0	4.7	124.4	124.4	-84.7	-84.9
ALLC0836	11/8/2024 11:13	50.1	46.2	0.0	3.7	128.2	128.3	-84.8	-84.8
ALLC0837	11/8/2024 11:09	53.4	46.6	0.0	0.0	128.5	128.5	-84.4	-84.4
ALLC0838	11/13/2024 9:29	41.6	45.5	3.9	9.0	67.7	67.3	-59.9	-58.8
ALLC0839	11/12/2024 10:16	42.7	44.1	0.0	13.2	128.4	128.4	-4.2	-4.2
ALLC0840	11/12/2024 10:11	39.9	40.8	0.0	19.3	124.1	124.1	-1.9	-1.9
ALLC0841	11/13/2024 9:02	53.9	41.1	0.0	5.0	62.9	62.9	-86.6	-86.6
ALLC0842	11/12/2024 10:04	39.5	37.6	0.0	22.9	113.1	113.4	-4.5	-3.9
ALLC0843	11/1/2024 13:12	42.5	33.2	0.3	24.0	74.6	74.8	-57.9	-51.5
ALLC0844	11/1/2024 13:16	33.7	30.8	0.0	35.5	87.2	87.2	-6.6	-4.8
ALLC0845	11/1/2024 13:19	60.8	39.2	0.0	0.0	79.6	79.6	-83.7	-83.7
ALLC0846	11/12/2024 8:45	54.1	33.9	2.2	9.8	63.3	60.6	-71.5	-71.2
ALLC0847	11/5/2024 9:16	47.3	34.0	1.1	17.6	113.5	113.7	-1.7	-1.6
ALLC0848	11/5/2024 9:13	41.0	33.5	0.0	25.5	104.4	104.4	-11.2	-11.2
ALLC0849	11/5/2024 9:06	37.3	32.9	0.0	29.8	118.8	120.4	-35.6	-69.3
ALLC0849	11/5/2024 9:09	38.7	33.8	0.0	27.5	120.9	121.4	-70.4	-39.6
ALT20001	11/5/2024 8:14	51.8	40.6	0.1	7.5	99.9	100.1	-0.9	-0.9
ALT20003	11/1/2024 10:31	48.5	41.3	0.0	10.2	123.9	124.0	-14.8	-14.8
ALT20004	11/1/2024 10:25	31.4	31.0	2.6	35.0	92.1	91.9	-4.7	-4.8
ALT20005	11/1/2024 10:28	42.2	39.9	0.0	17.9	96.4	96.7	-2.7	-2.8
ALT20006	11/1/2024 10:22	49.6	40.3	0.0	10.1	123.8	124.0	-13.3	-15.2
ALT20007	11/1/2024 10:34	51.6	39.2	0.0	9.2	105.7	105.9	-2.0	-2.0
ALT20008	11/1/2024 11:05	23.8	27.2	3.8	45.2	129.4	128.4	-3.6	-3.5
ALT20009	11/1/2024 10:48	46.5	40.6	0.0	12.9	129.8	129.9	-28.0	-28.6
ALT20010	11/1/2024 10:41	45.4	40.2	0.0	14.4	129.4	129.3	-4.5	-4.5
ALT20011	11/1/2024 10:44	42.7	38.4	0.0	18.9	124.2	124.2	-2.1	-2.1
ALT20012	11/1/2024 10:51	32.6	32.7	3.6	31.1	129.5	129.6	-1.7	-1.7
ALT20013	11/1/2024 10:54	42.0	40.0	0.0	18.0	127.7	128.5	-1.0	-1.0
ALT20014	11/1/2024 10:58	41.9	38.9	0.0	19.2	108.2	108.2	-0.6	-0.6
ALT20015	11/1/2024 11:01	41.3	37.1	1.0	20.6	124.0	124.0	-4.0	-2.6
ALT20016	11/4/2024 12:49	47.9	43.4	0.0	8.7	129.2	129.3	-8.8	-8.8
ALT20017	11/4/2024 12:53	39.8	40.1	0.0	20.1	137.3	138.0	-3.8	-5.1
ALT20017	11/4/2024 12:56	41.1	41.2	0.0	17.7	138.2	138.3	-5.6	-5.6
ALT20018	11/4/2024 13:00	44.5	40.9	0.0	14.6	133.4	133.4	-5.9	-5.9
ALT20019	11/4/2024 13:03	40.4	38.7	0.0	20.9	134.4	134.4	-2.5	-2.4
ALT20020	11/4/2024 12:45	52.7	44.1	0.0	3.2	129.8	129.8	-6.8	-6.8
ALT20021	11/4/2024 11:46	53.0	41.6	0.0	5.4	120.1	120.4	-4.6	-5.1
ALT20022	11/4/2024 11:50	48.1	41.9	0.0	10.0	117.7	117.7	-5.9	-5.9
ALT20023	11/4/2024 11:54	48.3	44.0	0.1	7.6	124.4	124.4	-13.6	-12.8
ALT20024	11/4/2024 11:58	42.9	41.6	0.0	15.5	128.7	128.8	-6.9	-5.6
ALT20025	11/4/2024 12:02	51.0	43.1	0.0	5.9	124.4	124.3	-6.5	-9.2
ALT20026	11/4/2024 12:06	46.7	40.3	0.8	12.2	127.1	126.7	-1.0	-0.9
ALT20027	11/4/2024 12:09	54.9	43.1	0.0	2.0	119.4	119.4	-14.9	-13.9
ALT20028	11/4/2024 12:42	55.9	44.1	0.0	0.0	124.9	125.0	-7.0	-7.0
ALT20029	11/4/2024 12:39	57.0	43.0	0.0	0.0	122.9	123.2	-2.9	-3.6
ALTA0003	11/12/2024 11:05	56.4	43.6	0.0	0.0	109.7	109.7	-83.4	-85.3
ALTA0054	11/7/2024 13:20	56.5	38.5	0.2	4.8	78.7	78.7	-44.4	-44.4
ALTA0056	11/7/2024 13:15	59.5	40.4	0.2	-0.1	107.6	108.1	-64.5	-64.5
ALTA0059	11/13/2024 10:24	47.5	52.5	0.0	0.0	89.7	89.8	-81.9	-80.6
ALTA0087	11/12/2024 10:54	55.9	43.9	0.0	0.2	125.5	125.6	-82.4	-82.4

ALTA0108	11/7/2024 9:36	50.8	40.8	0.1	8.3	72.2	65.4	-5.5	-6.6
ALTA0201	11/11/2024 9:35	56.5	37.1	0.5	5.9	109.1	109.6	-86.8	-86.5
ALTA0472	11/4/2024 12:41	49.8	43.5	0.0	6.7	126.4	126.7	-82.8	-83.4
ALTA0483	11/7/2024 8:25	53.8	41.2	0.0	5.0	102.1	103.0	-82.9	-85.2
ALTA0488	11/6/2024 9:29	51.2	43.3	0.0	5.5	119.9	120.9	-76.0	-76.0
ALTA0491	11/1/2024 13:30	57.9	40.8	0.2	1.1	118.5	118.6	-86.6	-86.6
ALTA0508	11/5/2024 8:41	58.8	39.8	0.0	1.4	108.9	109.2	-66.8	-66.8
ALTA0517	11/5/2024 8:46	57.4	38.6	0.0	4.0	108.4	108.4	-74.1	-72.4
ALTA0518	11/7/2024 9:19	47.4	38.5	0.0	14.1	121.5	121.6	-4.9	-4.3
ALTA0529	11/12/2024 10:34	41.0	32.5	4.2	22.3	68.2	68.2	-85.6	-85.6
ALTA0541	11/5/2024 9:27	49.0	36.3	0.0	14.7	119.4	119.6	-31.4	-30.3
ALTA0545	11/12/2024 9:58	32.9	53.8	0.0	13.3	123.7	123.9	-2.8	-2.8
ALTA0551	11/26/2024 8:26	53.5	46.5	0.0	0.0	56.1	55.2	-2.7	-7.8
ALTA0578	11/6/2024 10:38	50.9	37.6	0.5	11.0	87.2	87.6	-60.4	-60.4
ALTA0579	11/6/2024 9:35	42.0	45.9	0.0	12.1	88.6	88.6	-76.8	-76.8
ALTA0589	11/13/2024 8:57	42.1	40.7	1.1	16.1	103.2	102.6	-14.0	-10.6
ALTA0611	11/5/2024 9:54	46.2	36.0	0.0	17.8	122.6	123.3	-64.4	-62.8
ALTA0612	11/5/2024 9:50	45.0	34.3	3.0	17.7	116.8	117.9	-63.3	-64.0
ALTA0624	11/12/2024 10:17	37.5	36.4	0.0	26.1	82.9	83.1	-22.1	-19.5
ALTA0629	11/5/2024 10:03	48.5	36.2	0.0	15.3	113.5	113.7	-60.9	-60.9
ALTA0639	11/8/2024 14:02	43.3	43.1	0.0	13.6	138.3	138.5	-80.7	-80.7
ALTA0650	11/12/2024 10:01	41.7	39.4	4.2	14.7	68.5	68.4	-86.5	-86.0
ALTA0651	11/12/2024 10:06	51.9	48.1	0.0	0.0	100.1	100.0	-81.2	-81.2
ALTA0652	11/8/2024 13:57	49.4	42.4	0.0	8.2	137.2	137.3	-21.7	-21.7
ALTA0654	11/8/2024 10:38	45.2	49.7	1.1	4.0	122.2	121.2	-77.9	-76.1
ALTA0664	11/12/2024 9:55	44.7	37.7	2.3	15.3	75.4	75.3	-87.2	-87.4
ALTA0669	11/6/2024 10:28	20.3	19.1	3.4	57.2	80.9	79.4	-69.3	-69.3
ALTA0678	11/8/2024 9:04	55.5	42.9	1.2	0.4	92.5	92.2	-84.4	-84.8
ALTA0682	11/5/2024 8:49	58.4	41.6	0.0	0.0	119.9	120.0	-71.9	-72.7
ALTA0686	11/6/2024 10:18	60.4	39.6	0.0	0.0	55.2	55.2	-62.6	-65.2
ALTA0712	11/12/2024 8:49	53.8	46.2	0.0	0.0	129.2	129.4	-78.0	-79.2
ALTA0713	11/12/2024 8:39	52.2	42.3	0.0	5.5	123.5	123.6	-81.9	-84.1
ALTA0714	11/7/2024 8:05	60.6	36.7	0.8	1.9	126.8	127.2	-81.2	-83.2
ALTA0733	11/8/2024 10:29	48.6	45.0	0.0	6.4	143.5	143.3	-7.0	-7.1
ALTA0733	11/8/2024 10:29	CO was 20 ppm							
ALTA0751	11/7/2024 13:30	40.2	37.0	0.0	22.8	111.5	110.3	-2.4	-1.0
ALTA0753	11/8/2024 10:00	49.6	43.7	0.0	6.7	127.8	127.7	-12.5	-12.5
ALTA0755	11/7/2024 13:22	49.2	45.9	0.0	4.9	111.9	116.7	-0.7	-1.8
ALTA0756	11/6/2024 11:50	50.0	50.0	0.0	0.0	111.9	111.9	-79.8	-80.2
ALTA0759	11/6/2024 10:43	50.2	48.2	0.0	1.6	125.9	126.2	-9.3	-11.1
ALTA0760	11/6/2024 10:24	48.2	46.5	1.0	4.3	134.9	134.8	-40.0	-40.0
ALTA0761	11/12/2024 8:23	42.0	36.1	0.0	21.9	117.1	117.1	-10.7	-9.0
ALTA0762	11/12/2024 8:45	54.1	45.9	0.0	0.0	126.3	126.5	-69.3	-69.6
ALTA0764	11/7/2024 13:04	48.0	39.7	0.0	12.3	115.1	114.8	-5.4	-4.4
ALTA0765	11/1/2024 13:26	45.3	36.4	0.1	18.2	89.4	88.2	-25.6	-22.7
ALTA0766	11/6/2024 11:39	53.3	46.7	0.0	0.0	81.9	82.0	-83.0	-83.4
ALTA0767	11/7/2024 12:59	42.9	37.2	0.1	19.8	133.0	132.4	-3.6	-3.2
ALTA0769	11/8/2024 10:22	40.9	49.8	2.5	6.8	110.3	110.1	-84.4	-84.4
ALTA0770	11/12/2024 8:31	49.9	41.2	0.0	8.9	121.7	121.5	-9.7	-10.8
ALTA0771	11/7/2024 8:20	47.3	36.1	0.1	16.5	121.9	122.2	-57.4	-55.6
ALTA0772	11/6/2024 10:09	52.0	37.4	0.0	10.6	125.6	125.8	-12.5	-13.3
ALTA0851	11/6/2024 12:03	48.7	48.6	0.0	2.7	115.5	114.4	-5.3	-4.6
ALTA0852	11/6/2024 11:34	46.3	53.7	0.0	0.0	117.8	118.7	-0.7	-0.7
ALTA0853	11/5/2024 9:13	38.6	40.8	0.0	20.6	127.0	127.2	0.0	0.0
ALTA0853	11/6/2024 11:30	50.2	47.1	0.0	2.7	114.0	118.0	-5.9	-11.2
ALTA0854	11/5/2024 9:07	46.3	53.7	0.0	0.0	122.3	123.6	-0.1	-0.1
ALTA0856	11/11/2024 13:48	39.6	35.8	0.0	24.6	127.2	127.1	-0.8	-0.8
ALTA0857	11/4/2024 13:00	48.7	45.9	0.0	5.4	117.5	117.7	-81.5	-81.6
ALTA0858	11/4/2024 12:56	42.3	47.6	0.0	10.1	134.6	134.6	-2.6	-2.0

ALTA0859	11/8/2024 9:41	53.0	47.0	0.0	0.0	129.4	129.6	-10.4	-10.7
ALTA0860	11/8/2024 9:32	35.9	38.1	0.2	25.8	126.5	126.5	-36.7	-37.2
ALTA0861	11/8/2024 9:22	36.3	40.1	0.0	23.6	125.7	125.7	-0.6	-0.5
ALTA0862	11/8/2024 9:18	37.8	39.5	0.0	22.7	116.0	116.1	-3.3	-3.3
ALTA0863	11/8/2024 10:58	41.9	37.1	0.0	21.0	108.4	108.4	-85.4	-84.7
ALTA0864	11/12/2024 9:20	47.0	39.1	3.6	10.3	81.9	85.8	-85.8	-85.8
ALTA0865	11/8/2024 11:05	52.0	40.7	1.8	5.5	86.2	86.9	-80.8	-80.6
ALTA0866	11/8/2024 13:48	38.8	40.8	0.0	20.4	126.4	125.8	-22.1	-16.0
ALTA0867	11/8/2024 13:52	40.6	39.6	0.0	19.8	134.6	134.5	-39.4	-39.4
ALTA0868	11/6/2024 9:40	51.3	48.5	0.2	0.0	76.3	76.8	-73.1	-71.7
ALTA0870	11/12/2024 10:45	53.3	46.7	0.0	0.0	116.0	116.0	-83.9	-83.3
ALTA0872	11/6/2024 9:01	46.9	36.7	2.5	13.9	64.9	64.8	-76.5	-76.3
ALTA0873	11/6/2024 8:56	56.4	41.6	0.0	2.0	122.9	123.7	-76.9	-76.8
ALTA0875	11/12/2024 9:49	52.8	47.0	0.2	0.0	100.0	99.7	-84.2	-84.6
ALTA0877	11/12/2024 9:38	54.4	41.7	1.6	2.3	59.1	59.1	-86.4	-86.4
ALTA0878	11/5/2024 8:29	55.4	36.4	2.1	6.1	62.6	62.6	-67.7	-67.7
ALTA0879	11/5/2024 9:03	56.3	39.4	0.0	4.3	107.8	108.4	-10.9	-15.1
ALTA0880	11/8/2024 10:07	32.1	67.9	0.0	0.0	129.4	129.4	-63.8	-63.8

There are 181 vertical LFG wells, 2 horixontal LFG collection well, and 2 leachate cleanout riser system at ALRRF. A Well Decommissioning Notification for two wells was submitted to the BAAQMD on March 14, 2023, as required by PTO Condition 19235 Part (1)(b)(iv). A Well Decommissioning Notification for six wells was submitted to the BAAQMD on April 18, 2023 as required by PTO Condition 19235 Part (1)(b)(iv).A Well Decommissioning Notification for one well was submitted to the BAAQMD on May 12, 2023 as required by PTO Condition 19235 Part (1)(b)(iv).A Well Decommissioning Notification for one well was submitted to the BAAQMD on June 27, 2023 as required by PTO Condition 19235 Part (1)(b)(iv).A Well Decommissioning Notification for one well was submitted to the BAAQMD on August 31, 2023 as required by PTO Condition 19235 Part (1)(b)(iv). A Well Startup Notification Letter for eleven new wells was submitted to the BAAQMD on December 7, 2023 as required by PTO Condition 19235 Part (1)(b)(v). A Well Startup Notification Letter for one new well was submitted to the BAAQMD on December 22, 2023 as required by PTO Condition 19235 Part (1)(b)(v).A Well Decommissioning Notification for one well was submitted to the BAAQMD on January 16,2024 as required by PTO Condition 19235 Part (1)(b)(iv). A Well Decommissioning Notification for three wells was submitted to the BAAQMD on March 1, 2024 as required by PTO Condition 19235 Part (1)(b)(iv). A Well Decommissioning Notification for one well was submitted to the BAAQMD on April 18, 2024 as required by PTO Condition 19235 Part (1)(b)(iv). A Well Decommissioning Notification for three wells was submitted to the BAAQMD on June 20, 2024 as required by PTO Condition 19235 Part (1)(b)(iv).A Well Decommissioning Notification for one well was submitted to the BAAQMD on September 23, 2024 as required by PTO Condition 19235 Part (1)(b)(iv).

% - percent CH_4 - methane CO_2 - carbon dioxide O_2 - oxygen   °F - degrees Fahrenheit   "WC - inches water column

*Wells permitted to be on the HOV list, summarized in the table below.

Wells Approved for Higher Operating Value for Temperature

Approved HOV Wells*	**HOV Wells Approval/Notification Date**
501, 559, ~~562~~, 565, 566, 570, ~~574~~, and ~~576~~	4/29/2010
~~564~~ and 571	5/25/2010
513, 579, 601, and 611	1/22/2011
~~500~~, ~~525~~, 569, 612	3/3/2011
~~633~~ and 639	12/10/2014
652	6/7/2016
654 and ~~667~~	1/16/2017
718, 719, ~~720~~, 721, 723, ~~724~~, and 732	3/21/2017
~~510~~ and 733	10/31/2017
661	3/7/2018
745	7/19/2018
589	10/1/2018
755	2/19/2019
740	6/10/2019
~~799~~	3/29/2021
835	9/23/2021
836	9/23/2021
837	9/23/2021
798	7/29/2022
760	1/31/2023
850	3/14/2023
859	3/14/2023
867	3/14/2023

* ~~Crossed out~~ wells have been decommissioned.

APPENDIX N
WELLHEAD DEVIATION REPORT

ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
June 1, 2024 THROUGH November 30, 2024 WELLFIELD DEVIATION REPORT

REPORT PREPARED BY: Rajan Phadnis/Dan San Jose/Garry Carpenter
UPDATED DATE: December 1, 2024
FLOW SENSING DEVICE: LANDTEC GEM
MODEL: 5000
DATE LAST CALIBRATED: DAILY

Well ID	Time	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance Gas (%)	Initial Temperature (°F)	Adjusted Temperature (°F)	Initial Static Pressure ("WC)	Adjusted Static Pressure ("WC)	Comments	Duration of Exceedance (Days)
ALLC0775	6/14/2024 13:20	23.6	19.8	8.2	48.4	113.9	114.6	-63.3	-63.7	NSPS/EG CAI	
ALLC0775	6/19/2024 13:59	NSPS/EG Corrective Action Completed (CAC)- Well decommissioned								NSPS/EG Corrective Action Completed (CAC)	117
Well ALLC0775 had oxygen exceedance during June 2024. Well was decommissioned on June 19, 2024.											
ALLC0776	6/13/2024 12:40	2.2	5.0	15.8	77.0	81.8	81.6	-74.3	-75.0	NSPS/EG CAI	63
ALLC0776	6/19/2024 14:09	NSPS/EG Corrective Action Completed (CAC)- Well decommissioned								NSPS/EG Corrective Action Completed (CAC)	
Well ALTA0776 had oxygen exceedance during June 2024.Well was decommissioned on June 19, 2024.											
ALLC0828	6/12/2024 10:57	60.7	36.9	1.1	1.3	86.2	86.2	-67.3	-67.3	Fully Open;No Adj. Made;Watered In	
ALLC0828	6/19/2024 14:23	NSPS/EG Corrective Action Completed (CAC)- Well decommissioned								NSPS/EG Corrective Action Completed (CAC)	69
Well ALLC0828 had oxygen exceedance during June 2024. Well was decommissioned on June 19, 2024.											
ALLC0838	7/11/2024 10:42	32.2	25.7	7.9	34.2	106.8	106.7	-68.7	-68.5	NSPS/EG CAI;Fully Open;Watered In	
ALLC0838	7/11/2024 10:46	30.9	23.7	8.6	36.8	106.7	106.7	-70.5	-65.8	NSPS/EG CAI;Fully Open;Watered In	
ALLC0838	7/25/2024 8:04	46.9	36.9	4.0	12.2	79.8	79.9	-69.9	-68.5	Fully Open;No Adj. Made;Watered In	14
Well ALLC0838 had oxygen exceedance during July 2024. Exceedance cleared in July 2024.											
ALTA0868	6/10/2024 12:22	18.9	16.6	13.2	51.3	95.6	95.3	-26.6	-26.6	NSPS/EG CAI;Watered In	
ALTA0868	6/10/2024 12:24	19.6	16.7	13.3	50.4	94.9	94.9	-26.4	-26.4	NSPS/EG CAI;Watered In	
ALTA0868	7/8/2024 7:17	49.7	48.1	0.7	1.5	78.4	78.1	-82.7	-82.0	No Adj. Made;Watered In	28
Well ALTA0868 had oxygen exceedance in June 2024. Adjustments were made and exceedance was corrected in July 2024.											
ALLC0703	7/3/2024 5:54	8.4	7.9	15.7	68.0	100.8	101.8	-8.7	-23.7	NSPS/EG CAI;Inc. Flow/Vac.	
ALLC0703	7/3/2024 6:00	10.7	8.9	15.1	65.3	101.3	101.7	-26.2	-6.9	NSPS/EG CAI;Dec. Flow/Vac.	
ALLC0703	7/16/2024 9:03	8.8	8.5	15.8	66.9	100.1	101.7	-6.0	-22.4	NSPS/EG CAI;Inc. Flow/Vac.	
ALLC0703	7/16/2024 9:07	10.2	9.4	15.2	65.2	102.0	101.7	-23.1	-4.0	NSPS/EG CAI;Dec. Flow/Vac.	
ALLC0703	8/7/2024 8:42	9.1	10.0	13.1	67.8	106.7	107.8	-1.0	-17.9	NSPS/EG CAI;Inc. Flow/Vac.	
ALLC0703	8/7/2024 8:44	10.9	10.4	13.2	65.5	108.3	108.7	-20.2	-1.4	NSPS/EG CAI;Dec. Flow/Vac.	
ALLC0703	9/11/2024 8:37	6.5	10.3	12.1	71.1	99.0	102.4	-3.8	-22.9	NSPS/EG CAI;Inc. Flow/Vac.	
ALLC0703	9/11/2024 8:40	6.4	10.0	12.5	71.1	103.1	103.6	-22.4	-3.4	NSPS/EG CAI;Dec. Flow/Vac.	82
ALLC0703	9/23/2024 13:37	NSPS/EG Corrective Action Completed (CAC)									
Well ALLC0703 had oxygen exceedance during July and August 2024. Well ALLC0703 was decommissioned on September 23, 2024.											
ALT20012	6/5/2024 11:14	48.3	40.9	0.0	10.8	133.3	132.6	-2.0	-1.2	NSPS/EG CAI;Dec. Flow/Vac.	5
ALT20012	6/5/2024 11:14	CO was 40 ppm									
Well ALT20012 had temperature exceedance during June 2024. CO was 100 ppm. HOV letter was submitted on June 10, 2024, and well was added to the HOV list.											
ALT20018	6/5/2024 9:33	54.4	44.4	0.0	1.2	132.9	132.9	-5.3	-5.7	NSPS/EG CAI;Inc. Flow/Vac.	
ALT20018	6/5/2024 9:34	54.0	44.4	0.0	1.6	132.9	132.9	-6.1	-6.1	NSPS/EG CAI	
ALT20018	6/5/2024 9:40	CO was 20 ppm									
ALT20018	6/10/2024 9:55	53.3	43.8	0.0	2.9	132.3	132.3	-4.7	-4.9	NSPS/EG CAI;Inc. Flow/Vac.	
ALT20018	6/10/2024 10:00	CO was 20 ppm									
ALT20018	6/18/2024 10:45	51.3	43.7	0.2	4.8	132.5	132.5	-6.5	-6.5	NSPS/EG CAI;Fully Open	
ALT20018	6/18/2024 10:50	CO was 20 ppm									
ALT20018	7/2/2024 9:33	50.2	42.6	0.0	7.2	132.9	132.9	-6.0	-6.0	NSPS/EG CAI;Fully Open	34
ALT20018	7/2/2024 9:38	CO was 20 ppm									
Well ALT20018 had temperature exceedance during June 2024. CO was 100 ppm. HOV letter was submitted on July 9, 2024, and well was added to the HOV list.											
ALT20019	6/5/2024 10:03	54.6	45.2	0.0	0.2	132.4	132.3	-3.1	-3.2	NSPS/EG CAI;Inc. Flow/Vac.	
ALT20019	6/5/2024 10:05	54.4	45.2	0.0	0.4	132.4	132.4	-3.5	-3.5	NSPS/EG CAI	
ALT20019	6/5/2024 10:10	CO was 20 ppm									
ALT20019	6/10/2024 10:06	53.5	44.0	0.0	2.5	132.0	132.1	-3.1	-3.4	NSPS/EG CAI;Inc. Flow/Vac.	
ALT20019	6/10/2024 10:12	CO was 20 ppm									
ALT20019	6/18/2024 10:55	49.8	43.0	0.2	7.0	132.3	132.3	-4.6	-4.6	NSPS/EG CAI;Fully Open	
ALT20019	6/19/2024 11:00	CO was 20 ppm									
ALT20019	7/2/2024 9:42	48.0	40.9	0.2	10.9	132.6	132.6	-4.1	-4.1	NSPS/EG CAI;Fully Open	
ALT20019	7/2/2024 9:50	CO was 20 ppm									34
Well ALT20019 had temperature exceedance during June 2024. CO was 100 ppm. HOV letter was submitted on July 9, 2024, and well was added to the HOV list.											
ALT20008	9/5/2024 8:23	18.1	19.7	8.8	53.4	120.1	126.9	-1.0	-1.8	NSPS/EG CAI;Inc. Flow/Vac.	
ALT20008	9/5/2024 8:28	24.8	27.3	4.1	43.8	127.8	127.4	-2.0	-2.0	No Adj. Made	<1
Well ALT20008 had oxygen exceedance during September 2024. Exceedance cleared during the same month.											
EG CAI= Emissions Guidelines Corrective Action Initiated											

APPENDIX O

CONTROL DEVICE MONTHLY LANDFILL GAS FLOW RATES AND CO EMISSION CALCULATIONS

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY, Livermore, CA

MONTHLY LFG INPUT TO A-15 AND A-16 FLARES

A-15 (Flare)

Month	Total Available Runtime (Hours)	Total Downtime (Hours)	Total Runtime (Hours)	Average Flow (scfm)	Average CH_4 (%)[2]	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Total Heat Input (MMBtu)	CO Emission Factor[2] (lb/MMBTU)	Total CO (Tons)
June 24	720.0	692.1	27.9	1,726	45.7	2,834,132	1,293,781	1,291	0.053	0.034
July 24	744.0	744.0	0.0	0	45.7	0	0	0	0.053	0.000
August 24	744.0	433.3	310.7	1,503	45.7	28,003,414	12,783,558	12,754	0.053	0.335
September 24	720.0	719.5	0.5	853	45.7	27,286	12,456	12	0.053	0.000
October 24	744.0	727.6	16.4	1,748	45.7	1,689,861	771,422	770	0.053	0.020
November 24	721.0	721.0	0.0	0	45.7	0	0	0	0.053	0.000
TOTAL/AVG 2023-2024	**8,784.0**	**8,201.9**	**582.1**	**1,541**	**47.6**	**53,210,826**	**25,278,725**	**25,154**	**0.097**	**1.200**
June 1, 2024 - Novemebr 30, 2024	**4,393.0**	**4,037.5**	**355.5**	**1,457**	**45.7**	**32,554,693**	**14,861,217**	**14,827**	**0.053**	**0.390**
TOTAL/AVG 2024-Partial	**8,040.0**	**7,627.4**	**412.6**	**1,548**	**47.3**	**38,285,632**	**17,751,502**	**17,644**	**0.089**	**0.501**

A-16 (Flare)

Month	Total Available Runtime (Hours)	Total Downtime (Hours)	Total Runtime (Hours)	Average Flow (scfm)	Average CH_4 (%)[3]	LFG Volume (scf)	BPG Volume (scf)	Total Throughput (scf)	Total CH_4 Volume (scf)	Total Heat Input (MMBtu)	CO Emission Factor[3] (lb/MMBTU)	Total CO (Tons)
June 24	720.0	27.03	693.0	2,359	49.4	98,169,944	0.0	98,169,944	48,471,410	48,360	0.027	0.647
July 24	744.0	2.27	741.7	2,336	49.4	104,001,098	0.0	104,001,098	51,350,542	51,232	0.027	0.685
August 24	744.0	15.70	728.3	2,120	49.4	92,745,530	0.0	92,745,530	45,793,105	45,688	0.027	0.611
September 24	720.0	35.70	684.3	2,132	49.4	87,053,690	0.0	87,053,690	42,982,759	42,884	0.027	0.574
October 24	744.0	21.50	722.5	1,934	49.4	83,692,937	0.0	83,692,937	41,323,388	41,228	0.027	0.551
November 24	721.0	24.87	696.1	1,632	49.4	67,931,182	0.0	67,931,182	33,541,021	33,464	0.027	0.448
TOTAL/AVG 2023-2024	**8,784.0**	**424.1**	**8,359.9**	**2,069**	**48.4**	**1,039,426,789**	**0.0**	**1,039,426,789**	**503,525,349**	**502,367**	**0.017**	**4.323**
June 1, 2024 - Novemebr 30, 2024	**4,393.0**	**127.1**	**4,265.9**	**2,086**	**49.4**	**533,594,381**	**0.0**	**533,594,381**	**263,462,226**	**262,856**	**0.027**	**3.516**
TOTAL/AVG 2024-Partial	**8,040.0**	**231.1**	**7,808.9**	**2,084**	**48.5**	**976,071,505**	**0.0**	**976,071,505**	**473,691,345**	**472,602**	**0.018**	**4.289**

NOTES: 1) Pursuant to Permit Condition No. 19235, Part 4, the yearly heat input limit to the A-15 and A-16 Flares are 621,785 and 1,156,320 MMBtu, respectively.

2) Starting April 2023, the average methane percentage and CO emission rate from the March 1, 2023 source test will be used. It is an average of the methane percentages taken during the test. Starting May 2024, the average methane percentage and CO emission rate from the February 28, 2024 source test will be used. It is an average of the methane percentages taken during the test.

3)Starting May 2024, the highest CO emission rate from the March 6, 2024 source test is used pursuant to PTO Condition Number 24373, Part 3(a)(i). Starting May 2023, the highest CO emission rate from the March 8, 9, and 13, 2023 source test is used pursuant to PTO Condition Number 24373, Part 3(a)(i).

LFG - Landfill Gas **BPG** - By-Product Gas **scfm** - standard cubic feet per minute **%** - Percent **CH_4** - methane **scf** - standard cubic feet **MMBTU** - million British thermal units **CO** - carbon monoxide **lb** - pounds

MONTHLY LFG INPUT TO TURBINES (S-6 & S-7)

Altamont Landfill and Resource Recovery Facility, Livermore, CA

S-6 (Turbine)

Month	Total Available Runtime (hours)	Total Downtime (hours)	Total Runtime (hours)	Average Flow (scfm)	Average CH_4 (%)	Total LFG Volume (scf)	Total CH_4 Volume (scf)	Total Heat Input (MMBtu)	CO Emission Factor[2] (lb/MMBTU)	Total CO (Tons)
June-24	720.0	8.6	711.4	1,345	51.5	57,409,139	29,543,932	29,928	0.106	1.586
July-24	744.0	5.3	738.7	1,370	48.6	60,713,286	29,513,204	29,897	0.106	1.585
August-24	744.0	3.7	740.3	1,087	48.7	48,236,583	23,526,941	23,833	0.106	1.263
September-24	720.0	17.2	702.8	1,401	49.1	59,130,911	29,020,408	29,398	0.106	1.558
October-24	744.0	7.2	736.8	1,451	47.9	64,128,038	30,704,288	31,103	0.106	1.648
November-24	721.0	9.0	712.0	1,509	47.8	64,475,677	30,838,410	31,239	0.106	1.656
TOTAL/AVG 2023-2023	**8,784.0**	**99.8**	**8,684.2**	**1,374**	**50.2**	**715,526,753**	**358,837,221**	**363,502**	**0.110**	**19.970**
June 1, 2024 - November 30, 2024	**4,393.0**	**51.0**	**4,342.0**	**1,360**	**48.9**	**354,093,633**	**173,147,182**	**175,398**	**0.106**	**9.296**
TOTAL/AVG 2024-Partial	**8,040.0**	**83.6**	**7,956.4**	**1,366**	**50.3**	**651,727,977**	**327,430,730**	**331,687**	**0.108**	**17.933**

S-7 (Turbine)

Month	Total Available Runtime (hours)	Total Downtime (hours)	Total Runtime (hours)	Average Flow (scfm)	Average CH_4 (%)	Total Throughput (scf)	Total CH_4 Volume (scf)	Total Heat Input (MMBtu)	CO Emission Factor[2] (lb/MMBTU)	Total CO (Tons)
June-24	720.0	8.7	711.3	1,341	51.5	57,263,601	29,453,238	29,836	0.093	1.387
July-24	744.0	5.8	738.2	1,408	48.6	62,374,493	30,323,767	30,718	0.093	1.428
August-24	744.0	339.1	404.9	1,409	48.7	34,275,528	16,763,193	16,981	0.093	0.790
September-24	720.0	13.0	707.0	1,399	49.1	59,355,891	29,140,340	29,519	0.093	1.373
October-24	744.0	14.2	729.8	1,500	47.9	65,732,888	31,472,202	31,881	0.093	1.482
November-24	721.0	5.2	715.8	1,516	47.8	65,102,510	31,139,019	31,544	0.093	1.467
TOTAL/AVG 2023-2023	**8,784.0**	**490.9**	**8,293.1**	**1,408**	**50.2**	**701,250,255**	**351,757,353**	**356,329**	**0.095**	**16.885**
June 1, 2024 - November 30, 2024	**4,393.0**	**386.1**	**4,006.9**	**1,429**	**48.9**	**344,104,909**	**168,291,759**	**170,479**	**0.093**	**7.927**
TOTAL/AVG 2024-Partial	**8,040.0**	**475.5**	**7,564.5**	**1,403**	**50.3**	**637,309,362**	**320,284,378**	**324,447**	**0.094**	**15.243**
							12-Month Combined Heat Input	**719,831**		

Notes:

1) The 12-month consecutive heat input limit for both turbines combined pursuant to Permit Condition No. 18773, Part 8 is 838,480 MMBTU. The daily heat input limit for S-6 and S-7 pursuant to Permit Condition No. 18773, Part 8 is 1,378 MMBTU/day.

2) The CO Emission Factors for S-6 and S-7 were obtained from results of the source tests, pursuant to PTO Condition Number 24373 Part 3(a)(ii). Starting February 2023 results from the December 14, 2022, Source Test will be used. Starting February 2024, results from the December 6, 2023 Source Test will be used.

scfm - standard cubic feet per minute **%** - Percent **CH_4** - methane **scf** - standard cubic feet **MMBTU** - million British thermal units **CO** - carbon monoxide **lb** - pounds

12-MONTH CONSECUTIVE HEAT INPUT TO TURBINES (S-6 & S-7)

Altamont Landfill and Resource Recovery Facility, Livermore, CA

S-6 (Turbine)

Month	Total Heat Input (MMBTU)	12-Month Consecutive Total (MMBTU)
June-24	29,928	368,214
July-24	29,897	367,821
August-24	23,833	361,476
September-24	29,398	361,012
October-24	31,103	363,123
November-24	31,239	363,502

S-7 (Turbine)

Month	Total Heat Input (MMBTU)	Consecutive Total (MMBTU)	Combined 12-Month Consecutive Total (MMBTU)
June-24	29,836	427,213	795,427
July-24	30,718	365,239	733,060
August-24	16,981	351,873	713,349
September-24	29,519	411,739	772,751
October-24	31,881	355,474	718,597
November-24	31,544	356,329	719,831

Note: The 12-month consecutive heat input limit for both turbines combined pursuant to Permit Condition No. 18773, Part 8 is 838,480 MMBTU.

MMBTU - million British thermal units

Altamont Landfill and Resource Recovery Facility
Consecutive 12-Month LNG Plant Summary Page
S-210 LNG Plant

Month	Average CH_4 (%)	Maximum Daily Heat Input (MMBTU/day)	Total LFG Volume (scf)	Total CH4 Volume (scf)	Total Monthly Heat Input (MMBTU)	12-Month Consecutive Total (MMBTU)
June-24	NA*	NA*	NA*	NA*	NA*	NA*
July-24	NA*	NA*	NA*	NA*	NA*	NA*
August-24	NA*	NA*	NA*	NA*	NA*	NA*
September-24	NA*	NA*	NA*	NA*	NA*	NA*
October-24	NA*	NA*	NA*	NA*	NA*	NA*
November-24	NA*	NA*	NA*	NA*	NA*	NA*
TOTAL/AVG 2022-2023	**NA***	**NA***	**NA***	**NA***	**NA***	-
December 1, 2023 - November 1, 2024	**NA***	**NA***	**NA***	**NA***	**NA***	

Notes: 1) The LNG Plant (S-210) heat input log is maintained pursuant to Permit Condition No. 24255, Part 4.

2) The daily heat input limit for S-210 pursuant to Permit Condition No. 24255, Part 2 is 1,950 MMBtu/Day.

3) According to correspondence between ALRRF and the BAAQMD, the LNG Plant commenced testing activities in August 3, 2009.

4) *LNG Plant was shut down on June 30, 2023.

% - Percent **CH_4** - methane **MMBTU** - million British thermal units **scf** - standard cubic feet

APPENDIX P
BAAQMD CORRESPONDENCE

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

June 28, 2024

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105
Attn: Title V Reports

Re: Section I.F Title V 10-Day Report for Exceedance of VOC Laden Soil, Plant Number A2066, Altamont Landfill and Resource Recovery Facility, Livermore, California

Dear Sir or Madam:

The Altamont Landfill and Resource Recovery Facility (ALRRF) is submitting this 10-day notice to the Bay Area Air Quality Management District (BAAQMD) as required under Title V Permit Condition Section I.F for Waste Management of Alameda County Inc. (WMAC) facility in Livermore, CA.

The ALRRF Title V Permit Condition No. 19235 Part 20 (a) states that "*ALRRF shall limit the quantity of Volatile Organic Compound (VOC) laden soil handled per day such that no more than 15 pounds of total carbon could be emitted to the atmosphere per day.*"

During routine data review on June 19, 2024, it was discovered that the ALRRF site potentially exceeded the daily VOC limit on both June 15 and 18, 2024. ALRRF assumes all VOCs in soils utilized for daily cover are emitted to the atmosphere on the day the soil is managed at the facility regardless of the activities where the soil is generated — including loading and transporting the soil to the landfill. As such, ALRRF calculates the potential emissions from VOC laden soil to the atmosphere. In an abundance of caution and in accordance with permit conditions, this notification is being submitted within 10 calendar days of discovery of the exceedance of daily VOC limit. The exceedance was caused due to inadvertent miscommunication between WMAC staff. As required, a 30-day follow-up letter will confirm the contents of this submittal and provide additional details as appropriate.

ALRRF is committed to operating its landfill in compliance with applicable regulations. If you have any questions, please do not hesitate to contact Rajan Phadnis via email at rphadnis@wm.com.

Sincerely,

Waste Management of Alameda County, Inc.

Marcus Nettz
Area Director

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

July 17, 2024

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Attn: Title V Reports

Re: Section I.F Title V 30-Day Follow-up Report
Plant Number A2066, Altamont Landfill and Resource Recovery Facility, Livermore, California

Dear Sir or Madam:

The Altamont Landfill and Resource Recovery Facility (ALRRF) is submitting this 30-day follow-up report to the Bay Area Air Quality Management District (BAAQMD) as required under Title V Permit Condition Section I.F for Waste Management of Alameda County Inc. (WMAC) facility in Livermore, CA.

The ALRRF Title V Permit Condition No. 19235 Part 20 (a) states that "*ALRRF shall limit the quantity of Volatile Organic Compound (VOC) laden soil handled per day such that no more than 15 pounds of total carbon could be emitted to the atmosphere per day.*"

During routine data review on June 19, 2024, it was discovered that the ALRRF site potentially exceeded the daily VOC limit on both June 15 and 18, 2024. ALRRF conservatively assumes all VOCs in soils utilized for daily cover are emitted to the atmosphere on the day the soil is managed at the facility regardless of the activities where the soil is generated — including loading and transporting the soil to the landfill. As such, ALRRF calculates the potential emissions from VOC laden soil to the atmosphere. In an abundance of caution and in accordance with permit conditions, ALRRF submitted the 10-day notification on June 28, 2024, within 10 calendar days of discovery of the exceedance of daily VOC limit. The exceedance was caused due to inadvertent miscommunication between WMAC staff.

This letter serves as the 30-day follow-up written report including corrective and preventative actions taken by ALRRF. Upon discovery of the soil daily VOC daily exceedance ALRRF immediately took the following actions:

6/19/2024: During routine data review, it was discovered that ALRRF had exceeded the soil VOC limit on June 15 and 18, 2024.

6/21/2024: ALRRF team discussed corrective action items and determined necessary changes to daily operations.

6/21/2024: Supervisors and scale house personnel were retrained on scheduling and acceptance practices for VOC laden soils

6/21/2024: The facility initiated updating the site material handling process.

6/24/2024: The facility implemented process of mid-day communication between Operations Team, Site EP, and Sales Team.

6/28/2024: The facility submitted 10-day written report via email.

ALRRF is committed to operating its landfill in compliance with all applicable regulations. If you have any questions, please contact Rajan Phadnis at rphadnis@wm.com.

Sincerely,

Waste Management of Alameda County, Inc.

Marcus Nettz
Area Director

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

September 23, 2024

Janet Carrasco
Air Quality Specialist
Compliance and Enforcement Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Re: Facility Number A2066 - Waste Management of Alameda County, Inc.
Altamont Landfill and Resource Recovery Facility
Request for Limited Exemption (for construction activities) from Regulation 8, Rule 34 (Solid Waste Disposal Sites), Section 303 (Landfill Surface Requirements)-Construction work for installation of LFG horizontal collectors and laterals and upgrades to existing condensate system

Dear Ms. Carrasco:

This letter requests a limited exemption from the requirements of Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34, Section 303 (Landfill Surface Requirements) during wellfield and landfill construction activities to be conducted from October 1, 2024, through December 31, 2024, at the Altamont Landfill and Resource Recovery Facility (ALRRF), which is owned and operated by Waste Management of Alameda County, Inc. (WMAC). This notification is submitted pursuant to the BAAQMD Regulation 8, Rule 34, Section 118, "Limited Exemptions for Construction Activities."

The work consists of installation of new horizontal landfill gas (LFG) collectors and installation of new piping to upgrade and improve the existing condensate conveyance systems. This notification is submitted pursuant to the BAAQMD Regulation 8, Rule 34, Section 118, "Limited Exemptions for Construction Activities." The project work is scheduled to be completed during October 1, 2024, through December 31, 2024, and is covered by BAAQMD Permit to Operate (PTO) Condition Number 19235 Part 1(b)(i), as updated by Application Number (AN) 30563.

The construction work includes installation of new horizontal collectors and piping that will connect to the existing gas collection and control system (GCCS) and installation of new condensate piping system to improve the flow of liquids. The work will include excavation of the affected areas to remove previously placed waste during installation of piping. The affected areas will be backfilled with tires and/or soil and drainage material and covered. This letter also transmits the BAAQMD-required construction plan (work plan) for the proposed work. The work plan contains information required pursuant to Regulation 8, Rule 34, Section 118.1 and includes:

- Description of actions being taken;
- Description of landfill areas affected;
- Description of LFG components affected;
- Map showing the above areas and components;
- Reason requiring the action;
- Construction schedule; and
- Description of air quality mitigation measures planned.

No significant interruption of the current site LFG extraction and control operations is anticipated due to the work. The construction is anticipated to begin on or around October 1, 2024. We anticipate construction activities to conclude by December 31, 2024.

Unless notified otherwise, ALRRF will proceed in accordance with the attached work plan. We deem submittal of this plan as approval by the BAAQMD to take necessary action to ensure compliance with regulations, which may include taking additional wells offline for an extended period pursuant to Regulation 8, Rule 34, Section 118.

If you have any questions, please do not hesitate to contact me at rphadnis@wm.com. Thank you for your consideration.

Sincerely,

Rajan Phadnis
Environmental Protection Specialist
Waste Management of Alameda County, Inc.

Attachment: BAAQMD Regulation 8, Rule 34 Construction Plan

CC: Perry Ng, BAAQMD
Ben Tarver, ALRRF

BAAQMD REGULATION 8, RULE 34 CONSTRUCTION PLAN
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
CONSTRUCTION FOR LFG EXTRACTION HORIZONTAL COLLECTORS AND UPGRADES TO CONDENSATE SYSTEM

October 1, 2024, through December 31, 2024

INTRODUCTION

This Construction Work Plan is submitted pursuant to Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34, Section 118: Limited Exemptions for Construction Activities. To obtain an exemption from BAAQMD Regulation 8, Rule 34, Section 303: Landfill Surface Requirements, the operator shall submit a construction plan in writing to the Air Pollution Control Officer (APCO) prior to beginning any construction activities.

BAAQMD Section 303 requires maintaining the concentration of organic compounds and methane below 500 parts per million by volume (ppmv) at all points on the landfill surface. Section 118 provides an exemption from the surface emission standard for *"….areas of the landfill surface where the landfill cover material has been removed and refuse has been exposed for the express purpose of installing, expanding, replacing, or repairing components of the landfill gas, leachate, or gas condensate collection and removal systems."*

Pursuant to Regulation 8, Rule 34, Section 118, this work plan includes:

- Description of actions being taken;
- Description of landfill areas affected;
- Description of landfill gas (LFG) components affected;
- Map showing the affected areas and components;
- Reason requiring the action;
- Construction schedule; and
- Description of air quality mitigation measures planned.

ACTIONS BEING TAKEN

The work consists of installation of up to 5 new LFG horizontal collectors and additional pipelines that will connect the wells to the existing gas collection and control system (GCCS) and upgrades on condensate force main to improve the flow of liquids. In addition, the work will include excavation and backfilling activities with tires and/or soil and drainage material.

AFFECTED LANDFILL AREAS

The construction activities will occur in the Fill Area 1 and Fill Area 2 of the landfill, as shown on the attached figure. The construction activities will be executed in phases.

AFFECTED LFG COMPONENTS

ALRRF will conduct landfill GCCS construction activities in compliance with the Rule 8-34-116 and 8-34-117, if applicable.

Please see below for list of proposed GCCS installations and repairs:

- Installation of up to 5 new horizontal collectors and associated piping,
- Installation and tie-ins of piping and laterals at new LFG collectors,
- Condensate force main upgrades in FA1 and piping; and

Pursuant to Rule 8-34-117, ALRRF will take the GCCS wells offline, as necessary. ALRRF will ensure that no more than 5 gas wells are shut down at any time, and that no gas collection well may be down for more than 24 hours.

It is anticipated that the construction will have no significant impact on the routine operation of the existing GCCS. Installation of new LFG collectors, piping and laterals is independent of the ongoing operations of the GCCS. When connecting LFG extraction wells, isolation valves installed within the existing GCCS piping network will be used to minimize the number of existing LFG extraction wells offline at any given time while the newly installed LFG laterals are connected to the GCCS.

REASONS FOR ACTIONS

The proposed construction work is intended to:

- Install new LFG horizontal collectors and piping to increase collection efficiency to further reduce the potential for surface emissions, and
- Upgrade existing of condensate system to improve the flow of liquids

CONSTRUCTION SCHEDULE

The anticipated construction period will be between October 1, 2024, through December 31, 2024. The construction will be executed in phases during this period. The anticipated schedule for the construction activities is summarized in the table below:

Table 1 - Preliminary Construction Schedule

Task	Project Week and Duration
Mobilize crew, equipment, and materials to site	1 week
Excavation, Installation of collectors, piping and laterals, excavation, and backfilling work.	Up to 10 weeks
Clean-up and demobilize crew and materials	1 week

AIR QUALITY MITIGATION MEASURES

Emission of raw LFG will be minimized during construction. We anticipate minimal interruption of the overall site LFG extraction and control operations during the work. Installation of new collectors and piping is independent of ongoing operations of the existing GCCS. Air quality mitigation will be provided during the installation of wells and connection of wells to existing GCCS piping network.

An Asbestos Dust Mitigation Plan will not be prepared pursuant to California Code of Regulation (CCR) Title 17, Section 93105 and 93106 because the ALRRF is not in a geographic ultramafic rock unit, no portion of the landfill has naturally- occurring asbestos or serpentine, and no wells will be constructed in the asbestos monofill designated for friable asbestos disposal.

Due to the minimal amount of excavation planned for this work, air quality impacts are also anticipated to be minimal. Air quality mitigation will be provided during the following work tasks:

- Installation of horizontal collectors and piping,
- Connection of collectors to GCCS,
- Upgrades to condensate system, and
- Excavation and backfill of pipe trenches

During excavation through waste and soil cover, air emission will be controlled by implementing the following measures:

- Minimizing the installation time for each component;

- Minimizing the quantity of open borings or trench excavations at any one time;

- Relocating excavated refuse to the active waste disposal area within 24 hours; and

- Not leaving well borings open overnight or for more than 8 hours.

During connection of collectors to the existing LFG piping, and installation of new piping, air emissions will be controlled by implementing the following measures:

- Capping or blind flanging of all pipes and collector openings, which will remain sealed until time of connection to a vacuum source;

- Using isolation valves;

- Minimizing installation time for making each connection; and

- Minimizing the amount of open pipe during each installation, by using flange joints and flexible couplings.

The construction and initial operating dates and times for each horizontal collector shall be recorded pursuant to requirements for documenting individual well shutdown times in Regulation 8, Rule 34. Per the Permit to Operate (PTO) Condition Number 19235 Part 1(b)(iv), as updated by

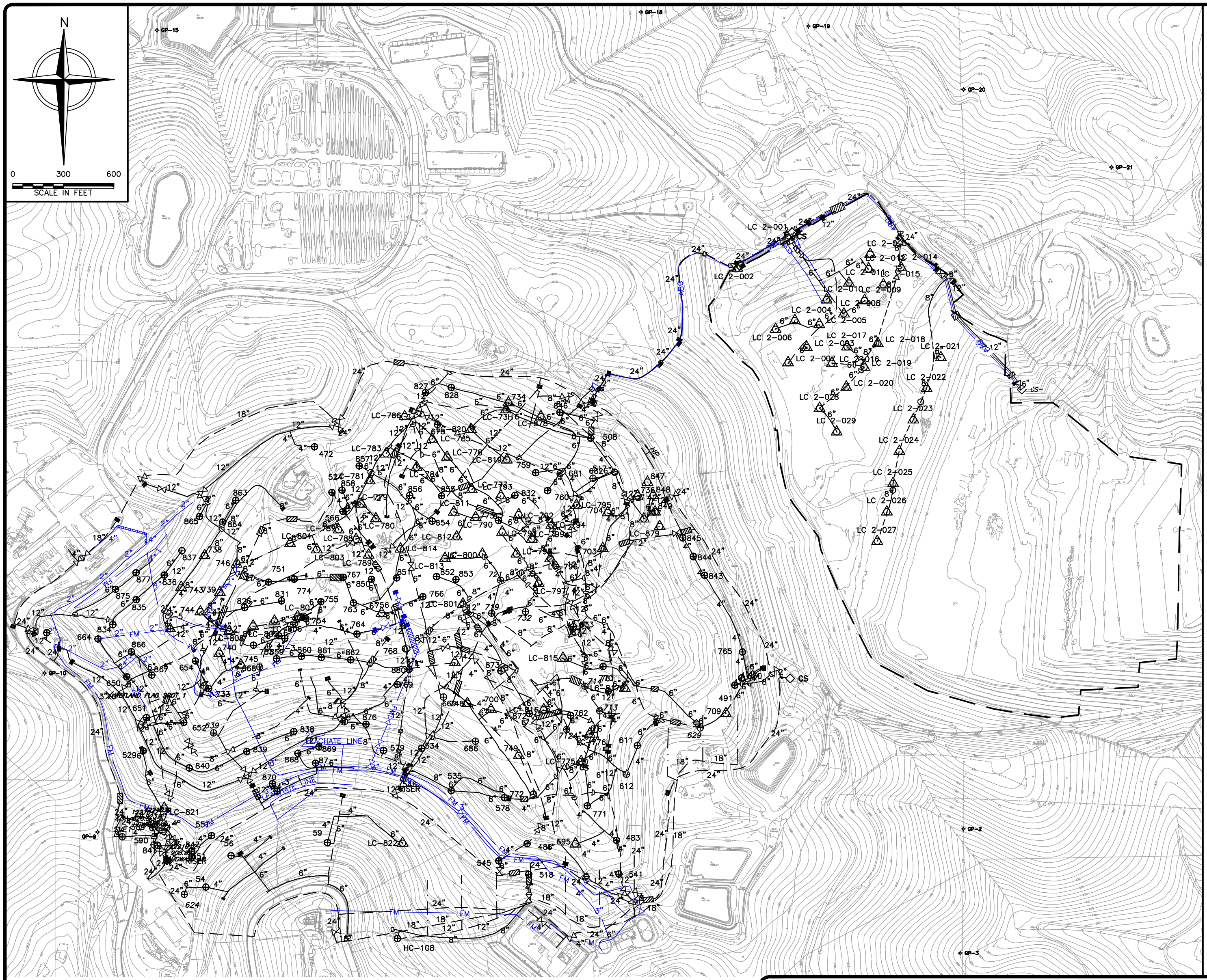
Application Number (AN) 30563 a start-up letter will be provided to the BAAQMD 3 days prior to applying a vacuum to the new wells.

RECORDKEEPING

The following records will be retained during the project:

- Construction start and end dates, projected and actual installation dates, and projected shut down times for individual gas collection system components.
- GCCS downtime and individual well shutdown times will be documented in accordance with the ALRRF's Startup, Shutdown, and Malfunction (SSM) Plan.
- Mitigation measures taken to minimize methane emissions and other potential air quality impacts will be documented.

Attachments: Figure 1 – Gas Collection and Control System Layout



PRELIMINARY - NOT FOR CONSTRUCTION

LEGEND

— — — —	UNIT 1 APPROXIMATE LIMIT OF WASTE
— — — —	UNIT 2 APPROXIMATE LINER BOUNDARY
▨	APPROXIMATE ASBESTOS AREA BOUNDARY
1400	EXISTING 10' CONTOUR
12"	EXISTING LANDFILL GAS PIPE - ABOVEGROUND
- - - -	EXISTING LANDFILL GAS PIPE - BELOWGROUND
— · — ·	EXISTING LEACHATE COLLECTION PIPE
— · · —	EXISTING HORIZONTAL LFG COLLECTOR
FM	EXISTING FORCE MAIN PIPE
CAG	EXISTING CONDENSATE LINE - ABOVEGROUND
CBG	EXISTING CONDENSATE LINE - BELOWGROUND
AAG	EXISTING AIR LINE - ABOVEGROUND
⊕ 523	EXISTING LFG EXTRACTION WELL
△ CI-1	EXISTING CONDENSATE INJECTION WELL
△ LC 2-021 △ 691	EXISTING LOCAL CONTROL WELL
⊗	EXISTING REMOTE WELLHEAD
⋈	EXISTING CONTROL VALVE
⊣	EXISTING BLIND FLANGE
╫	EXISTING FLANGE CONNECTION
▷	EXISTING REDUCER FITTING
◇ CS-	EXISTING CONDENSATE PUMP STATION
▨	EXISTING ROAD CROSSING
HP	EXISTING HEADER HIGH POINT
]	EXISTING CAP
⌖ GP-10	EXISTING GAS MONITORING PROBE
○	EXISTING U-TRAP RISER
■	AREA FROM SURVEY INFORMATION IN FILE TITLED "DINOSED - DISPOSAL AREA"
⊠	AREA FROM SURVEY INFORMATION IN FILE TITLED "9-23-14 RTA" EXISTING HEADER HIGH POINT
☁	APPROXIMATE LOCATION OF OLD FLARE MATERIALS

WASTE MANAGEMENT

This drawing represents intellectual property of Tetra Tech. Any modification to the original by other than Tetra Tech personnel violates its original purpose and as such is rendered void. Tetra Tech will not be held liable for any changes made to this document without express written consent of the originator.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 09/04/24
DRAWN BY CDH
DESIGNED BY CDH
CHECKED BY AMN
APPROVED BY PJS

TETRA TECH

ALL PROFESSIONAL ENGINEERING WORK IS PERFORMED BY DULY LICENSED PROFESSIONAL ENGINEERS UNDER THE APPROPRIATE STATE REGISTERED PROFESSIONAL ENTITY.

ALTAMONT LANDFILL AND
RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY, CALIFORNIA

HORIZONTAL COLLECTOR DESIGN
EXISTING SITE CONDITIONS

SHEET NO.
2

PROJECT NO.
2024-4002

1" 1/2" 0" 1"

File: \\tt.local\ceg\619\PROJECTS\ALTAMONT\2024-4002 - 2024 ENGINEERING SERVICES\GCCS Improvements\Project Drawings\Horizontal Design\2024-4002_HORIZONTAL DESIGN_C-100.dwg Layout: C-100 User: CHRIS.HODGE Sep 18, 2024 - 11:51am

Altamont Landfill & Resource
Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

May 3, 2024

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105
Attn: Title V Reports

Re: Section I.F – 10-Day Title V Report – Flare A-16 Total Reduced Sulfur Results
Altamont Landfill and Resource Recovery Facility, Livermore, CA
Facility Number A2066

Dear Sir/Madam:

Altamont Landfill and Resource Recovery Facility (ALRRF) is submitting this 10-day written report to the Bay Area Air Quality Management District (BAAQMD) as required under Title V Permit Condition Section I.F for Monitoring Reports.

ALRRF Title V Permit Requirement states that "*All instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions*".

On April 25, 2024, ALRRF received the draft source test report for the flare A-16 source test conducted on March 6, 2024. This report states the average inlet landfill gas at the time of the test was 266 ppmv as H_2S, which exceeds the 200 ppmv total reduced sulfur (TRS) limit specified in PTO Condition 19235, Part 11. However, these results do not appear to be representative of site conditions over the years. Therefore, ALRRF is currently conducting further investigations. ALRRF will include additional information in the 30-Day Title V report.

ALRRF is committed to operating its landfill in compliance with applicable regulations and will ensure that compliance is achieved. If you have any questions or need any additional information, please do not hesitate to contact Rajan Phadnis at rphadnis@wm.com.

Sincerely,
Altamont Landfill and Resource Recovery Facility

Marcus Nettz
Area Director
cc: Jay Patel, BAAQMD

Altamont Landfill & Resource
Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

May 23, 2024

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105
Attn: Title V Reports

Re: Section I.F – 30-Day Title V Report -Flare A-16 Total Reduced Sulfur Results
Altamont Landfill and Resource Recovery Facility, Livermore, CA
Facility Number A2066

Dear Sir/Madam:

Altamont Landfill and Resource Recovery Facility (ALRRF) is submitting this 30-day written report to the Bay Area Air Quality Management District (BAAQMD) as required under Title V Permit Condition Section I.F for Monitoring Reports.

ALRRF Title V Permit Requirement states that "*All instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions*".

On April 25, 2024, ALRRF received the draft report for the annual source test performed at flare A-16 on March 6, 2024. This report states the average inlet landfill gas at the time of the test was 266 ppmv as H_2S, which exceeds the 200 ppmv total reduced sulfur (TRS) limit specified in PTO Condition 19235, Part 11. However, these results are inconsistent with prior sample results. Source test results at flare A-15 (on February 28, 2024) had an average of 107 ppmv TRS as H_2S and the source test results at turbines S-6 and S-7 (on December 6, 2023) had an average of 71 ppmv TRS as H_2S. Therefore, ALRRF conducted further investigation and performed additional sampling at flare A-16. Results showed readings below the 200 ppmv permit limit. ALRRF has tentatively scheduled the source re-test for June 10, 2024. The recent TRS results from sampling conducted on May 7, 2024, demonstrate that the original results with TRS exceedance are not representative of current site conditions and appears to be an anomaly.

