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1. RECEIVED IN
ENFORCEMENT: 01/27/2023

January 25, 2023

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Director of Enforcement Division
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SUBJECT: Combined Title V Semi-Annual and Partial 8-34 Annual Report 40 CFR 63
Subpart AAAA Semi-Annual Report
The Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive, San Jose, CA 95037
Facility Number A1812

Dear Sir or Madam:

The Kirby Canyon Recycling & Disposal Facility (KCRDF) is pleased to submit the attached Combined Title V Semi-Annual and Partial 8-34 Annual Report for the period of July 1, 2022, through December 31, 2022, 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 1437 Part 16 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,

The Kirby Canyon Recycling & Disposal Facility

Enrique Perez
Responsible Official

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 Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
San Jose, California 95037
Facility Number A1812**

July 1, 2022, through December 31, 2022

Submitted on:
January 25, 2023

Prepared for:
The Kirby Canyon Recycling & Disposal Facility

**For Submittal to:
The Bay Area Air Quality Management District
375 Beale Street, Suite 600
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Attn: Title V Reports**

and

**USEPA, Region 9
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San Francisco, CA 94105
Attn: Director Enforcement Division, TRI & Air Section (ENF-2-1)**

Prepared by:



Kirby Canyon Recycling & Disposal Facility

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1 INTRODUCTION

1.1 Purpose

This document is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report for the Kirby Canyon Recycling & Disposal Facility (KCRDF), pursuant to Title V Permit Standard Condition 1.F and Condition Number 1437 Part 16. This Combined Report satisfies the requirements of Regulation 8, Rule 34, Section 411 of the Bay Area Air Quality Management District (BAAQMD) and Title 40 Code of Federal Regulations (CFR) Part 60 Subpart CC, Emission Guidelines (EG) for municipal solid waste (MSW) landfills. This Combined Report meets the requirements of Title V Standard Condition 1.F, BAAQMD Regulation 8-34-411, and 40 CFR §60.757(f) and 40 CFR part 62, Subpart F and OOO and covers compliance activities conducted from July 1, 2022, through December 31, 2022. During the timeframe included in this report from July 1, 2022, through December 31, 2022, 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. This Combined Report also includes the Semi-Annual Report of Start-up, Shutdown and Malfunction (SSM) Plan activities pursuant to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, Subpart AAAA for Landfills.

Section 2 of this Combined Report contains the elements required to satisfy both BAAQMD Regulation 8-34-411 and 40 CFR §60.757(f). A Performance Test Report for the A-12 Flare that meets the requirements of both BAAQMD Regulation 8-34-413 and 40 CFR §60.758(g) was conducted on February 23, 2022. Section 3 of this Combined Report includes performance test data collected during the reporting period as well as a discussion of the data from the Performance Test for the A-12 Flare, in compliance with BAAQMD Regulation 8-34-412, and Title V Permit Condition Number 1437 Parts 12 and 13. The February 23, 2022, Performance Test Report results for the A-12 Flare are included in Appendix O of the Combined Report.

Section 4 contains the Semi-Annual Report of SSM Plan activities.

1.2 Record Keeping 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 KCRDF. Records are maintained at this location for a minimum of five years.

1.3 Report Preparation

This Combined Report has been prepared by the KCRDF.

2 SEMI-ANNUAL MONITORING REPORT

In accordance with the KCRDF Title V Permit Standard Condition 1.F; Condition 1437, Part 16; BAAQMD Regulation 8-34-411 and 40 CFR §60.757(f), this report is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report that is required to be submitted by the KCRDF. 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 July 1, 2022, through December 31, 2022. The following table lists the rules and regulations that are required to be included in this Combined Report.

Table 2-1 Semi-Annual Report Requirements

RULE	REQUIREMENT	LOCATION IN REPORT
8-34-501.1 §60.757(f)(4)	All collection system downtime, including individual well shutdown times and the reason for the shutdown.	Section 2.1, Appendices B & C
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown.	Section 2.2, Appendix B
8-34-501.3, 8-34-507, §60.757(f)(1)	Continuous temperature for all operating flares and any enclosed combustor subject to Section 8-34-507.	Section 2.3, Appendix D
8-34-501.4, 8-34-510	Testing performed to satisfy any of the requirements of this Rule.	Sections 2.4 & 2.10, Appendix E
8-34-501.5, 8-34-505	Monthly landfill gas (LFG) flow rates and well concentration readings for facilities subject to 8-34-404.	Sections 2.5, 2.10 & 2.11, Appendices I & L
8-34-501.6, 8-34-503, 8-34-506, §60.757(f)(5)	For operations subject to Section 8-34-503 and 8-34-506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in parts per million by volume (ppmv), date of discovery, the action taken to repair the leak, date of the repair, date of any required re-monitoring, and the re-monitored concentration in ppmv.	Section 2.6 & 2.7, Appendices F & G
8-34-501.7	Annual waste acceptance rate and current amount of waste in place.	Section 2.8
8-34-501.8	Records of the nature, location, amount, and date of deposition of non-degradable wastes, for any landfill areas excluded from the collection system requirement as documented in the Collection and Control Design Plan.	Section 2.9
8-34-501.9, 8-34-505, §60.757(f)(1)	For operations subject to Section 8-34-505, records of all monitoring dates and any excesses of the limits stated in Section 8-34-305 that are discovered by the operator, including well identification number, the measured excess, the action taken to repair the excess, and the date of repair.	Section 2.10, Appendices I & K
8-34-501.10, 8-34-508, §60.757(f)(1)	Continuous gas flow rate records for any site subject to Section 8-34-508.	Section 2.11, Appendix L
8-34-501.11, 8-34-509	For operations subject to Section 8-34-509, records or key emission control system operating parameters.	Section 2.2.2

Table 2-1 (Continued)

RULE	REQUIREMENT	LOCATION IN REPORT
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
§60.10 (d)(5)(i)	Start-up, Shutdown, and Malfunction Events	Section 4, Appendices B & C
§63	Subpart AAAA	Section 2.10

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

Appendix A contains a map of the KCRDF’s existing landfill GCCS. Section 2.1.1 summarizes the collection system downtime. Section 2.1.2 includes the individual well shutdown times and the reason for each shutdown.

2.1.1 Collection System Downtime

During the period covered in this report, the landfill GCCS was not shut down for more than five days on any one occasion. The total GCCS Downtime for the reporting period of July 1, 2022, through December 31, 2022, is 93.5 hours. The downtime for the 2022 calendar year is 146.8 hours out of an allowable 240 hours per year pursuant to BAAQMD Regulation 8-34-113.2 (Limited Exemption, Inspection and Maintenance). The Flare SSM Log that list dates, times, and lengths of shutdowns for the reporting period is included in Appendix B.

2.1.2 Well Start-Up and Disconnection Log

There was one (1) Well SSM event during the reporting period. Wellfield construction activity is discussed in Section 2.13.

The Wellfield SSM Log that list dates, times, and lengths of shutdowns for the reporting period is included in Appendix C.

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

No bypassing of the control system or other emissions of raw LFG occurred during the reporting period. The SSM Log that includes all downtimes and reasons for each shutdown for the A-12 Flare is presented in Appendix B. As indicated in Section 2.1.1, the collection system downtime for the 2022 calendar year (January 1, 2022, through

December 31, 2022) is 146.8 hours out of an allowable 240 hours per year pursuant to BAAQMD Regulation 8-34-113.2 (Limited Exemption, Inspection and Maintenance).

During the reporting period, KCRDF submitted reportable compliance activity (RCA) notifications for flare shutdown event caused by one unplanned utility power interruption caused by PG&E enhanced power line safety settings and one planned maintenance shutdown for bird nest removal on September 1, 2022. RCA numbers 08L39 and 08L40 were assigned by BAAQMD. KCRDF also submitted the Title V 10 and 30-day letter report and 30-day written follow-up report on September 7, 2022. Copies of submitted letters are included in Appendix J.

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

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

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

The A-12 Flare is subject to continuous temperature monitoring as required in BAAQMD Regulation 8-34-507 and §60.757(f)(1). See Section 2.3 for flare temperature monitoring results.

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

The combustion zone temperature of the A-12 Flare is monitored with Type K Thermocouples. The temperature is displayed and digitally recorded with a General Electric (GE) data panel and Yokogawa FX112 continuous digital recorder. The temperature readings are downloaded and archived each working day.

Flare operating records indicate that the A-12 Flare three-hour average combustion zone temperature did not drop below the 1,400 degrees Fahrenheit (°F) limit, as required by Title V Permit A1812 Condition 1437 Part 10, during the reporting period when the A-12 Flare was in operation.

The flare operating records also indicate that the A-12 Flare combustion zone temperature did not drop below 1,483°F on a three-hour average basis, while in operation during the other reporting periods, pursuant to the limits established during the February 23, 2022, Performance Tests.

Appendix D contains flare temperature deviation/ inoperative monitor reports for the reporting period while the A-12 Flare was in operation.

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

The Monthly Cover Integrity Monitoring Reports are included in Appendix E. The cover integrity monitoring was performed on the following dates:

- July 25, 2022
- August 1, 11, and 24, 2022
- September 2 and 13, 2022
- October 6 and 18, 2022
- November 9 and 11, 2022
- December 6, 7, and 21, 2022

During the monthly monitoring events for this reporting period, it was noted that there were locations with surface cracks, seeps, and exposed waste. Corrective actions and repairs were completed at all the locations within the same month, by adding soil and compacting. See Appendix E, Cover Integrity Monitoring Reports for repair details.

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

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

2.6 Surface Emissions Monitoring (BAAQMD 8-34-501.6, 8-34-506, & §60.757(f)(5))

Quarterly Surface Emissions Monitoring (SEM), pursuant to BAAQMD Regulation 8-34-506, occurred during the reporting period on the following dates:

- Third Quarter 2022 – August 3, 2022
- Fourth Quarter 2022 – October 26 and December 20, 2022

A Thermo Scientific Toxic Vapor Analyzer 1000 (TVA1000) flame ionization detector (FID) was used to perform the SEM during the Third and Fourth Quarter 2022 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 2022 monitoring events, the monitoring equipment was calibrated using zero air and 500 parts per million by volume (ppmv) methane (CH₄) calibration gas.

The Third Quarter 2022 routine SEM was performed on August 3, 2022, and five (5) exceedances (FID readings greater than 500 ppm CH₄ above background measurements) were detected. The ten-day re-monitoring event was conducted on August 4, 2022, and no further exceedances were detected. The thirty-day follow-up monitoring event was conducted on August 29, 2022, and no exceedances were detected.

The Fourth Quarter 2022 SEM was performed on October 26 and December 20, 2022, and three (3) exceedances (FID readings greater than 500 ppm CH₄ above background measurements) were detected on October 26, 2022. Corrective actions were completed. The ten-day re-monitoring event was conducted on October 27, 2022, and no further exceedances were detected. The thirty-day follow-up monitoring event was conducted on November 21, 2022, and no exceedances were detected. The Third and Fourth Quarter 2022 SEM Reports are included in Appendix F.

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

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

- Third Quarter 2022 – August 3, 2022
- Fourth Quarter 2022 – October 26, 2022

A Thermo Scientific TVA1000 FID was used to perform both the Third and Fourth Quarter 2022 component leak testing events. No exceedances of 1,000 ppm were identified during the Third and Fourth Quarter 2022 monitoring events.

Appendix G contains the Quarterly Component Leak Check Monitoring Reports.

2.8 Solid Waste Placement Records (BAAQMD 8-34-501.7)

The solid waste placement records were reviewed for the timeframe of July 1, 2022, through December 31, 2022. The current waste-in-place figure includes solid waste placed in the landfill through December 31, 2022. A table of monthly totals for the reporting period is provided in Appendix H. The total waste accepted and placed at the KCRDF landfill did not exceed the 2,600 ton-per-day limit during the reporting period, pursuant to Title V Permit Condition Number 1437, Part 1a. The current waste-in-place tonnage listed below did not exceed the 19.84 million tons limit as required in the Title V Permit Condition Number 1437, Part 1b. Table 2-2 summarizes the solid waste placement records for the reporting period.

Table 2-2 Solid Waste Placement

Waste Placement	Total Waste Landfilled Excluding Cover
July 1, 2022, through December 31, 2022	125,675 tons
Current Waste-In-Place as of December 31, 2022	Approximately 8.32 Million tons

2.9 Non-degradable Waste Acceptance Records (BAAQMD 8-34-501.8)

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

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

Wellhead monitoring was performed on a monthly basis pursuant to BAAQMD Regulation 8-34-505. 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. The well readings for July 1, 2022, through December 31, 2022, are included in Appendix I. Each well was monitored in accordance with the following requirements:

- 8-34-305.1 – Each wellhead shall operate under a vacuum.
- 8-34-305.2 – The LFG temperature in each wellhead shall be less than 55 degrees Celsius (131°F).
- 8-34-305.4 – The oxygen (O₂) concentration in each wellhead shall be less than 5 percent (%) by volume.

The wellhead monitoring was performed on the following dates:

- July 1, 5, and 6, 2022
- August 1, 2, 3, 29, and 31, 2022
- September 2, 7, 8, and 9, 2022
- October 3, 4, and 5, 2022
- November 1, 2, 4, 7, and 17, 2022
- December 2, 5, 7, 9, and 12, 2022

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

Please refer to the Wellfield Deviation Log, included in Appendix K, for exceedance records for the reporting period of July 1, 2022, through December 31, 2022. 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 were no additional exceedances associated with specific conditions of 40 CFR part 63, Subpart AAAA for wellhead temperature and pressure standards.

2.10.2 Higher Operating Value (HOV) Wells

During the reporting period, the following wells were approved to operate at a higher operating value (HOV) temperature of 145°F: 51, 57, 58, 65, 66, 71, 74, 78, 86, 91, 92, 95, 98, 99, 119, 127, 128, 133, and 135. Wells 56, 75, 76, 87, and 89, are approved to operate at a HOV temperature of 156°F.

Copies of all BAAQMD correspondence are located in Appendix J.

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

The A-12 Flare LFG flow rate is measured continuously with a Kurz flowmeter. The LFG flow is displayed and digitally recorded with a General Electric data panel and Yokogawa FX112 continuous digital recorder. The flow meter is maintained and calibrated pursuant to the manufacturer's recommendations. The flare flow meter meets the requirements of BAAQMD Regulation 8-34-508 by recording fuel flow at least every fifteen (15) minutes. Appendix D contains the specific details. The flow data for the flare are available for review at the KCRDF. Appendix L contains a summary of the monthly LFG flow rates and heat input for the flare.

Table 2-3 below is a summary of the LFG flow from July 1, 2022, through December 31, 2022, for the A-12 Flare. The A-12 Flare did not exceed the annual heat input rate of 1,087,700 million British Thermal Units (MMBTU), pursuant to Title V Permit A1812 Condition Number 1437, Part 8. The A-12 Flare did not exceed the permitted daily limit of 2,980 million British Thermal Units (BTU) for the duration of this event.

Table 2-3 Total LFG Flow A-12 Flare – July 1, 2022, through December 31, 2022

Emission Control Device	Average Flow (scfm)	Methane (%)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heat Input (MMBTU)
A-12 Flare	1,601	44.3	417,624,888	185,146,477	187,553

*scfm = standard cubic feet per minute CH₄ = methane % = percent scf = standard cubic feet
Methane concentration from February 23, 2022, Source Test for the A-12 Flare.

2.12 Compliance with Title V Permit Cond. No. 1437, Part 14

The condensate injection rate did not exceed five (5) gallons per minute (gpm) during injection events (excluding startup times).

Table 2-4 summarizes the condensate injection rate and 12-month (consecutive) throughput in gallons for July 1, 2022, through December 31, 2022. Per Title V Permit A1812 Condition Number 1437 Part 14, the 12-month rolling average is below the permitted condensate injection limit of 2.0 million gallons per year. The monthly condensate injection logs are included in Appendix M.

Table 2-4 Condensate Injection Rates

Month	Average Condensate Injection Rate (gpm)	Monthly Condensate Injection Throughput (gallons)	Condensate Injection Throughput 12-Month Total (gallons)
July 2022	2.4	55,526	810,481
August 2022	2.1	48,980	803,659

Month	Average Condensate Injection Rate (gpm)	Monthly Condensate Injection Throughput (gallons)	Condensate Injection Throughput 12-Month Total (gallons)
September 2022	2.0	56,711	800,529
October 2022	2.0	68,588	792,232
November 2022	1.9	70,331	782,931
December 2022	1.9	81,720	784,523

gpm= gallons per minute

2.13 Compliance with §60.757(f)(6)

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

The GCCS was modified pursuant to Title V Permit Number A1812 during the reporting period. During the reporting period, no vertical wells were decommissioned or started pursuant to Title V Permit Condition 1437 Part 6.

As of December 31, 2022, the GCCS system consists of 78 vertical wells, 0 horizontal collectors, and 3 leachate collection risers (LCRS).

2.14 Compliance with Title V Permit Cond. No. 1437, Parts 2 and 3

A total of 11,097.4 tons of contaminated soil containing volatile organic compounds (VOCs) greater than 50 parts per million (ppm) was received during the reporting period. Low-VOC soil (containing less than 50 ppm of VOCs) was received during the reporting period. Required records of soil acceptance are available for review at the KCRDF.

2.15 Compliance with Title V Permit Cond. No. 23022, Part 2

Diesel Engine S-8 (the diesel engine for the portable compressor) is required to be operated less than 1,290 hours during any consecutive 12-month period. S-8 operated a total of 92 hours during the 12-month period, January 1, 2022, through December 31, 2022. S-8 operated a total of 43 hours during the 6-month reporting period, July 1, 2022, through December 31, 2022. S-8 used a total of approximately 165 gallons of diesel fuel during the 6-month reporting period.

2.16 Compliance with Title V Permit Cond. No. 1437, Part 20

Effective July 2012, the A-12 Flare Sulfur dioxide emissions shall not exceed 300 ppmv and SO₂ (dry) emissions shall not exceed 94.9 tons per year. The total reduced sulfur (TRS) shall not exceed 860 ppmv (dry) expressed as hydrogen sulfide.

To demonstrate compliance with above limits, the site will conduct annual testing of total TRS at the landfill gas main header. The source test data for (source test conducted on February 23, 2022) TRS value was used to calculate the monthly SO₂ emissions in tons.

The SO₂ emission did not exceed limit during the reporting period. The SO₂ tons 12-month rolling logs are included in Appendix P.

2.17 Compliance with Title V Permit Cond. No. 25872

To demonstrate compliance with permit limits for Source S-24, Construction & Demolition Debris Stockpile, the total construction & demolition debris accepted at S-24 in any consecutive 12-month period is limited to 104,000 tons and 500 tons for each day. To demonstrate compliance with Source S-25 Green and Wood Waste Stockpile the total combined green waste and wood waste debris accepted at S-25 in any consecutive 12-month period is limited to 250,000 and 4,500 tons each day. During the reporting period, the site did not exceed the permitted annual and daily limits. Required records are available for review at the KCRDF.

3 PERFORMANCE TEST REPORT

In accordance with BAAQMD Regulation 8-34-413 and 40 CFR §60.757(g) in the New Source Performance Standard (NSPS), a Performance Test Report is required to be submitted from subject facilities containing performance and monitoring data for the operation of the GCCS. The operational records listed in Table 3-1 have been reviewed, summarized, and are included in this Performance Test Report.

Table 3-1 Performance Test Requirements

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 O
§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 A
§60.757(g)(2)	The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based.	Section 3.3
§60.757(g)(3)	The documentation of the presence of asbestos or non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non-degradable material.	Section 3.4
§60.757(g)(4)	The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area.	Section 3.5
§60.757(g)(5)	The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill.	Section 3.6
§60.757(g)(6)	The provisions for the control of off-site migration.	Section 3.7 Appendix N

3.1 A-12 Flare Performance Test Results (BAAQMD 8-34-412)

The most recent A-12 Flare Compliance Demonstration Test (Performance Test) was performed on the A-12 Flare by Blue Sky Environmental, LLC on February 23, 2022, pursuant to Title V Permit A1812 Condition Number 1437 Part 12. The Performance Test Report for the A-12 Flare indicates that the flare is in compliance with BAAQMD Regulation 8-34-301.3. As required by BAAQMD Regulation 8-34-301.3, the flare meets the non-methane organic compound (NMOC) emission rate of less than 30 ppmv. Pursuant to Title V Permit A1812 Condition Number 1437 Part 10, the A-12 Flare meets the oxides of nitrogen (NO_x) emission concentration limit of less than 0.06 pounds (lbs)/MMBTU. The A-12 Flare meets the carbon monoxide (CO) emission concentration limit of less than 0.3 lbs/MMBTU, pursuant to Title V Permit A1812 Condition Number 1437 Part 11. Table 3-2 shows the results of the A-12 Flare Performance Test, averaged from six test runs - three with condensate on, and three with condensate off.

The A-12 2022 Source Test Report was submitted to the BAAQMD on April 6, 2022, within 60 days of the test date. The source test results for the above control device is included in Appendix O.

Table 3-2 A-12 Flare Performance Test Results – February 23, 2022

Condition	Flare (A-12) Average Results		8-34-301.3 limit	Compliance Status
	Condensate ON	Condensate OFF		
NMOC (ppmv @ 3% O ₂ , as CH ₄)	3.84	4.17	30 ppmv	In Compliance
NO _x , lbs/MMBTU	0.0474	0.040	0.06	In Compliance
CO, lbs/MMBTU	0.0044	0.0061	0.30	In Compliance

3.2 Compliance with §60.757(g)(1)

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

A map dated November 1, 2022, of the landfill GCCS showing the positioning of vertical wells, horizontal collectors, and other LFG extraction devices is included in Appendix A.

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.”

The KCRDF GCCS has historically provided LFG wells and collectors spaced in accordance with standard industry practices. The A-12 flare, LFG extraction wells, and piping are more than adequate to move the current LFG flow rate. KCRDF will continue to add additional LFG control capacity as necessary with the approval of BAAQMD. The installed collector density appears more than adequate for controlling surface emissions, based on continuous compliance and operational experience.

The total capacity of the LFG mover equipment was designed and will be designed to meet the current United States Environmental Protection Agency (USEPA) Model AP- 42 projections of LFG generation and the historic LFG extraction rates determined to be continuously available from the facility.

Demonstrating Compliance with §60.757(g)(2)

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

Compliance with 40 CFR §60.757(g)(2) is maintained by performing quarterly SEM. Refer to Section 2.6, Surface Emissions Monitoring for information pertaining to the SEM results. These results show that the GCCS has sufficient coverage over the waste footprint. Combined LFG recovery for the reporting period was 1,601 scfm. The current A-12 flare system has the capacity to destroy ~ twice the actual recovery. Well monitoring data shows that adequate vacuum is available at all points in the wellfield, demonstrating that the piping network is sufficient to handle all extracted LFG.

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.”

There are no segregated areas or accumulations of asbestos material documented for the site in the GCCS Design Plan. Therefore, 40 CFR §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.”

Non-productive areas have not been excluded from the coverage of the GCCS. Therefore, 40 CFR §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 A-12 Flare and blower system were installed in October and November 2007 and started up on December 3, 2007. The A-12 Flare and blower system is anticipated to be able to accommodate the expected LFG flow rate over the life of the landfill.

3.7 Compliance with §60.757(g)(6)

“The provisions for the control of off-site migration.”

Quarterly LFG migration monitoring, including all on-site buildings, occurred on the following dates:

- Third Quarter 2022 – September 21, 2022
- Fourth Quarter 2022 – October 18, 2022

All probes were in compliance with no detections above the 5.0 percent methane limit during the Third and Fourth Quarter 2022 monitoring events. There were no LFG migration occurrences at the KCRDF, and no areas of concern were identified during the Third and Fourth Quarter 2022 monitoring events. The LFG migration monitoring and building monitoring results for both quarterly events are included in Appendix N.

Demonstrating Compliance with §60.757(g)(6)

“The provisions for the control of off-site migration.”

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

4 START-UP, SHUTDOWN, MALFUNCTION REPORT

4.1 SSM Report for the Collection and Control Systems at the KCRDF

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

NESHAP 40 CFR Part 63, AAAA became effective on January 16, 2004. Those SSM events that occurred during the semi-annual reporting period are reported in this section (July 1, 2022-December 31, 2022). The following information is included as required:

- During the reporting period, twenty (20) A-12 Flare SSM events occurred. The A-12 Flare shut down and restarted during the reporting period due to the reasons noted in the Flare SSM Log, located in Appendix B.
- During the reporting period, one (1) wellfield SSM event occurred. Details are included in the Wellfield SSM Log, located in Appendix C.
- During the reporting period, no monitoring/recorder equipment SSM events occurred.
- In all twenty-one (21) events, automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan.
- No exceedances of any applicable emission limitation in the landfills NESHAP (63.10(d)(5)(i)) occurred.
- Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).

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.

Paul Enrique Perez

Signature of Responsible Official

01.25.2023

Date

Enrique Perez

Name of Responsible Official

APPENDIX A

LANDFILL GAS COLLECTION SYSTEM SITE MAP

APPENDIX B

FLARE SSM LOG AND GCCS DOWNTIME REPORT

CONTROL DEVICE AND GAS COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-12 Flare

Completed By: Rajan Phadnis/Tino Robles

KIRBY CANYON RECYCLING & DISPOSAL FACILITY, San Jose, CA

SSMP REPORT - From July 1 2022 through December 31, 2022

Identify Flare & Check Applicable Event	(1) Start of Event	(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	(12) Describe Emission Standard(s) Exceeded
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/07/22 08:42	7/07/22 08:46	0.07	3.1	Flare was shutdown to connect new header line. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/7/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/07/22 11:50	7/07/22 11:56	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/7/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/18/22 07:52	7/18/22 07:56	0.07	7.7	Flare was shutdown to install valve on main header. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/18/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/18/22 15:36	7/18/22 15:42	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/18/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/21/22 08:20	7/21/22 08:24	0.07	7.1	Flare was shutdown to install one new blower. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/21/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/21/22 15:28	7/21/22 15:34	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/21/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/22/22 07:46	7/22/22 07:50	0.07	8.5	Flare was shutdown to complete installation of new blower. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/22/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/22/22 16:16	7/22/22 16:22	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/22/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/22/22 17:24	7/22/22 17:28	0.07	0.4	Flare was shutdown during test on the new blower. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/22/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	7/22/22 17:46	7/22/22 17:52	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/22/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/15/22 07:30	8/15/22 07:34	0.07	2.2	Flare was shutdown to replace condensate pump. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/15/22 09:40	8/15/22 09:46	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/15/22 09:54	8/15/22 09:58	0.07	0.2	Flare shutdown during startup sequence. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/15/22 10:04	8/15/22 10:10	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/15/22 10:08	8/15/22 10:12	0.07	0.1	Flare shutdown during startup sequence. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/15/22 10:16	8/15/22 10:22	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/25/22 07:08	8/25/22 07:12	0.07	0.6	Flare shutdown due to high temperature alarm. Louvers were adjusted. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/25/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	8/25/22 07:42	8/25/22 07:48	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/25/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 08:24	9/01/22 08:28	0.07	1.3	Flare shutdown during PG&E power outage due to enhanced power line safety settings. RCA was filed and was assigned RCA Number 08L39. Flare was connected to emergency generator. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 09:44	9/01/22 09:50	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 09:48	9/01/22 09:52	0.07	0.2	Flare was shutdown during inspection and switching to Generator power. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 10:00	9/01/22 10:06	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	

CONTROL DEVICE AND GAS COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-12 Flare

Completed By: Rajan Phadnis/Tino Robles

KIRBY CANYON RECYCLING & DISPOSAL FACILITY, San Jose, CA

SSMP REPORT - From July 1 2022 through December 31, 2022

Identify Flare & Check Applicable Event	(1) Start of Event	(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	(12) Describe Emission Standard(s) Exceeded
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 10:30	9/01/22 10:34	0.07	0.4	Flare shutdown to switch back to utility power. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 10:52	9/01/22 10:58	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 12:52	9/01/22 12:56	0.07	0.6	Flare shutdown during PG&E power line maintenance to remove birds nest. RCA was filed and was assigned RCA Number 08L40. Flare was inspected after restart.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 13:30	9/01/22 13:36	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 13:34	9/01/22 13:38	0.07	0.2	Flare shutdown during startup sequence. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	9/01/22 13:44	9/01/22 13:50	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/1/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	10/01/22 06:12	10/01/22 06:16	0.07	3.2	Flare was shutdown during lower inspection and adjustments. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	10/01/22 09:26	10/01/22 09:32	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	10/12/22 09:38	10/12/22 09:42	0.07	0.6	Flare was shutdown to clean air filter. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/12/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	10/12/22 10:12	10/12/22 10:18	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/12/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	11/29/22 02:56	11/29/22 03:00	0.07	56.2	Flare shutdown during CPU failure. New CPU was ordered and replaced. Maintenance was performed on louvers, KOP, air line and flowmeter. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/29/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 3	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	12/01/22 11:08	12/01/22 11:14	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	12/1/2022	X Manual (Go to Section 8) Automatic (Go to Section 10)	Procedure 1 to 4	X Yes (Go to Section 10) No (Stop)	Yes (Go to Section 11) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	12/31/22 17:02	12/31/22 17:06	0.07	0.5	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	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	12/31/22 17:30	12/31/22 17:36	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	12/31/22 17:34	12/31/22 17:38	0.07	0.3	Flare shutdown during startup sequence. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	12/31/22 17:50	12/31/22 17:56	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	12/31/22 17:54	12/31/22 17:58	0.07	0.2	Flare shutdown during startup sequence. Flare was inspected and restarted.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 3	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	
Component: A-12 Flare Startup Event Shutdown Event Malfunction Event	12/31/22 18:04	12/31/22 18:10	0.10			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/15/2022	X Manual (Go to Section 9) Automatic (Go to Section 11)	Procedure No. 1 to 4	X Yes (Go to Section 11) No (Stop)	Yes (Go to Section 12) No (Stop)	

TOTAL DOWNTIME From January 1 2022 through December 31, 2022 (HOURS):	146.8
TOTAL DOWNTIME From July 1 2022 through December 31, 2022 (HOURS):	93.5
TOTAL PERMITTED GCOS DOWNTIME FOR 1 YEAR (HOURS):	240.0
TOTAL AVAILABLE RUNTIME From July 1 2022 through December 31, 2022 (HOURS):	4417.0
TOTAL RUNTIME From July 1 2022 through December 31, 2022 (HOURS):	4323.5
RUNTIME PERCENTAGE From July 1 2022 through December 31, 2022 (HOURS):	97.9%
SSM Counts:	20

(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) Press Emergency Stop if necessary Close On/Off switch(es) or Push On/Off button(s) 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: Valves are in correct position Levels, pressures, and temperatures are within normal starting range Alarms are cleared Power is on and available to control panel and ready to energize equipment. 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 -Leaks at wellheads, valves, -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 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 -Change of LFG flow -Change of LFG quality -Problems with air louvers -Problems with air/fuel controls -Change in atmospheric	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/	Monitors and records	Malfunctions of Temperature	-Problems with thermocouple	40. Check/adjust/repair thermocouple

EQUIPMENT	PURPOSE	MALFUNCTION EVENT	COMMON CAUSES	PROCEDURE NO. -TYPICAL RESPONSE ACTIONS
LFG Collection and Control System				
Recording Device	combustion temperature of enclosed combustion device	Monitoring/Recording Device	-Problems with device controls and/or wiring -Problems with chart recorder	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 arrester 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 occurred. Follow up in writing to the agency within 7 working days after the end of the event.

APPENDIX C

WELLFIELD SSM LOG

CONTROL DEVICE AND GAS COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: Wellfield

Completed By: Rajan Phadnis/Tino Robles

Kirby Canyon Recycling & Disposal Facility, San Jose, CA SSMP REPORT - From July 1 2022 through December 31, 2022													
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	(12) Describe Emission Standard(s) Exceeded	
Well ID Number:LR08	10/19/22 13:05	10/19/22 13:07	0.03	23.0	Well offline for filling- as part of the new cell construction	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/19/2022	X Manual (Go to Section 9)	Procedure No. 1 to 3	X	Yes (Go to Section 11)	Yes (Go to Section 12)	
Automatic (Go to Section 11)													
X Startup Event Shutdown Event Malfunction Event													
Well ID Number:LR08	10/20/22 12:05	10/20/22 12:07	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/20/2022	X Manual (Go to Section 9)	Procedure No. 1 to 4	X	Yes (Go to Section 11)	Yes (Go to Section 12)	
Automatic (Go to Section 11)													
X Startup Event Shutdown Event Malfunction Event													
SSM Counts : 1													

(a) STANDARD OPERATING PROCEDURES

Shutdown

<u>Procedure No.</u>	<u>Procedure</u>
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) Press Emergency Stop if necessary Close On/Off switch(es) or Push On/Off button(s) 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

<u>Procedure No.</u>	<u>Procedure</u>
1	Ensure that there are no unsafe conditions present
2	Ensure that the system is ready to start by one of the following: Valves are in correct position Levels, pressures, and temperatures are within normal starting range Alarms are cleared Power is on and available to control panel and ready to energize equipment. 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 -Leaks at wellheads, valves, -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

EQUIPMENT	PURPOSE	MALFUNCTION EVENT	COMMON CAUSES	PROCEDURE NO. -TYPICAL RESPONSE ACTIONS
LFG Collection and Control System				
LFG Control Device	Combusts LFG	Loss of Flame	<ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> -Problems with orifice plate, pitot tube, or other in-line flow measuring device -Problems with device controls and/or wiring -Problems with chart recorder 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> -Problems with thermocouple -Problems with device controls and/or wiring -Problems with chart recorder 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> 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 arrester 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 occurred. Follow up in writing to the agency within 7 working days after the end of the event.

APPENDIX D

FLARE TEMPERATURE DEVIATION/ INOPERATIVE MONITOR REPORTS

APPENDIX E

COVER INTEGRITY MONITORING REPORTS

APPENDIX F

SURFACE EMISSIONS MONITORING REPORTS



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

January 3, 2023

Ms. Becky Azevedo
Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
San Jose, CA 95037

Re: Fourth Quarter 2022 Surface Emissions and Component Leak Monitoring Report for the Kirby Canyon Recycling and Disposal Facility

Dear Ms. Azevedo:

This monitoring report for the “**Kirby Canyon Recycling and Disposal Facility (KCRDF) Landfill**” contains the results of the **Fourth Quarter 2022 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 was conducted by KCRDF 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 Monitoring

- 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).

KCRDF 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 KCRDF disposal area has been divided into one-hundred-and-fifty (150), 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 walking pattern as depicted the 2011 KCRDF 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)(2).

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

RES 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.

FOURTH QUARTER 2022 SEM AND COMPONENT LEAK RESULTS

The following is a summary of the SEM and component leak monitoring results completed for the Fourth Quarter 2022.

Instantaneous Surface Emissions Monitoring Results

The Instantaneous surface monitoring was performed on October 26, 2022, and December 20, 2022, 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 3 exceedances of 500 ppm_v as methane detected on October 26, 2022. Corrective actions to initiate repairs of the exceedances were completed within five days for all locations (on October 27, 2022).

Ten-Day Re-Monitoring Results

The 10-day re-monitoring event was completed on October 26, 2022. All locations were observed at less than 500 ppm_v.

One-Month Re-Monitoring Results

The 1-month re-monitoring event was completed on November 21, 2022. 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 October 26, 2022. 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 October 27, 2022, 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 October 27, 2022.

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 October 26, 2022. No leaks greater than 500 ppm_v were identified. 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). These values are documented in the field data sheets. The chart data is scanned and included in Attachment D.

Precipitation Requirements

Per the KCRDF'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

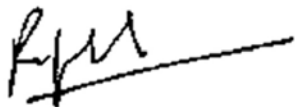
The portable analyzers were calibrated to meet the instrument specifications requirements of U.S. EPA Method 21. The calibration gas used was methane, diluted to a nominal concentration

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

A handwritten signature in black ink, appearing to read 'R. Phadnis', with a long horizontal line extending to the right.

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

2022 QUARTER: 4

PERFORMED BY: RES/WM

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Flag Number	Grid Number	Date of Monitoring	Concentration of Emission (ppmv)	Comments-Wells
1	82	10/26/2022	2,200	57
2	73	10/26/2022	7,000	127
3	87	10/26/2022	1,300	152

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

2022 QUARTER: 4

INITIAL MONITORING PERFORMED BY: RES/WM

FOLLOW-UP MONITORING PERFORMED BY: Carlos Cruz/Tino Robles

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			Corrective action within 5 days		1st 10-day Follow-Up			1st 30-day Follow-Up			Comments-Well locations
Flag	Monitoring	Field	Repair	Action taken to repair	Monitoring	No Exced.	Exced.	Monitoring	No Exced.	Exced.	
Number	Date	Reading	Date	Exceedance	Date	<500 ppm	>500 ppm	Date	<500 ppm	>500 ppm	
1	10/26/2022	2,200	10/27/2022	Added soil and compacted	10/27/2022	43.1		11/21/2022	17		57
2	10/26/2022	7,000	10/27/2022	Added soil and compacted	10/27/2022	31.2		11/21/2022	22		127
3	10/26/2022	1,300	10/27/2022	Added soil and compacted	10/27/2022	26.1		11/21/2022	28		152

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

2022 QUARTER:

4

INITIAL MONITORING PERFORMED BY: RES/WM

FOLLOW-UP MONITORING PERFORMED BY: Carlos Cruz

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			1st Re-mon Event - 10 Days			2nd Re-mon Event - 10 Days			Comments-Well locations
Exceedance	Monitoring	Field	Monitoring	No Exced.	Exced.	Monitoring	No Exced.	Exced.	
Grid ID No.	Date	Reading	Date	<500 ppm	>500 ppm	Date	<500 ppm	>500 ppm	
82	10/26/2022	2,200	10/27/2022	43.1	-	-	-	-	57
73	10/26/2022	7,000	10/27/2022	31.2	-	-	-	-	127
87	10/26/2022	1,300	10/27/2022	26.1	-	-	-	-	152

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

2022 QUARTER: 4

INITIAL MONITORING PERFORMED BY: RES/WM

FOLLOW-UP MONITORING PERFORMED BY: NA

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			Re-mon Event		Comments
Exceedance	Monitoring	Field	Monitoring	Reading	
Grid ID No.	Date	Reading	Date	ppm	
None					

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LOUIS VUARD CHRIS HASKINS
CELVIN ORTIZ BOBBER STRONG
DWIGHT ANDERSON Cal. Gas Exp. Date: 7/10/24

Date: 10-26-22 Instrument Used: FVA1000 Grid Spacing: 25'

Temperature: 71 Precip: 0 Upwind BG: 2.2 Downwind BG: 2.6

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
36	LW	1230	1245	45	2	3	10	
37	CO	1230	1245	116	2	3	10	
38	DA	1230	1245	95	2	3	10	
41	CH	1230	1245	58	2	3	10	
42	GS	1230	1245	89	2	3	10	
43	LW	1245	1300	116	2	4	10	
44	CO	1245	1300	41	2	4	10	
47	DA	1245	1300	74	2	4	10	
48	CH	1245	1300	70	2	4	10	
49	GS	1245	1300	127	2	4	10	
52	LW	1300	1315	77	1	3	13	
53	CO	1300	1315	38	1	3	13	
54	DA	1300	1315	71	1	3	13	
55	CH	1300	1315	62	1	3	13	
57	GS	1300	1315	11	1	3	13	
58	LW	1315	1330	60	2	2	12	
59	CO	1315	1330	72	2	2	12	
60	DA	1315	1330	59	2	2	12	
61	CH	1315	1330	76	2	2	12	
64	GS	1315	1330	15	2	2	12	
65	LW	1330	1345	44	1	2	10	
66	CO	1330	1345	108	1	2	10	
67	DA	1330	1345	122	1	2	10	
68	CH	1330	1345	52	1	2	10	
70	GS	1330	1345	14	1	2	10	
71	LW	1345	1400	35	1	1	8	
72	CO	1345	1400	51	1	1	8	
73	DA	1345	1400	7,000	1	1	8	Well 127
74	CH	1345	1400	45	1	1	8	
75	GS	1345	1400	31	1	1	8	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEIGH WOOD CLAU HAYES
CALVIN ORTIZ BOONCE STRONG
DWIGHT ANDERSON Cal Gas Exp. Date: 7-10-24

Date: 10-26-22 Instrument Used: LVA1000 Grid Spacing: 25'

Temperature: 74 Precip: 0 Upwind BG: 2.2 Downwind BG: 2.6

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
79	LW	1400	1415	12	1	3	10	
80	CO	1400	1415	45	1	3	10	
81	DA	1400	1415	97	1	3	10	
82	CH	1400	1415	2200	1	3	10	
83	GS	1400	1415	31	1	3	10	well 57
86	LW	1415	1430	35	1	3	6	
87	CO	1415	1430	1300	1	3	6	well 52
88	DA	1415	1430	71	1	3	6	
89	CH	1415	1430	38	1	3	6	
90	GS	1415	1430	17	1	3	6	
94	LW	1430	1445	81	1	2	12	
95	CO	1430	1445	102	1	2	12	
96	DA	1430	1445	38	1	2	12	
97	CH	1430	1445	40	1	2	12	
101	GS	1430	1445	42	1	2	12	
102	LW	1445	1500	61	2	3	13	
103	CO	1445	1500	34	2	3	13	
104	DA	1445	1500	47	2	3	13	
105	CH	1445	1500	21	2	3	13	
109	GS	1445	1500	17	2	3	13	
110	LW	1500	1515	51	1	1	6	
111	CO	1500	1515	39	1	1	6	
112	DA	1500	1515	51	1	1	6	
116	CH	1500	1515	47	1	1	6	
117	GS	1500	1515	111	1	1	6	
118	LW	1515	1530	20	2	5	12	
119	CO	1515	1530	24	2	5	12	
120	DA	1515	1530	16	2	5	12	
124	CH	1515	1530	18	2	5	12	
125	GS	1515	1530	27	2	5	12	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LOIS H WADSWORTH

 Cal Gas Exp. Date: _____

Date: 10-26-22 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	
76								Active trash ↓
77								
84								
91								
92								
98								
99								
106								
107								
113								
121								
129								
1								
2								
3								
4								
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Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Lois Lunn

 Cal Gas Exp. Date: _____

Date: 10-26-22 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	
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
39								
40								
45								
46								
50								
51								
56								
62								
63								
69								
78								
85								
93								

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL - MONITORING POINTS FOR SEM - UPDATED ON 10-28-2021

10-26-22

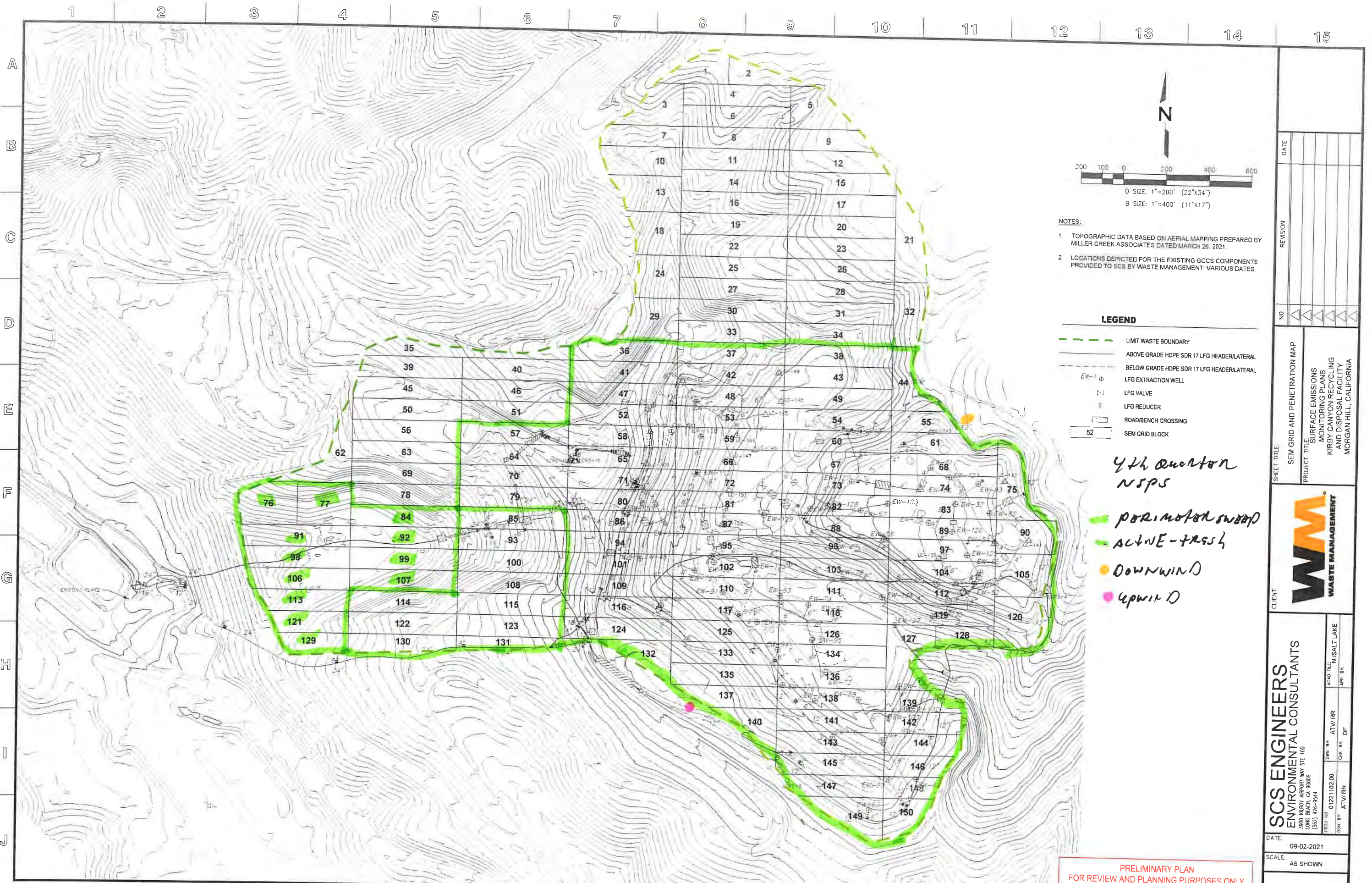
K	Point ID	DESCRIPTION	POINT TYPE	LATITUDE	LONGITUDE	SEM GRID BLOCK NO.	DATE	READING (PPM)	NOTES
K1	49175	LC-108 ✓	LFG Collector - Standard	37.1858544	-121.6713388	71		35	
K2	49176	LC-109 ✓	LFG Collector - Standard	37.1861615	-121.6712074	65		31	
K3	49178	LC-110 ✓	LFG Collector - Standard	37.1865715	-121.6712086	58		60	
K4	49180	LC-111 ✓	LFG Collector - Standard	37.1869514	-121.6708234	47		42	
K5	49181	LC-112 ✓	LFG Collector - Standard	37.1871774	-121.6706235	42		71	
K6	60315	LC-139 ✓	LFG Collector - Standard	37.1851287	-121.6662637	97		40	
K7	60316	LC-140 ✓	LFG Collector - Standard	37.1851745	-121.6661685	112		41	
K8	60317	LC-141 ✓	LFG Collector - Standard	37.1852798	-121.6652963	90		17	
K9	60318	LC-142 ✓	LFG Collector - Standard	37.1860808	-121.6654991	75		31	
K10	60319	LC-143 ✓	LFG Collector - Standard	37.1862571	-121.6664707	55		19	
K11	60322	LC-145 ✓	LFG Collector - Standard	37.1869271	-121.6693456	53		21	
K12	60326	LC-147 ✓	LFG Collector - Standard	37.1861606	-121.6697507	66		108	
K13	60328	LC-149 ✓	LFG Collector - Standard	37.1872639	-121.6690856	42		89	
K14	60331	LC-151 ✓	LFG Collector - Standard	37.1858384	-121.6699511	72		40	
K15	60332	LC-152 ✓	LFG Collector - Standard	37.1854474	-121.6697709	87		1300	
K16	65781	LC-153 ✓	LFG Collector - Standard	37.187298	-121.668656	53		38	
K17	65782	LC-154 ✓	LFG Collector - Standard	37.187069	-121.668981	54		21	
K18	65783	LC-155 ✓	LFG Collector - Standard	37.186831	-121.669257	64		15	
K19	65784	LC-156 ✓	LFG Collector - Standard	37.186235	-121.669166	54		48	
K20	65785	LC-157 ✓	LFG Collector - Standard	37.185945	-121.668561	58		38	
K21	65786	LC-158 ✓	LFG Collector - Standard	37.185941	-121.665918	59		22	
K22	65787	LC-159 ✓	LFG Collector - Standard	37.186525	-121.669906	52		58	
K23	65788	LC-160 ✓	LFG Collector - Standard	37.187048	-121.670208	52		31	
K24	65789	LC-161 ✓	LFG Collector - Standard	37.186387	-121.670388	52		77	
K25	22752	EW-14 ✓	LFG Collector - Standard	37.1854822	-121.6715554	86		35	
K26	22756	EW-27 ✓	LFG Collector - Standard	37.1841969	-121.6672322	127		20	
K27	22773	EW-48 ✓	LFG Collector - Standard	37.1849125	-121.6712309	101		42	
K28	27238	EW-51 ✓	LFG Collector - Standard	37.1861862	-121.6667349	68		52	
K29	33387	EW-54 ✓	LFG Collector - Standard	37.1854746	-121.6660124	97		24	
K30	33389	EW-56 ✓	LFG Collector - Standard	37.1859008	-121.6668334	74		45	
K31	33390	EW-57 ✓	LFG Collector - Standard	37.1856143	-121.6678545	82		2260	
K32	33391	EW-58 ✓	LFG Collector - Standard	37.1853507	-121.6675554	96		31	
K33	33395	EW-62 ✓	LFG Collector - Standard	37.1822292	-121.6667604	148		16	
K34	33396	EW-63 ✓	LFG Collector - Standard	37.1818317	-121.6674273	149		24	
K35	33398	EW-65 ✓	LFG Collector - Standard	37.1848434	-121.6658706	104		19	
K36	39441	EW-66 ✓	LFG Collector - Standard	37.1843777	-121.6709201	116		41	
K37	39445	EW-70 ✓	LFG Collector - Standard	37.1827215	-121.6680954	143		20	
K38	39446	EW-71 ✓	LFG Collector - Standard	37.1828801	-121.6674111	143		31	
K39	39447	EW-72 ✓	LFG Collector - Standard	37.1828111	-121.6665381	144		46	
K40	39449	EW-74 ✓	LFG Collector - Standard	37.1844741	-121.6684259	118		20	
K41	39450	EW-75 ✓	LFG Collector - Standard	37.1855639	-121.6666446	89		38	
K42	39451	EW-76 ✓	LFG Collector - Standard	37.1847177	-121.670374	102		61	
K43	39453	EW-78 ✓	LFG Collector - Standard	37.1846682	-121.6680346	103		27	

KIRBY LANDFILL - MONITORING POINTS FOR SEM - UPDATED ON 10-28-2021

10-26-22

K	Point ID	DESCRIPTION	POINT TYPE	LATITUDE	LONGITUDE	SEM GRID BLOCK NO.	DATE	READING (PPM)	NOTES
K44	39457	EW-82	LFG Collector - Standard	37.1858616	-121.6658484	83		37	
K45	39459	EW-84	LFG Collector - Standard	37.1864778	-121.6671679	61		76	
K46	39461	EW-86	LFG Collector - Standard	37.1855907	-121.6686993	82		50	
K47	39462	EW-87	LFG Collector - Standard	37.1852233	-121.6681567	96		38	
K48	41794	EW-88	LFG Collector - Standard	37.1831824	-121.667728	138		21	
K49	41795	EW-89	LFG Collector - Standard	37.1848945	-121.6700714	102		39	
K50	41796	EW-90	LFG Collector - Standard	37.1834937	-121.6686558	138		76	
K51	41797	EW-91	LFG Collector - Standard	37.1845284	-121.6699698	110		51	Change GRID #
K52	41798	EW-92	LFG Collector - Standard	37.1842745	-121.6681463	118		14	
K53	41799	EW-93	LFG Collector - Standard	37.1846024	-121.6690086	111		29	
K54	41800	EW-94	LFG Collector - Standard	37.1837826	-121.6690093	133		17	
K55	43784	EW-95	LFG Collector - Standard	37.1839988	-121.6685091	126		18	
K56	43786	EW-97	LFG Collector - Standard	37.1834011	-121.6689421	136		25	
K57	43787	EW-98	LFG Collector - Standard	37.1841664	-121.6691791	125		27	
K58	43788	EW-99	LFG Collector - Standard	37.1822657	-121.667186	148		14	
K59	46300	EW-101	LFG Collector - Standard	37.1834129	-121.667054	127		14	
K60	46301	EW-102	LFG Collector - Standard	37.1833032	-121.6670075	139		28	
K61	46302	EW-103	LFG Collector - Standard	37.1830105	-121.6672975	142		26	
K62	48252	EW-105	LFG Collector - Standard	37.186772	-121.6711534	47		36	
K63	51853	EW-118	LFG Collector - Standard	37.1865144	-121.6704025	59		41	
K64	51854	EW-119	LFG Collector - Standard	37.1853394	-121.6706102	87		34	
K65	51856	EW-121	LFG Collector - Standard	37.1869645	-121.6704699	48		32	
K66	51857	EW-122	LFG Collector - Standard	37.1860822	-121.6704487	72		51	
K67	55175	EW-123	LFG Collector - Standard	37.185714	-121.6673885	82		33	
K68	55176	EW-124	LFG Collector - Standard	37.1861053	-121.6663665	82		46	
K69	55177	EW-125	LFG Collector - Standard	37.1850526	-121.6661443	74		37	
K70	55178	EW-126	LFG Collector - Standard	37.1854463	-121.6669166	97		22	
K71	55179	EW-127	LFG Collector - Standard	37.1859883	-121.6679479	73		7,000	
K72	55180	EW-128	LFG Collector - Standard	37.1856942	-121.6683291	73		67	
K73	55181	EW-129	LFG Collector - Standard	37.1855239	-121.6693602	82		40	
K74	55182	EW-130	LFG Collector - Standard	37.1856391	-121.6713393	80		36	
K75	55183	EW-131	LFG Collector - Standard	37.1865955	-121.6708386	80		27	
K76	55185	EW-133	LFG Collector - Standard	37.18491	-121.6688906	103		34	
K77	55186	EW-134	LFG Collector - Standard	37.1844936	-121.6673614	111		22	
K78	55187	EW-135	LFG Collector - Standard	37.1843228	-121.6665942	119		24	
K79	22777	LCRS-4	Leachate Riser or Sump (LR)	37.1847276	-121.6653886	104		47	
K80	42098	LCRS-8	Leachate Riser or Sump (LR)	37.1823056	-121.6690703	147		20	
K81	46305	LCRS-11	Leachate Riser or Sump (LR)	37.1859682	-121.6715854	65		44	

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PRELIMINARY PLAN
FOR REVIEW AND PLANNING PURPOSES ONLY

NO.	REVISION	DATE

SHEET TITLE: SEM GRID AND PENETRATION MAP
PROJECT TITLE: SURFACE EMISSIONS MONITORING PLANS
KIRBY CANYON RECYCLING AND DISPOSAL FACILITY
MORGAN HILL, CALIFORNIA



CLIENT: SCS ENGINEERS ENVIRONMENTAL CONSULTANTS
3900 KIRBY AVENUE, SUITE 100
LONG BEACH, CA 90805
(562) 476-9544

DATE: 09-02-2021
SCALE: AS SHOWN

Attachment B

Integrated Surface Emission Monitoring Event Records

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

2022 QUARTER: 4
INITIAL MONITORING PERFORMED BY: RES
FOLLOW-UP MONITORING PERFORMED BY: N/A
LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			1st Re-mon Event - 10 Days			Comments
Exceedance	Monitoring	Field	Monitoring	No Exced.	No Exced.	
Grid ID No.	Date	Reading	Date	<25 ppm	>25 ppm	
None						

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGH WOOD CHRIS HUGHES
CELVIN ORTIZ BOBBER STRONG
DWIGHT ANDERSON Cal. Gas Exp. Date: 7-10-24

Date: 10-27-22 Instrument Used: FVA-1000 Grid Spacing: 25'

Temperature: 48 Precip: 0 Upwind BG: 2.2 Downwind BG: 2.6

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
36	LW	0615	0640	10.91	0	1	12	
37	CO	0615	0640	14.66	0	1	12	
38	DA	0615	0640	12.85	0	1	12	
41	CH	0615	0640	9.70	0	1	12	
42	BS	0615	0640	13.52	0	1	12	
43	LW	0640	0705	18.97	1	2	10	
44	CO	0640	0705	12.62	1	2	10	
47	DA	0640	0705	13.95	1	2	10	
48	CH	0640	0705	10.60	1	2	10	
49	BS	0640	0705	14.55	1	2	10	
52	LW	0715	0730	9.66	2	4	10	
53	CO	0705	0730	17.24	2	4	10	
54	DA	0705	0730	19.08	2	4	10	
55	CS	0705	0730	8.75	2	4	10	
57	BS	0705	0730	7.11	2	4	10	
58	LW	0730	0755	9.22	2	2	10	
59	CO	0730	0755	20.71	2	2	10	
60	DA	0730	0755	23.60	2	2	10	
61	CH	0730	0755	9.39	2	2	10	
64	BS	0730	0755	7.15	2	2	10	
65	LW	0755	0820	9.30	2	4	9	
66	CO	0755	0820	15.41	2	4	9	
67	DA	0755	0820	20.35	2	4	9	
68	CS	0755	0820	8.36	2	4	9	
70	BS	0755	0820	6.49	2	4	9	
71	LW	0820	0845	8.30	1	3	12	
72	CO	0820	0845	11.71	1	3	12	
73	DA	0820	0845	13.05	1	3	12	
74	CS	0820	0845	7.62	1	3	12	
75	BS	0820	0845	6.40	1	3	12	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGH WROE CHARS HUGHES
LEVIN ORTIZ COOPER STROUP
DWIGHT ANDERSON Cal. Gas Exp. Date: 7-10-24

Date: 10-27-22 Instrument Used: VIA1020 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.2 Downwind BG: 2.6

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
79	LV	0845	0910	6.15	3	5	10	
80	CO	0845	0910	8.32	3	5	10	
81	DA	0845	0910	11.75	3	5	10	
82	CH	0845	0910	9.67	3	5	10	
83	GS	0845	0910	7.41	3	5	10	
86	W	0910	0935	8.20	2	5	10	
87	CO	0910	0935	11.41	2	5	10	
88	DA	0910	0935	13.65	2	5	10	
89	CH	0910	0935	7.13	2	5	10	
90	GS	0910	0935	6.22	2	5	10	
94	LV	0935	1000	7.14	3	5	10	
95	CO	0935	1000	10.30	3	5	10	
96	DA	0935	1000	9.52	3	5	10	
97	CH	0935	1000	7.20	3	5	10	
101	GS	0935	1000	7.03	3	5	10	
102	W	1000	1025	10.45	4	6	10	
103	CO	1000	1025	8.10	4	6	10	
104	DA	1000	1025	6.47	4	6	10	
105	CH	1000	1025	5.30	4	6	10	
109	GS	1000	1025	7.21	4	6	10	
110	W	1025	1050	16.94	4	7	10	
111	CO	1025	1050	8.87	4	7	10	
112	DA	1025	1050	7.62	4	7	10	
116	CH	1025	1050	7.45	4	7	10	
117	GS	1025	1050	8.13	4	7	10	
118	W	1050	1115	7.22	4	6	8	
119	CO	1050	1115	6.49	4	6	8	
120	DA	1050	1115	6.28	4	6	8	
124	CH	1050	1115	6.11	4	6	8	
125	GS	1050	1115	5.72	4	6	8	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: 6815 J WNOE _____

 Cal. Gas Exp. Date: _____

Date: 10-27-22 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	
76								Active-pass ↓
77								
84								
91								
92								
98								
99								
106								
107								
113								
121								
129								
1								
2								
3								
4								
5								
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7								
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15								
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18								

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGH WARD _____

 _____ Cal. Gas Exp. Date: _____

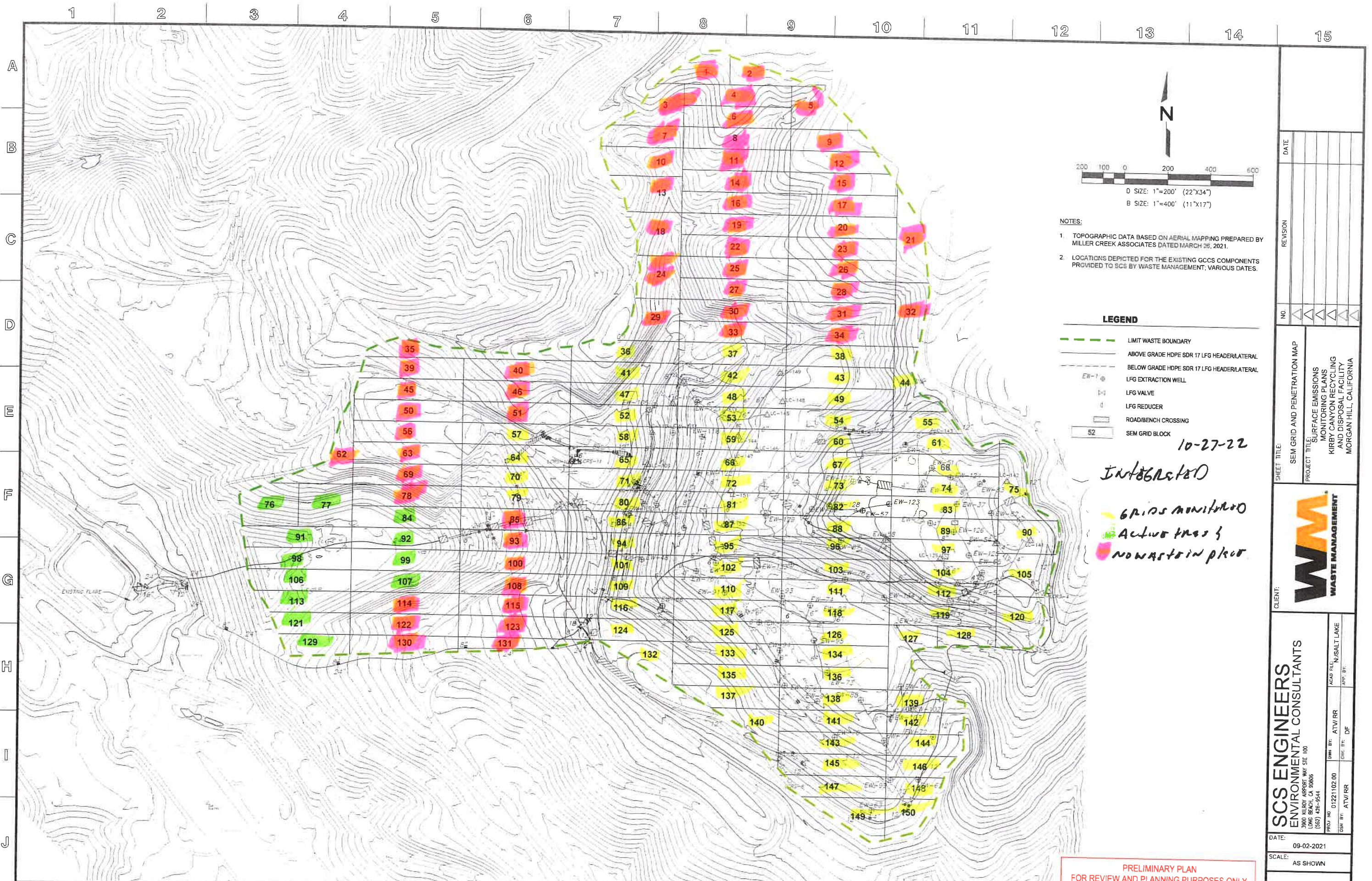
Date: 10-27-22 Instrument Used: _____ Grid Spacing: _____

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	
19								↓
20								
21								
22								
23								
24								
25								
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93								

Attach Calibration Sheet
 Attach site map showing grid ID

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PRELIMINARY PLAN
FOR REVIEW AND PLANNING PURPOSES ONLY

DATE	09-02-2021
SCALE	AS SHOWN
SHEET TITLE	SEM GRID AND PENETRATION MAP
	PROJECT TITLE: SURFACE EMISSIONS MONITORING PLANS KIRBY CANYON RECYCLING AND DISPOSAL FACILITY MORGAN HILL, CALIFORNIA
CLIENT	SCS ENGINEERS ENVIRONMENTAL CONSULTANTS 3900 KIRBY AIRPORT WAY, STE 100 LONG BEACH, CA 90806 (562) 426-9544
	ACAD FILE: NISALT LAKE APP. BY: ATV/RR DWG. BY: ATV/RR CHK. BY: DF
DATE	
REVISION	
NO.	

Attachment C

Component Leak Monitoring Event Records

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

2022 QUARTER: 4
INITIAL MONITORING PERFORMED BY: RES
FOLLOW-UP MONITORING PERFORMED BY: NA
LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Location	Initial Monitoring			Corrective Action		10-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
Flare Station	10/26/22	ND	Leigh wade	-	-	-	-	-

ND= No Exceedances

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

2022 QUARTER: 4

INITIAL MONITORING PERFORMED BY: RES

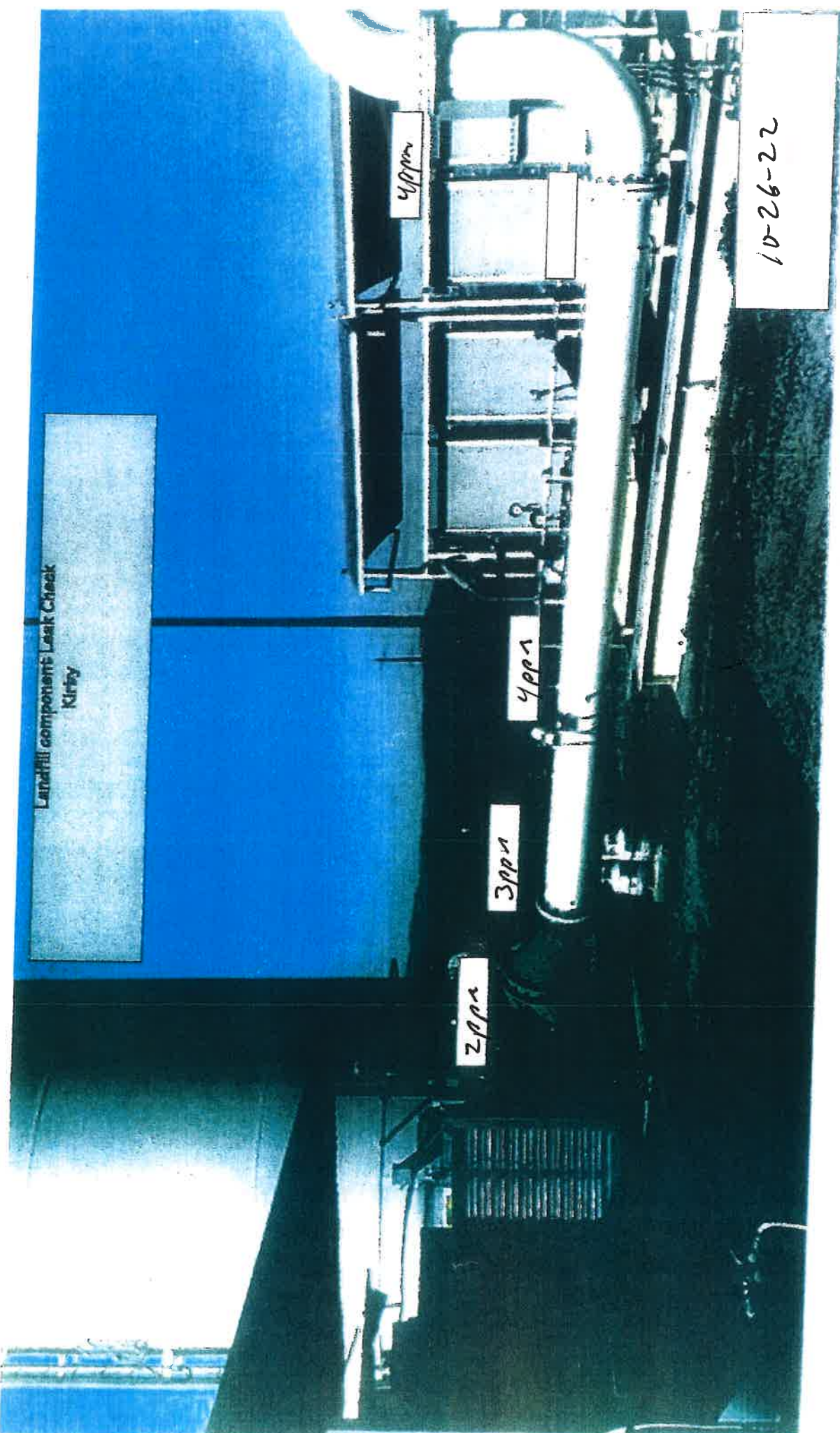
FOLLOW-UP MONITORING PERFORMED BY: NA

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Location	Initial Monitoring			Corrective Action		7-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
Flare Station	10/26/22	ND	Leigh wade	-	-	-	-	-

ND= No Exceedances

Landfill component Leak Check
Kirby



4ppm

4ppm

3ppm

2ppm

10-26-22

Landfill component Leak Check

Kirby

6ppm

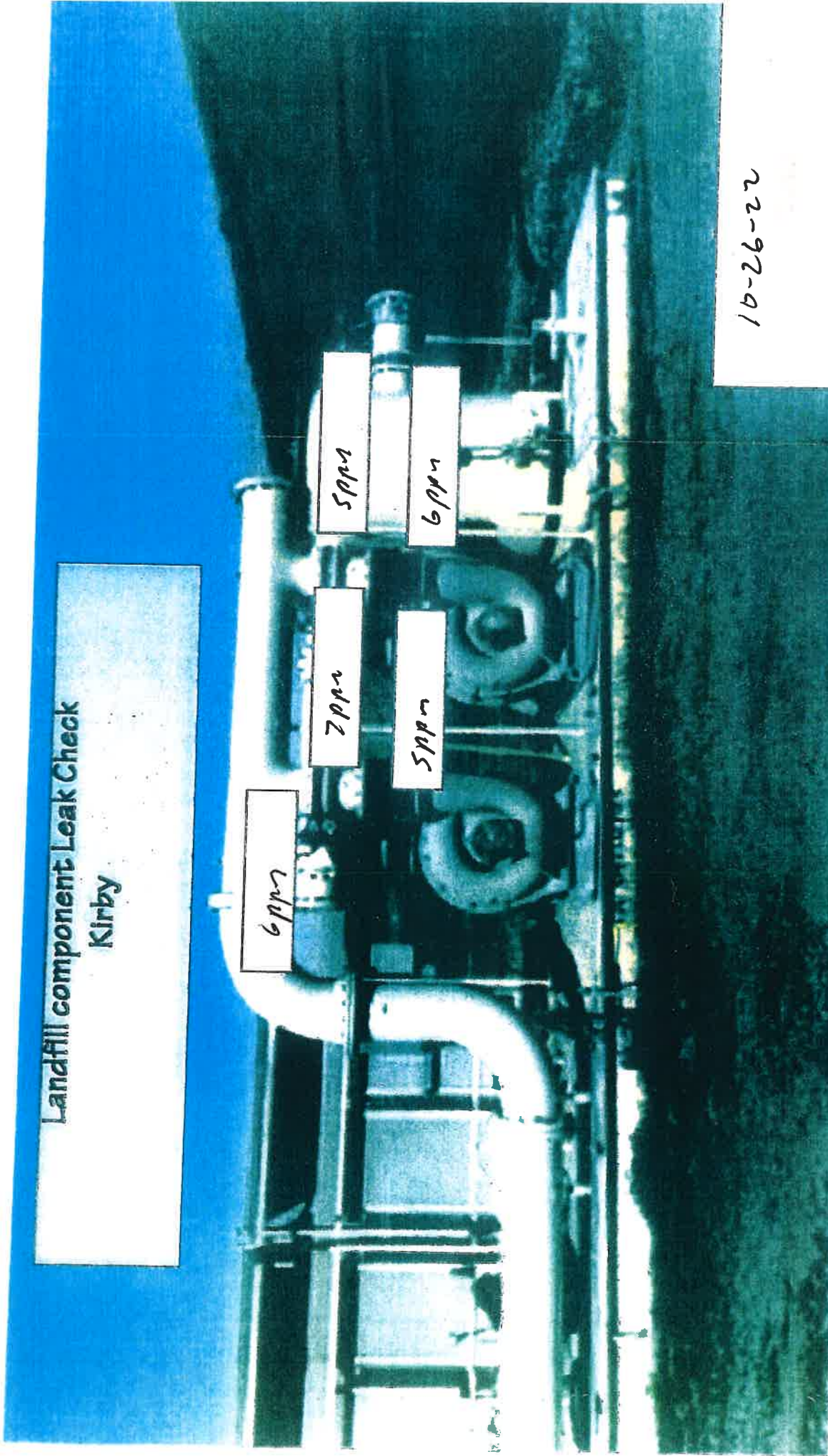
2ppm

5ppm

5ppm

6ppm

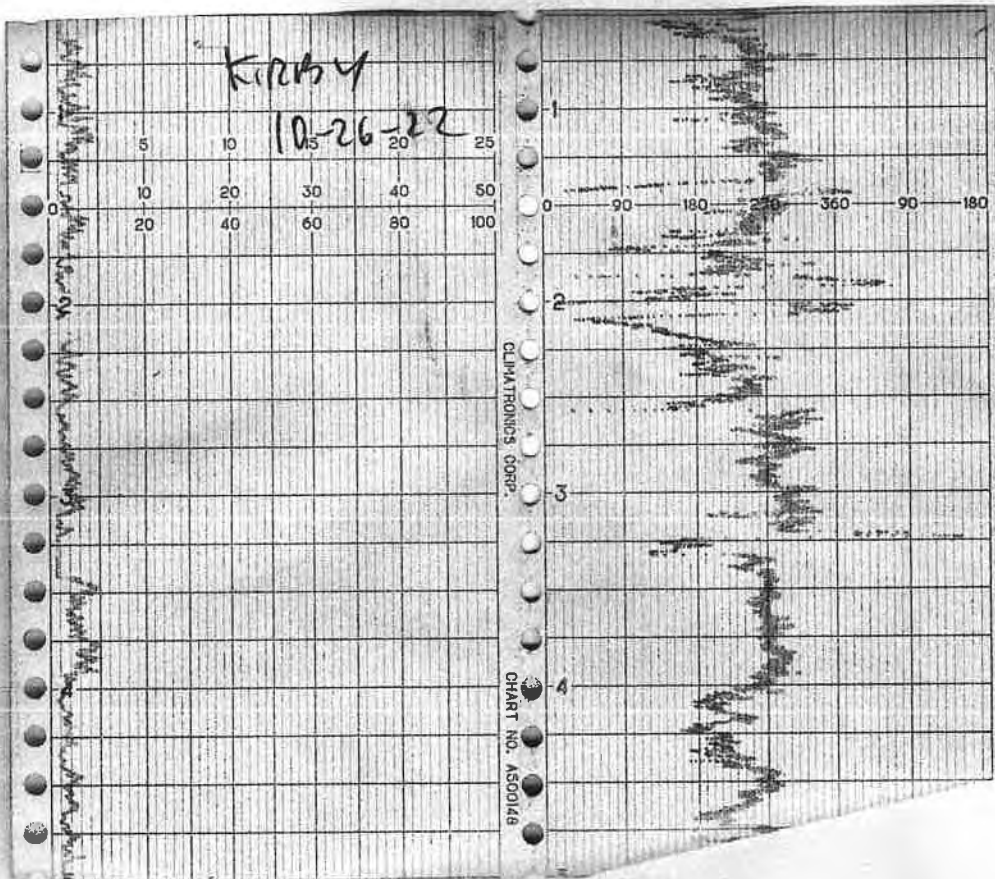
10-26-22



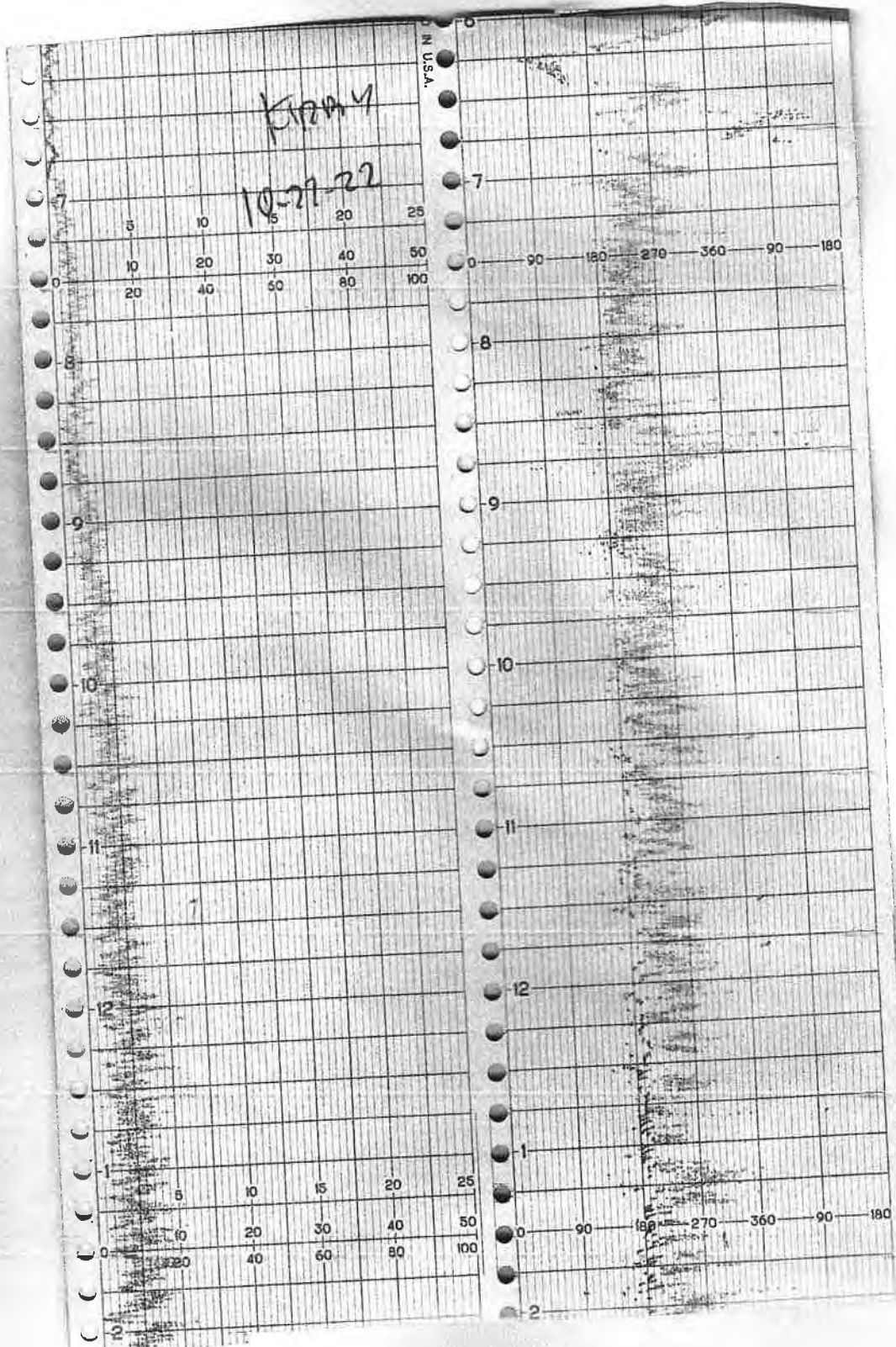
Attachment D

Weather Station Data

WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



16-POINT WIND DIRECTION INDEX

<u>NO</u>	<u>DIRECTION</u>	<u>DEGREES</u>		
		<u>FROM</u>	<u>CENTER</u>	<u>TO</u>
16	NORTH (N)	348.8	<u>360.0</u>	0.0
1	NORTH-NORTHEAST (NNE)	011.3	<u>022.5</u>	033.8
2	NORTHEAST (NE)	033.8	<u>045.0</u>	056.3
3	EAST-NORTHEAST (ENE)	056.3	<u>067.5</u>	078.8
4	EAST (E)	078.8	<u>090.0</u>	101.3
5	EAST-SOUTHEAST (ESE)	101.3	<u>112.5</u>	123.8
6	SOUTHEAST (SE)	123.8	<u>135.0</u>	146.3
7	SOUTH-SOUTHEAST (SSE)	146.3	<u>157.5</u>	168.8
8	SOUTH (S)	168.8	<u>180.0</u>	191.3
9	SOUTH-SOUTHWEST (SSW)	191.3	<u>202.5</u>	213.8
10	SOUTHWEST (SW)	213.8	<u>225.0</u>	236.3
11	WEST-SOUTHWEST (WSW)	236.3	<u>247.5</u>	258.8
12	WEST (W)	258.8	<u>270.0</u>	281.3
13	WEST-NORTHWEST (WNW)	281.3	<u>292.5</u>	303.8
14	NORTHWEST (NW)	303.8	<u>315.0</u>	326.3
15	NORTH-NORTHWEST (NNW)	326.3	<u>337.5</u>	348.8

Attachment E
Calibration Records

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: KIRBY INSTRUMENT MAKE: HORNO
 MODEL: LVA 1000 EQUIPMENT #: 10 SERIAL #: 1036346773
 MONITORING DATE: 10-26-22 TIME: 1220

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: <u>(Upwind + Downwind)</u> 2
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>495</u> ppm	<u>445</u> ppm	<u>7</u>
#2	<u>502</u> ppm	<u>452</u> ppm	<u>7</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>7</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>7</u> #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	<u>0.13</u> ppm	<u>495</u> ppm	<u>5</u>
#2	<u>0.09</u> ppm	<u>502</u> ppm	<u>2</u>
#3	<u>0.07</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.46</u> #DIV/0! Must be less than 10%

Performed By: LOUIS HUNDB Date/Time: 10-26-22 1220

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: KINDY INSTRUMENT MAKE: Fluor
 MODEL: UA1000 EQUIPMENT #: 11 SERIAL #: 1036346774
 MONITORING DATE: 10-26-22 TIME: 1220

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: <u>(Upwind + Downwind)</u> 2
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>507</u> ppm	<u>457</u> ppm	<u>6</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #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	<u>0.11</u> ppm	<u>507</u> ppm	<u>7</u>
#2	<u>0.06</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.46</u> #DIV/0! Must be less than 10%

Performed By: LESLIE ORTIZ Date/Time: 10-26-22 -1220

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME Kenoy INSTRUMENT MAKE FH000
 MODEL LVA1000 EQUIPMENT #: 12 SERIAL #: 1036246741
 MONITORING DATE: 10-26-22 TIME: 1220

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: <u>(Upwind + Downwind)</u> 2
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>489</u> ppm	<u>439</u> ppm	<u>6</u>
#2	<u>501</u> ppm	<u>451</u> ppm	<u>6</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #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	<u>0.07</u> ppm	<u>489</u> ppm	<u>11</u>
#2	<u>0.04</u> ppm	<u>501</u> ppm	<u>1</u>
#3	<u>0.03</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.80</u> #DIV/0! Must be less than 10%

Performed By DWIGHT ANDERSON Date/Time: 10-26-22 1220

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME 1212BY INSTRUMENT MAKE FH2010
 MODEL: LV A 1000 EQUIPMENT #: 13 SERIAL #: 1102746775
 MONITORING DATE: 10-26-22 TIME 1220

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: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>505</u> ppm	<u>455</u> ppm	<u>?</u>
#2	<u>489</u> ppm	<u>440</u> ppm	<u>?</u>
#3	<u>510</u> ppm	<u>459</u> ppm	<u>?</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>?</u> #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	<u>0.15</u> ppm	<u>505</u> ppm	<u>5</u>
#2	<u>0.11</u> ppm	<u>489</u> ppm	<u>1</u>
#3	<u>0.09</u> ppm	<u>510</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.40</u> #DIV/0! Must be less than 10%

Performed By: CHRIS HUGHES Date/Time: 10-26-22 1220

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: KENNY INSTRUMENT MAKE: YH0200
 MODEL: LVA1000 EQUIPMENT #: 16 SERIAL #: 1102746776
 MONITORING DATE: 10-26-22 TIME: 1220

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: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>503</u> ppm	<u>453</u> ppm	<u>4</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>4</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #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	<u>0.11</u> ppm	<u>503</u> ppm	<u>3</u>
#2	<u>0.07</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.05</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision $\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{500} \times \frac{100}{1}$			<u>0.20</u> #DIV/0! Must be less than 10%

Performed By: GEORGE STROUD Date/Time: 10-26-22 1220

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME 1Cindy INSTRUMENT MAKE fHornw
 MODEL LVALW EQUIPMENT # 10 SERIAL # 1036246773
 MONITORING DATE 10-27-22 TIME 0610

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: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>23</u> ppm	<u>20.7</u> ppm	<u>5</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #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	<u>0.14</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.11</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.07</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By LOSLAND Date/Time: 10-27-22 0610

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME: KIRBY INSTRUMENT MAKE HANNA
 MODEL LWA1000 EQUIPMENT #: 11 SERIAL #: 1036346772
 MONITORING DATE 10-27-22 TIME 0610

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: <u>(Upwind + Downwind)</u> 2
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>24</u> ppm	<u>21.6</u> ppm	<u>6</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #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	<u>0.09</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.06</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.05</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By COLVIN ORTIZ Date/Time: 10-27-22-0610

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME: ICMBy INSTRUMENT MAKE Filtoro
 MODEL LA 1000 EQUIPMENT #: 12 SERIAL #: 1036246741
 MONITORING DATE: 10-27-22 TIME: 0610

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: <u>(Upwind + Downwind)</u> 2
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>23</u> ppm	<u>20.7</u> ppm	<u>6</u>
#2	<u>24</u> ppm	<u>21.6</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #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	<u>0.13</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.08</u> ppm	<u>24</u> ppm	<u>1</u>
#3	<u>0.04</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>4.0</u> #DIV/0! Must be less than 10%

Performed By: DWIGHT ANDERSON Date/Time: 10-27-22 - 0610

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME: Kenny INSTRUMENT MAKE: Hanna
 MODEL: LV 800 EQUIPMENT #: 13 SERIAL #: 1102746775
 MONITORING DATE: 10-27-22 TIME: 0610

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: <u>(Upwind + Downwind)</u> 2
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #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	<u>0.11</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.08</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.04</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: Chris Hughes Date/Time: 10-27-22 - 0610

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME 16KBY INSTRUMENT MAKE: HANNO
 MODEL: FA1000 EQUIPMENT # 16 SERIAL #: 1102746776
 MONITORING DATE: 10-27-22 TIME: 0610

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: <u>(Upwind + Downwind)</u> 2
<u>2.2</u> ppm	<u>2.6</u> ppm	<u>2.4</u> ppm

Background Value = 2.4 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	<u>23</u> ppm	<u>20.7</u> ppm	<u>6</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #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	<u>0.09</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.07</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.05</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By: GREGG STROUP Date/Time: 10-27-22 - 0610

CALIBRATION PRECISION TEST RECORD

Date: 10/06/22

Expiration Date (3 months): 1/06/23

Time: 0625 AM _____ PM

Instrument Make: Thermo Model: TVA-1000B S/N: 0928538411

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: 502 ppm (d)

Measurement #3:

Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 502 ppm (f)

Calculate Precision:

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

_____ % (must be < than 10%)

Performed By: Robles

RESPONSE TIME TEST RECORD

Date: 10/6/22

Expiration Date (3 months): 1/6/23

Time: 625 AM _____ PM

Instrument Make: Thermo Model: TVA-1000B S/N: 0928538411

Measurement #1:

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: 7 seconds (a)

Measurement #2:

Stabilized Reading Using Calibration Gas: 502 ppm
90% of the Stabilized Reading: 451 ppm
Time to Reach 90% of Stabilized Reading after
switching from Zero Air to Calibration Gas: 4 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 502 ppm
90% of the Stabilized Reading: 451 ppm
Time to Reach 90% of Stabilized Reading after
switching from Zero Air to Calibration Gas: 5 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = \text{_____ seconds (must be less than 30 seconds)}$$

Performed By: Robles

**CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION
REPORT**

Landfill Name: KIRBY Date: 10-27-2022
Time: 2:00 AM PM
Instrument Make: THERMO Model: TVA-1000 S/N: 0928538411

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.
Stable Reading = 505 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:

$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{1.5} \text{ ppm}$$

Performed By: Carlos Cruz

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Kirby

Date: 11/21/22

Time: 0910 AM _____ PM

Instrument Make: Thermo

Model: TVA100B

S/N: 0928538411

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.
Stable Reading = 503 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) 2 ppm (b)

Calculate Background Value:

$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{1.5} \text{ ppm}$$

Performed By: Robles

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Kirby Date: 12/20/22
Time: 6:45 AM _____ PM
Instrument Make: THERMO Model: TVA 1000B S/N: 0914ce 35772

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.
Stable Reading = 502 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) 2 ppm (b)

Calculate Background Value:

$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{1} \text{ ppm}$$

Performed By: ROBLE

CALIBRATION PRECISION TEST RECORD

Date: 10-13-22

Expiration Date (3 months): 1-13-2023

Time: _____ AM 1:00 PM

Instrument Make: TVA-1000 Model: THERMO S/N: 09/4635772

Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)

Meter Reading for Calibration Gas: 000 ppm (b)

Measurement #2:

Meter Reading for Zero Air: 0 ppm (c)

Meter Reading for Calibration Gas: 504 ppm (d)

Measurement #3:

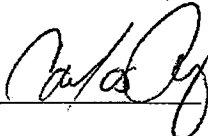
Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 501 ppm (f)

Calculate Precision:

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

 % (must be < than 10%)

Performed By: 

RESPONSE TIME TEST RECORD

Date: 10-13-20

Expiration Date (3 months): 1-13-2023

Time: AM 1:00 PM

Instrument Make: TVA-1000 Model: THERMO S/N: 0914635772

Measurement #1:

Stabilized Reading Using Calibration Gas: 500 ppm

90% of the Stabilized Reading: 498 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: 501 ppm

90% of the Stabilized Reading: 501 ppm

Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 1 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 500 ppm

90% of the Stabilized Reading: 494 ppm

Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas: 2 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = \underline{\quad 1 \quad} \text{ seconds (must be less than 30 seconds)}$$

Performed By: [Signature]

SURFACE EMISSION MONITORING INSTRUMENT CALIBRATION LOG

Site: _____

Purpose: _____

Operator: Jim M

Date: 10-1-22 Time: 0800

Model # TVA 1000

Serial # #10 1036346773

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>1.5</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm		<u>500</u>
Date of last factory calibration	<u>10-1-22</u>	90% of Calibration Gas, ppm		<u>450</u>
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>5</u>	
		2.	<u>5</u>	
		3.	<u>5</u>	
		Average	<u>5.0</u>	
		Equal to or less than 30 seconds?		<input checked="" type="radio"/> Y N
		Instrument calibrated to <u>city</u> gas.		

Comments: _____

**SURFACE EMISSION MONITORING INSTRUMENT
 CALIBRATION LOG**

Site: _____

Purpose: _____

Operator: JM

Date: 10-1-22 Time: 0815

Model # TVA 1000

Serial # #11 1036346774

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u> 2.6 </u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u> 500 </u>	<u> 500 </u>	<u> 100% </u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u> 500 </u>	
Date of last factory calibration	<u> 10-1-22 </u>	90% of Calibration Gas, ppm	<u> 450 </u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u> 5 </u>	
		2.	<u> 5 </u>	
		3.	<u> 5 </u>	
		Average	<u> 5.0 </u>	
		Equal to or less than 30 seconds?	<input checked="" type="radio"/>	N
		Instrument calibrated to	<u> 0.64 </u> gas.	

Comments: _____

**SURFACE EMISSION MONITORING INSTRUMENT
 CALIBRATION LOG**

Site: _____

Purpose: _____

Operator: JM My

Date: 10-1-22 Time: 0830

Model # TEA 1000

Serial # #12 1036246741

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>21</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100%</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>10-1-22</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>6</u>	
		2.	<u>6</u>	
		3.	<u>6</u>	
		Average	<u>6.0</u>	
		Equal to or less than 30 seconds?	<input checked="" type="radio"/> Y	N
		Instrument calibrated to	<u>city</u> gas.	

Comments: _____

SURFACE EMISSION MONITORING INSTRUMENT CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM My

Date: 10-1-22 Time: 0845

Model # TVA 1000

Serial # #13 1102746715

INSTRUMENT INTEGRITY CHECKLIST	INSTRUMENT CALIBRATION						
<p>Battery test <u>Pass</u> / Fail</p> <p>Reading following ignition <u>2.3</u> ppm</p> <p>Leak test <u>Pass</u> / Fail / NA</p> <p>Clean system check (check valve chatter) <u>Pass</u> / Fail / NA</p> <p>H₂ supply pressure gauge (acceptable range 9.5 - 12) <u>Pass</u> / Fail / NA</p> <p>Date of last factory calibration <u>10-1-22</u></p> <p>Factory calibration record w/instrument within 3 months <u>Pass</u> / Fail</p>	<p style="text-align: center;">CALIBRATION CHECK</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Calibration Gas (ppm)</th> <th style="width: 33%;">Actual (ppm)</th> <th style="width: 33%;">% Accuracy</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><u>500</u></td> <td style="text-align: center;"><u>500</u></td> <td style="text-align: center;"><u>100%</u></td> </tr> </tbody> </table> <p style="text-align: center;">RESPONSE TIME</p> <p>Calibration Gas, ppm <u>500</u></p> <p>90% of Calibration Gas, ppm <u>450</u></p> <p>Time required to attain 90% of Cal Gas ppm</p> <p>1. <u>5</u></p> <p>2. <u>5</u></p> <p>3. <u>6</u></p> <p>Average <u>5.3</u></p> <p>Equal to or less than 30 seconds? <input checked="" type="radio"/> Y <input type="radio"/> N</p> <p>Instrument calibrated to <u>City</u> gas.</p>	Calibration Gas (ppm)	Actual (ppm)	% Accuracy	<u>500</u>	<u>500</u>	<u>100%</u>
Calibration Gas (ppm)	Actual (ppm)	% Accuracy					
<u>500</u>	<u>500</u>	<u>100%</u>					

Comments: _____

SURFACE EMISSION MONITORING INSTRUMENT CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM JM

Date: 10-1-27 Time: 0930

Model # TVA 1000

Serial # #16 1102746776

INSTRUMENT INTEGRITY CHECKLIST	INSTRUMENT CALIBRATION						
<p>Battery test <u>Pass</u> / Fail</p> <p>Reading following ignition <u> 2.4 </u> ppm</p> <p>Leak test <u>Pass</u> / Fail / NA</p> <p>Clean system check (check valve chatter) <u>Pass</u> / Fail / NA</p> <p>H₂ supply pressure gauge (acceptable range 9.5 - 12) <u>Pass</u> / Fail / NA</p> <p>Date of last factory calibration <u> 10-1-27 </u></p> <p>Factory calibration record w/instrument within 3 months <u>Pass</u> / Fail</p>	<p style="text-align: center;">CALIBRATION CHECK</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Calibration Gas (ppm)</th> <th style="width: 33%;">Actual (ppm)</th> <th style="width: 33%;">% Accuracy</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><u> 500 </u></td> <td style="text-align: center;"><u> 500 </u></td> <td style="text-align: center;"><u> 100% </u></td> </tr> </tbody> </table> <p style="text-align: center;">RESPONSE TIME</p> <p>Calibration Gas, ppm <u> 500 </u></p> <p>90% of Calibration Gas, ppm <u> 450 </u></p> <p>Time required to attain 90% of Cal Gas ppm</p> <p>1. <u> 6 </u></p> <p>2. <u> 5 </u></p> <p>3. <u> 5 </u></p> <p>Average <u> 5.3 </u></p> <p>Equal to or less than 30 seconds? <input checked="" type="checkbox"/> N</p> <p>Instrument calibrated to <u> CH₄ </u> gas.</p>	Calibration Gas (ppm)	Actual (ppm)	% Accuracy	<u> 500 </u>	<u> 500 </u>	<u> 100% </u>
Calibration Gas (ppm)	Actual (ppm)	% Accuracy					
<u> 500 </u>	<u> 500 </u>	<u> 100% </u>					

Comments: _____



CUSTOMER: RES Unit # 10

SERIAL NUMBER: 1036346773

TECHNICIAN: MM DATE: 10-1-22

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	0.69	< 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.



TVA1000B CALIBRATION VERIFICATION

Environmental Inc.

CUSTOMER: RES van #11

SERIAL NUMBER: 1036346774

TECHNICIAN: M M DATE: 10-1-22

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	0.60	< 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.



CUSTOMER: RES UNIT #12

SERIAL NUMBER: 1036246791

TECHNICIAN: M. M. DATE: 10-1-22

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	0.57	< 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.



CUSTOMER: RES Unit #13

SERIAL NUMBER: 1102746775

TECHNICIAN: JM DATE: 10-1-27

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	0.01	< 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.



CUSTOMER: RES Unit #16

SERIAL NUMBER: 1102746776

TECHNICIAN: JM M DATE: 10-1-22

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	0.01	< 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.



EQUIPCO

SALES & SERVICE

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METHANE 500ppm
AIR BALANCE

Analytical Accuracy +/- 2%

103L @ 70F & 1000 PSIG
Lot# 260447
P/N MET-500-103L

EXP: JAN/2025

TVA

EQUIPCO

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Concord, CA 94520
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AIR, ULTRA ZERO
THC <0.2 PPM

Analytical Accuracy +/- 2%

103L @ 70F & 1000 PSIG
Lot# 260362
P/N AIR-ZER-103L

EXP: JAN/2025

TVA
zero

Intermountain Specialty Gases

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Nampa, ID 83687 (USA)
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www.isgases.com



"Your calibration gas manufacturer since 1992"

CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
--------------------	----------------------	----------------------------------

Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

Lot # 20-7421

Mfg. Date: 5/20/2020

Expiration Date:

Transfill Date: see cylinder

Parent Cylinder ID Number: NY02268

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
Title: Quality Assurance Manager
Certificate Date: 5/20/2020

MicroSupply



Service
INC.

Concentration (Mole%) Accuracy

- 20.9% Oxygen
- Bal. Nitrogen



CONTAINS CARTRIDGE
 Read and follow the
 label of this product
 Do not use for
 purposes other than
 those intended
 Use a leak detector
 (LSD) for oxygen
 applications
 and follow the
 instructions
 Degree of
 purity
 DO NOT REUSE
 Federal law
 prohibits
 this sale

Contents: 3.6ft³ @ 70°F and 1,000 PSIG

Exp Date
7/10/2024

Lot#: 20-7421

P/N: 01-100

103 L

1791 Kaiser Avenue, Irvine, CA 92614
 (949) 757-0353 or (800) 201-8150 Fax (949) 757-0363

103-01-100
 Oxygen 20.9%

103 L

Lot #



INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

Composition

Methane

Air

Certification

25 ppm

Balance

Analytical Accuracy

± 5%

Lot #	17-6074
--------------	----------------

Mfg. Date: 10/16/2017

Parent Cylinder ID 17161

Number:

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

ProSupply Service INC.