This letter serves as the 30-day written report including corrective and preventative actions taken by ALRRF. Upon discovery of the TRS exceedance ALRRF immediately took the following actions:

4/25/2024: ALRRF received draft report for the flare A-16 source test conducted on March 6, 2024.

4/29/2024: ALRRF reviewed the source report for the flare A-16 and noticed TRS exceedance.

5/1/2024: ALRRF team discussed corrective action items and initiated investigation into this matter.

5/1/2024: ALRRF conducted Draeger-tube sampling at flare A-16 and sulfur values were below 100 ppmv.

5/3/2024: ALRRF submitted the flare A-16 source test report to the BAAQMD Source Test Division.

5/3/2024: ALRRF submitted 10-day written report for TRS exceedance.

5/7/2024: ALRRF conducted laboratory sampling at flare A-16.

5/14/2024: ALRRF received laboratory sampling results and sulfur values were below 50 ppmv which is below the permit limit.

5/15/2024: ALRRF requested a quote for flare A-16 source re-test for TRS compounds.

5/23/2024: ALRRF submitted Title V 30-day written report.

ALRRF will submit the revised source test results within 60-days of source re-test and submit an addendum to the flare A-16 source test report submitted on 5/3/2024.

ALRRF is committed to operating its landfill in compliance with applicable regulations and will ensure that compliance is achieved. If you have any questions or need any additional information, please do not hesitate to contact Rajan Phadnis at rphadnis@wm.com.

Sincerely,
Altamont Landfill and Resource Recovery Facility

Marcus Nettz
Area Director

cc: Jay Patel, BAAQMD

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

September 23, 2024

Perry Ng
Permit Service Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California, 94105

Re: Well Decommissioning Notification for one Landfill Gas Well
Altamont Landfill and Resource Recovery Facility, Livermore, California, Plant Number A2066

Dear Sir/Madam:

This letter is to notify the Bay Area Air Quality Management District (BAAQMD) of the decommissioning of one landfill gas (LFG) well ALLC0703 at the Altamont Landfill and Resource Recovery Facility (ALRRF) on September 23, 2024, pursuant to Permit to Operate (PTO) Condition Number 19235 Part 1(b) as updated by AN 30563.

This notification is being made pursuant to Waste Management of Alameda County, Inc. (WMAC) Permit to Operate (PTO) Condition 19235 Parts (1)(b)(v), which states that a decommissioning notice shall be submitted to the BAAQMD within three (3) working days of the component(s) having been disconnected from the system. Vertical well ALLC0703 was decommissioned on September 23, 2024, as outlined below:

Well ID	Date and Time Decommissioned	Reason	Type
ALLC0703	09/23/2024; 1:32 PM	Low Flow	Vertical LFG Well

PTO Condition 19235 Part (1)(b)(vii) states that if the Permit Holder has a net reduction of more than five (5) components within a 120-day period, the Permit Holder shall submit a more comprehensive notice to the BAAQMD. The time period starting 120 days prior to the original submittal date (09/23/2024) starts on May 26, 2024. Since May 26, 2024, ALRRF has installed 0 LFG vertical wells and 0 horizontal collectors and 0 leachate cleanout riser system (LCRS). ALRRF has decommissioned 4 vertical LFG wells. The total net decrease is therefore 4 LFG components.

The decrease of LFG wells is not expected to result in surface emission leaks, as the GCCS will undergo tuning to accommodate the revised number of wells, and each remaining vertical LFG well will have the necessary vacuum applied to facilitate required LFG collection.

There are no vertical LFG wells disconnected out of the five (5) wells allowed pursuant to BAAQMD Regulation 8-34-116 (Limited Exemption, Well Raising).

The following table shows the current status of replacements, decommissions, and installations for PTO Condition Number 19235 Part 1(b) as updated by AN 30563.

Well Action	**PTO Condition Number 19235 Part 1(b) as updated by AN 30563**	**After Installations and Replacements in this Notification (Remaining)**
New Vertical Well Installations	120	43
Vertical Well Decommissions	100	65
New Horizontal Collector Installations	20	17
New Leachate Cleanout Risers Installations	5	5
Horizontal Collector Decommissions	5	2
Leachate Cleanout Risers Decommissions	5	5
Vertical Well Replacements	Unlimited	Unlimited

Pursuant to the June 20, 2024, Well Decommissioning Notification the GCCS consisted of 182 vertical LFG collection wells, 2 horizontal collectors, and 2 leachate cleanout riser system (LCRS). With the decommissioning of one LFG vertical well ALLC0703, as indicated in this Well Decommissioning Notification Letter, there are currently 181 vertical LFG collection wells, 2 horizontal collectors, and 2 LCRS connected to the GCCS at the ALRRF.

If you have any questions, please do not hesitate to contact me at rphadnis@wm.com.

Sincerely,

Rajan Phadnis
Waste Management of Alameda County, Inc.

CC Mr. Ben Tarver (ALRRF)

Altamont Landfill & Resource
Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

June 20, 2024

Perry Ng
Permit Service Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California, 94105

Re: Well Decommissioning Notification for three Landfill Gas Wells
Altamont Landfill and Resource Recovery Facility, Livermore, California, Plant Number A2066

Dear Sir/Madam:

This letter is to notify the Bay Area Air Quality Management District (BAAQMD) of the decommissioning of three landfill gas (LFG) wells ALLC0775, ALLC0776 and ALLC0828 at the Altamont Landfill and Resource Recovery Facility (ALRRF) on June 19, 2024, pursuant to Permit to Operate (PTO) Condition Number 19235 Part 1(b) as updated by AN 30563.

This notification is being made pursuant to Waste Management of Alameda County, Inc. (WMAC) Permit to Operate (PTO) Condition 19235 Parts (1)(b)(v), which states that a decommissioning notice shall be submitted to the BAAQMD within three (3) working days of the component(s) having been disconnected from the system. Vertical wells ALLC0775, ALLC0776, and ALLC0828 were decommissioned on June 19, 2024 as outlined below:

Well ID	Date and Time Decommissioned	Reason	Type
ALLC0775	06/19/2024; 2:00 PM	Low Flow	Vertical LFG Well
ALLC0776	06/19/2024; 2:10 PM	Low Flow	Vertical LFG Well
ALLC0828	06/19/2024; 2:24 PM	Low Flow	Vertical LFG Well

PTO Condition 19235 Part (1)(b)(vii) states that if the Permit Holder has a net reduction of more than five (5) components within a 120-day period, the Permit Holder shall submit a more comprehensive notice to the BAAQMD. The time period starting 120 days prior to the original submittal date (06/20/2024) starts on February 10, 2024. Since February 10, 2024, ALRRF has installed 0 LFG vertical wells and 0 horizontal collectors and 0 leachate cleanout riser system (LCRS). ALRRF has decommissioned 7 vertical LFG wells. The total net decrease is therefore 7 LFG components.

The increase of LFG well is not expected to result in surface emission leaks, as the GCCS will undergo tuning to accommodate the revised number of wells, and each remaining vertical LFG well will have the necessary vacuum applied to facilitate required LFG collection.

There are no vertical LFG wells disconnected out of the five (5) wells allowed pursuant to BAAQMD Regulation 8-34-116 (Limited Exemption, Well Raising).

The following table shows the current status of replacements, decommissions, and installations for PTO Condition Number 19235 Part 1(b) as updated by AN 30563.

Well Action	**PTO Condition Number 19235 Part 1(b) as updated by AN 30563**	**After Installations and Replacements in this Notification (Remaining)**
New Vertical Well Installations	120	43
Vertical Well Decommissions	100	66
New Horizontal Collector Installations	20	17
New Leachate Cleanout Risers Installations	5	5
Horizontal Collector Decommissions	5	2
Leachate Cleanout Risers Decommissions	5	5
Vertical Well Replacements	Unlimited	Unlimited

Pursuant to the April 18, 2024, Well Decommissioning Notification the GCCS consisted of 185 vertical LFG collection wells, 2 horizontal collectors, and 2 leachate cleanout riser system (LCRS). With the decommissioning of three LFG vertical wells ALLC0775, ALLC0776, and ALLC0828, as indicated in this Well Decommissioning Notification Letter, there are currently 182 vertical LFG collection wells, 2 horizontal collectors, and 2 LCRS connected to the GCCS at the ALRRF.

If you have any questions, please do not hesitate to contact me at rphadnis@wm.com.

Sincerely,

Rajan Phadnis
Waste Management of Alameda County, Inc.

CC Mr. Ben Tarver (ALRRF)

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

July 9, 2024

Perry Ng
Air Quality Engineer
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Re: Plant No. A2066 – Altamont Landfill and Resource Recovery Facility
Permit Modification Request to add two wells to list of Higher Operating Value Wells

Dear Sir/Madam:

This letter is to notify the Bay Area Air Quality Management District (BAAQMD) that Altamont Landfill and Resource Recovery Facility (ALRRF) is requesting to add two Wells ALT20018, and ALT20019 to the list of alternative temperature limit wells, also referred to as High Operating Value (HOV) wells.

This notification is being made pursuant to Waste Management of Alameda County Inc. (WMAC) Permit to Operate (PTO) Condition 19235 Parts (1)(d)(ii), which states that a notice shall be submitted to the BAAQMD within thirty (30) days of adding the component to the list of alternative temperature limit wells. ALRRF believes that it has satisfied all requirements listed under PTO Condition 19235 Parts (1)(d)(ii) to include Wells ALT20018, and ALT20019 to the list of alternative temperature limit wells.

A review of monitoring data indicates that the wells had elevated operating temperatures, and recent oxygen data shows low level of oxygen has been detected at these wells. Upon discovering the elevated temperatures, ALRRF personnel monitored the well for carbon monoxide (CO), which is an early indicator of subsurface fire. Typically, CO concentrations of greater than 1,000 parts per million by volume (ppmv) will indicate a subsurface fire, with CO concentrations greater than 500 ppmv being of concern. Initial monitoring at Well ALT20018 indicated CO readings of 20 ppmv. Subsequent monitoring at Well ALT20018 indicated CO concentrations of 20 ppmv, 20 ppmv and 20 ppmv. Methane concentration at Well ALT20018 did not appear to be affected by operation at the higher temperatures. Initial monitoring at Well ALT20019 indicated CO readings of 20 ppmv. Subsequent monitoring at Well ALT20019 indicated CO concentrations of 20 ppmv, 20 ppmv, and 20 ppmv. Methane concentration at Well ALT20019 did not appear to be affected by operation at the higher temperatures. See attached table for recent historical monitoring data and CO monitoring results for Wells ALT20018, and ALT20019.

WMAC will consider Wells ALT20018, and ALT20019 on the HOV list for a temperature of 145°F as of July 9, 2024. Should the temperature measured at Wells ALT20018, and ALT20019 during routine monitoring exceed 145°F, WMAC will consider it an exceedance and will track in accordance with the NSPS/EG and BAAQMD requirements.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Rajan Phadnis
Waste Management of Alameda County, Inc.

Attachments:

Table 1 –Wellfield Data- Wells ALT20018, and ALT20019
ALRRF GCCS Drawing

Table 1. Well Data for Wells ALT20018 and ALT20019

Device Name	Date Time	CH4 (Methane)(%)	CO2 (Carbon Dioxide)(%)	O2 (Oxygen)(%)	Balance Gas(%)	Initial Temperature(oF)	Adjusted Temperature(oF)	Initial Static Pressure("H2O)	Adjusted Static Pressure("H2O)
ALT20018	2/6/2024 8:41	53.2	46.8	0.0	0.0	85.9	127.0	-0.7	-1.2
ALT20018	3/22/2024 8:32	55.0	44.9	0.1	0.0	125.0	126.1	-2.3	-2.9
ALT20018	4/1/2024 9:38	54.4	45.6	0.0	0.0	129.1	129.0	-5.2	-5.3
ALT20018	5/1/2024 9:30	49.9	50.1	0.0	0.0	129.3	129.1	-5.0	-5.1
ALT20018	6/5/2024 9:33	54.4	44.4	0.0	1.2	132.9	132.9	-5.3	-5.7
ALT20018	6/5/2024 9:34	54.0	44.4	0.0	1.6	132.9	132.9	-6.1	-6.1
ALT20018	6/5/2024 9:40	CO was 20 ppm							
ALT20018	6/10/2024 9:55	53.3	43.8	0.0	2.9	132.3	132.3	-4.7	-4.9
ALT20018	6/10/2024 10:00	CO was 20 ppm							
ALT20018	6/18/2024 10:45	51.3	43.7	0.2	4.8	132.5	132.5	-6.5	-6.5
ALT20018	6/18/2024 10:50	CO was 20 ppm							
ALT20018	7/2/2024 9:33	50.2	42.6	0.0	7.2	132.9	132.9	-6.0	-6.0
ALT20018	7/2/2024 9:38	CO was 20 ppm							
ALT20019	1/2/2024 11:51	54.1	45.9	0.0	0.0	124.7	125.8	-0.2	-0.2
ALT20019	2/6/2024 8:47	53.8	46.2	0.0	0.0	125.4	126.1	-0.2	-0.3
ALT20019	3/8/2024 9:55	52.3	47.7	0.0	0.0	127.5	127.9	-1.4	-1.5
ALT20019	3/27/2024 10:20	55.2	44.8	0.0	0.0	126.5	127.8	-1.0	-1.5
ALT20019	4/1/2024 9:48	54.0	46.0	0.0	0.0	129.4	129.2	-2.9	-3.1
ALT20019	5/1/2024 9:24	50.0	50.0	0.0	0.0	128.7	128.5	-3.2	-3.2
ALT20019	6/5/2024 10:03	54.6	45.2	0.0	0.2	132.4	132.3	-3.1	-3.2
ALT20019	6/5/2024 10:05	54.4	45.2	0.0	0.4	132.4	132.4	-3.5	-3.5
ALT20019	6/5/2024 10:10	CO was 20 ppm							
ALT20019	6/10/2024 10:06	53.5	44.0	0.0	2.5	132.0	132.1	-3.1	-3.4
ALT20019	6/10/2024 10:12	CO was 20 ppm							
ALT20019	6/18/2024 10:55	49.8	43.0	0.2	7.0	132.3	132.3	-4.6	-4.6
ALT20019	6/19/2024 11:00	CO was 20 ppm							
ALT20019	7/2/2024 9:42	48.0	40.9	0.2	10.9	132.6	132.6	-4.1	-4.1
ALT20019	7/2/2024 9:50	CO was 20 ppm							

SEE SHEET 3 FOR ENLARGED PLAN VIEW OF THIS AREA

SEE SHEET 2 FOR ENLARGED PLAN VIEW OF THIS AREA

LEGEND

▬ ▬ ▬ ▬	UNIT 1 APPROXIMATE LIMIT OF WASTE
────	UNIT 2 APPROXIMATE LINER BOUNDARY
▨	APPROXIMATE ASBESTOS AREA BOUNDARY
── 1400 ──	EXISTING 10' CONTOUR
12" ────	EXISTING LANDFILL GAS PIPE – ABOVEGROUND
— — — —	EXISTING LANDFILL GAS PIPE – BELOWGROUND
— · — · —	EXISTING LEACHATE COLLECTION PIPE
— · · — · · —	EXISTING HORIZONTAL LFG COLLECTOR
—— FM ——	EXISTING FORCE MAIN PIPE
—— CAG ——	EXISTING CONDENSATE LINE – ABOVEGROUND
—— CBG ——	EXISTING CONDENSATE LINE – BELOWGROUND
⊕ 523	EXISTING LFG EXTRACTION WELL
△ CI–1	EXISTING CONDENSATE INJECTION WELL
△ LC 2–021 △ 691	EXISTING LOCAL CONTROL WELL
⊗	EXISTING REMOTE WELLHEAD
⋈	EXISTING CONTROL VALVE
⊣▮	EXISTING BLIND FLANGE
⊣▮⊢	EXISTING FLANGE CONNECTION
⊣▷⊢	EXISTING REDUCER FITTING
◇ CS–	EXISTING CONDENSATE PUMP STATION
▨	EXISTING ROAD CROSSING
HP ⊥	EXISTING HEADER HIGH POINT
]	EXISTING CAP
⌖ GP–10	EXISTING GAS MONITORING PROBE
12" ────	INSTALLED LANDFILL GAS PIPE – ABOVEGROUND
— — — —	INSTALLED LANDFILL GAS PIPE – BELOWGROUND
⊣▷⊢	INSTALLED REDUCER FITTING
△ LC 2–021 △ 691	INSTALLED LOCAL CONTROL WELL
⊣▮	INSTALLED BLIND FLANGE
⋈	INSTALLED CONTROL VALVE
○	INSTALLED U–TRAP RISER
▬	AREA FROM SURVEY INFORMATION IN FILE TITLED "DINOSED – DISPOSAL AREA"
☒	AREA FROM SURVEY INFORMATION IN FILE TITLED "9–23–14 RTA" EXISTING HEADER HIGH POINT
☁	APPROXIMATE LOCATION OF OLD FLARE MATERIALS

NOTES:

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL – ZONE 3, NAD27, VERTICAL – NGVD29.
2. SUPPLEMENTAL 2014 GCCS IMPROVEMENTS AS–BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: FEBRUARY 17, 2015.
3. SUPPLEMENTAL 2015 GCCS IMPROVEMENTS AS–BUILT PIPING PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: DECEMBER 18, 2015 AND FEBRUARY 25, 2016. ADDITIONAL FIELD MARKUPS PROVIDED BY WM DATED MAY 17, 2016.
4. THE 2016 GCCS IMPROVEMENTS AS–BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: DECEMBER 22, 2016.
5. THE 2017 GCCS IMPROVEMENTS AS–BUILT WELL LOCATIONS PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE SURVEYS RECEIVED: APRIL 17, 2018.
6. THE 2018 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: JUNE 26 AND JULY 30, 2018.
7. ASBESTOS AREA BOUNDARY LOCATION PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: APRIL 7, 2016.
8. THE 2019 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JANUARY 31 AND FEBRUARY 12, 2020.
9. THE 2020 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JANUARY 7 AND 30, FEBRUARY 12, APRIL 22 AND 30, AND JUNE 19, 2020.
10. SUPPLEMENTAL 2020 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: JULY 31, 2020.
11. FORCE MAIN PIPING LOCATIONS PER MARKUPS PROVIDED BY WM. DATE OF MARKUPS: APRIL 7, APRIL 9, AND MAY 7, 2020.
12. THE 2021 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: NOVEMBER 23, 2021, DECEMBER 9, 2021, DECEMBER 13, 2021, AND MARCH 8, 2022.
13. THE 2022 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JUNE 8, 2023
14. THE 2023 GCCS IMPROVEMENTS AS–BUILT PER PRECONSTRUCTION SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: OCTOBER 16, 2023.
15. THE 2023 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: DECEMBER 22, 2023.

DRAFT RECORD DRAWINGS

WASTE MANAGEMENT

This drawing represents intellectual property of Tetra Tech. Any modification to the original by other than Tetra Tech personnel violates its original purpose and as such is rendered void. Tetra Tech will not be held liable for any changes made to this document without express written consent of the originator.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 04/16/24
DRAWN BY DAA / GVP
DESIGNED BY CME
CHECKED BY AMN
APPROVED BY PJS

TETRA TECH

ALL PROFESSIONAL ENGINEERING WORK IS PERFORMED BY DULY LICENSED PROFESSIONAL ENGINEERS UNDER THE APPROPRIATE STATE REGISTERED PROFESSIONAL ENTITY.

ALTAMONT LANDFILL AND
RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY, CALIFORNIA

2024 GCCS IMPROVEMENTS
GCCS RECORD LAYOUT

SHEET NO.
1
PROJECT NO.
2024–4002

1" 1/2" 0" 1"

File: C:\Autosave\AcPublish_66800\2024–4002_DUALTXGS_ GCCS_RECORD DRAFT.dwg Layout: SHT 1 User: GERARDO.PAREDES Apr 16, 2024 – 4:56pm

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

June 10, 2024

Perry Ng
Air Quality Engineer
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Re: Plant No. A2066 – Altamont Landfill and Resource Recovery Facility
Permit Modification Request to add one well to list of Higher Operating Value Wells

Dear Sir/Madam:

This letter is to notify the Bay Area Air Quality Management District (BAAQMD) that Altamont Landfill and Resource Recovery Facility (ALRRF) is requesting to add one Well ALT20012 to the list of alternative temperature limit wells, also referred to as High Operating Value (HOV) wells.

This notification is being made pursuant to Waste Management of Alameda County Inc. (WMAC) Permit to Operate (PTO) Condition 19235 Parts (1)(d)(ii), which states that a notice shall be submitted to the BAAQMD within thirty (30) days of adding the component to the list of alternative temperature limit wells. ALRRF believes that it has satisfied all requirements listed under PTO Condition 19235 Parts (1)(d)(ii) to include Well ALT20012 to the list of alternative temperature limit wells.

A review of monitoring data indicates that the well had elevated operating temperatures, and recent oxygen data shows low level of oxygen has been detected at this wells. Upon discovering the elevated temperatures, ALRRF personnel monitored the well for carbon monoxide (CO), which is an early indicator of subsurface fire. Typically, CO concentrations of greater than 1,000 parts per million by volume (ppmv) will indicate a subsurface fire, with CO concentrations greater than 500 ppmv being of concern. Initial monitoring at ALT20012 indicated CO reading of 20 ppmv. Subsequent monitoring at Well ALT20012 indicated CO concentrations of 20 ppmv, 20 ppmv, and 40 ppmv. Methane concentration at Well ALT20012 did not appear to be affected by operation at the higher temperatures. See attached table for recent historical monitoring data and CO monitoring results for Well ALT20012.

WMAC will consider Well ALT20012 on the HOV list for a temperature of 145°F as of June 10, 2024. Should the temperature measured at Well ALT20012 during routine monitoring exceed 145°F, WMAC will consider it an exceedance and will track in accordance with the NSPS/EG and BAAQMD requirements.

If you have any questions, please do not hesitate to contact me.

Sincerely,

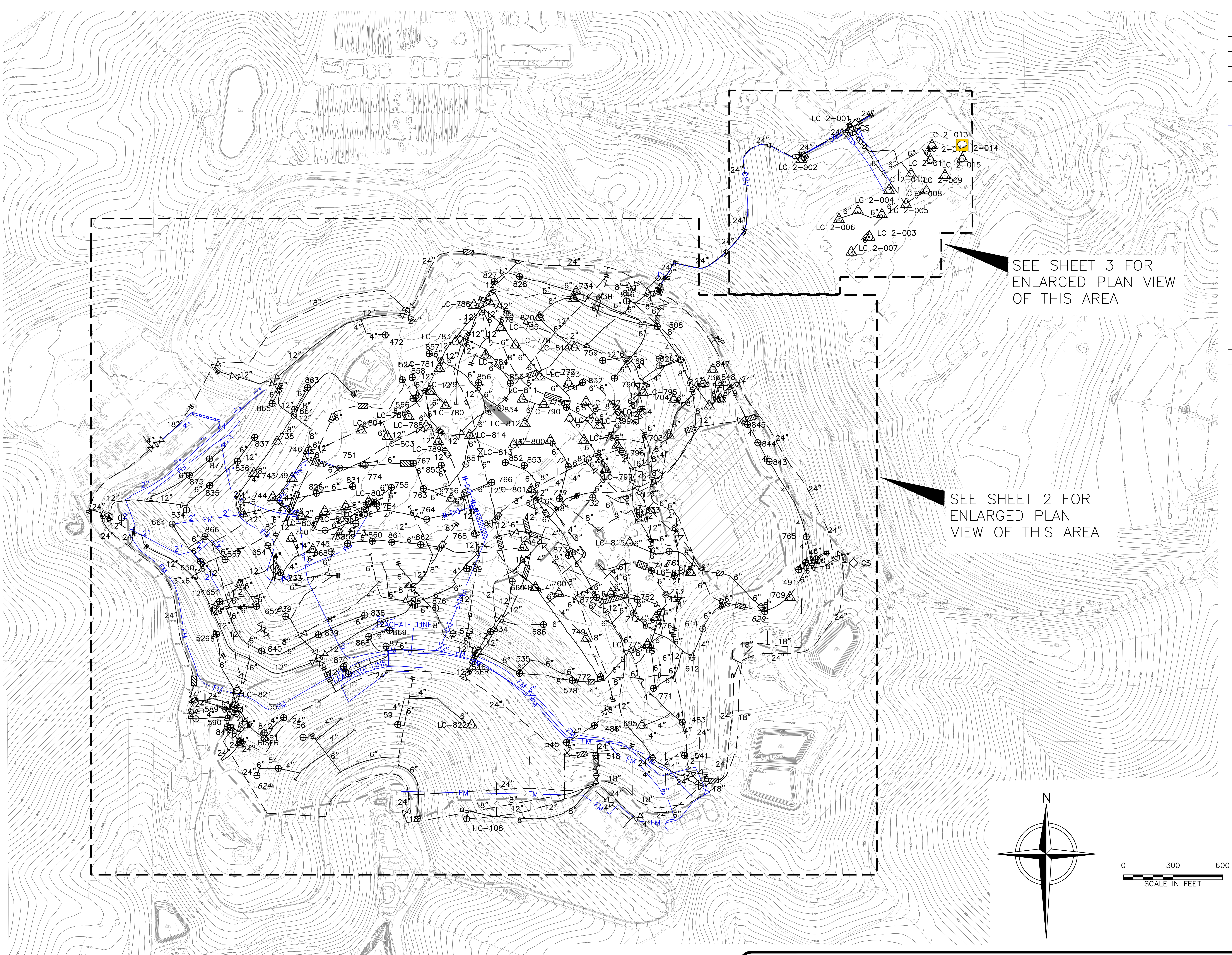
Rajan Phadnis
Waste Management of Alameda County, Inc.

Attachments:

Table 1 –Wellfield Data- Well ALT20012
ALRRF GCCS Drawing

Table 1. Wellfield Data

Device Name	Date Time	CH4 (Methane)(%)	CO2 (Carbon Dioxide) (%)	O2 (Oxygen) (%)	Balance Gas(%)	Initial Temperature (oF)	Adjusted Temperature(oF)	Initial Static Pressure("H2O)	Adjusted Static Pressure("H2O)
ALT20012	1/2/2024 10:43	41.9	42.5	0.0	15.6	128.4	127.3	-0.6	-0.5
ALT20012	2/8/2024 9:09	45.0	43.6	0.0	11.4	127.3	127.3	-1.3	-1.3
ALT20012	3/8/2024 10:52	47.3	45.4	0.0	7.3	127.3	127.3	-1.4	-1.4
ALT20012	4/1/2024 10:40	48.7	42.9	0.0	8.4	126.6	127.5	-1.4	-2.0
ALT20012	5/1/2024 9:33	38.8	39.1	0.2	21.9	131.1	131.0	-2.5	-2.0
ALT20012	5/1/2024 9:36	39.4	39.2	0.0	21.4	129.9	129.9	-2.0	-2.0
ALT20012	5/1/2024 9:40	CO was 20 ppm							
ALT20012	5/15/2024 14:02	42	42	0.1	15.9	131.3	131.3	-1.34	-1.34
ALT20012	5/15/2024 14:02	CO was 20 ppm							
ALT20012	5/28/2024 14:27	43	47.4	0	9.6	80.1	80.1	-1.59	-1.52
ALT20012	5/28/2024 2:27	CO was 20 ppm							
ALT20012	6/5/2024 11:14	48.3	40.9	0	10.8	133.3	132.6	-2.01	-1.23
ALT20012	6/5/2024 11:14	CO was 40 ppm							



LEGEND

1400	EXISTING 10' CONTOUR
12"	EXISTING LANDFILL GAS PIPE – ABOVEGROUND
	EXISTING LANDFILL GAS PIPE – BELOWGROUND
	EXISTING LEACHATE COLLECTION PIPE
	EXISTING HORIZONTAL LFG COLLECTOR
FM	EXISTING FORCE MAIN PIPE
CAG	EXISTING CONDENSATE LINE – ABOVEGROUND
CBG	EXISTING CONDENSATE LINE – BELOWGROUND
⊕ 523	EXISTING LFG EXTRACTION WELL
△ CI–1	EXISTING CONDENSATE INJECTION WELL
△ 691	EXISTING LOCAL CONTROL WELL
⊗	EXISTING REMOTE WELLHEAD
⋈	EXISTING CONTROL VALVE
⊣	EXISTING BLIND FLANGE
⊣⊢	EXISTING FLANGE CONNECTION
⊳	EXISTING REDUCER FITTING
◇ CS–	EXISTING CONDENSATE PUMP STATION
▨	EXISTING ROAD CROSSING
HP	EXISTING HEADER HIGH POINT
⊐	EXISTING CAP
✧ GP–10	EXISTING GAS MONITORING PROBE
⊕ 523	INSTALLED LFG EXTRACTION WELL
12"	INSTALLED LANDFILL GAS PIPE – ABOVEGROUND
	INSTALLED LANDFILL GAS PIPE – BELOWGROUND
⊣	INSTALLED BLIND FLANGE
⊳	INSTALLED REDUCER FITTING
⋈	INSTALLED CONTROL VALVE
▨	INSTALLED ROAD CROSSING
▬	AREA FROM SURVEY INFORMATION IN FILE TITLED "DINOSED – DISPOSAL AREA"
▨	AREA FROM SURVEY INFORMATION IN FILE TITLED "9–23–14 RTA"
○	APPROXIMATE LOCATION OF OLD FLARE MATERIALS

NOTES:

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL – ZONE 3, NAD27, VERTICAL – NGVD29.
2. SUPPLEMENTAL 2014 GCCS IMPROVEMENTS AS–BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA PROVIDED BY EMAIL FROM F3 & ASSOCIATES. DATE OF SURVEY: FEBRUARY 17, 2015.
3. SUPPLEMENTAL 2015 GCCS IMPROVEMENTS AS–BUILT PIPING PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: DECEMBER 18, 2015 AND FEBRUARY 25, 2016. ADDITIONAL FIELD MARKUPS PROVIDED BY WM DATED MAY 17, 2016.
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7. ASBESTOS AREA BOUNDARY LOCATION PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: APRIL 7, 2016.
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9. THE 2020 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JANUARY 7 AND 30, FEBRUARY 12, APRIL 22 AND 30, AND JUNE 19, 2020.
10. SUPPLEMENTAL 2020 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEY: JULY 31, 2020.
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13. THE 2022 GCCS IMPROVEMENTS AS–BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICA, CA. DATE OF SURVEYS: JUNE 8, 2023

DRAFT

WASTE MANAGEMENT

This drawing represents intellectual property of Tetra Tech. Any modification to the original by other than Tetra Tech personnel violates its original purpose and as such is rendered void. Tetra Tech will not be held liable for any changes made to this document without express written consent of the originator.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 06/27/23
DRAWN BY JJK
DESIGNED BY CME
CHECKED BY AMN
APPROVED BY PJS

TETRA TECH

ALL PROFESSIONAL ENGINEERING WORK IS PERFORMED BY DULY LICENSED PROFESSIONAL ENGINEERS UNDER THE APPROPRIATE STATE REGISTERED PROFESSIONAL ENTITY.

ALTAMONT LANDFILL AND
RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY, CALIFORNIA

2023 GCCS IMPROVEMENTS
GCCS RECORD LAYOUT

SHEET NO.
1

PROJECT NO.
230018

1" 1/2" 0" 1"

File: C:\Users\jazz.kalingasan\AppData\Local\Temp\AcPublish_10992\DUALTXGS_2023 GCCS_DRAFT.dwg Layout: SHT 1 User: JAZZ.KALINGASAN Jun 27, 2023 – 2:04pm

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

July 28, 2024

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Re: Altamont Landfill and Resource Recovery Facility, Livermore, California
Plant Number A2066,
10-Day NOV Response to BAAQMD Notice of Violation A-59768, Dated July 22, 2024

Dear Sir or Madam:

Although Waste Management of Alameda County Inc. (WMAC) for Altamont Landfill and Resource Recovery Facility, in Livermore, CA (ALRRF) strongly disagrees with the Notice of Violation (NOV) we are submitting this 10-day response to NOV Number A59768 dated July 22, 2024, (see attachment).

The ALRRF Title V Permit Condition No. 19235 Part 20 (a) states that "*ALRRF shall limit the quantity of Volatile Organic Compound (VOC) laden soil handled per day such that no more than 15 pounds of total carbon could be emitted to the atmosphere per day.*"

WMAC self-reported that the ALRRF site potentially exceeded the daily VOC limit on both June 15 and 18, 2024. For purpose of reporting non-compliance, ALRRF conservatively assumes all VOCs in soils utilized for daily cover are emitted to the atmosphere on the day the soil is managed at the facility regardless of the activities where the soil is generated — including loading and transporting the soil to the landfill. As such, ALRRF calculates the potential emissions from VOC laden soil to the atmosphere. Obviously, much of the VOC contaminants in soil are released to the air during loading at the generating facility and in the transportation to the landfill. The ALRRF provided information to BAAQMD that we assume that at most 50 percent of the VOCs could be released from the cover soils at the landfill. However, in an abundance of caution and in accordance with permit conditions, ALRRF submitted the 10-day notification on June 28, 2024, within 10 calendar days of discovery of the potential exceedance of daily VOC limit. ALRRF submitted the 30-day notification on July 17, 2024. The potential exceedance was caused due to inadvertent miscommunication between WMAC staff.

Upon discovery of the soil daily VOC daily potential exceedance ALRRF immediately took the following actions:

6/19/2024: During routine data review, it was discovered that ALRRF had potentially exceeded the soil VOC limit on June 15 and 18, 2024.

6/21/2024: ALRRF team discussed corrective action items and determined necessary changes to daily operations.

6/21/2024: Supervisors and scale house personnel were retrained on scheduling and acceptance practices for low VOC laden soils

6/21/2024: The facility initiated updating the site material handling process.

6/24/2024: The facility implemented process of mid-day communication between Operations Team, Site EP, and Sales Team.

6/28/2024: The facility submitted 10-day written report via email.

7/17/2024: The facility submitted 30-day written report via email.

ALRRF is committed to operating its landfill in compliance with applicable regulations.
If you have any questions, please contact Rajan Phadnis at rphadnis@wm.com.

Sincerely,

Waste Management of Alameda County, Inc.

Marcus Nettz
Area Director

CC: Jay Patel

APPENDIX Q
LFG CONDENSATE INJECTION DATA (A-15 AND A-16 FLARES)

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-15 Flare)

June-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
6/1/2024	0.0	0.0	0.0
6/2/2024	0.0	0.0	0.0
6/3/2024	0.0	0.0	0.0
6/4/2024	0.0	0.0	0.0
6/5/2024	0.0	0.0	0.0
6/6/2024	0.0	0.0	0.0
6/7/2024	0.0	0.0	0.0
6/8/2024	0.0	0.0	0.0
6/9/2024	0.0	0.0	0.0
6/10/2024	0.0	0.0	0.0
6/11/2024	0.0	0.0	0.0
6/12/2024	0.0	0.0	0.0
6/13/2024	0.0	0.0	0.0
6/14/2024	0.0	0.0	0.0
6/15/2024	0.0	0.0	0.0
6/16/2024	0.0	0.0	0.0
6/17/2024	0.0	0.0	0.0
6/18/2024	0.0	0.0	0.0
6/19/2024	0.0	0.0	0.0
6/20/2024	0.0	0.0	0.0
6/21/2024	0.0	0.0	0.0
6/22/2024	0.0	0.0	0.0
6/23/2024	0.0	0.0	0.0
6/24/2024	0.0	0.0	0.0
6/25/2024	0.0	0.0	0.0
6/26/2024	0.0	0.0	0.0
6/27/2024	0.0	0.0	0.0
6/28/2024	0.0	0.0	0.0
6/29/2024	0.0	0.0	0.0
6/30/2024	0.0	0.0	0.0
Total/Average	**0**	**0.0**	**0.00**
	Max	**0.0**	**0.00**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3, is 4,320 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-15 Flare)

July-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
7/1/2024	0.0	0.0	0.0
7/2/2024	0.0	0.0	0.0
7/3/2024	0.0	0.0	0.0
7/4/2024	0.0	0.0	0.0
7/5/2024	0.0	0.0	0.0
7/6/2024	0.0	0.0	0.0
7/7/2024	0.0	0.0	0.0
7/8/2024	0.0	0.0	0.0
7/9/2024	0.0	0.0	0.0
7/10/2024	0.0	0.0	0.0
7/11/2024	0.0	0.0	0.0
7/12/2024	0.0	0.0	0.0
7/13/2024	0.0	0.0	0.0
7/14/2024	0.0	0.0	0.0
7/15/2024	0.0	0.0	0.0
7/16/2024	0.0	0.0	0.0
7/17/2024	0.0	0.0	0.0
7/18/2024	0.0	0.0	0.0
7/19/2024	0.0	0.0	0.0
7/20/2024	0.0	0.0	0.0
7/21/2024	0.0	0.0	0.0
7/22/2024	0.0	0.0	0.0
7/23/2024	0.0	0.0	0.0
7/24/2024	0.0	0.0	0.0
7/25/2024	0.0	0.0	0.0
7/26/2024	0.0	0.0	0.0
7/27/2024	0.0	0.0	0.0
7/28/2024	0.0	0.0	0.0
7/29/2024	0.0	0.0	0.0
7/30/2024	0.0	0.0	0.0
7/31/2024	0.0	0.0	0.0
Total/Average	**0**	**0.0**	**0.00**
	Max	**0.0**	**0.00**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3, is 4,320 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-15 Flare)

August-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
8/1/2024	0.0	0.0	0.0
8/2/2024	0.0	0.0	0.0
8/3/2024	0.0	0.0	0.0
8/4/2024	0.0	0.0	0.0
8/5/2024	0.0	0.0	0.0
8/6/2024	0.0	0.0	0.0
8/7/2024	0.0	0.0	0.0
8/8/2024	0.0	0.0	0.0
8/9/2024	0.0	0.0	0.0
8/10/2024	0.0	0.0	0.0
8/11/2024	0.0	0.0	0.0
8/12/2024	0.0	0.0	0.0
8/13/2024	0.0	0.0	0.0
8/14/2024	0.0	0.0	0.0
8/15/2024	0.0	0.0	0.0
8/16/2024	0.0	0.0	0.0
8/17/2024	0.0	0.0	0.0
8/18/2024	0.0	0.0	0.0
8/19/2024	0.0	0.0	0.0
8/20/2024	0.0	0.0	0.0
8/21/2024	0.0	0.0	0.0
8/22/2024	0.0	0.0	0.0
8/23/2024	0.0	0.0	0.0
8/24/2024	0.0	0.0	0.0
8/25/2024	0.0	0.0	0.0
8/26/2024	0.0	0.0	0.0
8/27/2024	0.0	0.0	0.0
8/28/2024	0.0	0.0	0.0
8/29/2024	0.0	0.0	0.0
8/30/2024	0.0	0.0	0.0
8/31/2024	0.0	0.0	0.0
Total/Average	**0**	**0.0**	**0.00**
	Max	**0.0**	**0.00**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3, is 4,320 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-15 Flare)

September-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
9/1/2024	0.0	0.0	0.0
9/2/2024	0.0	0.0	0.0
9/3/2024	0.0	0.0	0.0
9/4/2024	0.0	0.0	0.0
9/5/2024	0.0	0.0	0.0
9/6/2024	0.0	0.0	0.0
9/7/2024	0.0	0.0	0.0
9/8/2024	0.0	0.0	0.0
9/9/2024	0.0	0.0	0.0
9/10/2024	0.0	0.0	0.0
9/11/2024	0.0	0.0	0.0
9/12/2024	0.0	0.0	0.0
9/13/2024	0.0	0.0	0.0
9/14/2024	0.0	0.0	0.0
9/15/2024	0.0	0.0	0.0
9/16/2024	0.0	0.0	0.0
9/17/2024	0.0	0.0	0.0
9/18/2024	0.0	0.0	0.0
9/19/2024	0.0	0.0	0.0
9/20/2024	0.0	0.0	0.0
9/21/2024	0.0	0.0	0.0
9/22/2024	0.0	0.0	0.0
9/23/2024	0.0	0.0	0.0
9/24/2024	0.0	0.0	0.0
9/25/2024	0.0	0.0	0.0
9/26/2024	0.0	0.0	0.0
9/27/2024	0.0	0.0	0.0
9/28/2024	0.0	0.0	0.0
9/29/2024	0.0	0.0	0.0
9/30/2024	0.0	0.0	0.0
Total/Average	**0**	**0.0**	**0.00**
	Max	**0.0**	**0.00**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3, is 4,320 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-15 Flare)

October-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
10/1/2024	0.0	0.0	0.0
10/2/2024	0.0	0.0	0.0
10/3/2024	0.0	0.0	0.0
10/4/2024	0.0	0.0	0.0
10/5/2024	0.0	0.0	0.0
10/6/2024	0.0	0.0	0.0
10/7/2024	0.0	0.0	0.0
10/8/2024	0.0	0.0	0.0
10/9/2024	0.0	0.0	0.0
10/10/2024	0.0	0.0	0.0
10/11/2024	0.0	0.0	0.0
10/12/2024	0.0	0.0	0.0
10/13/2024	0.0	0.0	0.0
10/14/2024	0.0	0.0	0.0
10/15/2024	0.0	0.0	0.0
10/16/2024	0.0	0.0	0.0
10/17/2024	0.0	0.0	0.0
10/18/2024	0.0	0.0	0.0
10/19/2024	0.0	0.0	0.0
10/20/2024	0.0	0.0	0.0
10/21/2024	0.0	0.0	0.0
10/22/2024	0.0	0.0	0.0
10/23/2024	0.0	0.0	0.0
10/24/2024	0.0	0.0	0.0
10/25/2024	0.0	0.0	0.0
10/26/2024	0.0	0.0	0.0
10/27/2024	0.0	0.0	0.0
10/28/2024	0.0	0.0	0.0
10/29/2024	0.0	0.0	0.0
10/30/2024	0.0	0.0	0.0
10/31/2024	0.0	0.0	0.0
Total/Average	**0**	**0.0**	**0.00**
	Max	**0.0**	**0.00**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3, is 4,320 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-15 Flare)

November-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
11/1/2024	0.0	0.0	0.0
11/2/2024	0.0	0.0	0.0
11/3/2024	0.0	0.0	0.0
11/4/2024	0.0	0.0	0.0
11/5/2024	0.0	0.0	0.0
11/6/2024	0.0	0.0	0.0
11/7/2024	0.0	0.0	0.0
11/8/2024	0.0	0.0	0.0
11/9/2024	0.0	0.0	0.0
11/10/2024	0.0	0.0	0.0
11/11/2024	0.0	0.0	0.0
11/12/2024	0.0	0.0	0.0
11/13/2024	0.0	0.0	0.0
11/14/2024	0.0	0.0	0.0
11/15/2024	0.0	0.0	0.0
11/16/2024	0.0	0.0	0.0
11/17/2024	0.0	0.0	0.0
11/18/2024	0.0	0.0	0.0
11/19/2024	0.0	0.0	0.0
11/20/2024	0.0	0.0	0.0
11/21/2024	0.0	0.0	0.0
11/22/2024	0.0	0.0	0.0
11/23/2024	0.0	0.0	0.0
11/24/2024	0.0	0.0	0.0
11/25/2024	0.0	0.0	0.0
11/26/2024	0.0	0.0	0.0
11/27/2024	0.0	0.0	0.0
11/28/2024	0.0	0.0	0.0
11/29/2024	0.0	0.0	0.0
11/30/2024	0.0	0.0	0.0
Total/Average	**0**	**0.0**	**0.00**
	Max	**0.0**	**0.00**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3, is 4,320 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-16 Flare)

June-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
6/1/2024	1,440	2.0	2,910
6/2/2024	1,440	2.1	2,970
6/3/2024	1,440	2.1	2,989
6/4/2024	804	2.1	1,677
6/5/2024	0	0.0	0
6/6/2024	902	2.5	2,248
6/7/2024	1,440	2.7	3,831
6/8/2024	1,398	2.5	3,425
6/9/2024	1,384	2.1	2,933
6/10/2024	778	2.1	1,620
6/11/2024	898	2.4	2,126
6/12/2024	1,440	2.4	3,435
6/13/2024	1,440	2.6	3,717
6/14/2024	1,416	2.6	3,707
6/15/2024	1,440	1.9	2,795
6/16/2024	1,440	2.0	2,929
6/17/2024	1,440	2.1	3,089
6/18/2024	1,440	2.2	3,227
6/19/2024	1,432	2.1	3,008
6/20/2024	1,430	2.2	3,146
6/21/2024	1,408	2.3	3,244
6/22/2024	1,368	2.2	3,075
6/23/2024	1,328	2.3	2,990
6/24/2024	1,384	2.2	3,103
6/25/2024	1,342	2.2	2,917
6/26/2024	1,064	2.2	2,349
6/27/2024	1,440	2.3	3,292
6/28/2024	1,440	2.3	3,345
6/29/2024	1,376	2.2	3,015
6/30/2024	1,336	2.2	2,974
Total/Average	**38,328**	**2.2**	**86,085**
Max	**1,440**	**2.7**	**3,831**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3 is 7,200 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-16 Flare)

July-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
7/1/2024	1,384	2.2	3,048
7/2/2024	1,344	2.3	3,034
7/3/2024	1,328	2.3	3,020
7/4/2024	1,290	2.2	2,864
7/5/2024	1,358	2.2	3,021
7/6/2024	1,342	2.2	2,999
7/7/2024	1,336	2.2	2,876
7/8/2024	1,384	2.2	2,979
7/9/2024	1,336	2.1	2,783
7/10/2024	1,358	2.2	2,973
7/11/2024	1,416	1.9	2,685
7/12/2024	1,440	1.8	2,631
7/13/2024	1,440	2.2	3,174
7/14/2024	1,328	2.6	3,388
7/15/2024	1,376	1.9	2,654
7/16/2024	1,408	2.0	2,806
7/17/2024	1,440	1.7	2,482
7/18/2024	1,440	1.9	2,775
7/19/2024	1,440	2.2	3,165
7/20/2024	1,440	2.4	3,498
7/21/2024	1,424	2.3	3,207
7/22/2024	1,440	1.6	2,262
7/23/2024	1,440	2.0	2,836
7/24/2024	1,440	2.2	3,176
7/25/2024	1,440	2.3	3,365
7/26/2024	1,440	2.1	2,997
7/27/2024	1,440	1.7	2,498
7/28/2024	1,440	2.0	2,925
7/29/2024	1,440	2.2	3,158
7/30/2024	1,440	2.2	3,203
7/31/2024	1,424	1.8	2,628
Total/Average	**43,436**	**2.1**	**91,109**
Max	**1,440**	**2.6**	**3,498**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3 is 7,200 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-16 Flare)

August-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
8/1/2024	1,440	1.5	2,097
8/2/2024	1,440	1.3	1,933
8/3/2024	1,440	1.3	1,939
8/4/2024	1,440	1.2	1,769
8/5/2024	1,096	2.7	3,001
8/6/2024	1,440	2.9	4,230
8/7/2024	1,412	2.9	4,083
8/8/2024	1,440	2.8	4,086
8/9/2024	1,440	2.8	4,025
8/10/2024	1,408	2.2	3,137
8/11/2024	1,440	1.1	1,602
8/12/2024	1,214	2.7	3,243
8/13/2024	1,440	2.9	4,130
8/14/2024	1,440	2.8	4,061
8/15/2024	1,194	1.7	2,007
8/16/2024	1,374	1.2	1,592
8/17/2024	898	1.3	1,185
8/18/2024	740	1.4	1,046
8/19/2024	1,056	2.9	3,064
8/20/2024	1,440	2.9	4,127
8/21/2024	1,400	1.7	2,429
8/22/2024	1,418	1.3	1,777
8/23/2024	1,440	1.4	2,083
8/24/2024	1,440	1.5	2,090
8/25/2024	1,440	1.4	2,012
8/26/2024	1,440	1.4	1,947
8/27/2024	1,440	1.2	1,796
8/28/2024	1,278	1.1	1,444
8/29/2024	1,012	3.0	2,992
8/30/2024	1,440	2.6	3,770
8/31/2024	1,440	2.4	3,504
Total/Average	**41,420**	**2.0**	**82,200**
Max	**1,440**	**3.0**	**4,230**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3 is 7,200 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-16 Flare)

September-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
9/1/2024	1,420	2.1	3,004
9/2/2024	1,352	2.0	2,707
9/3/2024	1,440	2.1	3,003
9/4/2024	1,440	2.1	2,989
9/5/2024	1,440	2.0	2,941
9/6/2024	1,314	2.4	3,168
9/7/2024	1,440	2.4	3,398
9/8/2024	1,440	2.4	3,408
9/9/2024	1,410	2.2	3,161
9/10/2024	1,440	2.2	3,181
9/11/2024	1,440	1.9	2,761
9/12/2024	1,440	1.7	2,514
9/13/2024	1,440	1.8	2,534
9/14/2024	1,288	0.9	1,182
9/15/2024	1,056	2.6	2,767
9/16/2024	1,078	2.5	2,686
9/17/2024	806	2.9	2,310
9/18/2024	1,440	3.5	4,975
9/19/2024	1,440	3.1	4,506
9/20/2024	1,440	3.1	4,402
9/21/2024	1,440	1.2	1,795
9/22/2024	1,420	2.3	3,244
9/23/2024	1,440	3.0	4,291
9/24/2024	570	3.0	1,699
9/25/2024	352	2.9	1,024
9/26/2024	538	2.9	1,569
9/27/2024	976	3.0	2,882
9/28/2024	1,440	3.0	4,303
9/29/2024	1,440	2.7	3,880
9/30/2024	1,440	2.7	3,851
Total/Average	**38,060**	**2.4**	**90,135**
Max	**1,440**	**3.5**	**4,975**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3 is 7,200 gallons per day.

Note: Substitute data was used during 9/30/24 13:36 -10/1/24 8:38, when meter was switched off after maintenance. Meter

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-16 Flare)

October-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
10/1/2024	1,440	2.8	3,976
10/2/2024	1,440	2.5	3,664
10/3/2024	1,440	2.3	3,343
10/4/2024	1,426	2.7	3,861
10/5/2024	1,440	3.0	4,250
10/6/2024	1,440	2.3	3,288
10/7/2024	1,440	1.9	2,754
10/8/2024	1,440	1.6	2,263
10/9/2024	886	2.1	1,854
10/10/2024	668	3.1	2,076
10/11/2024	1,440	3.1	4,522
10/12/2024	1,440	3.1	4,520
10/13/2024	1,440	2.9	4,204
10/14/2024	1,440	2.8	3,973
10/15/2024	1,440	2.4	3,418
10/16/2024	1,440	1.8	2,603
10/17/2024	1,440	1.2	1,680
10/18/2024	1,420	2.3	3,329
10/19/2024	1,440	2.8	4,093
10/20/2024	814	2.6	2,146
10/21/2024	962	2.3	2,258
10/22/2024	1,440	2.6	3,741
10/23/2024	1,440	2.6	3,773
10/24/2024	1,440	2.6	3,685
10/25/2024	1,432	1.8	2,560
10/26/2024	1,440	2.5	3,544
10/27/2024	1,440	2.5	3,645
10/28/2024	1,440	1.7	2,493
10/29/2024	1,434	1.9	2,657
10/30/2024	1,440	2.7	3,847
10/31/2024	1,440	2.8	3,983
Total/Average	**42,162**	**2.4**	**102,005**
Max	**1,440**	**3.1**	**4,522**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3 is 7,200 gallons per day.

min. - minute **GPM** - gallons per minute

Altamont Landfill and Resource Recovery Facility

CONDENSATE INJECTION (A-16 Flare)

November-24

Start Date	Total Injection Time (min.)	Average GPM	Total Gallons
11/1/2024	1,430	1.8	2,637
11/2/2024	1,440	2.3	3,278
11/3/2024	1,500	2.5	3,710
11/4/2024	1,440	2.4	3,448
11/5/2024	1,440	1.1	1,612
11/6/2024	1,440	1.3	1,826
11/7/2024	1,440	1.6	2,310
11/8/2024	1,428	2.7	3,913
11/9/2024	1,440	3.0	4,367
11/10/2024	1,440	2.6	3,685
11/11/2024	1,440	2.4	3,391
11/12/2024	1,440	2.3	3,379
11/13/2024	1,440	2.3	3,352
11/14/2024	1,440	2.3	3,311
11/15/2024	1,388	2.3	3,213
11/16/2024	1,440	2.3	3,340
11/17/2024	1,440	2.3	3,316
11/18/2024	1,440	2.3	3,352
11/19/2024	1,440	2.3	3,304
11/20/2024	1,440	2.3	3,275
11/21/2024	1,440	2.1	2,989
11/22/2024	1,440	2.1	3,033
11/23/2024	566	2.2	1,230
11/24/2024	820	2.4	1,942
11/25/2024	1,440	2.7	3,821
11/26/2024	1,440	2.7	3,932
11/27/2024	1,440	2.6	3,783
11/28/2024	1,440	2.6	3,675
11/29/2024	1,440	2.2	3,138
11/30/2024	1,440	1.8	2,607
Total/Average	**41,692**	**2.3**	**94,170**
Max	**1,500**	**3.0**	**4,367**

Note: The landfill gas condensate injection rate pursuant to Permit Condition No. 19235, Part 3 is 7,200 gallons per day.

min. - minute **GPM** - gallons per minute

APPENDIX R
S-99 GASOLINE DISPENSING FACILITY RECORDS

S-99 - Gasoline Dispensing Facility
Log of Fuel Usage per Title V (BAAQMD) - Permit Condition# 20813

Limit: 30,000 gallons per 12-month period

Month	Meter Reading	Date of Reading	Monthly Usage (Gallons)	12 Month Rolling Total (Gallons)
June-24	NA	31-Dec	0	0
July-24	NA	31-Jan	0	0
August-24	NA	29-Feb	0	0
September-24	NA	31-Mar	0	0
October-24	NA	30-Apr	0	0
November-24	NA	31-May	0	0
			6-Month Total Usage	**Rolling 12-Month Max**
			0	**0**

Note: The existing tank is out of service starting January 2022. ALRRF is currently using third party fuel dispensing truck to fuel site vehicles. ALRRF submitted the permit application to replace existing gasoline tank and it is in reviwe stage. BAAQMD approved the permit on August 8, 2023, and assigned ATC AN 31887. ALRRF plans to install the tank by Q1 2025.

APPENDIX S
VOC LADEN SOIL RECORDS

Profile	634823CA	659878CA	661148CA	657519CA	653497CA	657277CA	661621CA	662027CA	662882CA	663391CA	663222CA	663262CA	663772CA	662750CA	664220CA	664412CA	664451CA	664610CA	664835CA	664833CA	662550CA	664552CA	665107CA	665168CA	665393CA	665502CA	661014CA	614971CA	665574CA	Total "No":	2
ppm	1	5	2.8	13	2.5	1.9	3.1	1.9	6.1	26	15	1.9	2.23	2.2	3.3	4.47	7.4	6.6	21	3	2	3	3.3	5.41	1.8	9.3	14	3.4	34	lbs Emissions	less than 15
Date	Daily Tons																													lbs Emissions	less than 15
3-Jun						64.88																								0.2	Yes
5-Jun						176.7																								0.7	Yes
7-Jun						141.92																								0.5	Yes
10-Jun						38.23																								0.1	Yes
11-Jun		60.19						409.89																						2.2	Yes
12-Jun									15.46																					0.2	Yes
13-Jun								227.87																						0.9	Yes
15-Jun										407.73																				21.2	No
18-Jun		518.6				100.85				697.54																				41.8	No
19-Jun						95.97																								0.4	Yes
20-Jun										167.38																				8.7	Yes
21-Jun				45.27																										1.2	Yes
24-Jun				51.29																										1.3	Yes
25-Jun				36.18																										0.9	Yes
26-Jun						194.57																								0.7	Yes
27-Jun						499.05					41.38																			3.1	Yes
28-Jun		18.69		19.1		715.65		459.47			63.24																			7.0	Yes
1-Jul						581.58					44.54																			3.5	Yes
2-Jul	79.33					559.46					47.57																			3.7	Yes
3-Jul				41.13		404.24					64.61																			4.5	Yes
5-Jul				55.55							60.62																			3.3	Yes
8-Jul				64.06																										1.7	Yes
9-Jul						85.7																								0.3	Yes
12-Jul			203.33			91.4																								1.5	Yes
15-Jul			440.99																											2.5	Yes
16-Jul						36.81		399.57			16.07																			2.1	Yes
17-Jul			362.2	64.38																										3.7	Yes
18-Jul			206.14			158.8					13.69																			2.2	Yes
19-Jul						47.03					14.54																			0.6	Yes
22-Jul												11.48	1948.64																	8.7	Yes
23-Jul												29.47	1654.73																	7.5	Yes
24-Jul	134.7	638.94											1300.89																	12.5	Yes
25-Jul	165.08	577.3		17.32																										6.6	Yes
26-Jul		23																												0.2	Yes
29-Jul	185.09	124.18										7.67																		1.6	Yes
30-Jul	301.31					17.82																								0.7	Yes
31-Jul	333.96																													0.7	Yes
1-Aug	197.39	132.84																												1.7	Yes
5-Aug		159.52		11.81																										1.9	Yes
6-Aug				36.25				373.45																						2.4	Yes
7-Aug		60.72		33.51										328.07																2.9	Yes
8-Aug		131.18		31.64										240.38																3.2	Yes
9-Aug		110.34		67.11																										2.8	Yes
12-Aug				19.13																										0.5	Yes
13-Aug				34.86																										0.9	Yes
19-Aug															105.73															0.7	Yes
20-Aug								546.15							276.7															3.9	Yes
21-Aug		62.39													299.82															2.6	Yes
22-Aug		220.51													295.72															4.2	Yes
23-Aug		398.66													125.44															4.8	Yes
26-Aug		56.09																												0.6	Yes
27-Aug		343.36																												3.4	Yes
3-Sep															108.7	16.08														0.9	Yes
4-Sep															19.43															0.1	Yes
6-Sep																	82.4													1.2	Yes
9-Sep		192.14																												1.9	Yes
10-Sep								278.86							219.11															2.5	Yes
12-Sep		110.96															81.06													2.3	Yes
13-Sep		78.07												244.98																1.9	Yes
16-Sep														191.69																0.8	Yes
17-Sep								749.44									115.23													4.6	Yes
18-Sep																	18.37	522.38	14.47											7.8	Yes
19-Sep																			20.92											0.9	Yes
20-Sep																	150.34		16.62											2.9	Yes
23-Sep																				16.11										0.1	Yes
24-Sep																				18.4										0.1	Yes
26-Sep																			17.02		761.48									3.8	Yes
27-Sep																					1336.27	800.09								10.1	Yes
28-Sep																						1286.88								7.7	Yes
30-Sep						128.03												30.63				1850.14								12.0	Yes
1-Oct								610.17														1473.83								11.2	Yes
2-Oct												12.43																		0.0	Yes
3-Oct		297.11										20.11					128.73	28.7												5.3	Yes
7-Oct														484.87		32.81	115.84				188.87									4.9	Yes
8-Oct		176.7														36.17					944.97									5.9	Yes
9-Oct																48.42					1233.95									5.4	Yes
10-Oct																					1735.05									6.9	Yes
11-Oct						116.91										58.83	52.84				737.09	1198.09								11.9	Yes
14-Oct																28.5		10.4				426.39	447							5.9	Yes
15-Oct								471.16															441.86	750.4						12.8	Yes
16-Oct		34.43														35.37					452.99		456.75							5.5	Yes
17-Oct		20.33															123.93				352.78									3.4	Yes
18-Oct																56.32					547.97									2.7	Yes
21-Oct						261.59												10.21												1.1	Yes
22-Oct						165.62										19.91														0.8	Yes
23-Oct																21.67	98.11					695.41								5.8	Yes
24-Oct																	69.53					95.81								1.6	Yes
29-Oct																	29.27													0.4	Yes
30-Oct																	4.12													0.1	Yes
31-Oct																	8.68													0.1	Yes
1-Nov																	13.73													0.2	Yes
4-Nov																	11.91													0.2	Yes
5-Nov		77.1						1111.92																						5.0	Yes
6-Nov		34.77																			255.47				61.24					1.6	Yes
7-Nov																	8.2				49.4	252.08			13.44					1.9	Yes
8-Nov																					46.45					131.12				2.6	Yes
11-Nov																	14.93										43.35			1.4	Yes
12-Nov														212.39			7.52													1.0	Yes
13-Nov														341.91																1.5	Yes
14-Nov															18.98															0.1	Yes
15-Nov																												275.11		1.9	Yes
18-Nov																26.19												109.24		1.0	Yes
19-Nov																	5.47												53.91	3.7	Yes
20-Nov																	7.4													0.1	Yes
26-Nov								196.48																						0.7	Yes
																														0.0	

APPENDIX T
TRANSFER TANK (S-19) OPERATING RECORDS

ALTAMONT LANDFILL RESOURCE & RECOVERY FACILITY
S-19 Transfer Tank
FOURTH QUARTER 2024 INSPECTION AND LEAK CHECK

Technician:	**Garry Carpenter**	**Instrument:**	**Photovac MicroFID**
Date:	**11/20/2024**	**Serial Number:**	**CZPD312**

S-19 Component	Good Condition	Fair Condition	Repairs Needed	Date Repairs Made	Leak Check (500 ppmv Limit)	Comments
Body of Tank	X				ND	
End Weldings	-	X			ND	Metal erosion noted
Top Weldings	X				ND	
Center Opening Weldings	X				ND	
24" Gasket (center opening)	-	X			ND	
4" Gasket (center opening)	-	X			ND	
Level Gauge Connections	-				NA	
Influent Pipe Connections	X				ND	
Effluent Pipe Connections	X				ND	
Level Indicator	-				NA	

ppmv - parts per million by volume ND- Non-Detect NA- Not Applicable

ALTAMONT LANDFILL RESOURCE & RECOVERY FACILITY
S-19 Transfer Tank
THIRD QUARTER 2024 INSPECTION AND LEAK CHECK

Technician: Garry Carpenter
Date: 8/15/2024
Instrument: Photovac MicroFID
Serial Number: CZPD312

S-19 Component	Good Condition	Fair Condition	Repairs Needed	Date Repairs Made	Leak Check (500 ppmv Limit)	Comments
Body of Tank	X				ND	
End Weldings	-	X			ND	
Top Weldings	X				ND	
Center Opening Weldings	X				ND	
24" Gasket (center opening)	-	X			ND	
4" Gasket (center opening)	-	X			ND	
Level Gauge Connections	-				NA	
Influent Pipe Connections	X				ND	
Effluent Pipe Connections	X				ND	
Level Indicator	-				NA	

ppmv - parts per million by volume ND- Non-Detect NA- Not Applicable

APPENDIX u
DIESEL ENGINES RECORDS

Altamont Landfill and Resource Recovery Facility, Livermore, CA

Log of Diesel Engine Use – Emergency Standby Generators – Hours of Operation

2023-2024	S-199		S-200		S-201		Nature of Emergency*
	Began Operation in March 2008						
	Flare Station (903323)		WWTP (903322)		Maintenance (903321)		
	EMERGENCY	**TOTAL/RRA**	**EMERGENCY**	**TOTAL/RRA**	**EMERGENCY**	**TOTAL/RRA**	
June-24	0.0	1.0	0.0	1.0	0.0	1.0	
July-24	0.0	2.0	0.0	1.0	0.0	1.0	
August-24	0.0	3.0	0.0	4.0	0.0	1.0	
September-24	3.0	0.0	1.0	0.0	1.0	0.0	Utility trip
October-24	2.0	0.0	0.0	1.0	1.0	0.0	Utility trip
November-24	0.0	3.0	0.0	4.0	0.0	1.0	
Total Hours (December 1-2023-November 30, 2024):	**24.0**	**13.0**	**15.0**	**13.0**	**14.0**	**6.0**	
Total Hours (June 1, 2024-November 30, 2024):	**5.0**	**9.0**	**1.0**	**11.0**	**2.0**	**4.0**	
		(ATCM)		(ATCM)		(ATCM)	
		50		50		50	

Notes:

* See permit condition # 22850 for description of qualifying emergency conditions and reliability related activities (RRA).

Altamont Landfill and Resource Recovery Facility, Livermore, CA
Log of Diesel Engine Use and Fuel Consumption for S-193

2023-2024	S-193 Fire Pump at Gas Plant (#89) (951358)		
	EMERGENCY Hours	TOTAL/RRA Hours	Gallons Fuel
June-24	0.0	1.0	0.0
July-24	0.0	1.0	0.0
August-24	0.0	1.0	0.0
September-24	0.0	1.0	0.0
October-24	0.0	1.0	0.0
November-24	0.0	1.0	3.0
Total Hours (December 1-2023-November 30, 2024):	**0.0**	**12.0**	**3.0**
Total Hours (June 1, 2024-November 30, 2024):	**0.0**	**6.0**	**3.0**
Fuel Limits (gal/yr) (Condition No. 20801, Part 1)			62,196

*WM surrendered its permits for the S-197 and S-198 diesel engines on December 29, 2009.

Altamont Landfill and Resource Recovery Facility, Livermore, CA

Log of Diesel Engine Use and Fuel Consumption for S-224, S-225, S-228, S-231, S-235, and S-238

2023-2024	S-221/S-231		S-222/S-228		S-224		S-225		S-235		S-238		S-224, S-225, S-228, S-231,S-235 and S-238	
	Tipper #83 (855031)		Tipper #70 -T4 Diesel Engine (855029)		Tipper #5113 SF's (Replaced Old Tipper #71)		Tipper #5117 SF's (Replaced Old Tipper #93)		Tipper # 201 (855201)		Tipper (855007)		Total Monthly Hours	Rolling 12-Month Hours
	CARB PERP Issuance April 25, 2022		CARB PERP Permits Initial Issuance April 2020						CARB PERP Issuance December 1, 2022		CARB PERP Registration 205632 issued.			
	PERP Registration No. 196900		PERP Registration No. 187512		PERP Registration No. 187514		PERP Registration No. 187513		PERP Registration No. 200811		PERP Registration No. 205632			
	Hours	Gallons Fuel	Hours	Gallons Fuel	Hours	Gallons Fuel	Hours	Gallons Fuel	Hours	Gallons Fuel	Hours	Gallons Fuel		
June-24	196	206	182	117	0.0	0.0	0.0	0.0	400	443	204	204	982	11,876
July-24	279	301	182	137	0.0	0.0	0.0	0.0	454	539	185	205	1,100	12,091
August-24	0	0	188	117	0.0	0.0	0.0	0.0	592	566	524	545	1,304	12,458
September-24	0	0	163	67	0.0	0.0	0.0	0.0	461	469	446	452	1,070	12,624
October-24	307	264	213	128	0.0	0.0	0.0	0.0	621	596	245	248	1,386	13,145
November-24	46	63	177	110	0.0	0.0	0.0	0.0	531	511	510	642	1,264	13,537
Total Hours (December 1-2023-November 30, 2024):	**3,537**	**3,181**	**2,211**	**1,406**	**0.0**	**0.0**	**0.0**	**0.0**	**5,604**	**5,710**	**2,185**	**2,576**	**13,537**	
Total Hours (June 1, 2024-November 30, 2024):	**828**	**834**	**1,105**	**676**	**0.0**	**0.0**	**0.0**	**0.0**	**3,059**	**3,124**	**2,114**	**2,296**	**7,106**	
Limits	Combined S-224 and S-225 :14,600 Hours and Individual S-231, 235, and S-228 :7,300 Hours, during consecutive 12-Months													

*WM submitted surrender notification for S 208 for Tipper #70 in June 2014 and S206 for Tipper # 83 in January 2015.

*WM submitted surrender notification for S 218 for Tipper #93 in March 2016 and S217 for Tipper # 71 in March 2016.

*WM submitted startup notification for new Tippers S-224 and S-225 in March 2016.

*WM submitted COC for replacement of S-222 (CNG Tipper #70) with new T4.4 engine in January 2018. BAAQMD Assigned new Source Number S-228.

*WM submitted startup notification for new Tippers S-228 on June 13, 2018.

* WM submitted PERP application June 2019. CARB issued PERP permits in April 2020. Initial inspection email to District Inspector was sent on May 15, 2020. BAAQMD initial Inspection was conducted on June 4, 2020.

*S-221 Tipper engine was repowered. S-221 was decommissioned on February 17, 2023 and surrender notification was submitted on March 2, 2023.

APPENDIX V
PORTABLE ENGINES CO EMISSION CALCULATIONS

Altamont Landfill and Resource Recovery Facility, Livermore, CA
Portable Engines Operational Hours and Carbon Monoxide (CO) Emissions
June 2024

Source / Asset	Engine Name	Fuel Used	Runtime (Hours)	CO Emission Factor (g/bhp-hr)	Total CO (Tons)
S-31[1]	Diesel Engine for Green Waste Grinder	Diesel	N/A	0.70	N/A
S-193	Diesel Engine for Fire Pump at Gas Plant	Diesel	1	3.03	0.001
S-196[2]	Standby Diesel Engine Generator for Scale House	Diesel	N/A	3.03	N/A
S-197[3]	Standby Diesel Engine Generator for Break Trailer	Diesel	N/A	6.90	N/A
S-198[3]	Diesel Engine for Vacuum Truck Pump	Diesel	N/A	3.03	N/A
S-199	Emergency Standby Diesel Generator Set (Flare Station)	Diesel	1	1.34	0.000
S-200	Emergency Standby Diesel Generator Set (WWP)	Diesel	1	2.31	0.001
S-201	Emergency Standby Diesel Generator Set (Maintenance Shop)	Diesel	1	2.31	0.001
S-221/S-231	Repowered with T4 Diesel Engine for Tipper #83	Diesel	196	0.97	0.040
S-207[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.37	N/A
S-222/S-228	Diesel T4 Engine for Tipper #70	Diesel	182	0.97	0.022
S-209[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.37	N/A
S-214[3]	Portable Diesel Engine for Air Compressor	Diesel	N/A	3.03	N/A
S-217[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.97	N/A
S-218[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.97	N/A
S-224[5]	Diesel Engine for Tipper #5113	Diesel	0	0.97	0.000
S-225[5]	Diesel Engine for Tipper #5117	Diesel	0	0.97	0.000
S-235	Diesel Engine for Tipper #201	Diesel	400	0.97	0.054
S-238	Diesel Engine for Tipper #007	Diesel	204	0.97	0.028
WM# 741474	130 Air Compressor	Diesel	0	4.10	0.000
WM# 900767	Portable Pressure Washer	Diesel	0	3.03	0.000
WM# 900768	Track Cleaning Generator	Diesel	0	3.03	0.000
WM# 901653	MultiQuip 25 Gen Set	Diesel	1	4.10	0.000
WM# 902340	Light Unit	Diesel	0	3.03	0.000
WM# 902341	Light Unit	Diesel	0	6.00	0.000
WM# 902342	Light Unit	Diesel	0	6.00	0.000
WM# 902343	Light Unit	Diesel	0	6.00	0.000
WM# 902344	Light Unit	Diesel	0	3.03	0.000
WM# 902345	Light Unit	Diesel	0	3.03	0.000
WM# 902346	Light Unit	Diesel	0	3.03	0.000
WM# 903178	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 903255	Magnum Pro Light Unit	Diesel	0	6.00	0.000
WM# 903304	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903305	Nite0Lite Pro 4000 Watt	Diesel	134	6.00	0.009
WM# 903306	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000

WM# 903660	XQ20-4 Generator	Diesel	242	4.90	0.035
WM# 904858	Magnum MLT3060 Light Unit	Diesel	0	6.00	0.000
WM# 904981	4000 Watt Diesel Light Tower Terex	Diesel	0	6.00	0.000
WM# 904982	Magnum MLT3060 Light Unit	Diesel	112	6.00	0.009
WM# 904983	60Hz Light Unit	Diesel	202	6.00	0.018
WM# 904984	60Hz Light Unit	Diesel	124	6.00	0.009
WM# 903686	24CFM-GX90 Air Compressor - Landfill	Unleaded Gasoline	0	409.40	0.000
WM# 904662	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904663	4000 Watt Diesel Light Tower	Diesel	45	6.00	0.003
WM# 904664	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 905025	Light Unit	Diesel	0	6.000	0.000
WM# 905067	Light Unit	Diesel	0	6.000	0.000
WM# 905068	Light Unit	Diesel	184	6.000	0.013
WM# 951359	Back-up Lube Compressor	Diesel	0	4.10	0.000
WM# 951360	3500 Wt Portable Magnet	Unleaded Gasoline	0	410.00	0.000
WM# 951361	Portable Supv. Generator	Unleaded Gasoline	0	410.00	0.000
SN GCAFT2524206: 9A-A	Honda GX160 Air Compressor	Unleaded Gasoline	0	409.40	0.000
SN GCAFT2285062: 89-J	Honda GX160 Air Compressor	Unleaded Gasoline	0	347.50	0.000
SN 3625101631	Kohler Command Pro 13 Air Compressor	Unleaded Gasoline	0	273.68	0.000
				Monthly Total CO Emissions	0.243

Note: The Total CO emissions are calculated pursuant Permit Condition Number 24373, Part 3.a(iv and v)

1) Pursuant to ALRRF’s October 2009 Compliance Plan to satisfy Alameda County Ordinance 2008-01 (“Alameda County Plant Debris Landfill Ban”), ALRRF no longer receives plant debris as of January 1, 2010. Therefore, the greenwaste grinding operation, including the S-31 Portable Diesel Engine for the Greenwaste Grinder, was not used in January 2010 and will not be used in the future.

2) Diesel Engine S-196 is no longer in use as of August 2009.

3) The S-197 Portable Generator, the S-198 Vacuum Truck Pump and the S-214 Portable Air Compressor were removed from service in December 2009. WM submitted a permit surrender

4) The S-206 Tipper Engine was replaced by the S-222 Tipper CNG Engine and the S-208Tipper Engine was replaced by the S-221 Tipper CNG Engine.

5) The S-217 Tipper was replaced by new Diesel engine Tipper S-224 and the S-218 was replaced by new Diesel engine Tipper S-225.

6) The S-222 Tipper was replaced by new Diesel engine Tipper S-228.

g/bhp-hr - Grams per brake horsepower-hour

Altamont Landfill and Resource Recovery Facility, Livermore, CA
Portable Engines Operational Hours and Carbon Monoxide (CO) Emissions
July 2024

Source / Asset	Engine Name	Fuel Used	Runtime (Hours)	CO Emission Factor (g/bhp-hr)	Total CO (Tons)
S-31[1]	Diesel Engine for Green Waste Grinder	Diesel	N/A	0.70	N/A
S-193	Diesel Engine for Fire Pump at Gas Plant	Diesel	1	3.03	0.001
S-196[2]	Standby Diesel Engine Generator for Scale House	Diesel	N/A	3.03	N/A
S-197[3]	Standby Diesel Engine Generator for Break Trailer	Diesel	N/A	6.90	N/A
S-198[3]	Diesel Engine for Vacuum Truck Pump	Diesel	N/A	3.03	N/A
S-199	Emergency Standby Diesel Generator Set (Flare Station)	Diesel	2	1.34	0.001
S-200	Emergency Standby Diesel Generator Set (WWP)	Diesel	1	2.31	0.001
S-201	Emergency Standby Diesel Generator Set (Maintenance Shop)	Diesel	1	2.31	0.001
S-221/S-231	Repowered with T4 Diesel Engine for Tipper #83	Diesel	279	0.97	0.058
S-207[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.37	N/A
S-222/S-228	Diesel T4 Engine for Tipper #70	Diesel	182	0.97	0.022
S-209[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.37	N/A
S-214[3]	Portable Diesel Engine for Air Compressor	Diesel	N/A	3.03	N/A
S-217[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.97	N/A
S-218[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.97	N/A
S-224[5]	Diesel Engine for Tipper #5113	Diesel	0	0.97	0.000
S-225[5]	Diesel Engine for Tipper #5117	Diesel	0	0.97	0.000
S-235	Diesel Engine for Tipper #201	Diesel	454	0.97	0.062
S-238	Diesel Engine for Tipper #007	Diesel	185	0.97	0.025
WM# 741474	130 Air Compressor	Diesel	0	4.10	0.000
WM# 900767	Portable Pressure Washer	Diesel	0	3.03	0.000
WM# 900768	Track Cleaning Generator	Diesel	0	3.03	0.000
WM# 901653	MultiQuip 25 Gen Set	Diesel	1	4.10	0.000
WM# 902340	Light Unit	Diesel	0	3.03	0.000
WM# 902341	Light Unit	Diesel	0	6.00	0.000
WM# 902342	Light Unit	Diesel	0	6.00	0.000
WM# 902343	Light Unit	Diesel	0	6.00	0.000
WM# 902344	Light Unit	Diesel	0	3.03	0.000
WM# 902345	Light Unit	Diesel	0	3.03	0.000
WM# 902346	Light Unit	Diesel	0	3.03	0.000
WM# 903178	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 903255	Magnum Pro Light Unit	Diesel	0	6.00	0.000
WM# 903304	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903305	Nite0Lite Pro 4000 Watt	Diesel	167	6.00	0.011

WM# 903306	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903660	XQ20-4 Generator	Diesel	270	4.90	0.039
WM# 904858	Magnum MLT3060 Light Unit	Diesel	0	6.00	0.000
WM# 904981	4000 Watt Diesel Light Tower Terex	Diesel	0	6.00	0.000
WM# 904982	Magnum MLT3060 Light Unit	Diesel	46	6.00	0.004
WM# 904983	60Hz Light Unit	Diesel	268	6.00	0.024
WM# 904984	60Hz Light Unit	Diesel	114	6.00	0.008
WM# 903686	24CFM-GX90 Air Compressor - Landfill	Unleaded Gasoline	0	409.40	0.000
WM# 904662	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904663	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904664	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 905025	Light Unit	Diesel	0	6.000	0.000
WM# 905067	Light Unit	Diesel	1	6.000	0.000
WM# 905068	Light Unit	Diesel	173	6.000	0.012
WM# 951359	Back-up Lube Compressor	Diesel	0	4.10	0.000
WM# 951360	3500 Wt Portable Magnet	Unleaded Gasoline	0	410.00	0.000
WM# 951361	Portable Supv. Generator	Unleaded Gasoline	0	410.00	0.000
SN GCAFT2524206: 9A-A	Honda GX160 Air Compressor	Unleaded Gasoline	0	409.40	0.000
SN GCAFT2285062: 89-J	Honda GX160 Air Compressor	Unleaded Gasoline	0	347.50	0.000
SN 3625101631	Kohler Command Pro 13 Air Compressor	Unleaded Gasoline	0	273.68	0.000
				Monthly Total CO Emissions	0.268

Note: The Total CO emissions are calculated pursuant Permit Condition Number 24373, Part 3.a(iv and v)

1) Pursuant to ALRRF’s October 2009 Compliance Plan to satisfy Alameda County Ordinance 2008-01 (“Alameda County Plant Debris Landfill Ban”), ALRRF no longer receives plant debris
2) Diesel Engine S-196 is no longer in use as of August 2009.

3) The S-197 Portable Generator, the S-198 Vacuum Truck Pump and the S-214 Portable Air Compressor were removed from service in December 2009. WM submitted a permit surrender
4) The S-206 Tipper Engine was replaced by the S-222 Tipper CNG Engine and the S-208Tipper Engine was replaced by the S-221 Tipper CNG Engine.
5) The S-217 Tipper was replaced by new Diesel engine Tipper S-224 and the S-218 was replaced by new Diesel engine Tipper S-225.
6) The S-222 Tipper was replaced by new Diesel engine Tipper S-228.
g/bhp-hr - Grams per brake horsepower-hour

Altamont Landfill and Resource Recovery Facility, Livermore, CA
Portable Engines Operational Hours and Carbon Monoxide (CO) Emissions
August 2024

Source / Asset	Engine Name	Fuel Used	Runtime (Hours)	CO Emission Factor (g/bhp-hr)	Total CO (Tons)
S-31[1]	Diesel Engine for Green Waste Grinder	Diesel	N/A	0.70	N/A
S-193	Diesel Engine for Fire Pump at Gas Plant	Diesel	1	3.03	0.001
S-196[2]	Standby Diesel Engine Generator for Scale House	Diesel	N/A	3.03	N/A
S-197[3]	Standby Diesel Engine Generator for Break Trailer	Diesel	N/A	6.90	N/A
S-198[3]	Diesel Engine for Vacuum Truck Pump	Diesel	N/A	3.03	N/A
S-199	Emergency Standby Diesel Generator Set (Flare Station)	Diesel	3	1.34	0.001
S-200	Emergency Standby Diesel Generator Set (WWP)	Diesel	4	2.31	0.004
S-201	Emergency Standby Diesel Generator Set (Maintenance Shop)	Diesel	1	2.31	0.001
S-221/S-231	Repowered with T4 Diesel Engine for Tipper #83	Diesel	0	0.97	0.000
S-207[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.37	N/A
S-222/S-228	Diesel T4 Engine for Tipper #70	Diesel	188	0.97	0.023
S-209[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.37	N/A
S-214[3]	Portable Diesel Engine for Air Compressor	Diesel	N/A	3.03	N/A
S-217[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.97	N/A
S-218[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.97	N/A
S-224[5]	Diesel Engine for Tipper #5113	Diesel	0	0.97	0.000
S-225[5]	Diesel Engine for Tipper #5117	Diesel	0	0.97	0.000
S-235	Diesel Engine for Tipper #201	Diesel	592	0.97	0.080
S-238	Diesel Engine for Tipper #007	Diesel	524	0.97	0.071
WM# 741474	130 Air Compressor	Diesel	0	4.10	0.000
WM# 900767	Portable Pressure Washer	Diesel	0	3.03	0.000
WM# 900768	Track Cleaning Generator	Diesel	0	3.03	0.000
WM# 901653	MultiQuip 25 Gen Set	Diesel	2	4.10	0.000
WM# 902340	Light Unit	Diesel	0	3.03	0.000
WM# 902341	Light Unit	Diesel	0	6.00	0.000
WM# 902342	Light Unit	Diesel	0	6.00	0.000
WM# 902343	Light Unit	Diesel	0	6.00	0.000
WM# 902344	Light Unit	Diesel	0	3.03	0.000
WM# 902345	Light Unit	Diesel	0	3.03	0.000
WM# 902346	Light Unit	Diesel	0	3.03	0.000
WM# 903178	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 903255	Magnum Pro Light Unit	Diesel	0	6.00	0.000
WM# 903304	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903305	Nite0Lite Pro 4000 Watt	Diesel	326	6.00	0.022
WM# 903306	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000

WM# 903660	XQ20-4 Generator	Diesel	246	4.90	0.036
WM# 904858	Magnum MLT3060 Light Unit	Diesel	0	6.00	0.000
WM# 904981	4000 Watt Diesel Light Tower Terex	Diesel	0	6.00	0.000
WM# 904982	Magnum MLT3060 Light Unit	Diesel	93	6.00	0.007
WM# 904983	60Hz Light Unit	Diesel	309	6.00	0.028
WM# 904984	60Hz Light Unit	Diesel	120	6.00	0.008
WM# 903686	24CFM-GX90 Air Compressor - Landfill	Unleaded Gasoline	0	409.40	0.000
WM# 904662	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904663	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904664	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 905025	Light Unit	Diesel	94	6.000	0.007
WM# 905067	Light Unit	Diesel	2	6.000	0.000
WM# 905068	Light Unit	Diesel	18	6.000	0.001
WM# 951359	Back-up Lube Compressor	Diesel	0	4.10	0.000
WM# 951360	3500 Wt Portable Magnet	Unleaded Gasoline	0	410.00	0.000
WM# 951361	Portable Supv. Generator	Unleaded Gasoline	0	410.00	0.000
SN GCAFT2524206: 9A-A	Honda GX160 Air Compressor	Unleaded Gasoline	0	409.40	0.000
SN GCAFT2285062: 89-J	Honda GX160 Air Compressor	Unleaded Gasoline	0	347.50	0.000
SN 3625101631	Kohler Command Pro 13 Air Compressor	Unleaded Gasoline	0	273.68	0.000
				Monthly Total CO Emissions	0.290

Note: The Total CO emissions are calculated pursuant Permit Condition Number 24373, Part 3.a(iv and v)

1) Pursuant to ALRRF's October 2009 Compliance Plan to satisfy Alameda County Ordinance 2008-01 ("Alameda County Plant Debris Landfill Ban"), ALRRF no longer receives plant debris as of January 1, 2010. Therefore, the greenwaste grinding operation, including the S-31 Portable Diesel Engine for the Greenwaste Grinder, was not used in January 2010 and will not be

2) Diesel Engine S-196 is no longer in use as of August 2009.

3) The S-197 Portable Generator, the S-198 Vacuum Truck Pump and the S-214 Portable Air Compressor were removed from service in December 2009. WM submitted a permit surrender

4) The S-206 Tipper Engine was replaced by the S-222 Tipper CNG Engine and the S-208Tipper Engine was replaced by the S-221 Tipper CNG Engine.

5) The S-217 Tipper was replaced by new Diesel engine Tipper S-224 and the S-218 was replaced by new Diesel engine Tipper S-225.

6) The S-222 Tipper was replaced by new Diesel engine Tipper S-228.

g/bhp-hr - Grams per brake horsepower-hour

Altamont Landfill and Resource Recovery Facility, Livermore, CA
Portable Engines Operational Hours and Carbon Monoxide (CO) Emissions
September 2024

Source / Asset	Engine Name	Fuel Used	Runtime (Hours)	CO Emission Factor (g/bhp-hr)	Total CO (Tons)
S-31[1]	Diesel Engine for Green Waste Grinder	Diesel	N/A	0.70	N/A
S-193	Diesel Engine for Fire Pump at Gas Plant	Diesel	1	3.03	0.001
S-196[2]	Standby Diesel Engine Generator for Scale House	Diesel	N/A	3.03	N/A
S-197[3]	Standby Diesel Engine Generator for Break Trailer	Diesel	N/A	6.90	N/A
S-198[3]	Diesel Engine for Vacuum Truck Pump	Diesel	N/A	3.03	N/A
S-199	Emergency Standby Diesel Generator Set (Flare Station)	Diesel	3	1.34	0.001
S-200	Emergency Standby Diesel Generator Set (WWP)	Diesel	1	2.31	0.001
S-201	Emergency Standby Diesel Generator Set (Maintenance Shop)	Diesel	1	2.31	0.001
S-221/S-231	Repowered with T4 Diesel Engine for Tipper #83	Diesel	0	0.97	0.000
S-207[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.37	N/A
S-222/S-228	Diesel T4 Engine for Tipper #70	Diesel	163	0.97	0.020
S-209[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.37	N/A
S-214[3]	Portable Diesel Engine for Air Compressor	Diesel	N/A	3.03	N/A
S-217[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.97	N/A
S-218[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.97	N/A
S-224[5]	Diesel Engine for Tipper #5113	Diesel	0	0.97	0.000
S-225[5]	Diesel Engine for Tipper #5117	Diesel	0	0.97	0.000
S-235	Diesel Engine for Tipper #201	Diesel	461	0.97	0.063
S-238	Diesel Engine for Tipper #007	Diesel	446	0.97	0.061
WM# 741474	130 Air Compressor	Diesel	0	4.10	0.000
WM# 900767	Portable Pressure Washer	Diesel	0	3.03	0.000
WM# 900768	Track Cleaning Generator	Diesel	0	3.03	0.000
WM# 901653	MultiQuip 25 Gen Set	Diesel	1	4.10	0.000
WM# 902340	Light Unit	Diesel	0	3.03	0.000
WM# 902341	Light Unit	Diesel	0	6.00	0.000
WM# 902342	Light Unit	Diesel	0	6.00	0.000
WM# 902343	Light Unit	Diesel	0	6.00	0.000
WM# 902344	Light Unit	Diesel	0	3.03	0.000
WM# 902345	Light Unit	Diesel	0	3.03	0.000
WM# 902346	Light Unit	Diesel	0	3.03	0.000
WM# 903178	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 903255	Magnum Pro Light Unit	Diesel	0	6.00	0.000
WM# 903304	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903305	Nite0Lite Pro 4000 Watt	Diesel	195	6.00	0.013

WM# 903306	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903660	XQ20-4 Generator	Diesel	161	4.90	0.023
WM# 904858	Magnum MLT3060 Light Unit	Diesel	0	6.00	0.000
WM# 904981	4000 Watt Diesel Light Tower Terex	Diesel	0	6.00	0.000
WM# 904982	Magnum MLT3060 Light Unit	Diesel	32	6.00	0.002
WM# 904983	60Hz Light Unit	Diesel	245	6.00	0.022
WM# 904984	60Hz Light Unit	Diesel	209	6.00	0.015
WM# 903686	24CFM-GX90 Air Compressor - Landfill	Unleaded Gasoline	0	409.40	0.000
WM# 904662	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904663	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904664	4000 Watt Diesel Light Tower	Diesel	15	6.00	0.001
WM# 905025	Light Unit	Diesel	229	6.000	0.016
WM# 905067	Light Unit	Diesel	0	6.000	0.000
WM# 905068	Light Unit	Diesel	252	6.000	0.018
WM# 951359	Back-up Lube Compressor	Diesel	0	4.10	0.000
WM# 951360	3500 Wt Portable Magnet	Unleaded Gasoline	0	410.00	0.000
WM# 951361	Portable Supv. Generator	Unleaded Gasoline	0	410.00	0.000
SN GCAFT2524206: 9A-A	Honda GX160 Air Compressor	Unleaded Gasoline	0	409.40	0.000
SN GCAFT2285062: 89-J	Honda GX160 Air Compressor	Unleaded Gasoline	0	347.50	0.000
SN 3625101631	Kohler Command Pro 13 Air Compressor	Unleaded Gasoline	0	273.68	0.000
				Monthly Total CO Emissions	0.256

Note: The Total CO emissions are calculated pursuant Permit Condition Number 24373, Part 3.a(iv and v)

1) Pursuant to ALRRF's October 2009 Compliance Plan to satisfy Alameda County Ordinance 2008-01 ("Alameda County Plant Debris Landfill Ban"), ALRRF no longer receives plant debris as of January 1, 2010. Therefore, the greenwaste grinding operation, including the S-31 Portable Diesel Engine for the Greenwaste Grinder, was not used in January 2010 and will not be

2) Diesel Engine S-196 is no longer in use as of August 2009.

3) The S-197 Portable Generator, the S-198 Vacuum Truck Pump and the S-214 Portable Air Compressor were removed from service in December 2009. WM submitted a permit surrender

4) The S-206 Tipper Engine was replaced by the S-222 Tipper CNG Engine and the S-208Tipper Engine was replaced by the S-221 Tipper CNG Engine.

5) The S-217 Tipper was replaced by new Diesel engine Tipper S-224 and the S-218 was replaced by new Diesel engine Tipper S-225.

6) The S-222 Tipper was replaced by new Diesel engine Tipper S-228.

g/bhp-hr - Grams per brake horsepower-hour

Altamont Landfill and Resource Recovery Facility, Livermore, CA

Portable Engines Operational Hours and Carbon Monoxide (CO) Emissions
October 2024

Source / Asset	Engine Name	Fuel Used	Runtime (Hours)	CO Emission Factor (g/bhp-hr)	Total CO (Tons)
S-31[1]	Diesel Engine for Green Waste Grinder	Diesel	N/A	0.70	N/A
S-193	Diesel Engine for Fire Pump at Gas Plant	Diesel	1	3.03	0.001
S-196[2]	Standby Diesel Engine Generator for Scale House	Diesel	N/A	3.03	N/A
S-197[3]	Standby Diesel Engine Generator for Break Trailer	Diesel	N/A	6.90	N/A
S-198[3]	Diesel Engine for Vacuum Truck Pump	Diesel	N/A	3.03	N/A
S-199	Emergency Standby Diesel Generator Set (Flare Station)	Diesel	2	1.34	0.001
S-200	Emergency Standby Diesel Generator Set (WWP)	Diesel	1	2.31	0.001
S-201	Emergency Standby Diesel Generator Set (Maintenance Shop)	Diesel	1	2.31	0.001
S-221/S-231	Repowered with T4 Diesel Engine for Tipper #83	Diesel	307	0.97	0.063
S-207[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.37	N/A
S-222/S-228	Diesel T4 Engine for Tipper #70	Diesel	213	0.97	0.025
S-209[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.37	N/A
S-214[3]	Portable Diesel Engine for Air Compressor	Diesel	N/A	3.03	N/A
S-217[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.97	N/A
S-218[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.97	N/A
S-224[5]	Diesel Engine for Tipper #5113	Diesel	0	0.97	0.000
S-225[5]	Diesel Engine for Tipper #5117	Diesel	0	0.97	0.000
S-235	Diesel Engine for Tipper #201	Diesel	621	0.97	0.084
S-238	Diesel Engine for Tipper #007	Diesel	245	0.97	0.033
WM# 741474	130 Air Compressor	Diesel	0	4.10	0.000
WM# 900767	Portable Pressure Washer	Diesel	0	3.03	0.000
WM# 900768	Track Cleaning Generator	Diesel	0	3.03	0.000
WM# 901653	MultiQuip 25 Gen Set	Diesel	0	4.10	0.000
WM# 902340	Light Unit	Diesel	0	3.03	0.000
WM# 902341	Light Unit	Diesel	0	6.00	0.000
WM# 902342	Light Unit	Diesel	0	6.00	0.000
WM# 902343	Light Unit	Diesel	0	6.00	0.000
WM# 902344	Light Unit	Diesel	0	3.03	0.000
WM# 902345	Light Unit	Diesel	0	3.03	0.000
WM# 902346	Light Unit	Diesel	0	3.03	0.000
WM# 903178	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 903255	Magnum Pro Light Unit	Diesel	0	6.00	0.000
WM# 903304	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000

WM# 903305	Nite0Lite Pro 4000 Watt	Diesel	329	6.00	0.022
WM# 903306	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903660	XQ20-4 Generator	Diesel	332	4.90	0.048
WM# 904858	Magnum MLT3060 Light Unit	Diesel	0	6.00	0.000
WM# 904981	4000 Watt Diesel Light Tower Terex	Diesel	0	6.00	0.000
WM# 904982	Magnum MLT3060 Light Unit	Diesel	52	6.00	0.004
WM# 904983	60Hz Light Unit	Diesel	382	6.00	0.034
WM# 904984	60Hz Light Unit	Diesel	227	6.00	0.016
WM# 903686	24CFM-GX90 Air Compressor - Landfill	Unleaded Gasoline	0	409.40	0.000
WM# 904662	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904663	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904664	4000 Watt Diesel Light Tower	Diesel	72	6.00	0.005
WM# 905025	Light Unit	Diesel	368	6.000	0.026
WM# 905067	Light Unit	Diesel	0	6.000	0.000
WM# 905068	Light Unit	Diesel	229	6.000	0.016
WM# 951359	Back-up Lube Compressor	Diesel	0	4.10	0.000
WM# 951360	3500 Wt Portable Magnet	Unleaded Gasoline	0	410.00	0.000
WM# 951361	Portable Supv. Generator	Unleaded Gasoline	0	410.00	0.000
SN GCAFT2524206: 9A-A	Honda GX160 Air Compressor	Unleaded Gasoline	0	409.40	0.000
SN GCAFT2285062: 89-J	Honda GX160 Air Compressor	Unleaded Gasoline	0	347.50	0.000
SN 3625101631	Kohler Command Pro 13 Air Compressor	Unleaded Gasoline	0	273.68	0.000
				Monthly Total CO Emissions	0.380

Note: The Total CO emissions are calculated pursuant Permit Condition Number 24373, Part 3.a(iv and v)

1) Pursuant to ALRRF's October 2009 Compliance Plan to satisfy Alameda County Ordinance 2008-01 ("Alameda County Plant Debris Landfill Ban"), ALRRF no longer receives plant debris as of January 1, 2010. Therefore, the greenwaste grinding operation, including the S-31 Portable Diesel Engine for the Greenwaste Grinder, was not used in January 2010 and will not be
2) Diesel Engine S-196 is no longer in use as of August 2009.
3) The S-197 Portable Generator, the S-198 Vacuum Truck Pump and the S-214 Portable Air Compressor were removed from service in December 2009. WM submitted a permit surrender
4) The S-206 Tipper Engine was replaced by the S-222 Tipper CNG Engine and the S-208Tipper Engine was replaced by the S-221 Tipper CNG Engine.
5) The S-217 Tipper was replaced by new Diesel engine Tipper S-224 and the S-218 was replaced by new Diesel engine Tipper S-225.
6) The S-222 Tipper was replaced by new Diesel engine Tipper S-228.

g/bhp-hr - Grams per brake horsepower-hour

Altamont Landfill and Resource Recovery Facility, Livermore, CA
Portable Engines Operational Hours and Carbon Monoxide (CO) Emissions
November 2024

Source / Asset	Engine Name	Fuel Used	Runtime (Hours)	CO Emission Factor (g/bhp-hr)	Total CO (Tons)
S-31[1]	Diesel Engine for Green Waste Grinder	Diesel	N/A	0.70	N/A
S-193	Diesel Engine for Fire Pump at Gas Plant	Diesel	1	3.03	0.001
S-196[2]	Standby Diesel Engine Generator for Scale House	Diesel	N/A	3.03	N/A
S-197[3]	Standby Diesel Engine Generator for Break Trailer	Diesel	N/A	6.90	N/A
S-198[3]	Diesel Engine for Vacuum Truck Pump	Diesel	N/A	3.03	N/A
S-199	Emergency Standby Diesel Generator Set (Flare Station)	Diesel	3	1.34	0.001
S-200	Emergency Standby Diesel Generator Set (WWP)	Diesel	4	2.31	0.004
S-201	Emergency Standby Diesel Generator Set (Maintenance Shop)	Diesel	1	2.31	0.001
S-221/S-231	Repowered with T4 Diesel Engine for Tipper #83	Diesel	46	0.97	0.009
S-207[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.37	N/A
S-222/S-228	Diesel T4 Engine for Tipper #70	Diesel	177	0.97	0.021
S-209[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.37	N/A
S-214[3]	Portable Diesel Engine for Air Compressor	Diesel	N/A	3.03	N/A
S-217[4]	Diesel Engine for Tipper #71	Diesel	N/A	0.97	N/A
S-218[4]	Diesel Engine for Tipper #93	Diesel	N/A	0.97	N/A
S-224[5]	Diesel Engine for Tipper #5113	Diesel	0	0.97	0.000
S-225[5]	Diesel Engine for Tipper #5117	Diesel	0	0.97	0.000
S-235	Diesel Engine for Tipper #201	Diesel	531	0.97	0.072
S-238	Diesel Engine for Tipper #007	Diesel	510	0.97	0.069
WM# 741474	130 Air Compressor	Diesel	0	4.10	0.000
WM# 900767	Portable Pressure Washer	Diesel	0	3.03	0.000
WM# 900768	Track Cleaning Generator	Diesel	0	3.03	0.000
WM# 901653	MultiQuip 25 Gen Set	Diesel	0	4.10	0.000
WM# 902340	Light Unit	Diesel	0	3.03	0.000
WM# 902341	Light Unit	Diesel	0	6.00	0.000
WM# 902342	Light Unit	Diesel	0	6.00	0.000
WM# 902343	Light Unit	Diesel	0	6.00	0.000
WM# 902344	Light Unit	Diesel	0	3.03	0.000
WM# 902345	Light Unit	Diesel	0	3.03	0.000
WM# 902346	Light Unit	Diesel	0	3.03	0.000
WM# 903178	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 903255	Magnum Pro Light Unit	Diesel	0	6.00	0.000
WM# 903304	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000
WM# 903305	Nite0Lite Pro 4000 Watt	Diesel	323	6.00	0.021
WM# 903306	Nite0Lite Pro 4000 Watt	Diesel	0	6.00	0.000

WM# 903660	XQ20-4 Generator	Diesel	197	4.90	0.029
WM# 904858	Magnum MLT3060 Light Unit	Diesel	0	6.00	0.000
WM# 904981	4000 Watt Diesel Light Tower Terex	Diesel	0	6.00	0.000
WM# 904982	Magnum MLT3060 Light Unit	Diesel	171	6.00	0.013
WM# 904983	60Hz Light Unit	Diesel	233	6.00	0.021
WM# 904984	60Hz Light Unit	Diesel	195	6.00	0.014
WM# 903686	24CFM-GX90 Air Compressor - Landfill	Unleaded Gasoline	0	409.40	0.000
WM# 904662	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904663	4000 Watt Diesel Light Tower	Diesel	0	6.00	0.000
WM# 904664	4000 Watt Diesel Light Tower	Diesel	74	6.00	0.005
WM# 905025	Light Unit	Diesel	85	6.000	0.006
WM# 905067	Light Unit	Diesel	0	6.000	0.000
WM# 905068	Light Unit	Diesel	46	6.000	0.003
WM# 951359	Back-up Lube Compressor	Diesel	0	4.10	0.000
WM# 951360	3500 Wt Portable Magnet	Unleaded Gasoline	0	410.00	0.000
WM# 951361	Portable Supv. Generator	Unleaded Gasoline	0	410.00	0.000
SN GCAFT2524206: 9A-A	Honda GX160 Air Compressor	Unleaded Gasoline	0	409.40	0.000
SN GCAFT2285062: 89-J	Honda GX160 Air Compressor	Unleaded Gasoline	0	347.50	0.000
SN 3625101631	Kohler Command Pro 13 Air Compressor	Unleaded Gasoline	0	273.68	0.000
				Monthly Total CO Emissions	0.291

Note: The Total CO emissions are calculated pursuant Permit Condition Number 24373, Part 3.a(iv and v)

1) Pursuant to ALRRF’s October 2009 Compliance Plan to satisfy Alameda County Ordinance 2008-01 (“Alameda County Plant Debris Landfill Ban”), ALRRF no longer receives plant debris as of January 1, 2010. Therefore, the greenwaste grinding operation, including the S-31 Portable Diesel Engine for the Greenwaste Grinder, was not used in January 2010 and will not be

2) Diesel Engine S-196 is no longer in use as of August 2009.

3) The S-197 Portable Generator, the S-198 Vacuum Truck Pump and the S-214 Portable Air Compressor were removed from service in December 2009. WM submitted a permit surrender

4) The S-206 Tipper Engine was replaced by the S-222 Tipper CNG Engine and the S-208Tipper Engine was replaced by the S-221 Tipper CNG Engine.

5) The S-217 Tipper was replaced by new Diesel engine Tipper S-224 and the S-218 was replaced by new Diesel engine Tipper S-225.

6) The S-222 Tipper was replaced by new Diesel engine Tipper S-228.

g/bhp-hr - Grams per brake horsepower-hour

WASTE MANAGEMENT of ALAMEDA COUNTY
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
BAAQMD PLANT NO. 2066

PORTABLE ENGINES POTENTIAL CARBON MONOXIDE (CO) EMISSIONS

Source / Asset	Engine Name	Fuel Used	Model Year	Capacity (bhp)	Annual Potential Runtime (Hours)	CO Emission Factor (g/bhp-hr)	Annual Potential Total CO (Tons)	Monthly Potential Total CO (Tons)
S-31[1]	Diesel Engine for Green Waste Grinder	Diesel	2000	860	N/A	0.700	N/A	N/A
S-193	Diesel Engine for Fire Pump at Gas Plant	Diesel	N/A	159	100.0	3.030	0.053	0.004
S-196[2]	Standby Diesel Engine Generator for Scale House	Diesel	1990	78	N/A	3.030	N/A	N/A
S-197[3]	Standby Diesel Engine Generator for Break Trailer	Diesel	2000	78	N/A	6.900	N/A	N/A
S-198[3]	Diesel Engine for Vacuum Truck Pump	Diesel	1974	177	N/A	3.030	N/A	N/A
S-199	Emergency Standby Diesel Generator Set (Flare Station)	Diesel	2007	230	50.0	1.342	0.017	0.001
S-200	Emergency Standby Diesel Generator Set (WWTP)	Diesel	2007	420	50.0	2.312	0.054	0.004
S-201	Emergency Standby Diesel Generator Set (Maintenance Shop)	Diesel	2007	420	50.0	2.312	0.054	0.004
S-206[4]/S--221	CNG Engine for Tipper #83	Diesel	2007	127	8,760.0	0.969	1.189	0.099
S-207[4,5]	Diesel Engine for Tipper #93	Diesel	2004	137.4	7,300.0	0.373	0.412	0.034
S-208[4]/S-222/S-228	Diesel Engine for Tipper #70	Diesel	2017	127	8,760.0	0.969	1.189	0.099
S-209[4,5]	Diesel Engine for Tipper #71	Diesel	2004	137.4	7,300.0	0.373	0.412	0.034
S-214[3]	Portable Diesel Engine for Air Compressor	Diesel	1998	60	N/A	3.030	N/A	N/A
S-217[4,5]	Diesel Engine for Tipper #93	Diesel	2007	127	8,760.0	0.969	1.189	0.099
S-218[4,5]	Diesel Engine for Tipper #71	Diesel	2007	127	8,760.0	0.969	1.189	0.099
S-224[5]	Diesel Engine for Tipper #5113	Diesel	2015	124	8,760.0	0.969	1.189	0.099
S-225[5]	Diesel Engine for Tipper #5117	Diesel	2015	124	8,760.0	0.969	1.189	0.099
S-235	Diesel Engine for Tipper -New	Diesel	2021	124	8,760.0	0.969	1.189	0.099
S-238	Diesel Engine for Tipper -New	Diesel	2021	124	8,760.0	0.969	1.189	0.099
WM# 741474	130 Air Compressor	Diesel	2000	48	N/A	4.100	N/A	N/A
WM# 900767	Portable Pressure Washer	Diesel	1991	10	8,760.0	3.030	0.293	0.024
WM# 900768	Track Cleaning Generator	Diesel	1994	10	8,760.0	3.030	0.293	0.024
WM# 901653	MultiQuip 25 Gen Set	Diesel	1999	31	8,760.0	4.100	1.227	0.102
WM# 902340	Light Unit	Diesel	1999	10.5	8,760.0	3.030	0.307	0.026
WM# 902341	Light Unit	Diesel	2000	10.5	8,760.0	6.000	0.608	0.051
WM# 902342	Light Unit	Diesel	2000	10.5	8,760.0	6.000	0.608	0.051
WM# 902343	Light Unit	Diesel	2000	10.5	8,760.0	6.000	0.608	0.051
WM# 902344	Light Unit	Diesel	1998	10.5	8,760.0	3.030	0.307	0.026
WM# 902345	Light Unit	Diesel	1998	10.5	8,760.0	3.030	0.307	0.026
WM# 902346	Light Unit	Diesel	1998	10.5	8,760.0	3.030	0.307	0.026
WM# 903178	4000 Watt Diesel Light Tower	Diesel	2006	10.5	8,760.0	6.000	0.608	0.051
WM# 903255	Magnum Pro Light Unit	Diesel	2003	10.5	8,760.0	6.000	0.608	0.051
WM# 903304	Nite0Lite Pro 4000 Watt	Diesel	2008	10	8,760.0	6.000	0.579	0.048
WM# 903305	Nite0Lite Pro 4000 Watt	Diesel	2008	10	8,760.0	6.000	0.579	0.048
WM# 903306	Nite0Lite Pro 4000 Watt	Diesel	2008	10	8,760.0	6.000	0.579	0.048
WM# 903660	XQ20-4 Generator	Diesel	2010	27	8,760.0	4.900	1.278	0.106
WM# 904858	Magnum MLT3060 Light Unit	Diesel	2016	11.7	8,760.0	6.000	0.579	0.048
WM# 904981	4000 Watt Diesel Light Tower Terex	Diesel	2016	10.5	8,760.0	6.000	0.608	0.051
WM# 904982	Magnum MLT3060 Light Unit	Diesel	2016	11.7	8,760.0	6.000	0.579	0.048
WM# 904983	60Hz Light Unit	Diesel	2016	13.6	8,760.0	6.000	0.579	0.048
WM# 904984	60Hz Light Unit	Diesel	2016	10.5	8,760.0	6.000	0.579	0.048
WM# 903686	24CFM-GX90 Air Compressor - Landfill	Unleaded Gasoline	2010	13	8,760.0	409.396	51.392	4.283
WM# 951359	Back-up Lube Compressor	Diesel	2003	48	8,760.0	4.100	1.900	0.158
WM# 904662	4000 Watt Diesel Light Tower	Diesel	2015	10.5	8,760.0	6.000	0.608	0.051
WM# 904663	4000 Watt Diesel Light Tower	Diesel	2015	10.5	8,760.0	6.000	0.608	0.051
WM# 904664	4000 Watt Diesel Light Tower	Diesel	2015	10.5	8,760.0	6.000	0.608	0.051
WM# 905025	Light Unit	Diesel	2009	10.5	8,760.0	6.000	0.608	0.051
WM# 905067	Light Unit	Diesel	2010	10.5	8,760.0	6.000	0.608	0.051
WM# 905068	Light Unit	Diesel	2010	10.5	8,760.0	6.000	0.608	0.051
WM# 951360	3500 Wt Portable Magnet	Unleaded Gasoline	2003	10	8,760.0	410.000	39.591	3.299
WM# 951361	Postable Supv. Generator	Unleaded Gasoline	2002	11	8,760.0	410.000	43.550	3.629
SN GCAFT2524206: 9A-A	Honda GX160 Air Compressor	Unleaded Gasoline	2009	4.8	8,760.0	409.396	19.085	1.590
SN GCAFT2285062: 89-J	Honda GX160 Air Compressor	Unleaded Gasoline	2008	4.8	8,760.0	347.502	16.199	1.350
SN 3625101631[6]	Kohler Command Pro 13 Air Compressor	Unleaded Gasoline	2006	13.0	8,760.0	273.676	34.355	2.863
						Total	232.258	19.355

Note:

1) Pursuant to ALRRF's October 2009 Compliance Plan to satisfy Alameda County Ordinance 2008-01 ("Alameda County Plant Debris Landfill Ban"), ALRRF no longer receives plant debris as of January 1, 2010. Therefore, the

2) Diesel Engine S-196 is no longer in use as of August 2009.
3) The S-197 Portable Generator, the S-198 Vacuum Truck Pump and the S-214 Portable Air Compressor were removed from service in December 2009. WM submitted a permit surrender letter on December 29, 2009.
4) Pursuant to PTO Condition 24578, Tippers 70, 71, 83, and 93 are limited to 29,200 hours per consecutive 12-hour period. The maximum potential operating hours are the worst case scenario of each tipper operating all year
5) The S-207 Tipper Engine was replaced by the S-218 Tipper Engine and the S-209 Tipper Engine was replaced by the S-217 Tipper Engine in September 2010. S-224 replaced S-217 and S-225 replaced S-218 in 2015.
6) The Kohler air compresssor with SN 3625101631 was put first put into use in April 2011.
7) The S-222 Tipper was replaced by new Diesel engine Tipper S-228.
N/A - Not Applicable SN - Serial Number

APPENDIX W

ROLLING 12-MONTH AND MAXIMUM POTENTIAL CO EMISSIONS PERMIT RECORD

WASTE MANAGEMENT of ALAMEDA COUNTY
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
BAAQMD PLANT NO. 2066

ROLLING 12- MONTH CO EMISSIONS
PERMIT RECORD

For Month/Year	A-15 Flare (Tons)	A-16 Flare (Tons)	S-6 Turbine (Tons)	S-7 Turbine (Tons)	Portable Engines (Tons)	Monthly Total CO Emissions (Tons)	Rolling 12-Month Total CO Emissions (Tons)
June-24	0.03395	0.647	1.586	1.387	0.243	3.897	49.344
July-24	0.00000	0.685	1.585	1.428	0.268	3.966	49.448
August-24	0.33543	0.611	1.263	0.790	0.290	3.289	46.155
September-24	0.00033	0.574	1.558	1.373	0.256	3.761	45.338
October-24	0.02024	0.551	1.648	1.482	0.380	4.083	45.836
November-24	0.00000	0.448	1.656	1.467	0.291	3.861	45.857
12-Month Total	**1.200**	**4.323**	**19.970**	**16.885**	**3.478**	**45.857**	
Rolling 12- Month Total Permit Limit **(Cond. No. 24373, Parts 1 and 2)**	**93.268**	**115.632**	**56.064**	**56.064**		**225.000**	

Not 1) The Rolling 12-month CO Emissions Permit Record is maintained pursuant to Permit Condition No. 24373, Part 3.

2) The A-16 Flare was started up on July 16, 2009.

3) Pursuant to PTO Condition# 24373, Part 2, the rolling 12-month site-wide CO emissions did not exceed 225.00 Tons.

APPENDIX X
S-140/S-141 VOC RESULTS AND FLOW RECORDS

ALTAMONT LANDFILL FILL AREA 1 & 2 MONTHLY CONDENSATE AND LEACHATE FLOW REPORT

JANUARY THROUGH NOVEMBER 2024

GALLONS BY SOURCE

MONTH-2024	THROUGH		UNIT 2 **			Fill Area 1 LFG				Fill Area 2 LFG	UNIT 1 **			LSI-1*	LSI-2	LSI-3*
	DATE	SUBDRAIN (VD2) (Gallons/Month)	LCRS (LS2) (Gallons/Month)	LCRS (LS2) DAILY AVG (Gallons/Day)	VADOSE (VZM-A)	COND. To Injection Trench (Gallons/Month)	COND. To FLARE A15 (decommissioned) (Gallons/Month)	COND. To FLARE A16 (Gallons/Month)	CONDENSATE TOTAL (Gallons/Month)	CONDENSATE To injection system (Gallons/Month)	LCRS (LS) (Gallons/Month)	VALLEY SUBDRAIN (VD) (Gallons/Month)	LS and VD DAILY AVG (Gallons/Day)	INFLUENT (Gallons/ Month)	INFLUENT (Gallons/ Month)	INFLUENT (Gallons/ Month)
JAN	31-Jan	106,216	266,407	8,594	0	26,169	0	112,848	139,017	176,186	122,190	16,670	3,942	388,597	122,886	661,100
FEB	29-Feb	117,250	242,099	8,348	0	19,395	0	111,878	131,273	167,184	144,574	96,800	4,985	386,673	214,050	547,600
MAR	31-Mar	133,540	245,283	7,912	0	30,075	0	102,306	132,381	152,932	167,134	152,300	5,391	412,417	285,840	404,100
QUARTER	**Total**	**357,006**	**753,789**	**8,375**	**0**	**75,638**	**0**	**327,033**	**402,671**	**496,302**	**433,898**	**265,770**	**4,821**	**1,187,687**	**622,776**	**1,612,800**
APR	30-Apr	129,036	197,589	6,586	0	28,518	0	91,508	120,026	118,844	105,474	60,520	3,402	303,063	189,556	136,700
MAY	31-May	124,340	193,617	6,246	0	21,348	0	93,706	115,054	80,718	115,085	1	3,712	308,702	124,341	102,000
JUN	30-Jun	115,913	182,377	6,079	0	32,439	0	86,085	118,524	182,567	103,502	0	3,450	285,879	115,913	73,200
QUARTER	**Total**	**369,289**	**573,583**	**6,303**	**0**	**82,305**	**0**	**271,299**	**353,604**	**382,129**	**324,061**	**60,521**	**3,561**	**897,644**	**429,810**	**311,900**
JUL	31-Jul	111,007	180,318	5,817	0	29,984	0	91,109	121,093	109,059	107,584	0.0	3,470	287,902	111,007	96,500
AUG	31-Aug	106,183	136,694	4,409	0	34,210	0	82,200	116,410	122,234	114,687	3.0	3,700	251,381	106,186	68,200
SEP	30-Sep	100,879	199,508	6,650	0	41,689	0	90,135	131,824	124,522	113,886	0.0	3,796	313,394	100,879	58,600
QUARTER	**Total**	**318,069**	**516,520**	**5,614**	**0**	**105,884**	**0**	**263,443**	**369,327**	**355,815**	**336,157**	**3**	**3,654**	**852,677**	**318,072**	**223,300**
OCT	31-Oct	97,609	178,791	5,767	0	28,062	0	102,005	130,067	143,976	112,384	0.0	3,625	291,175	97,609	67,300
NOV	30-Nov	90,718	168,291	5,610	0	26,717	0	94,170	120,887	152,117	109,836	0	3,661	278,127	90,718	55,400
QUARTER	**Total**	**188,327**	**347,082**	**3,773**	**0**	**54,779**	**0**	**196,175**	**250,954**	**296,093**	**222,220**	**0**	**2,415**	**569,302**	**188,327**	**122,700**
2024_PART		**1,232,691**	**2,190,974**	**6,003**	**0**	**318,606**	**0**	**1,057,950**	**1,376,556**	**1,530,339**	**1,316,336**	**326,294**	**3,606**	**3,507,310**	**1,558,985**	**2,270,700**

Altamont Landfill and Resource Recovery Facility, Livermore, CA
S-140 and S-141 Analytical Results

	Quarter 1, 2024	Quarter 1, 2024	Quarter 2, 2024	Quarter 2, 2024	Quarter 3, 2024	Quarter 3, 2024	Quarter 4 2024	Quarter 4 2024	Fourth Quarter 2024	Annual 2024
	2/13/2024	2/13/2024	5/21/2024	5/21/2024	8/22/2024	8/22/2024	11/19/2024	11/19/2024	8/22/2024	Average
	Sample Location LCRS	Sample Location S-140	Sample Location LCRS	Sample Location S-140	Sample Location LCRS	Sample Location S-140	Sample Location LCRS	Sample Location S-140	(ppb)	(ppb)
Compound	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)	Concentration (ppbw)
Acetone	89.0		69.0				110.0		110.0	89.3
1,1,1,2-Tetrachloroethane										
1,1,1-Trichloroethane										
1,1,2,2-Tetrachloroethane										
1,1,2-Trichloroethane										
1,1-Dichloroethane										
1,1-Dichloroethene										
1,1-Dichloropropene										
1,2,3-Trichlorobenzene										
1,2,4-Trichlorobenzene										
1,2,4-Trimethylbenzene	1.0		1.4		1.6		0.92		0.9	1.2
1,2-Dibromo-3-chloropropane										
1,2-Dibromoethane										
1,2-Dichlorobenzene										
1,2-Dibromoethane										
1,2-Dichloroethane										
1,2-Dichloropropane										
1,3,5-Trimethylbenzene										
1,3-Dichlorobenzene										
1,3-Dichloropropane										
1,4-Dichlorobenzene	4.0				6.1		5.0		5.0	5.0
2,2-Dichloropropane										
2-Butanone(MEK)	57.0						43.0		43.0	50.0
2-Chloroethylvinyl ether										
2-Chlorotoluene										
2-Hexanone										
4-Chlorotoluene										
4-Methyl-2-pentanone (MIBK)										
Benzene	1.6		2.1		2.7					2.1
Bromobenzene										
Bromochloromethane										
Bromodichloromethane										
Bromoform										
Bromomethane										
Carbon disulfide	8.5		20.0	1.4	11.0		15.0		15.0	11.2
Carbon tetrachloride										
Chlorobenzene					1.5					1.5
Chloroethane										
Chloroform										
Chloromethane										
cis-1,2-Dichloroethene										
cis-1,3-Dichloropropene										
Dibromochloromethane										
Dibromomethane										
Dichlorodifluoromethane										
Ethylbenzene	2.4		3.4		3.9		2.7		2.7	3.1
Hexachlorobutadiene										
Isopropylbenzene										
Methylene chloride										
MTBE										
Naphthalene										
n-Butylbenzene										
n-Propylbenzene										
p-Isopropyltoluene										
4-Isopropyltoluene			1.1		1.6					1.4
sec-Butylbenzene										
Styrene										
tert-Butylbenzene										
Tetrachloroethene										
Toluene	2.0				4.1		2.5		2.5	2.9
Total xylenes	2.3		2.1		6.0		3.8		3.8	3.6
trans-1,2-Dichloroethene										
trans-1,3-Dichloropropene										
Trichloroethene										
Trichlorofluoromethane										
Trichlorotrifluoroethane										
Vinyl acetate										
Vinyl chloride										
Total TOC Concentration (ppb)	167.8	0.0	99.1	1.4	38.5	0.0	182.9	0.0	182.9	171.3

Note: ALRRF made a process change in which condensate is no longer sent to the water treatment plant.

			Compound	Concentration Limit (ppb)	Fourth Quarter 2024 Average (ppbw)	Annual Average Results (ppbw)
Annual Average TOC Conc. (ppm)		0.171	Benzene	80	ND	2.1
Fourth Quarter 2024 TOC Conc. (ppm)		0.183	Chloroform	470	ND	ND
Maximum Daily TOC Concentration = 52 ppm			1,4 Dichlorobenzene	1,020	5.0	5.0
Quarterly Average TOC Concentration Limit = 52 ppm			Methylene Chloride	2,530	ND	ND
			Naphthalene	3,590	ND	ND
			Perchloroethylene/ Tetrachloroethene	430	ND	ND
			Tricholoroethylene/ Trichloroethene	1,290	ND	ND
			Vinyl Chloride	30	ND	ND
Limits set by Permit Condition No. 20922, Part 1 through 5						

Altamont Landfill and Resource Recovery Facility, Livermore, CA
S-140 and S-141 Analytical Results

	11/6/2023	11/6/2023	2/13/2024	2/13/2024	5/21/2024	5/21/2024	8/22/2024	8/22/2024	8/22/2024	Average
	Sample Location LCRS	**Sample Location S-140**	**Sample Location LCRS**	**Sample Location S-140**	**Sample Location LCRS**	**Sample Location S-140**	**Sample Location LCRS**	**Sample Location S-140**	**(ppb)**	**(ppb)**
Compound	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**	**Concentration (ppbw)**
Acetone			89.0		69.0					79.0
1,1,1,2-Tetrachloroethane										
1,1,1-Trichloroethane										
1,1,2,2-Tetrachloroethane										
1,1,2-Trichloroethane										
1,1-Dichloroethane										
1,1-Dichloroethene										
1,1-Dichloropropene										
1,2,3-Trichlorobenzene										
1,2,4-Trichlorobenzene										
1,2,4-Trimethylbenzene			1.0		1.4		1.6		1.6	1.3
1,2-Dibromo-3-chloropropane										
1,2-Dibromoethane										
1,2-Dichlorobenzene										
1,2-Dibromoethane										
1,2-Dichloroethane										
1,2-Dichloropropane										
1,3,5-Trimethylbenzene										
1,3-Dichlorobenzene										
1,3-Dichloropropane										
1,4-Dichlorobenzene	4.4		4.0				6.1		6.1	4.8
2,2-Dichloropropane										
2-Butanone(MEK)			57.0							57.0
2-Chloroethylvinyl ether										
2-Chlorotoluene										
2-Hexanone										
4-Chlorotoluene										
4-Methyl-2-pentanone (MIBK)										
Benzene			1.6		2.1		2.7		2.7	2.1
Bromobenzene										
Bromochloromethane										
Bromodichloromethane										
Bromoform										
Bromomethane										
Carbon disulfide		17.0	8.5		20.0	1.4	11.0		11.0	11.6
Carbon tetrachloride										
Chlorobenzene							1.5		1.5	1.5
Chloroethane										
Chloroform										
Chloromethane										
cis-1,2-Dichloroethene										
cis-1,3-Dichloropropene										
Dibromochloromethane										
Dibromomethane										
Dichlorodifluoromethane										
Ethylbenzene			2.4		3.4		3.9		3.9	3.2
Hexachlorobutadiene										
Isopropylbenzene										
Methylene chloride										
MTBE										
Naphthalene										
n-Butylbenzene										
n-Propylbenzene										
p-Isopropyltoluene										
4-Isopropyltoluene					1.1		1.6		1.6	1.4
sec-Butylbenzene										
Styrene										
tert-Butylbenzene										
Tetrachloroethene										
Toluene			2.0				4.1		4.1	3.1
Total xylenes			2.3		2.1		6.0		6.0	3.5
trans-1,2-Dichloroethene										
trans-1,3-Dichloropropene										
Trichloroethene										
Trichlorofluoromethane										
Trichlorotrifluoroethane										
Vinyl acetate										
Vinyl chloride										
Total TOC Concentration (ppb)		17.0		0.0	99.1	1.4	38.5	0.0	38.5	26.0

Note: ALRRF made a process change in which condensate is no longer sent to the water treatment plant.