Concentration (Mole%) Accuracy +/- 5%

(CH₄) - 25 ppm
- Balance

3.67[±] @ 70°F and 1,000 PSIG

Exp Date
7/10/2024

Lot#: 17-6074

P/N: 23-0025

103 L

Kaiser Avenue, Irvine, CA 92614
515-8553 or (800) 201-8150 Fax (949) 757-0363

Methane



CONTAINS GAS UNDER PRESSURE

Read label before use. Use label at hand. Use appropriate

Do not handle until all safety protective gloves, protective

Use a back flow prevention slowly. Close valve after use

Dispose of content and container

DO NOT REMOVE THIS LABEL

Federal law forbids transportation 5124). Federal law prohibits

103-23-0025
Methane 25 ppm/
Oxygen 20.9% / Nitrogen

103 L

Lot #
17-6074



COA



2 of 2



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CERTIFICATE OF ANALYSIS

Composition

Methane

Air

Certification

25 ppm

Balance

Analytical Accuracy

± 5%

Lot #	17-6074
--------------	----------------

Mfg. Date: 10/16/2017

Parent Cylinder ID 17161

Number:

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



Concentration (Mole%) Accuracy
 (CH₄) - 25 ppm +/- 5%
 - Balance

Methane



CONTAINS GAS
 Read label before use
 label at hand.
 Do not handle with
 protective gloves.
 Use a back flow preventer
 slowly. Close valve after
 sunlight when not in
 use.
 Dispose of contents
 DO NOT REWORK
 Federal law prohibits
 5124). Federal law

Contents: 3.6ft³ @ 70°F and 1,000 PSIG

Exp Date
 4/27/2025

Lot#: 17-6074

P/N:23-0025

103 L

171 Kaiser Avenue, Irvine, CA 92614
 949-257-0353 or (800) 201-8150 Fax (949) 757-0363

103-23-0025
 Methane 25 ppm/
 Oxygen 20.9% Nitrogen

103 L

Lot #
 17-6074



DOT SP 11323 NRC 1100/1505M-1102
 TC-SU6495 NRC 76/104

Intermountain Specialty Gases

520 N. Kings Road
Nampa, ID 83687 (USA)
Phone (800) 552-5003, Fax (208) 466-9143
www.isgases.com



CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
Methane	500 ppm	2%
Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

Lot # 20-7497
Mfg. Date: 7/10/2020
Expiration Date:
Transfill Date: see cylinder
Parent Cylinder ID Number: TWC001763

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
Title: Quality Assurance Manager
Certificate Date: 7/10/2020

Supply Service INC.

Concentration (Mole%) Accuracy
± 2%
Balance

70°F and 1,000 PSIG

Exp Date
7/10/2024

Lot#: 20-7497

P/N:23-0500

103 L

103 L
Irvine, CA 92614
(800) 201-8150 Fax (949) 757-0363

Methane (0.000)



WARN

CONTAINS GAS UNDER PRESSURE
Read label before use. Keep out of reach of children. Keep label at hand. Use equipment used for this purpose only.
Do not handle until all safety precautions are read and protective gloves, protective clothing.
Use a back flow preventive device in backflow situations. Close valve after each use and store in a cool, dry place. Do not use in direct sunlight when ambient temperature is above 100°F.
Dispose of content and/or container in accordance with local, state and federal regulations.
DO NOT REMOVE THIS PRODUCT LABEL.
Federal law forbids transportation of this product in a motor vehicle (49 CFR 173.34). Federal law prohibits selling this product in a motor vehicle.

103-23-0500
Methane 0.000 ppm/
Nitrogen 20.0%

103 L

Lot #
20-7497



COA
4 of 4



INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy</u>
Methane	500 ppm	± 2%
Air	Balance	

Lot #	19-6955
--------------	----------------

Mfg. Date: 7/24/2019

Parent Cylinder ID 001763

Number:

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: 7/24/2019

Intermountain Specialty Gases

520 N. Kings Road
Nampa, ID 83687 (USA)
Phone (800) 552-5003, Fax (208) 466-9143
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"Your calibration gas manufacturer since 1992"

CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
Methane	500 ppm	2%
Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

Lot # 18-6641
Mfg. Date: 12/18/2018
Expiration Date:
Transfill Date: see cylinder

Parent Cylinder ID Number: 001763

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
Title: Quality Assurance Manager
Certificate Date: 12/18/2018



Concentration (Mole%) Accuracy

(CH₄) - 500 ppm
v: Balance

+/- 2%

3.6ft³ @ 70°F and 1,000 PSIG

Exp Date
6/26/2023



103 L

1031 Kaiser Avenue, Irvine, CA 92614
757-0353 or (800) 201-8150 Fax (949) 757-0363

500 ppm/
Nitrogen

103 L

COA



Lot #
18-6641

1100/1505M-1102
NRC 76



Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

46400 Continental Drive
Chesterfield, MI 48047

Cust Number 07152
Order Number 62891146
PO Number 04548169

Lot Number 9-326-80
Norlab Part# J1971500PA
Cylinder Size 103 Liter
Number of Cyl 1

Date on Manufacture 12/31/2019
Expires 12/2022
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 20180519 and 20180224

Approved:


David Reed
Lab Technician

Date Signed: 12/31/2019



PREMIER SAFETY

800.962.7837
premiersafety.com

46400 Continental
Chesterfield, MI 48021

Components Concentration (Mole %)

methane

500 ppm
Balance

0-135-81

accuracy ±2%

21971500PA

103Liters-3.6Cu.Ft.,-1000psig

MFG Date:

11/11/2020

Exp. Date:

11/2023

CALIBRATION GAS



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:


David Reed
Lab Technician

Date Signed:

6/13/2022

PREMIER SAFETY

800.962.7837
www.premiersafety.com

33596 Sterling
Sterling Heights, MI

Components	Concentration (Methane)
Air	Zero Grade
Oxygen	20.9 %
T.H.C. (as Methane)	< 1.0 ppm
Nitrogen	Balance

Lot:	2-154-85	MFG Date:	6/13/2022
Accuracy:	Certified	Exp. Date:	06/2025
Part:	J1002		
Comments:	103Liters-3.6Cu.Ft., -1000psig		

CALIBRATION GAS





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

Date on Manufacture 6/10/2022
Expires 06/2025
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:

David Reed
Lab Technician

Date Signed:

6/10/2022



800.962.7837
www.premiersafety.com

33596 Sterling Road
Sterling Heights, MI

Components

Concentration (Mole %)

Methane
Air

500 ppm
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



APPENDIX F

SURFACE EMISSIONS MONITORING REPORTS- CONTINUED



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

September 21, 2022

Ms. Becky Azevedo
Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
San Jose, CA 95037

Re: Third Quarter 2022 Surface Emissions and Component Leak Monitoring Report for the Kirby Canyon Recycling and Disposal Facility

Dear Ms. Azevedo:

This monitoring report for the “**Kirby Canyon Recycling and Disposal Facility (KCRDF) Landfill**” contains the results of the **Third Quarter 2022 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 was conducted by KCRDF 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 Monitoring

- 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).

KCRDF 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 KCRDF disposal area has been divided into one-hundred-and-fifty (150), 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 walking pattern as depicted the 2011 KCRDF 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)(2).

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

RES 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 2022 SEM AND COMPONENT LEAK RESULTS

The following is a summary of the SEM and component leak monitoring results completed for the Third Quarter 2022.

Instantaneous Surface Emissions Monitoring Results

The Instantaneous surface monitoring was performed on August 3, 2022, 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 5 exceedances of 500 ppm_v as methane detected on August 3, 2022. Corrective actions to initiate repairs of the exceedances were completed within five days for all locations (on August 4, 2022).

Ten-Day Re-Monitoring Results

The 10-day re-monitoring event was completed on August 4, 2022. All locations were observed at less than 500 ppm_v.

One-Month Re-Monitoring Results

The 1-month re-monitoring event was completed on August 29, 2022. 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 August 3, 2022. 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 August 4, 2022, 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 August 4, 2022.

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 3, 2022. No leaks greater than 500 ppm_v were identified. 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). These values are documented in the field data sheets. The chart data is scanned and included in Attachment D.

Precipitation Requirements

Per the KCRDF'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

A handwritten signature in black ink, appearing to read 'R. Phadnis', with a long horizontal line extending to the right.

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

2022 QUARTER: 3

PERFORMED BY: RES/WM

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Flag Number	Grid Number	Date of Monitoring	Concentration of Emission (ppmv)	Comments-Wells
31	119	8/3/2022	11,000	135
11	101	8/3/2022	776	48
1	143	8/3/2022	600	70
2	59	8/3/2022	1,800	118
3	52	8/3/2022	10,000	160

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

2022 QUARTER: 3

INITIAL MONITORING PERFORMED BY: RES/WMM

FOLLOW-UP MONITORING PERFORMED BY: Tino Robles

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			Corrective action within 5 days		1st 10-day Follow-Up			1st 30-day Follow-Up			Comments-Well locations
Flag	Monitoring	Field	Repair	Action taken to repair	Monitoring	No Exced.	Exced.	Monitoring	No Exced.	Exced.	
Number	Date	Reading	Date	Exceedance	Date	<500 ppm	>500 ppm	Date	<500 ppm	>500 ppm	
31	8/3/2022	11,000	8/4/2022	Becs increase to fully open/added water & pack soil	8/4/2022	15		8/29/2022	9		135
11	8/3/2022	776	8/4/2022	Becs increase to fully open/added & pack soil	8/4/2022	12		8/29/2022	7		48
1	8/3/2022	600	8/4/2022	Becs increase to fully open/added & pack soil	8/4/2022	13		8/29/2022	11		70
2	8/3/2022	1,800	8/4/2022	Becs increase to fully open/added & pack soil	8/4/2022	17		8/29/2022	19		118
3	8/3/2022	10,000	8/4/2022	Becs increase to fully open/added & pack soil	8/4/2022	30		8/29/2022	22		160

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

2022 QUARTER:

3

INITIAL MONITORING PERFORMED BY: RES/WM

FOLLOW-UP MONITORING PERFORMED BY: Tino Robles

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			1st Re-mon Event - 10 Days			2nd Re-mon Event - 10 Days			Comments-Well locations
Exceedance	Monitoring	Field	Monitoring	No Exced.	Exced.	Monitoring	No Exced.	Exced.	
Grid ID No.	Date	Reading	Date	<500 ppm	>500 ppm	Date	<500 ppm	>500 ppm	
119	8/3/2022	11,000	8/4/2022	15	-	-	-	-	135
101	8/3/2022	776	8/4/2022	12	-	-	-	-	48
143	8/3/2022	600	8/4/2022	13	-	-	-	-	70
59	8/3/2022	1,800	8/4/2022	17	-	-	-	-	118
52	8/3/2022	10,000	8/4/2022	30	-	-	-	-	160

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

2022 QUARTER: 3

INITIAL MONITORING PERFORMED BY: RES/WM

FOLLOW-UP MONITORING PERFORMED BY: NA

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			Re-mon Event		Comments
Exceedance	Monitoring	Field	Monitoring	Reading	
Grid ID No.	Date	Reading	Date	ppm	
None					

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LESLIE WADDE JOSÉ R. CO
CELVIN ORTIZ ARMANDO MARTINEZ
NICK BANKS Cal. Gas Exp. Date: 6-9-23

Date: 8-3-22 Instrument Used: FVA1000 Grid Spacing: 25'

Temperature: 65 Precip: 0 Upwind BG: 2.4 Downwind BG: 2.8

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
37	LW	0930	0945	85	2	3	14	
41	CO	0930	0945	77	2	3	14	
42	ND	0930	0945	120	2	3	14	
43	JN	0930	0945	85	2	3	14	
44	AM	0930	0945	36	2	3	14	
47	LW	0945	1000	74	2	3	14	
48	CO	0945	1000	163	2	3	14	
49	ND	0945	1000	74	2	3	14	
52	JN	0945	1000	10,000	2	3	14	well 160
53	AM	0945	1000	134	2	3	14	
54	LW	1000	1015	60	2	2	14	
55	CO	1000	1015	40	2	2	14	
57	ND	1000	1015	14	2	2	14	
58	JN	1000	1015	107	2	2	14	
59	AM	1000	1015	1,800	2	2	14	well 118
60	LW	1015	1030	94	2	3	14	
61	CO	1015	1030	40	2	3	14	
64	ND	1015	1030	16	2	3	14	
65	JN	1015	1030	51	2	3	14	
66	AM	1015	1030	94	2	3	14	
67	LW	1030	1045	120	2	3	14	
68	CO	1030	1045	115	2	3	14	
70	ND	1030	1045	13	2	3	14	
71	JN	1030	1045	46	2	3	14	
72	AM	1030	1045	58	2	3	14	
73	LW	1045	1100	65	3	4	14	
74	CO	1045	1100	50	3	4	14	
75	ND	1045	1100	32	3	4	14	
79	JN	1045	1100	15	3	4	14	
80	AM	1045	1100	45	3	4	14	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEIGH WADSWORTH JOSE A. RIZO
CELVIN ORTIZ ARMANDO MARTINEZ
NICK DENICO _____
 Cal. Gas Exp. Date: 6-9-23

Date: 8-3-22 Instrument Used: VA 1000 Grid Spacing: 25'

Temperature: 68 Precip: 0 Upwind BG: 2.4 Downwind BG: 2.8

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
81	LW	1100	1115	97	3	4	14	
82	CO	1100	1115	64	3	4	14	
83	ND	1100	1115	25	3	4	14	
86	JN	1100	1115	29	3	4	14	
87	AN	1100	1115	75	3	4	14	
88	LW	1115	1130	60	1	3	14	
89	CO	1115	1130	31	1	3	14	
90	ND	1115	1130	15	1	3	14	
94	JN	1115	1130	27	1	3	14	
95	AN	1115	1130	40	1	3	14	
96	LW	1200	1215	41	2	4	14	
97	CO	1200	1215	18	2	4	14	
101	ND	1200	1215	776	2	4	14	Well 48
102	JN	1200	1215	76	2	4	14	
103	AN	1200	1215	36	2	4	14	
104	LW	1215	1230	30	3	5	14	
105	CO	1215	1230	20	3	5	14	
109	ND	1215	1230	18	3	5	14	
110	JN	1215	1230	62	3	5	14	
111	AN	1215	1230	40	3	5	14	
112	LW	1230	1245	26	3	5	14	
116	CO	1230	1245	19	3	5	14	
117	ND	1230	1245	31	3	5	14	
118	JN	1230	1245	17	3	5	14	
119	AN	1230	1245	11,000	3	5	14	Well 135
120	LW	1245	1300	19	3	5	14	
124	CO	1245	1300	16	3	5	14	
125	ND	1245	1300	11	3	5	14	
126	JN	1245	1300	11	3	5	14	
127	AN	1245	1300	21	3	5	14	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEIGHANOR JOSE RIZZO
CELVIN ONTIZ ARMANDO MENTANA
NILK BONICKS Cal. Gas Exp. Date: 6-9-23

Date: 8-3-22 Instrument Used: TUA 1000 Grid Spacing: 25'

Temperature: 74 Precip: 0 Upwind BG: 2.4 Downwind BG: 2.8

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
128	LW	1300	1315	16	3	5	13	
132	CO	1300	1315	25	3	5	13	
133	NB	1300	1315	16	3	5	13	
134	JN	1300	1315	28	3	5	13	
135	AM	1300	1315	16	3	5	13	
136	LW	1315	1330	22	5	6	14	
137	CO	1315	1330	11	5	6	14	
138	NB	1315	1330	21	5	6	14	
139	JN	1315	1330	14	5	6	14	
140	AM	1315	1330	12	5	6	14	
141	LW	1330	1345	20	5	6	14	
142	CO	1330	1345	27	5	6	14	
143	NB	1330	1345	600	5	6	14	Well 70
144	JN	1330	1345	25	5	6	14	
145	AM	1330	1345	18	5	6	14	
146	LW	1345	1400	16	5	6	14	
147	CO	1345	1400	22	5	6	14	
148	NB	1345	1400	26	5	6	14	
149	JN	1345	1400	27	5	6	14	
150	AM	1345	1400	18	5	6	14	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEIGHWADK _____

Cal. Gas Exp. Date: _____

Date: 8-3-22 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	
76								Active-lasos
77								
84								
91								
92								
98								
99								
106								
107								
113								
121								
129								
1								no waste implcs
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								

Attach Calibration Sheet
Attach site map showing grid ID

KIRBY LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEISHWADE _____

 _____ Cal. Gas Exp. Date: _____

Date: 8-3-22 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	
19								↓
20								
21								
22								
23								
24								
25								
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62								
63								
69								
78								

Attach Calibration Sheet
 Attach site map showing grid ID

Orange Flag Landfill Surface Emissions Monitoring
Exceedances and Monitoring Log

Site: KIRBY

Quarter / Year:	3Q3 2022		Initial Monitoring Event							Page	of	Pages
	Technician:	LEIGH NOK		Instrument:	TVA 1000	Calibration Standard:	500 ppm	Field Reading (ppm)	Date Monitored			
Flag Number	Grid Number	Field Reading (ppm)	Date Monitored									Comments
0-31	119	11,000	8-3-22	First Re-Monitoring Event - 10 Days		Second Re-Monitoring Event - 10 Days		30-Day Follow-up Monitoring				
0-11	101	776	↓									Well 48
0-1	143	600										Well 70
0-2	59	1800										Well 118
0-3	52	10,000	↓									Well 160
0-												
0-												
0-												
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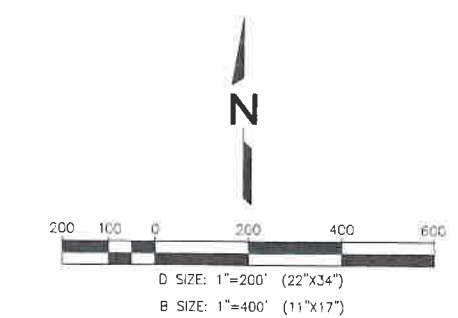
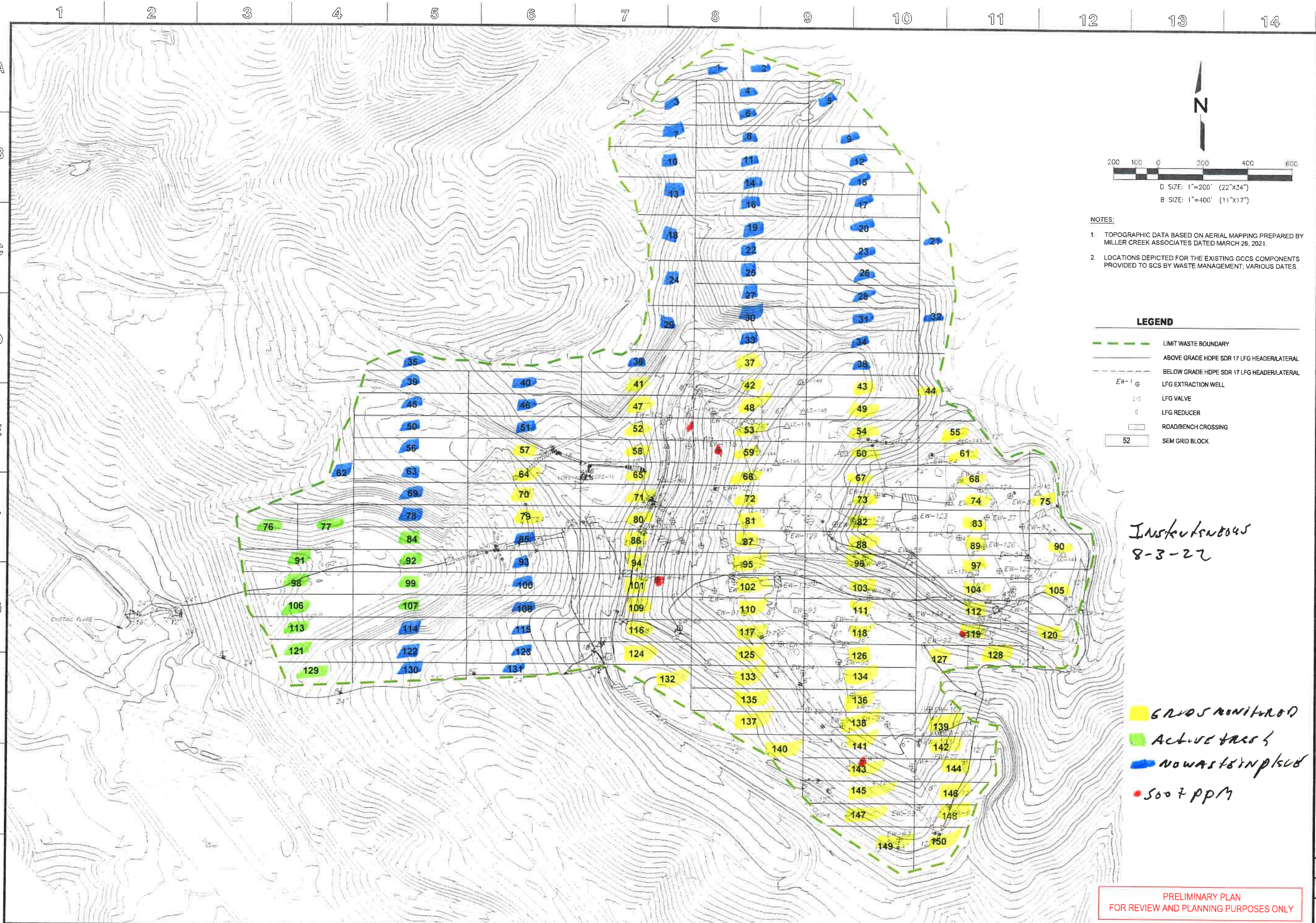
KIRBY LANDFILL - MONITORING POINTS FOR SEM - UPDATED ON 10-28-2021

K	Point ID	DESCRIPTION	POINT TYPE	LATITUDE	LONGITUDE	SEM GRID BLOCK NO.	DATE	READING (PPM)	NOTES
K1	49175	LC-108 ✓	LFG Collector - Standard	37.1858544	-121.6713388	71	8-3-22	46	
K2	49176	LC-109 ✓	LFG Collector - Standard	37.1861615	-121.6712074	65		60	
K3	49178	LC-110 ✓	LFG Collector - Standard	37.1865715	-121.6712086	58		107	
K4	49180	LC-111 ✓	LFG Collector - Standard	37.1869514	-121.6708234	47		59	
K5	49181	LC-112 ✓	LFG Collector - Standard	37.1871774	-121.6706235	42		120	
K6	60315	LC-139 ✓	LFG Collector - Standard	37.1851287	-121.6662637	97		18	
K7	60316	LC-140 ✓	LFG Collector - Standard	37.1851745	-121.6661685	112		26	
K8	60317	LC-141 ✓	LFG Collector - Standard	37.1852798	-121.6652963	90		15	
K9	60318	LC-142 ✓	LFG Collector - Standard	37.1860808	-121.6654991	75		32	
K10	60319	LC-143 ✓	LFG Collector - Standard	37.1862571	-121.6664707	55		40	
K11	60322	LC-145 ✓	LFG Collector - Standard	37.1869271	-121.6693456	53		134	
K12	60326	LC-147 ✓	LFG Collector - Standard	37.1861606	-121.6697507	66		94	
K13	60328	LC-149 ✓	LFG Collector - Standard	37.1872639	-121.6690856	42		38	
K14	60331	LC-151 ✓	LFG Collector - Standard	37.1858384	-121.6699511	72		54	
K15	60332	LC-152 ✓	LFG Collector - Standard	37.1854474	-121.6697709	87		75	
K16	65781	LC-153 ✓	LFG Collector - Standard	37.187298	-121.668656	53		92	
K17	65782	LC-154 ✓	LFG Collector - Standard	37.187069	-121.668981	54		45	
K18	65783	LC-155 ✓	LFG Collector - Standard	37.186831	-121.669257	54		11	
K19	65784	LC-156 ✓	LFG Collector - Standard	37.186235	-121.669166	54		60	
K20	65785	LC-157 ✓	LFG Collector - Standard	37.185945	-121.668561	59		47	
K21	65786	LC-158 ✓	LFG Collector - Standard	37.185941	-121.665918	59		70	
K22	65787	LC-159 ✓	LFG Collector - Standard	37.186525	-121.669906	52		49	
K23	65788	LC-160 ✓	LFG Collector - Standard	37.187048	-121.670208	52		10,000	
K24	65789	LC-161 ✓	LFG Collector - Standard	37.186387	-121.670388	52		87	
K25	22752	EW-14 ✓	LFG Collector - Standard	37.1854822	-121.6715554	86		29	
K26	22756	EW-27 ✓	LFG Collector - Standard	37.1841969	-121.6672322	127		21	
K27	22773	EW-48 ✓	LFG Collector - Standard	37.1849125	-121.6712309	101		776	
K28	27238	EW-51 ✓	LFG Collector - Standard	37.1861862	-121.6667349	68		115	
K29	33387	EW-54 ✓	LFG Collector - Standard	37.1854746	-121.6660124	97		41	
K30	33389	EW-56 ✓	LFG Collector - Standard	37.1859008	-121.6668334	74		80	
K31	33390	EW-57 ✓	LFG Collector - Standard	37.1856143	-121.6678545	82		64	
K32	33391	EW-58 ✓	LFG Collector - Standard	37.1853507	-121.6675554	96		39	
K33	33395	EW-62 ✓	LFG Collector - Standard	37.1822912	-121.6667604	148		12	
K34	33396	EW-63 ✓	LFG Collector - Standard	37.1818317	-121.6674273	149		27	
K35	33398	EW-65 ✓	LFG Collector - Standard	37.1848434	-121.6658706	104		30	
K36	39441	EW-66 ✓	LFG Collector - Standard	37.1843777	-121.6709201	116		19	
K37	39445	EW-70 ✓	LFG Collector - Standard	37.1827215	-121.6680954	143		600	
K38	39446	EW-71 ✓	LFG Collector - Standard	37.1828001	-121.6674111	143		31	
K39	39447	EW-72 ✓	LFG Collector - Standard	37.1828111	-121.6665381	144		25	
K40	39449	EW-74 ✓	LFG Collector - Standard	37.1844741	-121.6684259	118		17	
K41	39450	EW-75 ✓	LFG Collector - Standard	37.1855639	-121.6664446	89		31	
K42	39451	EW-76 ✓	LFG Collector - Standard	37.1847177	-121.670374	102		40	
K43	39453	EW-78 ✓	LFG Collector - Standard	37.1846682	-121.6680346	103		34	

KIRBY LANDFILL - MONITORING POINTS FOR SEM - UPDATED ON 10-28-2021

K	Point ID	DESCRIPTION	POINT TYPE	LATITUDE	LONGITUDE	SEM GRID BLOCK NO.	DATE	READING (PPM)	NOTES
K44	39457	EW-82	LFG Collector - Standard	37.1858616	-121.6658484	83	8-3-22	2.5	
K45	39459	EW-84	LFG Collector - Standard	37.1864778	-121.6671679	61		4.0	
K46	39461	EW-86	LFG Collector - Standard	37.1855907	-121.6686993	82		5.5	
K47	39462	EW-87	LFG Collector - Standard	37.1852233	-121.6681567	96		4.1	
K48	41794	EW-88	LFG Collector - Standard	37.1831824	-121.667728	138		1.7	
K49	41795	EW-89	LFG Collector - Standard	37.1848945	-121.6700714	102		7.6	
K50	41796	EW-90	LFG Collector - Standard	37.1834937	-121.6686558	138		2.1	
K51	41797	EW-91	LFG Collector - Standard	37.1845284	-121.6699698	110		6.2	
K52	41798	EW-92	LFG Collector - Standard	37.1842745	-121.6681463	118		1.4	
K53	41799	EW-93	LFG Collector - Standard	37.1846024	-121.6690086	111		2.5	
K54	41800	EW-94	LFG Collector - Standard	37.1837826	-121.6690093	133		1.6	
K55	43784	EW-95	LFG Collector - Standard	37.183988	-121.6685091	126		1.1	
K56	43786	EW-97	LFG Collector - Standard	37.1834011	-121.6689421	136		2.2	
K57	43787	EW-98	LFG Collector - Standard	37.1841664	-121.6691791	125		1.1	
K58	43788	EW-99	LFG Collector - Standard	37.1822657	-121.667186	148		2.6	
K59	46300	EW-101	LFG Collector - Standard	37.1834129	-121.667054	127		2.0	
K60	46301	EW-102	LFG Collector - Standard	37.1833032	-121.6670075	139		1.4	
K61	46302	EW-103	LFG Collector - Standard	37.1830105	-121.6672975	142		2.7	
K62	48252	EW-105	LFG Collector - Standard	37.186772	-121.6711534	47		7.4	
K63	51853	EW-118	LFG Collector - Standard	37.1865144	-121.6704025	59		1,800	
K64	51854	EW-119	LFG Collector - Standard	37.1853394	-121.6706102	87		5.0	
K65	51856	EW-121	LFG Collector - Standard	37.1869645	-121.6704699	48		6.3	
K66	51857	EW-122	LFG Collector - Standard	37.1860822	-121.6704487	72		5.5	
K67	55175	EW-123	LFG Collector - Standard	37.185714	-121.6673885	82		0.9	
K68	55176	EW-124	LFG Collector - Standard	37.1861053	-121.6663665	82		4.2	
K69	55177	EW-125	LFG Collector - Standard	37.1850526	-121.6661443	74		2.9	
K70	55178	EW-126	LFG Collector - Standard	37.1854463	-121.6669166	97		7.0	
K71	55179	EW-127	LFG Collector - Standard	37.1859883	-121.6679479	89		3.1	
K72	55180	EW-128	LFG Collector - Standard	37.1856942	-121.6683291	73		6.5	
K73	55181	EW-129	LFG Collector - Standard	37.1855239	-121.6693602	82		9.3	
K74	55182	EW-130	LFG Collector - Standard	37.1856391	-121.6713393	80		4.5	
K75	55183	EW-131	LFG Collector - Standard	37.1865955	-121.6708386	80		3.1	
K76	55185	EW-133	LFG Collector - Standard	37.18491	-121.6688906	103		2.9	
K77	55186	EW-134	LFG Collector - Standard	37.1844936	-121.6673614	111		4.0	
K78	55187	EW-135	LFG Collector - Standard	37.1843228	-121.6665942	119		11,000	
K79	22777	LCRS-4	Leachate Riser or Sump (LR)	37.1847276	-121.6653886	104		3.7	
K80	42098	LCRS-8	Leachate Riser or Sump (LR)	37.1823056	-121.6690703	147		2.2	
K81	46305	LCRS-11	Leachate Riser or Sump (LR)	37.1859682	-121.6715854	65		5.1	

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- NOTES:
1. TOPOGRAPHIC DATA BASED ON AERIAL MAPPING PREPARED BY MILLER CREEK ASSOCIATES DATED MARCH 26, 2021.
 2. LOCATIONS DEPICTED FOR THE EXISTING GCSS COMPONENTS PROVIDED TO SCS BY WASTE MANAGEMENT, VARIOUS DATES

LEGEND

	LIMIT WASTE BOUNDARY
	ABOVE GRADE HDPE SDR 17 LFG HEADER/LATERAL
	BELOW GRADE HDPE SDR 17 LFG HEADER/LATERAL
	LFG EXTRACTION WELL
	LFG VALVE
	LFG REDUCER
	ROAD/BENCH CROSSING
	SEM GRID BLOCK

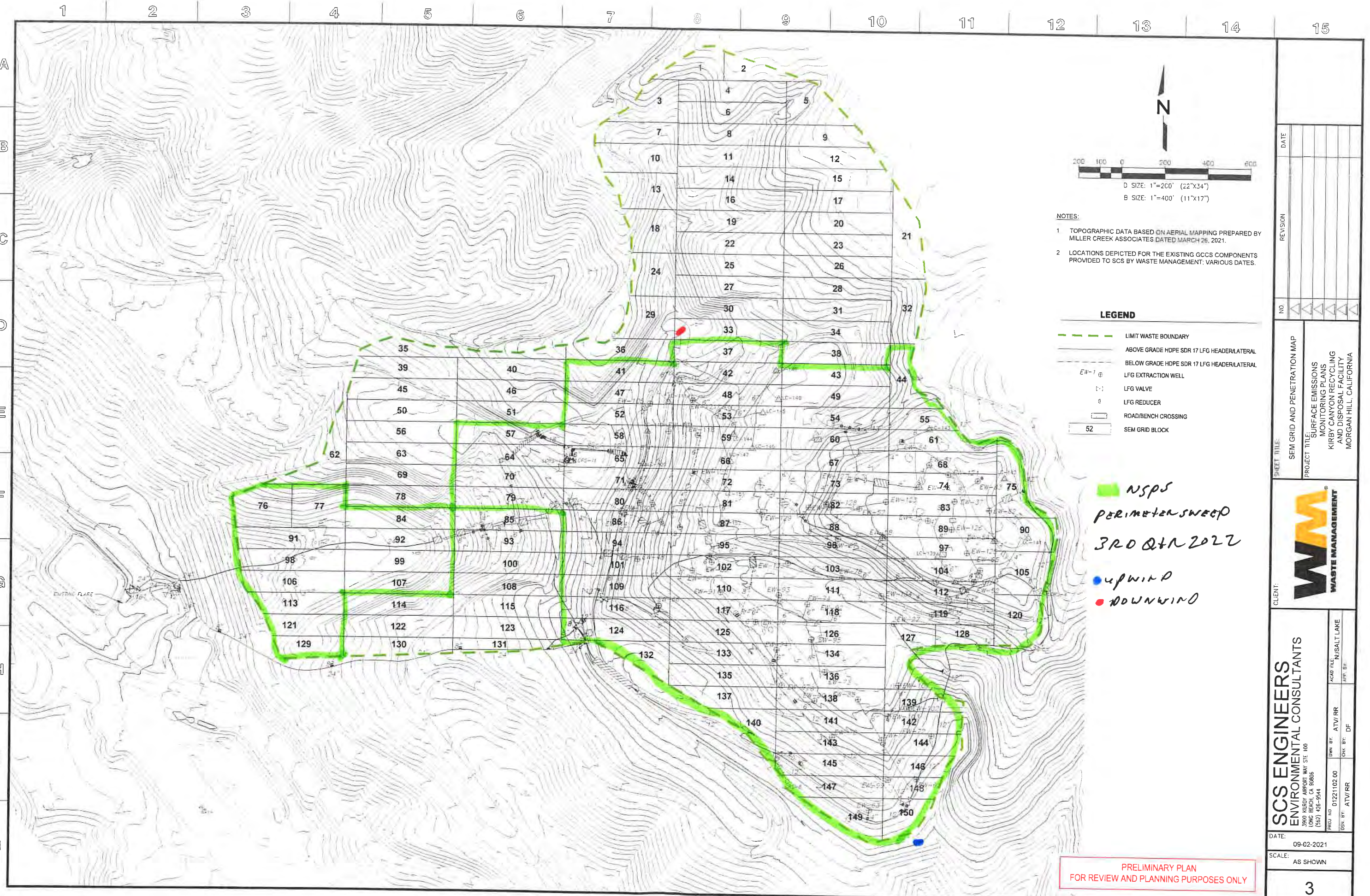
*Instructions
8-3-22*

- GRIDS MONITORED
- Active trees
- no waste in place
- 500+ ppm

PRELIMINARY PLAN
FOR REVIEW AND PLANNING PURPOSES ONLY

DATE		REVISION		NO					
<p>SHEET TITLE: SEM GRID AND PENETRATION MAP</p> <p>PROJECT TITLE: SURFACE EMISSIONS MONITORING PLANS KIRBY CANYON RECYCLING AND DISPOSAL FACILITY MORGAN HILL, CALIFORNIA</p>									
<p>CLIENT: SCS ENGINEERS ENVIRONMENTAL CONSULTANTS</p> <p>3900 WARDY AIRPORT WAY STE 100 LONG BEACH, CA 90805 (562) 426-9544</p> <p>PROJ NO: 01221102.00 DESIGNED BY: ATV/RR DRAWN BY: ATV/RR DATE: 09-02-2021</p> <p>SCALE: AS SHOWN</p>									
3									

H:\Salt Lake City\Kirby Landfill\SEU Emissions Monitoring Plans\Kirby Surface Emissions Monitoring Plans.dwg Sep 02, 2021 - 4:49pm By: 2747_r



NOTES:
 1 TOPOGRAPHIC DATA BASED ON AERIAL MAPPING PREPARED BY MILLER CREEK ASSOCIATES DATED MARCH 26, 2021.
 2 LOCATIONS DEPICTED FOR THE EXISTING GCCS COMPONENTS PROVIDED TO SCS BY WASTE MANAGEMENT: VARIOUS DATES.

- LEGEND**
- LIMIT WASTE BOUNDARY
 - ABOVE GRADE HDPE SDR 17 LFG HEADER/LATERAL
 - BELOW GRADE HDPE SDR 17 LFG HEADER/LATERAL
 - LFG EXTRACTION WELL
 - LFG VALVE
 - LFG REDUCER
 - ▭ ROAD/BENCH CROSSING
 - ▭ SEM GRID BLOCK

NSPS PERIMETER SWEEP 3RD QTR 2022

● UPWIND
● DOWNWIND

PRELIMINARY PLAN
FOR REVIEW AND PLANNING PURPOSES ONLY

	DATE								
	REVISION								
	NO	DATE							
SHEET TITLE:		SEM GRID AND PENETRATION MAP							
PROJECT TITLE:		SURFACE EMISSIONS MONITORING PLANS KIRBY CANYON RECYCLING AND DISPOSAL FACILITY MORGAN HILL, CALIFORNIA							
CLIENT:									
SCS ENGINEERS ENVIRONMENTAL CONSULTANTS		DATE:		09-02-2021		SCALE:		AS SHOWN	
3500 KIRBY AIRPORT WAY STE 100 LONG BEACH, CA 90806 (562) 426-9544		DRAWN BY:		ATV/RR		CHK BY:		DF	
PROJ NO: 01221102.00		DATE:		09-02-2021		SCALE:		AS SHOWN	
3									

Attachment B

Integrated Surface Emission Monitoring Event Records

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

2022 QUARTER: 3
INITIAL MONITORING PERFORMED BY: RES
FOLLOW-UP MONITORING PERFORMED BY: N/A
LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Initial Monitoring Event			1st Re-mon Event - 10 Days			Comments
Exceedance	Monitoring	Field	Monitoring	No Exced.	No Exced.	
Grid ID No.	Date	Reading	Date	<25 ppm	>25 ppm	
None						

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGH NADE JOSE RIZZO
CELVIN ORTIZ ARONDO MONTNER
NICK BENLES Cal. Gas Exp. Date: 6-9-23

Date: 8-4-22 Instrument Used: 4VA 1000 Grid Spacing: 25'

Temperature: 60 Precip: 0 Upwind BG: 2.4 Downwind BG: 2.8

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
37	LW	0530	0555	11.65	6	8	14	
41	CO	0530	0555	13.51	6	8	14	
42	ND	0530	0555	16.82	6	8	14	
43	JN	0530	0555	14.57	6	8	14	
44	AM	0530	0555	16.21	6	8	14	
47	LW	0555	0620	12.60	6	8	14	
48	CO	0555	0620	17.56	6	8	14	
49	ND	0555	0620	15.02	6	8	14	
52	JN	0555	0620	14.98	6	8	14	
53	AM	0555	0620	17.26	6	8	14	
54	LW	0620	0645	15.55	5	7	14	
55	CO	0620	0645	9.70	5	7	14	
57	ND	0620	0645	5.80	5	7	14	
58	JN	0620	0645	10.24	5	7	14	
59	AM	0620	0645	12.60	5	7	14	
60	LW	0645	0710	19.57	5	7	14	
61	CO	0645	0710	8.50	5	7	14	
64	ND	0645	0710	6.10	5	7	14	
65	JN	0645	0710	7.21	5	7	14	
66	AM	0645	0710	9.13	5	7	14	
67	LW	0710	0735	14.60	5	7	14	
68	CO	0710	0735	8.22	5	7	14	
70	ND	0710	0735	5.23	5	7	14	
71	JN	0710	0735	7.45	5	7	14	
72	AM	0710	0735	13.60	5	7	14	
73	LW	0735	0800	16.42	5	7	14	
74	CO	0735	0800	8.11	5	7	14	
75	ND	0735	0800	6.21	5	7	14	
79	JN	0735	0800	6.14	5	7	14	
80	AM	0735	0800	6.33	5	7	14	

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEWIS WADE
CELVIN ORTIZ
NICK BANKS

JOSE RAZO
ARMANDO MARTINEZ

Cal. Gas Exp. Date: 6-9-20

Date: 8-4-22 Instrument Used: FVA1000 Grid Spacing: 25'

Temperature: 69 Precip: 0 Upwind BG: 2.4 Downwind BG: 2.8

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 15 POINT	
81	LW	0800	0825	9.40	4	5	14	
82	CO	0800	0825	11.71	4	5	14	
83	ND	0800	0825	6.54	4	5	14	
86	JN	0800	0825	6.37	4	5	14	
87	AN	0800	0825	11.40	4	5	14	
88	LW	0825	0850	16.27	3	5	14	
89	CO	0825	0850	8.14	3	5	14	
90	ND	0825	0850	6.86	3	5	14	
94	JN	0825	0850	7.11	3	5	14	
95	AN	0825	0850	6.92	3	5	14	
96	LW	0850	0915	7.45	3	5	14	
97	CO	0850	0915	6.21	3	5	14	
101	ND	0910	0915	8.13	3	5	14	
102	JN	0850	0915	7.74	3	5	14	
103	AN	0850	0915	6.14	3	5	14	
104	LW	0915	0940	5.22	3	5	15	
105	CO	0915	0940	5.39	3	5	15	
109	ND	0915	0940	7.60	3	5	15	
110	JN	0915	0940	6.81	3	5	15	
111	AN	0915	0940	6.03	3	5	15	
112	LW	0940	1005	6.47	2	4	15	
116	CO	0940	1005	5.11	2	4	15	
117	ND	0940	1005	5.74	2	4	15	
118	JN	0940	1005	6.01	2	4	15	
119	AN	0940	1005	5.13	2	4	15	
120	LW	1005	1030	5.81	2	4	14	
124	CO	1005	1030	4.74	2	4	14	
125	ND	1005	1030	5.10	2	4	14	
126	JN	1005	1030	5.81	2	4	14	
127	AN	1005	1030	4.68	2	4	14	

Attach Calibration Sheet
Attach site map showing grid ID

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEISHMAN _____

 Cal. Gas Exp. Date: _____

Date: 8-4-22 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	
76								ACTIVE-TANK ↓ NDWASTE IN PKU ↘
77								
84								
91								
92								
98								
99								
106								
107								
113								
121								
129								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								

Attach Calibration Sheet
 Attach site map showing grid ID

KIRBY LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIS & WADE _____

 _____ Cal. Gas Exp. Date: _____

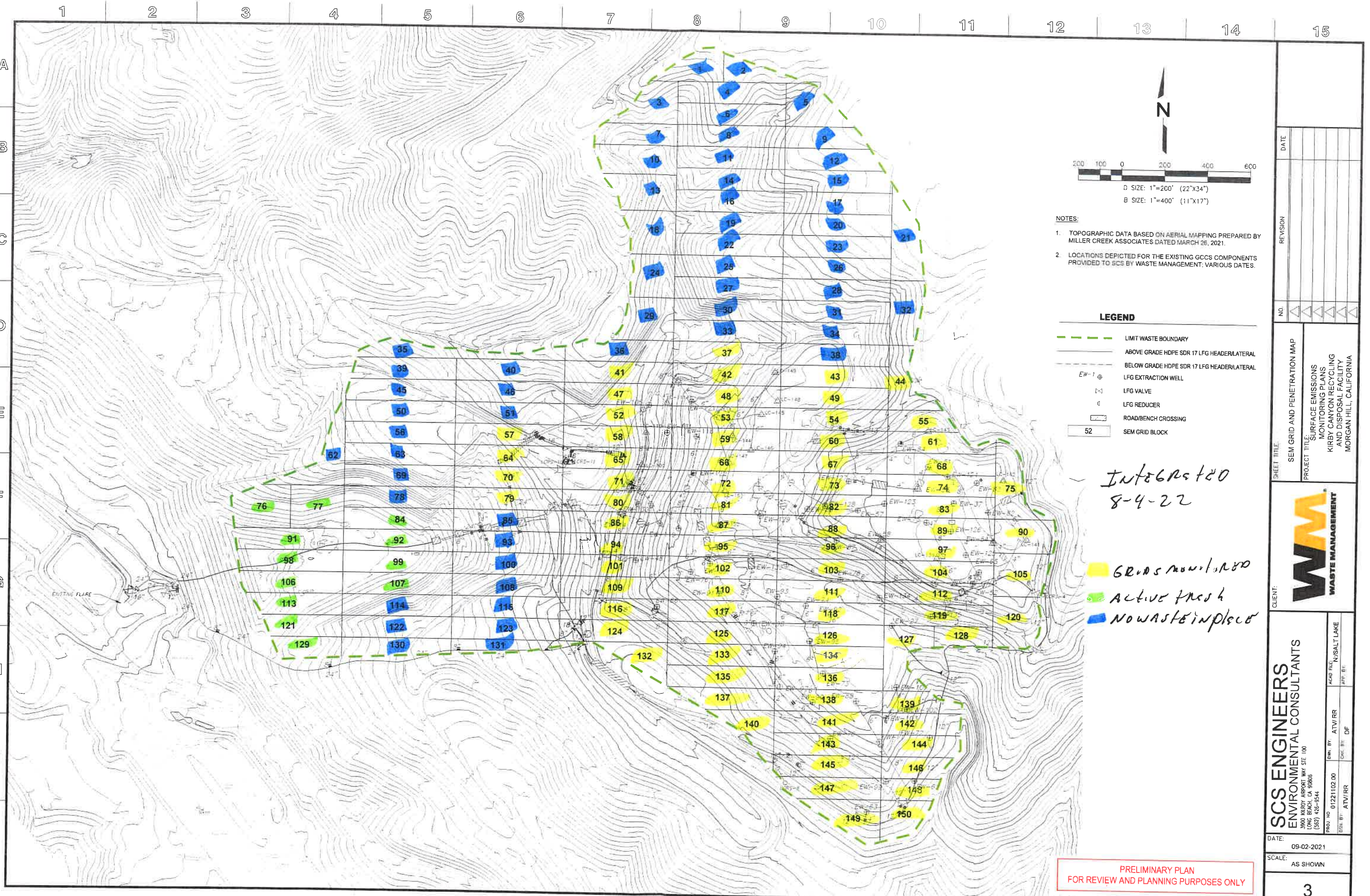
Date: 8-4-22 Instrument Used: _____ Grid Spacing: _____

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	
19								
20								
21								
22								
23								
24								
25								
26								
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36								
38								
39								
40								
45								
46								
50								
51								
56								
62								
63								
69								
78								

Attach Calibration Sheet
 Attach site map showing grid ID

N:\Salt Lake City\Kirby Landfill\SEM Emissions Monitoring Plans\Kirby Surface Emissions Monitoring Plans.dwg, Sep 02, 2021 - 4:39pm By: 27477_r



PRELIMINARY PLAN
FOR REVIEW AND PLANNING PURPOSES ONLY

- NOTES:
- TOPOGRAPHIC DATA BASED ON AERIAL MAPPING PREPARED BY MILLER CREEK ASSOCIATES DATED MARCH 26, 2021.
 - LOCATIONS DEPICTED FOR THE EXISTING GCCS COMPONENTS PROVIDED TO GCS BY WASTE MANAGEMENT, VARIOUS DATES.

LEGEND

- LIMIT WASTE BOUNDARY
- ABOVE GRADE HDPE SDR 17 LFG HEADER/LATERAL
- BELOW GRADE HDPE SDR 17 LFG HEADER/LATERAL
- EW-1 ⊕ LFG EXTRACTION WELL
- ⊗ LFG VALVE
- ⊕ LFG REDUCER
- ⊗ ROAD/BENCH CROSSING
- 52 SEM GRID BLOCK

Integrated
8-4-22

Gras monitor
Active fresh
No waste in place

DATE	
REVISION	
NO.	
SHEET TITLE	SEM GRID AND PENETRATION MAP
PROJECT TITLE	SURFACE EMISSIONS MONITORING PLANS KIRBY CANYON RECYCLING AND DISPOSAL FACILITY MORGAN HILL, CALIFORNIA
CLIENT	WM WASTE MANAGEMENT
DATE	09-02-2021
SCALE	AS SHOWN
PROJ. NO.	01221102.00
DATE	09-02-2021
SCALE	AS SHOWN
DATE	09-02-2021
SCALE	AS SHOWN
DATE	09-02-2021
SCALE	AS SHOWN

Attachment C

Component Leak Monitoring Event Records

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

2022 QUARTER: 3
INITIAL MONITORING PERFORMED BY: RES
FOLLOW-UP MONITORING PERFORMED BY: NA
LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Location	Initial Monitoring			Corrective Action		10-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
Flare Station	08/03/22	ND	Leigh wade	-	-	-	-	-

ND= No Exceedances

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

2022 QUARTER: 3

INITIAL MONITORING PERFORMED BY: RES

FOLLOW-UP MONITORING PERFORMED BY: NA

LANDFILL NAME: Kirby Canyon Recycling & Disposal Facility

Location	Initial Monitoring			Corrective Action		7-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
Flare Station	08/03/22	ND	Leigh wade	-	-	-	-	-

ND= No Exceedances

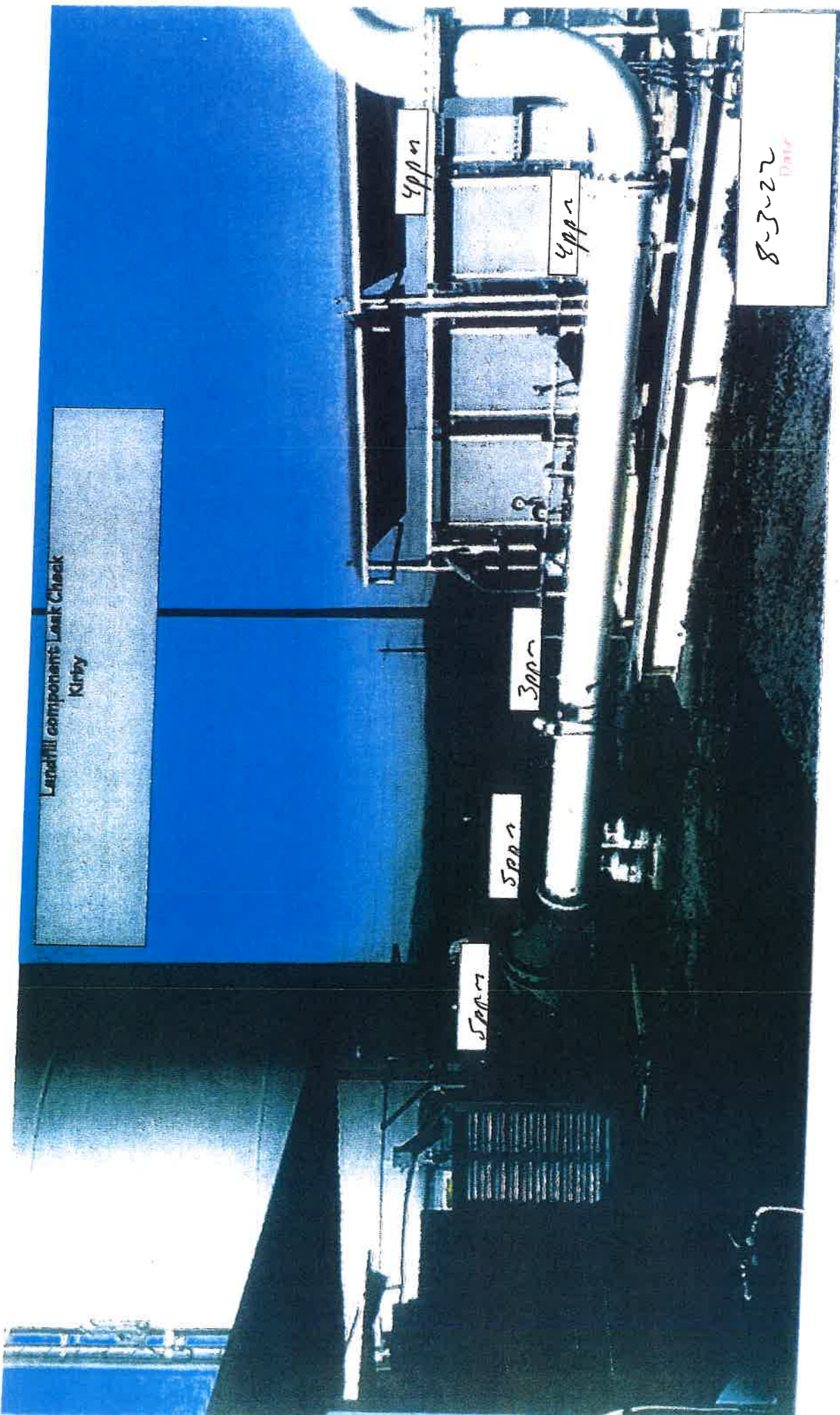
Landfill component Leak Check

Kirby



8-3-22

Lapchill component Leak Check
Kirby

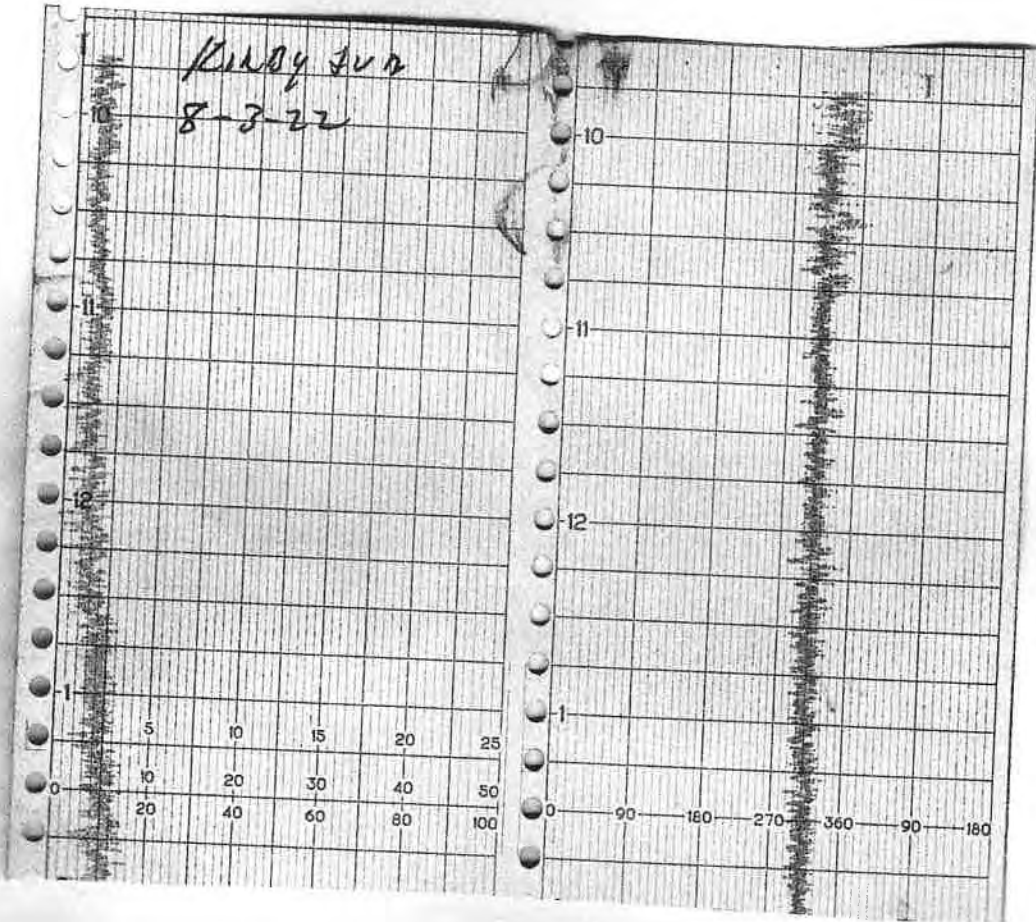


8-3-22
Date

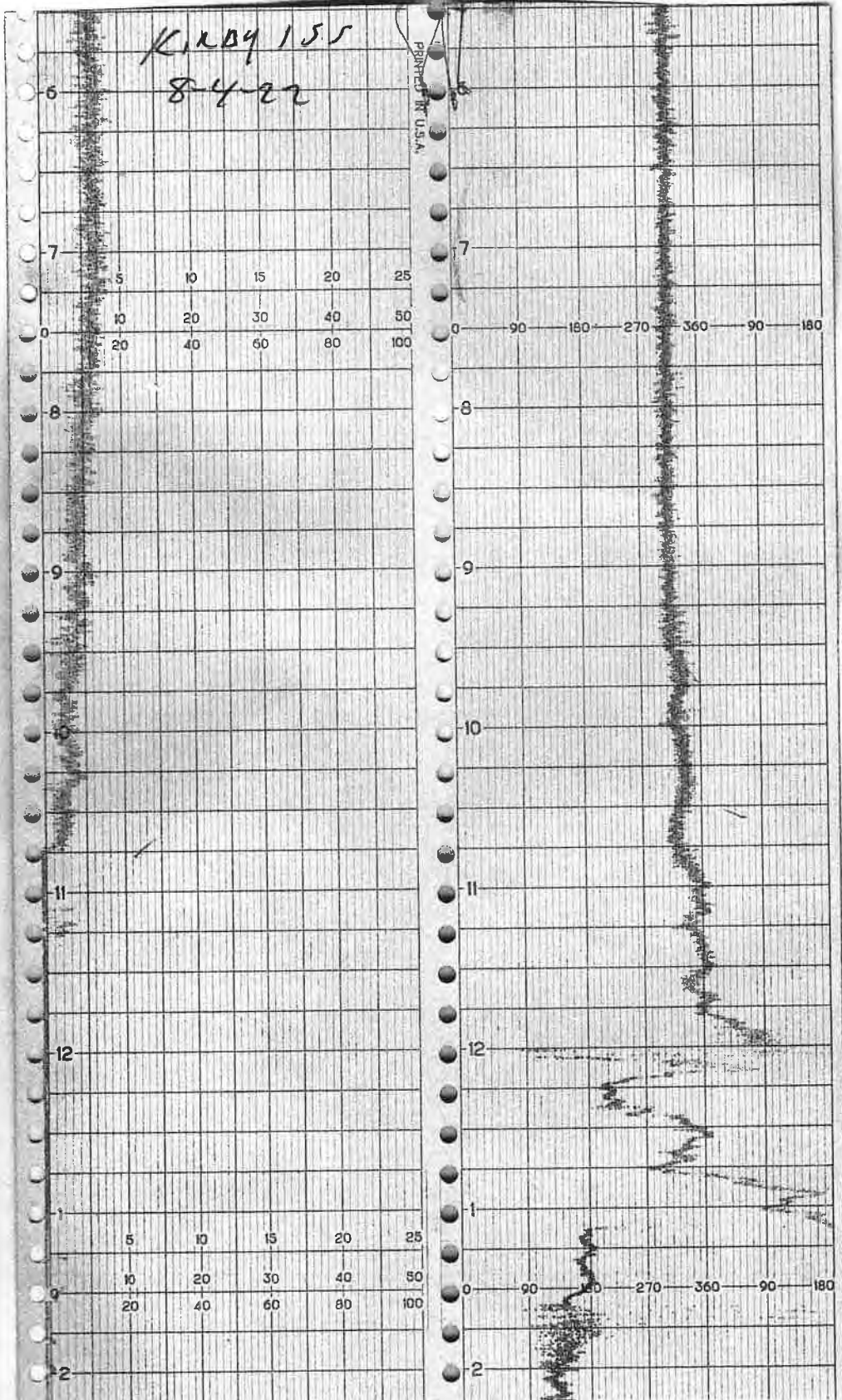
Attachment D

Weather Station Data

WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



16-POINT WIND DIRECTION INDEX

<u>NO</u>	<u>DIRECTION</u>	<u>DEGREES</u>		
		<u>FROM</u>	<u>CENTER</u>	<u>TO</u>
16	NORTH (N)	348.8	<u>360.0</u>	0.0
1	NORTH-NORTHEAST (NNE)	011.3	<u>022.5</u>	033.8
2	NORTHEAST (NE)	033.8	<u>045.0</u>	056.3
3	EAST-NORTHEAST (ENE)	056.3	<u>067.5</u>	078.8
4	EAST (E)	078.8	<u>090.0</u>	101.3
5	EAST-SOUTHEAST (ESE)	101.3	<u>112.5</u>	123.8
6	SOUTHEAST (SE)	123.8	<u>135.0</u>	146.3
7	SOUTH-SOUTHEAST (SSE)	146.3	<u>157.5</u>	168.8
8	SOUTH (S)	168.8	<u>180.0</u>	191.3
9	SOUTH-SOUTHWEST (SSW)	191.3	<u>202.5</u>	213.8
10	SOUTHWEST (SW)	213.8	<u>225.0</u>	236.3
11	WEST-SOUTHWEST (WSW)	236.3	<u>247.5</u>	258.8
12	WEST (W)	258.8	<u>270.0</u>	281.3
13	WEST-NORTHWEST (WNW)	281.3	<u>292.5</u>	303.8
14	NORTHWEST (NW)	303.8	<u>315.0</u>	326.3
15	NORTH-NORTHWEST (NNW)	326.3	<u>337.5</u>	348.8

Attachment E
Calibration Records

**SURFACE EMISSION MONITORING INSTRUMENT
 CALIBRATION LOG**

Site: _____

Purpose: _____

Operator: M. Murphy

Date: 8-6-22 Time: 0800

Model # TUA 1000

Serial # #10 1036346773

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.1</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>7-9-27</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>6</u>	
		2.	<u>6</u>	
		3.	<u>4</u>	
		Average	<u>5.3</u>	
		Equal to or less than 30 seconds?	<input checked="" type="radio"/>	N
		Instrument calibrated to	<u>C₄H₄</u>	gas.

Comments: _____

**SURFACE EMISSION MONITORING INSTRUMENT
 CALIBRATION LOG**

Site: _____

Purpose: _____

Operator: Jim Roberts

Date: 8-6-22 Time: 0815

Model # TVA 1000

Serial # #11 1036346774

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<u>Pass</u> / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.0</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<u>Pass</u> / Fail / NA	<u>500</u>	<u>500</u>	<u>100%</u>
Clean system check (check valve chatter)	<u>Pass</u> / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<u>Pass</u> / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>7-9-22</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<u>Pass</u> / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>6</u>	
		2.	<u>0</u>	
		3.	<u>5</u>	
		Average	<u>516</u>	
		Equal to or less than 30 seconds?	<u>(Y)</u>	N
		Instrument calibrated to	<u>644</u>	gas.

Comments: _____

**SURFACE EMISSION MONITORING INSTRUMENT
 CALIBRATION LOG**

Site: _____

Purpose: _____

Operator: M. N. B. AS

Date: 8-6-22 Time: 0830

Model # TVA 1000

Serial # #12 1036246741

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<u>Pass</u> / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.7</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<u>Pass</u> / Fail / NA	<u>500</u>	<u>500</u>	<u>100</u>
Clean system check (check valve chatter)	<u>Pass</u> / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<u>Pass</u> / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>7-9-22</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<u>Pass</u> / Fail	Time required to attain 90% of Cal Gas ppm		
		1. <u>5</u>		
		2. <u>5</u>		
		3. <u>5</u>		
		Average <u>5.0</u>		
		Equal to or less than 30 seconds?	<u>(Y)</u>	N
		Instrument calibrated to <u>city</u> gas.		

Comments: _____

**SURFACE EMISSION MONITORING INSTRUMENT
 CALIBRATION LOG**

Site: _____

Purpose: _____

Operator: Mr. Marks

Date: 8-6-22 Time: 0845

Model # TVA 1000

Serial # #13 1102746715

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.7</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>7-9-22</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>5</u>	
		2.	<u>5</u>	
		3.	<u>5</u>	
		Average	<u>5.0</u>	
		Equal to or less than 30 seconds?	<input checked="" type="radio"/>	N
		Instrument calibrated to	<u>city</u>	gas.

Comments: _____

**SURFACE EMISSION MONITORING INSTRUMENT
 CALIBRATION LOG**

Site: _____

Purpose: _____

Operator: Mu MBW

Date: 8-6-22 Time: 0930

Model # TCA 1000

Serial # #16 1102746716

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="checkbox"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>23</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="checkbox"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100%</u>
Clean system check (check valve chatter)	<input checked="" type="checkbox"/> Pass / Fail / NA	RESPONSE TIME		
H ₂ supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="checkbox"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>7-9-22</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="checkbox"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>7</u>	
		2.	<u>7</u>	
		3.	<u>7</u>	
		Average	<u>7.0</u>	
		Equal to or less than 30 seconds?	<input checked="" type="checkbox"/>	N
		Instrument calibrated to	<u>City</u>	gas.

Comments: _____



CUSTOMER: RES Unit #10

SERIAL NUMBER: 1036246773

TECHNICIAN: M. Roberts DATE: 7-9-22

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	0.69	< 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.



CUSTOMER: MAS unit # 11

SERIAL NUMBER: 1036346774

TECHNICIAN: M. [Signature] DATE: 7-9-27

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	0.52	< 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.



CUSTOMER: RES Vault #12

SERIAL NUMBER: 1036246741

TECHNICIAN: M. MORTS DATE: 9-9-17

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	503	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.46	< 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.



CUSTOMER: RES UNIT #13

SERIAL NUMBER: 1102746775

TECHNICIAN: M. MURPHY DATE: 7-9-22

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	99	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.89	< 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.



CUSTOMER: RES Unit #16

SERIAL NUMBER: 1102746976

TECHNICIAN: M. Morris DATE: 7-9-22

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	501	+/- 125
10000	10000	10,021	+/- 2500
< 1	ZERO GAS	0.69	< 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.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: KINBY INSTRUMENT MAKE: HITEN 70
 MODEL: HVA 100 EQUIPMENT #: 10 SERIAL #: 1026346773
 MONITORING DATE: 8-3-22 TIME: 0925

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: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>507</u> ppm	<u>457</u> ppm	<u>5</u>
#2	<u>495</u> ppm	<u>445</u> ppm	<u>5</u>
#3	<u>501</u> ppm	<u>451</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #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	<u>0.11</u> ppm	<u>507</u> ppm	<u>7</u>
#2	<u>0.09</u> ppm	<u>495</u> ppm	<u>5</u>
#3	<u>0.06</u> ppm	<u>501</u> ppm	<u>1</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.86</u> #DIV/0! Must be less than 10%

Performed By: LEISHA WADG Date/Time: 8-3-22 - 0925

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: KIRBY INSTRUMENT MAKE: Herao
 MODEL: LVA 1000 EQUIPMENT #: 11 SERIAL #: 1036346774
 MONITORING DATE: 8-3-22 TIME: 0925

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: <u>(Upwind + Downwind)</u> 2
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>501</u> ppm	<u>451</u> ppm	<u>4</u>
#2	<u>492</u> ppm	<u>442</u> ppm	<u>4</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #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	<u>0.09</u> ppm	<u>501</u> ppm	<u>1</u>
#2	<u>0.04</u> ppm	<u>492</u> ppm	<u>8</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.60</u> #DIV/0! Must be less than 10%

Performed By: CSLVIN ORTIZ Date/Time: 8-3-22-0925

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: ICADY INSTRUMENT MAKE: Hanna
 MODEL: 4VA 100 EQUIPMENT #: 12 SERIAL #: 103624674/
 MONITORING DATE: 8-3-22 TIME: 0925

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
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>489</u> ppm	<u>439</u> ppm	<u>7</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>7</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>7</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>7</u> #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	<u>0.15</u> ppm	<u>489</u> ppm	<u>11</u>
#2	<u>0.10</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.08</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.73</u> #DIV/0! Must be less than 10%

Performed By NICK BENKUS Date/Time: 8-3-22 0925

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Linby INSTRUMENT MAKE: Honno
 MODEL: LVA1000 EQUIPMENT #: 13 SERIAL #: 1102746775
 MONITORING DATE: 8-3-22 TIME: 0925

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: <u>(Upwind + Downwind)</u> 2
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>506</u> ppm	<u>456</u> ppm	<u>4</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>4</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #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	<u>0.14</u> ppm	<u>506</u> ppm	<u>6</u>
#2	<u>0.10</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.06</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.40</u> #DIV/0! Must be less than 10%

Performed By: Josh Rizzo Date/Time: 8-3-22-0925

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME KIRBY INSTRUMENT MAKE THORNO
 MODEL: VIA 1000 EQUIPMENT #: 16 SERIAL # 1102746776
 MONITORING DATE: 8-3-22 TIME 0925

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: <u>(Upwind + Downwind)</u> 2
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>503</u> ppm	<u>453</u> ppm	<u>5</u>
#2	<u>497</u> ppm	<u>447</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #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	<u>0.09</u> ppm	<u>503</u> ppm	<u>3</u>
#2	<u>0.07</u> ppm	<u>497</u> ppm	<u>3</u>
#3	<u>0.05</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.40</u> #DIV/0! Must be less than 10%

Performed By: ARNOLDO MARTINEZ Date/Time: 8-3-22-0925

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME KIRBY INSTRUMENT MAKE TECHNO
 MODEL: WA1000 EQUIPMENT #: 10 SERIAL #: 1096346773
 MONITORING DATE: 8-4-22 TIME: 0525

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: <u>(Upwind + Downwind)</u> 2
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>24</u> ppm	<u>21.6</u> ppm	<u>4</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #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	<u>0.14</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.09</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.07</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.3</u> #DIV/0! Must be less than 10%

Performed By: LEISHA NOO Date/Time: 8-4-22 0525

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME KINDY INSTRUMENT MAKE HANNO
 MODEL: HA1000 EQUIPMENT #: 11 SERIAL #: 1036346774
 MONITORING DATE: 8-4-22 TIME: 0525

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: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>23</u> ppm	<u>20.7</u> ppm	<u>6</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #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	<u>0.15</u> ppm	<u>29</u> ppm	<u>2</u>
#2	<u>0.10</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.09</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By: CSCVIN ORTIZ Date/Time: 8-4-22 - 0525

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Kindy INSTRUMENT MAKE Hanna
 MODEL: LVA1000 EQUIPMENT #: 12 SERIAL #: 1036246741
 MONITORING DATE: 8-4-22 TIME 0525

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: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>24</u> ppm	<u>21.6</u> ppm	<u>4</u>
#2	<u>24</u> ppm	<u>21.6</u> ppm	<u>4</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #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	<u>0.07</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.05</u> ppm	<u>24</u> ppm	<u>1</u>
#3	<u>0.05</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By Nick Banks Date/Time: 8-4-22 - 0525

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME KINDY INSTRUMENT MAKE HERNO
 MODEL: LVA 1000 EQUIPMENT #: 13 SERIAL #: 1102746775
 MONITORING DATE: 8-4-22 TIME 0825

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: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #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	<u>0.14</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.11</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.09</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: Josh Nard Date/Time 8-4-22-0525

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME: KINDY INSTRUMENT MAKE HANNA
 MODEL: LVA1000 EQUIPMENT # 16 SERIAL #: 1102746776
 MONITORING DATE: 8-4-22 TIME 0525

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: <u>(Upwind + Downwind)</u> 2
<u>2.4</u> ppm	<u>2.8</u> ppm	<u>2.6</u> ppm

Background Value = 2.6 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	<u>23</u> ppm	<u>20.7</u> ppm	<u>7</u>
#2	<u>24</u> ppm	<u>21.6</u> ppm	<u>7</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>7</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>7</u> #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	<u>0.11</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.07</u> ppm	<u>24</u> ppm	<u>1</u>
#3	<u>0.05</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>4.0</u> #DIV/0! Must be less than 10%

Performed By: ARNOLDO MARTINEZ Date/Time: 8-4-22 0525

Intermountain Specialty Gases

520 N. Kings Road
Nampa, ID 83687 (USA)
Phone (800) 552-5003, Fax (208) 466-9143
www.isgases.com



CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

Lot # 20-7421
Mfg. Date: 5/20/2020
Expiration Date:
Transfill Date: see cylinder

Parent Cylinder ID Number: NY02268

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
Title: Quality Assurance Manager
Certificate Date: 5/20/2020

EnviroSupply Service INC.

Concentration (Mole%) Accuracy

- 20.9% Oxygen
- Bal. Nitrogen

Comments: 3.64% @ 70°F and 1,000 PSIG

Exp Date

7/10/2024

Lot#: 20-7421

P/N: 01-100

103 L

1391 Kaiser Avenue, Irvine, CA 92614

757-0353 or (800) 201-8150 Fax (949) 757-0363



CONTAINS OXYGEN
 Reacts with...
 Do not...
 Use a...
 Dispose of...
 DO NOT...
 Filled on...
 5/24/...

103-01-100
Oxygen 20.9%

103 L
Lot#



INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

Composition

Methane

Air

Certification

25 ppm

Balance

Analytical Accuracy

± 5%

Lot #	17-6074
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Mfg. Date: 10/16/2017

Parent Cylinder ID 17161

Number:

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

ProSupply Service INC.

Concentration (Mole%) Accuracy
+/- 5%
(CH₄) - 25 ppm
- Balance

Pressure 3,678 @ 70°F and 1,000 PSIG

Exp Date
7/10/2024

Lot#: 17-6074

P/N:23-0025

103 L

Kaiser Avenue, Irvine, CA 92614
757-0363 or (800) 201-8150 Fax (949) 757-0363

Methane



CONTAINS GAS UNDER PRESSURE
Read label before use. Use the label at hand. Use appropriate
Do not handle until all safety
protective gloves, protective
Use a back flow preventer
slowly. Close valve after use
sunlight when ambient temperature
use
Dispose of content under
DO NOT REMOVE THIS LABEL
Federal law forbids transportation
5124). Federal law prohibits

103-23-0025
Methane 25 ppm/
Oxygen 20.9%/ Nitrogen

103 L

Lot #
17-6074

COA



2 of 2



INTERMOUNTAIN SPECIALTY GASES

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800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy</u>
Methane	25 ppm	± 5%
Air	Balance	

Lot #	17-6074
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Mfg. Date: 10/16/2017

Parent Cylinder ID 17161

Number:

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

MicroSupply Service INC.

Concentration (Mole%) Accuracy
Methane (CH₄) - 25 ppm
- Balance +/- 5%

Methane



CONTAINS Gas
Read label before use
label at hand. Use
Do not handle and
protective gloves
Use a back flow
slowly. Close valve
sunlight when not
use
Dispose of contents
DO NOT REWORK
Federal law limits
5124). Federal

Contents: 3.6ft³ @ 70°F and 1,000 PSIG

Exp Date
4/21/2022

Lot#: 17-6074

P/N:23-0025

103 L

1 Kaiser Avenue, Irvine, CA 92614
714-835-3353 or (800) 201-8150 Fax (949) 757-0363

103-23-0025
Methane 25 ppm/
Nitrogen 20.9% Nitrogen

103 L

Lot #
17-6074



DOT SP 11323 NRC 1100/1505M-1102
TC-SU6495 NRC 76/104

Intermountain Specialty Gases

520 N. Kings Road
Nampa, ID 83687 (USA)
Phone (800) 552-5003, Fax (208) 466-9143
www.isgases.com



"Your calibration gas manufacturer since 1992"

CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
Methane	500 ppm	2%
Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

Lot # 20-7497
Mfg. Date: 7/10/2020
Expiration Date:
Transfill Date: see cylinder
Parent Cylinder ID TWC001763
Number:

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
Title: Quality Assurance Manager
Certificate Date: 7/10/2020

Supply Service INC.

Concentration (Mole%) Accuracy
500 ppm
Balance +/- 2%

70°F and 1,000 PSIG

Exp Date

7/10/2024

Lot#: 20-7497

P/N:23-0500

103 L

Avenue, Irvine, CA 92614

Phone (800) 201-8150 Fax (949) 757-0363

Methane (0.500)



WAR

CONTAINS GAS UNDER PRESSURE

Read label before use. Keep out of reach of children. Label at hand. Use equipment with proper safety features.

Do not handle until all safety precautions are met. Wear protective gloves, protective clothing.

Use a back flow preventive device on the line. Open slowly. Close valve after each use and store in a cool, dry place. Avoid sunlight when ambient temperature is above 50°F.

Dispose of content and/or container in accordance with local, state and federal regulations.

DO NOT REMOVE THIS PRODUCT LABEL

Federal law forbids transportation in motor vehicles (49 CFR 173.301-173.302). Federal law prohibits selling for use in motor vehicles (49 CFR 173.301-173.302).

103-23-0500
Methane 500 ppm/
Nitrogen 20.0%

103 L

Lot #
20-7497

COA



4 of 4



INTERMOUNTAIN SPECIALTY GASES

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CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy</u>
Methane	500 ppm	± 2%
Air	Balance	

Lot #	19-6955
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Mfg. Date: 7/24/2019

Parent Cylinder ID 001763

Number:

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: 7/24/2019



Concentration (Mole%) Accuracy
500 ppm
Balance +/- 2%

70°F and 1,000 PSIG

Exp Date
11/7/2023

Lot#: 19-6955

P/N: 23-0500

103 L

Irvine, CA 92614
201-8150 Fax (949) 757-0363

Methane (CH₄)



CONTAINS GAS UNDER PRESSURE
Read label before use. See back of label at hand. Use equipment properly.
Do not handle until all safety warnings are read and understood. Wear protective gloves, protective clothing, eye protection, and hearing protection.
Use a back flow preventer and use slowly. Close valve after use and in sunlight when ambient temperature is above 50°F.
Dispose of contents and container in accordance with applicable regulations.
DO NOT REMOVE THIS PRODUCT FROM THE CARRIER.
Federal law forbids transportation of this product in a motor vehicle (49 CFR 173.34). Federal law prohibits the use of this product in a motor vehicle.

23-0500
500 ppm/
20.9% Nitrogen

103 L

COA



Lot #
19-6955

4 of 5

DOT SP 11323 NRC 1100/1505M-1102
TC-SU6495 NRC 76/104

CAUTION
FEDERAL LAW FORBIDS
TRANSPORTATION IF
REFILLED-PENALTY UP
TO \$500,000 FINE AND
5 YEARS IMPRISONMENT

Intermountain Specialty Gases

520 N. Kings Road
Nampa, ID 83687 (USA)
Phone (800) 552-5003, Fax (208) 466-9143
www.isgases.com



CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
Methane	500 ppm	2%
Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

Lot # 18-6641
Mfg. Date: 12/18/2018
Expiration Date:
Transfill Date: see cylinder

Parent Cylinder ID
Number: 001763

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
Title: Quality Assurance Manager
Certificate Date: 12/18/2018

Waters Supply Service INC

Concentration (Mole%) Accuracy
(CH₄) - 500 ppm +/- 2%
Balance

3.6 ft³ @ 70°F and 1,000 PSIG

Exp Date
6/26/2023



103 L

1791 Kaiser Avenue, Irvine, CA 92614
757-0353 or (800) 201-8150 Fax (949) 757-0363

500 ppm/
Nitrogen

103 L

COA



Lot #
18-6641

NRC 1100/1505M-1102
NRC 76

Nor



Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

46400 Continental Drive
Chesterfield, MI 48047

Cust Number 07152
Order Number 62891146
PO Number 04548169

Lot Number 9-326-80
Norlab Part# J1971500PA
Cylinder Size 103 Liter
Number of Cyl 1

Date on Manufacture 12/31/2019
Expires 12/2022
Analytical Accuracy +/- 2 %

Customer Part# N/A

Component	Reported Concentration	Requested Concentration
Methane Air	500 ppm Balance	500 ppm 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 20180519 and 20180224

Approved:


David Reed
Lab Technician

Date Signed:

12/31/2019



800.962.7837
www.premiersafety.com

46400 Continental
Chesterfield, MI 48021

Components

Concentration (Mole %)

methane

500 ppm
Balance

0-135-81

accuracy +/- 2%

J1971500PA

103Liters-3.6Cu.Ft.,-1000psig

MFG Date:

11/11/2020

Exp. Date:

11/2023

CALIBRATION GAS



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 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:

David Reed
Lab Technician

Date Signed:

6/13/2022

PREMIER SAFETY

800.962.7837
www.premiersafety.com

33596 Sterling Road
Sterling Heights, MI 48315

Components

Concentration (Mole %)

Air
Oxygen
T.H.C. (as Methane)
Nitrogen

Zero Grade
20.9 %
< 1.0 ppm
Balance

Lot: 2-154-85

Accuracy: Certified

Part: J1002

Contents: 103Liters-3.6Cu.Ft., -1000psig

MFG Date: 6/13/2022

Exp. Date: 06/2025

CALIBRATION GAS





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

Date on Manufacture 6/10/2022
Expires 06/2025
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:

David Reed
Lab Technician

Date Signed:

6/10/2022



800.962.7837
www.premiersafety.com

33596 Sterling Parkway
Sterling Heights, MI

Components

Concentration (Mole-%)

Methane
Air

500 ppm
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



EQUIPCO

SALES & SERVICE

2100 MERIDIAN PARK BLVD
Concord, CA 94520

TO REORDER CALL 1 (888) 234-5678

**METHANE 500ppm
AIR BALANCE**

Analytical Accuracy +/- 2%

103L @ 70F & 1000 PSIG

Lot# 260447

P/N MET-500-103L

EXP: JAN/2025

EQUIPCO

SALES & SERVICE

2100 Meridian Park Boulevard
Concord, CA 94520

TO REORDER CALL 1 (888)-234-5678

AIR ULTRA ZERO THC<0.2 PPM

Analytical Accuracy +/- 5%

103L @ 70F & 1000 PSIG

Lot# 249483

P/N:10003070

EXP: 07/2024

WARNING:
Contents under pressure. Do not use or store near heat
or open flame - exposure to temperatures above 130
degrees Fahrenheit may cause contents to vent or cause
bursting. Never direct container into fire or incinerator.
One should never use compressed gas cylinders for breathing
purposes. Do not use compressed gas cylinders for
purposes other than those intended by the manufacturer.

**CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION
REPORT**

Landfill Name: Kirby Date: 8/4/22
Time: 7:10 AM _____ PM
Instrument Make: TVA-1000 Model: Thermo S/N: 0928538411

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.
Stable Reading = 503 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): _____ ppm (b)

Calculate Background Value:
$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{1.5} \text{ ppm}$$

Performed By: Robb

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: KCRDF

Date: 8/29/22

Time: 7:15 AM _____ PM

Instrument Make: Thermo Model: TVA100B S/N: 0928538411

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.
Stable Reading = 502 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): 2 ppm (b)

Calculate Background Value:

$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{1} \text{ ppm}$$

Performed By: T. Pobles

CALIBRATION PRECISION TEST RECORD

Landfill Name: Krbt Date: 7/6/22
Expiration Date (3 months): 10/6/22
Time: 6:45 AM _____ PM
Instrument Make: TVA1003 Model: Thermal S/N: 0928538411
Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)
Meter Reading for Calibration Gas: 503 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: 501 ppm (f)

Calculate Precision:

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

_____ % (must be < than 10%)

Performed By: [Signature]

RESPONSE TIME TEST RECORD

Date: 7/6/22

Expiration Date (3 months): 10/6/22

Time: 645 AM _____ PM

Instrument Make: TVA 1000B Model: THERMAL S/N: 0928653411

Measurement #1:

Stabilized Reading Using Calibration Gas: 503 ppm
90% of the Stabilized Reading: 450 ppm
Time to Reach 90% of Stabilized Reading after
switching from Zero Air to Calibration Gas: 5 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: 4 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: 5 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = \text{_____ seconds (must be less than 30 seconds)}$$

Performed By: [Signature]

APPENDIX G

COMPONENT LEAK CHECK REPORTS

**KIRBY CANYON RECYCLING & DISPOSAL FACILITY, San Jose, CA
THIRD QUARTER 2022 LFG COMPONENT LEAK MONITORING**

INSTRUMENT FID
 MAKE: Photo Scientific
 MODEL: TVA 1000
 S/N: 1036346773

DATES OF SAMPLING: August 3, 2022
 FIELD TECHNICIANS: Leigh Wade

LOCATION OF LEAK	LEAK CONCENTRATION (ppmv)	DATE OF DISCOVERY	TECHNICIAN	ACTION TAKEN TO REPAIR LEAK	DATE OF REPAIR	DATE OF ANY REQUIRED RE-MONITORING	RE-MONITORED CONCENTRATION (ppmv)
NO EXCEEDANCES WERE DETECTED DURING THE THIRD QUARTER 2022 MONITORING EVENT							
In the event that an exceedance is detected, please initiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.							
NOTE: 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).							
NOTE: Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas, pursuant to BAAQMD Regulation 8-34-301.2.							
ND = Not Detected							

APPENDIX H

MONTHLY SOLID WASTE PLACEMENT TOTALS

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Solid Waste Placement Totals

From July 1, 2022 through December 31, 2022

July	Disposed	August	Disposed	September	Disposed	October	Disposed	November	Disposed	December	Disposed
Total in Tons	19,395	Total in Tons	20,090	Total in Tons	22,163	Total in Tons	24,243	Total in Tons	19,693	Total in Tons	20,092
									Total Disposed	July 1, 2022 through December 31, 2022	125,675

APPENDIX I

WELLFIELD MONITORING LOGS

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - July 1, 5, and 6, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCLC0108	7/1/2022 7:14	44.9	37.7	0.0	17.4	97.2	99.2	-24.4	-38.7
KCLC0109	7/1/2022 7:06	56.0	41.3	0.0	2.7	102.3	102.5	-40.8	-41.7
KCLC0110	7/1/2022 7:03	58.0	41.9	0.1	0.0	113.3	113.4	-41.1	-41.0
KCLC0111	7/1/2022 7:28	57.0	42.9	0.1	0.0	91.0	91.2	-39.4	-1.5
KCLC0112	7/1/2022 7:25	57.0	40.9	0.0	2.1	112.2	112.1	-39.4	-39.4
KCLC0139	7/5/2022 8:19	55.1	44.9	0.0	0.0	124.0	124.1	-21.1	-21.1
KCLC0140	7/5/2022 8:28	29.4	31.8	1.8	37.0	126.2	123.2	-22.4	-3.5
KCLC0141	7/5/2022 7:58	27.8	30.1	0.0	42.1	100.3	100.0	-10.1	-2.5
KCLC0142	7/5/2022 7:51	27.1	29.0	0.0	43.9	82.2	100.0	-0.2	-0.3
KCLC0143	7/5/2022 9:18	16.1	25.0	0.0	58.9	108.8	108.2	-2.4	-0.9
KCLC0145	7/1/2022 11:12	49.8	38.6	1.8	9.8	89.6	89.7	-28.1	-28.0
KCLC0147	7/1/2022 11:07	50.7	38.6	1.7	9.0	76.0	76.0	-37.9	-38.0
KCLC0149	7/1/2022 11:15	56.0	42.8	0.1	1.1	99.5	102.2	-0.6	-6.8
KCLC0151	7/1/2022 11:04	54.4	42.4	0.1	3.1	115.1	115.1	-9.8	-9.8
KCLC0152	7/1/2022 11:00	41.0	36.9	0.4	21.7	112.4	111.9	-20.8	-17.6
KCLC0153	7/1/2022 11:19	47.3	41.2	0.0	11.5	97.3	97.2	-0.7	-0.1
KCLC0154	7/1/2022 11:26	57.9	41.6	0.0	0.5	94.2	97.9	-0.8	-2.5
KCLC0155	7/1/2022 11:32	55.1	43.3	0.0	1.6	104.2	105.8	-1.0	-5.5
KCLC0156	7/1/2022 11:39	47.0	38.0	1.6	13.4	95.8	94.9	-32.0	-1.8
KCLC0157	7/1/2022 11:57	44.3	33.7	3.7	18.3	82.6	82.4	-16.8	-2.3
KCLC0158	7/5/2022 9:10	40.1	38.0	0.0	21.9	101.0	99.2	-0.3	-0.3
KCLC0159	7/1/2022 8:44	55.3	40.5	0.4	3.8	109.8	115.2	0.0	-5.5
KCLC0160	7/1/2022 8:26	47.8	36.9	3.0	12.3	110.2	110.2	-41.6	-42.2
KCLC0161	7/1/2022 9:48	42.2	36.8	1.0	20.0	113.9	112.3	-24.7	-16.7
KCYN0014	7/1/2022 7:17	40.6	31.6	0.0	27.8	103.1	102.4	-9.6	-7.3
KCYN0027	7/6/2022 9:29	47.4	39.3	0.0	13.3	119.1	118.8	-37.8	-38.1
KCYN0048	7/1/2022 8:04	30.0	30.7	1.1	38.2	128.3	130.3	-3.9	-3.9
KCYN0051	7/5/2022 9:00	40.1	40.6	0.0	19.3	103.8	102.5	-4.7	-0.2
KCYN0054	7/5/2022 8:12	35.9	32.3	3.1	28.7	84.4	84.4	-33.5	-28.5
KCYN0056	7/5/2022 8:50	54.9	43.8	0.0	1.3	125.9	126.0	-25.2	-25.1
KCYN0057	7/5/2022 8:43	50.4	41.4	0.0	8.2	130.8	130.8	-17.1	-17.6
KCYN0058	7/5/2022 8:38	55.9	43.2	0.0	0.9	117.6	118.0	-0.5	-0.5
KCYN0062	7/6/2022 7:50	52.7	42.0	0.0	5.3	129.7	130.5	-3.3	-10.6
KCYN0063	7/6/2022 7:55	57.4	42.6	0.0	0.0	113.2	117.8	-0.3	-1.5
KCYN0065	7/5/2022 8:02	53.6	41.8	0.0	4.6	108.7	108.7	-1.6	-1.5
KCYN0066	7/1/2022 7:56	54.9	38.4	1.0	5.7	126.1	126.6	-4.4	-5.2
KCYN0070	7/6/2022 8:08	57.0	40.4	0.0	2.6	108.9	111.6	-2.5	-5.9
KCYN0071	7/6/2022 9:17	52.1	40.7	0.0	7.2	129.7	129.7	-11.0	-10.9
KCYN0072	7/6/2022 7:46	58.4	41.6	0.0	0.0	105.5	111.5	-0.4	-3.1
KCYN0074	7/6/2022 9:37	56.6	43.4	0.0	0.0	130.5	130.9	-35.9	-38.8
KCYN0075	7/5/2022 8:34	56.0	43.7	0.0	0.3	130.7	130.4	-27.2	-26.9
KCYN0076	7/1/2022 9:16	49.4	35.9	2.3	12.4	125.0	125.8	-20.3	-16.2
KCYN0078	7/5/2022 7:24	55.5	41.8	0.0	2.7	128.5	127.5	-26.0	-26.6
KCYN0082	7/5/2022 9:14	57.9	42.1	0.0	0.0	113.5	114.4	-0.3	-0.3
KCYN0084	7/5/2022 9:23	51.8	39.8	0.0	8.4	112.3	120.2	-0.1	-0.6
KCYN0086	7/1/2022 12:03	48.3	38.4	1.9	11.4	128.5	123.2	-28.4	-16.3
KCYN0087	7/5/2022 7:38	41.1	38.8	0.0	20.1	130.0	130.3	-21.9	-18.8
KCYN0088	7/6/2022 9:12	51.1	38.0	0.0	10.9	109.8	109.7	-27.7	-28.5
KCYN0089	7/1/2022 9:02	50.3	39.0	1.2	9.5	128.9	126.8	-19.0	-18.4
KCYN0090	7/6/2022 8:58	43.0	35.8	0.0	21.2	106.9	105.7	-35.2	-33.2
KCYN0091	7/6/2022 8:32	57.5	42.5	0.0	0.0	128.7	128.5	-3.5	-7.2
KCYN0092	7/6/2022 9:34	56.5	42.5	0.0	1.0	128.3	128.3	-29.4	-28.5
KCYN0093	7/6/2022 9:41	56.3	43.7	0.0	0.0	124.6	129.7	-0.1	-3.4
KCYN0094	7/6/2022 8:48	57.0	40.4	0.0	2.6	125.4	125.3	-34.5	-35.1
KCYN0095	7/6/2022 8:39	57.1	42.9	0.0	0.0	124.9	125.0	-35.7	-29.4
KCYN0097	7/6/2022 8:12	58.4	41.6	0.0	0.0	118.0	120.2	-4.0	-8.5
KCYN0098	7/6/2022 8:43	57.5	42.5	0.0	0.0	124.5	130.5	-1.1	-2.8
KCYN0099	7/6/2022 8:04	47.5	39.9	0.0	12.6	129.2	128.9	-6.0	-2.6
KCYN0101	7/6/2022 9:25	42.1	33.9	0.0	24.0	97.6	97.7	-1.5	-1.5
KCYN0102	7/6/2022 9:04	35.3	33.2	0.0	31.5	102.7	102.5	-1.7	-1.6
KCYN0103	7/6/2022 9:21	36.3	34.4	0.0	29.3	121.1	115.1	-15.0	-10.1
KCYN0105	7/1/2022 7:35	57.6	42.4	0.0	0.0	81.6	81.9	-41.8	-41.8
KCYN0118	7/1/2022 10:13	44.5	33.9	2.5	19.1	121.3	121.4	-34.3	-36.3
KCYN0119	7/1/2022 9:23	54.4	41.8	0.5	3.3	129.9	129.0	-6.2	-6.1
KCYN0121	7/1/2022 8:18	49.1	38.0	2.5	10.4	116.6	116.4	-40.1	-40.2

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - July 1, 5, and 6, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCYN0122	7/1/2022 9:39	50.5	38.7	2.1	8.7	115.3	114.6	-35.4	-36.0
KCYN0123	7/5/2022 8:47	48.7	41.4	0.7	9.2	130.8	130.5	-6.6	-6.8
KCYN0124	7/5/2022 9:06	37.8	35.3	0.1	26.8	111.8	104.2	-6.4	-0.4
KCYN0125	7/5/2022 8:08	55.9	44.1	0.0	0.0	130.8	130.7	-14.2	-14.3
KCYN0126	7/5/2022 8:16	54.1	43.1	0.0	2.8	126.1	126.0	-9.3	-10.0
KCYN0127	7/5/2022 8:54	52.6	41.6	0.0	5.8	114.1	114.3	-1.1	-1.1
KCYN0128	7/1/2022 11:52	45.1	38.0	1.5	15.4	130.8	119.4	-25.9	-11.0
KCYN0129	7/1/2022 10:57	53.4	40.3	0.6	5.7	119.4	119.7	-35.0	-35.4
KCYN0130	7/1/2022 7:45	46.0	33.3	1.5	19.2	115.0	113.3	-12.0	-6.5
KCYN0131	7/1/2022 7:38	57.4	42.4	0.0	0.2	115.5	115.5	-40.5	-40.4
KCYN0133	7/5/2022 7:20	54.0	40.2	0.1	5.7	126.1	126.2	-27.1	-26.4
KCYN0134	7/5/2022 7:27	54.4	41.7	0.0	3.9	112.3	112.3	-25.9	-25.8
KCYN0135	7/5/2022 7:31	49.7	42.9	0.0	7.4	130.7	129.9	-23.8	-14.5
KCYNLR04	7/5/2022 7:43	57.2	40.5	0.0	2.3	101.1	101.1	-9.5	-9.9
KCYNLR08	7/6/2022 7:40	39.7	31.5	3.9	24.9	67.1	64.7	-30.2	-43.9
KCYNLR11	7/1/2022 7:10	59.2	40.7	0.0	0.1	65.6	65.6	-0.3	-0.3

*The following wells are approved to operate at a temperature HOV of 145°F: 51, 57, 58, 65, 66, 71, 74, 78, 86, 91, 92, 95, 98, 99, 119, 127, 128, 133, and 135. Wells 56, 75, 76, 87, and 89 are approved to operate at a temperature HOV of 156°F.

As of July 31, 2022, there are 78 vertical wells, 0 horizontal collector, and 3 LCR at KCRDF.