			Compound	**Concentration Limit (ppb)**	**Third Quarter 2024 Average (ppbw)**	**Annual Average Results (ppbw)**
Annual Average TOC Conc. (ppm)		0.026	Benzene	80	2.7	2.1
Third Quarter 2024 TOC Conc. (ppm)		0.039	Chloroform	470	ND	ND
Maximum Daily TOC Concentration = 52 ppm			1,4 Dichlorobenzene	1,020	6.1	4.8
Quarterly Average TOC Concentration Limit = 52 ppm			Methylene Chloride	2,530	ND	ND
			Naphthalene	3,590	ND	ND
			Perchloroethylene/	430	ND	ND
			Tricholoroethylene/ Trichloroethene	1,290	ND	ND
			Vinyl Chloride	30	ND	ND
Limits set by Permit Condition No. 20922, Part 1 through 5						

WASTE MANAGEMENT of ALAMEDA COUNTY
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
BAAQMD PLANT NO. 2066

LANDFILL GAS CONDENSATE TREATMENT SYSTEM
PERMIT RECORD

Record Month/Year	Monthly Gallons S-12	Condensate Gallons Injection A-15	Condensate Gallons Injection A-16	Monthly Gallons S-19	Rolling 12 Month Gallons S-19
Jun-24	118,524	0	86,050	0	0
Jul-24	121,093	0	91,109	0	0
Aug-24	116,410	0	82,200	0	0
Sep-24	131,824	0	90,135	0	0
Oct-24	130,067	0	102,005	0	0
Nov-24	120,887	0	94,170	0	0

Note: The landfill gas condensate injection rate to the A-15 and A-16 Flares pursuant to Permit Condition No. 19235, Part 3 is 4,320 and 7,200 gallons per day, respectively.

Altamont Landfill and Resource Recovery Facility
Monthly Throughput to S-140 and S-141

Month	Combined S-140 and S-141 (gallons)	Consecutive 12-Month Total (gallons)	Rolling 12-Month POC Total (lb)
Jun-24	0	0.00	0.00
Jul-24	0	0.00	0.00
Aug-24	0	0.00	0.00
Sep-24	0	0.00	0.00
Oct-24	0	0.00	0.00
Nov-24	0	0.00	0.00

Pursuant to Permit Condition No. 20922, Part 2,

1) The total combined wastewater throughput to S-140 and S-141 shall not exceed 6,460,000 gallons during any consecutive 12-month period.

2) The total volatile organic compound (VOC) concentration in the wastewater shall not exceed 52 ppm by weight OR 1,230 lbs precursor organic (POC) compounds during any consecutive 12-month period.

Altamont Landfill and Resource Recovery Facility
Daily Throughput to S-140 and S-141

Report Prepared by: Rajan Phadnis

Month: June 2024

Day	Time	Duration (min)	Totalizer Reading (gals)	S-140 (gals)	S-141 (gals)	Comments
6/1/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/2/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/3/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/4/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/5/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/6/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/7/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/8/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/9/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/10/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/11/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/12/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/13/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/14/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/15/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/16/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/17/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/18/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/19/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/20/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/21/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/22/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/23/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/24/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/25/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/26/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/27/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/28/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/29/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
6/30/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
			Combined Volume Total (gals) =	0		POC (lb/day)
			Max Daily	0	0	0

Notes:

Per WM starting March 2010,

1) When operating, liquid is manually sent to the reactors. The difference between two daily readings can be attributed to throughput for the first day. Personnel either sent liquid to S-140 alone or to S-140 and S-141 together. Tank level records determine whether liquids were sent to S-140 alone or to both S-140 and S-141. When liquids were sent to both reactors at once, the throughput was split evenly between the two reactors.

Pursuant to Permit Condition No. 20922, Part 1,

2) The waste water throughput to each reactor (S-140 and S-141) shall not exceed 52,400 gallons during any one day and the total volatile organic compound concentration in the wastewater shall not exceed 54 ppm by weight.

3) The 52 ppm volatile organic compound limit = 10 lbs precursor organic compounds (POC)/day

4) Please refer to Condition 20922 Part 1 (b) if daily throughput limit is breached

N/A - Not Available

Altamont Landfill and Resource Recovery Facility
Daily Throughput to S-140 and S-141

Report Prepared by: Rajan Phadnis

Month: July 2024

Day	Time	Duration (min)	Totalizer Reading (gals)	S-140 (gals)	S-141 (gals)	Comments
7/1/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/2/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/3/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/4/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/5/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/6/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/7/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/8/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/9/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/10/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/11/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/12/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/13/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/14/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/15/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/16/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/17/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/18/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/19/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/20/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/21/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/22/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/23/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/24/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/25/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/26/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/27/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/28/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/29/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/30/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
7/31/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.

Combined Volume Total (gals) =	0		POC (lb/day)
Max Daily	0	0	0

Notes:
Per WM starting March 2010,

1) When operating, liquid is manually sent to the reactors. The difference between two daily readings can be attributed to throughput for the first day. Personnel either sent liquid to S-140 alone or to S-140 and S-141 together. Tank level records determine whether liquids were sent to S-140 alone or to both S-140 and S-141. When liquids were sent to both reactors at once, the throughput was split evenly between the two reactors.
Pursuant to Permit Condition No. 20922, Part 1,
2) The waste water throughput to each reactor (S-140 and S-141) shall not exceed 52,400 gallons during any one day and the total volatile organic compound concentration in the wastewater shall not exceed 54 ppm by weight.
3) The 52 ppm volatile organic compound limit = 10 lbs precursor organic compounds (POC)/day
4) Please refer to Condition 20922 Part 1 (b) if daily throughput limit is breached
N/A - Not Available

Altamont Landfill and Resource Recovery Facility
Daily Throughput to S-140 and S-141

Report Prepared by: Rajan Phadnis

Month: August 2024

Day	Time	Duration (min)	Totalizer Reading (gals)	S-140 (gals)	S-141 (gals)	Comments
8/1/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/2/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/3/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/4/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/5/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/6/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/7/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/8/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/9/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/10/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/11/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/12/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/13/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/14/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/15/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/16/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/17/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/18/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/19/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/20/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/21/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/22/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/23/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/24/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/25/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/26/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/27/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/28/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/29/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/30/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
8/31/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
			Combined Volume Total (gals) =	0		POC (lb/day)
			Max Daily	0	0	0

Notes:
Per WM starting March 2010,

1) When operating, liquid is manually sent to the reactors. The difference between two daily readings can be attributed to throughput for the first day. Personnel either sent liquid to S-140 alone or to S-140 and S-141 together. Tank level records determine whether liquids were sent to S-140 alone or to both S-140 and S-141. When liquids were sent to both reactors at once, the throughput was split evenly between the two reactors.
Pursuant to Permit Condition No. 20922, Part 1,
2) The waste water throughput to each reactor (S-140 and S-141) shall not exceed 52,400 gallons during any one day and the total volatile organic compound concentration in the wastewater shall not exceed 54 ppm by weight.
3) The 52 ppm volatile organic compound limit = 10 lbs precursor organic compounds (POC)/day
4) Please refer to Condition 20922 Part 1 (b) if daily throughput limit is breached
N/A - Not Available

Altamont Landfill and Resource Recovery Facility
Daily Throughput to S-140 and S-141

Report Prepared by: Rajan Phadnis

Month: September 2024

Day	Time	Duration (min)	Totalizer Reading (gals)	S-140 (gals)	S-141 (gals)	Comments
9/1/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/2/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/3/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/4/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/5/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/6/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/7/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/8/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/9/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/10/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/11/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/12/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/13/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/14/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/15/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/16/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/17/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/18/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/19/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/20/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/21/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/22/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/23/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/24/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/25/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/26/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/27/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/28/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/29/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
9/30/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
			Combined Volume Total (gals) =	0		POC (lb/day)
			Max Daily	0	0	0

Notes:
Per WM starting March 2010,

1) When operating, liquid is manually sent to the reactors. The difference between two daily readings can be attributed to throughput for the first day. Personnel either sent liquid to S-140 alone or to S-140 and S-141 together. Tank level records determine whether liquids were sent to S-140 alone or to both S-140 and S-141. When liquids were sent to both reactors at once, the throughput was split evenly between the two reactors.
Pursuant to Permit Condition No. 20922, Part 1,
2) The waste water throughput to each reactor (S-140 and S-141) shall not exceed 52,400 gallons during any one day and the total volatile organic compound concentration in the wastewater shall not exceed 54 ppm by weight.
3) The 52 ppm volatile organic compound limit = 10 lbs precursor organic compounds (POC)/day
4) Please refer to Condition 20922 Part 1 (b) if daily throughput limit is breached
N/A - Not Available

Altamont Landfill and Resource Recovery Facility
Daily Throughput to S-140 and S-141

Report Prepared by: Rajan Phadnis

Month: October 2024

Day	Time	Duration (min)	Totalizer Reading (gals)	S-140 (gals)	S-141 (gals)	Comments
10/1/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/2/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/3/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/4/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/5/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/6/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/7/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/8/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/9/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/10/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/11/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/12/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/13/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/14/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/15/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/16/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/17/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/18/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/19/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/20/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/21/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/22/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/23/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/24/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/25/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/26/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/27/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/28/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/29/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/30/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
10/31/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
			Combined Volume Total (gals) =	0		POC (lb/day)
			Max Daily	0	0	0

Notes:
Per WM starting March 2010,

1) When operating, liquid is manually sent to the reactors. The difference between two daily readings can be attributed to throughput for the first day. Personnel either sent liquid to S-140 alone or to S-140 and S-141 together. Tank level records determine whether liquids were sent to S-140 alone or to both S-140 and S-141. When liquids were sent to both reactors at once, the throughput was split evenly between the two reactors.
Pursuant to Permit Condition No. 20922, Part 1,
2) The waste water throughput to each reactor (S-140 and S-141) shall not exceed 52,400 gallons during any one day and the total volatile organic compound concentration in the wastewater shall not exceed 54 ppm by weight.
3) The 52 ppm volatile organic compound limit = 10 lbs precursor organic compounds (POC)/day
4) Please refer to Condition 20922 Part 1 (b) if daily throughput limit is breached
N/A - Not Available

Altamont Landfill and Resource Recovery Facility
Daily Throughput to S-140 and S-141

Report Prepared by: Rajan Phadnis

Month: November 2024

Day	Time	Duration (min)	Totalizer Reading (gals)	S-140 (gals)	S-141 (gals)	Comments
11/1/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/2/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/3/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/4/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/5/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/6/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/7/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/8/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/9/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/10/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/11/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/12/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/13/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/14/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/15/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/16/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/17/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/18/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/19/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/20/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/21/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/22/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/23/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/24/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/25/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/26/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/27/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/28/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/29/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
11/30/2024		0		0	0	The WWTP did not operate, so a daily reading was not obtained.
			Combined Volume Total (gals) =	0		POC (lb/day)
			Max Daily	0	0	0

Notes:

Per WM starting March 2010,

1) When operating, liquid is manually sent to the reactors. The difference between two daily readings can be attributed to throughput for the first day. Personnel either sent liquid to S-140 alone or to S-140 and S-141 together. Tank level records determine whether liquids were sent to S-140 alone or to both S-140 and S-141. When liquids were sent to both reactors at once, the throughput was split evenly between the two reactors.

Pursuant to Permit Condition No. 20922, Part 1,

2) The waste water throughput to each reactor (S-140 and S-141) shall not exceed 52,400 gallons during any one day and the total volatile organic compound concentration in the wastewater shall not exceed 54 ppm by weight.

3) The 52 ppm volatile organic compound limit = 10 lbs precursor organic compounds (POC)/day

4) Please refer to Condition 20922 Part 1 (b) if daily throughput limit is breached

N/A - Not Available

ANALYTICAL REPORT

PREPARED FOR

Attn: Sonam Kaur
Waste Management
10840 Altamont Pass Road
Livermore, California 94550

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JOB DESCRIPTION

236|Altamont Landfill- LCRS
LCRS for 8260B

JOB NUMBER

280-195717-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

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Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Janice S. Collins

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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Job ID: 280-195717-1

Eurofins Denver

Job Narrative
280-195717-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 8/23/2024 9:10 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C.

GC/MS VOA
Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-666335. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. LCRS (280-195717-1)

Method 8260B: The following sample(s) was collected in a properly preserved vial; however, the pH of 7 was outside the required criteria of <2 when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: LCRS (280-195717-1).

Method 8260B: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: LCRS (280-195717-1). Elevated reporting limits (RLs) are provided.

Method 8260B: Reporting Limit - Estimated; Outside Calibration Range : The reporting limit provided for the following analyte(s) falls below the laboratory's lowest calibration standard: Chlorodibromomethane, Carbon tetrachloride, Vinyl chloride, Trichloroethene, trans-1,3-Dichloropropene, trans-1,2-Dichloroethene, Toluene, Tetrachloroethene, Styrene, Methyl tert-butyl ether, Isopropylbenzene, Ethylene Dibromide, Ethylbenzene, Dichlorodifluoromethane, Dichlorobromomethane, Dibromomethane, cis-1,2-Dichloroethene, cis-1,3-Dichloropropene, Benzene, 4-Chlorotoluene, 2-Chlorotoluene, 2,2-Dichloropropane, 1,4-Dichlorobenzene, 1,3-Dichlorobenzene, 1,3,5-Trimethylbenzene, 1,2-Dichloropropane, 1,2-Dichloroethane, 1,2-Dichlorobenzene, 1,2,4-Trimethylbenzene, 1,1-Dichloropropene, 1,1-Dichloroethene, 1,1-Dichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,1,2,2-Tetrachloroethane, 1,1,1-Trichloroethane and 1,1,1,2-Tetrachloroethane (1.0 RL .5). Results reported below the lowest calibration standard are estimated. LCRS (280-195717-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Comments
For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet permit requirements at the request of the client and to report the lowest possible RL for each analyte.

Detection Summary

Client: Waste Management
Project/Site: 236|Altamont Landfill- LCRS

Job ID: 280-195717-1

Client Sample ID: LCRS

Lab Sample ID: 280-195717-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.6		0.75	0.75	ug/L	5		8260B	Total/NA
1,4-Dichlorobenzene	6.1		1.9	1.9	ug/L	5		8260B	Total/NA
4-Isopropyltoluene	1.6		1.0	0.93	ug/L	5		8260B	Total/NA
Benzene	2.7		0.72	0.72	ug/L	5		8260B	Total/NA
Carbon disulfide	11		5.0	1.3	ug/L	5		8260B	Total/NA
Chlorobenzene	1.5		0.50	0.46	ug/L	5		8260B	Total/NA
Ethylbenzene	3.9		0.72	0.72	ug/L	5		8260B	Total/NA
Toluene	4.1		1.6	1.6	ug/L	5		8260B	Total/NA
Xylenes, Total	6.0		0.57	0.57	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Waste Management
Project/Site: 236|Altamont Landfill- LCRS

Job ID: 280-195717-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Waste Management
Project/Site: 236|Altamont Landfill- LCRS

Job ID: 280-195717-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-195717-1	LCRS	Water	08/22/24 11:20	08/23/24 09:10

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: LCRS
Date Collected: 08/22/24 11:20
Date Received: 08/23/24 09:10

Lab Sample ID: 280-195717-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.78	0.78	ug/L			09/05/24 16:56	5
1,1,1-Trichloroethane	ND		2.0	2.0	ug/L			09/05/24 16:56	5
1,1,2,2-Tetrachloroethane	ND		1.1	1.1	ug/L			09/05/24 16:56	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	3.6	ug/L			09/05/24 16:56	5
1,1,2-Trichloroethane	ND		1.4	1.4	ug/L			09/05/24 16:56	5
1,1-Dichloroethane	ND		1.1	1.1	ug/L			09/05/24 16:56	5
1,1-Dichloroethene	ND		1.2	1.2	ug/L			09/05/24 16:56	5
1,1-Dichloropropene	ND		0.95	0.95	ug/L			09/05/24 16:56	5
1,2,3-Trichlorobenzene	ND		6.0	6.0	ug/L			09/05/24 16:56	5
1,2,3-Trichloropropane	ND		1.4	1.4	ug/L			09/05/24 16:56	5
1,2,4-Trichlorobenzene	ND		2.9	2.9	ug/L			09/05/24 16:56	5
1,2,4-Trimethylbenzene	**1.6**		0.75	0.75	ug/L			09/05/24 16:56	5
1,2-Dibromo-3-Chloropropane	ND		2.1	2.1	ug/L			09/05/24 16:56	5
1,2-Dichlorobenzene	ND		0.72	0.72	ug/L			09/05/24 16:56	5
1,2-Dichloroethane	ND		1.4	1.4	ug/L			09/05/24 16:56	5
1,2-Dichloropropane	ND		1.2	1.2	ug/L			09/05/24 16:56	5
1,3,5-Trimethylbenzene	ND		0.61	0.61	ug/L			09/05/24 16:56	5
1,3-Dichlorobenzene	ND		1.7	1.7	ug/L			09/05/24 16:56	5
1,3-Dichloropropane	ND		1.0	0.87	ug/L			09/05/24 16:56	5
1,4-Dichlorobenzene	**6.1**		1.9	1.9	ug/L			09/05/24 16:56	5
2,2-Dichloropropane	ND		0.84	0.84	ug/L			09/05/24 16:56	5
2-Butanone (MEK)	ND		50	23	ug/L			09/05/24 16:56	5
2-Chlorotoluene	ND		1.7	1.7	ug/L			09/05/24 16:56	5
2-Hexanone	ND		50	4.1	ug/L			09/05/24 16:56	5
4-Chlorotoluene	ND		1.1	1.1	ug/L			09/05/24 16:56	5
4-Isopropyltoluene	**1.6**		1.0	0.93	ug/L			09/05/24 16:56	5
4-Methyl-2-pentanone (MIBK)	ND		50	4.9	ug/L			09/05/24 16:56	5
Acetone	ND		50	33	ug/L			09/05/24 16:56	5
Benzene	**2.7**		0.72	0.72	ug/L			09/05/24 16:56	5
Bromobenzene	ND		1.0	0.95	ug/L			09/05/24 16:56	5
Bromoform	ND		1.2	1.2	ug/L			09/05/24 16:56	5
Bromomethane	ND		12	12	ug/L			09/05/24 16:56	5
Carbon disulfide	**11**		5.0	1.3	ug/L			09/05/24 16:56	5
Carbon tetrachloride	ND		1.1	1.1	ug/L			09/05/24 16:56	5
Chlorobenzene	**1.5**		0.50	0.46	ug/L			09/05/24 16:56	5
Chlorobromomethane	ND		2.0	2.0	ug/L			09/05/24 16:56	5
Chlorodibromomethane	ND		1.4	1.4	ug/L			09/05/24 16:56	5
Chloroethane	ND		3.2	3.2	ug/L			09/05/24 16:56	5
Chloroform	ND		1.8	1.8	ug/L			09/05/24 16:56	5
Chloromethane	ND		1.1	1.1	ug/L			09/05/24 16:56	5
cis-1,2-Dichloroethene	ND		1.6	1.6	ug/L			09/05/24 16:56	5
cis-1,3-Dichloropropene	ND		0.78	0.78	ug/L			09/05/24 16:56	5
Dibromomethane	ND		1.7	1.7	ug/L			09/05/24 16:56	5
Dichlorobromomethane	ND		0.94	0.94	ug/L			09/05/24 16:56	5
Dichlorodifluoromethane	ND		1.5	1.5	ug/L			09/05/24 16:56	5
Ethylbenzene	**3.9**		0.72	0.72	ug/L			09/05/24 16:56	5
Ethylene Dibromide	ND		0.92	0.92	ug/L			09/05/24 16:56	5
Hexachlorobutadiene	ND		2.6	2.6	ug/L			09/05/24 16:56	5
Isopropylbenzene	ND		0.79	0.79	ug/L			09/05/24 16:56	5

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LCRS　　**Lab Sample ID: 280-195717-1**

Date Collected: 08/22/24 11:20　　**Matrix: Water**

Date Received: 08/23/24 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.3	1.3	ug/L			09/05/24 16:56	5
Methylene Chloride	ND		5.0	4.7	ug/L			09/05/24 16:56	5
Naphthalene	ND		5.0	5.0	ug/L			09/05/24 16:56	5
n-Butylbenzene	ND		1.2	1.2	ug/L			09/05/24 16:56	5
N-Propylbenzene	ND		1.0	0.92	ug/L			09/05/24 16:56	5
sec-Butylbenzene	ND		1.0	1.0	ug/L			09/05/24 16:56	5
Styrene	ND		0.63	0.63	ug/L			09/05/24 16:56	5
tert-Butylbenzene	ND		1.0	0.89	ug/L			09/05/24 16:56	5
Tetrachloroethene	ND		2.0	2.0	ug/L			09/05/24 16:56	5
Toluene	**4.1**		1.6	1.6	ug/L			09/05/24 16:56	5
trans-1,2-Dichloroethene	ND		1.8	1.8	ug/L			09/05/24 16:56	5
trans-1,3-Dichloropropene	ND		0.72	0.72	ug/L			09/05/24 16:56	5
Trichloroethene	ND		1.5	1.5	ug/L			09/05/24 16:56	5
Trichlorofluoromethane	ND		1.0	0.99	ug/L			09/05/24 16:56	5
Vinyl acetate	ND		10	1.8	ug/L			09/05/24 16:56	5
Vinyl chloride	ND		1.1	1.1	ug/L			09/05/24 16:56	5
Xylenes, Total	**6.0**		0.57	0.57	ug/L			09/05/24 16:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*09/05/24 16:56*	*5*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*09/05/24 16:56*	*5*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*09/05/24 16:56*	*5*
Toluene-d8 (Surr)	*101*		*80 - 125*		*09/05/24 16:56*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	**Client Sample ID**	**DCA (70-127)**	**BFB (78-120)**	**DBFM (77-120)**	**TOL (80-125)**
280-195717-1	LCRS	103	102	103	101
LCS 280-666335/4	Lab Control Sample	101	98	98	100
LCSD 280-666335/6	Lab Control Sample Dup	97	98	100	99
MB 280-666335/9	Method Blank	99	99	98	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Waste Management
Project/Site: 236|Altamont Landfill- LCRS

Job ID: 280-195717-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-666335/9
Matrix: Water
Analysis Batch: 666335

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.16	ug/L			09/05/24 09:43	1
1,1,1-Trichloroethane	ND		0.50	0.39	ug/L			09/05/24 09:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/05/24 09:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.73	0.73	ug/L			09/05/24 09:43	1
1,1,2-Trichloroethane	ND		0.50	0.27	ug/L			09/05/24 09:43	1
1,1-Dichloroethane	ND		0.50	0.22	ug/L			09/05/24 09:43	1
1,1-Dichloroethene	ND		0.50	0.23	ug/L			09/05/24 09:43	1
1,1-Dichloropropene	ND		0.50	0.19	ug/L			09/05/24 09:43	1
1,2,3-Trichlorobenzene	ND		1.2	1.2	ug/L			09/05/24 09:43	1
1,2,3-Trichloropropane	ND		1.0	0.28	ug/L			09/05/24 09:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			09/05/24 09:43	1
1,2,4-Trimethylbenzene	ND		0.50	0.15	ug/L			09/05/24 09:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.42	ug/L			09/05/24 09:43	1
1,2-Dichlorobenzene	ND		0.50	0.14	ug/L			09/05/24 09:43	1
1,2-Dichloroethane	ND		0.50	0.28	ug/L			09/05/24 09:43	1
1,2-Dichloropropane	ND		0.50	0.24	ug/L			09/05/24 09:43	1
1,3,5-Trimethylbenzene	ND		0.50	0.12	ug/L			09/05/24 09:43	1
1,3-Dichlorobenzene	ND		0.50	0.33	ug/L			09/05/24 09:43	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			09/05/24 09:43	1
1,4-Dichlorobenzene	ND		0.50	0.39	ug/L			09/05/24 09:43	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			09/05/24 09:43	1
2-Butanone (MEK)	ND		50	4.6	ug/L			09/05/24 09:43	1
2-Chlorotoluene	ND		0.50	0.34	ug/L			09/05/24 09:43	1
2-Hexanone	ND		50	0.81	ug/L			09/05/24 09:43	1
4-Chlorotoluene	ND		0.50	0.21	ug/L			09/05/24 09:43	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			09/05/24 09:43	1
4-Methyl-2-pentanone (MIBK)	ND		50	0.98	ug/L			09/05/24 09:43	1
Acetone	ND		50	6.6	ug/L			09/05/24 09:43	1
Benzene	ND		0.50	0.14	ug/L			09/05/24 09:43	1
Bromobenzene	ND		1.0	0.19	ug/L			09/05/24 09:43	1
Bromoform	ND		1.0	0.25	ug/L			09/05/24 09:43	1
Bromomethane	ND		2.4	2.4	ug/L			09/05/24 09:43	1
Carbon disulfide	ND		5.0	0.26	ug/L			09/05/24 09:43	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			09/05/24 09:43	1
Chlorobenzene	ND		0.50	0.092	ug/L			09/05/24 09:43	1
Chlorobromomethane	ND		1.0	0.40	ug/L			09/05/24 09:43	1
Chlorodibromomethane	ND		0.50	0.28	ug/L			09/05/24 09:43	1
Chloroethane	ND		1.0	0.64	ug/L			09/05/24 09:43	1
Chloroform	ND		1.0	0.36	ug/L			09/05/24 09:43	1
Chloromethane	ND		1.0	0.23	ug/L			09/05/24 09:43	1
cis-1,2-Dichloroethene	ND		0.50	0.32	ug/L			09/05/24 09:43	1
cis-1,3-Dichloropropene	ND		0.50	0.16	ug/L			09/05/24 09:43	1
Dibromomethane	ND		0.50	0.34	ug/L			09/05/24 09:43	1
Dichlorobromomethane	ND		0.50	0.19	ug/L			09/05/24 09:43	1
Dichlorodifluoromethane	ND		0.50	0.30	ug/L			09/05/24 09:43	1
Ethylbenzene	ND		0.50	0.14	ug/L			09/05/24 09:43	1
Ethylene Dibromide	ND		0.50	0.18	ug/L			09/05/24 09:43	1
Hexachlorobutadiene	ND		1.0	0.53	ug/L			09/05/24 09:43	1

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-666335/9
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 666335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.50	0.16	ug/L			09/05/24 09:43	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			09/05/24 09:43	1
Methylene Chloride	ND		5.0	0.94	ug/L			09/05/24 09:43	1
Naphthalene	ND		1.0	0.99	ug/L			09/05/24 09:43	1
n-Butylbenzene	ND		1.0	0.23	ug/L			09/05/24 09:43	1
N-Propylbenzene	ND		1.0	0.18	ug/L			09/05/24 09:43	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			09/05/24 09:43	1
Styrene	ND		0.50	0.13	ug/L			09/05/24 09:43	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			09/05/24 09:43	1
Tetrachloroethene	ND		0.50	0.40	ug/L			09/05/24 09:43	1
Toluene	ND		0.50	0.32	ug/L			09/05/24 09:43	1
trans-1,2-Dichloroethene	ND		0.50	0.37	ug/L			09/05/24 09:43	1
trans-1,3-Dichloropropene	ND		0.50	0.14	ug/L			09/05/24 09:43	1
Trichloroethene	ND		0.50	0.30	ug/L			09/05/24 09:43	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			09/05/24 09:43	1
Vinyl acetate	ND		10	0.36	ug/L			09/05/24 09:43	1
Vinyl chloride	ND		0.50	0.23	ug/L			09/05/24 09:43	1
Xylenes, Total	ND		0.50	0.11	ug/L			09/05/24 09:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*09/05/24 09:43*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*09/05/24 09:43*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*09/05/24 09:43*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*09/05/24 09:43*	*1*

Lab Sample ID: LCS 280-666335/4
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 666335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	48.5		ug/L		97	80 - 124
1,1,1-Trichloroethane	50.0	46.5		ug/L		93	80 - 123
1,1,2,2-Tetrachloroethane	50.0	49.4		ug/L		99	74 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.8		ug/L		92	73 - 132
1,1,2-Trichloroethane	50.0	46.4		ug/L		93	80 - 120
1,1-Dichloroethane	50.0	46.3		ug/L		93	78 - 121
1,1-Dichloroethene	50.0	45.3		ug/L		91	77 - 121
1,1-Dichloropropene	50.0	46.6		ug/L		93	77 - 123
1,2,3-Trichlorobenzene	50.0	47.0		ug/L		94	65 - 129
1,2,3-Trichloropropane	50.0	48.8		ug/L		98	80 - 120
1,2,4-Trichlorobenzene	50.0	46.1		ug/L		92	74 - 126
1,2,4-Trimethylbenzene	50.0	45.9		ug/L		92	79 - 124
1,2-Dibromo-3-Chloropropane	50.0	46.8		ug/L		94	73 - 128
1,2-Dichlorobenzene	50.0	46.1		ug/L		92	80 - 120
1,2-Dichloroethane	50.0	45.7		ug/L		91	71 - 121
1,2-Dichloropropane	50.0	47.9		ug/L		96	78 - 120
1,3,5-Trimethylbenzene	50.0	46.1		ug/L		92	80 - 122
1,3-Dichlorobenzene	50.0	46.0		ug/L		92	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-666335/4
Matrix: Water
Analysis Batch: 666335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichloropropane	50.0	46.5		ug/L		93	77 - 122
1,4-Dichlorobenzene	50.0	46.0		ug/L		92	80 - 120
2,2-Dichloropropane	50.0	43.8		ug/L		88	75 - 131
2-Butanone (MEK)	200	206		ug/L		103	58 - 135
2-Chlorotoluene	50.0	45.7		ug/L		91	80 - 120
2-Hexanone	200	205		ug/L		102	62 - 137
4-Chlorotoluene	50.0	45.1		ug/L		90	80 - 120
4-Isopropyltoluene	50.0	46.7		ug/L		93	80 - 122
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		104	66 - 135
Acetone	200	191		ug/L		95	61 - 134
Benzene	50.0	45.9		ug/L		92	80 - 120
Bromobenzene	50.0	46.3		ug/L		93	80 - 120
Bromoform	50.0	50.3		ug/L		101	79 - 138
Bromomethane	50.0	56.7		ug/L		113	29 - 148
Carbon disulfide	50.0	46.3		ug/L		93	70 - 121
Carbon tetrachloride	50.0	46.9		ug/L		94	79 - 127
Chlorobenzene	50.0	46.0		ug/L		92	80 - 120
Chlorobromomethane	50.0	48.0		ug/L		96	80 - 123
Chlorodibromomethane	50.0	48.8		ug/L		98	80 - 125
Chloroethane	50.0	51.3		ug/L		103	56 - 141
Chloroform	50.0	46.6		ug/L		93	80 - 120
Chloromethane	50.0	52.0		ug/L		104	56 - 133
cis-1,2-Dichloroethene	50.0	46.6		ug/L		93	80 - 120
cis-1,3-Dichloropropene	50.0	49.0		ug/L		98	76 - 129
Dibromomethane	50.0	48.2		ug/L		96	80 - 120
Dichlorobromomethane	50.0	49.6		ug/L		99	80 - 123
Dichlorodifluoromethane	50.0	52.6		ug/L		105	47 - 135
Ethylbenzene	50.0	44.5		ug/L		89	80 - 120
Ethylene Dibromide	50.0	47.0		ug/L		94	80 - 120
Hexachlorobutadiene	50.0	46.7		ug/L		93	73 - 128
Isopropylbenzene	50.0	45.8		ug/L		92	78 - 122
Methyl tert-butyl ether	50.0	47.6		ug/L		95	80 - 120
Methylene Chloride	50.0	46.6		ug/L		93	78 - 120
Naphthalene	50.0	48.7		ug/L		97	60 - 124
n-Butylbenzene	50.0	46.1		ug/L		92	59 - 140
N-Propylbenzene	50.0	46.3		ug/L		93	80 - 123
sec-Butylbenzene	50.0	46.7		ug/L		93	80 - 123
Styrene	50.0	46.0		ug/L		92	80 - 120
tert-Butylbenzene	50.0	45.5		ug/L		91	80 - 120
Tetrachloroethene	50.0	45.0		ug/L		90	80 - 121
Toluene	50.0	46.5		ug/L		93	80 - 120
trans-1,2-Dichloroethene	50.0	46.1		ug/L		92	79 - 121
trans-1,3-Dichloropropene	50.0	48.7		ug/L		97	80 - 123
Trichloroethene	50.0	47.1		ug/L		94	80 - 120
Trichlorofluoromethane	50.0	49.4		ug/L		99	54 - 144
Vinyl acetate	100	106		ug/L		106	55 - 161
Vinyl chloride	50.0	52.3		ug/L		105	67 - 127
Xylenes, Total	100	92.8		ug/L		93	80 - 120

QC Sample Results

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-666335/4
Matrix: Water
Analysis Batch: 666335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Lab Sample ID: LCSD 280-666335/6
Matrix: Water
Analysis Batch: 666335

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/L		102	80 - 124	5	20
1,1,1-Trichloroethane	50.0	47.9		ug/L		96	80 - 123	3	20
1,1,2,2-Tetrachloroethane	50.0	49.4		ug/L		99	74 - 123	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.1		ug/L		92	73 - 132	1	23
1,1,2-Trichloroethane	50.0	47.4		ug/L		95	80 - 120	2	20
1,1-Dichloroethane	50.0	47.7		ug/L		95	78 - 121	3	20
1,1-Dichloroethene	50.0	46.4		ug/L		93	77 - 121	2	21
1,1-Dichloropropene	50.0	47.3		ug/L		95	77 - 123	2	20
1,2,3-Trichlorobenzene	50.0	48.5		ug/L		97	65 - 129	3	20
1,2,3-Trichloropropane	50.0	50.9		ug/L		102	80 - 120	4	20
1,2,4-Trichlorobenzene	50.0	48.1		ug/L		96	74 - 126	4	20
1,2,4-Trimethylbenzene	50.0	47.7		ug/L		95	79 - 124	4	20
1,2-Dibromo-3-Chloropropane	50.0	49.5		ug/L		99	73 - 128	6	21
1,2-Dichlorobenzene	50.0	47.2		ug/L		94	80 - 120	2	20
1,2-Dichloroethane	50.0	46.5		ug/L		93	71 - 121	2	20
1,2-Dichloropropane	50.0	49.2		ug/L		98	78 - 120	3	20
1,3,5-Trimethylbenzene	50.0	48.0		ug/L		96	80 - 122	4	20
1,3-Dichlorobenzene	50.0	47.5		ug/L		95	80 - 120	3	20
1,3-Dichloropropane	50.0	48.2		ug/L		96	77 - 122	4	20
1,4-Dichlorobenzene	50.0	47.9		ug/L		96	80 - 120	4	20
2,2-Dichloropropane	50.0	45.8		ug/L		92	75 - 131	5	22
2-Butanone (MEK)	200	209		ug/L		105	58 - 135	2	20
2-Chlorotoluene	50.0	47.4		ug/L		95	80 - 120	4	20
2-Hexanone	200	212		ug/L		106	62 - 137	3	21
4-Chlorotoluene	50.0	46.1		ug/L		92	80 - 120	2	20
4-Isopropyltoluene	50.0	47.8		ug/L		96	80 - 122	2	20
4-Methyl-2-pentanone (MIBK)	200	209		ug/L		105	66 - 135	1	20
Acetone	200	195		ug/L		97	61 - 134	2	21
Benzene	50.0	47.7		ug/L		95	80 - 120	4	20
Bromobenzene	50.0	47.0		ug/L		94	80 - 120	1	20
Bromoform	50.0	51.4		ug/L		103	79 - 138	2	20
Bromomethane	50.0	55.8		ug/L		112	29 - 148	1	40
Carbon disulfide	50.0	47.4		ug/L		95	70 - 121	2	20
Carbon tetrachloride	50.0	47.3		ug/L		95	79 - 127	1	20
Chlorobenzene	50.0	48.8		ug/L		98	80 - 120	6	20
Chlorobromomethane	50.0	49.1		ug/L		98	80 - 123	2	20
Chlorodibromomethane	50.0	50.6		ug/L		101	80 - 125	4	20
Chloroethane	50.0	51.2		ug/L		102	56 - 141	0	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-666335/6
Matrix: Water
Analysis Batch: 666335

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroform	50.0	47.7		ug/L		95	80 - 120	2	20
Chloromethane	50.0	50.8		ug/L		102	56 - 133	2	20
cis-1,2-Dichloroethene	50.0	48.0		ug/L		96	80 - 120	3	20
cis-1,3-Dichloropropene	50.0	51.2		ug/L		102	76 - 129	5	20
Dibromomethane	50.0	47.7		ug/L		95	80 - 120	1	20
Dichlorobromomethane	50.0	50.9		ug/L		102	80 - 123	2	20
Dichlorodifluoromethane	50.0	51.4		ug/L		103	47 - 135	2	21
Ethylbenzene	50.0	46.8		ug/L		94	80 - 120	5	20
Ethylene Dibromide	50.0	49.1		ug/L		98	80 - 120	4	20
Hexachlorobutadiene	50.0	48.5		ug/L		97	73 - 128	4	20
Isopropylbenzene	50.0	47.4		ug/L		95	78 - 122	3	20
Methyl tert-butyl ether	50.0	48.8		ug/L		98	80 - 120	2	20
Methylene Chloride	50.0	47.7		ug/L		95	78 - 120	2	20
Naphthalene	50.0	50.3		ug/L		101	60 - 124	3	21
n-Butylbenzene	50.0	48.0		ug/L		96	59 - 140	4	20
N-Propylbenzene	50.0	47.9		ug/L		96	80 - 123	3	20
sec-Butylbenzene	50.0	48.4		ug/L		97	80 - 123	3	20
Styrene	50.0	48.7		ug/L		97	80 - 120	6	20
tert-Butylbenzene	50.0	47.8		ug/L		96	80 - 120	5	20
Tetrachloroethene	50.0	47.5		ug/L		95	80 - 121	5	20
Toluene	50.0	48.1		ug/L		96	80 - 120	3	20
trans-1,2-Dichloroethene	50.0	47.1		ug/L		94	79 - 121	2	20
trans-1,3-Dichloropropene	50.0	50.2		ug/L		100	80 - 123	3	20
Trichloroethene	50.0	49.3		ug/L		99	80 - 120	5	20
Trichlorofluoromethane	50.0	49.0		ug/L		98	54 - 144	1	28
Vinyl acetate	100	96.8		ug/L		97	55 - 161	9	23
Vinyl chloride	50.0	51.6		ug/L		103	67 - 127	1	25
Xylenes, Total	100	97.3		ug/L		97	80 - 120	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

GC/MS VOA

Analysis Batch: 666335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-195717-1	LCRS	Total/NA	Water	8260B	
MB 280-666335/9	Method Blank	Total/NA	Water	8260B	
LCS 280-666335/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-666335/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Client Sample ID: LCRS
Date Collected: 08/22/24 11:20
Date Received: 08/23/24 09:10

Lab Sample ID: 280-195717-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	666335	09/05/24 16:56	TAW	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information

Client Contact: Ms. ~~Tianna Nourot~~ AReves
Company: Waste Management
Address: 10840 Altamont Pass Road
City: Livermore
State, Zip: CA, 94550
Phone:
Email: ~~TNourot@wm.com~~ Aareves1@wm.com
Project Name: 236|Altamont Landfill/236 Event Desc: LCRS for 8260B
Site: California

Sampler: N. Maranhas
Phone:
PWSID:
Due Date Requested:
TAT Requested (days): Per WM
Compliance Project: ∆ Yes ∆ No
PO #: Purchase Order Requested
WO #:
Project #: 28002302
SSOW#:

Lab PM: Collins, Janice S
E-Mail: Janice.Collins@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin:
COC No: 280-142245-39001.1
Page: Page 1 of 1
Job #:

Preservation Codes:
A - HCL
Other:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - (MOD) Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
LCRS	8/22/24	1120	G	Water			X		
~~LCRS~~				Water					
~~LCRS~~				Water					
~~S-140~~ - Dry				Water					
~~S 140~~				Water					
~~S 140~~				Water					

280-195717 Chain of Custody

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☒ *Archive For* Per WM *Months*

Deliverable Requested: I, II, III, IV, Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by:
Date:
Time:
Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
N. Maranhas	8/22	SCS		8/23/24 0910	EETDEN

Custody Seals Intact: ∆ Yes ∆ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.5°c Foil IRTvi

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-195717-1

Login Number: 195717

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

Question	**Answer**	**Comment**
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	Refer to job narrative for details
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	False	Refer to job narrative for details
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

1 2 3 4 5 6 7 8 9 10 11 12 13 14

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Sonam Kaur
Waste Management
10840 Altamont Pass Road
Livermore, California 94550

Generated 12/4/2024 10:30:09 AM

JOB DESCRIPTION

236|Altamont Landfill - LCRS
LCRS for 8260B

JOB NUMBER

280-199842-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Eurofins Denver

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Janice S. Collins

Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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12/4/2024 10:30:09 AM

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Table of Contents

Definitions/Glossary

Client: Waste Management
Project/Site: 236|Altamont Landfill - LCRS

Job ID: 280-199842-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-199842-1 Eurofins Denver

Job Narrative
280-199842-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) lower than Eurofins Environmental Testing standard reporting limits. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 11/20/2024 9:10 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.3°C.

GC/MS VOA
Method 8260B: The method requirement for no headspace was not met. The following volatile sample was analyzed with significant headspace in the sample container(s): LCRS (280-199842-1). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method 8260B: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: LCRS (280-199842-1). The affected sample has a reported pH of 7.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 280-677129 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: (280-199987-B-4 MS) and (280-199987-B-4 MSD).

Method 8260B: The following sample was diluted due to the foamy nature of the sample matrix: LCRS (280-199842-1). Elevated reporting limits (RLs) are provided.

Method 8260B: The following compounds were outside control limits of 35%D in the continuing calibration verification (CCV) associated with batch 280-677129: Bromomethane (-48.3%D). This compound is considered a poor performer and has recovered within LCS/LCSD limits. The following samples are affected: LCRS (280-199842-1) and (CCV 280-677129/2).

Method 8260B: Reporting Limit - Estimated; Outside Calibration Range : The reporting limit provided for the following analyte(s) falls below the laboratory's lowest calibration standard: 1,1,2-Trichloro-1,2,2-trifluoroethane (0.73 ug/L requested RL, 2.0 ug/L lab method RL), 1,2,3-trichloropropane (1.0 ug/L requested RL, 2.50 ug/L lab method RL), 1,2-dibromo-3-chloropropane (1.0 ug/L requested RL, 5.0 ug/L lab method RL), 1,4-dichlorobenzene (0.50 ug/L requested RL, 1.0 ug/L lab method RL), and vinyl chloride (0.50 ug/L requested RL, 1.0 ug/L lab method RL). Results reported below the lowest calibration standard are estimated. The associated sample is impacted: LCRS (280-199842-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Comments

Case Narrative

Client: Waste Management
Project: 236|Altamont Landfill - LCRS

Job ID: 280-199842-1

Job ID: 280-199842-1 (Continued)

Eurofins Denver

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet permit requirements at the request of the client and to report the lowest possible RL for each analyte.

Detection Summary

Client: Waste Management
Job ID: 280-199842-1
Project/Site: 236|Altamont Landfill - LCRS

Client Sample ID: LCRS **Lab Sample ID: 280-199842-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.92		0.75	0.75	ug/L	5		8260B	Total/NA
1,4-Dichlorobenzene	5.0		1.9	1.9	ug/L	5		8260B	Total/NA
2-Butanone (MEK)	43	J	50	23	ug/L	5		8260B	Total/NA
Acetone	110		50	33	ug/L	5		8260B	Total/NA
Carbon disulfide	15		5.0	1.3	ug/L	5		8260B	Total/NA
Ethylbenzene	2.7		0.72	0.72	ug/L	5		8260B	Total/NA
Toluene	2.5		1.6	1.6	ug/L	5		8260B	Total/NA
Xylenes, Total	3.8		0.57	0.57	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Waste Management
Project/Site: 236|Altamont Landfill - LCRS

Job ID: 280-199842-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-199842-1	LCRS	Water	11/19/24 11:30	11/20/24 09:10

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: LCRS
Lab Sample ID: 280-199842-1
Date Collected: 11/19/24 11:30
Matrix: Water
Date Received: 11/20/24 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.78	0.78	ug/L			12/03/24 15:34	5
1,1,1-Trichloroethane	ND		2.0	2.0	ug/L			12/03/24 15:34	5
1,1,2,2-Tetrachloroethane	ND		1.1	1.1	ug/L			12/03/24 15:34	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	3.6	ug/L			12/03/24 15:34	5
1,1,2-Trichloroethane	ND		1.4	1.4	ug/L			12/03/24 15:34	5
1,1-Dichloroethane	ND		1.1	1.1	ug/L			12/03/24 15:34	5
1,1-Dichloroethene	ND		1.2	1.2	ug/L			12/03/24 15:34	5
1,1-Dichloropropene	ND		0.95	0.95	ug/L			12/03/24 15:34	5
1,2,3-Trichlorobenzene	ND		6.0	6.0	ug/L			12/03/24 15:34	5
1,2,3-Trichloropropane	ND		1.4	1.4	ug/L			12/03/24 15:34	5
1,2,4-Trichlorobenzene	ND		2.9	2.9	ug/L			12/03/24 15:34	5
1,2,4-Trimethylbenzene	**0.92**		0.75	0.75	ug/L			12/03/24 15:34	5
1,2-Dibromo-3-Chloropropane	ND		2.1	2.1	ug/L			12/03/24 15:34	5
1,2-Dichlorobenzene	ND		0.72	0.72	ug/L			12/03/24 15:34	5
1,2-Dichloroethane	ND		1.4	1.4	ug/L			12/03/24 15:34	5
1,2-Dichloropropane	ND		1.2	1.2	ug/L			12/03/24 15:34	5
1,3,5-Trimethylbenzene	ND		0.61	0.61	ug/L			12/03/24 15:34	5
1,3-Dichlorobenzene	ND		1.7	1.7	ug/L			12/03/24 15:34	5
1,3-Dichloropropane	ND		1.0	0.87	ug/L			12/03/24 15:34	5
1,4-Dichlorobenzene	**5.0**		1.9	1.9	ug/L			12/03/24 15:34	5
2,2-Dichloropropane	ND		0.84	0.84	ug/L			12/03/24 15:34	5
2-Butanone (MEK)	**43**	**J**	50	23	ug/L			12/03/24 15:34	5
2-Chlorotoluene	ND		1.7	1.7	ug/L			12/03/24 15:34	5
2-Hexanone	ND		50	4.1	ug/L			12/03/24 15:34	5
4-Chlorotoluene	ND		1.1	1.1	ug/L			12/03/24 15:34	5
4-Isopropyltoluene	ND		1.0	0.93	ug/L			12/03/24 15:34	5
4-Methyl-2-pentanone (MIBK)	ND		50	4.9	ug/L			12/03/24 15:34	5
Acetone	**110**		50	33	ug/L			12/03/24 15:34	5
Benzene	ND		0.72	0.72	ug/L			12/03/24 15:34	5
Bromobenzene	ND		1.0	0.95	ug/L			12/03/24 15:34	5
Bromoform	ND		1.2	1.2	ug/L			12/03/24 15:34	5
Bromomethane	ND		12	12	ug/L			12/03/24 15:34	5
Carbon disulfide	**15**		5.0	1.3	ug/L			12/03/24 15:34	5
Carbon tetrachloride	ND		1.1	1.1	ug/L			12/03/24 15:34	5
Chlorobenzene	ND		0.50	0.46	ug/L			12/03/24 15:34	5
Chlorobromomethane	ND		2.0	2.0	ug/L			12/03/24 15:34	5
Chlorodibromomethane	ND		1.4	1.4	ug/L			12/03/24 15:34	5
Chloroethane	ND		3.2	3.2	ug/L			12/03/24 15:34	5
Chloroform	ND		1.8	1.8	ug/L			12/03/24 15:34	5
Chloromethane	ND		1.1	1.1	ug/L			12/03/24 15:34	5
cis-1,2-Dichloroethene	ND		1.6	1.6	ug/L			12/03/24 15:34	5
cis-1,3-Dichloropropene	ND		0.78	0.78	ug/L			12/03/24 15:34	5
Dibromomethane	ND		1.7	1.7	ug/L			12/03/24 15:34	5
Dichlorobromomethane	ND		0.94	0.94	ug/L			12/03/24 15:34	5
Dichlorodifluoromethane	ND		1.5	1.5	ug/L			12/03/24 15:34	5
Ethylbenzene	**2.7**		0.72	0.72	ug/L			12/03/24 15:34	5
Ethylene Dibromide	ND		0.92	0.92	ug/L			12/03/24 15:34	5
Hexachlorobutadiene	ND		2.6	2.6	ug/L			12/03/24 15:34	5
Isopropylbenzene	ND		0.79	0.79	ug/L			12/03/24 15:34	5

Client Sample Results

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LCRS
Date Collected: 11/19/24 11:30
Date Received: 11/20/24 09:10
Lab Sample ID: 280-199842-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.3	1.3	ug/L			12/03/24 15:34	5
Methylene Chloride	ND		5.0	4.7	ug/L			12/03/24 15:34	5
Naphthalene	ND		5.0	5.0	ug/L			12/03/24 15:34	5
n-Butylbenzene	ND		1.2	1.2	ug/L			12/03/24 15:34	5
N-Propylbenzene	ND		1.0	0.92	ug/L			12/03/24 15:34	5
sec-Butylbenzene	ND		1.0	1.0	ug/L			12/03/24 15:34	5
Styrene	ND		0.63	0.63	ug/L			12/03/24 15:34	5
tert-Butylbenzene	ND		1.0	0.89	ug/L			12/03/24 15:34	5
Tetrachloroethene	ND		2.0	2.0	ug/L			12/03/24 15:34	5
Toluene	**2.5**		1.6	1.6	ug/L			12/03/24 15:34	5
trans-1,2-Dichloroethene	ND		1.8	1.8	ug/L			12/03/24 15:34	5
trans-1,3-Dichloropropene	ND		0.72	0.72	ug/L			12/03/24 15:34	5
Trichloroethene	ND		1.5	1.5	ug/L			12/03/24 15:34	5
Trichlorofluoromethane	ND		1.0	0.99	ug/L			12/03/24 15:34	5
Vinyl acetate	ND		10	1.8	ug/L			12/03/24 15:34	5
Vinyl chloride	ND		1.1	1.1	ug/L			12/03/24 15:34	5
Xylenes, Total	**3.8**		0.57	0.57	ug/L			12/03/24 15:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 127*		*12/03/24 15:34*	*5*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*12/03/24 15:34*	*5*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*12/03/24 15:34*	*5*
Toluene-d8 (Surr)	*96*		*80 - 125*		*12/03/24 15:34*	*5*

Surrogate Summary

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	**Client Sample ID**	**(70-127)**	**(78-120)**	**(77-120)**	**(80-125)**
280-199842-1	LCRS	87	95	100	96
280-199987-B-4 MS	Matrix Spike	89	97	102	96
280-199987-B-4 MSD	Matrix Spike Duplicate	87	96	99	94
LCS 280-677129/4	Lab Control Sample	88	96	98	94
LCSD 280-677129/5	Lab Control Sample Dup	89	97	100	97
MB 280-677129/9	Method Blank	89	95	101	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Waste Management
Project/Site: 236|Altamont Landfill - LCRS

Job ID: 280-199842-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-677129/9
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.16	ug/L			12/03/24 09:45	1
1,1,1-Trichloroethane	ND		0.50	0.39	ug/L			12/03/24 09:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/03/24 09:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.73	0.73	ug/L			12/03/24 09:45	1
1,1,2-Trichloroethane	ND		0.50	0.27	ug/L			12/03/24 09:45	1
1,1-Dichloroethane	ND		0.50	0.22	ug/L			12/03/24 09:45	1
1,1-Dichloroethene	ND		0.50	0.23	ug/L			12/03/24 09:45	1
1,1-Dichloropropene	ND		0.50	0.19	ug/L			12/03/24 09:45	1
1,2,3-Trichlorobenzene	ND		1.2	1.2	ug/L			12/03/24 09:45	1
1,2,3-Trichloropropane	ND		1.0	0.28	ug/L			12/03/24 09:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			12/03/24 09:45	1
1,2,4-Trimethylbenzene	ND		0.50	0.15	ug/L			12/03/24 09:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.42	ug/L			12/03/24 09:45	1
1,2-Dichlorobenzene	ND		0.50	0.14	ug/L			12/03/24 09:45	1
1,2-Dichloroethane	ND		0.50	0.28	ug/L			12/03/24 09:45	1
1,2-Dichloropropane	ND		0.50	0.24	ug/L			12/03/24 09:45	1
1,3,5-Trimethylbenzene	ND		0.50	0.12	ug/L			12/03/24 09:45	1
1,3-Dichlorobenzene	ND		0.50	0.33	ug/L			12/03/24 09:45	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			12/03/24 09:45	1
1,4-Dichlorobenzene	ND		0.50	0.39	ug/L			12/03/24 09:45	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			12/03/24 09:45	1
2-Butanone (MEK)	ND		50	4.6	ug/L			12/03/24 09:45	1
2-Chlorotoluene	ND		0.50	0.34	ug/L			12/03/24 09:45	1
2-Hexanone	ND		50	0.81	ug/L			12/03/24 09:45	1
4-Chlorotoluene	ND		0.50	0.21	ug/L			12/03/24 09:45	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			12/03/24 09:45	1
4-Methyl-2-pentanone (MIBK)	ND		50	0.98	ug/L			12/03/24 09:45	1
Acetone	ND		50	6.6	ug/L			12/03/24 09:45	1
Benzene	ND		0.50	0.14	ug/L			12/03/24 09:45	1
Bromobenzene	ND		1.0	0.19	ug/L			12/03/24 09:45	1
Bromoform	ND		1.0	0.25	ug/L			12/03/24 09:45	1
Bromomethane	ND		2.4	2.4	ug/L			12/03/24 09:45	1
Carbon disulfide	ND		5.0	0.26	ug/L			12/03/24 09:45	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			12/03/24 09:45	1
Chlorobenzene	ND		0.50	0.092	ug/L			12/03/24 09:45	1
Chlorobromomethane	ND		1.0	0.40	ug/L			12/03/24 09:45	1
Chlorodibromomethane	ND		0.50	0.28	ug/L			12/03/24 09:45	1
Chloroethane	ND		1.0	0.64	ug/L			12/03/24 09:45	1
Chloroform	ND		1.0	0.36	ug/L			12/03/24 09:45	1
Chloromethane	ND		1.0	0.23	ug/L			12/03/24 09:45	1
cis-1,2-Dichloroethene	ND		0.50	0.32	ug/L			12/03/24 09:45	1
cis-1,3-Dichloropropene	ND		0.50	0.16	ug/L			12/03/24 09:45	1
Dibromomethane	ND		0.50	0.34	ug/L			12/03/24 09:45	1
Dichlorobromomethane	ND		0.50	0.19	ug/L			12/03/24 09:45	1
Dichlorodifluoromethane	ND		0.50	0.30	ug/L			12/03/24 09:45	1
Ethylbenzene	ND		0.50	0.14	ug/L			12/03/24 09:45	1
Ethylene Dibromide	ND		0.50	0.18	ug/L			12/03/24 09:45	1
Hexachlorobutadiene	ND		1.0	0.53	ug/L			12/03/24 09:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-677129/9
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.50	0.16	ug/L			12/03/24 09:45	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			12/03/24 09:45	1
Methylene Chloride	ND		5.0	0.94	ug/L			12/03/24 09:45	1
Naphthalene	ND		1.0	0.99	ug/L			12/03/24 09:45	1
n-Butylbenzene	ND		1.0	0.23	ug/L			12/03/24 09:45	1
N-Propylbenzene	ND		1.0	0.18	ug/L			12/03/24 09:45	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			12/03/24 09:45	1
Styrene	ND		0.50	0.13	ug/L			12/03/24 09:45	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			12/03/24 09:45	1
Tetrachloroethene	ND		0.50	0.40	ug/L			12/03/24 09:45	1
Toluene	ND		0.50	0.32	ug/L			12/03/24 09:45	1
trans-1,2-Dichloroethene	ND		0.50	0.37	ug/L			12/03/24 09:45	1
trans-1,3-Dichloropropene	ND		0.50	0.14	ug/L			12/03/24 09:45	1
Trichloroethene	ND		0.50	0.30	ug/L			12/03/24 09:45	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			12/03/24 09:45	1
Vinyl acetate	ND		10	0.36	ug/L			12/03/24 09:45	1
Vinyl chloride	ND		0.50	0.23	ug/L			12/03/24 09:45	1
Xylenes, Total	ND		0.50	0.11	ug/L			12/03/24 09:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*		*12/03/24 09:45*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*12/03/24 09:45*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*12/03/24 09:45*	*1*
Toluene-d8 (Surr)	*95*		*80 - 125*		*12/03/24 09:45*	*1*

Lab Sample ID: LCS 280-677129/4
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	51.6		ug/L		103	80 - 124
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	80 - 123
1,1,2,2-Tetrachloroethane	50.0	47.9		ug/L		96	74 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.1		ug/L		92	73 - 132
1,1,2-Trichloroethane	50.0	51.5		ug/L		103	80 - 120
1,1-Dichloroethane	50.0	49.0		ug/L		98	78 - 121
1,1-Dichloroethene	50.0	47.5		ug/L		95	77 - 121
1,1-Dichloropropene	50.0	48.0		ug/L		96	77 - 123
1,2,3-Trichlorobenzene	50.0	52.0		ug/L		104	65 - 129
1,2,3-Trichloropropane	50.0	48.6		ug/L		97	80 - 120
1,2,4-Trichlorobenzene	50.0	53.3		ug/L		107	74 - 126
1,2,4-Trimethylbenzene	50.0	49.2		ug/L		98	79 - 124
1,2-Dibromo-3-Chloropropane	50.0	54.4		ug/L		109	73 - 128
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	80 - 120
1,2-Dichloroethane	50.0	44.1		ug/L		88	71 - 121
1,2-Dichloropropane	50.0	48.5		ug/L		97	78 - 120
1,3,5-Trimethylbenzene	50.0	49.0		ug/L		98	80 - 122
1,3-Dichlorobenzene	50.0	47.4		ug/L		95	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-677129/4
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichloropropane	50.0	47.9		ug/L		96	77 - 122
1,4-Dichlorobenzene	50.0	48.1		ug/L		96	80 - 120
2,2-Dichloropropane	50.0	52.3		ug/L		105	75 - 131
2-Butanone (MEK)	200	208		ug/L		104	58 - 135
2-Chlorotoluene	50.0	49.0		ug/L		98	80 - 120
2-Hexanone	200	196		ug/L		98	62 - 137
4-Chlorotoluene	50.0	49.3		ug/L		99	80 - 120
4-Isopropyltoluene	50.0	50.3		ug/L		101	80 - 122
4-Methyl-2-pentanone (MIBK)	200	208		ug/L		104	66 - 135
Acetone	200	191		ug/L		95	61 - 134
Benzene	50.0	49.8		ug/L		100	80 - 120
Bromobenzene	50.0	49.1		ug/L		98	80 - 120
Bromoform	50.0	54.8		ug/L		110	79 - 138
Bromomethane	50.0	25.9		ug/L		52	29 - 148
Carbon disulfide	50.0	47.6		ug/L		95	70 - 121
Carbon tetrachloride	50.0	50.6		ug/L		101	79 - 127
Chlorobenzene	50.0	46.9		ug/L		94	80 - 120
Chlorobromomethane	50.0	48.9		ug/L		98	80 - 123
Chlorodibromomethane	50.0	52.4		ug/L		105	80 - 125
Chloroethane	50.0	52.5		ug/L		105	56 - 141
Chloroform	50.0	47.8		ug/L		96	80 - 120
Chloromethane	50.0	45.4		ug/L		91	56 - 133
cis-1,2-Dichloroethene	50.0	50.1		ug/L		100	80 - 120
cis-1,3-Dichloropropene	50.0	47.1		ug/L		94	76 - 129
Dibromomethane	50.0	46.5		ug/L		93	80 - 120
Dichlorobromomethane	50.0	48.6		ug/L		97	80 - 123
Dichlorodifluoromethane	50.0	44.1		ug/L		88	47 - 135
Ethylbenzene	50.0	48.6		ug/L		97	80 - 120
Ethylene Dibromide	50.0	46.9		ug/L		94	80 - 120
Hexachlorobutadiene	50.0	52.1		ug/L		104	73 - 128
Isopropylbenzene	50.0	49.3		ug/L		99	78 - 122
Methyl tert-butyl ether	50.0	50.3		ug/L		101	80 - 120
Methylene Chloride	50.0	47.8		ug/L		96	78 - 120
Naphthalene	50.0	52.8		ug/L		106	60 - 124
n-Butylbenzene	50.0	48.5		ug/L		97	59 - 140
N-Propylbenzene	50.0	49.9		ug/L		100	80 - 123
sec-Butylbenzene	50.0	50.5		ug/L		101	80 - 123
Styrene	50.0	49.9		ug/L		100	80 - 120
tert-Butylbenzene	50.0	49.9		ug/L		100	80 - 120
Tetrachloroethene	50.0	48.4		ug/L		97	80 - 121
Toluene	50.0	51.1		ug/L		102	80 - 120
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	79 - 121
trans-1,3-Dichloropropene	50.0	49.8		ug/L		100	80 - 123
Trichloroethene	50.0	51.3		ug/L		103	80 - 120
Trichlorofluoromethane	50.0	49.9		ug/L		100	54 - 144
Vinyl acetate	100	139		ug/L		139	55 - 161
Vinyl chloride	50.0	52.7		ug/L		105	67 - 127
Xylenes, Total	100	96.3		ug/L		96	80 - 120

QC Sample Results

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-677129/4
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*94*		*80 - 125*

Lab Sample ID: LCSD 280-677129/5
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/L		104	80 - 124	0	20
1,1,1-Trichloroethane	50.0	49.6		ug/L		99	80 - 123	2	20
1,1,2,2-Tetrachloroethane	50.0	47.8		ug/L		96	74 - 123	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.3		ug/L		91	73 - 132	2	23
1,1,2-Trichloroethane	50.0	50.9		ug/L		102	80 - 120	1	20
1,1-Dichloroethane	50.0	48.2		ug/L		96	78 - 121	1	20
1,1-Dichloroethene	50.0	46.1		ug/L		92	77 - 121	3	21
1,1-Dichloropropene	50.0	46.9		ug/L		94	77 - 123	2	20
1,2,3-Trichlorobenzene	50.0	52.1		ug/L		104	65 - 129	0	20
1,2,3-Trichloropropane	50.0	48.6		ug/L		97	80 - 120	0	20
1,2,4-Trichlorobenzene	50.0	52.1		ug/L		104	74 - 126	2	20
1,2,4-Trimethylbenzene	50.0	47.5		ug/L		95	79 - 124	3	20
1,2-Dibromo-3-Chloropropane	50.0	54.0		ug/L		108	73 - 128	1	21
1,2-Dichlorobenzene	50.0	47.2		ug/L		94	80 - 120	4	20
1,2-Dichloroethane	50.0	42.4		ug/L		85	71 - 121	4	20
1,2-Dichloropropane	50.0	48.2		ug/L		96	78 - 120	1	20
1,3,5-Trimethylbenzene	50.0	47.6		ug/L		95	80 - 122	3	20
1,3-Dichlorobenzene	50.0	46.6		ug/L		93	80 - 120	2	20
1,3-Dichloropropane	50.0	48.5		ug/L		97	77 - 122	1	20
1,4-Dichlorobenzene	50.0	47.0		ug/L		94	80 - 120	2	20
2,2-Dichloropropane	50.0	50.5		ug/L		101	75 - 131	3	22
2-Butanone (MEK)	200	204		ug/L		102	58 - 135	2	20
2-Chlorotoluene	50.0	47.5		ug/L		95	80 - 120	3	20
2-Hexanone	200	197		ug/L		99	62 - 137	1	21
4-Chlorotoluene	50.0	48.3		ug/L		97	80 - 120	2	20
4-Isopropyltoluene	50.0	49.1		ug/L		98	80 - 122	2	20
4-Methyl-2-pentanone (MIBK)	200	205		ug/L		102	66 - 135	1	20
Acetone	200	183		ug/L		91	61 - 134	4	21
Benzene	50.0	48.6		ug/L		97	80 - 120	3	20
Bromobenzene	50.0	46.9		ug/L		94	80 - 120	5	20
Bromoform	50.0	56.3		ug/L		113	79 - 138	3	20
Bromomethane	50.0	28.6		ug/L		57	29 - 148	10	40
Carbon disulfide	50.0	46.5		ug/L		93	70 - 121	2	20
Carbon tetrachloride	50.0	50.0		ug/L		100	79 - 127	1	20
Chlorobenzene	50.0	47.4		ug/L		95	80 - 120	1	20
Chlorobromomethane	50.0	48.2		ug/L		96	80 - 123	1	20
Chlorodibromomethane	50.0	52.3		ug/L		105	80 - 125	0	20
Chloroethane	50.0	52.3		ug/L		105	56 - 141	0	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-677129/5
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroform			50.0	47.8		ug/L		96	80 - 120	0	20
Chloromethane			50.0	45.0		ug/L		90	56 - 133	1	20
cis-1,2-Dichloroethene			50.0	49.3		ug/L		99	80 - 120	2	20
cis-1,3-Dichloropropene			50.0	47.8		ug/L		96	76 - 129	1	20
Dibromomethane			50.0	46.7		ug/L		93	80 - 120	0	20
Dichlorobromomethane			50.0	47.8		ug/L		96	80 - 123	2	20
Dichlorodifluoromethane			50.0	44.0		ug/L		88	47 - 135	0	21
Ethylbenzene			50.0	48.8		ug/L		98	80 - 120	0	20
Ethylene Dibromide			50.0	47.0		ug/L		94	80 - 120	0	20
Hexachlorobutadiene			50.0	50.6		ug/L		101	73 - 128	3	20
Isopropylbenzene			50.0	48.9		ug/L		98	78 - 122	1	20
Methyl tert-butyl ether			50.0	49.4		ug/L		99	80 - 120	2	20
Methylene Chloride			50.0	47.2		ug/L		94	78 - 120	1	20
Naphthalene			50.0	53.5		ug/L		107	60 - 124	1	21
n-Butylbenzene			50.0	46.9		ug/L		94	59 - 140	3	20
N-Propylbenzene			50.0	48.9		ug/L		98	80 - 123	2	20
sec-Butylbenzene			50.0	48.9		ug/L		98	80 - 123	3	20
Styrene			50.0	49.9		ug/L		100	80 - 120	0	20
tert-Butylbenzene			50.0	48.5		ug/L		97	80 - 120	3	20
Tetrachloroethene			50.0	48.9		ug/L		98	80 - 121	1	20
Toluene			50.0	50.0		ug/L		100	80 - 120	2	20
trans-1,2-Dichloroethene			50.0	48.6		ug/L		97	79 - 121	3	20
trans-1,3-Dichloropropene			50.0	49.6		ug/L		99	80 - 123	0	20
Trichloroethene			50.0	50.6		ug/L		101	80 - 120	1	20
Trichlorofluoromethane			50.0	48.5		ug/L		97	54 - 144	3	28
Vinyl acetate			100	138		ug/L		138	55 - 161	1	23
Vinyl chloride			50.0	52.4		ug/L		105	67 - 127	1	25
Xylenes, Total			100	96.0		ug/L		96	80 - 120	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

Lab Sample ID: 280-199987-B-4 MS
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane	ND		25.0	24.4		ug/L		98	80 - 124		
1,1,1-Trichloroethane	0.53		25.0	24.2		ug/L		95	80 - 123		
1,1,2,2-Tetrachloroethane	ND		25.0	23.4		ug/L		94	74 - 123		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	21.9		ug/L		88	73 - 132		
1,1,2-Trichloroethane	ND		25.0	24.7		ug/L		99	80 - 120		
1,1-Dichloroethane	2.4		25.0	26.2		ug/L		95	78 - 121		
1,1-Dichloroethene	3.4		25.0	25.2		ug/L		87	77 - 121		
1,1-Dichloropropene	ND		25.0	22.4		ug/L		90	77 - 123		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-199987-B-4 MS
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	ND		25.0	25.2		ug/L		101	65 - 129
1,2,3-Trichloropropane	ND		25.0	24.5		ug/L		98	80 - 120
1,2,4-Trichlorobenzene	ND		25.0	24.9		ug/L		100	74 - 126
1,2,4-Trimethylbenzene	ND		25.0	23.5		ug/L		94	79 - 124
1,2-Dibromo-3-Chloropropane	ND		25.0	24.1		ug/L		96	73 - 128
1,2-Dichlorobenzene	ND		25.0	23.1		ug/L		92	80 - 120
1,2-Dichloroethane	ND		25.0	21.0		ug/L		84	71 - 121
1,2-Dichloropropane	ND		25.0	23.6		ug/L		95	78 - 120
1,3,5-Trimethylbenzene	ND		25.0	23.1		ug/L		92	80 - 122
1,3-Dichlorobenzene	ND		25.0	22.7		ug/L		91	80 - 120
1,3-Dichloropropane	ND		25.0	23.6		ug/L		94	77 - 122
1,4-Dichlorobenzene	ND		25.0	22.8		ug/L		91	80 - 120
2,2-Dichloropropane	ND		25.0	20.4		ug/L		82	75 - 131
2-Butanone (MEK)	ND		100	99.6		ug/L		100	58 - 135
2-Chlorotoluene	ND		25.0	23.6		ug/L		94	80 - 120
2-Hexanone	ND		100	92.6		ug/L		93	62 - 137
4-Chlorotoluene	ND		25.0	24.0		ug/L		96	80 - 120
4-Isopropyltoluene	ND		25.0	23.1		ug/L		92	80 - 122
4-Methyl-2-pentanone (MIBK)	ND		100	97.2		ug/L		97	66 - 135
Acetone	ND		100	88.7		ug/L		89	61 - 134
Benzene	ND		25.0	25.2		ug/L		101	80 - 120
Bromobenzene	ND		25.0	23.1		ug/L		92	80 - 120
Bromoform	ND		25.0	24.9		ug/L		100	79 - 138
Bromomethane	ND		25.0	8.32		ug/L		33	29 - 148
Carbon disulfide	ND		25.0	22.7		ug/L		91	70 - 121
Carbon tetrachloride	ND		25.0	23.4		ug/L		94	79 - 127
Chlorobenzene	ND		25.0	22.9		ug/L		92	80 - 120
Chlorobromomethane	ND		25.0	25.0		ug/L		100	80 - 123
Chlorodibromomethane	ND		25.0	24.1		ug/L		96	80 - 125
Chloroethane	ND		25.0	24.8		ug/L		99	56 - 141
Chloroform	ND		25.0	23.5		ug/L		94	80 - 120
Chloromethane	ND		25.0	20.9		ug/L		84	56 - 133
cis-1,2-Dichloroethene	110		25.0	115	4	ug/L		27	80 - 120
cis-1,3-Dichloropropene	ND		25.0	21.8		ug/L		87	76 - 129
Dibromomethane	ND		25.0	22.6		ug/L		90	80 - 120
Dichlorobromomethane	ND		25.0	23.2		ug/L		93	80 - 123
Dichlorodifluoromethane	ND		25.0	20.1		ug/L		81	47 - 135
Ethylbenzene	ND		25.0	23.9		ug/L		96	80 - 120
Ethylene Dibromide	ND		25.0	23.0		ug/L		92	80 - 120
Hexachlorobutadiene	ND		25.0	22.4		ug/L		90	73 - 128
Isopropylbenzene	ND		25.0	23.4		ug/L		94	78 - 122
Methyl tert-butyl ether	ND		25.0	24.5		ug/L		98	80 - 120
Methylene Chloride	ND		25.0	23.4		ug/L		94	78 - 120
Naphthalene	ND		25.0	26.0		ug/L		104	60 - 124
n-Butylbenzene	ND		25.0	21.4		ug/L		86	59 - 140
N-Propylbenzene	ND		25.0	23.7		ug/L		95	80 - 123
sec-Butylbenzene	ND		25.0	23.0		ug/L		92	80 - 123
Styrene	ND		25.0	23.7		ug/L		95	80 - 120
tert-Butylbenzene	ND		25.0	23.4		ug/L		94	80 - 120

QC Sample Results

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-199987-B-4 MS
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	72	F1	25.0	78.7	F1	ug/L		27	80 - 121
Toluene	ND		25.0	25.8		ug/L		103	80 - 120
trans-1,2-Dichloroethene	2.0		25.0	25.5		ug/L		94	79 - 121
trans-1,3-Dichloropropene	ND		25.0	22.8		ug/L		91	80 - 123
Trichloroethene	25	F1	25.0	44.2	F1	ug/L		77	80 - 120
Trichlorofluoromethane	ND		25.0	21.1		ug/L		84	54 - 144
Vinyl acetate	ND		50.0	62.3		ug/L		125	55 - 161
Vinyl chloride	ND		25.0	24.4		ug/L		98	67 - 127
Xylenes, Total	ND		50.0	48.0		ug/L		96	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 120*
Toluene-d8 (Surr)	*96*		*80 - 125*

Lab Sample ID: 280-199987-B-4 MSD
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	24.6		ug/L		99	80 - 124	1	20
1,1,1-Trichloroethane	0.53		25.0	25.5		ug/L		100	80 - 123	5	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.8		ug/L		91	74 - 123	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	22.9		ug/L		92	73 - 132	4	23
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	80 - 120	0	20
1,1-Dichloroethane	2.4		25.0	26.4		ug/L		96	78 - 121	1	20
1,1-Dichloroethene	3.4		25.0	25.7		ug/L		89	77 - 121	2	21
1,1-Dichloropropene	ND		25.0	23.4		ug/L		94	77 - 123	4	20
1,2,3-Trichlorobenzene	ND		25.0	25.4		ug/L		102	65 - 129	1	20
1,2,3-Trichloropropane	ND		25.0	23.3		ug/L		93	80 - 120	5	20
1,2,4-Trichlorobenzene	ND		25.0	25.2		ug/L		101	74 - 126	1	20
1,2,4-Trimethylbenzene	ND		25.0	23.6		ug/L		94	79 - 124	0	20
1,2-Dibromo-3-Chloropropane	ND		25.0	24.1		ug/L		96	73 - 128	0	21
1,2-Dichlorobenzene	ND		25.0	23.5		ug/L		94	80 - 120	2	20
1,2-Dichloroethane	ND		25.0	21.5		ug/L		86	71 - 121	2	20
1,2-Dichloropropane	ND		25.0	24.1		ug/L		96	78 - 120	2	20
1,3,5-Trimethylbenzene	ND		25.0	23.2		ug/L		93	80 - 122	0	20
1,3-Dichlorobenzene	ND		25.0	22.8		ug/L		91	80 - 120	1	20
1,3-Dichloropropane	ND		25.0	23.3		ug/L		93	77 - 122	1	20
1,4-Dichlorobenzene	ND		25.0	23.1		ug/L		92	80 - 120	1	20
2,2-Dichloropropane	ND		25.0	20.5		ug/L		82	75 - 131	0	22
2-Butanone (MEK)	ND		100	95.4		ug/L		95	58 - 135	4	20
2-Chlorotoluene	ND		25.0	23.5		ug/L		94	80 - 120	1	20
2-Hexanone	ND		100	88.8		ug/L		89	62 - 137	4	21
4-Chlorotoluene	ND		25.0	24.0		ug/L		96	80 - 120	0	20
4-Isopropyltoluene	ND		25.0	23.0		ug/L		92	80 - 122	0	20
4-Methyl-2-pentanone (MIBK)	ND		100	95.5		ug/L		96	66 - 135	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-199987-B-4 MSD
Matrix: Water
Analysis Batch: 677129

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		100	87.2		ug/L		87	61 - 134	2	21
Benzene	ND		25.0	24.6		ug/L		98	80 - 120	2	20
Bromobenzene	ND		25.0	23.7		ug/L		95	80 - 120	3	20
Bromoform	ND		25.0	25.0		ug/L		100	79 - 138	0	20
Bromomethane	ND		25.0	11.4		ug/L		45	29 - 148	31	40
Carbon disulfide	ND		25.0	23.1		ug/L		93	70 - 121	2	20
Carbon tetrachloride	ND		25.0	24.2		ug/L		97	79 - 127	3	20
Chlorobenzene	ND		25.0	23.3		ug/L		93	80 - 120	2	20
Chlorobromomethane	ND		25.0	24.8		ug/L		99	80 - 123	1	20
Chlorodibromomethane	ND		25.0	24.7		ug/L		99	80 - 125	2	20
Chloroethane	ND		25.0	25.4		ug/L		102	56 - 141	2	30
Chloroform	ND		25.0	24.0		ug/L		96	80 - 120	2	20
Chloromethane	ND		25.0	22.1		ug/L		88	56 - 133	5	20
cis-1,2-Dichloroethene	110		25.0	116	4	ug/L		32	80 - 120	1	20
cis-1,3-Dichloropropene	ND		25.0	21.8		ug/L		87	76 - 129	0	20
Dibromomethane	ND		25.0	22.3		ug/L		89	80 - 120	1	20
Dichlorobromomethane	ND		25.0	23.7		ug/L		95	80 - 123	2	20
Dichlorodifluoromethane	ND		25.0	20.9		ug/L		84	47 - 135	4	21
Ethylbenzene	ND		25.0	23.6		ug/L		94	80 - 120	1	20
Ethylene Dibromide	ND		25.0	22.2		ug/L		89	80 - 120	3	20
Hexachlorobutadiene	ND		25.0	22.6		ug/L		91	73 - 128	1	20
Isopropylbenzene	ND		25.0	23.9		ug/L		96	78 - 122	2	20
Methyl tert-butyl ether	ND		25.0	24.3		ug/L		97	80 - 120	1	20
Methylene Chloride	ND		25.0	23.7		ug/L		95	78 - 120	1	20
Naphthalene	ND		25.0	25.9		ug/L		104	60 - 124	1	21
n-Butylbenzene	ND		25.0	21.5		ug/L		86	59 - 140	1	20
N-Propylbenzene	ND		25.0	23.6		ug/L		94	80 - 123	0	20
sec-Butylbenzene	ND		25.0	23.6		ug/L		94	80 - 123	2	20
Styrene	ND		25.0	23.3		ug/L		93	80 - 120	2	20
tert-Butylbenzene	ND		25.0	23.7		ug/L		95	80 - 120	1	20
Tetrachloroethene	72	F1	25.0	78.3	F1	ug/L		25	80 - 121	1	20
Toluene	ND		25.0	25.2		ug/L		101	80 - 120	2	20
trans-1,2-Dichloroethene	2.0		25.0	25.6		ug/L		94	79 - 121	0	20
trans-1,3-Dichloropropene	ND		25.0	22.9		ug/L		92	80 - 123	0	20
Trichloroethene	25	F1	25.0	45.2		ug/L		81	80 - 120	2	20
Trichlorofluoromethane	ND		25.0	23.5		ug/L		94	54 - 144	11	28
Vinyl acetate	ND		50.0	62.1		ug/L		124	55 - 161	0	23
Vinyl chloride	ND		25.0	25.6		ug/L		102	67 - 127	5	25
Xylenes, Total	ND		50.0	47.0		ug/L		94	80 - 120	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*94*		*80 - 125*

QC Association Summary

GC/MS VOA

Analysis Batch: 677129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-199842-1	LCRS	Total/NA	Water	8260B	
MB 280-677129/9	Method Blank	Total/NA	Water	8260B	
LCS 280-677129/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-677129/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-199987-B-4 MS	Matrix Spike	Total/NA	Water	8260B	
280-199987-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Client Sample ID: LCRS

Date Collected: 11/19/24 11:30
Date Received: 11/20/24 09:10

Lab Sample ID: 280-199842-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	677129	12/03/24 15:34	MD	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: N Maranhas	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124596-26740.2
Client Contact: Tina Schmiesing	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page:
Company: SCS Engineers	PWSID:			Job #:

Address: 3900 Kilroy Airport Way Suite 100
City: Long Beach
State, Zip: CA, 90806
Phone:
Email: tschmiesing@scsengineers.com
Project Name: 236|Altamont Landfill
Site: California

Due Date Requested:
TAT Requested (days): Per WM
Compliance Project: Δ Yes Δ No
PO #:
WO #: 28002302- 'LCRS Fe- 8260B'
Project #: 28002302~~- SW Basin Water and Spring (WDR)~~
SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Y - Trizma
	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- VOCs	TDS/Alks/Cl/SO4/NO3(IC)	6010B- Total Metals	8011- EDB/DBCP	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	D	R		
~~S-140~~ = DRY												~~Short Hold: NO3(IC)~~
LCRS	11/19/20	1130	G	W			X					

280-199842 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For Per WM Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: N. Maranhas	Date/Time: 11/19/24	Company SCS	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11-20-24 0910	Company EETDEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.1°C PABUCFO-2

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-199842-1

Login Number: 199842
List Number: 1
Creator: Rystrom, Joshua R

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

APPENDIX Y
SOURCE TEST SUMMARY RESULTS

Waste Management of Alameda County, Inc.
Altamont Landfill & Resource Recovery Facility

BAAQMD Facility #2066

Annual Compliance Emissions Test Report #23411
Two – Landfill Gas Turbines (S-6 and S-7)

Located at:
Waste Management of Alameda County, Inc.
Altamont Landfill
10840 Altamont Pass Road
Livermore, CA 94551

Prepared for:
SCS Engineers
3117 Fite Circle Suite 108
Sacramento, CA 95827
Attn: Maria Bowen
mbowen@scsengineers.com

For Submittal to:
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Gloria Espena and Marco Hernandez
gespena@baaqmd.gov/mhernandez@baaqmd.gov
sourcetest@baaqmd.gov

Testing Performed on:
December 6, 2023

Final Report Submitted on:
February 2, 2024

Performed and Reported by:
Blue Sky Environmental, Inc.
2273 Lobert Street
Castro Valley, CA 94546
bluesky@blueskyenvironmental.com
Office (510) 525-1261 / Cell (810) 923-3181

REVIEW AND CERTIFICATION

Team Leader:

The work performed herein was conducted under my supervision, and I certify that:

a) the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program,

b) that the sampling and analytical procedures and data presented in the report are authentic and accurate,

c) that all testing details and conclusions are accurate and valid, and

d) that the production rate and/or heat input rate during the source test are reported accurately.

If this report is submitted for compliance purposes it should only be reproduced in its entirety. If there are any questions concerning this report, please contact me at (810) 923-3181.

Jeramie Richardson
Project Manager
Blue Sky Environmental, Inc.

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SECTION 1. INTRODUCTION

1.1. Summary

Blue Sky Environmental, Inc. was contracted by SCS Engineers to perform emissions testing for Waste Management of Alameda County, Inc. (WMAC), at the Altamont Landfill & Resource Recovery Facility (ALRRF) in Livermore, California. Testing was conducted to demonstrate that Landfill Gas Turbines S-6 and S-7 are operating in compliance with condition 18773 of the Bay Area Air Quality Management District (BAAQMD) permit to operate for Facility #2066.

Results of the test program are presented in this report. The source test information is summarized in Table 1-1. Test results derived from the source test are summarized in Tables 1-2 and 1-3. Results for individual test runs are included in Appendix A. The turbines met all compliance emission criteria.

Table 1-1 Source Test Information

Test Location:	Altamont Landfill and Resource Recovery Facility 10840 Altamont Pass Road, Livermore, CA 94551
Source Contact:	Maria Bowen, SCS Engineers (619) 455-9518
Source Tested:	Turbine S-6 – 3,950 hp Solar Centaur, Model T-4500 landfill gas-fired turbine Turbine S-7 – 3,950 hp Solar Centaur, Model T-4500 landfill gas-fired turbine
Source Test Date:	December 6, 2023
Test Objective:	Determine compliance with condition 18773 of the Bay Area Air Quality Management District (BAAQMD) permit to operate for Plant #2066
Test Performed by:	Blue Sky Environmental, Inc 2273 Lobert Street, Castro Valley, CA 94546 Jeramie Richardson (810) 923-3181 jrichardson@blueskyenvironmental.com
Test Parameters:	Landfill Gas Fuel Analysis O_2, N_2, CO_2, Btu, THC, CH_4, NMOC, HHV, F-Factor, sulfur & volumetric flow rate Turbine Emissions THC, CH_4, NMOC, NO_X, CO, O_2, SO_2 & volumetric flow rate

Table 1-2
Emissions Summary
Turbine S-6

Emission Parameter	Average Test Results	Permit Limits (Regulation Limit)	Compliance Status
Heat Input (fuel), MMBtu/day	996	1,378	In Compliance
Combustion Temperature, °F	1,168	--	--
NO$_X$, lb/MMBtu	0.0999	0.1567	In Compliance
NO$_X$, ppmvd @ 15% O$_2$	25.1	42	In Compliance
NO$_X$, lb/MW-hr	1.35	2.34	In Compliance
CO, lb/MMBtu	0.106	0.2229	In Compliance
NMOC, ppmvd @ 3% O$_2$	4.6	120 or >98%	In Compliance
NMOC Removal Efficiency, %	>99.37		
CH$_4$ Removal Efficiency, %	>99.95	>99%	In Compliance
TRS in Fuel, ppmv as H$_2$S	56.7	150	In Compliance
SO$_2$, ppmvd	2.61	300	In Compliance

Table 1-3
Emissions Summary
Turbine S-7

Emission Parameter	Average Test Results	Permit Limits (Regulation Limit)	Compliance Status
Heat Input (fuel), MMBtu/day	1,027	1,378	In Compliance
Combustion Temperature, °F	1,170	--	--
NO$_X$, lb/MMBtu	0.0970	0.1567	In Compliance
NO$_X$, ppmvd @ 15% O$_2$	24.2	42	In Compliance
NO$_X$, lb/MW-hr	1.35	2.34	In Compliance
CO, lb/MMBtu	0.093	0.2229	In Compliance
NMOC, ppmvd @ 3% O$_2$	<4.2	120 or >98%	In Compliance
NMOC Removal Efficiency, %	>99.30		
CH$_4$ Removal Efficiency, %	>99.95	>99%	In Compliance
TRS in Fuel, ppmv as H$_2$S	85.3	150	In Compliance
SO$_2$, ppmvd	3.87	300	In Compliance

SECTION 2. SOURCE TEST PROGRAM

2.1. Overview

This annual source test was performed to demonstrate that landfill gas turbines S-6 and S-7 are operating in accordance with the Bay Area Air Quality Management District (BAAQMD) permit to operate (PTO) for Plant #2066, condition 18773.

2.2. Pollutants Tested

The following U.S. Environmental Protection Agency (EPA), Bay Area Air Quality Management District (BAAQMD) and ASTM International sampling and analytical methods were used:

EPA Method 1	Sample and Traverse Point Determination
EPA Method 3A	O_2 and CO_2, Stack Gas Molecular Weight
EPA Method 10	CO
EPA Method 7E	NO_X and NO_2 Converter Check
EPA Method 4	Moisture Calculation
EPA Method 19	Flow Rate Calculation, DSCFM
EPA Method 25C	Analysis of landfill gas for TNMHC (NMOC)
EPA Method 25A	THC Emissions
EPA Method 18	THC/CH_4/NMHC Emissions
ASTM D-1945/3588	Fuel Analysis for BTU, F-Factors & Fixed Gases
ASTM D-5504	Sulfur Species, Hydrogen Sulfide (H_2S) and TRS

2.3. Test Date(s)

Testing was conducted on December 6, 2023.

2.4. Sampling and Observing Personnel

Testing was performed by Jeramie Richardson representing Blue Sky Environmental, Inc.

John Silva of SCS Engineers and Larry LaCerra of Waste Management were present to oversee turbine operations and assist in coordinating testing and the collection of process data to verify the accuracy of digitally recorded data collected during testing.

BAAQMD was notified of the scheduled source test in a Source Test Protocol submitted by SCS Engineering on behalf of Waste Management, on November 3, 2023. A Source Test Protocol acknowledgement was received on November 3, 2023 (NST-8878 (S-6) and NST-8879 (S-7)). No agency observers from the District were present during the test program. A copy of the source test protocol and email correspondence are provided in Appendix I.

2.5. Source/Process Description

The Altamont Landfill and Resource Recovery Facility operates two identical Solar Centaur T-4500 landfill gas-fired turbines at their site in Livermore, California. The turbines are each rated for 3,300 Kilowatts. Emissions vent through mufflers on the outside of the building and through 47-inch diameter stacks. The turbines were previously equipped with fogging systems; however, they have not been used during turbine operation in recent history. The fogging systems are not required for compliance.

2.6. Source Operating Conditions

The turbines were operated on landfill gas under normal operating conditions during testing. The normal operating range is approximately 80 – 100% load. Turbine S-6 was operated at 93.1% of rated kilowatt output and Turbine S-7 was operated at 93.1% of rated kilowatt output during the test period.

The average exhaust temperature at the normal operating condition was 1,168 °F for Turbine S-6 and 1,170 °F for Turbine S-7. The operating kilowatt, exhaust temperature, and flow records are provided in Appendix F.

The fuel volumetric flow rate was continuously measured and recorded by the facility at two-minute intervals in accordance with 40 CFR 60.756(b)(2), BAAQMD Regulation 8-34-508, and permit condition 18773 Part 11.

Landfill gas samples collected at the header of Turbine S-6 showed an average methane content of 47.5% and an oxygen range of 1.7 to 2.8%. Samples collected at the header of Turbine S-7 showed an average methane content of 46.7 % and an oxygen range of 1.3 to 1.5%.

SECTION 3. SAMPLING AND ANALYSIS PROCEDURES

3.1. Port Location

Sampling was conducted at the 47-inch diameter ID exhaust stack of each turbine through ports that were accessed with a 40-foot boom lift. The two two-inch ports on each turbine were located 25-feet above grade, approximately three stack diameters downstream from the muffler and approximately 0.75 stack diameters upstream from the exhaust.

3.2. Point Description/Labeling – Ports/Stack

Blue Sky Environmental conducted two perpendicular eight-point traverses of each turbine exhaust stack to check for the presence of cyclonic flow. O_2 stratification was less than 10%; therefore, subsequent CEM sampling was conducted using an average representative point in the stack.

3.3. Sample Train Description

Sampling system diagrams are provided in Appendix H. Additional descriptive information is included in the following section.

3.4. Sampling Procedure Description

Three consecutive thirty-minute gaseous emissions tests were performed for oxides of nitrogen (NOx), nitrogen oxide (NO), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2), and total hydrocarbons (THC) at each turbine exhaust stack. The sampling system was checked for leaks before the start of the testing, by plugging the sample probe and observing the sample rotameter flow drop to zero. Instrument linearity and system bias were checked. The system response time for each analyzer was recorded. The temperatures of the heated sample line between the probe and sample conditioner/condenser, and the condenser exhaust temperatures were maintained within limits during each test run.

Analyzer external calibrations were performed before and after each run using EPA protocol certified gas standards. Calibration gases were introduced to the sample manifold at the same flow rate as the sample. Any drift or bias was corrected using equation 100-3 from CARB Method 100. A NO_X analyzer converter efficiency check was performed before the first test run and achieved an efficiency greater than 90%.

Concurrent with the exhaust sampling, Blue Sky Environmental collected a total of six fuel samples (three from each unit) for %CH_4, %CO_2, %N2, BTU and F-factor by ASTM D-1945, C_1 to C_{6+} hydrocarbons by EPA Method 25C, and sulfur compounds using method ASTM D-5504. The samples were collected in 6-liter SUMMA cannisters and analyzed by Atmospheric Analysis & Consulting, Inc (AAC) in Ventura, California. Laboratory test results are provided in Appendix C.

Exhaust flow rates were calculated from fuel analysis. Fuel flow rates were determined from a dedicated fuel meter and stack O_2 values.

The sampling and analysis methods are summarized below:

EPA Method 1 – Sample and Velocity Traverses for Stationary Sources
This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements.

EPA Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. A small portion of the sample is passed through a fuel cell type paramagnetic oxygen analyzer which measures the electrical current generated by the oxidation reaction at the gas/fuel cell interface. Carbon dioxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon dioxide absorbs infrared radiation.

EPA Method 7E – Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure nitrogen oxides in stationary source emissions using a continuous instrumental analyzer. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Nitric oxide is determined by passing the sample through a chemiluminescent analyzer. The chemiluminescent process is based on the light given off when nitric oxide and ozone react. Nitrogen dioxide (NO_2) concentrations are determined by passing the sample through a catalyst which reduces the NO_2 to NO. The total oxides of nitrogen concentration (NO_2 + NO) is then determined by chemiluminescence.

Section 16.2.2 of the method is used to determine the NO_X analyzer NO_2 to NO conversion efficiency.

EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources

This method is used to measure carbon monoxide from integrated or continuous gas samples extracted from a sampling point. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Carbon monoxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon monoxide absorbs infrared radiation.

EPA Methods 3A, 7E and 10 are all continuous monitoring techniques using instrumental analyzers. Sampling is performed by extracting exhaust flue gas from the stack, conditioning the sample, and analyzing it by continuous monitoring gas analyzers in a continuing emissions monitoring (CEM) test van. The sampling system consists of a stainless-steel sample probe, Teflon sample line, glass-fiber particulate filter, and glass moisture-knockout condensers in ice, followed by thermoelectric coolers (optional), Teflon sample transfer tubing, a diaphragm pump, and a stainless steel/Teflon manifold and flow control/delivery system. A constant sample and calibration gas supply pressure of 5 PSI is provided to each analyzer to avoid pressure variable response differences. The entire sampling system is leak checked prior to and at the end of the sampling program.

The sampling and analytical system is checked for linearity with zero, mid (40-60%) and high span (80-100%) calibrations and is checked for system bias at the beginning and end of each run. System bias is determined by introducing calibration gas to the probe and pulling it through the entire sampling system. Individual test run calibrations use the calibration gas that most closely matches the stack gas effluent. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. EPA Methods 3A, 7E and 10 all defer to EPA Method 7E for the calculations of effluent concentration, span, calibration gas, analyzer calibration error (linearity), sampling system bias, zero drift, calibration drift and response time.

System Performance Criteria

Instrument Linearity	≤2% Full Scale
Instrument Bias	≤5% Full Scale
System Response Time	≤± 2 minutes
NO_X Converter Efficiency *(EPA Method 7E)*	≥ 90%
Instrument Zero Drift	≤± 3% Full Scale
Instrument Span Drift	≤± 3% Full Scale

EPA Method 4 – Determination of Moisture Content in Stack Gas

This method is used to determine the moisture content of stack gas. The sample is extracted and condensed in Greenburg-Smith impingers immersed in an ice bath and in a final impinger silica gel trap. The moisture is condensed in a solution of de-ionized water, or solutions of another type of sampling train if the moisture is being determined as part of another sampling method, such as EPA Method 5, SCAQMD Method 201.7 or BAAQMD ST-32. The moisture gain in the impinger solutions and silica gel is determined volumetrically and gravimetrically respectively. QA/QC procedures require that a minimum of 21 cubic feet of sample is pulled using a leak tight pump. The sample volume is measured with a calibrated dry gas meter. The impingers are immersed in an ice bath to maintain a gas outlet temperature of less than 68°F. Pre-test leak checks are performed for each run using a minimum 15 inches of mercury vacuum. Post-test leak checks are performed at the highest sample vacuum or greater. The leak test is acceptable if the leak rate is less than 0.02 cubic feet per minute or 4% of the average sampling rate, whichever is less. If the final leak check exceeds the criteria, either the volume is corrected based on the leak rate or the run is voided and repeated.

EPA Method 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates

This method is used to determine stack gas volumetric flow rates using oxygen-based F-factors. F-factors are ratios of combustion gas volumes to heat inputs. The heating value of the fuel in Btu per cubic foot is determined from analysis of fuel gas samples using ASTM D-1946/1945 gas chromatography analytical procedures. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine emission rates.

EPA Method 25C – Determination of Nonmethane Organic Compounds (NMOC) in Landfill Gas

This method is used to sample and measure NMOC in landfill gases. Gases are collected in a pre-evacuated 6-Liter SUMMA canister with pre-set flow controller set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consists of capillary orifice tubing designed to sample for a pre-set duration of 0.5 hrs. The sample is injected into a GC column where the methane and CO_2 are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO_2 then reduced to methane and analyzed.

EPA Method 25A – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer

This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.

The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. All data is corrected according to the method.

ASTM D-1945 – Analysis of Natural Gas by Gas Chromatography

This method is used to measure fixed gases (such as oxygen, nitrogen, carbon monoxide, and carbon dioxide) and methane by gas chromatography (GC/TCD). Light hydrocarbons, including C1-C7, are analyzed by GC/FID.

ASTM D-3588 – Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels

This method uses the molar composition of gaseous fuel determined from Method ASTM D-1945 to calculate the heating value and F-factor.

ASTM D-5504 – Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence

This method is used for the determination of speciated volatile sulfur-containing compounds in high methane content gaseous fuels by gas chromatography. Sulfur compounds are processed using a flame ionization detector (GC/FID). The products are then analyzed with a sulfur chemiluminescence detector (GC/SCD). Samples may be collected in Tedlar bags and analyzed within 24 hours or in Silco SUMMA canisters and analyzed within 72 hours.

3.5. Instrumentation and Analytical Procedures

The following continuous emissions analyzers were used:

Instrumentation	Parameter	Principle
TECO Model 42C	$NO/NO_2/NO_X$	Chemiluminescence
TECO Model 48C	CO	Gas Filter Correlation/Infrared
Ratfisch Model RS-55	THC	Flame Ionization (FID)
Servomex Model 1400	CO_2	Infrared
Servomex Model 1400	O_2	Paramagnetic

3.6. System Performance Criteria

All calibration gases are EPA Protocol #1. The analyzer data recording system consists of a Honeywell DPR 3000 chart recorder, supported by a Data Acquisition System (DAS). The instrument response is recorded on strip charts and DAS. The averages are corrected for drift using CARB Method 100 and EPA Method 7E equations.

Instrument Linearity	≤ 2% Full Scale
Instrument Bias	≤ 5% Full Scale
System Response Time	≤± 2 minutes
NOx Converter Efficiency *(EPA Method 7E)*	≥ 90%
Instrument Zero Drift	≤± 3% Full Scale
Instrument Span Drift	≤± 3% Full Scale

3.7. Comments: Limitations and Data Qualifications

This source test was performed in accordance with the protocol submitted to BAAQMD. No deviations from the protocol or anomalies were observed during testing. The turbines met all emissions compliance criteria.

Blue Sky Environmental has reviewed this report for accuracy and concluded that the test procedures were followed and accurately described and documented. The review included the following items:

Review of the general text
Review of calculations
Review of CEMS data
Review of supporting documentation

The services described in this report were performed in a manner consistent with the generally accepted professional testing principles and practices. No other warranty, expressed or implied, is made. These services were performed in a manner consistent with our agreement with our client. The report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions contained in this report pertain to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and operating parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to this, and do not warranty the accuracy of information supplied by others.

SECTION 4. APPENDICES

A. Tabulated Results

B. Calculations

C. Laboratory Reports

D. Field Data Sheets

E. Strip Chart Records

F. Process Information

G. QC Calibration Certificates and Quality Assurance Records

H. Sample Train Configuration and Stack Diagrams

I. Related Correspondence (Source Test Plan)

J. Permit to Operate

A
Tabulated Results

TABLE 1

Altamont Landfill & Resource Recovery Facility
Turbine S-6

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	12/06/23	12/06/23	12/06/23		
Test Time	1040-1117	1132-1207	1219-1254		
Standard Temperature, °F	70	70	70	70	
Process Parameters:					
Turbine Rating, kW	3,300	3,300	3,300	3,300	
Turbine, kW	3,104	3,068	3,048	3,073	
Turbine, % Rated Power	94.1	93.0	92.4	93.1	
Average Combustion Temperature, °F	1,168	1,168	1,168	1,168	
Fuel:					
Fuel Flow Rate, DSCFM	1,467	1,434	1,419	1,440	
Fuel Btu/CF @ 68°F	483.6	476.7	459.7	473.3	
Fuel Fd-Factor @ 68°F	9,530	9,247	9,515	9,431	
Heat Input, MMBtu/day	1,037	999	953	996	1,378
Total Reduced Sulfur, ppmv in Fuel	22.3	98.7	49.0	56.7	150
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	35,105	30,956	30,010	32,024	
Oxygen (O_2), % volume dry	16.8	16.6	16.5	16.6	
Carbon Dioxide (CO_2), % volume dry	3.6	3.7	3.7	3.7	
CO_2, lb/hr	8,682	7,900	7,670	8,084	
Water Vapor (H_2O), % volume	4.8	5.4	5.4	5.2	
NO_X Emissions (reported as NO_2):					
NO_2, ppmvd	3.5	3.3	3.4	3.4	
NO, ppmvd	14.9	15.0	14.5	14.8	
NO/NO_2 Ratio	4.3	4.6	4.3	4.4	
NOx, ppmvd	18.4	18.3	17.9	18.2	
NOx, ppmvd @ 15% O_2	26.5	24.8	24.0	25.1	42
NOx, lb/MMBtu	0.1067	0.0969	0.0962	0.0999	0.1567
NOx, lb/hr	4.62	4.04	3.83	4.16	
NOx, lb/MW-hr	1.49	1.32	1.26	1.35	2.34
CO Emissions:					
CO, ppmvd	31.1	33.0	31.6	31.9	
CO, ppmvd @ 15% O_2	44.7	44.7	42.3	43.9	
CO, lb/hr	4.74	4.43	4.12	4.43	
CO, lb/MMBtu	0.109	0.106	0.103	0.106	0.2229
SO_2 Emissions:					
SO_2, ppmvd *(calculated)*	0.93	4.57	2.32	2.61	300
SO_2, ppmvd @ 15% O_2	1.34	6.20	3.10	3.55	
SO_2, lb/hr	0.33	1.41	0.69	0.81	
Methane (CH_4) Emissions:					
CH_4, ppmvd *(EPA Method 25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd @ 15% O_2	<14.39	<13.57	<13.40	<13.79	
CH_4, lb/hr	<0.871	<0.768	<0.745	<0.795	
THC Emissions (reported as CH_4):					
THC, ppmv wet *(EPA Method 25A)*	<11.2	<11.1	<11.0	<11.1	
THC, ppmvd	<11.8	<11.7	<11.6	<11.7	
THC, lb/hr	<1.03	<0.90	<0.87	<0.93	
NMOC Emissions (reported as CH_4):					
NMOC, ppmv *(EPA Method 25A)*	1.2	1.1	<1.0	1.1	
NMOC, ppmvd @ 3% O_2	5.3	4.3	<4.1	4.6	120*
NMOC, lb/hr	0.11	0.08	<0.07	0.09	
Inlet:					
Inlet CH_4, % *(ASTM D-1945 & EPA Method 25C)*	48.5	47.8	46.1	47.5	
Inlet CH_4, lb/hr	1,766	1,701	1,624	1,697	
CH_4 Destruction Efficiency, %	>99.95%	>99.95%	>99.95%	>99.95%	>99%
Inlet THC (TOC), %	48.9	48.2	46.5	47.9	
Inlet THC (TOC), lb/hr	1,781	1,715	1,636	1,711	
THC (TOC) Destruction Efficiency, %	>99.94%	>99.95%	>99.95%	>99.95%	>98%
Inlet NMOC, ppmvd *(EPA Method 25C)*	4,171	3,866	3,564	3,867	
Inlet NMOC, lb/hr	15.18	13.76	12.55	13.83	
NMOC Destruction Efficiency, %	>99.30%	>99.41%	>99.41%	>99.37%	>98%*

* NMOC permit limits are 120 ppm @ 3% O_2 or DE >98%

TABLE 2

Altamont Landfill & Resource Recovery Facility
Turbine S-7

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	12/06/23	12/06/23	12/06/23		
Test Time	0812-0850	0905-0940	0952-1027		
Standard Temperature, °F	70	70	70	70	
Process Parameters:					
Turbine Rating, kW	3,300	3,300	3,300	3,300	
Turbine, kW	3,104	3,068	3,048	3,073	
Turbine, % Rated Power	94.1	93.0	92.4	93.1	
Average Combustion Temperature, °F	1,170	1,170	1,170	1,170	
Fuel:					
Fuel Flow Rate, DSCFM	1,522	1,515	1,485	1,508	
Fuel Btu/CF @ 68°F	457.7	481.7	458.7	466.0	
Fuel Fd-Factor @ 68°F	9,505	9,510	9,509	9,508	
Heat Input, MMBtu/day	1,018	1,067	996	1,027	1,378
Total Reduced Sulfur, ppmv in Fuel	114	99.9	42.1	85.3	150
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	33,375	34,189	31,465	33,010	
Oxygen (O_2), % volume dry	16.7	16.6	16.5	16.6	
Carbon Dioxide (CO_2), % volume dry	3.3	3.7	3.4	3.5	
CO_2, lb/hr	7,612	8,597	7,289	7,833	
Water Vapor (H_2O), % volume	4.4	4.5	4.7	4.5	
NO_X Emissions (reported as NO_2):					
NO_2, ppmvd	2.6	2.8	2.7	2.7	
NO, ppmvd	15.4	14.7	14.9	15.0	
NO/NO_2 Ratio	6.0	5.3	5.5	5.6	
NOx, ppmvd	18.0	17.4	17.6	17.7	
NOx, ppmvd @ 15% O_2	25.1	23.8	23.7	24.2	42
NOx, lb/MMBtu	0.1006	0.0954	0.0951	0.0970	0.1567
NOx, lb/hr	4.28	4.25	3.95	4.16	
NOx, lb/MW-hr	1.38	1.39	1.30	1.35	2.34
CO Emissions:					
CO, ppmvd	27.8	28.1	27.1	27.7	
CO, ppmvd @ 15% O_2	38.8	38.3	36.5	37.9	
CO, lb/hr	4.03	4.17	3.71	3.97	
CO, lb/MMBtu	0.095	0.094	0.089	0.093	0.2229
SO_2 Emissions:					
SO_2, ppmvd *(calculated)*	5.20	4.43	1.99	3.87	300
SO_2, ppmvd @ 15% O_2	7.26	6.04	2.67	5.33	
SO_2, lb/hr	1.73	1.51	0.62	1.28	
Methane (CH_4) Emissions:					
CH_4, ppmvd *(EPA Method 25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd @ 15% O_2	<13.96	<13.64	<13.46	<13.69	
CH_4, lb/hr	<0.829	<0.849	<0.781	<0.819	
THC Emissions (reported as CH_4):					
THC, ppmv wet *(EPA Method 25A)*	<11.0	<11.0	<11.0	<11.0	
THC, ppmvd	<11.5	<11.5	<11.5	<11.5	
THC, lb/hr	<0.95	<0.98	<0.90	<0.94	
NMOC Emissions (reported as CH_4):					
NMOC, ppmv *(EPA Method 25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppmvd @ 3% O_2	<4.2	<4.1	<4.1	<4.2	120*
NMOC, lb/hr	<0.08	<0.08	<0.08	<0.08	
Inlet:					
Inlet CH_4, % *(ASTM D-1945 & EPA Method 25C)*	45.9	48.3	46.0	46.7	
Inlet CH_4, lb/hr	1,734	1,817	1,696	1,749	
CH_4 Destruction Efficiency, %	>99.95%	>99.95%	>99.95%	>99.95%	>99%
Inlet THC (TOC), %	46.2	48.6	46.3	47.0	
Inlet THC (TOC), lb/hr	1,746	1,829	1,707	1,761	
THC (TOC) Destruction Efficiency, %	>99.95%	>99.95%	>99.95%	>99.95%	>98%
Inlet NMOC, ppmvd *(EPA Method 25C)*	3,191	3,051	3,090	3,111	
Inlet NMOC, lb/hr	12.06	11.48	11.39	11.64	
NMOC Destruction Efficiency, %	>99.31%	>99.26%	>99.31%	>99.30%	>98%*

* NMOC permit limits are 120 ppm @ 3% O_2 or DE >98%

Definitions and Calculations

DEFINITIONS:

ppmvd = parts per million concentration by volume expressed on a dry gas basis
lb/hr = pound per hour emission rate
Tstd. = standard temperature (°R = °F+460)
MW = molecular weight
DSCFM = dry standard cubic feet per minute
NOx = oxides of nitrogen, reported as NO_2 (MW = 46)
CO = carbon monoxide (MW = 28)
SO_2 = sulfur dioxide (MW = 64.1)
CH_4 = methane (MW = 12)
THC = total hydrocarbons, reported as methane
NMOC = non-methane organic compounds, reported as methane (MW = 16)

CALCULATIONS:

15% O_2 correction = ppm · 5.9 / (20.9 - %O_2)
3% O_2 correction = ppm · 17.9 / (20.9 - %O_2)
lb/hr = ppmvd · 8.223 E-05 · DSCFM · MW / Tstd. °R
lb/MW-hr = lb/hr / megawatt output
lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O_2)
MMBtu/day = Btu/CF · $DSCFM_{fuel}$ · 60 · 24/1,000,000
moisture correction - ppmvd (dry) = ppmv (wet) · 100 / (100 - H_2O%)
SO_2, ppmvd = (TRS in fuel as H_2S · fuel DSCFM) /exhaust DSCFM

Waste Management of Alameda County

BAAQMD Facility #2066

Compliance Test Report #24086

Landfill Gas Flare A-15

Located at:
Altamont Landfill
10840 Altamont Pass Road
Livermore, CA 94551

Prepared for:
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Testing Performed on:
February 28, 2024

Final Report Submitted on:
April 25, 2024

Performed and Reported by:
Blue Sky Environmental, Inc.
2273 Lobert Street
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bluesky@blueskyenvironmental.com

REVIEW AND CERTIFICATION

Team Leader:

The work performed herein was conducted under my supervision, and I certify that:

a) the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program,

b) that the sampling and analytical procedures and data presented in the report are authentic and accurate,

c) that all testing details and conclusions are accurate and valid, and

d) that the production rate and/or heat input rate during the source test are reported accurately.

If this report is submitted for compliance purposes, it should only be reproduced in its entirety. If there are any questions concerning this report, please contact me at (810) 923-3181.

Jeramie Richardson

President

Blue Sky Environmental, Inc.

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SECTION 1. INTRODUCTION

1.1. Summary

Blue Sky Environmental, Inc. was contracted by SCS Engineers to perform the emissions testing for Waste Management of Alameda County, Inc. (WMAC), at the Altamont Landfill in Livermore, California. Testing was conducted to demonstrate that Landfill Gas Flare A-15 is operating in compliance with Condition 19235 of Bay Area Air Quality Management District (BAAQMD) Permit to Operate A2066.

The results of the test program are presented in this report. The source test information is summarized in Table 1-1. Test results derived from the source test are summarized in Table 1-2. Results for individual test runs are provided in Appendix A. The flare met all compliance emission criteria.

Table 1-1. Source Test Information

Test Location:	Altamont Landfill 10840 Altamont Pass Road, Livermore, CA 94551
Source Contact:	Maria Bowen, SCS Engineers (619) 455-9518
Source Tested:	Flare (A-15) - 71 MMBtu/hr LFG Specialties, Inc. enclosed landfill gas flare
Source Test Date:	February 28, 2024
Test Objective:	Determine compliance with Condition 19235 of the Bay Area Air Quality Management District (BAAQMD) Permit to Operate for Plant 2066; BAAQMD Regulation 8, Rule 34; and the State Landfill Methane Gas Rule under AB32 for flare performance.
Test Performed By:	Blue Sky Environmental, Inc. 2273 Lobert Street, Castro Valley, CA 94546 Jaime Rios (925) 482-4504 bluesky@blueskyenvironmental.com
Test Parameters:	**Landfill Gas** O_2, N_2, CO_2, BTU, THC, CH_4, NMOC, HHV, F-factor, sulfur species, volumetric flow rate **Flare Emissions** THC, CH_4, NMOC, NO_X, CO, O_2, SO_2, moisture, volumetric flow rate.

Table 1-2. Compliance Summary

Emission Parameter	Average Results	Permit Limits	Compliance Status
NO_X, ppmvd @ 3% O_2	26.8	45	In Compliance
NO_X, lb/MMBtu	0.0348	0.06	In Compliance
CO, ppmvd @ 3% O_2	66.4	369	In Compliance
CO, lb/MMBtu	0.0526	0.30	In Compliance
TRS, ppmvd as H_2S in Fuel	107.0	200	In Compliance
NMOC, ppmvd @ 3% O_2 as CH_4	<2.4	30	In Compliance
NMOC Destruction Efficiency, %	>99.68	>98%	In Compliance
CH_4 Destruction Efficiency, %	>99.97	>99%	In Compliance

SECTION 2. SOURCE TEST PROGRAM

2.1. Overview

This annual source test was performed to demonstrate that landfill gas Flare A-15 is operating in compliance with Condition 19235 of the Bay Area Air Quality Management District (BAAQMD) Permit to Operate for Facility #2066 and Regulation 8, Rule 34. This testing also satisfies the compliance requirements outlined in the State Landfill Methane Gas Rule under AB32 for Flare performance.

2.2. Pollutants Tested

The following U.S. Environmental Protection Agency (EPA) and ASTM International sampling and analytical methods were used:

EPA Method 1	Sample and Traverse Point Determination
EPA Method 3A	O_2 and CO_2, Stack Gas Molecular Weight
EPA Method 10	CO Emissions
EPA Method 7E	NO_X and NO_2 Converter Check
EPA Method 4	Moisture
EPA Method 18	CH_4, THC, NMOC
EPA Method 19	Flow Rate Calculation DSCFM
EPA Method 25A	VOC Emissions
EPA Method 25C	TNMHC (NMOC) in fuel
ASTM D-1945/3588	BTU, F-Factor and Fixed Gases in Fuel
ASTM D-5504	Sulfur Species, Hydrogen Sulfide (H_2S) and TRS
EPA Method TO-15	Toxic Organic Compounds

2.3. Test Date

Testing was conducted on February 28, 2024.

2.4. Sampling and Observing Personnel

Testing was conducted by Jamie Rios and Vincent Gigli, representing Blue Sky Environmental, Inc.

Ben Tarver of Waste Management (WM) was present to operate the flare and assist in coordinating testing and the collection of process data during testing.

BAAQMD was notified of the scheduled testing in a source test plan submitted by SCS Engineering on behalf of Waste Management on January 26, 2024. A Source Test Protocol acknowledgement (NST-9041) was received on February 2, 2024. No agency observers from the District were present during the test program. A copy of the source test protocol and email correspondence are provided in Appendix I.

2.5. Source/Process Description

The Altamont Landfill, located in Livermore, California, is a multi-material landfill with a gas collection system that is abated by two industrial landfill gas flares. Flare A-15 has a 71

MMBtu/hr multiple nozzle burner. The flare shell is 45 feet high and 8.5 feet in diameter. The inside diameter (ID) is approximately 102 inches.

2.6. Source Operating Conditions

The flare was operated on landfill gas with no condensation injection under normal operating conditions during testing.

The average exhaust temperature at normal operating condition was 1,483 °F. The LFG flow rate ranged from 1,201 to 1,202 SCFM. The operating exhaust temperature, and LFG flow rate records are provided in Appendix F.

Landfill gas samples collected at the head of the flare showed an average methane content of 45.65% and an oxygen content of 3.45%.

The fuel sample collected during Run 3 of the test program (Condensate ON) had a relatively high oxygen content, suggesting that air had infiltrated the sample. These findings were excluded from calculations for heat value, TNMOC, CH_4, TRS, and toxic air pollutants. Results represent the average of Runs 1 and 2.

SECTION 3. SAMPLING AND ANALYSIS PROCEDURES

3.1. Port Location

Sampling was conducted in the 102-inch diameter ID stack of the flare through ports that were accessed with a 60-foot boom lift. The four 4-inch flange ports were located 40 feet above grade, approximately four stack diameters downstream from the burners and approximately one stack diameters upstream from the exhaust.

3.2. Point Description/Labeling – Ports/Stack

Blue Sky Environmental, Inc. conducted two perpendicular 8-point traverses of the stack to check for the presence of stratification. The traverse points for the 102-inch diameter stack with 4-inch ports were 7.3, 14.7, 23.8, 36.9, 73.1, 86.2, 95.3 and 102.7 inches. O_2 stratification was greater than 10%; therefore, subsequent CEM sampling was conducted using all traverse points.

3.3. Sample Train Description

Sampling system diagrams are provided in Appendix H. Additional descriptive information is included in the following section.

3.4. Sampling Procedure Description

Three consecutive 36-minute gaseous emissions tests were performed for oxides of nitrogen (NO_X), nitric oxide (NO), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2), methane (CH_4) and volatile organic compounds (VOC) at the flare exhaust stack.

The sampling system was checked for leaks before the start of the testing, by plugging the sample probe and observing the sample rotameter flow drop to zero. Instrument linearity and system bias were checked. The system response time for each analyzer was recorded. The temperatures of the heated sample line between the probe and sample conditioner/condenser, and the condenser exhaust temperatures were maintained within limits during each test run.

Analyzer external calibrations were performed before and after each run using EPA protocol certified gas standards. Calibration gases were introduced to the sample manifold at the same flow rate as the sample. Any drift or bias was corrected using equation 100-3 from CARB Method 100. A NOx analyzer converter efficiency check was performed before the first test run and achieved an efficiency greater than 90%.

Concurrent with the exhaust sampling, Blue Sky Environmental, Inc. collected a total of three integrated fuel samples for off-site analysis by Atmospheric Analysis & Consulting, Inc. (AAC), in Ventura, California. The samples were collected in 6-liter SUMMA canisters and analyzed for hydrocarbons by EPA Method 25, sulfur species (incl. H_2S and TRS) by ASTM D-5504, and HHV, F-factor, fixed gases, volatile organic compounds (VOCs), nonmethane organic compounds (NMOCs) and C^1-C^{6+} hydrocarbons by EPA Method 25C and ASTM D-1945. The collected samples were also analyzed for toxic organic compounds by EPA Method TO-15 (AP-42 2.4-1).

The sampling and analysis procedures are summarized below:

EPA Method 1 – Sample and Velocity Traverses for Stationary Sources
This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements.

EPA Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. A small portion of the sample is passed through a fuel cell type paramagnetic oxygen analyzer which measures the electrical current generated by the oxidation reaction at the gas/fuel cell interface. Carbon dioxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon dioxide absorbs infrared radiation.

EPA Method 7E – Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure nitrogen oxides in stationary source emissions using a continuous instrumental analyzer. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Nitric oxide is determined by passing the sample through a chemiluminescent analyzer. The chemiluminescent process is based on the light given off when nitric oxide and ozone react. Nitrogen dioxide (NO_2) concentrations are determined by passing the sample through a catalyst which reduces the NO_2 to NO. The total oxides of nitrogen concentration (NO_2 + NO) is then determined by chemiluminescence.

Section 16.2.2 of the method is used to determine the NO_X analyzer NO_2 to NO conversion efficiency.

EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources

This method is used to measure carbon monoxide from integrated or continuous gas samples extracted from a sampling point. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Carbon monoxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon monoxide absorbs infrared radiation.

EPA Methods 3A, 7E and 10 are all continuous monitoring techniques using instrumental analyzers. Sampling is performed by extracting exhaust flue gas from the stack, conditioning the sample, and analyzing it by continuous monitoring gas analyzers in a continuing emissions monitoring (CEM) test van. The sampling system consists of a stainless steel sample probe, Teflon sample line, glass-fiber particulate filter, and glass moisture-knockout condensers in ice, followed by thermoelectric coolers (optional), Teflon sample transfer tubing, a diaphragm pump, and a stainless steel/Teflon manifold and flow control/delivery system. A constant sample and calibration gas supply pressure of 5 psi is provided to each analyzer to avoid pressure variable response differences. The entire sampling system is leak checked prior to and at the end of the sampling program.

The sampling and analytical system is checked for linearity with zero, mid (40-60%) and high span (80-100%) calibrations and is checked for system bias at the beginning and end of each run. System bias is determined by introducing calibration gas to the probe and pulling it through the entire sampling system. Individual test run calibrations use the calibration gas that most closely matches the stack gas effluent. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. EPA Methods 3A, 7E and 10 all defer to EPA Method 7E for the calculations of effluent concentration, span, calibration gas, analyzer calibration error (linearity), sampling system bias, zero drift, calibration drift and response time.