%= percent

in. w.c.= inches in water column

degrees F= degrees Fahrenheit

HOV = Higher Operating Value

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - August 1, 2, 3, 29, and 31, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCLC0108	8/1/2022 8:27	43.7	37.6	0.0	18.7	102.1	94.90	-34.47	-16.13
KCLC0109	8/1/2022 8:19	56.0	42.6	0.4	1.0	99.1	99.80	-35.34	-35.98
KCLC0110	8/1/2022 8:13	57.0	43.0	0.0	0.0	114.2	114.30	-35.00	-35.03
KCLC0111	8/1/2022 7:08	57.1	42.7	0.2	0.0	89.1	89.20	-35.53	-35.25
KCLC0112	8/1/2022 7:04	56.8	43.2	0.0	0.0	112.4	112.40	-34.47	-34.55
KCLC0139	8/3/2022 7:59	54.2	45.8	0.0	0.0	122.4	122.70	-17.37	-16.29
KCLC0140	8/3/2022 7:50	53.0	43.6	0.0	3.4	112.1	120.60	-2.16	-17.37
KCLC0141	8/3/2022 7:09	51.5	36.8	0.0	11.7	95.9	98.40	-1.58	-9.87
KCLC0142	8/3/2022 7:01	38.8	31.4	0.0	29.8	96.2	96.40	-0.13	-0.11
KCLC0143	8/3/2022 9:37	58.0	39.5	0.0	2.5	103.9	106.40	-0.15	-1.80
KCLC0145	8/1/2022 10:33	56.8	43.2	0.0	0.0	86.5	87.60	-18.80	-26.89
KCLC0147	8/1/2022 10:27	56.8	42.3	0.1	0.8	73.4	73.50	-26.22	-25.72
KCLC0149	8/1/2022 10:36	52.1	42.1	0.0	5.8	106.0	105.90	-3.73	-7.22
KCLC0151	8/1/2022 10:22	56.1	43.9	0.0	0.0	114.9	115.10	-7.08	-7.87
KCLC0152	8/1/2022 10:17	53.2	42.6	0.0	4.2	110.8	111.90	-6.89	-9.61
KCLC0153	8/1/2022 10:44	54.5	45.0	0.0	0.5	94.1	97.40	-0.52	-2.87
KCLC0154	8/1/2022 10:49	36.7	36.6	0.0	26.7	101.7	100.70	-3.07	-1.38
KCLC0154	8/1/2022 10:49	36.7	36.6	0.0	26.7	101.7	100.70	-3.07	-1.38
KCLC0155	8/1/2022 10:57	45.2	40.2	0.0	14.6	107.4	104.60	-9.87	-2.77
KCLC0155	8/1/2022 10:57	45.2	40.2	0.0	14.6	107.4	104.60	-9.87	-2.77
KCLC0156	8/1/2022 11:02	57.0	42.7	0.0	0.3	95.3	97.60	-2.52	-15.31
KCLC0157	8/1/2022 9:51	45.9	39.9	0.5	13.7	76.6	77.00	-4.56	-3.47
KCLC0158	8/3/2022 9:20	54.2	44.9	0.0	0.9	80.5	96.40	-0.36	-1.94
KCLC0159	8/1/2022 8:56	49.0	37.3	2.4	11.3	104.0	105.00	-4.03	-7.23
KCLC0160	8/1/2022 8:06	56.1	43.9	0.0	0.0	109.3	109.50	-34.05	-34.42
KCLC0161	8/1/2022 9:39	54.4	43.5	0.0	2.1	112.8	115.00	-9.41	-25.56
KCYN0014	8/1/2022 8:44	62.6	35.2	0.0	2.2	101.2	101.90	-2.44	-3.70
KCYN0027	8/2/2022 9:35	49.8	38.3	0.0	11.9	121.0	120.80	-33.55	-33.14
KCYN0048	8/1/2022 7:54	33.4	33.4	0.0	33.2	129.1	127.80	-0.92	-0.91
KCYN0051	8/3/2022 9:04	50.8	44.2	0.0	5.0	103.0	103.90	-0.54	-2.13
KCYN0054	8/3/2022 7:17	48.3	39.0	0.0	12.7	75.2	76.10	-15.62	-25.01
KCYN0056	8/3/2022 8:24	55.8	44.2	0.0	0.0	125.8	125.80	-19.48	-19.89
KCYN0057	8/3/2022 8:43	52.2	41.1	0.0	6.7	130.0	130.50	-15.88	-16.01
KCYN0058	8/3/2022 9:30	53.0	40.3	1.0	5.7	122.8	122.80	-1.24	-1.25
KCYN0062	8/2/2022 7:26	32.1	32.0	0.1	35.8	130.2	128.90	-14.19	-6.17
KCYN0063	8/2/2022 7:19	42.3	35.3	0.1	22.3	120.6	118.50	-2.21	-0.79
KCYN0065	8/3/2022 7:42	55.9	44.1	0.0	0.0	94.3	109.10	-0.12	-11.58
KCYN0066	8/1/2022 7:41	55.4	39.8	0.0	4.8	127.6	127.90	-10.16	-12.83
KCYN0070	8/2/2022 8:29	48.4	38.0	0.0	13.6	114.4	114.40	-6.35	-6.38
KCYN0071	8/2/2022 8:04	52.6	41.0	0.0	6.4	130.5	128.10	-10.28	-11.62
KCYN0072	8/2/2022 7:35	26.8	29.5	0.0	43.7	112.8	105.10	-5.91	-2.86
KCYN0074	8/2/2022 9:59	56.7	43.3	0.0	0.0	130.4	130.30	-35.80	-34.50
KCYN0075	8/3/2022 8:17	55.8	44.2	0.0	0.0	130.0	130.20	-17.59	-17.07
KCYN0076	8/1/2022 9:14	56.5	43.5	0.0	0.0	130.6	130.50	-7.88	-11.83
KCYN0078	8/2/2022 10:31	53.8	41.2	0.1	4.9	128.7	130.50	-22.18	-21.76
KCYN0082	8/3/2022 9:22	56.1	41.9	0.0	2.0	115.6	115.80	-1.53	-2.22
KCYN0084	8/3/2022 9:42	36.4	34.8	0.0	28.8	122.8	120.40	-1.78	-0.51
KCYN0086	8/1/2022 10:01	56.3	43.0	0.0	0.7	127.0	130.00	-0.93	-9.73
KCYN0087	8/5/2022 9:10	43.3	36.7	0.1	19.9	130.8	130.70	-14.98	-9.40
KCYN0088	8/2/2022 9:29	54.3	35.8	0.0	9.9	110.8	110.90	-25.62	-28.01
KCYN0089	8/1/2022 9:04	50.7	40.1	0.0	9.2	130.1	130.40	-17.04	-17.03
KCYN0090	8/2/2022 9:21	51.0	38.3	0.0	10.7	107.3	108.90	-18.66	-22.46
KCYN0091	8/2/2022 8:47	53.5	41.5	0.0	5.0	129.8	130.10	-14.56	-15.40
KCYN0092	8/2/2022 9:44	57.2	42.1	0.0	0.7	127.3	127.70	-26.51	-27.12
KCYN0093	8/2/2022 9:53	43.7	37.3	0.0	19.0	129.3	127.70	-7.63	-4.62
KCYN0094	8/2/2022 8:57	48.5	38.4	0.1	13.0	125.7	125.30	-32.39	-31.85
KCYN0095	8/2/2022 9:12	57.5	42.5	0.0	0.0	125.6	125.70	-26.17	-28.63
KCYN0097	8/2/2022 8:40	50.5	39.2	0.0	10.3	121.8	121.80	-12.64	-13.22
KCYN0098	8/2/2022 9:07	49.9	39.9	0.0	10.2	128.3	129.30	-6.45	-6.57
KCYN0099	8/2/2022 8:10	56.6	42.8	0.0	0.6	122.5	129.60	-0.32	-2.06
KCYN0101	8/2/2022 7:51	45.6	35.1	0.0	19.3	101.1	101.00	-1.37	-1.30
KCYN0102	8/2/2022 7:43	52.1	37.5	0.0	10.4	105.3	106.90	-0.98	-1.52
KCYN0103	8/2/2022 7:58	56.8	40.6	0.0	2.6	107.3	111.80	-1.11	-2.29
KCYN0105	8/1/2022 7:17	58.4	41.6	0.0	0.0	85.9	85.20	-36.12	-35.66
KCYN0118	8/1/2022 9:34	54.6	42.8	0.0	2.6	120.3	120.40	-29.33	-27.97
KCYN0119	8/1/2022 9:20	56.5	43.5	0.0	0.0	130.6	130.90	-4.61	-5.49
KCYN0121	8/1/2022 7:58	56.4	43.6	0.0	0.0	115.7	115.30	-32.28	-32.25
KCYN0122	8/1/2022 9:26	56.3	43.7	0.0	0.0	114.3	114.40	-28.38	-28.40
KCYN0123	8/3/2022 8:33	49.1	40.9	0.8	9.2	130.2	130.60	-6.44	-7.13
KCYN0124	8/3/2022 9:12	56.1	43.9	0.0	0.0	97.2	105.90	-0.06	-1.42
KCYN0125	8/3/2022 7:28	56.5	43.5	0.0	0.0	130.8	130.80	-11.77	-11.75

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - August 1, 2, 3, 29, and 31, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCYN0126	8/3/2022 8:13	55.8	43.2	0.0	1.0	126.0	126.10	-9.07	-9.73
KCYN0127	8/3/2022 8:54	54.6	42.8	0.0	2.6	110.7	110.90	-2.06	-2.04
KCYN0128	8/1/2022 9:57	57.3	42.7	0.0	0.0	116.1	130.10	-2.20	-22.96
KCYN0129	8/1/2022 10:11	56.6	42.9	0.0	0.5	124.1	124.10	-27.16	-27.13
KCYN0130	8/1/2022 7:39	58.2	41.8	0.0	0.0	114.1	114.10	-1.46	-1.48
KCYN0131	8/1/2022 7:24	56.7	43.3	0.0	0.0	116.9	117.00	-37.28	-36.43
KCYN0133	8/2/2022 10:24	47.5	40.0	0.0	12.5	128.4	128.30	-22.39	-21.41
KCYN0134	8/2/2022 10:45	49.4	39.3	0.0	11.3	113.7	113.60	-21.71	-21.10
KCYN0135	8/2/2022 10:48	55.3	44.1	0.0	0.6	129.6	130.20	-4.46	-8.14
KCYNLR04	8/2/2022 10:56	55.4	38.9	0.0	5.7	101.2	101.10	-8.98	-10.31
KCYNLR08	8/29/2022 11:53	0.3	0.2	19.6	79.9	78.5	78.20	-34.27	-34.25
KCYNLR08	8/29/2022 11:55	0.1	0.1	19.5	80.3	78.4	78.20	-34.02	-34.03
KCYNLR08	8/31/2022 13:59	0.2	0.5	19.8	79.5	94.0	94.70	-33.35	-33.44
KCYNLR11	8/1/2022 8:36	59.1	40.9	0.0	0.0	70.0	70.10	-0.26	-0.22

*The following wells are approved to operate at a temperature HOV of 145°F: 51, 57, 58, 65, 66, 71, 74, 78, 86, 91, 92, 95, 98, 99, 119, 127, 128, 133, and 135. Wells 56, 75, 76, 87, and 89 are approved to operate at a temperature HOV of 156°F .
As of August 31, 2022, there are 78 vertical wells, 0 horizontal collector, and 3 LCR at KCRDF.

%= percent

in. w.c.= inches in water column

degrees F= degrees Fahrenheit

HOV = Higher Operating Value

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - September 2, 7, 8, and 9, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCLC0108	9/2/2022 9:06	57.5	42.1	0.0	0.4	69.3	83.0	-4.4	-24.8
KCLC0109	9/2/2022 8:41	57.5	42.5	0.0	0.0	101.4	101.7	-30.0	-30.0
KCLC0110	9/2/2022 8:30	57.4	42.5	0.0	0.1	113.4	113.5	-30.4	-29.7
KCLC0111	9/2/2022 9:23	57.2	42.8	0.0	0.0	94.3	94.4	-26.0	-26.0
KCLC0112	9/2/2022 9:18	57.2	42.0	0.0	0.8	113.7	113.7	-25.4	-25.3
KCLC0139	9/9/2022 7:44	53.2	43.8	0.0	3.0	124.5	124.6	-13.6	-13.6
KCLC0140	9/9/2022 7:40	35.1	34.8	0.6	29.5	126.4	122.9	-12.9	-0.7
KCLC0141	9/9/2022 7:20	31.5	31.4	0.0	37.1	99.8	99.0	-9.7	-1.5
KCLC0142	9/9/2022 7:16	20.3	24.8	0.0	54.9	102.5	102.5	-0.6	-0.6
KCLC0143	9/9/2022 8:31	23.3	27.4	0.2	49.1	109.3	109.5	-1.3	-0.8
KCLC0145	9/8/2022 10:19	57.2	41.6	0.2	1.0	100.1	100.2	-21.8	-21.7
KCLC0147	9/8/2022 10:15	41.0	32.7	3.6	22.7	92.3	94.1	-20.5	-4.4
KCLC0149	9/8/2022 10:23	47.9	40.1	0.0	12.0	111.5	111.7	-7.0	-4.5
KCLC0151	9/8/2022 10:08	55.4	43.1	0.0	1.5	115.8	115.8	-7.5	-8.3
KCLC0152	9/8/2022 10:03	47.6	40.4	0.0	12.0	113.8	113.9	-12.6	-12.6
KCLC0153	9/8/2022 10:26	43.3	40.3	0.0	16.4	101.5	101.5	-3.5	-1.9
KCLC0154	9/8/2022 10:30	50.1	41.0	0.0	8.9	101.6	102.3	-1.2	-2.3
KCLC0155	9/8/2022 10:33	54.7	43.0	0.0	2.3	108.1	108.1	-2.0	-3.4
KCLC0156	9/8/2022 10:37	55.4	42.7	0.0	1.9	98.8	98.7	-14.2	-19.5
KCLC0157	9/9/2022 8:39	48.8	34.9	2.0	14.3	73.7	73.6	-21.0	-22.0
KCLC0158	9/9/2022 8:22	34.8	35.0	0.5	29.7	106.0	106.0	-3.1	-1.9
KCLC0159	9/2/2022 10:04	47.1	37.0	2.4	13.5	105.5	104.4	-4.3	-1.3
KCLC0160	9/2/2022 9:59	55.6	44.4	0.0	0.0	110.1	110.4	-24.4	-24.4
KCLC0161	9/2/2022 10:30	46.2	40.6	0.0	13.2	114.6	112.9	-19.0	-13.1
KCYN0014	9/2/2022 9:12	56.1	35.3	0.0	8.6	103.5	103.6	-6.6	-7.8
KCYN0027	9/7/2022 9:29	49.5	39.8	0.0	10.7	119.7	119.8	-28.1	-29.8
KCYN0048	9/2/2022 9:47	55.5	42.8	0.0	1.7	100.4	127.9	-0.1	-3.0
KCYN0051	9/9/2022 8:14	45.4	41.0	0.0	13.6	104.3	104.1	-3.5	-1.3
KCYN0054	9/9/2022 7:25	35.0	28.7	3.8	32.5	91.8	90.5	-22.9	-17.7
KCYN0056	9/9/2022 8:12	52.0	41.5	0.3	6.2	127.3	127.3	-15.8	-15.8
KCYN0057	9/9/2022 8:03	51.8	42.4	0.0	5.8	128.4	127.3	-13.0	-12.8
KCYN0058	9/9/2022 7:59	55.5	40.7	0.1	3.7	87.4	91.4	-0.6	-0.6
KCYN0062	9/7/2022 7:47	53.8	42.5	0.0	3.7	129.7	130.7	-2.6	-5.7
KCYN0063	9/7/2022 7:43	57.1	42.8	0.0	0.1	111.3	117.9	-0.1	-1.3
KCYN0065	9/9/2022 7:31	51.4	40.5	0.8	7.3	109.9	111.8	-0.4	-0.9
KCYN0066	9/2/2022 9:43	50.1	40.3	0.0	9.6	128.0	128.2	-15.6	-21.6
KCYN0070	9/7/2022 8:38	46.0	38.5	0.0	15.5	113.4	112.6	-5.6	-3.2
KCYN0071	9/7/2022 8:18	49.7	40.9	0.0	9.4	129.1	129.1	-12.4	-12.4
KCYN0072	9/7/2022 7:50	57.0	43.0	0.0	0.0	102.3	111.3	-0.2	-1.7
KCYN0074	9/7/2022 9:40	55.0	43.8	0.0	1.2	129.5	129.8	-28.6	-28.2
KCYN0075	9/9/2022 7:55	56.4	41.8	0.1	1.7	130.9	124.4	-11.6	-11.5
KCYN0076	9/2/2022 10:18	55.8	44.2	0.0	0.0	130.7	130.3	-12.8	-16.0
KCYN0078	9/7/2022 10:34	53.9	42.3	0.0	3.8	130.5	130.6	-16.0	-16.0
KCYN0082	9/9/2022 8:26	43.1	36.2	0.1	20.6	116.7	109.5	-3.7	-0.6
KCYN0084	9/9/2022 8:35	56.2	41.9	0.1	1.8	113.7	118.6	-0.5	-0.6
KCYN0086	9/9/2022 8:45	53.9	42.2	0.4	3.5	129.1	129.9	-17.7	-17.7
KCYN0087	9/9/2022 7:06	54.1	41.3	0.0	4.6	128.4	130.8	-5.9	-7.1
KCYN0088	9/7/2022 8:06	51.6	38.8	0.0	9.6	110.1	110.0	-24.3	-24.7
KCYN0089	9/2/2022 10:12	55.3	42.5	0.0	2.2	129.2	129.0	-14.3	-15.5
KCYN0090	9/7/2022 8:14	46.0	38.0	0.0	16.0	105.7	104.7	-24.5	-22.5
KCYN0091	9/7/2022 8:48	52.0	42.8	0.0	5.2	130.6	129.8	-15.1	-16.3
KCYN0092	9/7/2022 9:35	55.2	43.2	0.0	1.6	127.1	127.4	-19.5	-19.5
KCYN0093	9/7/2022 9:45	54.8	44.6	0.0	0.6	114.9	121.2	0.0	-0.2
KCYN0094	9/7/2022 8:59	50.2	41.0	0.0	8.8	125.5	126.3	-26.5	-27.5
KCYN0095	9/7/2022 9:04	51.2	40.2	1.1	7.5	123.5	123.7	-23.9	-25.0
KCYN0097	9/7/2022 8:43	49.7	39.8	0.1	10.4	121.1	121.3	-12.2	-13.0
KCYN0098	9/7/2022 8:55	50.0	41.1	0.0	8.9	130.9	130.5	-6.3	-7.1
KCYN0099	9/7/2022 8:29	49.7	42.2	0.0	8.1	129.6	130.4	-5.0	-5.5
KCYN0101	9/7/2022 7:58	41.4	34.4	0.0	24.2	74.5	74.2	-1.1	-1.0
KCYN0102	9/7/2022 7:55	33.3	32.4	0.0	34.3	108.0	106.8	-1.8	-0.4
KCYN0103	9/7/2022 8:02	37.3	33.2	0.0	29.5	119.3	114.6	-6.4	-5.0
KCYN0105	9/2/2022 9:33	57.0	43.0	0.0	0.0	89.6	89.5	-26.7	-26.7
KCYN0118	9/7/2022 9:51	53.6	43.3	0.0	3.1	122.6	122.7	-22.6	-23.1
KCYN0119	9/2/2022 10:23	55.7	44.0	0.0	0.3	130.8	130.9	-5.0	-5.7
KCYN0121	9/2/2022 9:56	55.9	44.1	0.0	0.0	115.3	114.2	-22.1	-22.5
KCYN0122	9/2/2022 10:26	55.7	43.6	0.0	0.7	115.0	115.2	-20.4	-20.4
KCYN0123	9/9/2022 8:09	45.8	37.9	1.6	14.7	130.8	128.5	-6.5	-3.0
KCYN0124	9/9/2022 8:18	45.3	37.9	0.0	16.8	112.5	112.1	-3.8	-1.2
KCYN0125	9/9/2022 7:36	56.0	44.0	0.0	0.0	130.7	130.8	-8.0	-8.7
KCYN0126	9/9/2022 7:50	53.0	43.0	0.0	4.0	127.0	127.0	-8.5	-9.0
KCYN0127	9/9/2022 8:06	53.1	42.2	0.0	4.7	110.5	110.6	-1.4	-1.4

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - September 2, 7, 8, and 9, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCYN0128	9/9/2022 8:42	53.2	41.4	0.4	5.0	129.5	130.3	-22.2	-22.3
KCYN0129	9/8/2022 10:00	56.7	41.4	0.4	1.5	125.8	125.8	-20.5	-20.5
KCYN0130	9/2/2022 9:38	57.8	41.4	0.0	0.8	114.6	114.9	-3.7	-4.7
KCYN0131	9/2/2022 9:31	56.4	43.4	0.0	0.2	119.1	119.2	-27.2	-27.2
KCYN0133	9/7/2022 10:48	54.0	42.9	0.0	3.1	128.2	128.4	-15.7	-15.7
KCYN0134	9/7/2022 10:27	52.2	42.2	0.0	5.6	111.7	111.7	-14.4	-14.4
KCYN0135	9/7/2022 10:24	52.8	45.0	0.0	2.2	130.3	130.9	-8.8	-11.7
KCYNLR04	9/9/2022 7:11	58.8	41.2	0.0	0.0	101.1	101.1	-1.1	-2.2
KCYNLR08	9/7/2022 7:38	1.3	2.7	19.6	76.4	70.1	69.9	-34.6	-34.6
KCYNLR11	9/2/2022 9:03	58.4	41.6	0.0	0.0	70.7	71.7	-0.7	-2.7

*The following wells are approved to operate at a temperature HOV of 145°F: 51, 57, 58, 65, 66, 71, 74, 78, 86, 91, 92, 95, 98, 99, 119, 127, 128, 133, and 135. Wells 56, 75, 76, 87, and 89 are approved to operate at a temperature HOV of 156°F.

As of September 30, 2022, there are 78 vertical wells, 0 horizontal collector, and 3 LCR at KCRDF.

%= percent

in. w.c.= inches in water column

degrees F= degrees Fahrenheit

HOV = Higher Operating Value

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - October 3, 4, and 5, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCLC0108	10/3/2022 8:13	44.50	34.20	0.00	21.30	96.90	93.40	-37.00	-20.49
KCLC0109	10/3/2022 8:20	58.90	41.10	0.00	0.00	103.20	103.20	-38.56	-38.18
KCLC0110	10/3/2022 8:35	56.80	43.20	0.00	0.00	114.10	114.10	-39.02	-37.54
KCLC0111	10/3/2022 8:42	55.90	42.60	0.30	1.20	92.30	92.40	-36.95	-36.61
KCLC0112	10/3/2022 8:39	56.30	43.70	0.00	0.00	112.10	112.00	-35.27	-36.28
KCLC0139	10/5/2022 10:00	56.00	44.00	0.00	0.00	123.60	124.00	-21.53	-21.52
KCLC0140	10/5/2022 9:11	49.10	38.90	0.00	12.00	114.90	115.10	-3.17	-4.68
KCLC0141	10/5/2022 8:52	56.70	38.70	0.00	4.60	91.40	96.20	-0.23	-1.52
KCLC0142	10/5/2022 8:48	48.20	33.50	0.00	18.30	103.30	103.40	-0.24	-0.21
KCLC0143	10/5/2022 9:21	54.00	36.40	0.00	9.60	103.40	105.10	-0.28	-0.44
KCLC0145	10/3/2022 10:27	57.60	42.30	0.00	0.10	73.10	72.40	-31.55	-31.75
KCLC0147	10/3/2022 10:21	46.70	34.60	2.70	16.00	68.80	68.70	-28.96	-30.57
KCLC0149	10/3/2022 10:30	56.60	42.30	0.00	1.10	90.40	91.60	-3.41	-7.19
KCLC0151	10/3/2022 10:13	56.30	43.70	0.00	0.00	115.20	115.20	-15.30	-16.45
KCLC0152	10/3/2022 10:09	43.50	38.30	0.00	18.20	112.40	111.70	-18.09	-15.50
KCLC0153	10/3/2022 10:33	51.80	41.80	0.00	6.40	98.10	98.80	-1.29	-1.81
KCLC0154	10/3/2022 10:37	37.00	36.20	0.00	26.80	101.40	100.10	-4.03	-1.67
KCLC0155	10/3/2022 10:44	50.20	42.40	0.00	7.40	108.20	108.20	-5.08	-5.24
KCLC0156	10/3/2022 10:52	54.50	43.60	0.00	1.90	97.70	97.70	-29.73	-30.10
KCLC0157	10/5/2022 10:21	51.20	37.50	2.20	9.10	70.10	70.80	-26.38	-29.74
KCLC0158	10/5/2022 10:12	38.70	37.10	0.00	24.20	101.00	99.40	-1.52	-0.83
KCLC0159	10/3/2022 9:21	59.60	40.40	0.00	0.00	106.70	112.50	-2.25	-6.40
KCLC0160	10/3/2022 9:16	56.60	43.40	0.00	0.00	108.70	108.70	-36.59	-36.97
KCLC0161	10/3/2022 9:43	53.60	41.80	0.00	4.60	113.50	114.80	-14.66	-23.90
KCYN0014	10/3/2022 8:09	43.80	30.40	0.10	25.70	102.70	102.30	-13.52	-10.34
KCYN0027	10/4/2022 9:36	46.60	40.10	0.00	13.30	117.90	117.70	-41.62	-41.62
KCYN0048	10/3/2022 9:09	30.80	32.20	0.60	36.40	128.00	126.00	-3.70	-2.83
KCYN0051	10/5/2022 9:28	51.10	42.90	0.00	6.00	102.60	103.00	-1.91	-2.66
KCYN0054	10/5/2022 8:55	47.90	37.20	0.00	14.90	78.30	78.60	-0.77	-0.68
KCYN0056	10/5/2022 9:32	55.80	43.70	0.00	0.50	126.70	83.80	-27.00	-27.17
KCYN0057	10/5/2022 9:50	52.30	41.20	0.00	6.50	127.90	128.50	-22.31	-22.33
KCYN0058	10/5/2022 9:54	56.70	43.00	0.00	0.30	101.90	102.20	-1.16	-1.10
KCYN0062	10/3/2022 11:20	40.10	28.60	0.10	31.20	130.70	128.60	-8.87	-2.64
KCYN0063	10/3/2022 11:07	40.10	34.90	0.00	25.00	118.50	119.10	-2.63	-1.17
KCYN0065	10/5/2022 9:06	56.90	41.80	0.00	1.30	106.40	110.70	-0.29	-9.39
KCYN0066	10/3/2022 9:02	41.70	37.60	0.00	20.70	127.50	126.80	-31.23	-20.89
KCYN0070	10/4/2022 7:54	51.90	37.40	0.00	10.70	109.30	111.00	-3.49	-5.52
KCYN0071	10/4/2022 8:46	50.20	38.70	0.00	11.10	130.70	130.90	-16.99	-17.02
KCYN0072	10/3/2022 11:25	30.00	29.40	0.00	40.60	113.00	112.10	-5.44	-2.71
KCYN0074	10/4/2022 9:48	57.00	43.00	0.00	0.00	128.40	128.40	-41.15	-41.39
KCYN0075	10/5/2022 9:57	56.10	43.90	0.00	0.00	129.40	129.50	-22.00	-21.93
KCYN0076	10/3/2022 9:29	52.30	42.30	0.00	5.40	129.30	127.70	-26.79	-27.45
KCYN0078	10/4/2022 10:06	54.80	43.10	0.00	2.10	129.20	130.10	-29.85	-29.80
KCYN0082	10/5/2022 10:07	57.80	42.20	0.00	0.00	95.30	105.20	-0.02	-0.85
KCYN0084	10/5/2022 9:25	40.00	35.40	0.00	24.60	123.00	120.80	-1.87	-0.94
KCYN0086	10/5/2022 10:29	54.90	41.40	0.40	3.30	129.80	130.20	-24.58	-25.37
KCYN0087	10/5/2022 8:43	40.50	36.50	0.00	23.00	130.60	127.20	-16.60	-16.22
KCYN0088	10/4/2022 8:41	51.00	38.20	0.00	10.80	109.90	109.90	-34.77	-34.75
KCYN0089	10/3/2022 9:25	50.30	38.90	0.00	10.80	130.30	129.90	-25.28	-25.27
KCYN0090	10/4/2022 8:29	49.20	38.00	0.00	12.80	99.00	99.20	-21.17	-21.16
KCYN0091	10/4/2022 7:40	46.30	39.30	0.00	14.40	129.30	129.50	-25.57	-22.69
KCYN0092	10/4/2022 9:41	56.00	41.00	0.00	3.00	126.60	126.70	-33.19	-33.97
KCYN0093	10/4/2022 9:52	43.90	39.30	0.00	16.80	128.40	127.40	-6.59	-4.88
KCYN0094	10/4/2022 8:08	46.70	37.60	0.00	15.70	125.10	125.00	-38.79	-38.52
KCYN0094	10/4/2022 11:40	30.80	27.40	1.40	40.40	72.10	72.00	-6.61	-6.59
KCYN0095	10/4/2022 8:17	53.40	40.40	1.40	4.80	123.00	122.90	-37.45	-35.06
KCYN0097	10/4/2022 7:46	48.20	38.60	0.00	13.20	121.00	121.00	-19.26	-19.24
KCYN0098	10/4/2022 8:12	44.50	38.20	0.00	17.30	126.80	124.90	-10.43	-8.25
KCYN0099	10/3/2022 11:29	43.70	37.20	0.00	19.10	129.60	126.20	-8.82	-4.89
KCYN0101	10/4/2022 8:55	49.70	37.20	0.00	13.10	75.60	75.50	-0.83	-0.83
KCYN0102	10/4/2022 8:33	51.70	37.80	0.00	10.50	101.10	101.20	-1.18	-1.08
KCYN0103	10/4/2022 8:51	58.00	42.00	0.00	0.00	90.50	103.70	-1.62	-2.66
KCYN0105	10/3/2022 8:48	56.90	43.10	0.00	0.00	86.90	86.90	-37.36	-38.14
KCYN0118	10/3/2022 9:40	55.60	43.20	0.00	1.20	120.30	120.40	-33.45	-28.50
KCYN0119	10/3/2022 9:34	51.10	40.60	0.00	8.30	130.50	130.50	-10.94	-11.30
KCYN0121	10/3/2022 9:13	56.40	41.30	0.00	2.30	113.00	113.00	-34.87	-34.87
KCYN0122	10/3/2022 9:37	56.40	43.60	0.00	0.00	112.70	112.80	-30.40	-30.45
KCYN0123	10/5/2022 9:40	45.40	37.30	1.50	15.80	126.00	115.70	-5.78	-3.68
KCYN0124	10/5/2022 10:15	56.60	41.00	0.00	2.40	108.50	110.50	-0.31	-0.53
KCYN0125	10/5/2022 9:00	57.30	41.10	0.00	1.60	130.50	130.30	-18.82	-18.88
KCYN0126	10/5/2022 10:04	55.50	42.40	0.00	2.10	125.80	125.90	-15.21	-15.10

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - October 3, 4, and 5, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCYN0127	10/5/2022 9:44	57.90	42.10	0.00	0.00	101.00	103.70	-2.47	-2.50
KCYN0128	10/5/2022 10:25	52.30	42.00	0.00	5.70	130.50	129.10	-29.02	-29.07
KCYN0129	10/3/2022 10:05	54.30	41.30	0.60	3.80	124.40	124.50	-29.80	-29.81
KCYN0130	10/3/2022 8:57	52.90	39.20	0.00	7.90	114.80	114.60	-8.39	-8.60
KCYN0131	10/3/2022 8:45	56.90	43.10	0.00	0.00	114.00	114.30	-37.97	-38.31
KCYN0133	10/4/2022 10:00	45.70	40.60	0.00	13.70	127.50	123.30	-29.64	-19.58
KCYN0134	10/4/2022 10:09	52.60	42.00	0.00	5.40	112.10	112.10	-28.75	-28.83
KCYN0135	10/4/2022 10:17	51.80	42.50	0.00	5.70	129.60	130.60	-22.11	-25.72
KCYNLR04	10/4/2022 10:24	56.50	40.70	0.00	2.80	100.60	100.60	-8.20	-9.78
KCYNLR08	10/3/2022 11:14	1.60	11.80	17.60	69.00	76.30	76.50	-46.50	-46.50
KCYNLR11	10/3/2022 8:18	60.10	39.90	0.00	0.00	60.20	61.30	-0.14	-0.20

*The following wells are approved to operate at a temperature HOV of 145°F: 51, 57, 58, 65, 66, 71, 74, 78, 86, 91, 92, 95, 98, 99, 119, 127, 128, 133, and 135. Wells 56, 75, 76, 87, and 89 are approved to operate at a temperature HOV of 156°F .

As of October 31, 2022, there are 78 vertical wells, 0 horizontal collector, and 3 LCR at KCRDF.

%= percent

in. w.c.= inches in water column

degrees F= degrees Fahrenheit

HOV = Higher Operating Value

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - November 1, 2, 4, 7, and 17, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCLC0108	11/1/2022 7:47	53.3	38.2	0.3	8.2	75.7	82.0	-11.0	-32.3
KCLC0109	11/1/2022 7:53	59.1	40.4	0.0	0.5	99.7	99.8	-38.7	-38.7
KCLC0110	11/1/2022 8:00	57.4	42.6	0.0	0.0	106.8	106.7	-38.3	-38.3
KCLC0111	11/1/2022 8:08	56.9	43.1	0.0	0.0	81.4	81.9	-38.0	-37.3
KCLC0112	11/1/2022 8:05	57.2	42.8	0.0	0.0	108.3	108.4	-35.5	-35.9
KCLC0139	11/4/2022 11:33	53.4	42.8	0.0	3.8	125.0	125.1	-23.2	-23.2
KCLC0140	11/4/2022 11:30	40.4	36.7	0.0	22.9	113.5	113.5	-5.4	-5.4
KCLC0141	11/4/2022 12:20	25.5	30.2	0.0	44.3	92.9	95.1	-2.1	-2.1
KCLC0142	11/4/2022 12:24	19.2	26.9	0.0	53.9	98.4	72.8	-0.2	-0.2
KCLC0143	11/4/2022 11:59	27.8	30.9	0.0	41.3	105.6	104.7	-0.9	-0.7
KCLC0145	11/2/2022 9:26	57.7	42.2	0.1	0.0	55.0	55.0	-34.1	-33.5
KCLC0147	11/2/2022 9:21	53.8	39.4	1.7	5.1	53.1	53.1	-33.5	-33.6
KCLC0149	11/2/2022 9:29	47.4	38.6	0.0	14.0	95.6	93.8	-7.4	-2.1
KCLC0151	11/2/2022 9:17	56.6	43.4	0.0	0.0	114.4	114.5	-24.0	-24.6
KCLC0152	11/2/2022 9:12	44.6	38.3	0.0	17.1	109.1	108.2	-10.3	-9.8
KCLC0153	11/2/2022 9:33	49.3	41.7	0.0	9.0	98.6	98.8	-2.2	-2.4
KCLC0154	11/2/2022 9:37	47.1	40.0	0.0	12.9	94.0	94.0	-0.8	-0.8
KCLC0155	11/2/2022 9:41	51.2	41.6	0.0	7.2	106.9	107.0	-5.7	-5.9
KCLC0156	11/2/2022 9:45	55.1	43.0	0.0	1.9	96.7	96.7	-32.6	-32.9
KCLC0157	11/2/2022 9:58	50.2	39.1	2.5	8.2	50.6	50.5	-25.6	-25.6
KCLC0158	11/4/2022 12:12	38.2	35.7	0.0	26.1	83.7	81.8	-1.3	-1.1
KCLC0159	11/1/2022 8:44	49.6	38.0	2.0	10.4	104.2	103.4	-3.9	-2.2
KCLC0160	11/1/2022 8:38	56.4	43.6	0.0	0.0	100.2	100.5	-36.1	-35.9
KCLC0161	11/1/2022 11:12	42.4	37.7	0.0	19.9	114.7	114.6	-28.5	-26.2
KCYN0014	11/1/2022 7:41	52.9	32.5	0.0	14.6	98.8	100.2	-2.8	-3.5
KCYN0027	11/1/2022 9:42	45.3	37.8	0.0	16.9	117.9	116.7	-41.2	-33.9
KCYN0048	11/1/2022 8:30	56.4	43.6	0.0	0.0	83.3	125.0	-0.6	-3.4
KCYN0051	11/4/2022 12:05	42.5	40.8	0.0	16.7	102.5	101.8	-3.8	-1.5
KCYN0054	11/4/2022 11:20	40.8	34.2	0.0	25.0	69.1	72.4	-5.3	-10.9
KCYN0056	11/7/2022 8:10	51.0	44.6	0.0	4.4	125.4	125.4	-28.6	-28.5
KCYN0057	11/4/2022 9:08	48.8	40.8	0.0	10.4	126.6	129.3	-24.2	-24.8
KCYN0058	11/4/2022 9:03	56.0	37.0	0.2	6.8	92.2	92.3	-1.6	-1.5
KCYN0062	11/2/2022 7:42	57.8	42.2	0.0	0.0	123.6	128.3	-1.1	-5.2
KCYN0063	11/2/2022 7:37	60.2	39.8	0.0	0.0	110.3	115.8	-0.2	-1.2
KCYN0065	11/4/2022 11:27	57.6	42.4	0.0	0.0	101.5	110.1	-5.0	-16.5
KCYN0066	11/1/2022 8:25	58.6	41.4	0.0	0.0	125.8	126.7	-5.1	-6.9
KCYN0070	11/1/2022 8:55	45.1	36.5	0.0	18.4	111.7	110.8	-6.5	-3.7
KCYN0071	11/1/2022 9:18	51.7	39.8	0.0	8.5	128.7	130.9	-18.4	-19.4
KCYN0072	11/2/2022 7:47	61.6	38.3	0.0	0.1	97.5	104.2	-0.4	-1.2
KCYN0074	11/2/2022 8:44	57.0	43.0	0.0	0.0	130.6	130.8	-43.4	-43.2
KCYN0075	11/4/2022 11:39	55.2	42.8	0.0	2.0	124.4	119.8	-18.8	-18.6
KCYN0076	11/1/2022 10:46	50.5	40.2	0.0	9.3	130.1	130.5	-27.9	-28.4
KCYN0078	11/2/2022 10:53	53.0	41.5	0.0	5.5	130.5	130.5	-29.4	-29.4
KCYN0082	11/4/2022 11:16	47.1	34.5	0.0	18.4	115.0	114.0	-2.1	-1.6
KCYN0084	11/4/2022 11:55	46.0	37.7	0.1	16.2	108.2	108.5	-0.2	-0.2
KCYN0086	11/2/2022 9:50	55.2	42.3	0.6	1.9	130.9	130.4	-22.8	-23.5
KCYN0087	11/2/2022 10:35	38.3	37.0	0.0	24.7	127.1	128.4	-15.1	-15.5
KCYN0088	11/2/2022 8:29	45.9	36.8	0.0	17.3	109.7	97.3	-39.8	-23.1
KCYN0089	11/1/2022 10:51	49.4	39.7	0.0	10.9	130.6	129.5	-24.6	-24.6
KCYN0090	11/2/2022 8:16	41.9	36.1	0.0	22.0	100.6	102.7	-26.0	-28.4
KCYN0091	11/1/2022 8:48	48.8	39.2	0.0	12.0	130.1	126.4	-18.2	-17.1
KCYN0092	11/2/2022 8:40	56.9	42.2	0.0	0.9	126.8	126.7	-34.5	-33.7
KCYN0093	11/2/2022 8:49	57.3	42.7	0.0	0.0	121.5	127.3	-1.2	-2.5
KCYN0094	11/2/2022 8:05	45.1	37.3	0.0	17.6	127.3	126.6	-20.5	-16.0
KCYN0095	11/2/2022 8:09	55.1	40.5	1.5	2.9	123.7	123.9	-37.4	-38.5
KCYN0097	11/1/2022 8:52	42.3	36.9	0.7	20.1	120.7	120.1	-19.3	-13.8
KCYN0098	11/2/2022 8:02	53.6	38.9	0.0	7.5	129.8	129.8	-3.8	-4.6
KCYN0099	11/1/2022 9:00	57.1	42.9	0.0	0.0	125.0	130.5	-0.8	-2.3
KCYN0101	11/1/2022 9:36	43.9	36.5	0.0	19.6	80.7	80.9	-1.0	-0.9
KCYN0102	11/2/2022 8:22	38.5	34.3	0.0	27.2	100.1	100.3	-1.4	-1.3
KCYN0103	11/1/2022 9:21	37.9	34.7	0.0	27.4	117.4	114.2	-7.1	-6.0
KCYN0105	11/1/2022 8:14	56.8	43.2	0.0	0.0	73.8	73.8	-37.8	-38.0
KCYN0118	11/1/2022 11:16	50.8	40.5	0.0	8.7	119.6	119.5	-35.9	-35.9
KCYN0119	11/1/2022 10:57	44.8	37.7	0.0	17.5	130.8	129.1	-12.3	-6.9
KCYN0121	11/1/2022 8:35	55.6	44.4	0.0	0.0	108.7	109.1	-33.9	-33.9
KCYN0122	11/1/2022 11:08	55.2	40.1	0.2	4.5	109.3	109.3	-32.4	-32.4
KCYN0123	11/4/2022 11:45	41.4	35.8	4.3	18.5	122.7	124.3	-2.9	-2.9
KCYN0124	11/4/2022 12:09	51.1	40.9	0.0	8.0	110.9	111.3	-2.0	-2.7
KCYN0125	11/4/2022 11:24	55.6	42.1	0.0	2.3	129.9	127.4	-21.2	-21.6
KCYN0126	11/4/2022 11:35	51.4	41.8	0.0	6.8	125.8	125.8	-16.8	-16.8
KCYN0127	11/4/2022 11:51	33.8	33.2	0.0	33.0	129.8	120.7	-23.8	-3.6

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

Wellfield Monitoring Report - November 1, 2, 4, 7, and 17, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCYN0128	11/4/2022 10:19	43.7	37.2	0.0	19.1	127.9	128.0	-7.7	-7.8
KCYN0129	11/2/2022 9:08	56.2	42.7	0.3	0.8	113.9	113.9	-29.9	-29.9
KCYN0130	11/1/2022 8:21	53.9	39.4	0.0	6.7	114.6	114.6	-9.2	-9.6
KCYN0131	11/1/2022 8:17	57.2	42.7	0.1	0.0	113.7	113.6	-39.1	-38.4
KCYN0133	11/2/2022 10:50	56.0	42.1	0.0	1.9	120.8	124.4	-2.8	-8.3
KCYN0134	11/2/2022 10:56	44.4	39.3	0.0	16.3	112.2	112.1	-28.3	-28.2
KCYN0135	11/2/2022 11:00	46.9	41.0	0.0	12.1	130.3	129.4	-26.4	-15.2
KCYNLR04	11/2/2022 11:06	55.3	38.9	0.2	5.6	100.3	100.3	-8.0	-8.0
KCYNLR04	11/7/2022 8:14	54.8	36.9	0.2	8.1	100.1	100.2	-8.3	-8.3
KCYNLR08	11/17/2022 14:37	0.2	2.6	19.9	77.3	100.0	100.4	0.0	0.0
KCYNLR11	11/1/2022 7:50	60.0	39.8	0.0	0.2	54.9	55.1	-0.3	-0.4

*The following wells are approved to operate at a temperature HOV of 145°F: 51, 57, 58, 65, 66, 71, 74, 78, 86, 91, 92, 95, 98, 99, 119, 127, 128, 133, and 135. Wells 56, 75, 76, 87, and 89 are approved to operate at a temperature HOV of 156°F .

As of November 30, 2022, there are 78 vertical wells, 0 horizontal collector, and 3 LCR at KCRDF.

%= percent

in. w.c.= inches in water column

degrees F= degrees Fahrenheit

HOV = Higher Operating Value

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
Wellfield Monitoring Report - December 2, 5, 7, 9, and 12, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCLC0108	12/7/2022 12:49	41.50	33.00	0.00	25.50	94.50	92.20	-37.20	-23.92
KCLC0109	12/7/2022 13:00	56.40	40.50	0.00	3.10	101.90	101.90	-40.76	-41.23
KCLC0110	12/7/2022 13:04	57.40	42.60	0.00	0.00	113.30	113.30	-40.69	-40.25
KCLC0111	12/12/2022 14:32	58.80	41.00	0.20	0.00	68.80	68.80	-40.94	-40.96
KCLC0112	12/9/2022 12:02	57.70	42.30	0.00	0.00	111.80	111.70	-38.02	-37.61
KCLC0139	12/7/2022 9:14	55.50	43.90	0.00	0.60	124.00	124.00	-23.52	-23.52
KCLC0140	12/7/2022 9:10	42.80	38.70	0.00	18.50	111.70	111.60	-4.38	-4.36
KCLC0141	12/7/2022 8:35	39.00	34.70	0.00	26.30	93.20	93.10	-1.86	-1.85
KCLC0142	12/7/2022 8:30	38.70	31.50	0.00	29.80	75.00	79.80	-0.07	-0.15
KCLC0143	12/7/2022 10:11	42.40	35.50	0.00	22.10	95.10	94.80	-0.53	-0.51
KCLC0145	12/5/2022 9:17	57.30	39.40	0.80	2.50	49.30	49.30	-35.84	-35.83
KCLC0147	12/5/2022 9:05	56.50	43.20	0.30	0.00	48.30	50.00	-34.82	-33.89
KCLC0149	12/5/2022 9:22	58.70	41.30	0.00	0.00	54.80	59.50	-1.77	-5.75
KCLC0151	12/5/2022 8:59	57.20	42.80	0.00	0.00	111.40	111.50	-32.87	-33.56
KCLC0152	12/5/2022 8:55	54.00	40.60	0.00	5.40	109.00	110.30	-11.30	-13.18
KCLC0153	12/5/2022 9:25	49.30	41.00	0.00	9.70	98.00	98.00	-3.09	-3.06
KCLC0154	12/5/2022 9:28	48.60	40.00	0.00	11.40	93.10	93.10	-0.76	-0.75
KCLC0155	12/5/2022 9:31	52.10	41.50	0.00	6.40	107.30	107.30	-6.58	-7.20
KCLC0156	12/5/2022 9:36	56.80	43.00	0.00	0.20	96.50	96.50	-33.10	-33.10
KCLC0157	12/5/2022 10:06	46.10	34.50	3.90	15.50	49.20	49.00	-31.11	-30.68
KCLC0158	12/7/2022 10:27	39.30	38.60	0.00	22.10	66.80	72.30	-1.29	-1.24
KCLC0159	12/2/2022 7:57	60.70	39.30	0.00	0.00	82.70	104.10	-0.83	-5.09
KCLC0160	12/2/2022 12:24	56.90	43.10	0.00	0.00	99.80	100.20	-37.59	-37.52
KCLC0161	12/2/2022 12:17	53.00	41.20	0.00	5.80	113.50	113.90	-25.37	-29.97
KCYN0014	12/7/2022 12:45	48.20	31.10	0.00	20.70	103.90	103.80	-5.94	-5.78
KCYN0027	12/2/2022 11:05	56.50	42.60	0.10	0.80	116.00	116.00	-39.78	-39.82
KCYN0048	12/9/2022 12:18	47.40	32.80	0.00	19.80	102.40	101.20	-3.45	-1.45
KCYN0051	12/7/2022 10:17	50.80	43.20	0.00	6.00	95.80	97.80	-3.31	-6.39
KCYN0054	12/7/2022 8:52	22.00	24.90	2.10	51.00	60.80	58.40	-37.54	-40.90
KCYN0056	12/9/2022 11:49	55.80	41.70	0.10	2.40	126.20	126.20	-29.50	-29.44
KCYN0057	12/7/2022 9:48	49.20	40.60	0.00	10.20	126.20	128.30	-22.86	-22.84
KCYN0058	12/7/2022 9:31	54.60	40.70	0.00	4.70	87.20	87.50	-1.31	-1.30
KCYN0062	12/2/2022 8:43	48.70	38.60	0.00	12.70	128.40	127.70	-7.25	-3.88
KCYN0063	12/2/2022 8:39	55.90	36.30	0.00	7.80	116.80	117.10	-0.49	-0.56
KCYN0065	12/7/2022 9:07	49.80	39.90	0.40	9.90	100.40	103.30	-3.49	-9.39
KCYN0066	12/12/2022 14:44	52.90	38.90	0.00	8.20	127.00	127.20	-12.62	-15.29
KCYN0070	12/2/2022 8:19	59.10	39.40	0.00	1.50	100.60	105.60	-2.20	-3.96
KCYN0071	12/2/2022 10:14	51.80	39.60	0.00	8.60	130.80	130.70	-24.13	-25.46
KCYN0072	12/2/2022 8:47	51.70	37.80	0.00	10.50	109.10	109.50	-2.25	-2.81
KCYN0074	12/2/2022 11:14	56.30	43.70	0.00	0.00	130.50	130.50	-42.13	-42.84
KCYN0075	12/7/2022 9:27	55.00	45.00	0.00	0.00	129.10	129.10	-23.02	-23.11
KCYN0076	12/2/2022 11:55	53.70	42.40	0.00	3.90	129.10	126.20	-29.96	-30.00
KCYN0078	12/7/2022 8:06	54.30	40.30	0.00	5.40	130.50	130.70	-30.71	-30.81
KCYN0082	12/7/2022 10:29	57.70	42.30	0.00	0.00	107.00	110.30	-0.69	-0.97
KCYN0084	12/7/2022 10:01	54.90	41.20	0.00	3.90	105.40	114.40	-0.20	-0.99
KCYN0086	12/5/2022 10:02	58.30	36.80	0.70	4.20	129.40	130.90	-28.35	-28.98
KCYN0087	12/7/2022 10:52	37.80	37.80	0.00	24.40	125.80	123.10	-19.43	-10.10
KCYN0088	12/2/2022 10:31	59.40	40.60	0.00	0.00	82.10	92.90	-0.02	-0.87
KCYN0089	12/2/2022 8:05	53.70	38.80	0.00	7.50	127.80	127.30	-26.43	-26.42
KCYN0090	12/2/2022 9:51	59.00	39.90	0.00	1.10	100.80	106.30	-25.53	-32.98
KCYN0091	12/2/2022 8:57	54.30	40.50	0.00	5.20	128.10	127.30	-12.80	-14.32
KCYN0092	12/2/2022 11:10	57.30	42.70	0.00	0.00	126.70	126.70	-33.01	-33.13
KCYN0093	12/2/2022 11:24	52.70	39.90	0.00	7.40	130.40	130.70	-5.40	-6.53
KCYN0094	12/2/2022 9:46	58.60	40.70	0.00	0.70	125.30	126.20	-6.96	-8.71
KCYN0095	12/2/2022 9:37	58.10	41.90	0.00	0.00	124.40	124.40	-39.13	-38.70
KCYN0097	12/2/2022 8:10	59.20	40.80	0.00	0.00	118.00	119.10	-4.87	-7.20
KCYN0098	12/2/2022 9:41	54.90	40.00	0.00	5.10	130.40	130.10	-5.65	-6.75
KCYN0099	12/2/2022 8:24	53.40	41.60	0.00	5.00	130.80	130.70	-5.38	-6.02
KCYN0101	12/2/2022 10:03	58.90	38.30	0.00	2.80	89.60	96.50	-0.20	-0.51
KCYN0102	12/2/2022 9:58	54.30	38.40	0.00	7.30	103.30	105.60	-0.31	-0.43
KCYN0103	12/2/2022 10:08	58.40	40.40	0.00	1.20	112.90	117.50	-1.94	-4.67
KCYN0105	12/9/2022 12:07	57.50	42.20	0.00	0.30	73.80	74.10	-36.24	-36.38
KCYN0118	12/2/2022 12:20	55.30	41.50	0.00	3.20	118.70	118.80	-34.37	-35.25
KCYN0119	12/2/2022 12:06	56.40	43.60	0.00	0.00	130.10	130.40	-2.78	-3.32
KCYN0121	12/2/2022 12:28	57.70	41.70	0.00	0.60	114.50	114.70	-35.37	-35.29
KCYN0122	12/2/2022 12:13	55.90	44.10	0.00	0.00	109.20	109.10	-35.07	-35.17
KCYN0123	12/7/2022 9:40	44.30	37.60	2.80	15.30	127.00	110.60	-4.40	-2.77
KCYN0124	12/7/2022 10:21	43.80	38.50	0.00	17.70	111.10	110.60	-4.06	-2.55

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
 Wellfield Monitoring Report - December 2, 5, 7, 9, and 12, 2022

Device Name	Date Time	CH ₄ % by Volume	CO ₂ % by Volume	O ₂ % by Volume	Balance % by Volume	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)
KCYN0125	12/7/2022 9:02	56.90	42.70	0.00	0.40	130.20	130.30	-22.17	-22.12
KCYN0126	12/7/2022 9:18	51.50	41.80	0.00	6.70	125.80	125.80	-16.97	-16.95
KCYN0127	12/7/2022 9:54	55.20	42.10	0.00	2.70	103.60	115.40	-3.17	-7.18
KCYN0128	12/5/2022 10:12	52.00	39.40	0.00	8.60	130.80	130.20	-30.76	-30.83
KCYN0129	12/5/2022 8:50	57.70	41.90	0.20	0.20	112.40	112.50	-32.06	-32.08
KCYN0130	12/12/2022 14:55	53.80	38.50	0.00	7.70	114.30	114.20	-10.62	-11.26
KCYN0131	12/9/2022 12:11	56.60	42.70	0.00	0.70	109.50	111.30	-41.53	-41.45
KCYN0133	12/7/2022 8:01	52.90	38.90	0.00	8.20	124.90	126.20	-13.65	-18.72
KCYN0134	12/7/2022 8:12	46.80	38.20	0.00	15.00	110.30	86.90	-30.75	-12.46
KCYN0135	12/7/2022 8:17	56.60	43.40	0.00	0.00	126.90	129.40	-7.91	-15.98
KCYNLR04	12/7/2022 8:23	56.10	39.40	0.10	4.40	98.60	98.60	-9.91	-11.54
KCYNLR08	12/2/2022 8:32	49.30	38.50	1.30	10.90	53.30	54.10	-3.00	-3.06
KCYNLR08	12/7/2022 11:32	4.60	3.30	18.40	73.70	59.80	60.20	-19.40	-19.41
KCYNLR08	12/9/2022 9:17	42.00	29.70	2.80	25.50	47.00	47.00	-46.35	-47.02
KCYNLR11	12/9/2022 12:33	60.00	40.00	0.00	0.00	65.20	65.20	-0.05	-0.46

*The following wells are approved to operate at a temperature HOV of 145°F: 51, 57, 58, 65, 66, 71, 74, 78, 86, 91, 92, 95, 98, 99, 119, 127, 128, 133, and 135. Wells 56, 75, 76, 87, and 89 are approved to operate at a temperature HOV of 156°F.

As of December 31, 2022, there are 78 vertical wells, 0 horizontal collector, and 3 LCR at KCRDF.

%= percent

in. w.c.= inches in water column

degrees F= degrees Fahrenheit

HOV = Higher Operating Value

APPENDIX J

BAAQMD CORRESPONDENCE



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

September 6, 2022 (via email: compliance@baaqmd.gov)

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: Kirby Canyon Recycling & Disposal Facility, San Jose, CA. Facility Number A1812,
Section I.F Title V, 10 and 30-Day written report

Dear Sir or Madam:

Waste Management of California, Inc. d/b/a Kirby Canyon Recycling & Disposal Facility (“KCRDF”) is submitting this 10 and 30-day Title V written report to the Bay Area Air Quality Management District (BAAQMD) as required under Title V Permit Condition Section I.F for KCRDF.