EPA Method 4 – Determination of Moisture Content in Stack Gas

This method is used to determine the moisture content of stack gas. The sample is extracted and condensed in Greenburg-Smith impingers immersed in an ice bath and in a final impinger silica gel trap. The moisture is condensed in a solution of de-ionized water, or solutions of another type of sampling train if the moisture is being determined as part of another sampling method, such as EPA Method 5, SCAQMD Method 201.7 or BAAQMD ST-32. The moisture gain in the impinger solutions and silica gel is determined volumetrically and gravimetrically respectively.

QA/QC procedures require that a minimum of 21 cubic feet of sample is pulled using a leak tight pump. The sample volume is measured with a calibrated dry gas meter. The impingers are immersed in an ice bath to maintain a gas outlet temperature of less than 68°F. Pre-test leak checks are performed for each run using a minimum of 15 inches of mercury vacuum. Post-test leak checks are performed at the highest sample vacuum or greater. The leak test is acceptable if the leak rate is less than 0.02 cubic feet per minute or 4% of the average sampling rate, whichever is less. If the final leak check exceeds the criteria, either the volume is corrected based on the leak rate or the run is voided and repeated.

EPA Method 18 – Measurement of Gaseous Organic Compound Emissions by Gas Chromatography

This method is used to determine emissions of volatile organics by gas chromatograph/mass spectroscopy (GC/MS). Gaseous emissions are drawn through a Teflon sample transfer line to a Tedlar bag held in a rigid leak proof bag container. The sample is drawn into the bag by evacuating the container to stack gas pressure to allow sample flow without using a pump to avoid contamination. Negative pressure is adjusted to maintain an integrated sample flow for the collection time. The bag samples are taken to a laboratory and analyzed within 72 hours.

EPA Method 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates

This method is used to determine stack gas volumetric flow rates using oxygen-based F-factors. F-factors are ratios of combustion gas volumes to heat inputs. The heating value of the fuel in Btu per cubic foot is determined from analysis of fuel gas samples using ASTM D-1946/1945 gas chromatography analytical procedures. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine emission rates.

EPA Method 25A – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer

This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.

The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test.

EPA Method 25C – Determination of Nonmethane Organic Compounds (NMOC) in Landfill Gas

This method is used to sample and measure NMOC in landfill gases. The method is written for evacuated tank sampling but is adaptable to Tedlar bag sampling procedures. The sampling equipment consists of a stainless steel or glass lined probe with a short stainless-steel or Teflon transfer line to a Tedlar bag housed in a sealed chamber. The chamber is evacuated by pump at a prescribed rate for the test duration and the Tedlar bag capacity, so the sample is integrated over the test period. The sample is injected into a GC column where the methane and CO_2 are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO_2 then reduced to methane and analyzed.

ASTM D-1945 – Analysis of Natural Gas by Gas Chromatography

This method is used to measure fixed gases (such as oxygen, nitrogen, carbon monoxide, and carbon dioxide) and methane by gas chromatography (GC/TCD). Light hydrocarbons, including C_1-C_7, are analyzed by GC/FID.

ASTM D-3588 – Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels

This method uses the molar composition of gaseous fuel determined from Method ASTM D-1945 to calculate the heating value and F-factor.

ASTM D-5504 – Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence

This method is used for the determination of speciated volatile sulfur-containing compounds in high methane content gaseous fuels by gas chromatography. Sulfur compounds are processed using a flame ionization detector (GC/FID). The products are then analyzed with a sulfur chemiluminescence detector (GC/SCD). Samples may be collected in Tedlar bags and analyzed within 24 hours or in Silco SUMMA canisters and analyzed within 7 days.

EPA Compendium Method TO-15 – Determination of Toxic Organic Compounds in Ambient Air

This method is used to measure volatile organic compounds that are included in the hazardous air pollutants (HAPs) listed in Title III of the Clean Air Act Amendments of 1990 by GC/MS (gas chromatography/mass spectroscopy). Samples are collected in pre-evacuated 6-Liter SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the TO-15 Method list of volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consisted of capillary orifice tubing designed to sample for a pre-set duration of 0.75hrs.

3.5. Instrumentation and Analytical procedures

The following continuous emissions analyzers were used:

Instrumentation	Parameter	Principle
TECO Model 42C	NO_X/NO	Chemiluminescence
TECO Model 48C	CO	Gas Filter Correlation/Infrared
TECO Model RSS66	NMOC/CH_4	Flame Ionization
Servomex Model 1400	CO_2	Infrared
Servomex Model 1440	O_2	Paramagnetic

3.6. System Performance Criteria

The analyzer data recording system consists of a Honeywell DPR300 strip chart recorder, supported by a Data Acquisition System (DAS). The instrument response is recorded on strip charts and DAS. The averages are corrected for drift using BAAQMD and EPA Method 7E equations. All system performance criteria were met.

Instrument Linearity	≤2% Full Scale
Instrument Bias	≤5% Full Scale
System Response Time	≤± 2 minutes
NO_X Converter Efficiency *(EPA Method 7E)*	≥ 90%
Instrument Zero Drift	≤± 3% Full Scale
Instrument Span Drift	≤± 3% Full Scale

3.7. Comments: Limitations and Data Qualifications

This source test was performed in accordance with the protocol submitted to BAAQMD. The fuel sample collected during Run 3 of the test program (Condensate ON) had a relatively high oxygen content, suggesting that air had infiltrated the sample. These findings were excluded from calculations for heat value, TNMOC, CH_4, TRS, and toxic air pollutants. Results represent the average of Runs 1 and 2. No other deviations from the protocol or anomalies were observed during testing. Emissions measured from the flare meet permit limits.

Blue Sky Environmental has reviewed this report for accuracy and concluded that the test procedures were followed and accurately described and documented. The review included the following items:

Review of the general text
Review of calculations
Review of CEMS data
Review of supporting documentation

The services described in this report were performed in a manner consistent with the generally accepted professional testing principles and practices. No other warranty, expressed or implied, is made. These services were performed in a manner consistent with our agreement with our client. The report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions contained in this report pertain to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and operating parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to this, and do not warranty the accuracy of information supplied by others.

SECTION 4. APPENDICES

A

Tabulated Results

TABLE 1

Altamont Landfill
Flare A-15
1,483°F

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	2/28/24	2/28/24	2/28/24		
Test Time	0856-0935	1013-1052	1113-1151		
Standard Temperature, °F	70	70	70		
Flare Temperature, °F	1,483	1,483	1,483	1,483	
Fuel:					
Fuel Flow Rate, DSCFM	1,202	1,202	1,201	1,201	
Fuel Heat Input, MMBtu/hr	34.9	31.8	33.3	33.3	
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	13,996	12,639	13,520	13,385	
Oxygen (O_2), % volume dry	12.8	12.7	12.9	12.8	
Carbon Dioxide (CO_2), % volume dry	7.27	7.27	6.95	7.16	
Water Vapor (H_2O), % volume *(EPA Method 4)*	7.24	5.21	7.88	6.78	
NO_X Emissions (reported as NO_2):					
NOx, ppmvd	12.0	12.4	12.1	12.1	
NOx, ppmvd @ 3% O_2	26.4	27.0	26.9	26.8	45
NOx, lb/hr	1.19	1.12	1.166	1.160	
NOx, lb/MMBtu	0.0343	0.0351	0.0350	0.0348	0.06
CO Emissions:					
CO, ppmvd	45.4	23.9	21.2	30.2	
CO, ppmvd @ 3% O_2	100.1	52.1	47.2	66.4	369
CO, lb/hr	2.76	1.31	1.24	1.77	
CO, lb/MMBtu	0.0792	0.0412	0.0373	0.0526	0.30
SO_2 Emissions:					
Inlet TRS, ppmv as H_2S *(ASTM D5504)*	114	100	107.0*	107.0	200
SO_2, ppmv *(calculated)*	9.79	9.51	9.51	9.60	
THC Emissions (reported as CH_4):					
THC, ppmvd	<11.9	<11.6	<11.9	<11.8	
THC, lb/hr	<0.412	<0.364	<0.401	<0.392	
Methane (CH_4) Emissions:					
CH_4, ppmv wet *(EPA Method 25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd	<10.8	<10.6	<10.9	<10.7	
CH_4, lb/hr	<0.375	<0.331	<0.364	<0.357	
NMOC Emissions (reported as CH_4):					
NMOC, ppmv wet *(EPA Method 25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppmvd	<1.1	<1.1	<1.1	<1.1	
NMOC, ppmvd @ 3% O_2	<2.4	<2.3	<2.4	<2.4	30
NMOC, lb/hr	<0.037	<0.033	<0.036	<0.036	
Inlet Hydrocarbons:					
Inlet THC, ppmvd	481,645	439,079	460,362*	460,362	
Inlet THC, lb/hr	1,437	1,310	1,373*	1,373	
THC Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	
Inlet CH_4, ppmvd *(ASTM D-1945)*	477,000	436,000	456,500*	456,500	
Inlet CH_4, lb/hr	1,423	1,301	1,361*	1,362	
CH_4 Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet NMOC, ppmvd *(EPA Method 25C)*	4,645	3,079	3,862*	3,862	
Inlet NMOC, lb/hr	13.86	9.19	11.51*	11.52	
NMOC Destruction Efficiency, %	>99.73%	>99.64%	>99.68%	>99.68%	>98%

DEFINITIONS:

ppmvd = parts per million concentration by volume expressed on a dry gas basis
lb/hr = pound per hour emission rate
Tstd. = standard temperature (°R = °F+460)
MW = molecular weight
DSCFM = dry standard cubic feet per minute
NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)
CO = carbon monoxide (MW = 28)
CH_4 = methane (MW = 16)
THC = total hydrocarbons, reported as CH_4 (MW = 16)
NMOC = non-methane organic compounds, reported as CH_4 (MW = 16)

CALCULATIONS:

15% O_2 Correction = ppm · 5.9 / (20.9 - %O_2)
3% O_2 Correction = ppm · 17.9 / (20.9 - %O_2)
lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O_2)
Destruction Efficiency = (inlet, lb/hr - outlet, lb/hr) / inlet, lb/hr
SO_2, ppm (calculated) = inlet TRS, ppmv · fuel flow rate, DSCFM/exhaust flow rate, DSCFM

<value = 2% of analyzer range

** Results are the average of Runs 1 and 2 refer to section 3.7 of the report*

TABLE 2
AP42 2.4-1 - Landfill Gas Samples

Altamont Landfill
Flare A-15

Compound	Method	Run 1 (ppb)	Run 2 (ppb)	Run 3 (ppb)	Average * Results (ppb)	Permit Limits (ppb)
1,1,1-Trichloroethane	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
1,1,2,2-Tetrachloroethane	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	400
1,1-Dichloroethane (Ethylidene Dichloride)	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	1,000
1,1-Dichloroethene (Vinylidene Chloride)	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
1,2-Dichloroethane (Ethylene Dichloride)	*EPA TO-15*	**186**	**212**	**85.4**	**199**	1,500
1,2-Dichloropropane	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
2-Propanol (Isopropyl alcohol)	*EPA TO-15*	**43,900**	**39,000**	**21,600**	**41,450**	500,000
Acrylonitrile	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	300
Bromodichloromethane	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
Carbon Tetrachloride	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	100
Chlorobenzene	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
Chlorodifluoromethane	*EPA TO-15*	109	115	50.3	112	
Chloroethane (Ethyl Chloride)	*EPA TO-15*	87.0	88.7	<44.9	87.9	
Chloroform (Trichloromethane)	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	100
Chloromethane	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
1,2-Dichlorobenzene	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
1,3-Dichlorobenzene	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
1,4-Dichlorobenzene	*EPA TO-15*	**493**	**613**	**301**	**553**	7,500
Dichlorodifluoromethane (Freon 12)	*EPA TO-15*	112	116	51.2	114	
Dichlorofluoromethane	*EPA TO-15*	**61.2**	<46.2	<44.9	<50.8	
Dichloromethane (Methylene Chloride)	*EPA TO-15*	<107	<92.4	<89.9	<96.4	1,500
Ethanol	*EPA TO-15*	263,000	216,000	119,000	239,500	
Ethylbenzene	*EPA TO-15*	**3,700**	**3,820**	**2,010**	**3,760**	23,000
1,2-Dibromoethane (Ethylene dibromide)	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
Trichlorofluoromethane	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
n-Hexane	*EPA TO-15*	536	570	315	553	
2-Butanone (Methyl Ethyl Ketone)	*EPA TO-15*	**38,100**	**33,700**	**17,200**	**35,900**	350,000
4-Methyl-2-pentanone (MiBK)	*EPA TO-15*	2,010	2,080	970	2,045	
Perchloroethylene (Tetrachloroethene) PCE	*EPA TO-15*	**146**	**148**	**68.3**	**147**	1,500
trans-1,2-Dichloroethene	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	
Trichloroethylene (TCE)	*EPA TO-15*	**81.7**	**89.6**	<44.9	**85.7**	1,500
Vinyl Chloride (Chloroethene)	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	1,000
m/p-Xylenes	*EPA TO-15*	6,910	7,170	3,830	7,040	
o-Xylene	*EPA TO-15*	2,540	2,680	1,350	2,610	
Total Xylenes	*EPA TO-15*	**9,450**	**9,850**	**5,180**	**9,650**	90,000
Benzene	*EPA TO-15*	**2,050**	**2,140**	**1,010**	**2,095**	7,900
Benzyl Chloride (a-Chlorotoluene)	*EPA TO-15*	<53.7	<46.2	<44.9	<48.3	500
Methanol (Methyl Alcohol)	*EPA TO-15*	53,100	45,800	24,300	49,450	600,000
Toluene	*EPA TO-15*	6,840	6,760	3,770	6,800	80,000

** Due to air intrusiuon of the sample collected during Run 3, results are the average of Runs 1 and 2*

SCS ENGINEERS Environmental Consultants & Contractors

May 3, 2024
Project No. 01201101.02

Source Test Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Subject: **2024 ANNUAL SOURCE TEST REPORT A-16 FLARE**
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
(FACILITY A2066)

To whom it may concern,

The 2024 Annual Source test at the A-16 Flare was completed on March 6, 2024. Preliminary results for the TRS as hydrogen sulfide (H_2S) indicated values above permit limit of 200 parts per million by volume (ppmv). However, these results do not appear to be representative of site conditions over the years. Therefore, Altamont Landfill and Resource Recovery Facility (ALRRF) is currently conducting further investigations.

Please contact the undersigned at (619) 455-9518 or at mbowen@scsengineers.com or Rajan Phadnis at (510) 875-9338 or at rphadnis@wm.com if you have any questions or require any additional information.

Sincerely,

Maria Bowen
Project Manager
SCS Engineers

CC: Rajan Phadnis, Waste Management
Christian Colline, Waste Management

Attachment A: Annual Source Test Report A-16 2024

Annual Source Test Report ALRRF A-16 2024

Waste Management of Alameda County

BAAQMD Facility #2066

Compliance Test Report #24097

Landfill Gas Flare A-16

Located at:
Altamont Landfill
10840 Altamont Pass Road
Livermore, CA 94551

Prepared for:
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For Submittal to:
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Gloria Espena and Marco Hernandez
gespena@baaqmd.gov/mhernandez@baaqmd.gov
sourcetest@baaqmd.gov

Testing Performed on:
March 6, 2024

Final Report Submitted on:
May 3, 2024

Performed and Reported by:
Blue Sky Environmental, Inc.
2273 Lobert Street
Castro Valley, CA 94546
Office (510) 508-3469/Mobile (810) 923-3181
bluesky@blueskyenvironmental.com

REVIEW AND CERTIFICATION

<u>Team Leader:</u>

The work performed herein was conducted under my supervision, and I certify that:

a) the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program,

b) that the sampling and analytical procedures and data presented in the report are authentic and accurate,

c) that all testing details and conclusions are accurate and valid, and

d) that the production rate and/or heat input rate during the source test are reported accurately.

If this report is submitted for compliance purposes, it should only be reproduced in its entirety. If there are any questions concerning this report, please contact me at (810) 923-3181.

Jeramie Richardson

President

Blue Sky Environmental, Inc.

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SECTION 1. INTRODUCTION

1.1. Summary

Blue Sky Environmental, Inc. was contracted by SCS Engineers to perform emissions testing for Waste Management of Alameda County, Inc. at the Altamont Landfill and Resource Recovery Facility (ALRRF) in Livermore, California. Testing was conducted to demonstrate that landfill gas Flare A-16 is operating in compliance with Condition 19235 of Bay Area Air Quality Management District (BAAQMD) Permit to Operate A2066.

The results of the test program are presented in this report. The source test information is summarized in Table 1-1. Test results derived from the source test are summarized in Tables 1-2 and 1-3. Results for individual test runs are provided in Appendix A. The flare met all compliance emission criteria; however, the total reduced sulfur content of the landfill gas exceeded permitted limits.

Table 1-1 Source Test Information

Test Location:	Altamont Landfill and Resource Recovery Facility (ALRRF) 10840 Altamont Pass Road, Livermore CA 94551
Source Contact:	Maria Bowen, SCS Engineers (619) 455-9518
Source Tested:	Flare A-16 – 132 MMBtu/hr LFG Specialties, Inc. enclosed landfill gas flare
Source Test Date:	March 6, 2024
Test Objective:	Determine compliance with Condition 19235 of the Bay Area Air Quality Management District (BAAQMD) permit for Facility #2066; BAAQMD Regulation 8, Rule 34; and the State Landfill Methane Gas Rule under AB32 for flare performance.
Test Performed by:	Blue Sky Environmental, Inc. 2273 Lobert Street, Castro Valley, CA 94546 Jaime Rios (925) 482-4504 bluesky@blueskyenvironmental.com
Test Parameters:	Landfill Gas O_2, N_2, CO_2, BTU, THC, CH_4, NMOC, HHV, F-Factor, Sulfur and VOC Species, Volumetric Flow rate Flare Emissions THC, CH_4, NMOC, NO_X, CO, O_2, SO_2, Moisture, Volumetric Flow rate.

Table 1-2 Compliance Summary

Flare A-16 Condensate Injection - ON

Emission Parameter	Average Results (Condensate - ON)	Permit Limit	Compliance Status
NO_X, ppmvd @ 3% O_2	38.9	45	In Compliance
NO_X, lb/MMBtu	0.0504	0.06	In Compliance
CO, ppmvd @ 3% O_2	<21.7	246	In Compliance
CO, lb/MMBtu	<0.0171	0.20	In Compliance
TRS as H_2S in Fuel, ppmvd	272	200	Exceeds Permit
SO_2, ppmvd	24.4	300	In Compliance
NMOC, ppmvd @ 3% O_2 as CH_4	<2.9	30	In Compliance
NMOC Destruction Efficiency, %	>99.19%	>98%	In Compliance
CH_4 Destruction Efficiency, %	>99.97%	>99%	In Compliance

Table 1-3 Compliance Summary

Flare A-16 Condensate Injection - OFF

Emission Parameter	Average Results (Condensate - OFF)	Permit Limit	Compliance Status
NO_X, ppmvd @ 3% O_2	29.8	45	In Compliance
NO_X, lb/MMBtu	0.0387	0.06	In Compliance
CO, ppmvd @ 3% O_2	46.0	246	In Compliance
CO, lb/MMBtu	0.0364	0.20	In Compliance
TRS as H_2S in Fuel, ppmvd	259	200	Exceeds Permit
SO_2, ppmvd	21.0	300	In Compliance
NMOC, ppmvd @ 3% O_2 as CH_4	<2.3	30	In Compliance
NMOC Destruction Efficiency, %	>99.46%	>98%	In Compliance
CH_4 Destruction Efficiency, %	>99.97%	>99%	In Compliance

SECTION 2. SOURCE TEST PROGRAM

2.1. Overview

This annual source test was performed to demonstrate that landfill gas Flare A-16 is operating in accordance with Condition 19235 of the Bay Area Air Quality Management District (BAAQMD) Permit to Operate for Facility #2066 and BAAQMD Regulation 8, Rule 34. This testing also satisfies compliance requirements outlined in the State Landfill Methane Gas Rule under AB32 for flare performance.

2.2. Pollutants Tested

The following U.S. Environmental Protection Agency (EPA) and ASTM International sampling and analytical methods were used:

EPA Method 1	Sample and Traverse Point Determination
EPA Method 3A	O_2 and CO_2 Emissions, Stack Gas Molecular Weight
EPA Method 10	CO Emissions
EPA Method 7E	NO_X Emissions and NO_2 Converter Check
EPA Method 4	Moisture Content in Stack Gas
EPA Method 18	CH_4, THC, NMOC
EPA Method 19	Flow Rate Calculation DSCFM
EPA Method 25A	VOC Emissions
EPA Method 25C	TNMHC (NMOC) in Fuel
ASTM D-1945/3588	BTU, F-Factor and Fixed Gases in Fuel
ASTM D-5504	Sulfur Species, Hydrogen Sulfide (H_2S) and TRS
EPA Method TO-15	Toxic Organic Compounds

2.3. Test Date

Testing was conducted March 6, 2024.

2.4. Sampling and Observing Personnel

Testing was conducted by Jaime Rios and Timothy Eandi, representing Blue Sky Environmental, Inc.

Ben Tarver of Waste Management (WM) was present to operate the flare and assist in coordinating testing and the collection of process data during testing.

BAAQMD was notified of the scheduled testing in a source test plan submitted on February 5, 2024. A Source Test Protocol acknowledgement (NST-9045) was received the same day. No agency observers from the District were present during the test program. A copy of the source test protocol and email correspondence are provided in Appendix J.

2.5. Source/Process Description

The Altamont Landfill, located in Livermore, California, is a multi-material landfill with a gas collection system that is abated by two industrial landfill gas flares. Flare A-16 has a 132 MMBtu/hr multiple nozzle burner and a combustion zone temperature set-point of 1,600 °F. The flare shell is 50 feet high and 12.5 feet in diameter. The inside diameter (ID) is approximately 144 inches. Flare A-16 operates on landfill gas (LFG). Collected landfill gas condensate is periodically injected into the flare through one vertical nozzle positioned near the burner.

2.6. Source Operating Conditions

The flare was operated at or near maximum operating rates for each of the following operating conditions:

1) while the flare was burning landfill gas without any condensate injection,
2) while the flare was burning landfill gas and condensate was being injected into the flare at the maximum injection rate (0.98 gallons per minute).

The average exhaust temperature during the test program was 1,522 °F. The LFG flow rate ranged from 2,059 to 2,101 SCFM. Landfill gas samples collected at the head of the flare showed an average methane content of 49.8% and an oxygen content of 2.14%. The operating exhaust temperature and LFG flow rate records are provided in Appendix F.

The fuel sample collected during Run 3, condensate on, of the test program had a relatively high oxygen content, suggesting that air had infiltrated the sample. These findings were excluded from calculations for heat value, TNMOC, CH_4, TRS, and toxic air pollutants. Results represent the average of Runs 1 and 2.

SECTION 3. SAMPLING AND ANALYSIS PROCEDURES

3.1. Port Location

Sampling was conducted at the 144-inch diameter ID stack of the flare through ports that were accessed with a 65-foot boom lift. The four 8-inch flange ports were located 45 feet above grade, approximately four stack diameters downstream from the burners and approximately one stack diameter upstream from the exhaust.

3.2. Point Description/Labeling – Ports/Stack

Blue Sky Environmental, Inc. conducted two perpendicular 8-point traverses to check for the presence of stratification and cyclonic flow. O_2 stratification was greater than 10%; therefore, subsequent CEM sampling was conducted using all traverse points. Sampling was performed for two minutes per point for a total of 16 points over 32-minute test run. The traverse points for the 144-inch diameter stack with offset 8-inch ports were 4.6, 15.1, 27.9, 46.5, 97.5, 116.1, 128.9 and 139.4 inches.

3.3. Sample Train Description

Sampling system diagrams are provided in Appendix I. Additional descriptive information is included in the following section.

3.4. Sampling Procedure Description

Six consecutive 32-minute gaseous emissions tests were performed for oxides of nitrogen (NO_X), nitric oxide (NO), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2), methane (CH_4) and non-methane organic compounds (NMOC) at the flare exhaust stack. The first three tests were performed while the flare was burning landfill gas with the condensate injection system operating. The last three tests were performed while the flare was burning landfill gas with the condensate injection off. The gas flow was controlled with a critical orifice to collect the 32-minute integrated samples.

The sampling system was checked for leaks before the start of the testing, by plugging the sample probe and observing the sample rotameter flow drop to zero. Instrument linearity and system bias were checked. The system response time for each analyzer was recorded. The temperatures of the heated sample line between the probe and sample conditioner/condenser, and the condenser exhaust temperatures were maintained within limits during each test run.

Analyzer external calibrations were performed before and after each run using EPA protocol certified gas standards. Calibration gases were introduced to the sample manifold at the same flow rate as the sample. Any drift or bias was corrected using equation 100-3 from CARB Method 100. A NO_X analyzer converter efficiency check was performed before the first test run and achieved an efficiency greater than 90%.

Concurrent with the exhaust sampling, Blue Sky Environmental, Inc. collected a total of six integrated fuel samples (one sample per test run) for HHV, F-factor, fixed gases, volatile organic compounds (VOCs), nonmethane organic compounds (NMOCs) and C_1-C_{6+} hydrocarbons by EPA Method 25C and ASTM D-1945, and sulfur compounds by ASTM D-5504. Additionally, the fuel samples were analyzed for toxic organic compounds by EPA Method TO-15. The samples were collected in 6-liter SUMMA canisters and analyzed by Atmospheric Analysis & Consulting, Inc., located in Ventura, CA.

The sampling and analysis procedures are summarized below:

EPA Method 1 – Sample and Velocity Traverses for Stationary Sources
This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements.

EPA Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)
This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. A small portion of the sample is passed through a fuel cell type paramagnetic oxygen analyzer which measures the electrical current generated by the oxidation reaction at the gas/fuel cell interface. Carbon dioxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon dioxide absorbs infrared radiation.

EPA Method 7E – Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)
This method is used to measure nitrogen oxides in stationary source emissions using a continuous instrumental analyzer. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Nitric oxide is determined by passing the sample through a chemiluminescent analyzer. The chemiluminescent process is based on the light given off when nitric oxide and ozone react. Nitrogen dioxide (NO_2) concentrations are determined by passing the sample through a catalyst which reduces the NO_2 to NO. The total oxides of nitrogen concentration (NO_2 + NO) is then determined by chemiluminescence.

Section 16.2.2 of the method is used to determine the NO_X analyzer NO_2 to NO conversion efficiency.

EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources
This method is used to measure carbon monoxide from integrated or continuous gas samples extracted from a sampling point. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Carbon monoxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon monoxide absorbs infrared radiation.

EPA Methods 3A, 7E and 10 are all continuous monitoring techniques using instrumental analyzers. Sampling is performed by extracting exhaust flue gas from the stack, conditioning the sample, and analyzing it by continuous monitoring gas analyzers in a continuing emissions monitoring (CEM) test van. The sampling system consists of a stainless-steel sample probe, Teflon sample line, glass-fiber particulate filter, and glass moisture-knockout condensers in ice, followed by thermoelectric coolers (optional), Teflon sample transfer tubing, a diaphragm pump, and a stainless steel/Teflon manifold and flow control/delivery system. A constant sample and calibration gas supply pressure of 5 PSI is provided to each analyzer to avoid pressure variable response differences. The entire sampling system is leak checked prior to and at the end of the sampling program.

The sampling and analytical system is checked for linearity with zero, mid (40-60%) and high span (80-100%) calibrations and is checked for system bias at the beginning and end of each run. System bias is determined by introducing calibration gas to the probe and pulling it through the entire sampling system. Individual test run calibrations use the calibration gas that most closely matches the stack gas effluent. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. EPA Methods 3A, 7E and 10 all defer to EPA Method 7E for the calculations of effluent concentration, span, calibration gas, analyzer calibration error (linearity), sampling system bias, zero drift, calibration drift and response time.

EPA Method 4 – Determination of Moisture Content in Stack Gas

This method is used to determine the moisture content of stack gas. The sample is extracted and condensed in Greenburg-Smith impingers immersed in an ice bath and in a final impinger silica gel trap. The moisture is condensed in a solution of de-ionized water, or solutions of another type of sampling train if the moisture is being determined as part of another sampling method, such as EPA Method 5 or EPA 12. The moisture gain in the impinger solutions and silica gel is determined volumetrically and gravimetrically respectively.

QA/QC procedures require that a minimum of 21 cubic feet of sample is pulled using a leak tight pump. The sample volume is measured with a calibrated dry gas meter. The impingers are immersed in an ice bath to maintain a gas outlet temperature of less than 68°F. Pre-test leak checks are performed for each run using a minimum of 15 inches of mercury vacuum. Post-test leak checks are performed at the highest sample vacuum or greater. The leak test is acceptable if the leak rate is less than 0.02 cubic feet per minute or 4% of the average sampling rate, whichever is less. If the final leak check exceeds the criteria, either the volume is corrected based on the leak rate or the run is voided and repeated.

EPA Method 18 – Measurement of Gaseous Organic Compound Emissions by Gas Chromatography

This method is used to determine emissions of volatile organics by gas chromatography (GC). Gases are collected in a pre-evacuated 6-Liter SUMMA canister with pre-set flow controller set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the target volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consists of capillary orifice tubing designed to sample for a pre-set duration of 0.5 hrs.

EPA Method 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates

This method is used to determine stack gas volumetric flow rates using oxygen-based F-factors. F-factors are ratios of combustion gas volumes to heat inputs. The heating value of the fuel in Btu per cubic foot is determined from analysis of fuel gas samples using ASTM D-1946/1945 gas chromatography analytical procedures. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine emission rates. 301.

EPA Method 25A – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer

This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.

The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test.

EPA Method 25C – Determination of Nonmethane Organic Compounds (NMOC) in Landfill Gas

This method is used to sample and measure NMOC in landfill gases. Gases are collected in a pre-evacuated 6-Liter SUMMA canister with pre-set flow controller set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consists of capillary orifice tubing designed to sample for a pre-set duration of 0.5 hrs. The sample is injected into a GC column where the methane and CO_2 are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO_2 then reduced to methane and analyzed.

ASTM D-1945 – Analysis of Natural Gas by Gas Chromatography

This method is used to measure fixed gases (such as oxygen, nitrogen, carbon monoxide, and carbon dioxide) and methane by gas chromatography (GC/TCD). Light hydrocarbons, including C1-C7, are analyzed by GC/FID.

ASTM D-3588 – Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels

This method uses the molar composition of gaseous fuel determined from Method ASTM D-1945 to calculate the heating value and F-factor.

ASTM D-5504 – Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence

This method is used for the determination of speciated volatile sulfur-containing compounds in high methane content gaseous fuels by gas chromatography. Sulfur compounds are processed using a flame ionization detector (GC/FID). The products are then analyzed with a sulfur chemiluminescence detector (GC/SCD). Samples may be collected in Tedlar bags and analyzed within 24 hours or in Silco SUMMA canisters and analyzed within 7 days.

EPA Compendium Method TO-15 – Determination of Toxic Organic Compounds in Ambient Air

This method is used to measure volatile organic compounds that are included in the hazardous air pollutants (HAPs) listed in Title III of the Clean Air Act Amendments of 1990 by GC/MS (gas chromatography/mass spectroscopy). Samples are collected in pre-evacuated 6-Liter SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the TO-15 Method list of volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consisted of capillary orifice tubing designed to sample for a pre-set duration of 0.75hrs.

3.5. Instrumentation

The following continuous emissions analyzers were used:

Instrumentation	Parameter	Principle
TECO Model 42C	$NO_X/NO/NO_2$	Chemiluminescence
TECO Model 48C	CO	Gas Filter Correlation /Infrared
TECO Model 55C	$NMOC/CH_4$	Flame Ionization (GC/FID)
Servomex Model 1440	CO_2	Infrared
Servomex Model 1440	O_2	Paramagnetic

The analyzer data recording system consists of a Honeywell DPR300 strip chart recorder, supported by a data acquisition system (DAS). The instrument response is recorded on strip charts and DAS. The averages are corrected for drift using BAAQMD and EPA Method 7E equations. All system performance criteria were met.

3.6. System Performance Criteria

The analyzer data recording system consists of a Honeywell DPR300 strip chart recorder, supported by a Data Acquisition System (DAS). The instrument response is recorded on strip charts and DAS. The averages are corrected for drift using BAAQMD and EPA Method 7E equations. All system performance criteria were met.

Instrument Linearity	≤2% Full Scale
Instrument Bias	≤5% Full Scale
System Response Time	≤± 2 minutes
NO_X Converter Efficiency *(EPA Method 7E)*	≥ 90%
Instrument Zero Drift	≤± 3% Full Scale
Instrument Span Drift	≤± 3% Full Scale

3.7. Comments: Limitations and Data Qualifications

This source test was performed in accordance with the protocol submitted to BAAQMD. The fuel sample collected during Run 3, condensate on, of the test program had a relatively high oxygen content, suggesting that air had infiltrated the sample. These findings were excluded from calculations for heat value, TNMOC, CH_4, TRS, and toxic air pollutants. Results represent the average of Runs 1 and 2. No other deviations from the protocol or anomalies were observed during testing. No deviations from the protocol were observed during testing. The measured emissions from the flare comply with the permit limits; however, the total reduced sulfur as H2S content of the landfill gas exceeded permitted limits.

Blue Sky Environmental, Inc. has reviewed this report for accuracy and concluded that the test procedures were followed and accurately described and documented. The review included the following items:

Review of the general text
Review of calculations
Review of CEMS data
Review of supporting documentation

The services described in this report were performed in a manner consistent with the generally accepted professional testing principles and practices. No other warranty, expressed or implied, is made. These services were performed in a manner consistent with our agreement with our client. The report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions contained in this report pertain to conditions existing when services were performed and are intended only for the client purposes, locations, time frames, and operating parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to this, and do not warranty the accuracy of information supplied by others.

SECTION 4. APPENDICES

- **A.** **Tabulated Results**
- **B.** **Calculations**
- **C.** **Laboratory Reports**
- **D.** **Field Data Sheets**
- **E.** **Process Information**
- **F.** **Flare Flow Meter Calibration Records**
- **G.** **QC Calibration Certificates and Quality Assurance Records**
- **H.** **Sample Train Configuration and Stack Diagrams**
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- **J.** **Permit**

A
Tabulated Results

TABLE 1

Altamont Landfill
Flare A-16
1,522 °F - Condensate ON

Parameter	**Run 1**	**Run 2**	**Run 3**	**Average Results**	**Permit Limits**
Test Date	3/6/24	3/6/24	3/6/24		
Test Time	0744-0825	0852-0933	0959-1037		
Standard Temperature, °F	70	70	70		
Process Parameters:					
Flare Temperature, °F	1,522	1,521	1,522	1,522	
Condensate Injection, gpm	1.03	0.90	1.02	0.98	
Fuel:					
Fuel Flow Rate, SCFM	2,066	2,059	2,071	2,065	
Fuel Heat Input, MMBtu/hr	57.8	59.9	59.1	58.9	
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	22,190	23,697	23,850	23,246	
Oxygen (O_2), % volume dry	12.4	12.7	12.9	12.7	
Carbon Dioxide (CO_2), % volume dry	7.88	7.24	7.55	7.56	
Water Vapor (H_2O), % volume dry *(EPA Method 4)*	6.89	6.37	5.80	6.35	
$NO/NO_2/NO_X$ Emissions:					
NOx, ppmvd	18.7	17.7	17.4	17.9	
NOx, ppmvd @ 3% O_2	39.5	38.6	38.6	38.9	45
NOx, lb/hr	2.96	3.00	2.96	2.97	
NOx, lb/day	71.0	71.9	71.0	71.3	
NOx, lb/MMBtu	0.0512	0.0500	0.0500	0.0504	0.06
CO Emissions:					
CO, ppmvd	<10.0	<10.0	<10.0	<10.0	
CO, ppmvd @ 3% O_2	<21.2	<21.8	<22.2	<21.7	246
CO, lb/hr	<0.964	<1.029	<1.036	<1.010	
CO, lb/day	<23.1	<24.7	<24.9	<24.2	
CO, lb/MMBtu	<0.0167	<0.0172	<0.0175	<0.0171	0.20
TRS as H_2S, ppmvd in Fuel	269	274	272*	272	200
Sulfur Dioxide (SO_2) Emissions, ppmvd (calculated)	25.0	23.8	24.4*	24.4	300
THC Emissions (reported as CH_4):					
THC, ppmv wet *(Sum NMOC + CH_4)*	<11.8	<11.0	<11.0	<11.3	
THC, ppmvd dry	<12.7	<11.8	<11.8	<12.1	
THC, lb/hr	<0.698	<0.695	<0.699	<0.697	
Methane (CH_4) Emissions:					
CH_4, ppmv wet *(EPA Method 25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd	<10.7	<10.7	<10.6	<10.7	
CH_4, lb/hr	<0.592	<0.628	<0.629	<0.616	
NMOC Emissions (reported as CH_4):					
NMOC, ppmv wet *(EPA Method 25A)*	1.8	<1.0	<1.0	<1.3	
NMOC, ppmvd	1.9	<1.1	<1.1	<1.4	
NMOC, ppmvd @ 3% O_2	4.1	<2.3	<2.4	<2.9	30**
NMOC, lb/hr	0.11	<0.063	<0.063	<0.077	
Inlet Hydrocarbons (reported as CH_4):					
Inlet NMOC, ppmvd *(EPA Method 25C)*	2,064	1,995	2,030*	2,030	
Inlet NMOC, lb/hr	10.6	10.2	10.4*	10.4	
NMOC Destruction Efficiency, %	>98.99%	>99.38%	>99.19%	>99.19%	>98%**
Inlet CH_4, ppmvd *(ASTM D-1945)*	461,000	480,000	470,500*	470,500	
Inlet CH_4, lb/hr	2,365	2,453	2,409*	2,409	
CH_4 Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC (TOC), ppmvd *(Sum NMOC + CH4)*	463,064	481,995	472,530*	472,530	
Inlet THC (TOC), lb/hr	2,375	2,464	2,420*	2,420	
THC (TOC) Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	

DEFINITIONS:

ppmvd = parts per million concentration by volume expressed on a dry gas basis

lb/hr = pound per hour emission rate

Tstd. = standard temperature (°R = °F+460)

MW = molecular weight

DSCFM = dry standard cubic feet per minute

NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)

CO = carbon monoxide (MW = 28)

THC = TOC = total hydrocarbons including CH_4, reported as CH_4 (MW = 16)

NMOC = non-methane organic compounds, reported as CH_4 (MW = 16)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)

lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R

Destruction Efficiency (DE) = (inlet, lb/hr- outlet, lb/hr) / inlet, lb/hr

SO_2 emission ppmvd = H_2S in fuel · fuel flow/stack gas flow

SO_2 = sulfur dioxide as SO_2 (MW = 64.1)

< Value = 2% of Analyzer Range

** Results are the average of Runs 1 and 2*

*** NMOC permit limits are 30 ppmvd @ 3% O_2 or DE >98%*

TABLE 2
AP42 2.4-1 - Landfill Gas Samples

Altamont Landfill
Flare A-16
1,522 °F - Condensate ON

Compound	**Method**	**Run 1 (ppb)**	**Run 2 (ppb)**	**Run 3 (ppb)**	**Average * Results (ppb)**	**Permit Limits (ppb)**
1,1,1-Trichloroethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,1,2,2-Tetrachloroethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	400
1,1-Dichloroethane (Ethylidene Dichloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,000
1,1-Dichloroethene (Vinylidene Chloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,2-Dichloroethane (Ethylene Dichloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,500
1,2-Dichloropropane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
2-Propanol (Isopropyl alcohol)	*EPA TO-15*	**10,200**	**13,000**	**2,480**	**11,600**	500,000
Acrylonitrile	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	300
Bromodichloromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Carbon Tetrachloride	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	100
Chlorobenzene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Chlorodifluoromethane	*EPA TO-15*	62.1	60.1	<51.3	61.1	
Chloroethane (Ethyl Chloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Chloroform (Trichloromethane)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	100
Chloromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,2-Dichlorobenzene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,3-Dichlorobenzene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,4-Dichlorobenzene	*EPA TO-15*	**308**	**360**	**72.8**	**334**	7,500
Dichlorodifluoromethane (Freon 12)	*EPA TO-15*	57.3	54.4	<51.3	55.9	
Dichlorofluoromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Dichloromethane (Methylene Chloride)	*EPA TO-15*	<95.6	<95.4	<103	<95.5	1,500
Ethanol	*EPA TO-15*	41,600	43,300	7,960	42,450	
Ethylbenzene	*EPA TO-15*	**2,680**	**2,770**	**634**	**2,725**	23,000
1,2-Dibromoethane (Ethylene dibromide)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Trichlorofluoromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
n-Hexane	*EPA TO-15*	305	295	153	300	
2-Butanone (Methyl Ethyl Ketone)	*EPA TO-15*	**24,400**	**23,600**	**4,160**	**24,000**	350,000
4-Methyl-2-pentanone (MiBK)	*EPA TO-15*	1,170	1,210	248	1,190	
Perchloroethylene (Tetrachloroethene) PCE	*EPA TO-15*	**54.5**	**52.5**	<51.3	**53.5**	1,500
trans-1,2-Dichloroethene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Trichloroethylene (TCE)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,500
Vinyl Chloride (Chloroethene)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,000
m/p-Xylenes	*EPA TO-15*	4,350	4,490	992	4,420	
o-Xylene	*EPA TO-15*	1,570	1,660	361	1,615	
Total Xylenes	*EPA TO-15*	**5,920**	**6,150**	**1,353**	**6,035**	90,000
Benzene	*EPA TO-15*	**1,490**	**1,490**	**298**	**1,490**	7,900
Benzyl Chloride (a-Chlorotoluene)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	500
Methanol (Methyl Alcohol)	*EPA TO-15*	**7,010**	**7,690**	**1,790**	**7,350**	600,000
Toluene	*EPA TO-15*	**4,790**	**4,750**	**1,210**	**4,770**	80,000

TABLE 3

Altamont Landfill
Flare A-16
1,522 °F - Condensate OFF

Parameter	**Run 1**	**Run 2**	**Run 3**	**Average Results**	**Permit Limits**
Test Date	3/6/24	3/6/24	3/6/24		
Test Time	1102-1144	1204-1244	1302-1344		
Standard Temperature, °F	70	70	70		
Process Parameters:					
Flare Temperature, °F	1,522	1,522	1,522	1,522	
Condensate Injection, gpm	0.00	0.00	0.00	0.00	
Fuel:					
Fuel Flow Rate, SCFM	2,101	2,090	2,091	2,094	
Fuel Heat Input, MMBtu/hr	65.4	65.9	65.6	65.6	
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	25,613	26,422	25,782	25,939	
Oxygen (O_2), % volume dry	12.6	12.8	12.6	12.7	
Carbon Dioxide (CO_2), % volume dry	7.18	6.97	7.26	7.14	
Water Vapor (H_2O), % volume dry *(EPA Method 4)*	7.58	6.34	6.92	6.95	
NO/NO_2/NO_X Emissions:					
NOx, ppmvd	13.8	13.4	14.0	13.7	
NOx, ppmvd @ 3% O_2	29.8	29.4	30.2	29.8	45
NOx, lb/hr	2.53	2.52	2.57	2.54	
NOx, lb/day	60.7	60.5	61.7	61.0	
NOx, lb/MMBtu	0.0387	0.0382	0.0392	0.0387	0.06
CO Emissions:					
CO, ppmvd	19.3	15.3	29.2	21.2	
CO, ppmvd @ 3% O_2	41.5	33.6	63.1	46.0	246
CO, lb/hr	2.14	1.75	3.27	2.39	
CO, lb/day	51.4	42.0	78.6	57.3	
CO, lb/MMBtu	0.0328	0.0266	0.0499	0.0364	0.20
TRS as H_2S, ppmvd in Fuel	339	211	228	259	200
Sulfur Dioxide (SO_2) Emissions, ppmvd (calculated)	27.8	16.7	18.5	21.0	300
THC Emissions (reported as CH_4):					
THC, ppmv wet *(Sum NMOC + CH_4)*	<11.0	<11.0	<11.0	<11.0	
THC, ppmvd dry	<11.9	<11.9	<11.9	<11.9	
THC, lb/hr	<0.757	<0.781	<0.762	<0.766	
Methane (CH_4) Emissions:					
CH_4, ppmv wet *(EPA Method 25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd	<10.8	<10.7	<10.7	<10.7	
CH_4, lb/hr	<0.688	<0.700	<0.688	<0.692	
NMOC Emissions (reported as CH_4):					
NMOC, ppmv wet *(EPA Method 25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppmvd	<1.1	<1.1	<1.1	<1.1	
NMOC, ppmvd @ 3% O_2	<2.3	<2.3	<2.3	<2.3	30*
NMOC, lb/hr	<0.069	<0.070	<0.069	<0.069	
Inlet Hydrocarbons (reported as CH_4):					
Inlet NMOC, ppmvd *(EPA Method 25C)*	2,350	2,358	2,714	2,474	
Inlet NMOC, lb/hr	12.3	12.2	14.1	12.9	
NMOC Destruction Efficiency, %	>99.44%	>99.43%	>99.51%	>99.46%	>98%*
Inlet CH_4, ppmvd	513,000	520,000	518,000	517,000	
Inlet CH_4, lb/hr	2,676	2,698	2,688	2,688	
CH_4 Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC (TOC), ppmvd	515,350	522,358	520,714	519,474	
Inlet THC (TOC), lb/hr	2,688	2,711	2,702	2,700	
THC (TOC) Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	

DEFINITIONS:

ppmvd = parts per million concentration by volume expressed on a dry gas basis
lb/hr = pound per hour emission rate
Tstd. = standard temperature (°R = °F+460)
MW = molecular weight
DSCFM = dry standard cubic feet per minute
NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)
CO = carbon monoxide (MW = 28)
THC = TOC = total hydrocarbons including CH_4, reported as CH_4 (MW = 16)
NMOC = non-methane organic compounds, reported as CH_4 (MW = 16)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)
lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
THC, ppm as CH_4 = NMOC + CH_4
Destruction Efficiency (DE) = (inlet, lb/hr- outlet, lb/hr) / inlet, lb/hr
SO_2 emission ppmvd = H_2S in fuel · fuel flow/stack gas flow
SO_2 = sulfur dioxide as SO_2 (MW = 64.1)
< Value = 2% of Analyzer Range

** NMOC permit limits are 30 ppmvd @ 3% O_2 or DE >98%*

TABLE 4
AP42 2.4-1 - Landfill Gas Samples

Altamont Landfill
Flare A-16
1,522 °F - Condensate OFF

Compound	**Method**	**Run 1 (ppb)**	**Run 2 (ppb)**	**Run 3 (ppb)**	**Average Results (ppb)**	**Permit Limits (ppb)**
1,1,1-Trichloroethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,1,2,2-Tetrachloroethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	400
1,1-Dichloroethane (Ethylidene Dichloride)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,000
1,1-Dichloroethene (Vinylidene Chloride)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,2-Dichloroethane (Ethylene Dichloride)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,500
1,2-Dichloropropane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
2-Propanol (Isopropyl alcohol)	*EPA TO-15*	**15,700**	**19,300**	**20,900**	**18,633**	500,000
Acrylonitrile	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	300
Bromodichloromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Carbon Tetrachloride	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	100
Chlorobenzene	*EPA TO-15*	105	102	97.4	101	
Chlorodifluoromethane	*EPA TO-15*	68.2	72.4	64.0	68.2	
Chloroethane (Ethyl Chloride)	*EPA TO-15*	<47.3	<48.3	<46.4	47.3	
Chloroform (Trichloromethane)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	100
Chloromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,2-Dichlorobenzene	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,3-Dichlorobenzene	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,4-Dichlorobenzene	*EPA TO-15*	**360**	**391**	**391**	**381**	7,500
Dichlorodifluoromethane (Freon 12)	*EPA TO-15*	64.4	59.9	59.4	61.2	
Dichlorofluoromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Dichloromethane (Methylene Chloride)	*EPA TO-15*	<94.7	<96.5	<92.8	<94.7	1,500
Ethanol	*EPA TO-15*	56,900	62,900	68,700	62,833	
Ethylbenzene	*EPA TO-15*	**2,920**	**2,920**	**2,840**	**2,893**	23,000
1,2-Dibromoethane (Ethylene dibromide)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Trichlorofluoromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
n-Hexane	*EPA TO-15*	342	345	333	340	
2-Butanone (Methyl Ethyl Ketone)	*EPA TO-15*	**27,900**	**29,300**	**31,000**	**29,400**	350,000
4-Methyl-2-pentanone (MiBK)	*EPA TO-15*	1,340	1,370	1,330	1,347	
Perchloroethylene (Tetrachloroethene) PCE	*EPA TO-15*	**60.6**	**62.7**	**59.4**	**60.9**	1,500
trans-1,2-Dichloroethene	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Trichloroethylene (TCE)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,500
Vinyl Chloride (Chloroethene)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,000
m/p-Xylenes	*EPA TO-15*	4,780	4,840	4,650	4,757	
o-Xylene	*EPA TO-15*	1,740	1,800	1,730	1,757	
Total Xylenes	*EPA TO-15*	**6,520**	**6,640**	**6,380**	**6,513**	90,000
Benzene	*EPA TO-15*	**1,660**	**1,620**	**1,560**	**1,613**	7,900
Benzyl Chloride (a-Chlorotoluene)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	500
Methanol (Methyl Alcohol)	*EPA TO-15*	9,110	11,000	10,500	10,203	600,000
Toluene	*EPA TO-15*	5,170	5,140	4,970	5,093	80,000

SCS ENGINEERS Environmental Consultants & Contractors

August 5, 2024
Project No. 01201101.02

Source Test Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Subject: **2024 ANNUAL SOURCE TEST AMENDED REPORT A-16 FLARE ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY (FACILITY A2066)**

To Whom It May Concern,

The 2024 Annual Source Test at the A-16 Flare was completed on March 6, 2024, the final report was submit to the Bay Area Air Quality Management District (BAAQMD or District) on May 3, 2024. Preliminary results for total reduced sulfur (TRS) as hydrogen sulfide (H_2S) indicated values above the permit limit of 200 parts per million by volume (ppmv). Altamont Landfill and Resource Recovery Facility (ALRRF) completed additional testing at the A-16 Flare to confirm the H_2S results on June 10, 2024. The retesting results show that the site is in compliance with the permitted limit of 200 ppmv for TRS. Attached, please find the amended report and contractor supplemental form, which includes the June 10, 2024 test result.

Please contact the undersigned at (619) 455-9518 or at mbowen@scsengineers.com or Rajan Phadnis at (510) 875-9338 or at rphadnis@wm.com if you have any questions or require any additional information.

Sincerely,

Maria Bowen
Project Manager
SCS Engineers

CC: Rajan Phadnis, Waste Management

Attachment A: Annual Source Test Amended Report A-16 Flare 2024

Annual Source Test Amended Report ALRRF A-16 Flare 2024

Blue Sky Environmental, Inc

Waste Management of Alameda County

BAAQMD Facility #2066

Compliance Test Report #24097

Landfill Gas Flare A-16

Located at:
Altamont Landfill
10840 Altamont Pass Road
Livermore, CA 94551

Prepared for:
SCS Engineers
3117 Fite Circle, Suite 108
Sacramento, CA 95827

Attn: Maria Bowen
mbowen@scsengineers.com

For Submittal to:
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Attn: Gloria Espena and Marco Hernandez
gespena@baaqmd.gov/mhernandez@baaqmd.gov
sourcetest@baaqmd.gov

Testing Performed on:
March 6, 2024
Retest Performed on:
June 10, 2024

Final Report Submitted on:
May 2, 2024
Amended Report completed on:
July 30, 2024

Performed and Reported by:
Blue Sky Environmental, Inc.
2273 Lobert Street
Castro Valley, CA 94546

Office (510) 525-1261/Mobile (810) 923-3181
bluesky@blueskyenvironmental.com

REVIEW AND CERTIFICATION

Team Leader:

The work performed herein was conducted under my supervision, and I certify that:

a) the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program,

b) that the sampling and analytical procedures and data presented in the report are authentic and accurate,

c) that all testing details and conclusions are accurate and valid, and

d) that the production rate and/or heat input rate during the source test are reported accurately.

If this report is submitted for compliance purposes, it should only be reproduced in its entirety. If there are any questions concerning this report, please contact me at (810) 923-3181.

Jeramie Richardson
President
Blue Sky Environmental, Inc.

TABLE OF CONTENTS

SECTION 1. INTRODUCTION

1.1. Summary

Blue Sky Environmental, Inc. was contracted by SCS Engineers to perform emissions testing for Waste Management of Alameda County, Inc. at the Altamont Landfill and Resource Recovery Facility (ALRRF) in Livermore, California. Testing was conducted to demonstrate that landfill gas Flare A-16 is operating in compliance with Condition 19235 of Bay Area Air Quality Management District (BAAQMD) Permit to Operate A2066.

The results of the test program are presented in this report. The source test information is summarized in Table 1-1. Test results derived from the source test are summarized in Tables 1-2 and 1-3. Results for individual test runs are provided in Appendix A. The flare met all compliance emission criteria; the total reduced sulfur content of the landfill gas was within permitted limits during source retest on June 10, 2024.

Table 1-1 Source Test Information

Test Location:	Altamont Landfill and Resource Recovery Facility (ALRRF) 10840 Altamont Pass Road, Livermore CA 94551
Source Contact:	Maria Bowen, SCS Engineers (619) 455-9518
Source Tested:	Flare A-16 – 132 MMBtu/hr LFG Specialties, Inc. enclosed landfill gas flare
Source Test Date:	March 6, 2024; TRS as H_2S Retest June 10, 2024
Test Objective:	Determine compliance with Condition 19235 of the Bay Area Air Quality Management District (BAAQMD) permit for Facility #2066; BAAQMD Regulation 8, Rule 34; and the State Landfill Methane Gas Rule under AB32 for flare performance.
Test Performed by:	Blue Sky Environmental, Inc. 2273 Lobert Street, Castro Valley, CA 94546 *March 6, 2024:* Jaime Rios (925) 482-4504 bluesky@blueskyenvironmental.com *June 10, 2024:* Jeramie Richardson (810) 923-3181 bluesky@blueskyenvironmental.com
Test Parameters:	*March 6, 2024:* Landfill Gas O_2, N_2, CO_2, BTU, THC, CH_4, NMOC, HHV, F-Factor, Sulfur and VOC Species, Volumetric Flow rate Flare Emissions THC, CH_4, NMOC, NO_X, CO, O_2, SO_2, Moisture, Volumetric Flow rate. *June 10, 2024:* TRS as H_2S and SO_2

Table 1-2 Compliance Summary

Flare A-16 Condensate Injection - ON

Emission Parameter	Average Results (Condensate - ON)	Permit Limit	Compliance Status
NO_X, ppmvd @ 3% O_2	38.9	45	In Compliance
NO_X, lb/MMBtu	0.0504	0.06	In Compliance
CO, ppmvd @ 3% O_2	<21.7	246	In Compliance
CO, lb/MMBtu	<0.0171	0.20	In Compliance
TRS as H_2S in Fuel, ppmvd*	97.7	200	In Compliance
SO_2, ppmvd	24.4	300	In Compliance
NMOC, ppmvd @ 3% O_2 as CH_4	<2.9	30	In Compliance
NMOC Destruction Efficiency, %	>99.19%	>98%	In Compliance
CH_4 Destruction Efficiency, %	>99.97%	>99%	In Compliance

*Results from TRS and H_2S retest conducted on June 10, 2024

Table 1-3 Compliance Summary

Flare A-16 Condensate Injection - OFF

Emission Parameter	Average Results (Condensate - OFF)	Permit Limit	Compliance Status
NO_X, ppmvd @ 3% O_2	29.8	45	In Compliance
NO_X, lb/MMBtu	0.0387	0.06	In Compliance
CO, ppmvd @ 3% O_2	46.0	246	In Compliance
CO, lb/MMBtu	0.0364	0.20	In Compliance
TRS as H_2S in Fuel, ppmvd*	76.4	200	In Compliance
SO_2, ppmvd	21.0	300	In Compliance
NMOC, ppmvd @ 3% O_2 as CH_4	<2.3	30	In Compliance
NMOC Destruction Efficiency, %	>99.46%	>98%	In Compliance
CH_4 Destruction Efficiency, %	>99.97%	>99%	In Compliance

*Results from TRS and H_2S retest conducted on June 10, 2024

SECTION 2. SOURCE TEST PROGRAM

2.1. Overview

This annual source test was performed to demonstrate that landfill gas Flare A-16 is operating in accordance with Condition 19235 of the Bay Area Air Quality Management District (BAAQMD) Permit to Operate for Facility #2066 and BAAQMD Regulation 8, Rule 34. This testing also satisfies compliance requirements outlined in the State Landfill Methane Gas Rule under AB32 for flare performance.

2.2. Pollutants Tested

The following U.S. Environmental Protection Agency (EPA) and ASTM International sampling and analytical methods were used:

EPA Method 1	Sample and Traverse Point Determination
EPA Method 3A	O_2 and CO_2 Emissions, Stack Gas Molecular Weight
EPA Method 10	CO Emissions
EPA Method 7E	NO_X Emissions and NO_2 Converter Check
EPA Method 4	Moisture Content in Stack Gas
EPA Method 18	CH_4, THC, NMOC
EPA Method 19	Flow Rate Calculation DSCFM
EPA Method 25A	VOC Emissions
EPA Method 25C	TNMHC (NMOC) in Fuel
ASTM D-1945/3588	BTU, F-Factor and Fixed Gases in Fuel
ASTM D-5504	Sulfur Species, Hydrogen Sulfide (H_2S) and TRS
EPA Method TO-15	Toxic Organic Compounds

2.3. Test Date

Testing was conducted March 6, 2024. The TRS as H_2S retest was conducted on June 10, 2024.

2.4. Sampling and Observing Personnel

Testing on March 6 was conducted by Jaime Rios and Timothy Eandi, representing Blue Sky Environmental, Inc. Retesting on June 10 was conducted by Jeramie Richardson, representing Blue Sky Environmental, Inc.

Ben Tarver of Waste Management (WM) was present to operate the flare and assist in coordinating testing and the collection of process data during testing.

BAAQMD was notified of the scheduled testing in a source test plan submitted on February 5, 2024. A Source Test Protocol acknowledgement (NST-9045) was received the same day. No agency observers from the District were present during the test program. A copy of the source test protocol and email correspondence are provided in Appendix J.

BAAQMD was notified of the scheduled retest in a source test protocol submitted by SCS Engineers on behalf of Altamont Landfill and Resource Recovery Facility on May 24, 2024. A

Source Test Protocol acknowledgement (NST-9409) was received on May 24, 2024 for the test. No agency observers from the district were present during the test program. A copy of the source test protocol and email correspondence are provided in Appendix D.

The 2024 Annual Source Test at the A-16 Flare was completed on March 6, 2024. Report was submitted on May2, 2024. Preliminary results for total reduced sulfur (TRS) as hydrogen sulfide (H_2S) indicated values above the permit limit of 200 parts per million by volume (ppmv). ALRRF completed source retest at the A-16 Flare to confirm the TRS results on June 10, 2024. The retesting results show that the site is in compliance with the permitted limit of 200 ppmv for TRS.

2.5. Source/Process Description

The Altamont Landfill, located in Livermore, California, is a multi-material landfill with a gas collection system that is abated by two industrial landfill gas flares. Flare A-16 has a 132 MMBtu/hr multiple nozzle burner and a combustion zone temperature set-point of 1,600 °F. The flare shell is 50 feet high and 12.5 feet in diameter. The inside diameter (ID) is approximately 144 inches. Flare A-16 operates on landfill gas (LFG). Collected landfill gas condensate is periodically injected into the flare through one vertical nozzle positioned near the burner.

2.6. Source Operating Conditions

The flare was operated at or near maximum operating rates for each of the following operating conditions:

1) while the flare was burning landfill gas without any condensate injection,
2) while the flare was burning landfill gas and condensate was being injected into the flare at the maximum injection rate (0.98 gallons per minute).

The average exhaust temperature during the test program conducted on March 6, 2024, was 1,522 °F. The LFG flow rate ranged from 2,059 to 2,101 SCFM. Landfill gas samples collected at the head of the flare showed an average methane content of 49.8% and an oxygen content of 2.14%. The operating exhaust temperature and LFG flow rate records are provided in Appendix F.

The fuel sample collected during Run 3, condensate on, of the test program had a relatively high oxygen content, suggesting that air had infiltrated the sample. These findings were excluded from calculations for heat value, TNMOC, CH_4, TRS, and toxic air pollutants. Results represent the average of Runs 1 and 2.

The average exhaust temperature during the retest program conducted on June 10, 2024, was 1,524 °F. The LFG flow rate ranged from 2,014 to 2,044 SCFM. Landfill gas samples collected at the head of the flare showed an average methane content of 47.5% and an oxygen content of 2.11%. The operating exhaust temperature and LFG flow rate records are provided in Appendix F, however the SO_2 emissions were calculated using data from the March 6 test as the conditions were identical and did not produce any significant changes in the calculations.

SECTION 3. SAMPLING AND ANALYSIS PROCEDURES

3.1. Port Location

Sampling was conducted at the 144-inch diameter ID stack of the flare through ports that were accessed with a 65-foot boom lift. The four 8-inch flange ports were located 45 feet above grade, approximately four stack diameters downstream from the burners and approximately one stack diameter upstream from the exhaust.

3.2. Point Description/Labeling – Ports/Stack

Blue Sky Environmental, Inc. conducted two perpendicular 8-point traverses to check for the presence of stratification and cyclonic flow. O_2 stratification was greater than 10%; therefore, subsequent CEM sampling was conducted using all traverse points. Sampling was performed for two minutes per point for a total of 16 points over 32-minute test run. The traverse points for the 144-inch diameter stack with offset 8-inch ports were 4.6, 15.1, 27.9, 46.5, 97.5, 116.1, 128.9 and 139.4 inches.

3.3. Sample Train Description

Sampling system diagrams are provided in Appendix I. Additional descriptive information is included in the following section.

3.4. Sampling Procedure Description

Six consecutive 32-minute gaseous emissions tests were performed for oxides of nitrogen (NO_X), nitric oxide (NO), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2), methane (CH_4) and non-methane organic compounds (NMOC) at the flare exhaust stack. The first three tests were performed while the flare was burning landfill gas with the condensate injection system operating. The last three tests were performed while the flare was burning landfill gas with the condensate injection off. The gas flow was controlled with a critical orifice to collect the 32-minute integrated samples.

The sampling system was checked for leaks before the start of the testing, by plugging the sample probe and observing the sample rotameter flow drop to zero. Instrument linearity and system bias were checked. The system response time for each analyzer was recorded. The temperatures of the heated sample line between the probe and sample conditioner/condenser, and the condenser exhaust temperatures were maintained within limits during each test run.

Analyzer external calibrations were performed before and after each run using EPA protocol certified gas standards. Calibration gases were introduced to the sample manifold at the same flow rate as the sample. Any drift or bias was corrected using equation 100-3 from CARB Method 100. A NO_X analyzer converter efficiency check was performed before the first test run and achieved an efficiency greater than 90%.

Concurrent with the exhaust sampling, Blue Sky Environmental, Inc. collected a total of six integrated fuel samples (one sample per test run) for HHV, F-factor, fixed gases, volatile organic compounds (VOCs), nonmethane organic compounds (NMOCs) and C_1-C_{6+} hydrocarbons by EPA Method 25C and ASTM D-1945, and sulfur compounds by ASTM D-5504. Additionally, the fuel samples were analyzed for toxic organic compounds by EPA Method TO-15. The samples were collected in 6-liter SUMMA canisters and analyzed by Atmospheric Analysis & Consulting, Inc., located in Ventura, CA.

The sampling and analysis procedures are summarized below:

EPA Method 1 – Sample and Velocity Traverses for Stationary Sources

This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements.

EPA Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. A small portion of the sample is passed through a fuel cell type paramagnetic oxygen analyzer which measures the electrical current generated by the oxidation reaction at the gas/fuel cell interface. Carbon dioxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon dioxide absorbs infrared radiation.

EPA Method 7E – Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure nitrogen oxides in stationary source emissions using a continuous instrumental analyzer. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Nitric oxide is determined by passing the sample through a chemiluminescent analyzer. The chemiluminescent process is based on the light given off when nitric oxide and ozone react. Nitrogen dioxide (NO_2) concentrations are determined by passing the sample through a catalyst which reduces the NO_2 to NO. The total oxides of nitrogen concentration (NO_2 + NO) is then determined by chemiluminescence.

Section 16.2.2 of the method is used to determine the NO_X analyzer NO_2 to NO conversion efficiency.

EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources

This method is used to measure carbon monoxide from integrated or continuous gas samples extracted from a sampling point. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Carbon monoxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon monoxide absorbs infrared radiation.

EPA Methods 3A, 7E and 10 are all continuous monitoring techniques using instrumental analyzers. Sampling is performed by extracting exhaust flue gas from the stack, conditioning the sample, and analyzing it by continuous monitoring gas analyzers in a continuing emissions monitoring (CEM) test van. The sampling system consists of a stainless-steel sample probe, Teflon sample line, glass-fiber particulate filter, and glass moisture-knockout condensers in ice, followed by thermoelectric coolers (optional), Teflon sample transfer tubing, a diaphragm pump, and a stainless steel/Teflon manifold and flow control/delivery system. A constant sample and calibration gas supply pressure of 5 PSI is provided to each analyzer to avoid pressure variable response differences. The entire sampling system is leak checked prior to and at the end of the sampling program.

The sampling and analytical system is checked for linearity with zero, mid (40-60%) and high span (80-100%) calibrations and is checked for system bias at the beginning and end of each run. System bias is determined by introducing calibration gas to the probe and pulling it through the entire sampling system. Individual test run calibrations use the calibration gas that most closely matches the stack gas effluent. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. EPA Methods 3A, 7E and 10 all defer to EPA Method 7E for the calculations of effluent concentration, span, calibration gas, analyzer calibration error (linearity), sampling system bias, zero drift, calibration drift and response time.

EPA Method 4 – Determination of Moisture Content in Stack Gas

This method is used to determine the moisture content of stack gas. The sample is extracted and condensed in Greenburg-Smith impingers immersed in an ice bath and in a final impinger silica gel trap. The moisture is condensed in a solution of de-ionized water, or solutions of another type of sampling train if the moisture is being determined as part of another sampling method, such as EPA Method 5 or EPA 12. The moisture gain in the impinger solutions and silica gel is determined volumetrically and gravimetrically respectively.

QA/QC procedures require that a minimum of 21 cubic feet of sample is pulled using a leak tight pump. The sample volume is measured with a calibrated dry gas meter. The impingers are immersed in an ice bath to maintain a gas outlet temperature of less than 68°F. Pre-test leak checks are performed for each run using a minimum of 15 inches of mercury vacuum. Post-test leak checks are performed at the highest sample vacuum or greater. The leak test is acceptable if the leak rate is less than 0.02 cubic feet per minute or 4% of the average sampling rate, whichever is less. If the final leak check exceeds the criteria, either the volume is corrected based on the leak rate or the run is voided and repeated.

EPA Method 18 – Measurement of Gaseous Organic Compound Emissions by Gas Chromatography

This method is used to determine emissions of volatile organics by gas chromatography (GC). Gases are collected in a pre-evacuated 6-Liter SUMMA canister with pre-set flow controller set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the target volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consists of capillary orifice tubing designed to sample for a pre-set duration of 0.5 hrs.

EPA Method 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates

This method is used to determine stack gas volumetric flow rates using oxygen-based F-factors. F-factors are ratios of combustion gas volumes to heat inputs. The heating value of the fuel in Btu per cubic foot is determined from analysis of fuel gas samples using ASTM D-1946/1945 gas chromatography analytical procedures. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine emission rates. 301.

EPA Method 25A – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer

This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.

The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test.

EPA Method 25C – Determination of Nonmethane Organic Compounds (NMOC) in Landfill Gas

This method is used to sample and measure NMOC in landfill gases. Gases are collected in a pre-evacuated 6-Liter SUMMA canister with pre-set flow controller set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consists of capillary orifice tubing designed to sample for a pre-set duration of 0.5 hrs. The sample is injected into a GC column where the methane and CO_2 are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO_2 then reduced to methane and analyzed.

ASTM D-1945 – Analysis of Natural Gas by Gas Chromatography

This method is used to measure fixed gases (such as oxygen, nitrogen, carbon monoxide, and carbon dioxide) and methane by gas chromatography (GC/TCD). Light hydrocarbons, including C1-C7, are analyzed by GC/FID.

ASTM D-3588 – Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels

This method uses the molar composition of gaseous fuel determined from Method ASTM D-1945 to calculate the heating value and F-factor.

ASTM D-5504 – Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence

This method is used for the determination of speciated volatile sulfur-containing compounds in high methane content gaseous fuels by gas chromatography. Sulfur compounds are processed using a flame ionization detector (GC/FID). The products are then analyzed with a sulfur chemiluminescence detector (GC/SCD). Samples may be collected in Tedlar bags and analyzed within 24 hours or in Silco SUMMA canisters and analyzed within 7 days.

EPA Compendium Method TO-15 – Determination of Toxic Organic Compounds in Ambient Air

This method is used to measure volatile organic compounds that are included in the hazardous air pollutants (HAPs) listed in Title III of the Clean Air Act Amendments of 1990 by GC/MS (gas chromatography/mass spectroscopy). Samples are collected in pre-evacuated 6-Liter SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the TO-15 Method list of volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consisted of capillary orifice tubing designed to sample for a pre-set duration of 0.75hrs.

3.5. Instrumentation

The following continuous emissions analyzers were used:

Instrumentation	Parameter	Principle
TECO Model 42C	$NO_X/NO/NO_2$	Chemiluminescence
TECO Model 48C	CO	Gas Filter Correlation /Infrared
TECO Model 55C	$NMOC/CH_4$	Flame Ionization (GC/FID)
Servomex Model 1440	CO_2	Infrared
Servomex Model 1440	O_2	Paramagnetic

The analyzer data recording system consists of a Honeywell DPR300 strip chart recorder, supported by a data acquisition system (DAS). The instrument response is recorded on strip charts and DAS. The averages are corrected for drift using BAAQMD and EPA Method 7E equations. All system performance criteria were met.

3.6. System Performance Criteria

The analyzer data recording system consists of a Honeywell DPR300 strip chart recorder, supported by a Data Acquisition System (DAS). The instrument response is recorded on strip charts and DAS. The averages are corrected for drift using BAAQMD and EPA Method 7E equations. All system performance criteria were met.

Instrument Linearity	≤2% Full Scale
Instrument Bias	≤5% Full Scale
System Response Time	≤± 2 minutes
NO_X Converter Efficiency *(EPA Method 7E)*	≥ 90%
Instrument Zero Drift	≤± 3% Full Scale
Instrument Span Drift	≤± 3% Full Scale

3.7. Comments: Limitations and Data Qualifications

This source test was performed in accordance with the protocol submitted to BAAQMD. The fuel sample collected during Run 3, condensate on, of the test program had a relatively high oxygen content, suggesting that air had infiltrated the sample. These findings were excluded from calculations for heat value, TNMOC, CH_4, TRS, and toxic air pollutants. Results represent the average of Runs 1 and 2. No other deviations from the protocol or anomalies were observed during testing. No deviations from the protocol were observed during testing. The measured emissions from the flare comply with the permit limits; however, the total reduced sulfur as H2S content of the landfill gas exceeded permitted limits.

Blue Sky Environmental, Inc. has reviewed this report for accuracy and concluded that the test procedures were followed and accurately described and documented. The review included the following items:

Review of the general text
Review of calculations
Review of CEMS data
Review of supporting documentation

The services described in this report were performed in a manner consistent with the generally accepted professional testing principles and practices. No other warranty, expressed or implied, is made. These services were performed in a manner consistent with our agreement with our client. The report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions contained in this report pertain to conditions existing when services were performed and are intended only for the client purposes, locations, time frames, and operating parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to this, and do not warranty the accuracy of information supplied by others.

SECTION 4. APPENDICES

A
Tabulated Results

TABLE 1

Altamont Landfill
Flare A-16
1,522 °F - Condensate ON

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	3/6/24	3/6/24	3/6/24		
Test Time	0744-0825	0852-0933	0959-1037		
Standard Temperature, °F	70	70	70		
Process Parameters:					
Flare Temperature, °F	1,522	1,521	1,522	1,522	
Condensate Injection, gpm	1.03	0.90	1.02	0.98	
Fuel:					
Fuel Flow Rate, SCFM	2,066	2,059	2,071	2,065	
Fuel Heat Input, MMBtu/hr	57.8	59.9	59.1	58.9	
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	22,190	23,697	23,850	23,246	
Oxygen (O_2), % volume dry	12.4	12.7	12.9	12.7	
Carbon Dioxide (CO_2), % volume dry	7.88	7.24	7.55	7.56	
Water Vapor (H_2O), % volume dry *(EPA Method 4)*	6.89	6.37	5.80	6.35	
NO/NO_2/NO_X Emissions:					
NOx, ppmvd	18.7	17.7	17.4	17.9	
NOx, ppmvd @ 3% O_2	39.5	38.6	38.6	38.9	45
NOx, lb/hr	2.96	3.00	2.96	2.97	
NOx, lb/day	71.0	71.9	71.0	71.3	
NOx, lb/MMBtu	0.0512	0.0500	0.0500	0.0504	0.06
CO Emissions:					
CO, ppmvd	<10.0	<10.0	<10.0	<10.0	
CO, ppmvd @ 3% O_2	<21.2	<21.8	<22.2	<21.7	246
CO, lb/hr	<0.964	<1.029	<1.036	<1.010	
CO, lb/day	<23.1	<24.7	<24.9	<24.2	
CO, lb/MMBtu	<0.0167	<0.0172	<0.0175	<0.0171	0.20
TRS as H_2S, ppmvd in Fuel* **	83.0	110	100	98	200
Sulfur Dioxide (SO_2) Emissions, ppmvd (calculated)***	7.7	9.6	8.6	8.6	300
THC Emissions (reported as CH_4):					
THC, ppmv wet *(Sum NMOC + CH_4)*	<11.8	<11.0	<11.0	<11.3	
THC, ppmvd dry	<12.7	<11.8	<11.8	<12.1	
THC, lb/hr	<0.698	<0.695	<0.699	<0.697	
Methane (CH_4) Emissions:					
CH_4, ppmv wet *(EPA Method 25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd	<10.7	<10.7	<10.6	<10.7	
CH_4, lb/hr	<0.592	<0.628	<0.629	<0.616	
NMOC Emissions (reported as CH_4):					
NMOC, ppmv wet *(EPA Method 25A)*	1.8	<1.0	<1.0	<1.3	
NMOC, ppmvd	1.9	<1.1	<1.1	<1.4	
NMOC, ppmvd @ 3% O_2	4.1	<2.3	<2.4	<2.9	30**
NMOC, lb/hr	0.11	<0.063	<0.063	<0.077	
Inlet Hydrocarbons (reported as CH_4):					
Inlet NMOC, ppmvd *(EPA Method 25C)*	2,064	1,995	2,030*	2,030	
Inlet NMOC, lb/hr	10.6	10.2	10.4*	10.4	
NMOC Destruction Efficiency, %	>98.99%	>99.38%	>99.19%	>99.19%	>98%**
Inlet CH_4, ppmvd *(ASTM D-1945)*	461,000	480,000	470,500*	470,500	
Inlet CH_4, lb/hr	2,365	2,453	2,409*	2,409	
CH_4 Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC (TOC), ppmvd *(Sum NMOC + CH4)*	463,064	481,995	472,530*	472,530	
Inlet THC (TOC), lb/hr	2,375	2,464	2,420*	2,420	
THC (TOC) Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	

DEFINITIONS:

ppmvd = parts per million concentration by volume expressed on a dry gas basis
lb/hr = pound per hour emission rate
Tstd. = standard temperature (°R = °F+460)
MW = molecular weight
DSCFM = dry standard cubic feet per minute
NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)
CO = carbon monoxide (MW = 28)
THC = TOC = total hydrocarbons including CH_4, reported as CH_4 (MW = 16)
NMOC = non-methane organic compounds, reported as CH_4 (MW = 16)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)
lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
Destruction Efficiency (DE) = (inlet, lb/hr- outlet, lb/hr) / inlet, lb/hr
SO_2 emission ppmvd = H_2S in fuel · fuel flow/stack gas flow
SO_2 = sulfur dioxide as SO_2 (MW = 64.1)
< Value = 2% of Analyzer Range

* *Results are the average of Runs 1 and 2*

** *NMOC permit limits are 30 ppmvd @ 3% O_2 or DE >98%*

*** Results from retest event on 6/10/2024, SO_2 emissions were calculated with process data from testing on 3/6/2024

TABLE 2
AP42 2.4-1 - Landfill Gas Samples

Altamont Landfill
Flare A-16
1,522 °F - Condensate ON

Compound	**Method**	**Run 1 (ppb)**	**Run 2 (ppb)**	**Run 3 (ppb)**	**Average * Results (ppb)**	**Permit Limits (ppb)**
1,1,1-Trichloroethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,1,2,2-Tetrachloroethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	400
1,1-Dichloroethane (Ethylidene Dichloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,000
1,1-Dichloroethene (Vinylidene Chloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,2-Dichloroethane (Ethylene Dichloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,500
1,2-Dichloropropane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
2-Propanol (Isopropyl alcohol)	*EPA TO-15*	**10,200**	**13,000**	**2,480**	**11,600**	500,000
Acrylonitrile	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	300
Bromodichloromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Carbon Tetrachloride	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	100
Chlorobenzene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Chlorodifluoromethane	*EPA TO-15*	62.1	60.1	<51.3	61.1	
Chloroethane (Ethyl Chloride)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Chloroform (Trichloromethane)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	100
Chloromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,2-Dichlorobenzene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,3-Dichlorobenzene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
1,4-Dichlorobenzene	*EPA TO-15*	**308**	**360**	**72.8**	**334**	7,500
Dichlorodifluoromethane (Freon 12)	*EPA TO-15*	57.3	54.4	<51.3	55.9	
Dichlorofluoromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Dichloromethane (Methylene Chloride)	*EPA TO-15*	<95.6	<95.4	<103	<95.5	1,500
Ethanol	*EPA TO-15*	41,600	43,300	7,960	42,450	
Ethylbenzene	*EPA TO-15*	**2,680**	**2,770**	**634**	**2,725**	23,000
1,2-Dibromoethane (Ethylene dibromide)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Trichlorofluoromethane	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
n-Hexane	*EPA TO-15*	305	295	153	300	
2-Butanone (Methyl Ethyl Ketone)	*EPA TO-15*	**24,400**	**23,600**	**4,160**	**24,000**	350,000
4-Methyl-2-pentanone (MiBK)	*EPA TO-15*	1,170	1,210	248	1,190	
Perchloroethylene (Tetrachloroethene) PCE	*EPA TO-15*	**54.5**	**52.5**	<51.3	**53.5**	1,500
trans-1,2-Dichloroethene	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	
Trichloroethylene (TCE)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,500
Vinyl Chloride (Chloroethene)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	1,000
m/p-Xylenes	*EPA TO-15*	4,350	4,490	992	4,420	
o-Xylene	*EPA TO-15*	1,570	1,660	361	1,615	
Total Xylenes	*EPA TO-15*	**5,920**	**6,150**	**1,353**	**6,035**	90,000
Benzene	*EPA TO-15*	**1,490**	**1,490**	**298**	**1,490**	7,900
Benzyl Chloride (a-Chlorotoluene)	*EPA TO-15*	<47.8	<47.7	<51.3	<47.8	500
Methanol (Methyl Alcohol)	*EPA TO-15*	**7,010**	**7,690**	**1,790**	**7,350**	600,000
Toluene	*EPA TO-15*	**4,790**	**4,750**	**1,210**	**4,770**	80,000

TABLE 3

Altamont Landfill
Flare A-16
1,522 °F - Condensate OFF

Parameter	**Run 1**	**Run 2**	**Run 3**	**Average Results**	**Permit Limits**
Test Date	3/6/24	3/6/24	3/6/24		
Test Time	1102-1144	1204-1244	1302-1344		
Standard Temperature, °F	70	70	70		
Process Parameters:					
Flare Temperature, °F	1,522	1,522	1,522	1,522	
Condensate Injection, gpm	0.00	0.00	0.00	0.00	
Fuel:					
Fuel Flow Rate, SCFM	2,101	2,090	2,091	2,094	
Fuel Heat Input, MMBtu/hr	65.4	65.9	65.6	65.6	
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	25,613	26,422	25,782	25,939	
Oxygen (O_2), % volume dry	12.6	12.8	12.6	12.7	
Carbon Dioxide (CO_2), % volume dry	7.18	6.97	7.26	7.14	
Water Vapor (H_2O), % volume dry *(EPA Method 4)*	7.58	6.34	6.92	6.95	
$NO/NO_2/NO_X$ Emissions:					
NOx, ppmvd	13.8	13.4	14.0	13.7	
NOx, ppmvd @ 3% O_2	29.8	29.4	30.2	29.8	45
NOx, lb/hr	2.53	2.52	2.57	2.54	
NOx, lb/day	60.7	60.5	61.7	61.0	
NOx, lb/MMBtu	0.0387	0.0382	0.0392	0.0387	0.06
CO Emissions:					
CO, ppmvd	19.3	15.3	29.2	21.2	
CO, ppmvd @ 3% O_2	41.5	33.6	63.1	46.0	246
CO, lb/hr	2.14	1.75	3.27	2.39	
CO, lb/day	51.4	42.0	78.6	57.3	
CO, lb/MMBtu	0.0328	0.0266	0.0499	0.0364	0.20
TRS as H_2S, ppmvd in Fuel**	88.6	23.5	117	76.4	200
Sulfur Dioxide (SO_2) Emissions, ppmvd (calculated)**	7.3	1.9	9.5	6.2	300
THC Emissions (reported as CH_4):					
THC, ppmv wet *(Sum NMOC + CH_4)*	<11.0	<11.0	<11.0	<11.0	
THC, ppmvd dry	<11.9	<11.9	<11.9	<11.9	
THC, lb/hr	<0.757	<0.781	<0.762	<0.766	
Methane (CH_4) Emissions:					
CH_4, ppmv wet *(EPA Method 25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd	<10.8	<10.7	<10.7	<10.7	
CH_4, lb/hr	<0.688	<0.700	<0.688	<0.692	
NMOC Emissions (reported as CH_4):					
NMOC, ppmv wet *(EPA Method 25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppmvd	<1.1	<1.1	<1.1	<1.1	
NMOC, ppmvd @ 3% O_2	<2.3	<2.3	<2.3	<2.3	30*
NMOC, lb/hr	<0.069	<0.070	<0.069	<0.069	
Inlet Hydrocarbons (reported as CH_4):					
Inlet NMOC, ppmvd *(EPA Method 25C)*	2,350	2,358	2,714	2,474	
Inlet NMOC, lb/hr	12.3	12.2	14.1	12.9	
NMOC Destruction Efficiency, %	>99.44%	>99.43%	>99.51%	>99.46%	>98%*
Inlet CH_4, ppmvd	513,000	520,000	518,000	517,000	
Inlet CH_4, lb/hr	2,676	2,698	2,688	2,688	
CH_4 Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC (TOC), ppmvd	515,350	522,358	520,714	519,474	
Inlet THC (TOC), lb/hr	2,688	2,711	2,702	2,700	
THC (TOC) Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	

DEFINITIONS:

ppmvd = parts per million concentration by volume expressed on a dry gas basis
lb/hr = pound per hour emission rate
Tstd. = standard temperature (°R = °F+460)
MW = molecular weight
DSCFM = dry standard cubic feet per minute
NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)
CO = carbon monoxide (MW = 28)
THC = TOC = total hydrocarbons including CH_4, reported as CH_4 (MW = 16)
NMOC = non-methane organic compounds, reported as CH_4 (MW = 16)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)
lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
THC, ppm as CH_4 = NMOC + CH_4
Destruction Efficiency (DE) = (inlet, lb/hr- outlet, lb/hr) / inlet, lb/hr
SO_2 emission ppmvd = H_2S in fuel · fuel flow/stack gas flow
SO_2 = sulfur dioxide as SO_2 (MW = 64.1)
< Value = 2% of Analyzer Range

** NMOC permit limits are 30 ppmvd @ 3% O_2 or DE >98%*

** Results from retest event on 6/10/2024, SO_2 emissions were calculated with process data from testing on 3/6/2024

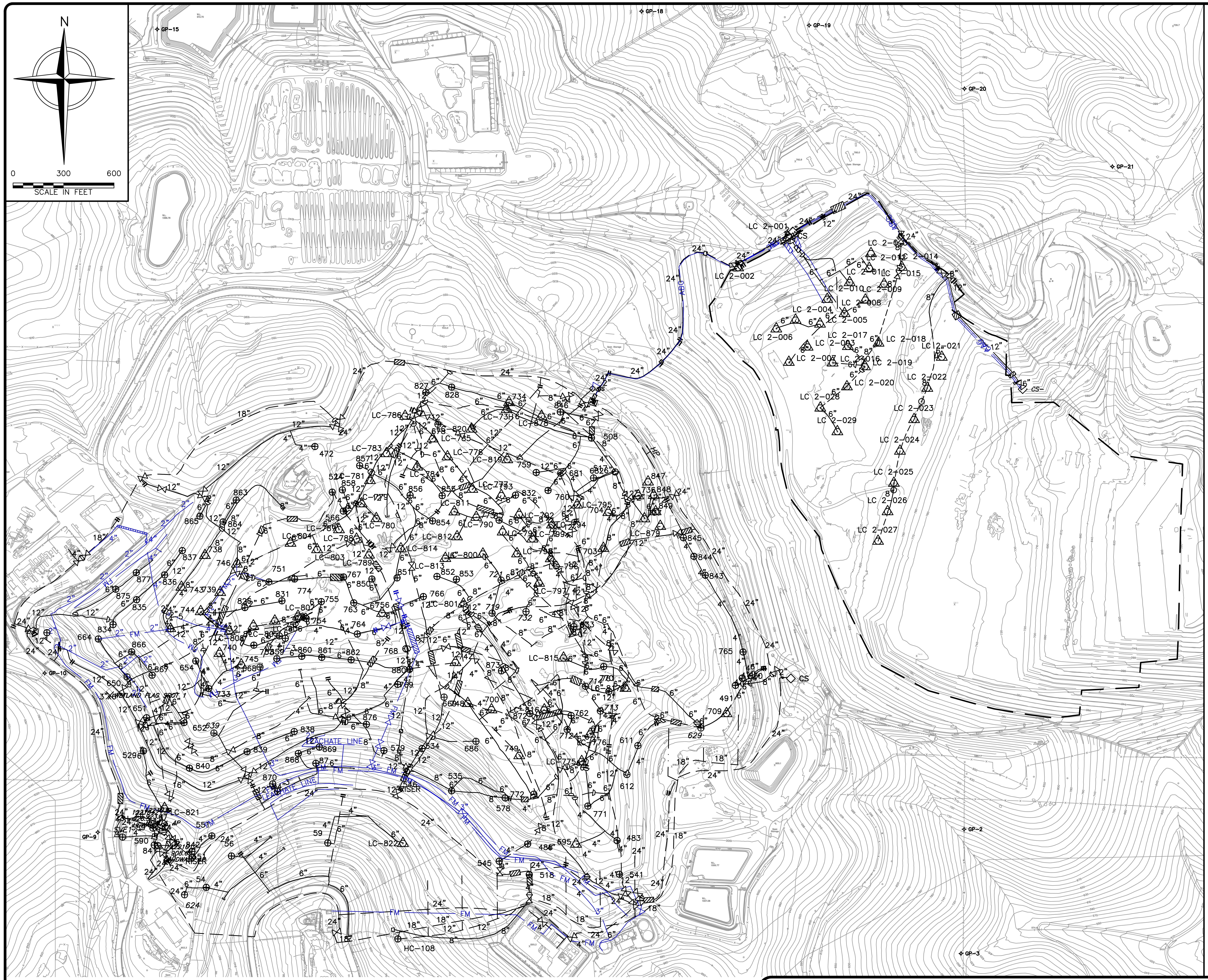
TABLE 4

AP42 2.4-1 - Landfill Gas Samples

Altamont Landfill
Flare A-16
1,522 °F - Condensate OFF

Compound	**Method**	**Run 1 (ppb)**	**Run 2 (ppb)**	**Run 3 (ppb)**	**Average Results (ppb)**	**Permit Limits (ppb)**
1,1,1-Trichloroethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,1,2,2-Tetrachloroethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	400
1,1-Dichloroethane (Ethylidene Dichloride)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,000
1,1-Dichloroethene (Vinylidene Chloride)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,2-Dichloroethane (Ethylene Dichloride)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,500
1,2-Dichloropropane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
2-Propanol (Isopropyl alcohol)	*EPA TO-15*	**15,700**	**19,300**	**20,900**	**18,633**	500,000
Acrylonitrile	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	300
Bromodichloromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Carbon Tetrachloride	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	100
Chlorobenzene	*EPA TO-15*	105	102	97.4	101	
Chlorodifluoromethane	*EPA TO-15*	68.2	72.4	64.0	68.2	
Chloroethane (Ethyl Chloride)	*EPA TO-15*	<47.3	<48.3	<46.4	47.3	
Chloroform (Trichloromethane)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	100
Chloromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,2-Dichlorobenzene	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,3-Dichlorobenzene	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
1,4-Dichlorobenzene	*EPA TO-15*	**360**	**391**	**391**	**381**	7,500
Dichlorodifluoromethane (Freon 12)	*EPA TO-15*	64.4	59.9	59.4	61.2	
Dichlorofluoromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Dichloromethane (Methylene Chloride)	*EPA TO-15*	<94.7	<96.5	<92.8	<94.7	1,500
Ethanol	*EPA TO-15*	56,900	62,900	68,700	62,833	
Ethylbenzene	*EPA TO-15*	**2,920**	**2,920**	**2,840**	**2,893**	23,000
1,2-Dibromoethane (Ethylene dibromide)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Trichlorofluoromethane	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
n-Hexane	*EPA TO-15*	342	345	333	340	
2-Butanone (Methyl Ethyl Ketone)	*EPA TO-15*	**27,900**	**29,300**	**31,000**	**29,400**	350,000
4-Methyl-2-pentanone (MiBK)	*EPA TO-15*	1,340	1,370	1,330	1,347	
Perchloroethylene (Tetrachloroethene) PCE	*EPA TO-15*	**60.6**	**62.7**	**59.4**	**60.9**	1,500
trans-1,2-Dichloroethene	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	
Trichloroethylene (TCE)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,500
Vinyl Chloride (Chloroethene)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	1,000
m/p-Xylenes	*EPA TO-15*	4,780	4,840	4,650	4,757	
o-Xylene	*EPA TO-15*	1,740	1,800	1,730	1,757	
Total Xylenes	*EPA TO-15*	**6,520**	**6,640**	**6,380**	**6,513**	90,000
Benzene	*EPA TO-15*	**1,660**	**1,620**	**1,560**	**1,613**	7,900
Benzyl Chloride (a-Chlorotoluene)	*EPA TO-15*	<47.3	<48.3	<46.4	<47.3	500
Methanol (Methyl Alcohol)	*EPA TO-15*	9,110	11,000	10,500	10,203	600,000
Toluene	*EPA TO-15*	5,170	5,140	4,970	5,093	80,000

APPENDIX Z
GCCS MAP



LEGEND

	UNIT 1 APPROXIMATE LIMIT OF WASTE
	UNIT 2 APPROXIMATE LINER BOUNDARY
▨	APPROXIMATE ASBESTOS AREA BOUNDARY
1400	EXISTING 10' CONTOUR
12"	EXISTING LANDFILL GAS PIPE - ABOVEGROUND
	EXISTING LANDFILL GAS PIPE - BELOWGROUND
	EXISTING LEACHATE COLLECTION PIPE
	EXISTING HORIZONTAL LFG COLLECTOR
FM	EXISTING FORCE MAIN PIPE
CAG	EXISTING CONDENSATE LINE - ABOVEGROUND
CBG	EXISTING CONDENSATE LINE - BELOWGROUND
AAG	EXISTING AIR LINE - ABOVEGROUND
⊕ 523	EXISTING LFG EXTRACTION WELL
△ CI-1	EXISTING CONDENSATE INJECTION WELL
△ LC 2-021 △ 691	EXISTING LOCAL CONTROL WELL
⊗	EXISTING REMOTE WELLHEAD
⋈	EXISTING CONTROL VALVE
⊣∥	EXISTING BLIND FLANGE
⊣∥⊢	EXISTING FLANGE CONNECTION
⊣▷⊢	EXISTING REDUCER FITTING
◇ CS-	EXISTING CONDENSATE PUMP STATION
▨	EXISTING ROAD CROSSING
HP	EXISTING HEADER HIGH POINT
]	EXISTING CAP
✧ GP-10	EXISTING GAS MONITORING PROBE
○	EXISTING U-TRAP RISER
▬	AREA FROM SURVEY INFORMATION IN FILE TITLED "DINOSED - DISPOSAL AREA"
▨	AREA FROM SURVEY INFORMATION IN FILE TITLED "9-23-14 RTA" EXISTING HEADER HIGH POINT
☁	APPROXIMATE LOCATION OF OLD FLARE MATERIALS

PRELIMINARY - NOT FOR CONSTRUCTION

WASTE MANAGEMENT

This drawing represents intellectual property of Tetra Tech. Any modification to the original by other than Tetra Tech personnel violates its original purpose and as such is rendered void. Tetra Tech will not be held liable for any changes made to this document without express written consent of the originator.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 09/04/24
DRAWN BY CDH
DESIGNED BY CDH
CHECKED BY AMN
APPROVED BY PJS

TETRA TECH

ALL PROFESSIONAL ENGINEERING WORK IS PERFORMED BY DULY LICENSED PROFESSIONAL ENGINEERS UNDER THE APPROPRIATE STATE REGISTERED PROFESSIONAL ENTITY.

ALTAMONT LANDFILL AND
RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY, CALIFORNIA

HORIZONTAL COLLECTOR DESIGN
EXISTING SITE CONDITIONS

SHEET NO.
2

PROJECT NO.
2024-4002

1" 1/2" 0" 1"

File: \\tt.local\ceg\619\PROJECTS\ALTAMONT\2024-4002 - 2024 ENGINEERING SERVICES\GCCS Improvements\Project Drawings\Horizontal Design\2024-4002_HORIZONTAL DESIGN_C-100.dwg Layout: C-100 User: CHRIS.HODGE Sep 18, 2024 - 11:51am

APPENDIX AA
QUARTERLY GAS MIGRATION MONITORING DATA

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

September 16, 2024

Sonum Kaur
EP Specialist
Altamont Landfill and Resource Recovery Facility
10840 Altamont Pass Rd.
Livermore, California 94551

Re: Third Quarter 2024 Perimeter Gas and Methane in Structure Monitoring Report Altamont Landfill and Resource Recovery Facility

Dear Ms. Kaur,

This report for the Altamont Landfill and Resource Recovery Facility (ALRRF) contains the results of the Third Quarter 2024 Perimeter Gas and Methane in Structure Monitoring conducted at the ALRRF. All monitoring was conducted by ALRRF personnel.

REGULATORY REQUIREMENTS

Requirements for monitoring are outlined in 40 CFR 258.23, Title 27 California Code of Regulations (CCR), Article 6, Gas Monitoring at Active and Closed Disposal Sites. These regulations require periodic monitoring to ensure that methane concentrations are less than 5 percent at the property boundary and less than 1.25 percent in on-site buildings and structures. Reporting requirements are presented in Title 27 §20934.

MONITORING RESULTS AND MAP [TITLE 27 §20934(a)(1), (2), (3) AND (5)]

Monitoring was conducted in accordance with 40 CFR 258.23 and Title 27, Article 6 at the locations shown in the attached map (Attachment A).

During the Third Quarter 2024, Probes GP 8C and GP 20C had higher methane values in July 2024. The methane values at Probes GP 8C and GP 20C have been previously shown to be naturally occurring and not related to landfill operations. No other exceedances of Subtitle D (40 CFR 258.23) and California Code of Regulations (CCR) Title 27, Division 2, Section 20919.5 were detected during the monitoring events.

Results for probes are summarized in Table 1. All other Field data sheets during the Third Quarter of 2024 are presented in Attachment B.

Table 1

Altamont Landfill and Resource Recovery Facility
Perimeter Gas Probe Monitoring Results

3rd Quarter 2024
Analyst: Dan San Jose/ Garry Carpenter
Date: 07/09/24, 07/12/24, 07/16/24
Instrument: Gem 5000 Serial #: G503646/G509170_
Atmospheric Temperature (Deg F):87/90/66/
Barometric Pressure: 29.16/28.76/29.22/ Inch of HG
Wind Speed: 12/7/11 MPH   Wind Direction: E/E /E
Weather Condition: Clear/Cloudy/

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALT-GP1A	7/16/2024 8:25	0	0.2	-0.61	Ok	Ok	
ALT-GP1B	7/16/2024 8:27	0	0.1	-0.23	Ok	Ok	
ALT-GP1C	7/16/2024 8:28	0	0.2	-0.18	Ok	Ok	
ALT-GP2A	7/12/2024 10:35	0	0.3	0	Ok	Ok	
ALT-GP2B	7/12/2024 10:37	0	0.2	0.01	Ok	Ok	
ALT-GP3A	7/12/2024 7:28	0	0.1	0.03	Ok	Ok	
ALT-GP3B	7/12/2024 7:30	0	0	0.05	Ok	Ok	
ALT-GP4A	7/12/2024 7:43	0	0.2	-0.03	Ok	Ok	
ALT-GP5A	7/12/2024 8:03	0	0.5	0.02	Ok	Ok	
ALT-GP6A	7/12/2024 10:46	0	0.2	0.05	Ok	Ok	
ALT-GP6B	7/12/2024 10:47	0	0.1	0.09	Ok	Ok	
ALT-GP6C	7/12/2024 10:49	0	0.1	0.02	Ok	Ok	
ALT-GP7A	7/12/2024 10:56	0	0.3	0.09	Ok	Ok	
ALT-GP7B	7/12/2024 10:57	0	0.6	0.04	Ok	Ok	
ALT-GP7C	7/12/2024 10:59	0	0.3	0.06	Ok	Ok	
ALT-GP8A	7/12/2024 7:19	0	0.7	-0.16	Ok	Ok	
ALT-GP8B	7/12/2024 7:21	0.7	0.4	-0.13	Ok	Ok	
ALT-GP8C	7/12/2024 7:23	44.2	1.7	1.48	Ok	Ok	
ALT-GP9A	7/12/2024 7:32	0	0.3	-0.11	Ok	Ok	
ALT-GP9B	7/12/2024 7:34	0	2.6	-0.12	Ok	Ok	
ALT-GP9C	7/12/2024 7:35	0	0.2	-0.11	Ok	Ok	
ALTGP10A	7/12/2024 7:52	0	1	-0.1	Ok	Ok	
ALTGP10B	7/12/2024 7:53	0	1	-0.11	Ok	Ok	
ALTGP11A	7/12/2024 8:02	0	3	-0.09	Ok	Ok	
ALTGP11B	7/12/2024 8:03	0	2.8	-0.12	Ok	Ok	
ALTGP11C	7/12/2024 8:05	0	0.3	0.01	Ok	Ok	
ALTGP12A	7/12/2024 8:43	0	0.4	0.02	Ok	Ok	
ALTGP13A	7/12/2024 8:50	0	0.2	-0.02	Ok	Ok	
ALTGP14A	7/12/2024 8:55	0	0.2	-0.01	Ok	Ok	
ALTGP15A	7/12/2024 8:59	0.7	0.1	-0.02	Ok	Ok	
ALTGP16A	7/12/2024 9:07	0	0.8	-0.04	Ok	Ok	
ALTGP17A	7/12/2024 9:21	0	0.8	0.01	Ok	Ok	
ALTGP18A	7/12/2024 9:55	0	0.2	0.01	Ok	Ok	
ALTGP18B	7/12/2024 9:56	0	0.1	-0.04	Ok	Ok	

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALTGP19A	7/12/2024 9:47	0	0.3	-0.11	Ok	Ok	
ALTGP19B	7/12/2024 9:48	0	0.1	0.12	Ok	Ok	
ALTGP20A	7/9/2024 9:12	0	0.3	-0.02	Ok	Ok	
ALTGP20B	7/9/2024 9:10	0	0.2	-0.08	Ok	Ok	
ALTGP20C	7/9/2024 9:08	43.6	3	-0.03	Ok	Ok	
ALTGP21A	7/12/2024 8:57	0	0.6	0.05	Ok	Ok	
ALTGP21B	7/12/2024 9:00	0	0.1	0.08	Ok	Ok	
ALTGP21C	7/12/2024 9:01	0	0.3	0.12	Ok	Ok	
ALTGP23A	7/12/2024 6:31	0	0.1	-0.09	Ok	Ok	
ALTGP23B	7/12/2024 6:32	0	0.8	0	Ok	Ok	
ALTGP23C	7/12/2024 6:34	0	0.2	0.15	Ok	Ok	
ALTGP24A	7/12/2024 6:40	0	0.3	-0.02	Ok	Ok	
ALTGP25A	7/12/2024 6:52	0	0.2	0.01	Ok	Ok	
ALTGP25B	7/12/2024 6:54	0	0.2	-0.07	Ok	Ok	
ALTGP26A	7/12/2024 7:10	0	0.7	0.04	Ok	Ok	
ALTGP27A	7/12/2024 6:23	0	0.1	-0.01	Ok	Ok	
ALTGP27B	7/12/2024 6:25	0	0.2	-0.03	Ok	Ok	
ALTGP28A	7/12/2024 8:41	0	0.3	0.12	Ok	Ok	
ALTGP28B	7/12/2024 8:43	0	0.3	0.14	Ok	Ok	

Immediately notify compliance personnel of any readings in excess of 5 percent methane.
ND = Not Detected

California Code of Regulations Title 27, Division 2, Chapter 3, Article 6, §20921 require that:

(1) The concentration of methane gas must not exceed 1.25 percent by volume in air within any portion of any on-site structures.

(2) The concentration of methane gas migrating from the disposal site must not exceed 5 percent by volume in air at the disposal site permitted facility boundary or an alternative boundary approved in accordance with §20925.

MONITORING EQUIPMENT AND METHODOLOGY [TITLE 27 §20934(a)(4)]

Perimeter Gas Monitoring

The facility conducted the required monitoring using a CES - Landtec GEM-2000 gas analyzer (GEM). The monitoring was conducted by Garry Carpenter and Dan San Jose on July 9, 12, and 16, 2024. The static pressure of probe was measured using the GEM's internal pressure transducers.

Facility Structures

Garry Carpenter used a Photovac Micro FID to monitor buildings and structures to check for the presence of methane on August 16, 2024. The instrument was calibrated on August 16, 2024, using 500 ppm methane standard.

Combustible Methane Gas Monitor Calibration

Some facility structures are monitored continuously using Sierra Monitors. The monitor is calibrated at a frequency determined by the manufacturer. The most recent calibration was conducted by Dan San Jose on August 16, 2024.

GENERAL WEATHER CONDITIONS [TITLE 27 §20934(a)(3)]

General weather conditions at the time of monitoring are presented in Table 2.

Table 2
General Weather Conditions

Description	General Conditions	Wind Speed mph	Wind Direction	Barometric Pressure, Inches of Hg	Ambient Temperature Min/Max, Deg F
July 9, 2024	Sunny	9.3	WNW	29.84	61/79
July 12, 2024	Sunny	2.5	W	29.81	70/95
July 16, 2024	Overcast	8.0	WNW	30.01	59/73

* Refer to https://www.timeanddate.com/weather/usa/livermore/historic?month=12&year=2021for details on wind speed and direction

If you have any questions regarding this notification, please do not hesitate to contact me at rphadnis@wm.com.

Thank you,

Waste Management of Alameda County, Inc.

Rajan Phadnis
EP Air Specialist

Attachments: Perimeter Gas Probe Location Map
ALRRF Third Quarter 2024 Field Data

ATTACHMENT A

PROBE LOCATION MAP

LEGEND

- ▬ ▬ APPROXIMATE PERMITTED FACILITY BOUNDARY
- ― APPROXIMATE LIMIT OF FILL AREA 1 AND FILL AREA 2
- ⊗ EXISTING PERIMETER LANDFILL GAS MONITORING PROBE LOCATION
- ⊗ PROPOSED LOCATION WHERE PROBE NOT CONSTRUCTED DUE TO SHALLOW WATER OR STEEP TERRAIN
- ◌ ESTIMATED 1,000-FT RADIUS OF INFLUENCE FROM LFG MONITORING PROBE

NOTE:

1. AERIAL PHOTOGRAPHY, DATED 10 JANUARY 2022, PROVIDED BY MILLER CREEK AERIAL MAPPING, LLC.

GAS MONITORING PROBE LOCATIONS
FILL AREA 1 AND FILL AREA 2
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY

Geosyntec
consultants

PROJECT NO: SAC242J
FEBRUARY 2022

FIGURE
32

P:\CADD\CIVIL 3D\WM\ALTAMONT\SAC242I (FA1 LFG)\JTD FIG32

ATTACHMENT B

FIELD DATA

Altamont Landfill and Resource Recovery Facility
Perimeter Gas Probe Monitoring Results

3 rd Quarter 2024

Analyst: Dan San Jose/ Garry Carpenter
Date: 07/09/24, 07/12/24, 07/16/24
Instrument: Gem 5000 Serial #: G503646/G509170_
Atmospheric Temperature (Deg F):87/90/66/
Barometric Pressure: 29.16/28.76/29.22/ Inch of HG
Wind Speed: 12/7/11 MPH_ Wind Direction: E/E /E
Weather Condition:_ Clear/Cloudy/

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALT-GP1A	7/16/2024 8:25	0	0.2	-0.61	Ok	Ok	
ALT-GP1B	7/16/2024 8:27	0	0.1	-0.23	Ok	Ok	
ALT-GP1C	7/16/2024 8:28	0	0.2	-0.18	Ok	Ok	
ALT-GP2A	7/12/2024 10:35	0	0.3	0	Ok	Ok	
ALT-GP2B	7/12/2024 10:37	0	0.2	0.01	Ok	Ok	
ALT-GP3A	7/12/2024 7:28	0	0.1	0.03	Ok	Ok	
ALT-GP3B	7/12/2024 7:30	0	0	0.05	Ok	Ok	
ALT-GP4A	7/12/2024 7:43	0	0.2	-0.03	Ok	Ok	
ALT-GP5A	7/12/2024 8:03	0	0.5	0.02	Ok	Ok	
ALT-GP6A	7/12/2024 10:46	0	0.2	0.05	Ok	Ok	
ALT-GP6B	7/12/2024 10:47	0	0.1	0.09	Ok	Ok	
ALT-GP6C	7/12/2024 10:49	0	0.1	0.02	Ok	Ok	
ALT-GP7A	7/12/2024 10:56	0	0.3	0.09	Ok	Ok	
ALT-GP7B	7/12/2024 10:57	0	0.6	0.04	Ok	Ok	
ALT-GP7C	7/12/2024 10:59	0	0.3	0.06	Ok	Ok	
ALT-GP8A	7/12/2024 7:19	0	0.7	-0.16	Ok	Ok	
ALT-GP8B	7/12/2024 7:21	0.7	0.4	-0.13	Ok	Ok	
ALT-GP8C	7/12/2024 7:23	44.2	1.7	1.48	Ok	Ok	
ALT-GP9A	7/12/2024 7:32	0	0.3	-0.11	Ok	Ok	
ALT-GP9B	7/12/2024 7:34	0	2.6	-0.12	Ok	Ok	
ALT-GP9C	7/12/2024 7:35	0	0.2	-0.11	Ok	Ok	
ALTGP10A	7/12/2024 7:52	0	1	-0.1	Ok	Ok	
ALTGP10B	7/12/2024 7:53	0	1	-0.11	Ok	Ok	
ALTGP11A	7/12/2024 8:02	0	3	-0.09	Ok	Ok	
ALTGP11B	7/12/2024 8:03	0	2.8	-0.12	Ok	Ok	
ALTGP11C	7/12/2024 8:05	0	0.3	0.01	Ok	Ok	
ALTGP12A	7/12/2024 8:43	0	0.4	0.02	Ok	Ok	
ALTGP13A	7/12/2024 8:50	0	0.2	-0.02	Ok	Ok	
ALTGP14A	7/12/2024 8:55	0	0.2	-0.01	Ok	Ok	
ALTGP15A	7/12/2024 8:59	0.7	0.1	-0.02	Ok	Ok	
ALTGP16A	7/12/2024 9:07	0	0.8	-0.04	Ok	Ok	
ALTGP17A	7/12/2024 9:21	0	0.8	0.01	Ok	Ok	
ALTGP18A	7/12/2024 9:55	0	0.2	0.01	Ok	Ok	
ALTGP18B	7/12/2024 9:56	0	0.1	-0.04	Ok	Ok	
ALTGP19A	7/12/2024 9:47	0	0.3	-0.11	Ok	Ok	
ALTGP19B	7/12/2024 9:48	0	0.1	0.12	Ok	Ok	

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALTGP20A	7/9/2024 9:12	0	0.3	-0.02	Ok	Ok	
ALTGP20B	7/9/2024 9:10	0	0.2	-0.08	Ok	Ok	
ALTGP20C	7/9/2024 9:08	43.6	3	-0.03	Ok	Ok	
ALTGP21A	7/12/2024 8:57	0	0.6	0.05	Ok	Ok	
ALTGP21B	7/12/2024 9:00	0	0.1	0.08	Ok	Ok	
ALTGP21C	7/12/2024 9:01	0	0.3	0.12	Ok	Ok	
ALTGP23A	7/12/2024 6:31	0	0.1	-0.09	Ok	Ok	
ALTGP23B	7/12/2024 6:32	0	0.8	0	Ok	Ok	
ALTGP23C	7/12/2024 6:34	0	0.2	0.15	Ok	Ok	
ALTGP24A	7/12/2024 6:40	0	0.3	-0.02	Ok	Ok	
ALTGP25A	7/12/2024 6:52	0	0.2	0.01	Ok	Ok	
ALTGP25B	7/12/2024 6:54	0	0.2	-0.07	Ok	Ok	
ALTGP26A	7/12/2024 7:10	0	0.7	0.04	Ok	Ok	
ALTGP27A	7/12/2024 6:23	0	0.1	-0.01	Ok	Ok	
ALTGP27B	7/12/2024 6:25	0	0.2	-0.03	Ok	Ok	
ALTGP28A	7/12/2024 8:41	0	0.3	0.12	Ok	Ok	
ALTGP28B	7/12/2024 8:43	0	0.3	0.14	Ok	Ok	

Immediately notify compliance personnel of any readings in excess of 5 percent methane.
ND = Not Detected

California Code of Regulations Title 27, Division 2, Chapter 3, Article 6, §20921 require that:

(1) The concentration of methane gas must not exceed 1.25 percent by volume in air within any portion of any on-site structures.

(2) The concentration of methane gas migrating from the disposal site must not exceed 5 percent by volume in air at the disposal site permitted facility boundary or an alternative boundary approved in accordance with §20925.

Methane-In-Structure Monitoring Data

Analyst: Garry Carpenter **Date:** 8-16-24 **Instrument:** Photo Vac FID **Serial #:** CZPA312

Monitored Location	Date and Time		Methane (ppm)	Methane (%)	Comments
Guardhouse	8-16-24	8:20am	2.9		
Leachate Pump Station	8-16-24	8:15am	101		
Administration Building	8-16-24	8:09am	1.6		
Sales Building	8-1624	8:11am	1.7		
Engineering Trailer	8-1624	8:07am	1.9		
Garage Office	8-16-24	9:31am	4.0		
Shop Break room	8-16-24	9:33am	3.0		
Maintenance Building Supervisor's Office	8-16-24	9:34	3.7		
Office Trailer Fill Area 2 (1)	8-16-24	9:00am	4.6		
Employee break trailer fill area 2 (2)	8-16-24	8:58am	5.4		
Office Trailer Fill area 2 (3)	8-16-24	8:56am	5.1		
Scale House South	8-16-24	9:26am	5.0		
Scale House North	8-16-24	9:27am	3.8		
Employee Break Trailer	8-16-24	—	—		Abandoned
Gas Team Office Trailer	8-16-24	9:13am	3.4		
LNG Building 1	8-16-24	—	—		Abandoned
LNG Building 2 (Trailer)	8-16-24	—	—		Abandoned
Tire Office Trailer	8-16-24	9:23am	4.0		
Davis Street Trailer	8-1624	9:19am	3.0		
Waste Water Plant	8-1624	8:31am	5.4		
Gas Plant	8-16-24	8:25am	8.4		
CASP trailer	8-16-24	8:48am	4.0		
Litter Pickers' Trailer (Mobile)	8-16-24	9:02am	4.5		

Immediately notify compliance personnel of any readings in excess of 1.25 percent methane.

3RD QTR.

Permanent Structure Monitor Calibration

Calibrated to 5,000 ppm CH_4

Analyst: D. San Jose **Date:** 08-16-24

Instrument: Model 26 Calibration system **Serial Number: 0824904075MTS**

METHANE SENSOR CALIBRATION					
Monitored Location	**Date**	**Time**	**Monitor Condition**		**Comments**
			Arrival	**Departure**	
Guardhouse	08-16-24	8:21 AM	OK	OK	
Administrative Building	08-16-24	8:07 AM	OK	OK	
Sales Building	08-16-24	8:05 AM	OK	OK	
Engineering Trailer	08-16-24	8:00 AM	OK	OK	
Garage Office	08-16-24	9:30 AM	OK	OK	
Shop Break room	08-16-24	9:32 AM	OK	OK	
Maintenance Building – Supervisor's Office	08-16-24	9:35 AM	OK	OK	
Office Trailer Fill Area 2 (1)	08-16-24	9:02 AM	OK	OK	
Employee break trailer Fill area 2 (2)	08-16-24	9:05 AM	OK	OK	
Office trailer in Fill Area 2 (3)	08-16-24	9:07 AM	OK	OK	
Scale House –(South)	08-16-24	9:24 AM	OK	OK	
Scale House –(North)	08-16-24	9:27 AM	OK	OK	
Employee Break Trailer	N/A				ABANDONED BUILDING
Litter picker Trailer	08-16-24	9:10 AM	OK	OK	
Davis Street Trailer	08-16-24	9:18 AM	OK	OK	
Gas Team's Trailer	08-16-24	9:16 AM	OK	OK	
WWTP (Manager's Office)	08-16-24	8:31 AM	OK	OK	
CASP trailer	08-16-24	8:49 AM	OK	OK	
WWTP (Lab)	08-16-24	8:35 AM	OK	OK	
Gas Plant	08-16-24	8:27 AM	OK	OK	

CALIBRATION PRECISION TEST RECORD

Date: 8-15-24

Expiration Date (3 months): 11-15-24

Time: 10:50 AM _______ PM

Instrument Make: PhotoVac Model: Micro FID S/N: CZPD312

Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)

Meter Reading for Calibration Gas: 500 ppm (b)

Measurement #2:

Meter Reading for Zero Air: 0 ppm (c)

Meter Reading for Calibration Gas: 500 ppm (d)

Measurement #3:

Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 500 ppm (f)

Calculate Precision:

$$\frac{\{|(500) - (b)| + |(500) - (d)| + |(500) - (f)|\}}{3} \times \frac{1}{500} \times 100$$

______ % (must be < than 10%)

Performed By: Gary Carpenter

RESPONSE TIME TEST RECORD

Date: 8-15-24

Expiration Date (3 months): 11-15-24

Time: 10:47 AM _______ PM

Instrument Make: PhotoVac Model: Micro FID S/N: 6ZPD312

Measurement #1:

Stabilized Reading Using Calibration Gas: 500 ppm

90% of the Stabilized Reading: 450 ppm

Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (a)

Measurement #2:

Stabilized Reading Using Calibration Gas: 500 ppm

90% of the Stabilized Reading: 450 ppm

Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 501 ppm

90% of the Stabilized Reading: 451 ppm

Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2.0 seconds (c)

Calculate Response Time:

$\frac{(a) + (b) + (c)}{3} =$ 2 seconds (must be less than 30 seconds)

Performed By: Gary Carpenter

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill Date: 8-16-24

Time: 8:00 AM ______ PM

Instrument Make: PhotoVac Model: MicroFID S/N: CZPD312

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.

   Stable Reading = 501 ppm
3. Adjust meter to read 500 ppm.

Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 2.0 ppm (a)
2. Downwind Reading (highest in 30 seconds): 1 ppm (b)

Calculate Background Value:

$\frac{(a) + (b)}{2}$ Background = 1.5 ppm

Performed By: Gary Carpenter

Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

December 6, 2024

Sonam Kaur
EP Specialist
Altamont Landfill and Resource Recovery Facility
10840 Altamont Pass Rd.
Livermore, California 94551

Re: Fourth Quarter 2024 Perimeter Gas and Methane in Structure Monitoring Report Altamont Landfill and Resource Recovery Facility

Dear Ms. Kaur,

This report for the Altamont Landfill and Resource Recovery Facility (ALRRF) contains the results of the Fourth Quarter 2024 Perimeter Gas and Methane in Structure Monitoring conducted at the ALRRF. All monitoring was conducted by ALRRF personnel.

REGULATORY REQUIREMENTS

Requirements for monitoring are outlined in 40 CFR 258.23, Title 27 California Code of Regulations (CCR), Article 6, Gas Monitoring at Active and Closed Disposal Sites. These regulations require periodic monitoring to ensure that methane concentrations are less than 5 percent at the property boundary and less than 1.25 percent in on-site buildings and structures. Reporting requirements are presented in Title 27 §20934.

MONITORING RESULTS AND MAP [TITLE 27 §20934(a)(1), (2), (3) AND (5)]

Monitoring was conducted in accordance with 40 CFR 258.23 and Title 27, Article 6 at the locations shown in the attached map (Attachment A).

During the Fourth Quarter 2024, Probes GP 15A had higher methane values in October 2024. ALRRF submitted the initial exceedance notification and the 60-day report to the LEA. No other exceedances of Subtitle D (40 CFR 258.23) and California Code of Regulations (CCR) Title 27, Division 2, Section 20919.5 were detected during the monitoring events.

Results for probes are summarized in Table 1. All other Field data sheets during the Fourth Quarter of 2024 are presented in Attachment B.

Table 1

Altamont Landfill and Resource Recovery Facility
Perimeter Gas Probe Monitoring Results

4th Quarter 2024
Analyst: Dan San Jose/ Garry Carpenter
Date: 10.01.24/ 10.02.24/
Instrument: Gem 5000 Serial #: G509158/G509170
Atmospheric Temperature (Deg F):96/98/
Barometric Pressure: 29.92/29.32/ Inch of HG
Wind Speed: 4/ 6 / MPH   Wind Direction: S/S
Weather Condition: Clear/Clear/

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALT-GP1A	10/2/2024 9:39	0	0.2	-0.03	Ok	Ok	
ALT-GP1B	10/2/2024 9:41	0	0.2	0	Ok	Ok	
ALT-GP1C	10/2/2024 9:43	0	0.2	-0.02	Ok	Ok	
ALT-GP2A	10/2/2024 10:06	0	0.2	-0.04	Ok	Ok	
ALT-GP2B	10/2/2024 10:07	0	0.2	0.11	Ok	Ok	
ALT-GP3A	10/1/2024 9:43	0	0.2	0.22	Ok	Ok	
ALT-GP3B	10/1/2024 9:44	0	0.1	0.17	Ok	Ok	
ALT-GP4A	10/1/2024 10:08	0	0.1	0.28	Ok	Ok	
ALT-GP5A	10/2/2024 10:59	0	0.4	0.13	Ok	Ok	
ALT-GP6A	10/2/2024 10:15	0	0.2	0.17	Ok	Ok	
ALT-GP6B	10/2/2024 10:17	0	0.1	0.08	Ok	Ok	
ALT-GP6C	10/2/2024 10:18	0	0.1	0.18	Ok	Ok	
ALT-GP7A	10/2/2024 10:27	0	0.2	0.11	Ok	Ok	
ALT-GP7B	10/2/2024 10:28	0	0.5	-0.02	Ok	Ok	
ALT-GP7C	10/2/2024 10:29	0	0.4	0.2	Ok	Ok	
ALT-GP8A	10/1/2024 9:25	0	0.5	-0.03	Ok	Ok	
ALT-GP8B	10/1/2024 9:27	0.3	0.4	-0.04	Ok	Ok	
ALT-GP8C	10/1/2024 9:29	9	0.3	0.06	Ok	Ok	
ALT-GP9A	10/1/2024 9:38	0	0.2	-0.01	Ok	Ok	
ALT-GP9B	10/1/2024 9:39	0	1.1	-0.08	Ok	Ok	
ALT-GP9C	10/1/2024 9:40	0	0.3	-0.06	Ok	Ok	
ALTGP10A	10/1/2024 9:52	0	0.8	0.03	Ok	Ok	
ALTGP10B	10/1/2024 9:53	0	0.8	-0.07	Ok	Ok	
ALTGP11A	10/1/2024 10:00	0	2.4	0.09	Ok	Ok	
ALTGP11B	10/1/2024 10:02	0	3	-0.01	Ok	Ok	
ALTGP11C	10/1/2024 10:03	0	0.5	0.09	Ok	Ok	
ALTGP12A	10/1/2024 10:15	0.1	0.3	0.11	Ok	Ok	
ALTGP13A	10/1/2024 10:24	0	0.1	0.01	Ok	Ok	
ALTGP14A	10/1/2024 10:28	0	0.1	0.11	Ok	Ok	
ALTGP15A	10/1/2024 10:32	8.4	3.2	-0.01	Ok	Ok	
ALTGP16A	10/1/2024 10:39	0	0.4	0.17	Ok	Ok	
ALTGP17A	10/1/2024 11:06	0	0.6	0.16	Ok	Ok	
ALTGP18A	10/1/2024 13:52	0	0.3	0.08	Ok	Ok	
ALTGP18B	10/1/2024 13:54	0	0.5	0.02	Ok	Ok	

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALTGP19A	10/1/2024 13:46	0	0.2	0.07	Ok	Ok	
ALTGP19B	10/1/2024 13:47	0	0.2	0.08	Ok	Ok	
ALTGP20A	10/2/2024 8:12	0	0.2	0.19	Ok	Ok	
ALTGP20B	10/2/2024 8:14	0	0.2	0.11	Ok	Ok	
ALTGP20C	10/2/2024 8:15	0	0.2	0.06	Ok	Ok	
ALTGP21A	10/2/2024 7:35	0	0.6	0.15	Ok	Ok	
ALTGP21B	10/2/2024 7:37	0	0.3	0.13	Ok	Ok	
ALTGP21C	10/2/2024 7:38	0	0.3	0.19	Ok	Ok	
ALTGP23A	10/1/2024 10:46	0	0.1	0.31	Ok	Ok	
ALTGP23B	10/1/2024 10:47	0	0.4	0.28	Ok	Ok	
ALTGP23C	10/1/2024 10:49	0	0.2	0.27	Ok	Ok	
ALTGP24A	10/1/2024 10:40	0	0.2	0.23	Ok	Ok	
ALTGP25A	10/1/2024 9:19	0	0.2	0.16	Ok	Ok	
ALTGP25B	10/1/2024 9:22	0	0.2	0.07	Ok	Ok	
ALTGP26A	10/1/2024 10:25	0	0.3	0.2	Ok	Ok	
ALTGP27A	10/1/2024 10:54	0	0.1	0.19	Ok	Ok	
ALTGP27B	10/1/2024 10:56	0	0.1	0.22	Ok	Ok	
ALTGP28A	10/2/2024 7:46	0	0.3	0.15	Ok	Ok	
ALTGP28B	10/2/2024 7:48	0	0.3	0.02	Ok	Ok	

Immediately notify compliance personnel of any readings in excess of 5 percent methane.
ND = Not Detected

California Code of Regulations Title 27, Division 2, Chapter 3, Article 6, §20921 require that:

(1) The concentration of methane gas must not exceed 1.25 percent by volume in air within any portion of any on-site structures.