A breakdown report was submitted on September 1, 2022, ~ 12:15 PM and ~4:30 PM (Addendum RCA form) by KCRDF because the landfill gas collection and control system (GCCS) was temporarily shut down due to an Enhanced Powerline Safety Setting (PG&E wildfire prevention efforts for safety) and to clear birds nest. The standby emergency generator was started during the initial power outage event and flare was online on Thursday, September 1, 2022, around ~10:00 AM. The flare was started at ~1:44 PM after the second power outage event (see Attachment A for flare data). Although KCRDF disagrees that Breakdown Relief is the appropriate methodology for compliance with Rule 8-34 during an unplanned power outage, due to direction from BAAQMD staff, KCRDF submitted the request for Breakdown Relief from BAAQMD for the September 1, 2022, PG&E power outage via BAAQMD’s Reportable Compliance Activity (RCA) notification form submitted on September 1, 2022 and was assigned RCA numbers 08L39 and 08L40 (see Attachment B for copy of RCA submittal).

The unplanned power outage shutdowns noted in RCA numbers 08L39 and 08L40 did not result in emissions and do not qualify as non-compliance. KCRDF believes that it complied with the Title V permit conditions and safety protocols. KCRDF followed all measures to ensure gas movers and valves were closed during the shutdown events. KCRDF’s downtime events were not the result of equipment malfunction, knowing, willful, intentional, chronic nor committed by a recalcitrant, and did not benefit KCRDF economically nor result in a nuisance. The frequency and duration of weather or utility-related electrical interruptions are outside of KCRDF’s control.

KCRDF is committed to operating its landfill in compliance with applicable regulations and will ensure that compliance is achieved. However, KCRDF disagrees with the BAAQMD that temporary shutdowns resulting from unplanned power outages are violations of any BAAQMD regulation.

If you have any questions or need any additional information, please do not hesitate to contact me at (408) 779-2206.

Sincerely,

Kirby Canyon Recycling & Disposal Facility

A handwritten signature in cursive script that reads "Paul Enrique Perez".

Enrique Perez
District Manager

cc: Erin Phillips, BAAQMD

Attachments:

Attachment A- KCRDF flare data

Attachment B- Copy of KCRDF RCA Form 08L39 and 08L40

Attachment A
KCRDF flare data

Kirby Canyon Recycling and Disposal Facility

Date	Time	Flare F		Flare SCFM	
		MIN	MAX	MIN	MAX
2022/09/01	07:00:00	1635	1650	1518	1543
2022/09/01	07:02:00	1635	1652	1512	1546
2022/09/01	07:04:00	1631	1653	1518	1541
2022/09/01	07:06:00	1633	1650	1515	1545
2022/09/01	07:08:00	1635	1650	1515	1541
2022/09/01	07:10:00	1635	1650	1517	1541
2022/09/01	07:12:00	1633	1650	1518	1540
2022/09/01	07:14:00	1636	1650	1512	1543
2022/09/01	07:16:00	1632	1650	1518	1544
2022/09/01	07:18:00	1634	1648	1517	1541
2022/09/01	07:20:00	1635	1655	1515	1545
2022/09/01	07:22:00	1633	1653	1515	1541
2022/09/01	07:24:00	1632	1652	1518	1540
2022/09/01	07:26:00	1635	1650	1517	1543
2022/09/01	07:28:00	1633	1650	1512	1541
2022/09/01	07:30:00	1635	1650	1517	1541
2022/09/01	07:32:00	1635	1647	1517	1541
2022/09/01	07:34:00	1635	1659	1515	1545
2022/09/01	07:36:00	1633	1660	1517	1541
2022/09/01	07:38:00	1635	1653	1513	1540
2022/09/01	07:40:00	1633	1653	1517	1548
2022/09/01	07:42:00	1635	1648	1515	1541
2022/09/01	07:44:00	1636	1652	1521	1548
2022/09/01	07:46:00	1635	1648	1512	1541
2022/09/01	07:48:00	1635	1648	1517	1543
2022/09/01	07:50:00	1635	1652	1515	1546
2022/09/01	07:52:00	1631	1652	1517	1548
2022/09/01	07:54:00	1633	1648	1520	1546
2022/09/01	07:56:00	1635	1648	1512	1546
2022/09/01	07:58:00	1638	1646	1518	1545
2022/09/01	08:00:00	1636	1654	1523	1548
2022/09/01	08:02:00	1636	1654	1525	1549
2022/09/01	08:04:00	1633	1654	1521	1551
2022/09/01	08:06:00	1636	1647	1525	1549
2022/09/01	08:08:00	1633	1650	1524	1548
2022/09/01	08:10:00	1636	1645	1519	1551
2022/09/01	08:12:00	1633	1655	1521	1549
2022/09/01	08:14:00	1635	1655	1526	1550
2022/09/01	08:16:00	1633	1652	1524	1554
2022/09/01	08:18:00	1638	1645	1524	1546
2022/09/01	08:20:00	1635	1648	1521	1547
2022/09/01	08:22:00	1635	1654	1521	1550
2022/09/01	08:24:00				
2022/09/01	08:26:00				
2022/09/01	08:28:00				
2022/09/01	08:30:00				
2022/09/01	08:32:00				
2022/09/01	08:34:00				
2022/09/01	08:36:00				
2022/09/01	08:38:00				
2022/09/01	08:40:00				
2022/09/01	08:42:00				
2022/09/01	08:44:00				
2022/09/01	08:46:00				
2022/09/01	08:48:00				
2022/09/01	08:50:00				
2022/09/01	08:52:00				
2022/09/01	08:54:00				
2022/09/01	08:56:00				
2022/09/01	08:58:00				
2022/09/01	09:00:00				
2022/09/01	09:02:00				
2022/09/01	09:04:00				
2022/09/01	09:06:00				
2022/09/01	09:08:00				
2022/09/01	09:10:00				
2022/09/01	09:12:00				
2022/09/01	09:14:00				
2022/09/01	09:16:00				
2022/09/01	09:18:00				
2022/09/01	09:20:00				
2022/09/01	09:22:00				
2022/09/01	09:24:00				
2022/09/01	09:26:00				
2022/09/01	09:28:00				
2022/09/01	09:30:00				
2022/09/01	09:32:00				
2022/09/01	09:34:00				
2022/09/01	09:36:00				

2022/09/01	09:38:00				
2022/09/01	09:40:00				
2022/09/01	09:42:00	91	92	-399	108
2022/09/01	09:44:00	90	96	35	1525
2022/09/01	09:46:00	96	291	48	2149
2022/09/01	09:48:00	291	314	46	51
2022/09/01	09:50:00	276	310	45	48
2022/09/01	09:52:00	240	276	45	48
2022/09/01	09:54:00	207	240	45	48
2022/09/01	09:56:00	182	207	45	48
2022/09/01	09:58:00	162	182	45	831
2022/09/01	10:00:00	162	502	831	2130
2022/09/01	10:02:00	502	964	1748	1879
2022/09/01	10:04:00	964	1358	1745	1845
2022/09/01	10:06:00	1358	1524	1777	1817
2022/09/01	10:08:00	1524	1601	1761	1797
2022/09/01	10:10:00	1599	1636	1741	1774
2022/09/01	10:12:00	1623	1638	1707	1754
2022/09/01	10:14:00	1630	1645	1712	1742
2022/09/01	10:16:00	1630	1645	1707	1734
2022/09/01	10:18:00	1637	1641	1697	1722
2022/09/01	10:20:00	1638	1652	1689	1722
2022/09/01	10:22:00	1633	1648	1687	1716
2022/09/01	10:24:00	1630	1645	1690	1719
2022/09/01	10:26:00	1629	1647	1634	1712
2022/09/01	10:28:00	1632	1652	689	1671
2022/09/01	10:30:00				
2022/09/01	10:32:00				
2022/09/01	10:34:00				
2022/09/01	10:36:00	584	664	-405	103
2022/09/01	10:38:00	494	584	50	50
2022/09/01	10:40:00	425	494	50	50
2022/09/01	10:42:00	372	425	50	50
2022/09/01	10:44:00	327	372	50	50
2022/09/01	10:46:00	291	327	49	50
2022/09/01	10:48:00	263	291	49	50
2022/09/01	10:50:00	234	263	49	411
2022/09/01	10:52:00	232	520	411	2011
2022/09/01	10:54:00	520	934	1689	1813
2022/09/01	10:56:00	934	1314	1676	1709
2022/09/01	10:58:00	1314	1523	1679	1729
2022/09/01	11:00:00	1523	1589	1647	1710
2022/09/01	11:02:00	1589	1618	1637	1672
2022/09/01	11:04:00	1618	1644	1633	1670
2022/09/01	11:06:00	1627	1649	1632	1662
2022/09/01	11:08:00	1633	1649	1625	1662
2022/09/01	11:10:00	1636	1646	1619	1653
2022/09/01	11:12:00	1634	1649	1618	1652
2022/09/01	11:14:00	1630	1650	1618	1645
2022/09/01	11:16:00	1633	1652	1613	1642
2022/09/01	11:18:00	1632	1649	1612	1640
2022/09/01	11:20:00	1632	1652	1610	1642
2022/09/01	11:22:00	1639	1646	1602	1640
2022/09/01	11:24:00	1637	1649	1608	1635
2022/09/01	11:26:00	1633	1649	1605	1638
2022/09/01	11:28:00	1637	1649	1602	1632
2022/09/01	11:30:00	1640	1648	1608	1636
2022/09/01	11:32:00	1635	1648	1606	1635
2022/09/01	11:34:00	1635	1650	1607	1633
2022/09/01	11:36:00	1632	1650	1604	1630
2022/09/01	11:38:00	1634	1650	1603	1628
2022/09/01	11:40:00	1632	1652	1603	1625
2022/09/01	11:42:00	1632	1650	1603	1628
2022/09/01	11:44:00	1634	1649	1603	1627
2022/09/01	11:46:00	1634	1653	1601	1625
2022/09/01	11:48:00	1633	1653	1599	1626
2022/09/01	11:50:00	1633	1647	1599	1626
2022/09/01	11:52:00	1633	1653	1598	1629
2022/09/01	11:54:00	1635	1650	1599	1633
2022/09/01	11:56:00	1633	1654	1599	1626
2022/09/01	11:58:00	1632	1652	1603	1624
2022/09/01	12:00:00	1633	1652	1599	1623
2022/09/01	12:02:00	1631	1652	1598	1629
2022/09/01	12:04:00	1632	1652	1599	1634
2022/09/01	12:06:00	1634	1654	1593	1621
2022/09/01	12:08:00	1633	1653	1596	1621

2022/09/01	12:10:00	1634	1648	1598	1634
2022/09/01	12:12:00	1635	1654	1599	1626
2022/09/01	12:14:00	1635	1650	1594	1622
2022/09/01	12:16:00	1634	1647	1596	1622
2022/09/01	12:18:00	1635	1648	1596	1624
2022/09/01	12:20:00	1634	1652	1598	1622
2022/09/01	12:22:00	1635	1651	1597	1624
2022/09/01	12:24:00	1635	1653	1599	1620
2022/09/01	12:26:00	1635	1646	1599	1625
2022/09/01	12:28:00	1635	1653	1597	1626
2022/09/01	12:30:00	1634	1653	1596	1624
2022/09/01	12:32:00	1634	1651	1595	1627
2022/09/01	12:34:00	1632	1653	1591	1621
2022/09/01	12:36:00	1634	1651	1599	1625
2022/09/01	12:38:00	1635	1650	1599	1624
2022/09/01	12:40:00	1635	1655	1591	1624
2022/09/01	12:42:00	1633	1649	1598	1627
2022/09/01	12:44:00	1635	1649	1597	1621
2022/09/01	12:46:00	1635	1656	1591	1626
2022/09/01	12:48:00	1633	1656	1596	1629
2022/09/01	12:50:00	1635	1652	1599	1622
2022/09/01	12:52:00				
2022/09/01	12:54:00				
2022/09/01	12:56:00	785	812	-378	108
2022/09/01	12:58:00	670	785	44	49
2022/09/01	13:00:00	595	670	49	49
2022/09/01	13:02:00	537	595	49	49
2022/09/01	13:04:00	488	537	49	49
2022/09/01	13:06:00	448	489	48	49
2022/09/01	13:08:00	411	448	48	49
2022/09/01	13:10:00	380	412	49	49
2022/09/01	13:12:00	351	380	48	49
2022/09/01	13:14:00	326	352	47	49
2022/09/01	13:16:00	303	326	47	49
2022/09/01	13:18:00	282	303	47	48
2022/09/01	13:20:00	267	282	47	48
2022/09/01	13:22:00	250	267	47	48
2022/09/01	13:24:00	238	251	47	48
2022/09/01	13:26:00	226	238	47	47
2022/09/01	13:28:00	214	226	47	48
2022/09/01	13:30:00	200	214	47	1144
2022/09/01	13:32:00	202	556	104	2016
2022/09/01	13:34:00	556	623	45	104
2022/09/01	13:36:00	503	598	45	47
2022/09/01	13:38:00	419	503	47	47
2022/09/01	13:40:00	352	419	47	48
2022/09/01	13:42:00	299	352	47	47
2022/09/01	13:44:00	274	338	47	2069
2022/09/01	13:46:00	338	855	1769	2016
2022/09/01	13:48:00	855	1235	1732	1800
2022/09/01	13:50:00	1235	1490	1734	1793
2022/09/01	13:52:00	1490	1577	1685	1773
2022/09/01	13:54:00	1577	1626	1685	1713
2022/09/01	13:56:00	1626	1636	1675	1711
2022/09/01	13:58:00	1630	1637	1667	1697
2022/09/01	14:00:00	1625	1652	1664	1696
2022/09/01	14:02:00	1627	1644	1657	1688
2022/09/01	14:04:00	1633	1655	1659	1690
2022/09/01	14:06:00	1635	1654	1655	1680
2022/09/01	14:08:00	1635	1645	1656	1685
2022/09/01	14:10:00	1635	1658	1652	1678
2022/09/01	14:12:00	1635	1650	1648	1675
2022/09/01	14:14:00	1630	1650	1645	1669
2022/09/01	14:16:00	1637	1653	1645	1667
2022/09/01	14:18:00	1635	1651	1640	1665
2022/09/01	14:20:00	1635	1645	1639	1664
2022/09/01	14:22:00	1639	1644	1637	1667
2022/09/01	14:24:00	1638	1655	1627	1665
2022/09/01	14:26:00	1634	1653	1633	1662
2022/09/01	14:28:00	1631	1649	1639	1663
2022/09/01	14:30:00	1632	1647	1636	1668
2022/09/01	14:32:00	1632	1655	1636	1662
2022/09/01	14:34:00	1633	1647	1631	1660
2022/09/01	14:36:00	1631	1654	1633	1659
2022/09/01	14:38:00	1635	1653	1630	1663
2022/09/01	14:40:00	1638	1649	1633	1663
2022/09/01	14:42:00	1633	1650	1631	1664
2022/09/01	14:44:00	1635	1647	1625	1653
2022/09/01	14:46:00	1636	1653	1626	1649
2022/09/01	14:48:00	1632	1646	1628	1654
2022/09/01	14:50:00	1637	1645	1630	1651
2022/09/01	14:52:00	1635	1652	1626	1653

2022/09/01	14:54:00	1632	1652	1623	1653
2022/09/01	14:56:00	1633	1652	1626	1657
2022/09/01	14:58:00	1634	1648	1622	1651
2022/09/01	15:00:00	1631	1653	1620	1649
2022/09/01	15:02:00	1636	1643	1626	1650
2022/09/01	15:04:00	1639	1647	1628	1653
2022/09/01	15:06:00	1634	1652	1623	1655
2022/09/01	15:08:00	1632	1647	1626	1658
2022/09/01	15:10:00	1637	1651	1629	1656
2022/09/01	15:12:00	1635	1650	1625	1654
2022/09/01	15:14:00	1634	1653	1630	1658
2022/09/01	15:16:00	1631	1650	1622	1660
2022/09/01	15:18:00	1632	1651	1625	1660
2022/09/01	15:20:00	1632	1651	1631	1656
2022/09/01	15:22:00	1635	1650	1626	1653
2022/09/01	15:24:00	1631	1650	1627	1655
2022/09/01	15:26:00	1635	1647	1632	1654
2022/09/01	15:28:00	1635	1648	1627	1655
2022/09/01	15:30:00	1639	1651	1627	1662

Attachment B
Copy of KCRDF RCA Form 08L39 and 08L40

From: [RCA Notification](#)
To: [Phadnis, Rajan](#)
Subject: [EXTERNAL] RE: KCRDF A1812-Addendum to RCA 08L39 for PG&E power outage events on 9.1.2022
Date: Thursday, September 1, 2022 5:09:55 PM

ID# 08L40

From: Phadnis, Rajan <rphadnis@wm.com>
Sent: Thursday, September 1, 2022 4:35 PM
To: RCA Notification <rca@baaqmd.gov>
Cc: Azevedo, Becky <Razevedo@wm.com>; Colline, Christian <CColline@wm.com>; Perez, Enrique <pperez3@wm.com>; Erin Phillips <ephillips@baaqmd.gov>
Subject: KCRDF A1812-Addendum to RCA 08L39 for PG&E power outage events on 9.1.2022

I am attaching an Addendum to RCA notification form (RCA Number 08L39) for unplanned PG&E power outages on 9/1/2022 , at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,
Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

From: RCA Notification <rca@baaqmd.gov>
Sent: Thursday, September 1, 2022 12:29 PM
To: Phadnis, Rajan <rphadnis@wm.com>
Subject: [EXTERNAL] RE: KCRDF A1812-RCA for PG&E power outage on 9.1.2022

Hello,

This RCA has been assigned to ID# 08L39

From: Phadnis, Rajan <rphadnis@wm.com>
Sent: Thursday, September 1, 2022 12:17 PM
To: RCA Notification <rca@baaqmd.gov>
Cc: Colline, Christian <CColline@wm.com>; Erin Phillips <ephillips@baaqmd.gov>; Azevedo, Becky <Razevedo@wm.com>; Perez, Enrique <pperez3@wm.com>; Phadnis, Rajan <rphadnis@wm.com>
Subject: KCRDF A1812-RCA for PG&E power outage on 9.1.2022

CAUTION: This email originated from outside of the BAAQMD network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am attaching the RCA notification form for unplanned PG&E power outage on 9/1/2022, at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,

Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

Recycling is a good thing. Please recycle any printed emails.



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

September 1, 2022 ([via email rca@baaqmd.gov](mailto:rca@baaqmd.gov))

Compliance & Enforcement Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

**Re: Addendum to Reportable Compliance Activity (RCA 08L39) Notification
Kirby Canyon Recycling & Disposal Facility, San Jose, CA, Facility Number A1812**

Waste Management of California, Inc. d/b/a Kirby Canyon Recycling & Disposal Facility (“KCRDF”) is submitting the attached Addendum Reportable Compliance Activity (RCA) Form (RCA Number 08L39 was assigned) for temporary flare shutdown event caused by unplanned utility power interruption on September 1, 2022, at ~ 8:30 AM and ~12:50 PM. A breakdown report about the PG&E's power outage is being submitted via this letter to Bay Area Air Quality Management District (BAAQMD) on September 1, 2022, at ~4:30 PM.

Although KCRDF disagrees that Breakdown Relief is the appropriate methodology for compliance with Rule 8-34 during an unplanned power outage, due to direction from BAAQMD staff, this letter is to request Breakdown Relief from BAAQMD for the PG&E power outage. BAAQMD’s RCA notification form, as modified, is enclosed. The frequency and duration of weather or utility-related electrical interruptions are outside of KCRDF’s control and KCRDF asserts that it did not violate any applicable regulations and limits.

Breakdown Relief should be granted as KCRDF complied with administrative requirements despite its objections to the re-interpretation of Rule 8-34 and:

1. The breakdown is not the result of intent, negligence or disregard of air pollution control regulations;
2. The breakdown is not the result of improper maintenance;
3. The breakdown does not create a public nuisance;
4. The breakdown was not caused by an excessively recurrent breakdown of the same equipment; and
5. The breakdown did not occur, and any emissions did not interfere with attainment or maintenance of any National or California air quality standard.

The power was restored on September 1, 2022, at ~ 10:15 AM and at ~ 1:50 PM and the GCCS was back online. The shutdown event was unforeseeable & unpreventable at KCRDF. The flare was temporarily shut down and did not result in emission nor nuisance.

Sincerely,
Kirby Canyon Recycling & Disposal Facility

A handwritten signature in black ink, appearing to read 'R. Phadnis', with a long horizontal line extending to the right.

Rajan Phadnis
EP Specialist

cc: Erin Phillips, BAAQMD

Attachment: Addendum RCA Form (RCA Number 08L39) KCRDF Facility A1812



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT DIVISION

ADDENDUM to RCA Number 08L39

Notification Form

Reportable
Compliance
Activity (RCA)

[See back of form for instructions](#) →

1. **BREAKDOWN RELIEF: *District Use Only*** BREAKDOWN REFERENCE #:

2. NA **MONITOR EXCESS EMISSION or EXCURSION: *District Use Only*** REFERENCE #:

3. NA **MONITOR IS INOPERATIVE: *District Use Only*** REFERENCE #:

4. NA **PRESSURE RELIEF DEVICE (PRD): *District Use Only*** PRD REFERENCE #:

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	Kirby Canyon Recycling & Disposal Facility	Site #	A1812
Address	910 Coyote Creek Golf Drive, San Jose 95037	Source #	S-1
Reported by	R Phadnis	Phone #	510-875-9338
Indicated Excess	-NA	Fax #	-
Allowable Limit	-NA	Averaging Time	-
Start Time/Date	9/1/2022 at ~ 8:30 AM and 9/1/2022~12:50 PM	Clear Time	9/1/2022 at ~ 10:15 AM and 9/1/2022 at ~ 1:50 PM
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input type="checkbox"/> ▶ Parametric <input type="checkbox"/> ▶ PRD <input type="checkbox"/> ▶ Non-monitor		
Monitor description(s)			
Parameter(s) exceeded or not functioning due to inoperation	<input type="checkbox"/> ▶ NO _x <input type="checkbox"/> ▶ SO ₂ <input type="checkbox"/> ▶ CO <input type="checkbox"/> ▶ CO ₂ <input type="checkbox"/> ▶ H ₂ S <input type="checkbox"/> ▶ TRS <input type="checkbox"/> ▶ NH ₃ <input type="checkbox"/> ▶ O ₂ <input type="checkbox"/> ▶ H ₂ O <input type="checkbox"/> ▶ Opacity <input type="checkbox"/> ▶ Lead <input type="checkbox"/> ▶ Gauge Pressure <input type="checkbox"/> ▶ Flow <input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC) <input type="checkbox"/> ▶ Temperature <input type="checkbox"/> ▶ Wind Speed <input type="checkbox"/> ▶ Wind Direction <input type="checkbox"/> ▶ Steam <input checked="" type="checkbox"/> ▶ Other (describe) Power outage		
Unit(s) of Measurement	<input type="checkbox"/> ▶ ppm <input type="checkbox"/> ▶ ppb <input type="checkbox"/> ▶ min/hr > 20% <input type="checkbox"/> ▶ inches H ₂ O <input type="checkbox"/> ▶ mmHg <input type="checkbox"/> ▶ psig <input type="checkbox"/> ▶ pH <input type="checkbox"/> ▶ °Fahrenheit <input checked="" type="checkbox"/> ▶ Other (describe)		

Event Description:

This breakdown report is being submitted on 9/1/2022 at ~ 4:30 PM by Kirby Canyon Recycling & Disposal Facility (KCRDF) because the GCCS was temporarily shut down due to the PG&E power outage.

The previous breakdown report (RCA 08L39) was submitted on 9/1/2022 at ~ 12:15 PM by Kirby Canyon Recycling & Disposal Facility (KCRDF) because the GCCS was temporarily shut down due to the PG&E power outage. During the PG&E power outage, the GCCS was potentially out of compliance with BAAQMD regulation 8-34-301.1. Please also see objections and discussion in the attached cover letter dated 9/1/2022.

District Use Only

Received by

Date

Time

General Instructions

- ✓ Check the Box numbers 1- 4 that apply to the RCA you are trying to report or request and read the detailed instructions.
- ✓ You will receive an ID # for each RCA you submit. In the case of a request for Breakdown Relief where multiple monitors are affected, you do not need to submit multiple forms, as long as all necessary information is given on one form. RCA reported during other than core business hours will be assigned an ID # the following working day. If you do not receive an ID #, it is your responsibility to contact the BAAQMD to get one.
- ✓ You may submit only one request for breakdown relief per form. However, you may submit multiple indicated excess, inoperative monitors and PRD reports on one form, provided that the start and end times given for the events in the required information section is inclusive of all events. Information on parameters exceeded, units of measurement and allowable limits can be provided in the event description box or when contacted by District staff with questions.
- ✓ Fill out the "Site Information and Description Information Required" areas of this form and email to rca@baaqmd.gov
- ✓ **A 30-day written follow-up report is required for Breakdown Requests and PRD Releases.** Reports for these types of RCA must contain a quantification of emissions, the calculations used to derive the emissions, and their duration. Reference [Breakdown Admissions Advisory dated 12/3/04](#). Send 30-day report letters to: BAAQMD Compliance and Enforcement Division, MAILSTOP: RCA 30-DAY REPORT, 375 Beale Street, Ste. 600 San Francisco, CA 94105. NOTE: **You may have additional report requirements under Title V.**

Detailed Instructions

Box 1: To Request Breakdown Relief (Regulations 1-112, 1-113, 1-208, 1-431, 1-432)

If you have an equipment malfunction (e.g.; breakdown) that leads to the release of air pollutants above the regulatory or your permitted levels, you may request relief from BAAQMD enforcement action.

- Check Box #1.
- NOTE:** Start and end times given for these events in the required information section must be inclusive of all events.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- Requests for breakdown relief may not be withdrawn and must be called in or faxed to the BAAQMD immediately upon discovery of an equipment malfunction.
- Receipt of an RCA ID# for a breakdown does not mean relief has been granted. An Inspector will visit your facility to determine compliance.

Box 2: Monitor Indicates Excess Emission or Excursion (Regulation 1-522.7, 1-523.3, 1-542)

When a BAAQMD-required monitor indicates an excess or excursion, you must report it to the BAAQMD.

- Check Box #2.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- Any excess emission indicated by a CEM or excursion of a parametric monitor, shall be reported to the BAAQMD within 96 hours.
- Area concentration excesses over the limits prescribed in District regulations shall be reported to the BAAQMD within the next normal working day following the examination of data.

Box 3: Monitor Is Inoperative (Regulations 1-522, 1-523, 1-530)

When a BAAQMD-required monitor is inoperative for greater than 24 hours, you must report it to the BAAQMD.

- Check Box #3 only if inoperative for greater than 24 hours.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- All reports of inoperative monitors must be reported by the following BAAQMD working day and additionally be cleared by a notification of resumption of monitoring. To notify the BAAQMD regarding the resumption of monitoring, do not send in a separate RCA form; call (415) 749-4979 and give the RCA ID #, date, and the time of resumption.
- Inoperative monitors (except parametric monitors) with downtime greater than 15 days must furnish proof of expedited repair in a follow-up report.

Box 4: Pressure Relief Device (PRD) Is Released (Regulation 8-28-401)

When a PRD at your refinery/chemical plant vents to the atmosphere, you must report it to the BAAQMD.

- Check Box #4 only if a pressure relief device is released.
- Separate RCA ID #'s can be applied to monitor(s) affected by a PRD by also checking Box #2 if other monitors record an excess or excursion.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- All PRD release reports must be reported by the following BAAQMD working day.

From: [RCA Notification](#)
To: [Phadnis, Rajan](#)
Subject: [EXTERNAL] RE: KCRDF A1812-RCA for PG&E power outage on 9.1.2022
Date: Thursday, September 1, 2022 12:29:29 PM

Hello,

This RCA has been assigned to ID# 08L39

From: Phadnis, Rajan <rphadnis@wm.com>
Sent: Thursday, September 1, 2022 12:17 PM
To: RCA Notification <rca@baaqmd.gov>
Cc: Colline, Christian <CColline@wm.com>; Erin Phillips <ephillips@baaqmd.gov>; Azevedo, Becky <Razevedo@wm.com>; Perez, Enrique <pperez3@wm.com>; Phadnis, Rajan <rphadnis@wm.com>
Subject: KCRDF A1812-RCA for PG&E power outage on 9.1.2022

CAUTION: This email originated from outside of the BAAQMD network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am attaching the RCA notification form for unplanned PG&E power outage on 9/1/2022, at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,

Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

Recycling is a good thing. Please recycle any printed emails.



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

September 6, 2022 (via email: compliance@baaqmd.gov)

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105
Attn: RCA 30-Day Report

Re: Kirby Canyon Recycling & Disposal Facility, San Jose, CA. Facility Number A1812,
Request for Breakdown Relief RCA Numbers 08L39 and 08L40
30-Day Written Follow-up Report (Per Regulation 1, Section 432)

Dear Sir or Madam:

Waste Management of California, Inc. d/b/a Kirby Canyon Recycling & Disposal Facility (“KCRDF”) is submitting this 30-Day follow-up report to the Bay Area Air Quality Management District (BAAQMD) for the PG&E power outage events on September 1, 2022.

A breakdown report (Per Regulation 1, Section 431) was submitted on September 1, 2022, ~ 12:15 PM and ~4:30 PM (Addendum RCA form) by KCRDF because the landfill gas collection and control system (GCCS) was temporarily shut down due to the PG&E power outage due to an Enhanced Powerline Safety Setting (PG&E wildfire prevention efforts for safety) and to clear birds nest. The standby emergency generator was started during the initial power outage event and flare was initially back online on Thursday, September 1, 2022, around ~10:00 AM. The flare was started at ~1:44 PM after the second power outage event (see Attachment A for flare data). Although KCRDF disagrees that Breakdown Relief is the appropriate methodology for compliance with Rule 8-34 during an unplanned power outage, due to direction from BAAQMD staff, KCRDF submitted the request for Breakdown Relief from BAAQMD for the September 1, 2022, PG&E power outage events via BAAQMD’s Reportable Compliance Activity (RCA) notification form submitted on September 1, 2022, and were assigned RCA numbers 08L39 and 08L40- (see Attachment B for copy of RCA submittals).

The unplanned power outage shutdown noted in RCA - did not result in emissions and do not qualify as non-compliance. KCRDF believes that it complied with the Title V permit conditions and safety protocols. KCRDF followed all measures to ensure gas movers and valves were closed during the shutdown events. KCRDF’s downtime events were not the result of equipment malfunction, knowing, willful, intentional, chronic nor committed by a recalcitrant, and did not benefit KCRDF economically nor result in a nuisance. The frequency and duration of weather or utility-related electrical interruptions are outside of KCRDF’s control.

KCRDF is committed to operating its landfill in compliance with applicable regulations and will ensure that compliance is achieved. However, KCRDF disagrees with the BAAQMD that temporary shutdowns resulting from unplanned power outages are violations of any BAAQMD regulation.

If you have any questions or need any additional information, please do not hesitate to contact me at (408) 779-2206.

Sincerely,

Kirby Canyon Recycling & Disposal Facility

A handwritten signature in cursive script that reads "Paul Enrique Perez".

Enrique Perez
District Manager

cc: Erin Phillips, BAAQMD

Attachments:

Attachment A- KCRDF flare data

Attachment B- Copy of KCRDF RCA Form Numbers 08L39 and 08L40

Attachment A
KCRDF flare data

Kirby Canyon Recycling and Disposal Facility

Date	Time	Flare F		Flare SCFM	
		MIN	MAX	MIN	MAX
2022/09/01	07:00:00	1635	1650	1518	1543
2022/09/01	07:02:00	1635	1652	1512	1546
2022/09/01	07:04:00	1631	1653	1518	1541
2022/09/01	07:06:00	1633	1650	1515	1545
2022/09/01	07:08:00	1635	1650	1515	1541
2022/09/01	07:10:00	1635	1650	1517	1541
2022/09/01	07:12:00	1633	1650	1518	1540
2022/09/01	07:14:00	1636	1650	1512	1543
2022/09/01	07:16:00	1632	1650	1518	1544
2022/09/01	07:18:00	1634	1648	1517	1541
2022/09/01	07:20:00	1635	1655	1515	1545
2022/09/01	07:22:00	1633	1653	1515	1541
2022/09/01	07:24:00	1632	1652	1518	1540
2022/09/01	07:26:00	1635	1650	1517	1543
2022/09/01	07:28:00	1633	1650	1512	1541
2022/09/01	07:30:00	1635	1650	1517	1541
2022/09/01	07:32:00	1635	1647	1517	1541
2022/09/01	07:34:00	1635	1659	1515	1545
2022/09/01	07:36:00	1633	1660	1517	1541
2022/09/01	07:38:00	1635	1653	1513	1540
2022/09/01	07:40:00	1633	1653	1517	1548
2022/09/01	07:42:00	1635	1648	1515	1541
2022/09/01	07:44:00	1636	1652	1521	1548
2022/09/01	07:46:00	1635	1648	1512	1541
2022/09/01	07:48:00	1635	1648	1517	1543
2022/09/01	07:50:00	1635	1652	1515	1546
2022/09/01	07:52:00	1631	1652	1517	1548
2022/09/01	07:54:00	1633	1648	1520	1546
2022/09/01	07:56:00	1635	1648	1512	1546
2022/09/01	07:58:00	1638	1646	1518	1545
2022/09/01	08:00:00	1636	1654	1523	1548
2022/09/01	08:02:00	1636	1654	1525	1549
2022/09/01	08:04:00	1633	1654	1521	1551
2022/09/01	08:06:00	1636	1647	1525	1549
2022/09/01	08:08:00	1633	1650	1524	1548
2022/09/01	08:10:00	1636	1645	1519	1551
2022/09/01	08:12:00	1633	1655	1521	1549
2022/09/01	08:14:00	1635	1655	1526	1550
2022/09/01	08:16:00	1633	1652	1524	1554
2022/09/01	08:18:00	1638	1645	1524	1546
2022/09/01	08:20:00	1635	1648	1521	1547
2022/09/01	08:22:00	1635	1654	1521	1550
2022/09/01	08:24:00				
2022/09/01	08:26:00				
2022/09/01	08:28:00				
2022/09/01	08:30:00				
2022/09/01	08:32:00				
2022/09/01	08:34:00				
2022/09/01	08:36:00				
2022/09/01	08:38:00				
2022/09/01	08:40:00				
2022/09/01	08:42:00				
2022/09/01	08:44:00				
2022/09/01	08:46:00				
2022/09/01	08:48:00				
2022/09/01	08:50:00				
2022/09/01	08:52:00				
2022/09/01	08:54:00				
2022/09/01	08:56:00				
2022/09/01	08:58:00				
2022/09/01	09:00:00				
2022/09/01	09:02:00				
2022/09/01	09:04:00				
2022/09/01	09:06:00				
2022/09/01	09:08:00				
2022/09/01	09:10:00				
2022/09/01	09:12:00				
2022/09/01	09:14:00				
2022/09/01	09:16:00				
2022/09/01	09:18:00				
2022/09/01	09:20:00				
2022/09/01	09:22:00				
2022/09/01	09:24:00				
2022/09/01	09:26:00				
2022/09/01	09:28:00				
2022/09/01	09:30:00				
2022/09/01	09:32:00				
2022/09/01	09:34:00				
2022/09/01	09:36:00				

2022/09/01	09:38:00				
2022/09/01	09:40:00				
2022/09/01	09:42:00	91	92	-399	108
2022/09/01	09:44:00	90	96	35	1525
2022/09/01	09:46:00	96	291	48	2149
2022/09/01	09:48:00	291	314	46	51
2022/09/01	09:50:00	276	310	45	48
2022/09/01	09:52:00	240	276	45	48
2022/09/01	09:54:00	207	240	45	48
2022/09/01	09:56:00	182	207	45	48
2022/09/01	09:58:00	162	182	45	831
2022/09/01	10:00:00	162	502	831	2130
2022/09/01	10:02:00	502	964	1748	1879
2022/09/01	10:04:00	964	1358	1745	1845
2022/09/01	10:06:00	1358	1524	1777	1817
2022/09/01	10:08:00	1524	1601	1761	1797
2022/09/01	10:10:00	1599	1636	1741	1774
2022/09/01	10:12:00	1623	1638	1707	1754
2022/09/01	10:14:00	1630	1645	1712	1742
2022/09/01	10:16:00	1630	1645	1707	1734
2022/09/01	10:18:00	1637	1641	1697	1722
2022/09/01	10:20:00	1638	1652	1689	1722
2022/09/01	10:22:00	1633	1648	1687	1716
2022/09/01	10:24:00	1630	1645	1690	1719
2022/09/01	10:26:00	1629	1647	1634	1712
2022/09/01	10:28:00	1632	1652	689	1671
2022/09/01	10:30:00				
2022/09/01	10:32:00				
2022/09/01	10:34:00				
2022/09/01	10:36:00	584	664	-405	103
2022/09/01	10:38:00	494	584	50	50
2022/09/01	10:40:00	425	494	50	50
2022/09/01	10:42:00	372	425	50	50
2022/09/01	10:44:00	327	372	50	50
2022/09/01	10:46:00	291	327	49	50
2022/09/01	10:48:00	263	291	49	50
2022/09/01	10:50:00	234	263	49	411
2022/09/01	10:52:00	232	520	411	2011
2022/09/01	10:54:00	520	934	1689	1813
2022/09/01	10:56:00	934	1314	1676	1709
2022/09/01	10:58:00	1314	1523	1679	1729
2022/09/01	11:00:00	1523	1589	1647	1710
2022/09/01	11:02:00	1589	1618	1637	1672
2022/09/01	11:04:00	1618	1644	1633	1670
2022/09/01	11:06:00	1627	1649	1632	1662
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2022/09/01	11:10:00	1636	1646	1619	1653
2022/09/01	11:12:00	1634	1649	1618	1652
2022/09/01	11:14:00	1630	1650	1618	1645
2022/09/01	11:16:00	1633	1652	1613	1642
2022/09/01	11:18:00	1632	1649	1612	1640
2022/09/01	11:20:00	1632	1652	1610	1642
2022/09/01	11:22:00	1639	1646	1602	1640
2022/09/01	11:24:00	1637	1649	1608	1635
2022/09/01	11:26:00	1633	1649	1605	1638
2022/09/01	11:28:00	1637	1649	1602	1632
2022/09/01	11:30:00	1640	1648	1608	1636
2022/09/01	11:32:00	1635	1648	1606	1635
2022/09/01	11:34:00	1635	1650	1607	1633
2022/09/01	11:36:00	1632	1650	1604	1630
2022/09/01	11:38:00	1634	1650	1603	1628
2022/09/01	11:40:00	1632	1652	1603	1625
2022/09/01	11:42:00	1632	1650	1603	1628
2022/09/01	11:44:00	1634	1649	1603	1627
2022/09/01	11:46:00	1634	1653	1601	1625
2022/09/01	11:48:00	1633	1653	1599	1626
2022/09/01	11:50:00	1633	1647	1599	1626
2022/09/01	11:52:00	1633	1653	1598	1629
2022/09/01	11:54:00	1635	1650	1599	1633
2022/09/01	11:56:00	1633	1654	1599	1626
2022/09/01	11:58:00	1632	1652	1603	1624
2022/09/01	12:00:00	1633	1652	1599	1623
2022/09/01	12:02:00	1631	1652	1598	1629
2022/09/01	12:04:00	1632	1652	1599	1634
2022/09/01	12:06:00	1634	1654	1593	1621
2022/09/01	12:08:00	1633	1653	1596	1621

2022/09/01	12:10:00	1634	1648	1598	1634
2022/09/01	12:12:00	1635	1654	1599	1626
2022/09/01	12:14:00	1635	1650	1594	1622
2022/09/01	12:16:00	1634	1647	1596	1622
2022/09/01	12:18:00	1635	1648	1596	1624
2022/09/01	12:20:00	1634	1652	1598	1622
2022/09/01	12:22:00	1635	1651	1597	1624
2022/09/01	12:24:00	1635	1653	1599	1620
2022/09/01	12:26:00	1635	1646	1599	1625
2022/09/01	12:28:00	1635	1653	1597	1626
2022/09/01	12:30:00	1634	1653	1596	1624
2022/09/01	12:32:00	1634	1651	1595	1627
2022/09/01	12:34:00	1632	1653	1591	1621
2022/09/01	12:36:00	1634	1651	1599	1625
2022/09/01	12:38:00	1635	1650	1599	1624
2022/09/01	12:40:00	1635	1655	1591	1624
2022/09/01	12:42:00	1633	1649	1598	1627
2022/09/01	12:44:00	1635	1649	1597	1621
2022/09/01	12:46:00	1635	1656	1591	1626
2022/09/01	12:48:00	1633	1656	1596	1629
2022/09/01	12:50:00	1635	1652	1599	1622
2022/09/01	12:52:00				
2022/09/01	12:54:00				
2022/09/01	12:56:00	785	812	-378	108
2022/09/01	12:58:00	670	785	44	49
2022/09/01	13:00:00	595	670	49	49
2022/09/01	13:02:00	537	595	49	49
2022/09/01	13:04:00	488	537	49	49
2022/09/01	13:06:00	448	489	48	49
2022/09/01	13:08:00	411	448	48	49
2022/09/01	13:10:00	380	412	49	49
2022/09/01	13:12:00	351	380	48	49
2022/09/01	13:14:00	326	352	47	49
2022/09/01	13:16:00	303	326	47	49
2022/09/01	13:18:00	282	303	47	48
2022/09/01	13:20:00	267	282	47	48
2022/09/01	13:22:00	250	267	47	48
2022/09/01	13:24:00	238	251	47	48
2022/09/01	13:26:00	226	238	47	47
2022/09/01	13:28:00	214	226	47	48
2022/09/01	13:30:00	200	214	47	1144
2022/09/01	13:32:00	202	556	104	2016
2022/09/01	13:34:00	556	623	45	104
2022/09/01	13:36:00	503	598	45	47
2022/09/01	13:38:00	419	503	47	47
2022/09/01	13:40:00	352	419	47	48
2022/09/01	13:42:00	299	352	47	47
2022/09/01	13:44:00	274	338	47	2069
2022/09/01	13:46:00	338	855	1769	2016
2022/09/01	13:48:00	855	1235	1732	1800
2022/09/01	13:50:00	1235	1490	1734	1793
2022/09/01	13:52:00	1490	1577	1685	1773
2022/09/01	13:54:00	1577	1626	1685	1713
2022/09/01	13:56:00	1626	1636	1675	1711
2022/09/01	13:58:00	1630	1637	1667	1697
2022/09/01	14:00:00	1625	1652	1664	1696
2022/09/01	14:02:00	1627	1644	1657	1688
2022/09/01	14:04:00	1633	1655	1659	1690
2022/09/01	14:06:00	1635	1654	1655	1680
2022/09/01	14:08:00	1635	1645	1656	1685
2022/09/01	14:10:00	1635	1658	1652	1678
2022/09/01	14:12:00	1635	1650	1648	1675
2022/09/01	14:14:00	1630	1650	1645	1669
2022/09/01	14:16:00	1637	1653	1645	1667
2022/09/01	14:18:00	1635	1651	1640	1665
2022/09/01	14:20:00	1635	1645	1639	1664
2022/09/01	14:22:00	1639	1644	1637	1667
2022/09/01	14:24:00	1638	1655	1627	1665
2022/09/01	14:26:00	1634	1653	1633	1662
2022/09/01	14:28:00	1631	1649	1639	1663
2022/09/01	14:30:00	1632	1647	1636	1668
2022/09/01	14:32:00	1632	1655	1636	1662
2022/09/01	14:34:00	1633	1647	1631	1660
2022/09/01	14:36:00	1631	1654	1633	1659
2022/09/01	14:38:00	1635	1653	1630	1663
2022/09/01	14:40:00	1638	1649	1633	1663
2022/09/01	14:42:00	1633	1650	1631	1664
2022/09/01	14:44:00	1635	1647	1625	1653
2022/09/01	14:46:00	1636	1653	1626	1649
2022/09/01	14:48:00	1632	1646	1628	1654
2022/09/01	14:50:00	1637	1645	1630	1651
2022/09/01	14:52:00	1635	1652	1626	1653

2022/09/01	14:54:00	1632	1652	1623	1653
2022/09/01	14:56:00	1633	1652	1626	1657
2022/09/01	14:58:00	1634	1648	1622	1651
2022/09/01	15:00:00	1631	1653	1620	1649
2022/09/01	15:02:00	1636	1643	1626	1650
2022/09/01	15:04:00	1639	1647	1628	1653
2022/09/01	15:06:00	1634	1652	1623	1655
2022/09/01	15:08:00	1632	1647	1626	1658
2022/09/01	15:10:00	1637	1651	1629	1656
2022/09/01	15:12:00	1635	1650	1625	1654
2022/09/01	15:14:00	1634	1653	1630	1658
2022/09/01	15:16:00	1631	1650	1622	1660
2022/09/01	15:18:00	1632	1651	1625	1660
2022/09/01	15:20:00	1632	1651	1631	1656
2022/09/01	15:22:00	1635	1650	1626	1653
2022/09/01	15:24:00	1631	1650	1627	1655
2022/09/01	15:26:00	1635	1647	1632	1654
2022/09/01	15:28:00	1635	1648	1627	1655
2022/09/01	15:30:00	1639	1651	1627	1662

Attachment B
Copy of KCRDF RCA Form 08L39 and 08L40

From: [RCA Notification](#)
To: [Phadnis, Rajan](#)
Subject: [EXTERNAL] RE: KCRDF A1812-Addendum to RCA 08L39 for PG&E power outage events on 9.1.2022
Date: Thursday, September 1, 2022 5:09:55 PM

ID# 08L40

From: Phadnis, Rajan <rphadnis@wm.com>
Sent: Thursday, September 1, 2022 4:35 PM
To: RCA Notification <rca@baaqmd.gov>
Cc: Azevedo, Becky <Razevedo@wm.com>; Colline, Christian <CColline@wm.com>; Perez, Enrique <pperez3@wm.com>; Erin Phillips <ephillips@baaqmd.gov>
Subject: KCRDF A1812-Addendum to RCA 08L39 for PG&E power outage events on 9.1.2022

I am attaching an Addendum to RCA notification form (RCA Number 08L39) for unplanned PG&E power outages on 9/1/2022 , at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,
Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

From: RCA Notification <rca@baaqmd.gov>
Sent: Thursday, September 1, 2022 12:29 PM
To: Phadnis, Rajan <rphadnis@wm.com>
Subject: [EXTERNAL] RE: KCRDF A1812-RCA for PG&E power outage on 9.1.2022

Hello,

This RCA has been assigned to ID# 08L39

From: Phadnis, Rajan <rphadnis@wm.com>
Sent: Thursday, September 1, 2022 12:17 PM
To: RCA Notification <rca@baaqmd.gov>
Cc: Colline, Christian <CColline@wm.com>; Erin Phillips <ephillips@baaqmd.gov>; Azevedo, Becky <Razevedo@wm.com>; Perez, Enrique <pperez3@wm.com>; Phadnis, Rajan <rphadnis@wm.com>
Subject: KCRDF A1812-RCA for PG&E power outage on 9.1.2022

CAUTION: This email originated from outside of the BAAQMD network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am attaching the RCA notification form for unplanned PG&E power outage on 9/1/2022, at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,

Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

Recycling is a good thing. Please recycle any printed emails.



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

September 1, 2022 ([via email rca@baaqmd.gov](mailto:rca@baaqmd.gov))

Compliance & Enforcement Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

**Re: Addendum to Reportable Compliance Activity (RCA 08L39) Notification
Kirby Canyon Recycling & Disposal Facility, San Jose, CA, Facility Number A1812**

Waste Management of California, Inc. d/b/a Kirby Canyon Recycling & Disposal Facility (“KCRDF”) is submitting the attached Addendum Reportable Compliance Activity (RCA) Form (RCA Number 08L39 was assigned) for temporary flare shutdown event caused by unplanned utility power interruption on September 1, 2022, at ~ 8:30 AM and ~12:50 PM. A breakdown report about the PG&E's power outage is being submitted via this letter to Bay Area Air Quality Management District (BAAQMD) on September 1, 2022, at ~4:30 PM.

Although KCRDF disagrees that Breakdown Relief is the appropriate methodology for compliance with Rule 8-34 during an unplanned power outage, due to direction from BAAQMD staff, this letter is to request Breakdown Relief from BAAQMD for the PG&E power outage. BAAQMD's RCA notification form, as modified, is enclosed. The frequency and duration of weather or utility-related electrical interruptions are outside of KCRDF's control and KCRDF asserts that it did not violate any applicable regulations and limits.

Breakdown Relief should be granted as KCRDF complied with administrative requirements despite its objections to the re-interpretation of Rule 8-34 and:

1. The breakdown is not the result of intent, negligence or disregard of air pollution control regulations;
2. The breakdown is not the result of improper maintenance;
3. The breakdown does not create a public nuisance;
4. The breakdown was not caused by an excessively recurrent breakdown of the same equipment; and
5. The breakdown did not occur, and any emissions did not interfere with attainment or maintenance of any National or California air quality standard.

The power was restored on September 1, 2022, at ~ 10:15 AM and at ~ 1:50 PM and the GCCS was back online. The shutdown event was unforeseeable & unpreventable at KCRDF. The flare was temporarily shut down and did not result in emission nor nuisance.

Sincerely,
Kirby Canyon Recycling & Disposal Facility

A handwritten signature in black ink, appearing to read 'R. Phadnis', with a long horizontal line extending to the right.