(2) The concentration of methane gas migrating from the disposal site must not exceed 5 percent by volume in air at the disposal site permitted facility boundary or an alternative boundary approved in accordance with §20925.

MONITORING EQUIPMENT AND METHODOLOGY [TITLE 27 §20934(a)(4)]

Perimeter Gas Monitoring

The facility conducted the required monitoring using a CES - Landtec GEM-2000 gas analyzer (GEM). The monitoring was conducted by Garry Carpenter and Dan San Jose on October 1 and 2, 2024. The static pressure of probe was measured using the GEM's internal pressure transducers.

Facility Structures

Garry Carpenter used a Photovac Micro FID to monitor buildings and structures to check for the presence of methane on November 25, 2024. The instrument was calibrated on November 25, 2024, using 500 ppm methane standard.

Combustible Methane Gas Monitor Calibration

Some facility structures are monitored continuously using Sierra Monitors. The monitor is calibrated at a frequency determined by the manufacturer. The most recent calibration was conducted by Dan San Jose on November 25, 2024.

GENERAL WEATHER CONDITIONS [TITLE 27 §20934(a)(3)]

General weather conditions at the time of monitoring are presented in Table 2.

Table 2
General Weather Conditions

Description	General Conditions	Wind Speed mph	Wind Direction	Barometric Pressure, Inches of Hg	Ambient Temperature Min/Max, Deg F
October 1, 2024	Sunny	2.5	WSW	29.97	61/93
October 2, 2024	Sunny	1.9	W	29.89	64/93

* Refer to https://www.timeanddate.com/weather/usa/livermore/historic?month=12&year=2021for details on wind speed and direction

If you have any questions regarding this notification, please do not hesitate to contact me at rphadnis@wm.com.

Thank you,

Waste Management of Alameda County, Inc.

Rajan Phadnis
EP Air Specialist

Attachments: Perimeter Gas Probe Location Map
ALRRF Fourth Quarter 2024 Field Data

ATTACHMENT A

PROBE LOCATION MAP

LEGEND

▬ ▬	APPROXIMATE PERMITTED FACILITY BOUNDARY
—	APPROXIMATE LIMIT OF FILL AREA 1 AND FILL AREA 2
⊗	EXISTING PERIMETER LANDFILL GAS MONITORING PROBE LOCATION
⊗	PROPOSED LOCATION WHERE PROBE NOT CONSTRUCTED DUE TO SHALLOW WATER OR STEEP TERRAIN
◌	ESTIMATED 1,000-FT RADIUS OF INFLUENCE FROM LFG MONITORING PROBE

NOTE:

1. AERIAL PHOTOGRAPHY, DATED 10 JANUARY 2022, PROVIDED BY MILLER CREEK AERIAL MAPPING, LLC.

GAS MONITORING PROBE LOCATIONS FILL AREA 1 AND FILL AREA 2 ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY

Geosyntec
consultants

FIGURE
32

PROJECT NO: SAC242J
FEBRUARY 2022

P:\CADD\CIVIL 3D\WM\ALTAMONT\SAC242I (FA1 LFG)\JTD FIG32

ATTACHMENT B

FIELD DATA

Altamont Landfill and Resource Recovery Facility
Perimeter Gas Probe Monitoring Results

4 th Quarter 2024

Analyst: Dan San Jose/ Garry Carpenter
Date: 10.01.24/ 10.02.24/
Instrument: Gem 5000 Serial #: G509158/G509170_
Atmospheric Temperature (Deg F):96/98/
Barometric Pressure: 29.92/29.32/ Inch of HG
Wind Speed: 4/ 6 / MPH_ Wind Direction: S/S
Weather Condition: Clear/Clear/

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALT-GP1A	10/2/2024 9:39	0	0.2	-0.03	Ok	Ok	
ALT-GP1B	10/2/2024 9:41	0	0.2	0	Ok	Ok	
ALT-GP1C	10/2/2024 9:43	0	0.2	-0.02	Ok	Ok	
ALT-GP2A	10/2/2024 10:06	0	0.2	-0.04	Ok	Ok	
ALT-GP2B	10/2/2024 10:07	0	0.2	0.11	Ok	Ok	
ALT-GP3A	10/1/2024 9:43	0	0.2	0.22	Ok	Ok	
ALT-GP3B	10/1/2024 9:44	0	0.1	0.17	Ok	Ok	
ALT-GP4A	10/1/2024 10:08	0	0.1	0.28	Ok	Ok	
ALT-GP5A	10/2/2024 10:59	0	0.4	0.13	Ok	Ok	
ALT-GP6A	10/2/2024 10:15	0	0.2	0.17	Ok	Ok	
ALT-GP6B	10/2/2024 10:17	0	0.1	0.08	Ok	Ok	
ALT-GP6C	10/2/2024 10:18	0	0.1	0.18	Ok	Ok	
ALT-GP7A	10/2/2024 10:27	0	0.2	0.11	Ok	Ok	
ALT-GP7B	10/2/2024 10:28	0	0.5	-0.02	Ok	Ok	
ALT-GP7C	10/2/2024 10:29	0	0.4	0.2	Ok	Ok	
ALT-GP8A	10/1/2024 9:25	0	0.5	-0.03	Ok	Ok	
ALT-GP8B	10/1/2024 9:27	0.3	0.4	-0.04	Ok	Ok	
ALT-GP8C	10/1/2024 9:29	9	0.3	0.06	Ok	Ok	
ALT-GP9A	10/1/2024 9:38	0	0.2	-0.01	Ok	Ok	
ALT-GP9B	10/1/2024 9:39	0	1.1	-0.08	Ok	Ok	
ALT-GP9C	10/1/2024 9:40	0	0.3	-0.06	Ok	Ok	
ALTGP10A	10/1/2024 9:52	0	0.8	0.03	Ok	Ok	
ALTGP10B	10/1/2024 9:53	0	0.8	-0.07	Ok	Ok	
ALTGP11A	10/1/2024 10:00	0	2.4	0.09	Ok	Ok	
ALTGP11B	10/1/2024 10:02	0	3	-0.01	Ok	Ok	
ALTGP11C	10/1/2024 10:03	0	0.5	0.09	Ok	Ok	
ALTGP12A	10/1/2024 10:15	0.1	0.3	0.11	Ok	Ok	
ALTGP13A	10/1/2024 10:24	0	0.1	0.01	Ok	Ok	
ALTGP14A	10/1/2024 10:28	0	0.1	0.11	Ok	Ok	
ALTGP15A	10/1/2024 10:32	8.4	3.2	-0.01	Ok	Ok	
ALTGP16A	10/1/2024 10:39	0	0.4	0.17	Ok	Ok	
ALTGP17A	10/1/2024 11:06	0	0.6	0.16	Ok	Ok	
ALTGP18A	10/1/2024 13:52	0	0.3	0.08	Ok	Ok	
ALTGP18B	10/1/2024 13:54	0	0.5	0.02	Ok	Ok	
ALTGP19A	10/1/2024 13:46	0	0.2	0.07	Ok	Ok	

Probe ID	Date Time	CH_4 (%)	CO_2 (%)	Probe Pressure (in-H_2O)	Probe Condition (clean, capped, locked)		Comments
ALTGP19B	10/1/2024 13:47	0	0.2	0.08	Ok	Ok	
ALTGP20A	10/2/2024 8:12	0	0.2	0.19	Ok	Ok	
ALTGP20B	10/2/2024 8:14	0	0.2	0.11	Ok	Ok	
ALTGP20C	10/2/2024 8:15	0	0.2	0.06	Ok	Ok	
ALTGP21A	10/2/2024 7:35	0	0.6	0.15	Ok	Ok	
ALTGP21B	10/2/2024 7:37	0	0.3	0.13	Ok	Ok	
ALTGP21C	10/2/2024 7:38	0	0.3	0.19	Ok	Ok	
ALTGP23A	10/1/2024 10:46	0	0.1	0.31	Ok	Ok	
ALTGP23B	10/1/2024 10:47	0	0.4	0.28	Ok	Ok	
ALTGP23C	10/1/2024 10:49	0	0.2	0.27	Ok	Ok	
ALTGP24A	10/1/2024 10:40	0	0.2	0.23	Ok	Ok	
ALTGP25A	10/1/2024 9:19	0	0.2	0.16	Ok	Ok	
ALTGP25B	10/1/2024 9:22	0	0.2	0.07	Ok	Ok	
ALTGP26A	10/1/2024 10:25	0	0.3	0.2	Ok	Ok	
ALTGP27A	10/1/2024 10:54	0	0.1	0.19	Ok	Ok	
ALTGP27B	10/1/2024 10:56	0	0.1	0.22	Ok	Ok	
ALTGP28A	10/2/2024 7:46	0	0.3	0.15	Ok	Ok	
ALTGP28B	10/2/2024 7:48	0	0.3	0.02	Ok	Ok	

Immediately notify compliance personnel of any readings in excess of 5 percent methane.
ND = Not Detected

California Code of Regulations Title 27, Division 2, Chapter 3, Article 6, §20921 require that:

(1) The concentration of methane gas must not exceed 1.25 percent by volume in air within any portion of any on-site structures.

(2) The concentration of methane gas migrating from the disposal site must not exceed 5 percent by volume in air at the disposal site permitted facility boundary or an alternative boundary approved in accordance with §20925.

Methane-In-Structure Monitoring Data

Analyst: Garry Carpenter **Date:** 11-25-24 **Instrument:** Photo Vac Micro FID **Serial #:** CZPO 312

Monitored Location	Date and Time		Methane (ppm)	Methane (%)	Comments
Guardhouse	11-25-24	10:05am	2.7		
Leachate Pump Station	11-25-24	10:08am	115		
Administration Building	11-25-24	10:01am	5.3		
Sales Building	11-25-24	9:59am	4.4		
Engineering Trailer	11-25-24	9:51am	6.4		
Garage Office	11-25-24	10:10am	3.2		
Shop Break room	11-25-24	10:11am	1.7		
Maintenance Building Supervisor's Office	11-25-24	10:13am	24.4		
Office Trailer Fill Area 2 (1)	11-25-24	10:30am	4.1		
Employee break trailer fill area 2 (2)	11-25-24	10:32am	4:2		
Office Trailer Fill area 2 (3)	11-25-24	10:35am	13		
Scale House South	11-25-24	10:16am	12.1		
Scale House North	11-25-24	10:17am	11.3		
Employee Break Trailer	–	–	–	–	Abandoned
Gas Team Office Trailer	–	–	–	–	NOT in USE To be abandoned Safety concerns
LNG Building 1	–	–	–	–	Abandoned
LNG Building 2 (Trailer)	–	–	–	–	Abandoned
Tire Office Trailer	11-25-24	10:47am	3.4		
Davis Street Trailer	11-25-24	10:43am	4.6		
Waste Water Plant	11-25-24	12:20pm	13.0		
Gas Plant	11-25-24	12:16pm	2.8		
CASP trailer	11-25-24	10:25am	2.5		
Litter Pickers' Trailer (Mobile)	11-25-24	10:37am	3.6		

Immediately notify compliance personnel of any readings in excess of 1.25 percent methane.

Permanent Structure Monitor Calibration

Calibrated to 5,000 ppm CH_4

Analyst: Dan San Jose **Date: 11.25.24**

Instrument: Model 26 Calibration system **Serial Number: 0824904075MTS**

METHANE SENSOR CALIBRATION					
Monitored Location	**Date**	**Time**	**Monitor Condition**		**Comments**
			Arrival	**Departure**	
Guardhouse	11.25.24	10:05 am	OK	OK	
Administrative Building	11.25.24	10:00 am	OK	OK	
Sales Building	11.25.24	9:58 am	OK	OK	
Engineering Trailer	11.25.24	9:50 am	OK	OK	
Garage Office	11.25.24	10:9 AM	OK	OK	
Shop Break room	11.25.24	10:11 am	OK	OK	
Maintenance Building – Supervisor's Office	11.25.24	10:12 AM	OK	OK	
Office Trailer Fill Area 2 (1)	11.25.24	10:29 AM	OK	OK	
Employee break trailer Fill area 2 (2)	11.25.24	10:32 am	OK	OK	
Office trailer in Fill Area 2 (3)	11.25.24	10:35 am	OK	OK	
Scale House –(South)	11.25.24	10:14 am	OK	OK	
Scale House –(North)	11.25.24	10:16 am	OK	OK	
Employee Break Trailer	—	N/A	—	—	NOT IN USE, ABANDONED
Litter picker Trailer	11.25.24	10:37 am	OK	OK	
Davis Street Trailer	11.25.24	10:40 am	OK	OK	
Gas Team's Trailer	—	N/A	—	—	NOT IN USE, TO BE ABANDONED
WWTP (Manager's Office)	11.25.24	12:22 PM	OK	OK	
CASP trailer	11.25.24	10:25 AM	OK	OK	
WWTP (Lab)	11.25.24	12:20 pm	OK	OK	
Gas Plant	11.25.24	12:15 PM	OK	OK	

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill Date: 9.25.24

Time: 9:15 AM ______ PM

Instrument Make: Photo Vac Model: Micro FID S/N: CZPD312

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.

   Stable Reading = 501 ppm

3. Adjust meter to read 500 ppm.

Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 2 ppm (a)
2. Downwind Reading (highest in 30 seconds): 1 ppm (b)

Calculate Background Value:

$\frac{(a) + (b)}{2}$ Background = 1.5 ppm

Performed By: Garry Carpenter

4th QTR 2024

RESPONSE TIME TEST RECORD

Date: 11.04.24

Expiration Date (3 months): 02.2024

Time: 8:34 AM —— PM

Instrument Make: Thermo Scientific Model: TVA1000 S/N: 0936338909

Measurement #1:

Stabilized Reading Using Calibration Gas: 504 ppm
90% of the Stabilized Reading: 454 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 4 seconds (a)

Measurement #2:

Stabilized Reading Using Calibration Gas: 506 ppm
90% of the Stabilized Reading: 456 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 5 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 500 ppm
90% of the Stabilized Reading: 450 ppm
Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 4 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = 4$$ seconds (must be less than 30 seconds)

Performed By: D. San Jose

4th QTR 2024

CALIBRATION PRECISION TEST RECORD

Date: 11.04.24

Expiration Date (3 months): 02.2024

Time: 8:37 AM — PM

Instrument Make: Thermo Scientific Model: TVA 1000 S/N: 0936338909

Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)

Meter Reading for Calibration Gas: 504 ppm (b)

Measurement #2:

Meter Reading for Zero Air: 0 ppm (c)

Meter Reading for Calibration Gas: 500 ppm (d)

Measurement #3:

Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 500 ppm (f)

Calculate Precision:

$$\frac{\{|(500)-(b)| + |(500)-(d)| + |(500)-(f)|\}}{3} \times \frac{1}{500} \times 100$$

______ % (must be < than 10%)

Performed By: D. San Jose

ATTACHMENT C

CORRESPONDENCE

Altamont Landfill & Resource
Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

SENT VIA EMAIL

October 8, 2024

Ryan Hammon
Alameda County Dept. of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

SUBJECT: Probe GP15A Exceedance
Altamont Landfill and Resource Recovery Facility
SWIS: 01-AA-0009

Dear Mr. Hammon:

Altamont Landfill Resource Recovery Facility (ALRRF) is submitting this letter as required under Title 27, Division 2, Chapter 3, Subchapter 4, §20937. On October 1st, 2024, a methane concentration of 8.4 percent (%) was measured at Gas Monitoring Probe ALTGP 15A (GP-15A). The site has taken immediate steps to characterize and mitigate the exceedance.

IMMEDIATE RESPONSE ACTIONS

ALRRF took immediate response actions regarding the elevated methane levels detected at GP-15A. Site personnel used the Gazoscan methane detector to verify that there were no surface emissions in the area surrounding the probe. The site is continuing to investigate the source of the exceedance and is in the process of ordering sampling kits to conduct TO-14A laboratory analysis and carbon dating tests.

VERIFICATION READING

In accordance with 27 CCR §20937, ALRRF is currently verifying the validity of results. On October 8th, 2024, a verification reading was taken at GP-15A. The reading confirmed that GP-15A has a concentration of methane in excess of 5 percent by volume air.

If you have any questions, please contact the undersigned at (562) 505-5779.

Sincerely,
Altamont Landfill and Resource Recovery Facility

Blaine Harrison
District Manager

Waste Management of Alameda County, Inc. DBA Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

SENT VIA EMAIL

December 2, 2024

Ryan Hammon
Alameda County Dept. of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

SUBJECT: 60-Day Report - Probe GP15A Exceedance
Altamont Landfill and Resource Recovery Facility
SWIS: 01-AA-0009

Dear Mr. Hammon:

Waste Management of Alameda County, Inc. DBA Altamont Landfill Resource and Recovery Facility (ALRRF) is submitting this letter as required under Title 27, Division 2, Chapter 3, Subchapter 4, §20937. On October 1st, 2024, a methane concentration of 8.4% was measured at Gas Monitoring Probe 15A (GP15A). Initial notification to the LEA submitted via email on October 8, 2024.

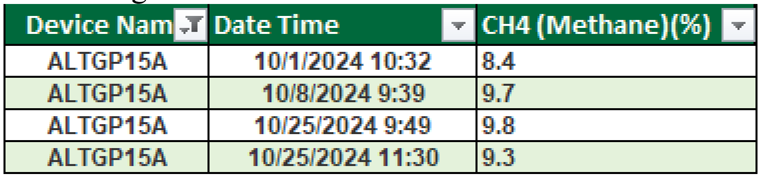
ALRRF undertook response actions to the elevated methane monitored at GP-15A, utilizing the Gazoscan methane detector. The facility verified that no surface emissions were detected in the vicinity of the probe. GP-15A is not located near any structures.

ALRRF collected samples to conduct TO-14A laboratory analysis. The results seem to indicate that the methane is not from landfill gas. The data indicates negligible amounts of ethanol and carbon disulfide, with no chlorinated hydrocarbons or freons detected. The data suggests the methane concentrations observed in these probes are from a natural source.

The results of the samples are included under Attachment A for review.

MONITORING DATA

Monitoring data obtained at Probe 15A since the exceedance is presented in the following table:



Device Nam	Date Time	CH4 (Methane)(%)
ALTGP15A	10/1/2024 10:32	8.4
ALTGP15A	10/8/2024 9:39	9.7
ALTGP15A	10/25/2024 9:49	9.8
ALTGP15A	10/25/2024 11:30	9.3

Waste Management of Alameda County, Inc. DBA Altamont Landfill & Resource Recovery Facility
10840 Altamont Pass Road
Livermore, CA 94551

ALRRF considers this submittal as fulfilling the regulatory requirement and deadline for the submittal and implementation of actions related to Probe 15A.

If you have any questions, please contact the undersigned at (562)505-5779 .

Sincerely,
Altamont Landfill and Resource Recovery Facility

Blaine F Harrison

Blaine Harrison
District Manager

Attachment A – Gas Composition and TO-14 Analytical

Attachment A

Gas Composition and TO-14 Analytical

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Air Toxics

11/1/2024
Mr. Rajan Phadnis
Waste Management Inc
172 98th Ave

Oakland CA 94603

Project Name:
Project #:
Workorder #: 2410604C

Dear Mr. Rajan Phadnis

The following report includes the data for the above referenced project for sample(s) received on 10/25/2024 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Joel Tillman at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Joel Tillman

Joel Tillman
Project Manager

WORK ORDER #: 2410604C

Work Order Summary

CLIENT:
Mr. Rajan Phadnis
Waste Management Inc
172 98th Ave
Oakland, CA 94603

BILL TO:
Accounts Payable
Waste Management Inc
PO Box 6700
Portland, OR 97228

PHONE: 510-613-0254

FAX: 510-613-2839

DATE RECEIVED: 10/25/2024

DATE COMPLETED: 11/01/2024

P.O. # 14233774

PROJECT #

CONTACT: Joel Tillman

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	GP 15A(1)	Modified ASTM D-1946	7.3 "Hg	10 psi
02A	GP 15A(2)	Modified ASTM D-1946	7.1 "Hg	9.9 psi
03A	A16 INLET	Modified ASTM D-1946	9.6 "Hg	10 psi
04A	Lab Blank	Modified ASTM D-1946	NA	NA
05A	CCV	Modified ASTM D-1946	NA	NA
06A	LCS	Modified ASTM D-1946	NA	NA
06AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 11/01/24

Cert. No.: AZ Licensure-AZ0775, FL NELAP-E87680, LA NELAP–02089, MN NELAP-2703122, NH NELAP–209223-B, NJ NELAP-CA016, NY NELAP-11291, TX NELAP-T104704434, UT NELAP-CA009332023-16, VA NELAP-12695, WA NELAP-C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-20
Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

LABORATORY NARRATIVE
Modified ASTM D-1946
Waste Management Inc
Workorder# 2410604C

Three 1 Liter Summa Canister samples were received on October 25, 2024. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Since Nitrogen is used to pressurize samples, the reported Nitrogen values are calculated by adding all the sample components and subtracting from 100%.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: GP 15A(1)

Lab ID#: 2410604C-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	1.7
Nitrogen	0.22	82
Methane	0.00022	9.3
Carbon Dioxide	0.022	6.8

Client Sample ID: GP 15A(2)

Lab ID#: 2410604C-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	1.7
Nitrogen	0.22	82
Methane	0.00022	9.3
Carbon Dioxide	0.022	7.0

Client Sample ID: A16 INLET

Lab ID#: 2410604C-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	2.2
Nitrogen	0.25	18
Methane	0.00025	45
Carbon Dioxide	0.025	35

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Client Sample ID: GP 15A(1)

Lab ID#: 2410604C-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11103018**	**Date of Collection: 10/25/24 11:36:00 A**
Dil. Factor:	**2.22**	**Date of Analysis: 10/30/24 05:38 PM**

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.22	1.7
Nitrogen	0.22	82
Carbon Monoxide	0.022	Not Detected
Methane	0.00022	9.3
Carbon Dioxide	0.022	6.8
Ethane	0.0022	Not Detected
Ethene	0.0022	Not Detected

Container Type: 1 Liter Summa Canister

Client Sample ID: GP 15A(2)

Lab ID#: 2410604C-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11103019**	**Date of Collection:**	**10/25/24 11:43:00 A**
Dil. Factor:	**2.20**	**Date of Analysis:**	**10/30/24 06:02 PM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	1.7
Nitrogen	0.22	82
Carbon Monoxide	0.022	Not Detected
Methane	0.00022	9.3
Carbon Dioxide	0.022	7.0
Ethane	0.0022	Not Detected
Ethene	0.0022	Not Detected

Container Type: 1 Liter Summa Canister

Client Sample ID: A16 INLET

Lab ID#: 2410604C-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: 11103020 **Date of Collection:** 10/25/24 11:58:00 A

Dil. Factor: 2.47 **Date of Analysis:** 10/30/24 06:26 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	2.2
Nitrogen	0.25	18
Carbon Monoxide	0.025	Not Detected
Methane	0.00025	45
Carbon Dioxide	0.025	35
Ethane	0.0025	Not Detected
Ethene	0.0025	Not Detected

Container Type: 1 Liter Summa Canister

Client Sample ID: Lab Blank

Lab ID#: 2410604C-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11103005**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**10/30/24 11:31 AM**

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.10	Not Detected
Nitrogen	0.10	Not Detected
Carbon Monoxide	0.010	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected
Ethane	0.0010	Not Detected
Ethene	0.0010	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2410604C-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11103001**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/30/24 09:52 AM**

Compound	%Recovery
Oxygen	100
Nitrogen	94
Carbon Monoxide	98
Methane	98
Carbon Dioxide	104
Ethane	101
Ethene	102

Container Type: NA - Not Applicable

Client Sample ID: LCS

Lab ID#: 2410604C-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: 11103002 **Date of Collection: NA**
Dil. Factor: 1.00 **Date of Analysis: 10/30/24 10:17 AM**

Compound	%Recovery	Method Limits
Oxygen	101	85-115
Nitrogen	93	85-115
Carbon Monoxide	96	85-115
Methane	98	85-115
Carbon Dioxide	107	85-115
Ethane	104	85-115
Ethene	102	85-115

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 2410604C-06AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**11103026**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/30/24 09:17 PM**

Compound	%Recovery	Method Limits
Oxygen	102	85-115
Nitrogen	93	85-115
Carbon Monoxide	95	85-115
Methane	98	85-115
Carbon Dioxide	106	85-115
Ethane	104	85-115
Ethene	103	85-115

Container Type: NA - Not Applicable

Method : Modified ASTM D-1946

CAS Number	Compound	Rpt. Limit (%)
7782-44-7	Oxygen	0.10
7727-37-9	Nitrogen	0.10
630-08-0	Carbon Monoxide	0.010
74-82-8	Methane	0.00010
124-38-9	Carbon Dioxide	0.010
74-84-0	Ethane	0.0010
74-85-1	Ethene	0.0010

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11/1/2024

Mr. Rajan Phadnis
Waste Management Inc
172 98th Ave

Oakland CA 94603

Project Name:
Project #:
Workorder #: 2410604B

Dear Mr. Rajan Phadnis

The following report includes the data for the above referenced project for sample(s) received on 10/25/2024 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-14A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Joel Tillman at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Joel Tillman

Joel Tillman
Project Manager

WORK ORDER #: 2410604B

Work Order Summary

CLIENT:
Mr. Rajan Phadnis
Waste Management Inc
172 98th Ave
Oakland, CA 94603

BILL TO:
Accounts Payable
Waste Management Inc
PO Box 6700
Portland, OR 97228

PHONE: 510-613-0254
FAX: 510-613-2839
DATE RECEIVED: 10/25/2024
DATE COMPLETED: 11/01/2024

P.O. # 14233774
PROJECT #
CONTACT: Joel Tillman

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	GP 15A(1)	Modified TO-14A	7.3 "Hg	10 psi
02A	GP 15A(2)	Modified TO-14A	7.1 "Hg	9.9 psi
03A	A16 INLET	Modified TO-14A	9.6 "Hg	10 psi
04A	Lab Blank	Modified TO-14A	NA	NA
04B	Lab Blank	Modified TO-14A	NA	NA
05A	CCV	Modified TO-14A	NA	NA
05B	CCV	Modified TO-14A	NA	NA
06A	LCS	Modified TO-14A	NA	NA
06AA	LCSD	Modified TO-14A	NA	NA
06B	LCS	Modified TO-14A	NA	NA
06BB	LCSD	Modified TO-14A	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 11/01/24

Cert. No.: AZ Licensure-AZ0775, FL NELAP-E87680, LA NELAP–02089, MN NELAP-2703122, NH NELAP–209223-B, NJ NELAP-CA016, NY NELAP-11291, TX NELAP-T104704434, UT NELAP-CA009332023-16, VA NELAP-12695, WA NELAP-C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-20
Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

LABORATORY NARRATIVE
Modified TO-14A
Waste Management Inc
Workorder# 2410604B

Three 1 Liter Summa Canister samples were received on October 25, 2024. The laboratory performed analysis via modified EPA Method TO-14A using GC/MS in the full scan mode.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications. Please note that TO-14A was validated for specially treated canisters, and the use of Tedlar bags for sample collection is outside the scope of the method.

Requirement	*TO-14A*	*ATL Modifications*
Initial Calibration criteria	RSD</=30%	Follow TO-15 requirements of RSD</=30% with two compounds allowed out to </=40%RSD.
BFB absolute abundance criteria	Within 10% of that from previous day	CCV internal standard area counts are compared to ICAL, corrective action when recovery is less than 60%.
Blank acceptance criteria	<0.20 ppbv	<Reporting Limit
Sample Drying System	Nafion Dryer	Multibed hydrophobic sorbent
BFB ion abundance criteria	Ion abundance listed in Table 4 of TO-14A	Follow ion abundance criteria listed in Method TO-15

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample A16 INLET due to the presence of high level target species.

The Relative Percent Difference (RPD) of the LCS/LCSD exceeded acceptance limits for 1,2,4-Trichlorobenzene (analytical batch from instrument MSD-14).

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

C - Estimated calculation due to estimated sampling rate.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Summary of Detected Compounds
MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Client Sample ID: GP 15A(1)

Lab ID#: 2410604B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	4.4	40	8.4	76
Carbon Disulfide	4.4	6.2	14	19

Client Sample ID: GP 15A(2)

Lab ID#: 2410604B-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	4.4	38	8.2	71
Acetone	11	11	26	27

Client Sample ID: A16 INLET

Lab ID#: 2410604B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	820	860	1700	1800
Ethanol	1000	45000	1900	84000
Acetone	820	17000	2000	40000
2-Propanol	1000	11000	2500	28000
Hexane	210	390	730	1400
2-Butanone (Methyl Ethyl Ketone)	820	20000	2400	58000
Tetrahydrofuran	210	2400	610	7200
Benzene	210	2400	660	7700
Heptane	210	510	840	2100
Toluene	210	3800	780	14000
Ethyl Benzene	210	1800	890	7800
m,p-Xylene	210	1600	890	6900
o-Xylene	210	480	890	2100
Styrene	210	300	880	1300
Cumene	210	450	1000	2200

Client Sample ID: GP 15A(1)

Lab ID#: 2410604B-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102808a**	**Date of Collection:**	**10/25/24 11:36:00 A**
Dil. Factor:	**2.22**	**Date of Analysis:**	**10/28/24 03:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.5	Not Detected
Freon 114	1.1	Not Detected	7.8	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	4.4	40	8.4	76
Freon 113	1.1	Not Detected	8.5	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	Not Detected	26	Not Detected
2-Propanol	4.4	Not Detected	11	Not Detected
Carbon Disulfide	4.4	6.2	14	19
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Chloroform	1.1	Not Detected	5.4	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.0	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.2	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.5	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.4	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	2.2	Not Detected	8.4	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	Not Detected	7.5	Not Detected
2-Hexanone	4.4	Not Detected	18	Not Detected

Client Sample ID: GP 15A(1)

Lab ID#: 2410604B-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102808a**	**Date of Collection:**	**10/25/24 11:36:00 A**
Dil. Factor:	**2.22**	**Date of Analysis:**	**10/28/24 03:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.5	Not Detected
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	2.2	Not Detected	9.6	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.6	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	33	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	95	70-130

Client Sample ID: GP 15A(2)

Lab ID#: 2410604B-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102807a**	**Date of Collection:**	**10/25/24 11:43:00 A**
Dil. Factor:	**2.19**	**Date of Analysis:**	**10/28/24 03:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.6	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	4.4	38	8.2	71
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Acetone	11	11	26	27
2-Propanol	4.4	Not Detected	11	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.3	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	2.2	Not Detected	8.2	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected
2-Hexanone	4.4	Not Detected	18	Not Detected

Client Sample ID: GP 15A(2)

Lab ID#: 2410604B-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102807a**	**Date of Collection:**	**10/25/24 11:43:00 A**
Dil. Factor:	**2.19**	**Date of Analysis:**	**10/28/24 03:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.3	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	2.2	Not Detected	9.5	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.5	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	32	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: A16 INLET

Lab ID#: 2410604B-03A

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102867a**	**Date of Collection:**	**10/25/24 11:58:00 A**
Dil. Factor:	**41.2**	**Date of Analysis:**	**10/29/24 05:04 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	210	Not Detected	1000	Not Detected
Freon 114	210	Not Detected	1400	Not Detected
Chloromethane	820	860	1700	1800
Vinyl Chloride	210	Not Detected	530	Not Detected
1,3-Butadiene	210	Not Detected	460	Not Detected
Bromomethane	820	Not Detected	3200	Not Detected
Chloroethane	820	Not Detected	2200	Not Detected
Freon 11	210	Not Detected	1200	Not Detected
Ethanol	1000	45000	1900	84000
Freon 113	210	Not Detected	1600	Not Detected
1,1-Dichloroethene	210	Not Detected	820	Not Detected
Acetone	820	17000	2000	40000
2-Propanol	1000	11000	2500	28000
Carbon Disulfide	820	Not Detected	2600	Not Detected
3-Chloropropene	820	Not Detected	2600	Not Detected
Methylene Chloride	820	Not Detected	2900	Not Detected
Methyl tert-butyl ether	210	Not Detected	740	Not Detected
trans-1,2-Dichloroethene	210	Not Detected	820	Not Detected
Hexane	210	390	730	1400
1,1-Dichloroethane	210	Not Detected	830	Not Detected
2-Butanone (Methyl Ethyl Ketone)	820	20000	2400	58000
cis-1,2-Dichloroethene	210	Not Detected	820	Not Detected
Tetrahydrofuran	210	2400	610	7200
Chloroform	210	Not Detected	1000	Not Detected
1,1,1-Trichloroethane	210	Not Detected	1100	Not Detected
Cyclohexane	210	Not Detected	710	Not Detected
Carbon Tetrachloride	210	Not Detected	1300	Not Detected
2,2,4-Trimethylpentane	210	Not Detected	960	Not Detected
Benzene	210	2400	660	7700
1,2-Dichloroethane	210	Not Detected	830	Not Detected
Heptane	210	510	840	2100
Trichloroethene	210	Not Detected	1100	Not Detected
1,2-Dichloropropane	210	Not Detected	950	Not Detected
1,4-Dioxane	820	Not Detected	3000	Not Detected
Bromodichloromethane	210	Not Detected	1400	Not Detected
cis-1,3-Dichloropropene	210	Not Detected	930	Not Detected
4-Methyl-2-pentanone	820	Not Detected	3400	Not Detected
Toluene	210	3800	780	14000
trans-1,3-Dichloropropene	210	Not Detected	930	Not Detected
1,1,2-Trichloroethane	210	Not Detected	1100	Not Detected
Tetrachloroethene	210	Not Detected	1400	Not Detected
2-Hexanone	820	Not Detected	3400	Not Detected

Client Sample ID: A16 INLET

Lab ID#: 2410604B-03A

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102867a**	**Date of Collection:**	**10/25/24 11:58:00 A**
Dil. Factor:	**41.2**	**Date of Analysis:**	**10/29/24 05:04 PM**

Compound	**Rpt. Limit (ppbv)**	**Amount (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ug/m3)**
Dibromochloromethane	210	Not Detected	1800	Not Detected
1,2-Dibromoethane (EDB)	210	Not Detected	1600	Not Detected
Chlorobenzene	210	Not Detected	950	Not Detected
Ethyl Benzene	210	1800	890	7800
m,p-Xylene	210	1600	890	6900
o-Xylene	210	480	890	2100
Styrene	210	300	880	1300
Bromoform	210	Not Detected	2100	Not Detected
Cumene	210	450	1000	2200
1,1,2,2-Tetrachloroethane	210	Not Detected	1400	Not Detected
Propylbenzene	210	Not Detected	1000	Not Detected
4-Ethyltoluene	210	Not Detected	1000	Not Detected
1,3,5-Trimethylbenzene	210	Not Detected	1000	Not Detected
1,2,4-Trimethylbenzene	210	Not Detected	1000	Not Detected
1,3-Dichlorobenzene	210	Not Detected	1200	Not Detected
1,4-Dichlorobenzene	210	Not Detected	1200	Not Detected
alpha-Chlorotoluene	210	Not Detected	1100	Not Detected
1,2-Dichlorobenzene	210	Not Detected	1200	Not Detected
1,2,4-Trichlorobenzene	820	Not Detected	6100	Not Detected
Hexachlorobutadiene	820	Not Detected	8800	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: Lab Blank

Lab ID#: 2410604B-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: a102806
Dil. Factor: 1.00
Date of Collection: NA
Date of Analysis: 10/28/24 12:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

Client Sample ID: Lab Blank

Lab ID#: 2410604B-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102806**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**10/28/24 12:58 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	1.0	Not Detected	4.3	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	93	70-130

Client Sample ID: Lab Blank

Lab ID#: 2410604B-04B

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102835**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**10/28/24 11:10 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	20	Not Detected	78	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	25	Not Detected	47	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	25	Not Detected	61	Not Detected
Carbon Disulfide	20	Not Detected	62	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	20	Not Detected	69	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	20	Not Detected	82	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
2-Hexanone	20	Not Detected	82	Not Detected

Client Sample ID: Lab Blank

Lab ID#: 2410604B-04B

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102835**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**10/28/24 11:10 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: CCV

Lab ID#: 2410604B-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102803**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 11:12 AM**

Compound	%Recovery
Freon 12	95
Freon 114	97
Chloromethane	124
Vinyl Chloride	123
1,3-Butadiene	122
Bromomethane	114
Chloroethane	112
Freon 11	93
Ethanol	96
Freon 113	98
1,1-Dichloroethene	100
Acetone	102
2-Propanol	97
Carbon Disulfide	104
3-Chloropropene	103
Methylene Chloride	103
Methyl tert-butyl ether	95
trans-1,2-Dichloroethene	101
Hexane	102
1,1-Dichloroethane	101
2-Butanone (Methyl Ethyl Ketone)	102
cis-1,2-Dichloroethene	102
Tetrahydrofuran	99
Chloroform	94
1,1,1-Trichloroethane	92
Cyclohexane	100
Carbon Tetrachloride	90
2,2,4-Trimethylpentane	105
Benzene	104
1,2-Dichloroethane	95
Heptane	108
Trichloroethene	100
1,2-Dichloropropane	105
1,4-Dioxane	98
Bromodichloromethane	99
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	101
Toluene	101
trans-1,3-Dichloropropene	102
1,1,2-Trichloroethane	104
Tetrachloroethene	98
2-Hexanone	100

Client Sample ID: CCV

Lab ID#: 2410604B-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102803**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 11:12 AM**

Compound	%Recovery
Dibromochloromethane	100
1,2-Dibromoethane (EDB)	103
Chlorobenzene	101
Ethyl Benzene	103
m,p-Xylene	105
o-Xylene	107
Styrene	105
Bromoform	99
Cumene	103
1,1,2,2-Tetrachloroethane	105
Propylbenzene	105
4-Ethyltoluene	103
1,3,5-Trimethylbenzene	103
1,2,4-Trimethylbenzene	106
1,3-Dichlorobenzene	102
1,4-Dichlorobenzene	102
alpha-Chlorotoluene	104
1,2-Dichlorobenzene	101
1,2,4-Trichlorobenzene	102
Hexachlorobutadiene	99

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: CCV

Lab ID#: 2410604B-05B

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102832**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 09:57 PM**

Compound	%Recovery
Freon 12	101
Freon 114	98
Chloromethane	105
Vinyl Chloride	96
1,3-Butadiene	96
Bromomethane	104
Chloroethane	108
Freon 11	103
Ethanol	83
Freon 113	102
1,1-Dichloroethene	104
Acetone	102
2-Propanol	83
Carbon Disulfide	97
3-Chloropropene	101
Methylene Chloride	109
Methyl tert-butyl ether	97
trans-1,2-Dichloroethene	94
Hexane	94
1,1-Dichloroethane	101
2-Butanone (Methyl Ethyl Ketone)	95
cis-1,2-Dichloroethene	94
Tetrahydrofuran	92
Chloroform	104
1,1,1-Trichloroethane	95
Cyclohexane	96
Carbon Tetrachloride	100
2,2,4-Trimethylpentane	98
Benzene	101
1,2-Dichloroethane	106
Heptane	87
Trichloroethene	103
1,2-Dichloropropane	102
1,4-Dioxane	101
Bromodichloromethane	99
cis-1,3-Dichloropropene	94
4-Methyl-2-pentanone	85
Toluene	97
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	94
Tetrachloroethene	102
2-Hexanone	95

Client Sample ID: CCV
Lab ID#: 2410604B-05B
MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102832**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 09:57 PM**

Compound	**%Recovery**
Dibromochloromethane	101
1,2-Dibromoethane (EDB)	99
Chlorobenzene	101
Ethyl Benzene	96
m,p-Xylene	97
o-Xylene	98
Styrene	100
Bromoform	100
Cumene	98
1,1,2,2-Tetrachloroethane	100
Propylbenzene	96
4-Ethyltoluene	103
1,3,5-Trimethylbenzene	98
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	103
1,4-Dichlorobenzene	103
alpha-Chlorotoluene	80
1,2-Dichlorobenzene	101
1,2,4-Trichlorobenzene	79
Hexachlorobutadiene	71

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130

Client Sample ID: LCS

Lab ID#: 2410604B-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	a102804	**Date of Collection: NA**
Dil. Factor:	1.00	**Date of Analysis: 10/28/24 11:46 AM**

Compound	%Recovery	Method Limits
Freon 12	94	70-130
Freon 114	95	70-130
Chloromethane	98	70-130
Vinyl Chloride	90	70-130
1,3-Butadiene	87	70-130
Bromomethane	86	70-130
Chloroethane	83	70-130
Freon 11	94	70-130
Ethanol	93	70-130
Freon 113	97	70-130
1,1-Dichloroethene	99	70-130
Acetone	100	70-130
2-Propanol	104	70-130
Carbon Disulfide	104	70-130
3-Chloropropene	103	70-130
Methylene Chloride	102	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	100	70-130
Hexane	97	70-130
1,1-Dichloroethane	99	70-130
2-Butanone (Methyl Ethyl Ketone)	104	70-130
cis-1,2-Dichloroethene	104	70-130
Tetrahydrofuran	100	70-130
Chloroform	93	70-130
1,1,1-Trichloroethane	94	70-130
Cyclohexane	102	70-130
Carbon Tetrachloride	90	70-130
2,2,4-Trimethylpentane	94	70-130
Benzene	106	70-130
1,2-Dichloroethane	97	70-130
Heptane	104	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	104	70-130
1,4-Dioxane	92	70-130
Bromodichloromethane	97	70-130
cis-1,3-Dichloropropene	105	70-130
4-Methyl-2-pentanone	106	70-130
Toluene	100	70-130
trans-1,3-Dichloropropene	102	70-130
1,1,2-Trichloroethane	104	70-130
Tetrachloroethene	97	70-130
2-Hexanone	108	70-130

Client Sample ID: LCS

Lab ID#: 2410604B-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102804**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 11:46 AM**

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	100	70-130
1,2-Dibromoethane (EDB)	102	70-130
Chlorobenzene	102	70-130
Ethyl Benzene	107	70-130
m,p-Xylene	106	70-130
o-Xylene	107	70-130
Styrene	108	70-130
Bromoform	100	70-130
Cumene	103	70-130
1,1,2,2-Tetrachloroethane	106	70-130
Propylbenzene	105	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	108	70-130
1,3-Dichlorobenzene	103	70-130
1,4-Dichlorobenzene	102	70-130
alpha-Chlorotoluene	98	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	119	70-130
Hexachlorobutadiene	116	70-130

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: LCSD

Lab ID#: 2410604B-06AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102805**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 12:21 PM**

Compound	%Recovery	Method Limits
Freon 12	92	70-130
Freon 114	92	70-130
Chloromethane	94	70-130
Vinyl Chloride	88	70-130
1,3-Butadiene	85	70-130
Bromomethane	82	70-130
Chloroethane	81	70-130
Freon 11	91	70-130
Ethanol	91	70-130
Freon 113	94	70-130
1,1-Dichloroethene	94	70-130
Acetone	97	70-130
2-Propanol	102	70-130
Carbon Disulfide	102	70-130
3-Chloropropene	102	70-130
Methylene Chloride	100	70-130
Methyl tert-butyl ether	94	70-130
trans-1,2-Dichloroethene	98	70-130
Hexane	95	70-130
1,1-Dichloroethane	97	70-130
2-Butanone (Methyl Ethyl Ketone)	101	70-130
cis-1,2-Dichloroethene	102	70-130
Tetrahydrofuran	97	70-130
Chloroform	91	70-130
1,1,1-Trichloroethane	91	70-130
Cyclohexane	99	70-130
Carbon Tetrachloride	88	70-130
2,2,4-Trimethylpentane	91	70-130
Benzene	105	70-130
1,2-Dichloroethane	94	70-130
Heptane	105	70-130
Trichloroethene	99	70-130
1,2-Dichloropropane	102	70-130
1,4-Dioxane	95	70-130
Bromodichloromethane	97	70-130
cis-1,3-Dichloropropene	105	70-130
4-Methyl-2-pentanone	104	70-130
Toluene	100	70-130
trans-1,3-Dichloropropene	100	70-130
1,1,2-Trichloroethane	102	70-130
Tetrachloroethene	95	70-130
2-Hexanone	104	70-130

Client Sample ID: LCSD

Lab ID#: 2410604B-06AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a102805**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 12:21 PM**

Compound	%Recovery	Method Limits
Dibromochloromethane	98	70-130
1,2-Dibromoethane (EDB)	100	70-130
Chlorobenzene	100	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	104	70-130
o-Xylene	106	70-130
Styrene	105	70-130
Bromoform	98	70-130
Cumene	100	70-130
1,1,2,2-Tetrachloroethane	105	70-130
Propylbenzene	103	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	101	70-130
1,2,4-Trimethylbenzene	106	70-130
1,3-Dichlorobenzene	100	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	96	70-130
1,2-Dichlorobenzene	100	70-130
1,2,4-Trichlorobenzene	120	70-130
Hexachlorobutadiene	113	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: LCS

Lab ID#: 2410604B-06B

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102833**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**10/28/24 10:21 PM**

Compound	**%Recovery**	**Method Limits**
Freon 12	96	70-130
Freon 114	95	70-130
Chloromethane	92	70-130
Vinyl Chloride	92	70-130
1,3-Butadiene	92	70-130
Bromomethane	98	70-130
Chloroethane	89	70-130
Freon 11	103	70-130
Ethanol	85	70-130
Freon 113	97	70-130
1,1-Dichloroethene	97	70-130
Acetone	100	70-130
2-Propanol	93	70-130
Carbon Disulfide	90	70-130
3-Chloropropene	86	70-130
Methylene Chloride	102	70-130
Methyl tert-butyl ether	89	70-130
trans-1,2-Dichloroethene	87	70-130
Hexane	89	70-130
1,1-Dichloroethane	95	70-130
2-Butanone (Methyl Ethyl Ketone)	93	70-130
cis-1,2-Dichloroethene	89	70-130
Tetrahydrofuran	88	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	90	70-130
Cyclohexane	90	70-130
Carbon Tetrachloride	94	70-130
2,2,4-Trimethylpentane	94	70-130
Benzene	96	70-130
1,2-Dichloroethane	100	70-130
Heptane	88	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	95	70-130
1,4-Dioxane	93	70-130
Bromodichloromethane	94	70-130
cis-1,3-Dichloropropene	90	70-130
4-Methyl-2-pentanone	81	70-130
Toluene	93	70-130
trans-1,3-Dichloropropene	90	70-130
1,1,2-Trichloroethane	89	70-130
Tetrachloroethene	98	70-130
2-Hexanone	89	70-130

Client Sample ID: LCS

Lab ID#: 2410604B-06B

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102833**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 10:21 PM**

Compound	%Recovery	Method Limits
Dibromochloromethane	94	70-130
1,2-Dibromoethane (EDB)	94	70-130
Chlorobenzene	96	70-130
Ethyl Benzene	93	70-130
m,p-Xylene	93	70-130
o-Xylene	91	70-130
Styrene	93	70-130
Bromoform	96	70-130
Cumene	92	70-130
1,1,2,2-Tetrachloroethane	96	70-130
Propylbenzene	93	70-130
4-Ethyltoluene	94	70-130
1,3,5-Trimethylbenzene	93	70-130
1,2,4-Trimethylbenzene	93	70-130
1,3-Dichlorobenzene	97	70-130
1,4-Dichlorobenzene	97	70-130
alpha-Chlorotoluene	76	70-130
1,2-Dichlorobenzene	96	70-130
1,2,4-Trichlorobenzene	94	70-130
Hexachlorobutadiene	94	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130

Client Sample ID: LCSD

Lab ID#: 2410604B-06BB

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102834**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 10/28/24 10:46 PM**

Compound	%Recovery	Method Limits
Freon 12	94	70-130
Freon 114	91	70-130
Chloromethane	90	70-130
Vinyl Chloride	92	70-130
1,3-Butadiene	90	70-130
Bromomethane	92	70-130
Chloroethane	94	70-130
Freon 11	102	70-130
Ethanol	82	70-130
Freon 113	94	70-130
1,1-Dichloroethene	94	70-130
Acetone	92	70-130
2-Propanol	91	70-130
Carbon Disulfide	90	70-130
3-Chloropropene	89	70-130
Methylene Chloride	102	70-130
Methyl tert-butyl ether	90	70-130
trans-1,2-Dichloroethene	88	70-130
Hexane	87	70-130
1,1-Dichloroethane	92	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
cis-1,2-Dichloroethene	88	70-130
Tetrahydrofuran	87	70-130
Chloroform	93	70-130
1,1,1-Trichloroethane	89	70-130
Cyclohexane	90	70-130
Carbon Tetrachloride	92	70-130
2,2,4-Trimethylpentane	92	70-130
Benzene	97	70-130
1,2-Dichloroethane	97	70-130
Heptane	83	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	94	70-130
1,4-Dioxane	92	70-130
Bromodichloromethane	90	70-130
cis-1,3-Dichloropropene	90	70-130
4-Methyl-2-pentanone	78	70-130
Toluene	92	70-130
trans-1,3-Dichloropropene	91	70-130
1,1,2-Trichloroethane	90	70-130
Tetrachloroethene	97	70-130
2-Hexanone	90	70-130

Client Sample ID: LCSD

Lab ID#: 2410604B-06BB

MODIFIED EPA METHOD TO-14A GC/MS

File Name:	**14102834**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**10/28/24 10:46 PM**

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	92	70-130
1,2-Dibromoethane (EDB)	94	70-130
Chlorobenzene	95	70-130
Ethyl Benzene	94	70-130
m,p-Xylene	90	70-130
o-Xylene	92	70-130
Styrene	94	70-130
Bromoform	94	70-130
Cumene	91	70-130
1,1,2,2-Tetrachloroethane	97	70-130
Propylbenzene	92	70-130
4-Ethyltoluene	97	70-130
1,3,5-Trimethylbenzene	95	70-130
1,2,4-Trimethylbenzene	94	70-130
1,3-Dichlorobenzene	99	70-130
1,4-Dichlorobenzene	101	70-130
alpha-Chlorotoluene	82	70-130
1,2-Dichlorobenzene	103	70-130
1,2,4-Trichlorobenzene	122	70-130
Hexachlorobutadiene	117	70-130

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130

Method : Modified TO-14A

CAS Number	Compound	Rpt. Limit (ppbv)
75-71-8	Freon 12	0.50
76-14-2	Freon 114	0.50
74-87-3	Chloromethane	5.0
75-01-4	Vinyl Chloride	0.50
106-99-0	1,3-Butadiene	0.50
74-83-9	Bromomethane	5.0
75-00-3	Chloroethane	2.0
75-69-4	Freon 11	0.50
64-17-5	Ethanol	2.0
76-13-1	Freon 113	0.50
75-35-4	1,1-Dichloroethene	0.50
67-64-1	Acetone	5.0
67-63-0	2-Propanol	2.0
75-15-0	Carbon Disulfide	2.0
107-05-1	3-Chloropropene	2.0
75-09-2	Methylene Chloride	5.0
1634-04-4	Methyl tert-butyl ether	2.0
156-60-5	trans-1,2-Dichloroethene	0.50
110-54-3	Hexane	0.50
75-34-3	1,1-Dichloroethane	0.50
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2.0
156-59-2	cis-1,2-Dichloroethene	0.50
109-99-9	Tetrahydrofuran	0.50
67-66-3	Chloroform	0.50
71-55-6	1,1,1-Trichloroethane	0.50
110-82-7	Cyclohexane	0.50
56-23-5	Carbon Tetrachloride	0.50
540-84-1	2,2,4-Trimethylpentane	0.50
71-43-2	Benzene	0.50
107-06-2	1,2-Dichloroethane	0.50
142-82-5	Heptane	0.50
79-01-6	Trichloroethene	0.50
78-87-5	1,2-Dichloropropane	0.50
123-91-1	1,4-Dioxane	2.0
75-27-4	Bromodichloromethane	0.50
10061-01-5	cis-1,3-Dichloropropene	0.50
108-10-1	4-Methyl-2-pentanone	0.50
108-88-3	Toluene	1.0
10061-02-6	trans-1,3-Dichloropropene	0.50
79-00-5	1,1,2-Trichloroethane	0.50
127-18-4	Tetrachloroethene	0.50
591-78-6	2-Hexanone	2.0
124-48-1	Dibromochloromethane	0.50
106-93-4	1,2-Dibromoethane (EDB)	0.50

Method : Modified TO-14A

CAS Number	Compound	Rpt. Limit (ppbv)
108-90-7	Chlorobenzene	0.50
100-41-4	Ethyl Benzene	0.50
108-38-3	m,p-Xylene	1.0
95-47-6	o-Xylene	0.50
100-42-5	Styrene	0.50
75-25-2	Bromoform	0.50
98-82-8	Cumene	0.50
79-34-5	1,1,2,2-Tetrachloroethane	0.50
103-65-1	Propylbenzene	0.50
622-96-8	4-Ethyltoluene	0.50
108-67-8	1,3,5-Trimethylbenzene	0.50
95-63-6	1,2,4-Trimethylbenzene	0.50
541-73-1	1,3-Dichlorobenzene	0.50
106-46-7	1,4-Dichlorobenzene	0.50
100-44-7	alpha-Chlorotoluene	0.50
95-50-1	1,2-Dichlorobenzene	0.50
120-82-1	1,2,4-Trichlorobenzene	2.0
87-68-3	Hexachlorobutadiene	2.0

	Surrogate	Method Limits
17060-07-0	1,2-Dichloroethane-d4	70-130
2037-26-5	Toluene-d8	70-130
460-00-4	4-Bromofluorobenzene	70-130

APPENDIX AB
GREEN WASTE ACCEPTANCE RECORD AND S-31 FUEL USAGE AND HOURS OF OPERATION

S-29 - Green Waste Stockpiles

Log of Throughput, Fuel Usage, and Hours of Operation per Title V (BAAQMD) - Permit Condition

Limit: 68,040 tons of green waste received from off-site locations for grinding per 12-month period

Limit: 76,205 gallons of fuel for grinder during any 12-month period

Water Applications: Refer to Dust Suppression Logs

	Green Waste Received	Grinder		12 Month Rolling Totals	
Month	**(tons)**	**Diesel Usage (gallons)**	**Hours of Operation**	**Received (tons)**	**Fuel (gallons)**
Jun-24	0.0	0.0	0.0	0	0.0
Jul-24	0.0	0.0	0.0	0	0.0
Aug-24	0.0	0.0	0.0	0	0.0
Sep-24	0.0	0.0	0.0	0	0.0
Oct-24	0.0	0.0	0.0	0	0.0
Nov-24	0.0	0.0	0.0	0	0.0

This data includes both greenwaste and C&D material that third accept and grind.

ALRRF only accepts green waste for transferring offsite for processing.

APPENDIX AC
NON-METHANE ORGANIC COMPOUNDS PERMIT RECORD

Pursuant to PTO Condition Number 19235 Part 17(a), upon commencement of waste disposal in Fill Area 2, the rolling 3-year average NMOC concentration in LFG will be limited to 600 ppmv NMOC, expressed as C6 and corrected to 50 percent CH_4. Filling commenced in Fill Area 2 in March 2019. Addendum to Application for a Change of Condition to Increase POC Limit was submitted on September 29, 2020. Application for Change of Condition for Fill Area 2 was submitted on June 18, 2017. Application Number AN 28727 was assigned. Addendum to Application for a Change of Condition to Increase POC Limit was submitted on September 29, 2020. ALRRF submitted a follow-up letter to the previous submittals on September 23, 2021, September 21, 2022, September 27, 2023 and September 20, 2024. BAAQMD issued a new AN Number 32247.

APPENDIX AD
PARAMETRIC MONITOR INOPERATION SUMMARY

WASTE MANAGEMENT of ALAMEDA COUNTY
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
BAAQMD PLANT NO. 2066
Parametric Monitor Inoperation Summary
June 1, 2024 through November 30, 2024

Source	Data Monitoring Month	Start Date Time	End Date Time	Total Missing Data (Hours)	Comments
A-15 Flare	June 1, 2024 through November 30, 2024	No data gaps greater than 15 minutes in duration during operation of the device.			
A-16 Flare	June 1, 2024 through November 30, 2024	9/26/24 14:34	9/26/24 14:38	0.07	Data gap during work on upgrades to data logger. Substitute data for flow and temperature was used.
A-16 Flare	June 1, 2024 through November 30, 2024	9/27/24 7:44	9/27/24 9:22	1.63	Data gap during work on upgrades to data logger. Data logger was inadvertantly turned off and data recording had to be restarted. Substitute data for flow and temperature was used.
A-16 Flare	June 1, 2024 through November 30, 2024	9/30/24 13:36	10/1/24 8:38	19.03	Condensate injection channel on data logger was stopped indavertently on 9/30/24 during upgrades and was restarted on 10/1/24. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/3/24 12:04	6/3/24 12:08	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/11/24 19:12	6/11/24 19:14	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/18/24 10:04	6/18/24 10:06	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 13:22	6/20/24 13:32	0.17	Data gap due to server communication error. Server was rest and issue was resolved. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 13:34	6/20/24 13:36	0.03	Data gap due to server communication error. Server was rest and issue was resolved. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 13:48	6/20/24 13:50	0.03	Data gap due to server communication error. Server was rest and issue was resolved. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 14:08	6/20/24 14:10	0.03	Data gap due to server communication error. Server was rest and issue was resolved. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	6/28/24 10:44	6/28/24 10:48	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	7/15/24 2:12	7/15/24 2:16	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	7/23/24 10:14	7/23/24 10:16	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	7/31/24 19:22	7/31/24 19:24	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	9/4/24 1:32	9/4/24 1:34	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	9/16/24 7:02	9/16/24 7:04	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	10/2/24 15:04	10/2/24 15:06	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	10/18/24 19:50	10/18/24 19:54	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	10/23/24 7:24	10/23/24 7:26	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	10/31/24 10:06	10/31/24 10:10	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	11/8/24 11:48	11/8/24 11:50	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-6 Gas Turbine	June 1, 2024 through November 30, 2024	11/16/24 13:48	11/16/24 13:50	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.

Source	Data Monitoring Month	Start Date Time	End Date Time	Total Missing Data (Hours)	Comments
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/3/24 12:04	6/3/24 12:08	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/11/24 19:12	6/11/24 19:14	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/18/24 10:04	6/18/24 10:06	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 13:22	6/20/24 13:32	0.17	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 13:34	6/20/24 13:36	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 13:48	6/20/24 13:50	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/20/24 14:08	6/20/24 14:10	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	6/28/24 10:44	6/28/24 10:48	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	7/15/24 2:12	7/15/24 2:16	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	7/23/24 10:14	7/23/24 10:16	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	7/31/24 19:22	7/31/24 19:24	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	9/4/24 1:32	9/4/24 1:34	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	9/16/24 7:02	9/16/24 7:04	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	10/2/24 15:04	10/2/24 15:06	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	10/18/24 19:50	10/18/24 19:54	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	10/23/24 7:24	10/23/24 7:26	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	10/31/24 10:06	10/31/24 10:10	0.07	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	11/8/24 11:48	11/8/24 11:50	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-7 Gas Turbine	June 1, 2024 through November 30, 2024	11/16/24 13:48	11/16/24 13:50	0.03	Flow data channel recorded out of range readings due to loss of signal. Substitute data was used.
S-210 LNG Plant	June 1, 2024 through November 30, 2024	LNG Plant was shut down on June 30, 2023.			

Notes:

1) The Data Gap Summary is maintained pursuant to BAAQMD Regulation 1-523.
2) Periods of parametric monitor inoperation did not exceed 24 hours or 15 consecutive days for each source. Also, periods of parametric monitor inoperation did not exceed 30 days over a consecutive 12-month period for each source.