Rajan Phadnis
EP Specialist

cc: Erin Phillips, BAAQMD

Attachment: Addendum RCA Form (RCA Number 08L39) KCRDF Facility A1812



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT DIVISION

ADDENDUM to RCA Number 08L39

Notification Form

Reportable
Compliance
Activity (RCA)

[See back of form for instructions](#) →

1. **BREAKDOWN RELIEF: *District Use Only*** BREAKDOWN REFERENCE #:

2. NA **MONITOR EXCESS EMISSION or EXCURSION: *District Use Only*** REFERENCE #:

3. NA **MONITOR IS INOPERATIVE: *District Use Only*** REFERENCE #:

4. NA **PRESSURE RELIEF DEVICE (PRD): *District Use Only*** PRD REFERENCE #:

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	Kirby Canyon Recycling & Disposal Facility	Site #	A1812
Address	910 Coyote Creek Golf Drive, San Jose 95037	Source #	S-1
Reported by	R Phadnis	Phone #	510-875-9338
Indicated Excess	-NA	Fax #	-
Allowable Limit	-NA	Averaging Time	-
Start Time/Date	9/1/2022 at ~ 8:30 AM and 9/1/2022~12:50 PM	Clear Time	9/1/2022 at ~ 10:15 AM and 9/1/2022 at ~ 1:50 PM
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input type="checkbox"/> ▶ Parametric <input type="checkbox"/> ▶ PRD <input type="checkbox"/> ▶ Non-monitor		
Monitor description(s)			
Parameter(s) exceeded or not functioning due to inoperation	<input type="checkbox"/> ▶ NO _x <input type="checkbox"/> ▶ SO ₂ <input type="checkbox"/> ▶ CO <input type="checkbox"/> ▶ CO ₂ <input type="checkbox"/> ▶ H ₂ S <input type="checkbox"/> ▶ TRS <input type="checkbox"/> ▶ NH ₃ <input type="checkbox"/> ▶ O ₂ <input type="checkbox"/> ▶ H ₂ O <input type="checkbox"/> ▶ Opacity <input type="checkbox"/> ▶ Lead <input type="checkbox"/> ▶ Gauge Pressure <input type="checkbox"/> ▶ Flow <input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC) <input type="checkbox"/> ▶ Temperature <input type="checkbox"/> ▶ Wind Speed <input type="checkbox"/> ▶ Wind Direction <input type="checkbox"/> ▶ Steam <input checked="" type="checkbox"/> ▶ Other (describe) Power outage		
Unit(s) of Measurement	<input type="checkbox"/> ▶ ppm <input type="checkbox"/> ▶ ppb <input type="checkbox"/> ▶ min/hr > 20% <input type="checkbox"/> ▶ inches H ₂ O <input type="checkbox"/> ▶ mmHg <input type="checkbox"/> ▶ psig <input type="checkbox"/> ▶ pH <input type="checkbox"/> ▶ °Fahrenheit <input checked="" type="checkbox"/> ▶ Other (describe)		

Event Description:

This breakdown report is being submitted on 9/1/2022 at ~ 4:30 PM by Kirby Canyon Recycling & Disposal Facility (KCRDF) because the GCCS was temporarily shut down due to the PG&E power outage.

The previous breakdown report (RCA 08L39) was submitted on 9/1/2022 at ~ 12:15 PM by Kirby Canyon Recycling & Disposal Facility (KCRDF) because the GCCS was temporarily shut down due to the PG&E power outage. During the PG&E power outage, the GCCS was potentially out of compliance with BAAQMD regulation 8-34-301.1. Please also see objections and discussion in the attached cover letter dated 9/1/2022.

District Use Only

Received by

Date

Time

General Instructions

- ✓ Check the Box numbers 1- 4 that apply to the RCA you are trying to report or request and read the detailed instructions.
- ✓ You will receive an ID # for each RCA you submit. In the case of a request for Breakdown Relief where multiple monitors are affected, you do not need to submit multiple forms, as long as all necessary information is given on one form. RCA reported during other than core business hours will be assigned an ID # the following working day. If you do not receive an ID #, it is your responsibility to contact the BAAQMD to get one.
- ✓ You may submit only one request for breakdown relief per form. However, you may submit multiple indicated excess, inoperative monitors and PRD reports on one form, provided that the start and end times given for the events in the required information section is inclusive of all events. Information on parameters exceeded, units of measurement and allowable limits can be provided in the event description box or when contacted by District staff with questions.
- ✓ Fill out the "Site Information and Description Information Required" areas of this form and email to rca@baaqmd.gov
- ✓ **A 30-day written follow-up report is required for Breakdown Requests and PRD Releases.** Reports for these types of RCA must contain a quantification of emissions, the calculations used to derive the emissions, and their duration. Reference [Breakdown Admissions Advisory dated 12/3/04](#). Send 30-day report letters to: BAAQMD Compliance and Enforcement Division, MAILSTOP: RCA 30-DAY REPORT, 375 Beale Street, Ste. 600 San Francisco, CA 94105. NOTE: **You may have additional report requirements under Title V.**

Detailed Instructions

Box 1: To Request Breakdown Relief (Regulations 1-112, 1-113, 1-208, 1-431, 1-432)

If you have an equipment malfunction (e.g.; breakdown) that leads to the release of air pollutants above the regulatory or your permitted levels, you may request relief from BAAQMD enforcement action.

- Check Box #1.
- NOTE:** Start and end times given for these events in the required information section must be inclusive of all events.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- Requests for breakdown relief may not be withdrawn and must be called in or faxed to the BAAQMD immediately upon discovery of an equipment malfunction.
- Receipt of an RCA ID# for a breakdown does not mean relief has been granted. An Inspector will visit your facility to determine compliance.

Box 2: Monitor Indicates Excess Emission or Excursion (Regulation 1-522.7, 1-523.3, 1-542)

When a BAAQMD-required monitor indicates an excess or excursion, you must report it to the BAAQMD.

- Check Box #2.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- Any excess emission indicated by a CEM or excursion of a parametric monitor, shall be reported to the BAAQMD within 96 hours.
- Area concentration excesses over the limits prescribed in District regulations shall be reported to the BAAQMD within the next normal working day following the examination of data.

Box 3: Monitor Is Inoperative (Regulations 1-522, 1-523, 1-530)

When a BAAQMD-required monitor is inoperative for greater than 24 hours, you must report it to the BAAQMD.

- Check Box #3 only if inoperative for greater than 24 hours.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- All reports of inoperative monitors must be reported by the following BAAQMD working day and additionally be cleared by a notification of resumption of monitoring. To notify the BAAQMD regarding the resumption of monitoring, do not send in a separate RCA form; call (415) 749-4979 and give the RCA ID #, date, and the time of resumption.
- Inoperative monitors (except parametric monitors) with downtime greater than 15 days must furnish proof of expedited repair in a follow-up report.

Box 4: Pressure Relief Device (PRD) Is Released (Regulation 8-28-401)

When a PRD at your refinery/chemical plant vents to the atmosphere, you must report it to the BAAQMD.

- Check Box #4 only if a pressure relief device is released.
- Separate RCA ID #'s can be applied to monitor(s) affected by a PRD by also checking Box #2 if other monitors record an excess or excursion.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- All PRD release reports must be reported by the following BAAQMD working day.

From: [RCA Notification](#)
To: [Phadnis, Rajan](#)
Subject: [EXTERNAL] RE: KCRDF A1812-RCA for PG&E power outage on 9.1.2022
Date: Thursday, September 1, 2022 12:29:29 PM

Hello,

This RCA has been assigned to ID# 08L39

From: Phadnis, Rajan <rphadnis@wm.com>
Sent: Thursday, September 1, 2022 12:17 PM
To: RCA Notification <rca@baaqmd.gov>
Cc: Colline, Christian <CColline@wm.com>; Erin Phillips <ephillips@baaqmd.gov>; Azevedo, Becky <Razevedo@wm.com>; Perez, Enrique <pperez3@wm.com>; Phadnis, Rajan <rphadnis@wm.com>
Subject: KCRDF A1812-RCA for PG&E power outage on 9.1.2022

CAUTION: This email originated from outside of the BAAQMD network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am attaching the RCA notification form for unplanned PG&E power outage on 9/1/2022, at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,

Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

Recycling is a good thing. Please recycle any printed emails.

From: [RCA Notification](#)
To: [Phadnis, Rajan](#)
Subject: [EXTERNAL] RE: KCRDF A1812-Addendum to RCA 08L39 for PG&E power outage events on 9.1.2022
Date: Thursday, September 1, 2022 5:09:55 PM

ID# 08L40

From: Phadnis, Rajan <rphadnis@wm.com>
Sent: Thursday, September 1, 2022 4:35 PM
To: RCA Notification <rca@baaqmd.gov>
Cc: Azevedo, Becky <Razevedo@wm.com>; Colline, Christian <CColline@wm.com>; Perez, Enrique <pperez3@wm.com>; Erin Phillips <ephillips@baaqmd.gov>
Subject: KCRDF A1812-Addendum to RCA 08L39 for PG&E power outage events on 9.1.2022

I am attaching an Addendum to RCA notification form (RCA Number 08L39) for unplanned PG&E power outages on 9/1/2022 , at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,
Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

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Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

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Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

September 1, 2022 ([via email rca@baaqmd.gov](mailto:rca@baaqmd.gov))

Compliance & Enforcement Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

**Re: Addendum to Reportable Compliance Activity (RCA 08L39) Notification
Kirby Canyon Recycling & Disposal Facility, San Jose, CA, Facility Number A1812**

Waste Management of California, Inc. d/b/a Kirby Canyon Recycling & Disposal Facility (“KCRDF”) is submitting the attached Addendum Reportable Compliance Activity (RCA) Form (RCA Number 08L39 was assigned) for temporary flare shutdown event caused by unplanned utility power interruption on September 1, 2022, at ~ 8:30 AM and ~12:50 PM. A breakdown report about the PG&E's power outage is being submitted via this letter to Bay Area Air Quality Management District (BAAQMD) on September 1, 2022, at ~4:30 PM.

Although KCRDF disagrees that Breakdown Relief is the appropriate methodology for compliance with Rule 8-34 during an unplanned power outage, due to direction from BAAQMD staff, this letter is to request Breakdown Relief from BAAQMD for the PG&E power outage. BAAQMD's RCA notification form, as modified, is enclosed. The frequency and duration of weather or utility-related electrical interruptions are outside of KCRDF's control and KCRDF asserts that it did not violate any applicable regulations and limits.

Breakdown Relief should be granted as KCRDF complied with administrative requirements despite its objections to the re-interpretation of Rule 8-34 and:

1. The breakdown is not the result of intent, negligence or disregard of air pollution control regulations;
2. The breakdown is not the result of improper maintenance;
3. The breakdown does not create a public nuisance;
4. The breakdown was not caused by an excessively recurrent breakdown of the same equipment; and
5. The breakdown did not occur, and any emissions did not interfere with attainment or maintenance of any National or California air quality standard.

The power was restored on September 1, 2022, at ~ 10:15 AM and at ~ 1:50 PM and the GCCS was back online. The shutdown event was unforeseeable & unpreventable at KCRDF. The flare was temporarily shut down and did not result in emission nor nuisance.

Sincerely,
Kirby Canyon Recycling & Disposal Facility

A handwritten signature in black ink, appearing to read 'R. Phadnis', with a long horizontal line extending to the right.

Rajan Phadnis
EP Specialist

cc: Erin Phillips, BAAQMD

Attachment: Addendum RCA Form (RCA Number 08L39) KCRDF Facility A1812



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT DIVISION

ADDENDUM to RCA Number 08L39

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Compliance
Activity (RCA)

[See back of form for instructions](#) →

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2. NA **MONITOR EXCESS EMISSION or EXCURSION: *District Use Only*** REFERENCE #:

3. NA **MONITOR IS INOPERATIVE: *District Use Only*** REFERENCE #:

4. NA **PRESSURE RELIEF DEVICE (PRD): *District Use Only*** PRD REFERENCE #:

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	Kirby Canyon Recycling & Disposal Facility	Site #	A1812
Address	910 Coyote Creek Golf Drive, San Jose 95037	Source #	S-1
Reported by	R Phadnis	Phone #	510-875-9338
Indicated Excess	-NA	Fax #	-
Allowable Limit	-NA	Averaging Time	-
Start Time/Date	9/1/2022 at ~ 8:30 AM and 9/1/2022~12:50 PM	Clear Time	9/1/2022 at ~ 10:15 AM and 9/1/2022 at ~ 1:50 PM
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input type="checkbox"/> ▶ Parametric <input type="checkbox"/> ▶ PRD <input type="checkbox"/> ▶ Non-monitor		
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Parameter(s) exceeded or not functioning due to inoperation	<input type="checkbox"/> ▶ NO _x <input type="checkbox"/> ▶ SO ₂ <input type="checkbox"/> ▶ CO <input type="checkbox"/> ▶ CO ₂ <input type="checkbox"/> ▶ H ₂ S <input type="checkbox"/> ▶ TRS <input type="checkbox"/> ▶ NH ₃ <input type="checkbox"/> ▶ O ₂ <input type="checkbox"/> ▶ H ₂ O <input type="checkbox"/> ▶ Opacity <input type="checkbox"/> ▶ Lead <input type="checkbox"/> ▶ Gauge Pressure <input type="checkbox"/> ▶ Flow <input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC) <input type="checkbox"/> ▶ Temperature <input type="checkbox"/> ▶ Wind Speed <input type="checkbox"/> ▶ Wind Direction <input type="checkbox"/> ▶ Steam <input checked="" type="checkbox"/> ▶ Other (describe) Power outage		
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District Use Only

Received by

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Time

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Detailed Instructions

Box 1: To Request Breakdown Relief (Regulations 1-112, 1-113, 1-208, 1-431, 1-432)

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- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- All PRD release reports must be reported by the following BAAQMD working day.

From: [RCA Notification](#)
To: [Phadnis, Rajan](#)
Subject: [EXTERNAL] RE: KCRDF A1812-RCA for PG&E power outage on 9.1.2022
Date: Thursday, September 1, 2022 12:29:29 PM

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Cc: Colline, Christian <CColline@wm.com>; Erin Phillips <ephillips@baaqmd.gov>; Azevedo, Becky <Razevedo@wm.com>; Perez, Enrique <pperez3@wm.com>; Phadnis, Rajan <rphadnis@wm.com>
Subject: KCRDF A1812-RCA for PG&E power outage on 9.1.2022

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I am attaching the RCA notification form for unplanned PG&E power outage on 9/1/2022, at Kirby Canyon Recycling and Disposal Facility- A1812.

Thank you,

Rajan Phadnis
EP Specialist
For Kirby Canyon Recycling and Disposal Facility

Recycling is a good thing. Please recycle any printed emails.



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

October 27, 2022

Mr. Raymond Salalila
Air Quality Specialist
Compliance and Enforcement Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Re: Kirby Canyon Recycling & Disposal Facility
Facility Number A1812
Request for Limited Exemption (for construction activities) from Regulation 8, Rule 34
(Solid Waste Disposal Sites), Section 303 (Landfill Surface Requirements)

Dear Mr. Salalila:

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 landfill construction activities to be conducted from November 3, 2022, through December 31, 2022, at the Kirby Canyon Recycling & Disposal Facility (KCRDF) Landfill in San Jose, California. This notification is submitted pursuant to Regulation 8, Rule 34, Section 118, "Limited Exemptions for Construction Activities." The work consists of installation of new landfill gas (LFG) extraction wells and piping to maintain compliance with Regulation 8, Rule 34, and is to be performed during the period of November 3, 2022, through December 31, 2022.

The construction work will include excavation during installation of new LFG extraction wells; installation of new piping and laterals and repair of existing piping that will connect to existing LFG extraction wells and to the gas collection and control system (GCCS). The affected areas will then be backfilled. The work for this project includes installation, excavation and backfilling. 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 AB-32 §95470(a)(1)(I) and (J) 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 crew will mobilize to the site on or around November 3, 2022. We anticipate construction activities to conclude by December 31, 2022.

Unless notified otherwise, KCRDF 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 LFG extraction wells offline for an extended period pursuant to Regulation 8, Rule 34, Section 118. Please do not hesitate to contact me at (408) 960-0770 with any questions.

Sincerely,
Kirby Canyon Recycling & Disposal Facility

A handwritten signature in cursive script, reading "Michael L. Winter", enclosed in a thin black rectangular border.

Michael L. Winter
District Engineer

CC: Loi Chau, BAAQMD
Perry Ng, BAAQMD
Enrique Perez, KCRDF
Bill Louis, WM

BAAQMD RULE 8-34-118 CONSTRUCTION PLAN

Kirby Canyon Recycling & Disposal Facility

LFG EXTRACTION WELLS AND PIPING CONSTRUCTION WORK

November 3, 2022, through December 31, 2022

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.

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.*”

- 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;
- Description of air quality mitigation measures planned; and
- Recordkeeping requirements.

ACTIONS BEING TAKEN

The work consists of installation of up to ten LFG wells and associated new piping, excavation, and repair of existing piping that will connect to existing LFG extraction wells and to the GCCS.

AFFECTED LANDFILL AREAS

The construction activities will occur in the area shown on the attached figure.

AFFECTED LFG COMPONENTS

KCRDF 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 installation and repairs:

- Installation of up to ten new LFG wells and associated piping;
- Installation and tie-ins of piping at new wells;
- Any other additional piping that may be required at existing wells and pipes; and
- Cut and cap below grade surface penetrations that are not active

Pursuant to Rule 8-34-117, KCRDF will take the GCCS wells offline, as necessary. KCRDF 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 extraction 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 collection wells.
- Install and connect new piping and laterals.
- Increase LFG collection efficiency to further reduce the potential for surface emissions.

CONSTRUCTION SCHEDULE

The anticipated construction period will be between November 3, 2022, through December 31, 2022, and is summarized in the table below:

Table 1 - Preliminary Construction Schedule

Task	Project Duration
Mobilize crew, equipment, and materials to site	Week 1
Installation of wells, repair and installation of piping, excavation and backfilling	Up to 8 weeks
Clean-up and demobilize crew and materials	Week 1

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 laterals and piping is independent of ongoing operations of the existing GCCS. Air quality mitigation will be provided during the installation and connection of piping to existing GCCS piping network. These mitigation measures are presented below and are designed to meet both the requirements of 8-34 Section 118 and §95470(a)(1)(I).

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:

- Drilling for installation of LFG wells;
- Installation of new LFG pipes and repairs of existing pipes;
- Excavation and backfill of pipe trenches; and
- Connection of new wells and laterals to existing piping and GCCS

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 designated waste disposal area immediately and covering the relocated waste daily by no later than the end of each day; and
- Excavations will not be left open overnight or for periods greater than 8 hours

During connection to the existing LFG piping, and installation of laterals and piping, air emissions will be controlled by implementing the following measures:

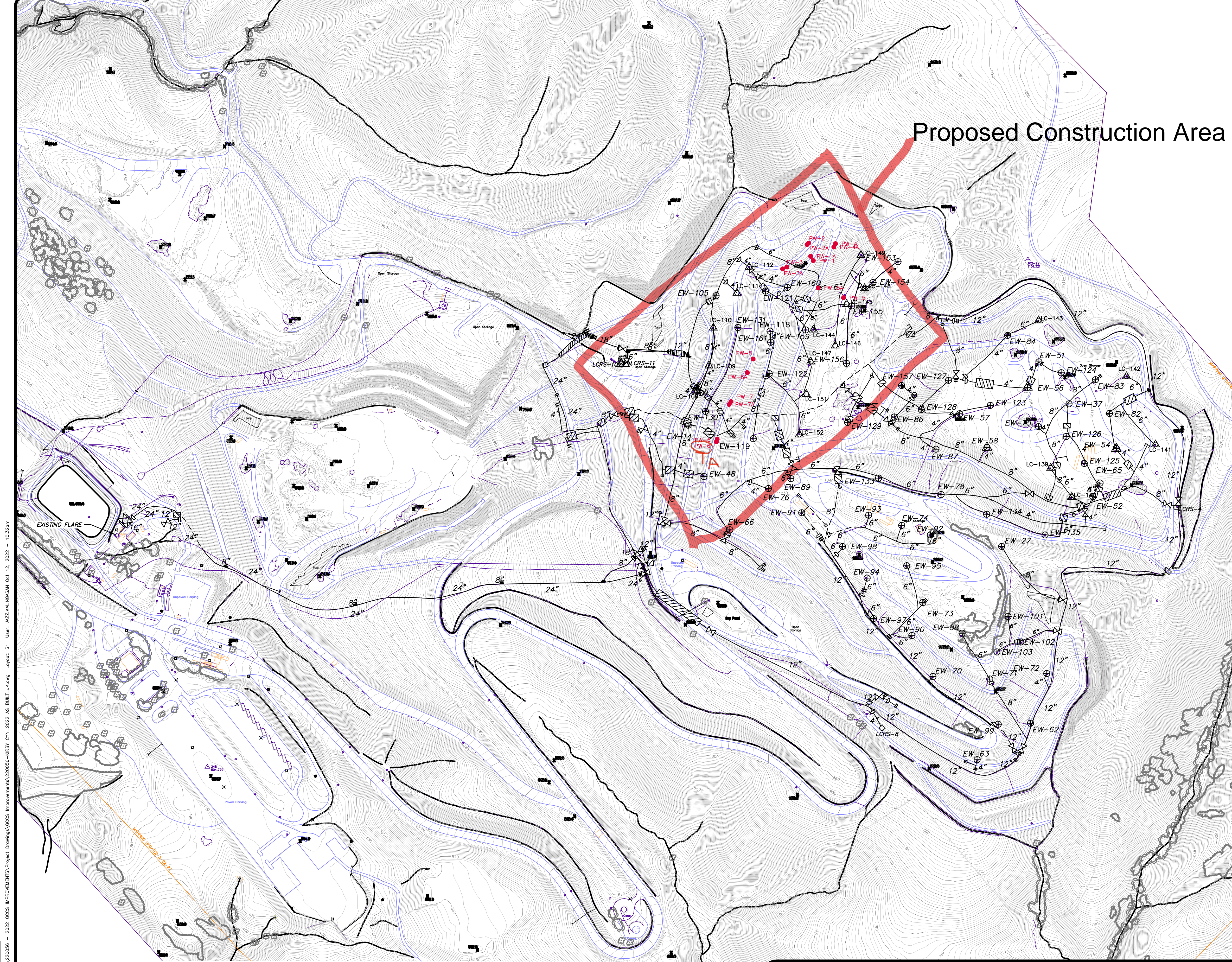
- Capping or blind flanging of all pipes and collector openings, which will remain sealed until time of connection to a vacuum source;
- Using isolation valves;
- Minimizing installation time for making each connection; and
- Minimizing the amount of open pipe during each installation, by using flange joints and flexible couplings.

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 KCRDF's Startup, Shutdown, and Malfunction (SSM) Plan.
- Mitigation measures taken to minimize methane emissions and other potential air quality impacts will be documented.

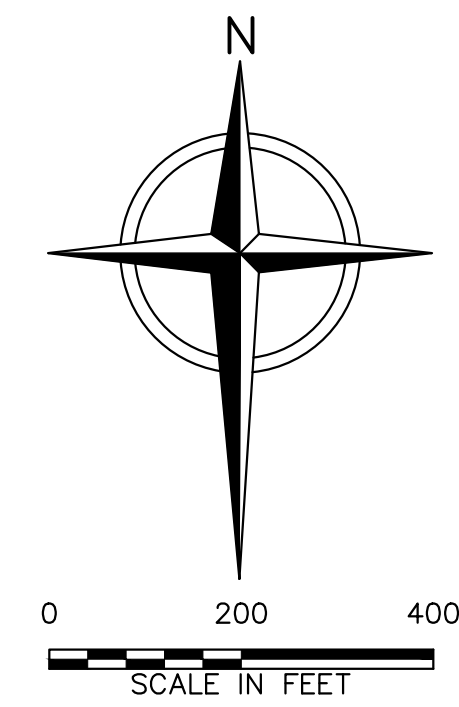
Attachments: Figure 1 – Gas Collection and Control System layout



Proposed Construction Area

LEGEND

- 1400 — EXISTING 10' CONTOUR
- 12" — EXISTING ABOVEGROUND PIPING
- - - 12" - - - EXISTING BELOWGROUND PIPING
- - - - - EXISTING HORIZONTAL COLLECTOR
- ⊕ EW-3 EXISTING LFG EXTRACTION WELL
- △ LC-108 EXISTING LOCAL CONTROL WELL
- ⊙ EXISTING REMOTE WELLHEAD
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- |— EXISTING FLANGE CONNECTION
- |— EXISTING REDUCER FITTING
- ▨ EXISTING ROAD CROSSING
- RISER
- |— EXISTING CAP ON EXISTING PIPE



NOTES:

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY WALKER ASSOCIATES. DATE OF PHOTOGRAPHY: MARCH 22, 2022.
2. SUPPLEMENTAL 2016 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD MARK-UP DRAWING PROVIDED BY WM ON JULY 19, 2017. WELL LOCATIONS PER RECORD DRAWINGS WELL SCHEDULE DATED: JULY 13, 2016.
3. 2017 GCCS AS-BUILT SURVEY PROVIDED BY F3 AND ASSOCIATES, INC. DATED: OCTOBER 11, 2017
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5. SUPPLEMENTAL 2019 GCCS AS-BUILT MARKUPS/COMMENTS PROVIDED BY WM DATED: JANUARY 27 AND 30, 2020, AND BY SCS ENGINEERS DATED: FEBRUARY 4, 2020.
6. 2020 GCCS IMPROVEMENTS AS-BUILT SURVEY PROVIDED BY F3 AND ASSOCIATES, INC. DATED: JULY 22, 2020.
7. SUPPLEMENTAL 2020 GCCS AS-BUILT MARKUPS/COMMENTS PROVIDED BY WM ON NOVEMBER 3, 2020, NOVEMBER 5, 2020 AND NOVEMBER 6, 2020.
8. 2021 GCCS IMPROVEMENTS AS-BUILT SURVEY PROVIDED BY F3 AND ASSOCIATES, INC. DATED: AUGUST 4, 2021.

File: K:\PROJECTS\KIRBY CANYON\220056 - 2022 GCCS IMPROVEMENTS\Project Drawings\GCCS Improvements\220056-KIRBY CYNL2022 AS BUILT.dwg Layout: S1 User: JAZZ MAJINGGAN Oct 12, 2022 - 10:32am

RECORD DRAWINGS



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE: 10/10/2022
 DRAWN BY: JJK
 DESIGNED BY: KA
 CHECKED BY: AMN
 APPROVED BY: PJS



KIRBY CANYON RECYCLING
 AND DISPOSAL FACILITY
 SAN JOSE, CALIFORNIA
2022 GCCS IMPROVEMENTS
AS-BUILT SITE PLAN

SHEET NO.
1
 PROJECT NO.
 220056



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

December 21, 2022

Mr. Raymond Salalila
Air Quality Specialist
Compliance and Enforcement Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Re: Kirby Canyon Recycling & Disposal Facility
Facility Number A1812
Update to Previously Approved Request for Limited Exemption for construction activities, submitted on October 27, 2022

Dear Mr. Salalila:

The Kirby Canyon Recycling & Disposal Facility (KCRDF) submitted a notification on October 27, 2022, for Limited Exemption (for construction activities) from Regulation 8, Rule 34 (Solid Waste Disposal Sites), for the new wells and piping installation and connection related construction activities. The KCRDF's Construction Plan was approved by BAAQMD on November 8, 2022.

KCRDF initiated the project in November 2022. However, the site has experienced delays in scheduling the second phase of the project. This delay requires adjustments to the construction schedule, and the project end date has been extended from December 31, 2022, to March 31, 2023. Attached is the revised construction plan with the revised project end date.

In case of any questions, please do not hesitate to contact me at (408) 960-0770.

Sincerely,

Kirby Canyon Recycling and Disposal Facility

A handwritten signature in black ink that reads "Michael L. Winter". The signature is written in a cursive style and is enclosed in a thin black rectangular border.

Michael L. Winter
District Engineer

CC: Perry Ng, BAAQMD
Enrique Perez, KCRDF
Bill Louis, WM

BAAQMD RULE 8-34-118 CONSTRUCTION PLAN-UPDATE

Kirby Canyon Recycling & Disposal Facility

LFG EXTRACTION WELLS AND PIPING CONSTRUCTION WORK

November 3, 2022, through March 31, 2023

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.

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.*”

- 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;
- Description of air quality mitigation measures planned; and
- Recordkeeping requirements.

ACTIONS BEING TAKEN

The work consists of installation of up to ten LFG wells and associated new piping, excavation, and repair of existing piping that will connect to existing LFG extraction wells and to the GCCS.

AFFECTED LANDFILL AREAS

The construction activities will occur in the area shown on the attached figure.

AFFECTED LFG COMPONENTS

KCRDF 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 installation and repairs:

- Installation of up to ten new LFG wells and associated piping;
- Installation and tie-ins of piping at new wells;
- Any other additional piping that may be required at existing wells and pipes; and
- Cut and cap below grade surface penetrations that are not active

Pursuant to Rule 8-34-117, KCRDF will take the GCCS wells offline, as necessary. KCRDF 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 extraction 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 collection wells.
- Install and connect new piping and laterals.
- Increase LFG collection efficiency to further reduce the potential for surface emissions.

CONSTRUCTION SCHEDULE

The anticipated construction period will be between November 3, 2022, through March 31, 2023, and is summarized in the table below:

Table 1 - Preliminary Construction Schedule

Task	Project Duration
Mobilize crew, equipment, and materials to site	Week 1
Installation of wells, repair and installation of piping, excavation, and backfilling	Up to 21 weeks
Clean-up and demobilize crew and materials	Week 1

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 laterals and piping is independent of ongoing operations of the existing GCCS. Air quality mitigation will be provided during the installation and connection of piping to existing GCCS piping network. These mitigation measures are presented below and are designed to meet both the requirements of 8-34 Section 118 and §95470(a)(1)(I).

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:

- Drilling for installation of LFG wells;
- Installation of new LFG pipes and repairs of existing pipes;
- Excavation and backfill of pipe trenches; and
- Connection of new wells and laterals to existing piping and GCCS

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 designated waste disposal area immediately and covering the relocated waste daily by no later than the end of each day; and
- Excavations will not be left open overnight or for periods greater than 8 hours

During connection to the existing LFG piping, and installation of laterals and piping, air emissions will be controlled by implementing the following measures:

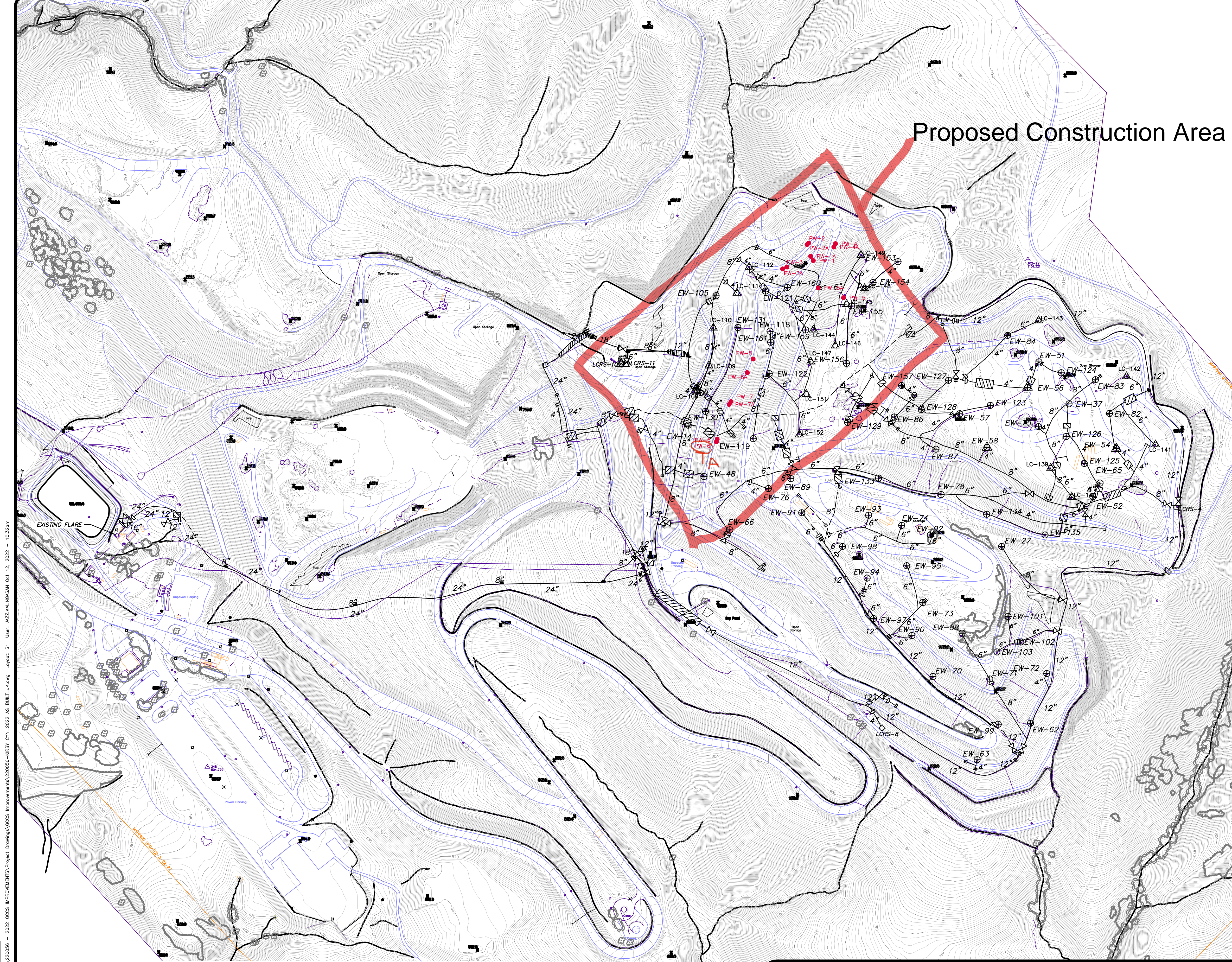
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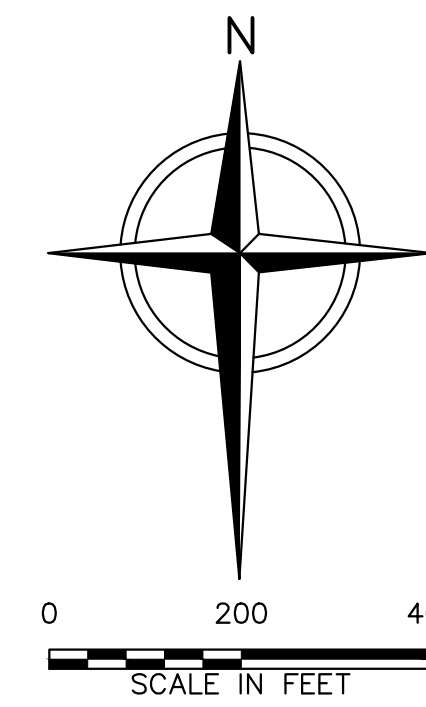
Attachments: Figure 1 – Gas Collection and Control System layout



Proposed Construction Area

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RECORD DRAWINGS



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE: 10/10/2022
 DRAWN BY: JJK
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KIRBY CANYON RECYCLING AND DISPOSAL FACILITY
 SAN JOSE, CALIFORNIA
2022 GCCS IMPROVEMENTS
AS-BUILT SITE PLAN

SHEET NO.
1
 PROJECT NO.
 220056

APPENDIX K

WELLFIELD DEVIATION LOG

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
WELLFIELD DEVIATION REPORT
Reporting Period: From July 1 2022 through December 31, 2022

REPORT PREPARED BY: Rajan Phadnis
UPDATED DATE: January 1, 2023
LFG MONITORING DEVICE: GEM
MODEL: 2000
DATE LAST CALIBRATED: DAILY

Well ID	Date and Time	CH ₄	CO ₂	O ₂	Balance	Initial Temperature (degrees F)	Adjusted Temperature (degrees F)	Initial Pressure (in. w.c.)	Adjusted Pressure (in. w.c.)	Comments	Duration of Exceedance As of the End of Reporting Period
KCYNLR08	8/29/2022 11:53	0.3	0.2	19.6	79.9	78.5	78.2	-34.3	-34.3	NSPS/EG CAI;Fully Open	
KCYNLR08	8/31/2022 13:59	0.2	0.5	19.8	79.5	94.0	94.7	-33.4	-33.4	NSPS/EG CAI;Barely Open;No Adj. Made	
KCYNLR08	9/7/2022 7:38	1.3	2.7	19.6	76.4	70.1	69.9	-34.6	-34.6	NSPS/EG CAI;Barely Open;No Adj. Made	
KCYNLR08	10/3/2022 11:14	1.6	11.8	17.6	69.0	76.3	76.5	-46.5	-46.5	NSPS/EG CAI;Barely Open;No Adj. Made	
KCYNLR08	11/17/2022 14:37	0.2	2.6	19.9	77.3	100.0	100.4	0.0	0.0	NSPS/EG CAI;Barely Open;No Adj. Made	
KCYNLR08	12/7/2022 11:32	4.6	3.3	18.4	73.7	59.8	60.2	-19.4	-19.4	NSPS/EG CAI;Barely Open;No Adj. Made	
KCYNLR08	12/9/2022 9:17	42.0	29.7	2.8	25.5	47.0	47.0	-46.4	-47.0	NSPS/EG CAI;Fully Open;Inc. Flow/Vac.	102

Comments: LR08 had oxygen exceedance during the cell construction period. LR08 was repaired and exceedance was cleared within 120 days.

APPENDIX L

MONTHLY LANDFILL GAS FLOW RATES

MONTHLY LFG Input to Flare (A-12) July 1-December 31, 2022
KIRBY CANYON RECYCLING & DISPOSAL FACILITY, San Jose, CA

Month	Total Available Runtime (hours)	Total Downtime (hours)	Total Runtime (hours)	Average Flow (scfm)	CH ₄ (%)*	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Total Heat Input (MMBTU)
July-22	744.00	26.87	717.13	1,619	44.3	69,596,967	30,854,563	31,256
August-22	744.00	3.03	740.97	1,596	44.3	70,972,415	31,464,343	31,873
September-22	720.00	2.70	717.30	1,585	44.3	68,213,592	30,241,268	30,634
October-22	744.00	3.80	740.20	1,640	44.3	72,838,709	32,291,731	32,712
November 2022²	721.00	45.07	675.93	1,524	44.3	64,001,270	28,373,811	28,743
December-22	744.00	12.03	731.97	1,640	44.3	72,001,935	31,920,762	32,336
July 1-December 31, 2022, Totals/Avg	4,417.00	93.50	4,323.50	1,601	44.3	417,624,888	185,146,477	187,553
January 1-December 31, 2022, Totals/Avg	8,760.00	146.80	8,613.20	1,734	45.0	898,034,299	404,280,887	409,537

NOTES:

*Methane content determined in 2022 is from February 25, 2021 and February 23, 2022 source test data.

²There were 721 hours in November 2023, due to Daylight Saving Time.

The annual heat input rate for the A-12 Flare shall not exceed 1,087,700 MMBTU and 2,980 MMBTU per day (Title V Permit A1812 Condition 1437 Part 8).

scfm= standard cubic feet per minute

scf= standard cubic feet

MMBTU= million British thermal units

LFG= landfill gas

CH₄= methane

MONTHLY LFG Input to Flare (A-12)		
KIRBY CANYON RECYCLING & DISPOSAL FACILITY, San Jose, CA		
MONTHLY LFG Heat Input: 2022		
Month	Monthly Total Heat Input (MMBTU)	12-Month Total Heat Input (MMBTU)
January-22	39,313	508,913
February-22	33,777	505,509
March-22	42,390	503,147
April-22	37,231	498,614
May-22	36,314	490,473
June-22	32,958	479,837
July-22	31,256	464,193
August-22	31,873	447,808
September-22	30,634	436,256
October-22	32,712	426,659
November-22	28,743	415,973
December-22	32,336	409,537
MMBTU= million British thermal units		

The annual heat input rate for the A-12 Flare shall not exceed 1,087,700 MMBTU and 2,980 MMBTU per day (Title V Permit A1812 Condition 1437 Part 8).

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
San Jose, CA

Heat Input Rate

A-12 Flare

MONTH: July-22

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
7/1/2022	24.00	44.3	1,672	2,407,640	1,067,384	1,013.0	1,081
7/2/2022	24.00	44.3	1,646	2,370,446	1,050,895	1,013.0	1,065
7/3/2022	24.00	44.3	1,639	2,360,774	1,046,607	1,013.0	1,060
7/4/2022	24.00	44.3	1,647	2,372,191	1,051,668	1,013.0	1,065
7/5/2022	24.00	44.3	1,610	2,318,834	1,028,013	1,013.0	1,041
7/6/2022	24.00	44.3	1,628	2,343,908	1,039,129	1,013.0	1,053
7/7/2022	20.87	44.3	1,666	2,085,812	924,707	1,013.0	937
7/8/2022	24.00	44.3	1,661	2,392,082	1,060,486	1,013.0	1,074
7/9/2022	24.00	44.3	1,654	2,382,082	1,056,053	1,013.0	1,070
7/10/2022	24.00	44.3	1,666	2,398,833	1,063,479	1,013.0	1,077
7/11/2022	24.00	44.3	1,660	2,390,124	1,059,618	1,013.0	1,073
7/12/2022	24.00	44.3	1,633	2,351,783	1,042,621	1,013.0	1,056
7/13/2022	24.00	44.3	1,638	2,358,425	1,045,565	1,013.0	1,059
7/14/2022	24.00	44.3	1,629	2,346,090	1,040,097	1,013.0	1,054
7/15/2022	24.00	44.3	1,626	2,341,624	1,038,117	1,013.0	1,052
7/16/2022	24.00	44.3	1,635	2,354,754	1,043,938	1,013.0	1,058
7/17/2022	24.00	44.3	1,639	2,359,857	1,046,200	1,013.0	1,060
7/18/2022	16.27	44.3	1,699	1,658,424	735,232	1,013.0	745
7/19/2022	24.00	44.3	1,693	2,437,942	1,080,818	1,013.0	1,095
7/20/2022	24.00	44.3	1,667	2,400,307	1,064,133	1,013.0	1,078
7/21/2022	16.87	44.3	1,643	1,662,493	737,036	1,013.0	747
7/22/2022	15.13	44.3	1,605	1,457,273	646,056	1,013.0	654
7/23/2022	24.00	44.3	1,575	2,268,190	1,005,561	1,013.0	1,019
7/24/2022	24.00	44.3	1,551	2,233,632	990,241	1,013.0	1,003
7/25/2022	24.00	44.3	1,554	2,237,292	991,863	1,013.0	1,005
7/26/2022	24.00	44.3	1,548	2,228,663	988,038	1,013.0	1,001
7/27/2022	24.00	44.3	1,538	2,214,087	981,576	1,013.0	994
7/28/2022	24.00	44.3	1,530	2,203,032	976,675	1,013.0	989
7/29/2022	24.00	44.3	1,539	2,215,576	982,236	1,013.0	995
7/30/2022	24.00	44.3	1,545	2,224,210	986,063	1,013.0	999
7/31/2022	24.00	44.3	1,542	2,220,587	984,457	1,013.0	997
Totals/ Average:	717.13	44.3	1,619	69,596,967	30,854,563	1,013.0	31,256
						Maximum	1,095

NOTES:

*Starting April 2022, Methane content determined from the February 23, 2022, A-12 Source Test is used.

The daily heat input rate for the A-12 Flare shall not exceed 2,980 MMBTU (Title V Permit A1812 Condition 1437 Part 8).

scfm= standard cubic feet per minute

BTU/scf= British thermal unit per square cubic feet

scf= standard cubic feet

MMBTU= million British thermal units

LFG= landfill gas

CH₄= methane

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
San Jose, CA

Heat Input Rate
A-12 Flare

MONTH: August-22

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
8/1/2022	24.00	44.3	1,591	2,290,657	1,015,522	1,013.0	1,029
8/2/2022	24.00	44.3	1,622	2,336,251	1,035,735	1,013.0	1,049
8/3/2022	24.00	44.3	1,659	2,389,086	1,059,158	1,013.0	1,073
8/4/2022	24.00	44.3	1,668	2,401,595	1,064,704	1,013.0	1,079
8/5/2022	24.00	44.3	1,660	2,389,874	1,059,508	1,013.0	1,073
8/6/2022	24.00	44.3	1,661	2,391,930	1,060,419	1,013.0	1,074
8/7/2022	24.00	44.3	1,654	2,381,963	1,056,000	1,013.0	1,070
8/8/2022	24.00	44.3	1,644	2,367,267	1,049,485	1,013.0	1,063
8/9/2022	24.00	44.3	1,643	2,365,283	1,048,606	1,013.0	1,062
8/10/2022	24.00	44.3	1,637	2,356,561	1,044,739	1,013.0	1,058
8/11/2022	24.00	44.3	1,627	2,342,795	1,038,636	1,013.0	1,052
8/12/2022	24.00	44.3	1,624	2,338,863	1,036,893	1,013.0	1,050
8/13/2022	24.00	44.3	1,623	2,337,563	1,036,316	1,013.0	1,050
8/14/2022	24.00	44.3	1,619	2,330,803	1,033,320	1,013.0	1,047
8/15/2022	21.53	44.3	1,592	2,057,398	912,110	1,013.0	924
8/16/2022	24.00	44.3	1,569	2,259,616	1,001,760	1,013.0	1,015
8/17/2022	24.00	44.3	1,553	2,236,724	991,611	1,013.0	1,005
8/18/2022	24.00	44.3	1,555	2,238,712	992,493	1,013.0	1,005
8/19/2022	24.00	44.3	1,559	2,244,451	995,037	1,013.0	1,008
8/20/2022	24.00	44.3	1,544	2,222,860	985,465	1,013.0	998
8/21/2022	24.00	44.3	1,548	2,228,562	987,993	1,013.0	1,001
8/22/2022	24.00	44.3	1,578	2,272,592	1,007,513	1,013.0	1,021
8/23/2022	24.00	44.3	1,588	2,287,222	1,013,999	1,013.0	1,027
8/24/2022	24.00	44.3	1,563	2,250,022	997,507	1,013.0	1,010
8/25/2022	23.43	44.3	1,568	2,204,934	977,518	1,013.0	990
8/26/2022	24.00	44.3	1,568	2,258,220	1,001,141	1,013.0	1,014
8/27/2022	24.00	44.3	1,557	2,242,132	994,009	1,013.0	1,007
8/28/2022	24.00	44.3	1,549	2,230,596	988,895	1,013.0	1,002
8/29/2022	24.00	44.3	1,556	2,240,846	993,439	1,013.0	1,006
8/30/2022	24.00	44.3	1,557	2,241,372	993,672	1,013.0	1,007
8/31/2022	24.00	44.3	1,553	2,235,665	991,142	1,013.0	1,004
Totals/ Average:	740.97	44.3	1,596	70,972,415	31,464,343	1,013.0	31,873
						Maximum	1,079

NOTES:

*Starting April 2022, Methane content determined from the February 23, 2022, A-12 Source Test is used.

The daily heat input rate for the A-12 Flare shall not exceed 2,980 MMBTU (Title V Permit A1812 Condition 1437 Part 8).

scfm= standard cubic feet per minute

BTU/scf= British thermal unit per square cubic feet

scf= standard cubic feet

MMBTU= million British thermal units

LFG= landfill gas

CH₄= methane

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
San Jose, CA

Heat Input Rate

A-12 Flare

MONTH: September-22

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
9/1/2022	21.30	44.3	1,585	2,025,900	898,146	1,013.0	910
9/2/2022	24.00	44.3	1,606	2,313,121	1,025,481	1,013.0	1,039
9/3/2022	24.00	44.3	1,625	2,340,065	1,037,426	1,013.0	1,051
9/4/2022	24.00	44.3	1,617	2,328,554	1,032,323	1,013.0	1,046
9/5/2022	24.00	44.3	1,617	2,328,588	1,032,338	1,013.0	1,046
9/6/2022	24.00	44.3	1,622	2,335,981	1,035,615	1,013.0	1,049
9/7/2022	24.00	44.3	1,636	2,355,416	1,044,231	1,013.0	1,058
9/8/2022	24.00	44.3	1,647	2,371,370	1,051,304	1,013.0	1,065
9/9/2022	24.00	44.3	1,609	2,317,217	1,027,296	1,013.0	1,041
9/10/2022	24.00	44.3	1,569	2,259,640	1,001,771	1,013.0	1,015
9/11/2022	24.00	44.3	1,584	2,280,996	1,011,239	1,013.0	1,024
9/12/2022	24.00	44.3	1,573	2,264,983	1,004,139	1,013.0	1,017
9/13/2022	24.00	44.3	1,556	2,240,598	993,329	1,013.0	1,006
9/14/2022	24.00	44.3	1,550	2,232,693	989,824	1,013.0	1,003
9/15/2022	24.00	44.3	1,543	2,222,205	985,175	1,013.0	998
9/16/2022	24.00	44.3	1,544	2,224,002	985,971	1,013.0	999
9/17/2022	24.00	44.3	1,537	2,212,944	981,069	1,013.0	994
9/18/2022	24.00	44.3	1,523	2,192,606	972,052	1,013.0	985
9/19/2022	24.00	44.3	1,526	2,197,614	974,273	1,013.0	987
9/20/2022	24.00	44.3	1,515	2,181,533	967,143	1,013.0	980
9/21/2022	24.00	44.3	1,556	2,239,994	993,061	1,013.0	1,006
9/22/2022	24.00	44.3	1,604	2,309,252	1,023,765	1,013.0	1,037
9/23/2022	24.00	44.3	1,614	2,324,715	1,030,621	1,013.0	1,044
9/24/2022	24.00	44.3	1,614	2,323,475	1,030,071	1,013.0	1,043
9/25/2022	24.00	44.3	1,601	2,305,805	1,022,237	1,013.0	1,036
9/26/2022	24.00	44.3	1,600	2,304,206	1,021,528	1,013.0	1,035
9/27/2022	24.00	44.3	1,588	2,286,108	1,013,505	1,013.0	1,027
9/28/2022	24.00	44.3	1,585	2,282,904	1,012,084	1,013.0	1,025
9/29/2022	24.00	44.3	1,598	2,300,431	1,019,855	1,013.0	1,033
9/30/2022	24.00	44.3	1,605	2,310,676	1,024,397	1,013.0	1,038
Totals/ Average:	717.30	44.3	1,585	68,213,592	30,241,268	1,013.0	30,634
						Maximum	1,065

NOTES:

*Starting April 2022, Methane content determined from the February 23, 2022, A-12 Source Test is used.

The daily heat input rate for the A-12 Flare shall not exceed 2,980 MMBTU (Title V Permit A1812 Condition 1437 Part 8).

scfm= standard cubic feet per minute

BTU/scf= British thermal unit per square cubic feet

scf= standard cubic feet

MMBTU= million British thermal units

LFG= landfill gas

CH₄= methane

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
San Jose, CA

Heat Input Rate
A-12 Flare

MONTH: October-22

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
10/1/2022	20.77	44.3	1,601	1,995,054	884,471	1,013.0	896
10/2/2022	24.00	44.3	1,586	2,283,733	1,012,452	1,013.0	1,026
10/3/2022	24.00	44.3	1,640	2,361,727	1,047,029	1,013.0	1,061
10/4/2022	24.00	44.3	1,624	2,338,577	1,036,766	1,013.0	1,050
10/5/2022	24.00	44.3	1,640	2,362,021	1,047,159	1,013.0	1,061
10/6/2022	24.00	44.3	1,656	2,384,312	1,057,042	1,013.0	1,071
10/7/2022	24.00	44.3	1,651	2,377,153	1,053,868	1,013.0	1,068
10/8/2022	24.00	44.3	1,649	2,374,001	1,052,471	1,013.0	1,066
10/9/2022	24.00	44.3	1,635	2,354,278	1,043,727	1,013.0	1,057
10/10/2022	24.00	44.3	1,641	2,363,328	1,047,739	1,013.0	1,061
10/11/2022	24.00	44.3	1,634	2,353,448	1,043,359	1,013.0	1,057
10/12/2022	23.43	44.3	1,639	2,304,494	1,021,656	1,013.0	1,035
10/13/2022	24.00	44.3	1,638	2,358,725	1,045,698	1,013.0	1,059
10/14/2022	24.00	44.3	1,650	2,375,800	1,053,268	1,013.0	1,067
10/15/2022	24.00	44.3	1,629	2,346,361	1,040,217	1,013.0	1,054
10/16/2022	24.00	44.3	1,640	2,361,397	1,046,883	1,013.0	1,060
10/17/2022	24.00	44.3	1,647	2,371,850	1,051,517	1,013.0	1,065
10/18/2022	24.00	44.3	1,652	2,379,071	1,054,718	1,013.0	1,068
10/19/2022	24.00	44.3	1,677	2,415,449	1,070,846	1,013.0	1,085
10/20/2022	24.00	44.3	1,679	2,418,161	1,072,048	1,013.0	1,086
10/21/2022	24.00	44.3	1,649	2,374,240	1,052,577	1,013.0	1,066
10/22/2022	24.00	44.3	1,641	2,362,731	1,047,474	1,013.0	1,061
10/23/2022	24.00	44.3	1,630	2,347,312	1,040,639	1,013.0	1,054
10/24/2022	24.00	44.3	1,643	2,365,918	1,048,887	1,013.0	1,063
10/25/2022	24.00	44.3	1,650	2,376,521	1,053,588	1,013.0	1,067
10/26/2022	24.00	44.3	1,637	2,357,729	1,045,257	1,013.0	1,059
10/27/2022	24.00	44.3	1,640	2,361,088	1,046,746	1,013.0	1,060
10/28/2022	24.00	44.3	1,631	2,348,318	1,041,085	1,013.0	1,055
10/29/2022	24.00	44.3	1,636	2,356,307	1,044,626	1,013.0	1,058
10/30/2022	24.00	44.3	1,642	2,364,216	1,048,133	1,013.0	1,062
10/31/2022	24.00	44.3	1,629	2,345,389	1,039,786	1,013.0	1,053
Totals/ Average:	740.20	44.3	1,640	72,838,709	32,291,731	1,013.0	32,712
						Maximum	1,086

NOTES:

*Starting April 2022, Methane content determined from the February 23, 2022, A-12 Source Test is used.

The daily heat input rate for the A-12 Flare shall not exceed 2,980 MMBTU (Title V Permit A1812 Condition 1437 Part 8).

scfm= standard cubic feet per minute

BTU/scf= British thermal unit per square cubic feet

scf= standard cubic feet

MMBTU= million British thermal units

LFG= landfill gas

CH₄= methane

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
San Jose, CA

Heat Input Rate
A-12 Flare

MONTH: November-22

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
11/1/2022	24.00	44.3	1,623	2,337,431	1,036,258	1,013.0	1,050
11/2/2022	24.00	44.3	1,632	2,349,467	1,041,594	1,013.0	1,055
11/3/2022	24.00	44.3	1,628	2,344,951	1,039,592	1,013.0	1,053
11/4/2022	24.00	44.3	1,615	2,325,377	1,030,914	1,013.0	1,044
11/5/2022	24.00	44.3	1,605	2,311,588	1,024,801	1,013.0	1,038
11/6/2022	25.00	44.3	1,596	2,393,582	1,061,151	1,013.0	1,075
11/7/2022	24.00	44.3	1,580	2,275,497	1,008,801	1,013.0	1,022
11/8/2022	24.00	44.3	1,566	2,255,517	999,943	1,013.0	1,013
11/9/2022	24.00	44.3	1,564	2,252,500	998,605	1,013.0	1,012
11/10/2022	24.00	44.3	1,583	2,279,794	1,010,706	1,013.0	1,024
11/11/2022	24.00	44.3	1,584	2,280,764	1,011,136	1,013.0	1,024
11/12/2022	24.00	44.3	1,574	2,266,154	1,004,659	1,013.0	1,018
11/13/2022	24.00	44.3	1,572	2,263,172	1,003,337	1,013.0	1,016
11/14/2022	24.00	44.3	1,572	2,264,323	1,003,847	1,013.0	1,017
11/15/2022	24.00	44.3	1,569	2,258,852	1,001,421	1,013.0	1,014
11/16/2022	24.00	44.3	1,576	2,269,143	1,005,984	1,013.0	1,019
11/17/2022	24.00	44.3	1,575	2,268,712	1,005,793	1,013.0	1,019
11/18/2022	24.00	44.3	1,569	2,258,910	1,001,447	1,013.0	1,014
11/19/2022	24.00	44.3	1,564	2,252,031	998,397	1,013.0	1,011
11/20/2022	24.00	44.3	1,567	2,256,110	1,000,206	1,013.0	1,013
11/21/2022	24.00	44.3	1,564	2,252,372	998,549	1,013.0	1,012
11/22/2022	24.00	44.3	1,561	2,247,869	996,552	1,013.0	1,010
11/23/2022	24.00	44.3	1,560	2,245,893	995,676	1,013.0	1,009
11/24/2022	24.00	44.3	1,562	2,249,564	997,304	1,013.0	1,010
11/25/2022	24.00	44.3	1,567	2,256,583	1,000,415	1,013.0	1,013
11/26/2022	24.00	44.3	1,562	2,248,615	996,883	1,013.0	1,010
11/27/2022	24.00	44.3	1,557	2,241,709	993,821	1,013.0	1,007
11/28/2022	24.00	44.3	1,545	2,224,498	986,191	1,013.0	999
11/29/2022	2.93	44.3	1,536	270,292	119,829	1,013.0	121
11/30/2022	0.00	44.3	0	0	0	1,013.0	0
Totals/ Average:	675.93	44.3	1,524	64,001,270	28,373,811	1,013.0	28,743
						Maximum	1,075

NOTES:

*Starting April 2022, Methane content determined from the February 23, 2022, A-12 Source Test is used.

The daily heat input rate for the A-12 Flare shall not exceed 2,980 MMBTU (Title V Permit A1812 Condition 1437 Part 8).

scfm= standard cubic feet per minute

BTU/scf= British thermal unit per square cubic feet

scf= standard cubic feet

MMBTU= million British thermal units

LFG= landfill gas

CH₄= methane

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
San Jose, CA

Heat Input Rate
A-12 Flare

MONTH: December-22

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
12/1/2022	12.87	44.3	1,671	1,290,001	571,899	1,013.0	579
12/2/2022	24.00	44.3	1,671	2,406,588	1,066,917	1,013.0	1,081
12/3/2022	24.00	44.3	1,689	2,432,040	1,078,201	1,013.0	1,092
12/4/2022	24.00	44.3	1,676	2,413,627	1,070,038	1,013.0	1,084
12/5/2022	24.00	44.3	1,677	2,414,524	1,070,436	1,013.0	1,084
12/6/2022	24.00	44.3	1,670	2,404,447	1,065,968	1,013.0	1,080
12/7/2022	24.00	44.3	1,670	2,404,980	1,066,205	1,013.0	1,080
12/8/2022	24.00	44.3	1,662	2,393,403	1,061,072	1,013.0	1,075
12/9/2022	24.00	44.3	1,671	2,406,910	1,067,060	1,013.0	1,081
12/10/2022	24.00	44.3	1,659	2,388,727	1,058,999	1,013.0	1,073
12/11/2022	24.00	44.3	1,633	2,352,142	1,042,780	1,013.0	1,056
12/12/2022	24.00	44.3	1,629	2,345,441	1,039,809	1,013.0	1,053
12/13/2022	24.00	44.3	1,636	2,355,848	1,044,423	1,013.0	1,058
12/14/2022	24.00	44.3	1,643	2,365,819	1,048,843	1,013.0	1,062
12/15/2022	24.00	44.3	1,641	2,362,360	1,047,310	1,013.0	1,061
12/16/2022	24.00	44.3	1,637	2,357,678	1,045,234	1,013.0	1,059
12/17/2022	24.00	44.3	1,636	2,355,815	1,044,408	1,013.0	1,058
12/18/2022	24.00	44.3	1,625	2,339,980	1,037,388	1,013.0	1,051
12/19/2022	24.00	44.3	1,622	2,335,007	1,035,183	1,013.0	1,049
12/20/2022	24.00	44.3	1,628	2,343,997	1,039,169	1,013.0	1,053
12/21/2022	24.00	44.3	1,632	2,349,685	1,041,691	1,013.0	1,055
12/22/2022	24.00	44.3	1,627	2,342,343	1,038,436	1,013.0	1,052
12/23/2022	24.00	44.3	1,624	2,338,083	1,036,547	1,013.0	1,050
12/24/2022	24.00	44.3	1,627	2,342,539	1,038,522	1,013.0	1,052
12/25/2022	24.00	44.3	1,630	2,346,518	1,040,287	1,013.0	1,054
12/26/2022	24.00	44.3	1,620	2,333,365	1,034,455	1,013.0	1,048
12/27/2022	24.00	44.3	1,607	2,314,320	1,026,012	1,013.0	1,039
12/28/2022	24.00	44.3	1,608	2,315,870	1,026,699	1,013.0	1,040
12/29/2022	24.00	44.3	1,595	2,297,488	1,018,550	1,013.0	1,032
12/30/2022	24.00	44.3	1,607	2,313,966	1,025,855	1,013.0	1,039
12/31/2022	23.10	44.3	1,615	2,238,424	992,365	1,013.0	1,005
Totals/ Average:	731.97	44.3	1,640	72,001,935	31,920,762	1,013.0	32,336
						Maximum	1,092

NOTES:

*Starting April 2022, Methane content determined from the February 23, 2022, A-12 Source Test is used.

The daily heat input rate for the A-12 Flare shall not exceed 2,980 MMBTU (Title V Permit A1812 Condition 1437 Part 8).

scfm= standard cubic feet per minute

BTU/scf= British thermal unit per square cubic feet

scf= standard cubic feet

MMBTU= million British thermal units

LFG= landfill gas

CH₄= methane

APPENDIX M
MONTHLY CONDENSATE INJECTION LOGS

KIRBY CANYON RECYCLING & DISPOSAL FACILITY			
CONDENSATE INJECTION TOTALS: 2022			
Title V Permit A1812, Condition Number 1437 Part 14			
Month	Average Condensate Injection Rate (gpm)	Monthly Condensate Injection Throughput (gallons)	Condensate Injection Throughput 12-Month Total (gallons)
January-22	2.0	72,626	825,011
February-22	1.9	55,415	812,719
March-22	2.1	78,795	809,420
April-22	2.1	72,973	813,492
May-22	2.1	66,903	809,631
June-22	2.3	55,955	806,463
July-22	2.4	55,526	810,481
August-22	2.1	48,980	803,659
September-22	2.0	56,711	800,529
October-22	2.0	68,588	792,232
November-22	1.9	70,331	782,931
December-22	1.9	81,720	784,523
NOTES:			
gpm= gallons per minute			
Pursuant to Title V Permit A1812, Condition Number 1437 Part 14, the landfill gas condensate injection rate shall not exceed 5 gpm.			
Pursuant to Title V Permit A1812, Condition Number 1437 Part 14, the total landfill gas condensate injection throughput shall not exceed 2,000,000 gallons during any consecutive 12-month period.			

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

July-22

Start Date	Start Time	End Date	End Time	Total Injection Time (min.)	Average GPM	Total Gallons
2022/07/01	00:26:00	2022/07/01	07:44:00	438	2.3	1015
2022/07/01	12:48:00	2022/07/01	17:50:00	302	2.4	720
2022/07/02	00:32:00	2022/07/02	07:34:00	422	2.3	977
2022/07/02	12:24:00	2022/07/02	17:40:00	316	2.4	749
2022/07/02	23:46:00	2022/07/02	23:58:00	14	2.4	34
2022/07/03	00:00:00	2022/07/03	07:08:00	428	2.3	991
2022/07/03	11:40:00	2022/07/03	17:40:00	360	2.3	835
2022/07/03	23:40:00	2022/07/03	23:58:00	20	2.4	48
2022/07/04	00:00:00	2022/07/04	07:22:00	442	2.3	1018
2022/07/04	12:06:00	2022/07/04	17:32:00	326	2.4	768
2022/07/05	00:32:00	2022/07/05	07:32:00	420	2.3	974
2022/07/05	12:50:00	2022/07/05	17:52:00	302	2.4	717
2022/07/06	00:40:00	2022/07/06	07:10:00	390	2.3	905
2022/07/06	11:14:00	2022/07/06	17:26:00	372	2.4	875
2022/07/07	00:04:00	2022/07/07	08:04:00	480	2.3	1106
2022/07/07	12:02:00	2022/07/07	15:10:00	188	2.3	433
2022/07/07	22:04:00	2022/07/07	23:58:00	116	2.4	277
2022/07/08	00:00:00	2022/07/08	05:50:00	350	2.3	810
2022/07/08	09:58:00	2022/07/08	16:24:00	386	2.3	904
2022/07/08	23:16:00	2022/07/08	23:58:00	44	2.4	106
2022/07/09	00:00:00	2022/07/09	07:00:00	420	2.3	978
2022/07/09	11:14:00	2022/07/09	17:14:00	360	2.4	856
2022/07/09	23:40:00	2022/07/09	23:58:00	20	2.4	49
2022/07/10	00:00:00	2022/07/10	08:00:00	480	2.3	1123
2022/07/10	12:20:00	2022/07/10	17:36:00	316	2.4	764
2022/07/11	01:32:00	2022/07/11	09:02:00	450	2.4	1075
2022/07/11	13:32:00	2022/07/11	18:06:00	274	2.5	671
2022/07/12	01:56:00	2022/07/12	10:24:00	508	2.3	1186
2022/07/12	15:10:00	2022/07/12	19:34:00	264	2.5	647
2022/07/13	01:48:00	2022/07/13	10:30:00	522	2.3	1205
2022/07/13	15:14:00	2022/07/13	19:26:00	252	2.4	614
2022/07/14	01:52:00	2022/07/14	09:54:00	482	2.4	1140
2022/07/14	14:30:00	2022/07/14	18:54:00	264	2.5	648
2022/07/15	01:08:00	2022/07/15	09:48:00	520	2.4	1227
2022/07/15	14:22:00	2022/07/15	18:52:00	270	2.5	670
2022/07/16	01:06:00	2022/07/16	09:38:00	512	2.4	1210
2022/07/16	14:04:00	2022/07/16	18:32:00	268	2.4	643
2022/07/17	01:44:00	2022/07/17	09:58:00	494	2.3	1138
2022/07/17	14:52:00	2022/07/17	19:02:00	250	2.4	600
2022/07/18	01:58:00	2022/07/18	07:52:00	354	2.4	834
2022/07/18	15:48:00	2022/07/18	18:02:00	134	2.3	312
2022/07/19	01:54:00	2022/07/19	10:04:00	490	2.3	1128
2022/07/19	14:48:00	2022/07/19	18:56:00	248	2.4	596
2022/07/20	01:18:00	2022/07/20	10:26:00	548	2.3	1240
2022/07/20	14:54:00	2022/07/20	19:02:00	248	2.5	618
2022/07/21	01:14:00	2022/07/21	08:20:00	426	2.4	1013
2022/07/21	16:02:00	2022/07/21	18:44:00	162	2.4	393
2022/07/22	01:48:00	2022/07/22	07:46:00	358	2.4	861
2022/07/22	16:30:00	2022/07/22	17:24:00	54	2.4	128

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

July-22

2022/07/22	17:58:00	2022/07/22	20:12:00	134	2.4	325
2022/07/23	02:22:00	2022/07/23	10:04:00	462	2.4	1095
2022/07/23	14:32:00	2022/07/23	18:40:00	248	2.4	590
2022/07/24	01:14:00	2022/07/24	09:12:00	478	2.3	1093
2022/07/24	13:40:00	2022/07/24	18:52:00	312	2.4	740
2022/07/25	01:00:00	2022/07/25	08:42:00	462	2.4	1100
2022/07/25	13:06:00	2022/07/25	18:14:00	308	2.4	737
2022/07/26	01:12:00	2022/07/26	09:16:00	484	2.3	1114
2022/07/26	13:44:00	2022/07/26	18:20:00	276	2.4	665
2022/07/27	01:06:00	2022/07/27	08:20:00	434	2.3	1012
2022/07/27	12:48:00	2022/07/27	17:46:00	298	2.4	715
2022/07/28	00:46:00	2022/07/28	08:00:00	434	2.3	1008
2022/07/28	12:20:00	2022/07/28	17:24:00	304	2.4	719
2022/07/29	00:00:00	2022/07/29	07:44:00	464	2.4	1095
2022/07/29	00:00:00	2022/07/29	07:44:00	464	2.4	1095
2022/07/29	12:16:00	2022/07/29	17:34:00	318	2.5	779
2022/07/30	00:18:00	2022/07/30	07:48:00	450	2.4	1087
2022/07/30	12:24:00	2022/07/30	17:40:00	316	2.4	771
2022/07/31	00:12:00	2022/07/31	07:46:00	454	2.4	1072
2022/07/31	12:28:00	2022/07/31	18:44:00	376	2.4	887
Totals				23,540	2.4	55,526
				Maximum GPM	2.5	

gpm= gallons per minute

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the landfill gas condensate injection rate shall not exceed 5 gpm

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the total landfill gas condensate injection throughput shall not exceed 2,000,000 gallons during any consecutive 12-month period.

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

August-22

Start Date	Start Time	End Date	End Time	Total Injection Time (min.)	Average GPM	Total Gallons
2022/08/01	00:54:00	2022/08/01	09:20:00	506	2.3	1,186
2022/08/01	13:34:00	2022/08/01	18:30:00	296	2.4	710
2022/08/02	01:10:00	2022/08/02	08:20:00	430	2.4	1,013
2022/08/03	12:18:00	2022/08/03	17:22:00	304	2.4	718
2022/08/04	12:36:00	2022/08/04	17:42:00	306	2.3	716
2022/08/05	01:16:00	2022/08/05	08:08:00	412	2.3	932
2022/08/05	12:48:00	2022/08/05	17:50:00	302	2.3	704
2022/08/06	01:18:00	2022/08/06	08:20:00	422	2.3	966
2022/08/06	13:14:00	2022/08/06	18:08:00	294	2.4	701
2022/08/07	01:14:00	2022/08/07	08:32:00	438	2.3	1,021
2022/08/07	13:22:00	2022/08/07	18:12:00	290	2.5	711
2022/08/08	01:12:00	2022/08/08	08:32:00	440	2.3	1,029
2022/08/08	13:14:00	2022/08/08	18:42:00	328	2.4	785
2022/08/09	01:20:00	2022/08/09	08:56:00	456	2.3	1,057
2022/08/09	13:34:00	2022/08/09	18:24:00	290	2.4	706
2022/08/10	01:22:00	2022/08/10	09:30:00	488	2.3	1,107
2022/08/10	14:16:00	2022/08/10	18:56:00	280	2.4	671
2022/08/11	01:50:00	2022/08/11	09:48:00	478	2.3	1,098
2022/08/11	14:44:00	2022/08/11	19:28:00	284	2.4	677
2022/08/12	01:36:00	2022/08/12	09:54:00	498	2.3	1,122
2022/08/12	14:48:00	2022/08/12	19:32:00	284	2.4	679
2022/08/13	01:42:00	2022/08/13	09:48:00	486	2.3	1,101
2022/08/13	14:40:00	2022/08/13	19:18:00	278	2.4	664
2022/08/14	02:04:00	2022/08/14	10:24:00	500	2.3	1,139
2022/08/14	15:22:00	2022/08/14	19:38:00	256	2.4	612
2022/08/15	02:28:00	2022/08/15	07:30:00	302	2.3	693
2022/08/15	10:30:00	2022/08/15	15:16:00	286	2.0	581
2022/08/16	01:26:00	2022/08/16	10:48:00	562	1.9	1,089
2022/08/16	16:36:00	2022/08/16	20:48:00	252	2.0	507
2022/08/17	04:30:00	2022/08/17	14:08:00	578	1.9	1,093
2022/08/17	22:24:00	2022/08/17	23:58:00	96	2.1	199
2022/08/18	00:00:00	2022/08/18	05:46:00	346	2.0	693
2022/08/18	10:50:00	2022/08/18	18:24:00	454	2.0	894
2022/08/19	02:22:00	2022/08/19	13:52:00	690	1.9	1,336
2022/08/19	23:14:00	2022/08/19	23:58:00	46	2.1	96
2022/08/20	00:00:00	2022/08/20	08:28:00	508	2.0	1,002
2022/08/20	13:06:00	2022/08/20	19:16:00	370	2.0	749
2022/08/21	02:18:00	2022/08/21	13:28:00	670	1.9	1,292
2022/08/21	21:08:00	2022/08/21	23:58:00	172	2.0	352
2022/08/22	00:00:00	2022/08/22	06:48:00	408	2.0	799
2022/08/22	11:34:00	2022/08/22	18:46:00	432	2.0	868
2022/08/23	01:48:00	2022/08/23	13:26:00	698	2.0	1,365
2022/08/23	22:56:00	2022/08/23	23:58:00	64	2.1	134
2022/08/24	00:00:00	2022/08/24	08:34:00	514	2.0	1,019
2022/08/24	13:38:00	2022/08/24	19:46:00	368	2.0	750
2022/08/25	02:24:00	2022/08/25	07:08:00	284	2.0	556
2022/08/25	07:54:00	2022/08/25	15:12:00	438	1.9	851
2022/08/25	23:52:00	2022/08/25	23:58:00	8	2.1	17
2022/08/26	00:00:00	2022/08/26	07:46:00	466	2.0	917
2022/08/26	08:02:00	2022/08/26	11:04:00	182	1.9	347
2022/08/26	16:32:00	2022/08/26	21:22:00	290	2.0	593
2022/08/27	03:04:00	2022/08/27	14:34:00	690	1.9	1,341
2022/08/27	22:26:00	2022/08/27	23:58:00	94	2.0	192
2022/08/28	00:00:00	2022/08/28	09:20:00	560	1.9	1,092
2022/08/28	14:24:00	2022/08/28	20:48:00	384	2.0	777
2022/08/29	02:14:00	2022/08/29	13:52:00	698	1.9	1,356
2022/08/29	22:12:00	2022/08/29	23:58:00	108	2.1	223
2022/08/30	00:00:00	2022/08/30	08:16:00	496	2.0	980

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

August-22

2022/08/30	13:12:00	2022/08/30	19:28:00	376	2.0	769
2022/08/31	02:32:00	2022/08/31	14:08:00	696	2.0	1,369
2022/08/31	21:52:00	2022/08/31	23:58:00	128	2.1	265
Totals				23,060	2.1	48,980
				Maximum GPM	2.4	

gpm= gallons per minute

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the landfill gas condensate injection rate shall not exceed 5 gpm.

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the total landfill gas condensate injection throughput shall not exceed 2,000,000 gallons during any consecutive 12-month period.

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

September-22

Start Date	Start Time	End Date	End Time	Total Injection Time (min.)	Average GPM	Total Gallons
2022/09/01	00:00:00	2022/09/01	07:40:00	460	2.0	915
2022/09/01	11:12:00	2022/09/01	12:52:00	100	2.0	202
2022/09/01	15:02:00	2022/09/01	19:12:00	250	2.1	515
2022/09/02	03:06:00	2022/09/02	14:48:00	702	2.0	1,402
2022/09/02	22:48:00	2022/09/02	23:58:00	72	2.1	151
2022/09/03	00:00:00	2022/09/03	09:16:00	556	2.0	1,117
2022/09/03	13:44:00	2022/09/03	19:26:00	342	2.1	707
2022/09/04	02:38:00	2022/09/04	13:56:00	678	2.0	1,358
2022/09/04	23:44:00	2022/09/04	23:58:00	16	2.3	37
2022/09/05	00:00:00	2022/09/05	07:20:00	440	2.1	913
2022/09/05	12:12:00	2022/09/05	17:56:00	344	2.1	713
2022/09/06	03:30:00	2022/09/06	12:26:00	536	2.1	1,103
2022/09/07	01:12:00	2022/09/07	09:04:00	472	2.1	987
2022/09/07	13:38:00	2022/09/07	18:38:00	300	2.1	623
2022/09/08	03:06:00	2022/09/08	13:40:00	634	2.0	1,283
2022/09/09	00:00:00	2022/09/09	08:20:00	500	2.1	1,042
2022/09/09	13:00:00	2022/09/09	18:30:00	330	2.1	685
2022/09/10	02:06:00	2022/09/10	13:12:00	666	2.0	1,340
2022/09/10	19:42:00	2022/09/10	23:58:00	258	2.1	537
2022/09/11	00:00:00	2022/09/11	04:46:00	286	2.0	584
2022/09/11	09:42:00	2022/09/11	17:24:00	462	2.0	947
2022/09/12	00:50:00	2022/09/12	12:42:00	712	2.0	1,442
2022/09/12	19:52:00	2022/09/12	23:58:00	248	2.1	519
2022/09/13	00:00:00	2022/09/13	06:14:00	374	2.0	753
2022/09/13	10:34:00	2022/09/13	18:48:00	494	2.1	1,021
2022/09/14	00:16:00	2022/09/14	14:48:00	872	2.0	1,747
2022/09/14	21:50:00	2022/09/14	23:58:00	130	2.1	271
2022/09/15	00:00:00	2022/09/15	12:00:00	720	2.0	1,447
2022/09/15	17:32:00	2022/09/16	00:00:00	388	2.1	809
2022/09/16	00:00:00	2022/09/16	03:02:00	182	2.0	363
2022/09/16	07:28:00	2022/09/16	17:54:00	626	2.0	1,262
2022/09/16	23:54:00	2022/09/16	23:58:00	6	2.2	13
2022/09/17	00:00:00	2022/09/17	14:28:00	868	2.0	1,738
2022/09/17	20:52:00	2022/09/17	23:58:00	188	2.1	393
2022/09/18	00:00:00	2022/09/18	11:28:00	688	2.0	1,369
2022/09/18	16:20:00	2022/09/18	23:58:00	460	2.0	928
2022/09/19	00:00:00	2022/09/19	09:50:00	590	1.9	1,145
2022/09/19	14:24:00	2022/09/19	22:48:00	504	2.1	1,042
2022/09/20	03:22:00	2022/09/20	17:04:00	822	2.0	1,640
2022/09/20	23:18:00	2022/09/20	23:58:00	42	2.1	88
2022/09/21	00:00:00	2022/09/21	17:10:00	1,030	2.0	2,048
2022/09/21	22:38:00	2022/09/21	23:58:00	82	2.1	171
2022/09/22	00:00:00	2022/09/22	18:14:00	1,094	2.0	2,197
2022/09/22	23:46:00	2022/09/22	23:58:00	14	2.1	30
2022/09/23	00:00:00	2022/09/23	17:26:00	1,046	2.0	2,118
2022/09/23	23:48:00	2022/09/23	23:58:00	12	2.1	25
2022/09/24	00:00:00	2022/09/24	16:14:00	974	2.0	1,972
2022/09/24	23:22:00	2022/09/24	23:58:00	38	2.1	79
2022/09/25	00:00:00	2022/09/25	16:30:00	990	2.0	1,978

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

September-22

2022/09/25	23:06:00	2022/09/25	23:58:00	54	2.1	113
2022/09/26	00:00:00	2022/09/26	16:14:00	974	2.0	1,964
2022/09/26	22:40:00	2022/09/26	23:58:00	80	2.1	168
2022/09/27	00:00:00	2022/09/27	16:00:00	960	2.0	1,943
2022/09/27	21:58:00	2022/09/27	23:58:00	122	2.1	256
2022/09/28	00:00:00	2022/09/28	16:32:00	992	2.0	2,000
2022/09/28	22:24:00	2022/09/28	23:58:00	96	2.1	202
2022/09/29	00:00:00	2022/09/29	16:38:00	998	2.0	2,025
2022/09/29	22:44:00	2022/09/29	23:58:00	76	2.1	162
2022/09/30	00:00:00	2022/09/30	15:56:00	956	2.1	1,964
2022/09/30	22:52:00	2022/09/30	23:58:00	68	2.1	143
Totals				27,974	2.0	56,711
				Maximum GPM	2.2	

gpm= gallons per minute

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the landfill gas condensate injection rate shall not exceed 5 gpm.

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the total landfill gas condensate injection throughput shall not exceed 2,000,000 gallons during any consecutive 12-month period.

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

October-22

Start Date	Start Time	End Date	End Time	Total Injection Time (min.)	Average GPM	Total Gallons
2022/10/01	00:00:00	2022/10/01	06:12:00	372	2.0	758
2022/10/01	09:40:00	2022/10/01	19:34:00	594	2.0	1,187
2022/10/02	00:40:00	2022/10/02	17:46:00	1,026	2.0	2,041
2022/10/02	23:22:00	2022/10/02	23:58:00	38	2.1	79
2022/10/03	00:00:00	2022/10/03	20:58:00	1,258	2.0	2,504
2022/10/04	01:24:00	2022/10/04	19:02:00	1,058	2.0	2,086
2022/10/05	00:26:00	2022/10/05	18:36:00	1,090	2.0	2,159
2022/10/06	00:52:00	2022/10/06	17:10:00	978	2.0	1,960
2022/10/07	00:10:00	2022/10/07	17:12:00	1,022	2.0	2,035
2022/10/08	00:02:00	2022/10/08	16:56:00	1,014	2.0	2,030
2022/10/08	23:46:00	2022/10/08	23:58:00	14	2.0	28
2022/10/09	00:00:00	2022/10/09	17:16:00	1,036	2.0	2,062
2022/10/09	23:26:00	2022/10/09	23:58:00	34	2.0	70
2022/10/10	00:00:00	2022/10/10	13:58:00	838	2.0	1,666
2022/10/11	05:36:00	2022/10/11	20:46:00	910	2.0	1,784
2022/10/12	02:16:00	2022/10/12	09:38:00	442	2.0	863
2022/10/12	10:22:00	2022/10/12	23:58:00	818	3.0	2,426
2022/10/13	00:00:00	2022/10/13	00:14:00	14	2.9	41
2022/10/13	04:44:00	2022/10/13	16:10:00	686	2.3	1,562
2022/10/13	22:02:00	2022/10/13	23:58:00	118	2.0	235
2022/10/14	00:00:00	2022/10/14	18:46:00	1,126	1.9	2,192
2022/10/15	00:30:00	2022/10/15	19:24:00	1,134	2.0	2,217
2022/10/16	00:14:00	2022/10/16	18:34:00	1,100	2.0	2,170
2022/10/16	23:56:00	2022/10/16	23:58:00	4	2.0	8
2022/10/17	00:00:00	2022/10/17	19:20:00	1,160	2.0	2,280
2022/10/18	00:36:00	2022/10/18	19:28:00	1,132	2.0	2,215
2022/10/19	00:58:00	2022/10/19	18:38:00	1,060	2.0	2,097
2022/10/20	00:58:00	2022/10/20	18:18:00	1,040	2.0	2,042
2022/10/21	00:46:00	2022/10/21	19:28:00	1,122	2.0	2,191
2022/10/22	00:30:00	2022/10/22	21:06:00	1,236	1.9	2,407
2022/10/23	01:28:00	2022/10/23	23:58:00	1,352	1.9	2,600
2022/10/24	00:00:00	2022/10/24	03:48:00	228	1.9	431
2022/10/24	08:00:00	2022/10/24	23:58:00	960	1.9	1,853
2022/10/25	00:00:00	2022/10/25	04:04:00	244	1.9	468
2022/10/25	08:14:00	2022/10/25	23:58:00	946	1.9	1,836
2022/10/26	00:00:00	2022/10/26	05:44:00	344	1.9	648
2022/10/26	09:50:00	2022/10/26	23:58:00	850	1.9	1,645
2022/10/27	00:00:00	2022/10/27	16:40:00	1,000	1.9	1,899
2022/10/27	22:34:00	2022/10/27	23:58:00	86	2.0	173
2022/10/28	00:00:00	2022/10/28	21:08:00	1,268	1.9	2,449
2022/10/29	01:28:00	2022/10/29	23:58:00	1,352	1.9	2,614

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

October-22

2022/10/30	00:00:00	2022/10/30	01:46:00	106	1.9	201
2022/10/30	05:52:00	2022/10/30	23:58:00	1,088	1.9	2,110
2022/10/31	00:00:00	2022/10/31	02:54:00	174	1.9	330
2022/10/31	07:06:00	2022/10/31	23:58:00	1,014	1.9	1,937
Totals				34,486	2.0	68,588
				Maximum GPM	3.0	

gpm= gallons per minute

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the landfill gas condensate injection rate shall not exceed 5 gpm.

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the total landfill gas condensate injection throughput shall not exceed 2,000,000 gallons during any consecutive 12-month period.

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

November-22

Start Date	Start Time	End Date	End Time	Total Injection Time (min.)	Average GPM	Total Gallons
2022/11/01	00:00:00	2022/11/01	21:48:00	1,308	1.9	2,432
2022/11/02	01:44:00	2022/11/02	23:58:00	1,336	1.9	2,511
2022/11/03	00:00:00	2022/11/03	23:58:00	1,440	1.9	2,677
2022/11/04	00:00:00	2022/11/04	14:42:00	882	1.8	1,628
2022/11/04	19:26:00	2022/11/04	23:58:00	274	1.9	528
2022/11/05	00:00:00	2022/11/05	23:58:00	1,440	1.9	2,727
2022/11/06	00:00:00	2022/11/06	05:02:00	346	1.9	646
2022/11/06	09:02:00	2022/11/06	23:58:00	898	1.9	1,726
2022/11/07	00:00:00	2022/11/07	18:18:00	1,098	1.9	2,067
2022/11/07	22:10:00	2022/11/07	23:58:00	110	1.9	214
2022/11/08	00:00:00	2022/11/08	23:58:00	1,440	1.9	2,726
2022/11/09	00:00:00	2022/11/09	23:58:00	1,440	1.9	2,703
2022/11/10	00:00:00	2022/11/10	23:58:00	1,440	1.9	2,685
2022/11/11	00:00:00	2022/11/11	10:08:00	608	1.8	1,121
2022/11/11	13:58:00	2022/11/11	23:58:00	602	1.9	1,141
2022/11/12	00:00:00	2022/11/12	23:58:00	1,440	1.9	2,670
2022/11/13	00:00:00	2022/11/13	23:58:00	1,440	1.8	2,655
2022/11/14	00:00:00	2022/11/14	18:16:00	1,096	1.8	2,010
2022/11/14	22:40:00	2022/11/14	23:58:00	80	2.0	157
2022/11/15	00:00:00	2022/11/15	23:58:00	1,440	1.9	2,732
2022/11/16	00:00:00	2022/11/16	23:58:00	1,440	1.9	2,693
2022/11/17	00:00:00	2022/11/17	06:14:00	374	1.8	688
2022/11/17	10:22:00	2022/11/17	23:58:00	818	1.9	1,532
2022/11/18	00:00:00	2022/11/18	23:58:00	1,440	1.9	2,668
2022/11/19	00:00:00	2022/11/19	19:32:00	1,172	1.8	2,159
2022/11/19	23:40:00	2022/11/19	23:58:00	20	1.9	39
2022/11/20	00:00:00	2022/11/20	23:58:00	1,440	1.9	2,723
2022/11/21	00:00:00	2022/11/21	23:58:00	1,440	1.8	2,664
2022/11/22	00:00:00	2022/11/22	09:34:00	574	1.8	1,045
2022/11/22	13:48:00	2022/11/22	23:58:00	612	1.9	1,157
2022/11/23	00:00:00	2022/11/23	23:58:00	1,440	1.8	2,661
2022/11/24	00:00:00	2022/11/24	17:30:00	1,050	1.8	1,928
2022/11/24	22:14:00	2022/11/24	23:58:00	106	1.9	203
2022/11/25	00:00:00	2022/11/25	23:58:00	1,440	1.9	2,691
2022/11/26	00:00:00	2022/11/26	18:10:00	1,090	1.8	1,979
2022/11/26	22:30:00	2022/11/26	23:58:00	90	1.9	171
2022/11/27	00:00:00	2022/11/27	23:58:00	1,440	1.8	2,659
2022/11/28	00:00:00	2022/11/28	23:58:00	1,440	1.8	2,603
2022/11/29	00:00:00	2022/11/29	02:56:00	176	1.8	316
Totals				37,760	1.9	70,331
				Maximum GPM	2.0	

gpm= gallons per minute

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the landfill gas condensate injection rate shall not exceed 5 gpm.

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the total landfill gas condensate injection throughput shall not exceed 2,000,000 gallons during any consecutive 12-month period.

KIRBY CANYON RECYCLING & DISPOSAL FACILITY

CONDENSATE INJECTION (A-12 Flare)

December-22

Start Date	Start Time	End Date	End Time	Total Injection Time (min.)	Average GPM	Total Gallons
2022/12/01	11:18:00	2022/12/01	23:56:00	758	2.4	1,787
2022/12/02	04:16:00	2022/12/02	23:58:00	1,184	2.0	2,384
2022/12/03	00:00:00	2022/12/03	23:58:00	1,440	1.9	2,724
2022/12/04	00:00:00	2022/12/04	23:58:00	1,440	1.9	2,716
2022/12/05	00:00:00	2022/12/05	23:58:00	1,440	1.9	2,717
2022/12/06	00:00:00	2022/12/06	23:58:00	1,440	1.9	2,709
2022/12/07	00:00:00	2022/12/07	23:58:00	1,440	1.9	2,706
2022/12/08	00:00:00	2022/12/08	23:58:00	1,440	1.9	2,708
2022/12/09	00:00:00	2022/12/09	23:58:00	1,440	1.9	2,724
2022/12/10	00:00:00	2022/12/10	23:58:00	1,440	1.9	2,725
2022/12/11	00:00:00	2022/12/11	23:58:00	1,440	1.9	2,707
2022/12/12	00:00:00	2022/12/12	23:58:00	1,440	1.9	2,706
2022/12/13	00:00:00	2022/12/13	23:58:00	1,440	1.9	2,708
2022/12/14	00:00:00	2022/12/14	17:14:00	1,034	1.9	1,939
2022/12/14	21:12:00	2022/12/14	23:58:00	168	1.9	325
2022/12/15	00:00:00	2022/12/15	23:58:00	1,440	1.9	2,728
2022/12/16	00:00:00	2022/12/16	23:58:00	1,440	1.9	2,713
2022/12/17	00:00:00	2022/12/17	23:58:00	1,440	1.9	2,718
2022/12/18	00:00:00	2022/12/18	23:58:00	1,440	1.9	2,714
2022/12/19	00:00:00	2022/12/19	23:58:00	1,440	1.9	2,711
2022/12/20	00:00:00	2022/12/20	23:58:00	1,440	1.9	2,721
2022/12/21	00:00:00	2022/12/21	23:58:00	1,440	1.9	2,723
2022/12/22	00:00:00	2022/12/22	23:58:00	1,440	1.9	2,722
2022/12/23	00:00:00	2022/12/23	23:58:00	1,440	1.9	2,732
2022/12/24	00:00:00	2022/12/24	03:20:00	200	1.9	377
2022/12/24	07:10:00	2022/12/24	23:58:00	1,010	1.9	1,941
2022/12/25	00:00:00	2022/12/25	23:58:00	1,440	1.9	2,756
2022/12/26	00:00:00	2022/12/26	23:58:00	1,440	1.9	2,746
2022/12/27	00:00:00	2022/12/27	23:58:00	1,440	1.9	2,736
2022/12/28	00:00:00	2022/12/28	23:58:00	1,440	1.9	2,720
2022/12/29	00:00:00	2022/12/29	09:22:00	562	1.9	1,057
2022/12/29	13:20:00	2022/12/29	23:58:00	640	1.9	1,239
2022/12/30	00:00:00	2022/12/30	23:58:00	1,440	1.9	2,778
2022/12/31	00:00:00	2022/12/31	17:02:00	1,022	1.9	1,971
2022/12/31	18:34:00	2022/12/31	23:58:00	326	1.9	630
Totals				42,904	1.9	81,720
				Maximum GPM	1.9	

gpm= gallons per minute

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the landfill gas condensate injection rate shall not exceed 5 gpm.

Pursuant to Title V Permit A1812, Condition Number 25301 Part 14, the total landfill gas condensate injection throughput shall not exceed 2,000,000 gallons during any consecutive 12-month period.

APPENDIX N

GAS MIGRATION MONITORING REPORTS



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

November 1, 2022

Ms. Becky Azevedo
Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
San Jose, CA 95037

**Re: Fourth Quarter 2022 Perimeter gas and Methane in Structure Monitoring Report
Kirby Canyon Recycling & Disposal Facility**

Dear Ms. Azevedo:

This report for the “Kirby Canyon Recycling and Disposal Facility (KCRDF) Landfill” contains the results of the Fourth Quarter 2022 Perimeter Gas and Methane in Structure Monitoring conducted at the KCRDF. All monitoring was conducted by KCRDF 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). Results for both probes and structures are summarized in Table 1. Field data are presented in Attachment B.

No exceedances of Subtitle D (40 CFR 258.23) and California Code of Regulations (CCR) Title 27, Division 2, Section 20919.5 were detected during any of the monitoring events.

Results for probes and are summarized in Table 1. All other Field data sheets are presented in Attachment B.

Ms. Becky Azevedo
 Date: November 1, 2022

Kirby Canyon Recycling and Disposal Facility Perimeter Gas Monitoring Probe Results

Analyst: Tino Robles Date: 10/18/2022
 Instrument: Gem 5000 Serial #: G502468
 Atmospheric Temperature (Deg F): 75
 Barometric Pressure: 30.04 Inch of HG
 Wind Speed: 5 Mph Wind Direction: N
 Weather Condition: Sunny

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP01A	11:08 AM	0	0.05	Ok	Ok	
KIRBP01B	11:10 PM	0	-0.04	Ok	Ok	
KIRBP02A	11:39 AM	0	-0.01	Ok	Ok	
KIRBP02B	11:41 AM	0	-0.01	Ok	Ok	
KIRBP03A	11:45 AM	0	-0.05	Ok	Ok	
KIRBP03B	11:47 AM	0	-0.02	Ok	Ok	
KIRBP04A	11:16 AM	0	-0.04	Ok	Ok	
KIRBP04B	11:18 AM	0	-0.08	Ok	Ok	
KIRBP05A	12:32 PM	0	0.06	Ok	Ok	
KIRBP05B	12:34 PM	0	0.01	Ok	Ok	
KIRBP06A	12:20 PM	0	-0.01	Ok	Ok	
KIRBP06B	12:22 PM	0	0.04	Ok	Ok	
KIRBP07A	12:13 PM	0	0.02	Ok	Ok	
KIRBP07B	12:15 PM	0	-0.01	Ok	Ok	
KIRBP08A	12:05 PM	0	-0.04	Ok	Ok	
KIRBP08B	12:07 PM	0	0.01	Ok	Ok	

Ms. Becky Azevedo
 Date: November 1, 2022

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP09A	11:59 AM	0	0.01	Ok	Ok	
KIRBP09B	12:01 PM	0	-0.05	Ok	Ok	
KIRBP10A	11:32 AM	0	-0.05	Ok	Ok	
KIRBP10B	11:34 AM	0	-0.08	Ok	Ok	
KIRBP011A	11:28 AM	0	-0.05	Ok	Ok	
KIRBP011B	11:30 AM	0	-0.06	Ok	Ok	
KIRBP12A	11:12 AM	0	-0.06	Ok	Ok	
KIRBP12B	11:14 AM	0	-0.03	Ok	Ok	
KIRBP14A	1:28 PM	0	-0.01	Ok	Ok	
KIRBP14B	1:30 PM	0	-0.02	Ok	Ok	
KIRBP15	10:34 AM	0	0.05	Ok	Ok	

ND = No detection

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.

Note: The reading should not exceed 25% LEL = 1.25% CH₄ = 12,500 ppm CH₄

Immediately notify compliance personnel of any readings in excess of 5 percent methane.

STRUCTURE FID MONITORING DATA

Analyst: Tino Robles

Date: 10-18-22

Instrument: FID

Serial #: 0928538411

Monitored Location	Time	PPM	Comments
Scale House	6:55 AM	0	
Admin Building	6:35 AM	0	
Operations Break Trailer	6:45 AM	0	

ND = No detection

Immediately notify compliance personnel of any readings in excess of 1.25 percent methane

Ms. Becky Azevedo
Date: November 1, 2022

MONITORING EQUIPMENT AND METHODOLOGY [TITLE 27 §20934(a)(4)]

Perimeter Gas Monitoring

The facility conducted the required monitoring using a CES-Landtec GEM-5000 gas analyzer (GEM). The monitoring was conducted by Tino Robles on October 18, 2022. The static pressure of each probe was monitored using the GEM's internal pressure transducers and the probes were monitored to determine methane concentration.

Facility Structures

Tino Robles used a TVA 1000 to monitor buildings and structures to check for the presence of methane on October 18, 2022. The instrument was calibrated on October 18, 2022, 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 Tino Robles on October 18, 2022.

GENERAL WEATHER CONDITIONS [TITLE 27 §20934(a)(3)]

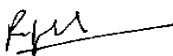
General weather conditions at the time of monitoring are presented in Table 3.

Table 3 General Weather Conditions

Description	October 18, 2022
General conditions	Overcast
Avg Wind Speed (mph)	4.3
Wind Direction	NW
Barometric Pressure, (Inches of Hg)	30.03
Average Ambient (Temperature Deg F)	77

If you have any questions regarding this notification, please do not hesitate to contact me at rphadnis@wm.com

Thank you,
Waste Management,



Rajan Phadnis
EP Air Specialist- Northern California-Nevada

Attachments: Perimeter Gas Probe Location Map
KCRDF Field Data

ATTACHMENT A

SITE MAP



**FIGURE 1
PERIMETER GAS PROBE LOCATIONS**

KIRBY CANYON RECYCLING & DISPOSAL FACILITY
SANTA CLARA COUNTY, CALIFORNIA

DATE:	09/30/19
FILENAME:	SITE0919-LFGpr
PROJ. No.	WM8701

ATTACHMENT B

FIELD DATA

Kirby Canyon Recycling and Disposal Facility Perimeter Gas Monitoring Probe Results

Analyst: Tino Robles Date: 10/18/2022
 Instrument: Gem 5000 Serial #: G502468
 Atmospheric Temperature (Deg F): 75
 Barometric Pressure: 30.04 Inch of HG
 Wind Speed: 5 Mph Wind Direction: N
 Weather Condition: Sunny

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP01A	11:08 AM	0	0.05	Ok	Ok	
KIRBP01B	11:10 PM	0	-0.04	Ok	Ok	
KIRBP02A	11:39 AM	0	-0.01	Ok	Ok	
KIRBP02B	11:41 AM	0	-0.01	Ok	Ok	
KIRBP03A	11:45 AM	0	-0.05	Ok	Ok	
KIRBP03B	11:47 AM	0	-0.02	Ok	Ok	
KIRBP04A	11:16 AM	0	-0.04	Ok	Ok	
KIRBP04B	11:18 AM	0	-0.08	Ok	Ok	
KIRBP05A	12:32 PM	0	0.06	Ok	Ok	
KIRBP05B	12:34 PM	0	0.01	Ok	Ok	
KIRBP06A	12:20 PM	0	-0.01	Ok	Ok	
KIRBP06B	12:22 PM	0	0.04	Ok	Ok	
KIRBP07A	12:13 PM	0	0.02	Ok	Ok	
KIRBP07B	12:15 PM	0	-0.01	Ok	Ok	
KIRBP08A	12:05 PM	0	-0.04	Ok	Ok	
KIRBP08B	12:07 PM	0	0.01	Ok	Ok	
KIRBP09A	11:59 AM	0	0.01	Ok	Ok	
KIRBP09B	12:01 PM	0	-0.05	Ok	Ok	
KIRBP10A	11:32 AM	0	-0.05	Ok	Ok	

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP10B	11:34 AM	0	-0.08	Ok	Ok	
KIRBP011A	11:28 AM	0	-0.05	Ok	Ok	
KIRBP011B	11:30 AM	0	-0.06	Ok	Ok	
KIRBP12A	11:12 AM	0	-0.06	Ok	Ok	
KIRBP12B	11:14 AM	0	-0.03	Ok	Ok	
KIRBP14A	1:28 PM	0	-0.01	Ok	Ok	
KIRBP14B	1:30 PM	0	-0.02	Ok	Ok	
KIRBP15	10:34 AM	0	0.05	Ok	Ok	

ND = No detection

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.

Note: The reading should not exceed 25% LEL = 1.25% CH₄ = 12,500 ppm CH₄

Immediately notify compliance personnel of any readings in excess of 5 percent methane.

STRUCTURE FID MONITORING DATA

Analyst: Tino Robles

Date: 10-18-22

Instrument: TVA-1000

Serial #: 0928538411

Monitored Location	Time	PPM	Comments
Scale House	6:55 AM	0	
Admin Building	6:35 AM	0	
Operations Break Trailer	6:45 AM	0	

ND = No detection

Immediately notify compliance personnel of any readings in excess of 1.25 percent methane.



GAS DETECTOR CALIBRATION RECORD

LOCATION: KIRBY CANYON RECYCLING AND DISPOSAL FACILITY

MANUFACTURER & MODEL NUMBER: Sierra Monitor Corporation Model #2001

CALIBRATED BY / INSTRUMENT USED: Cal System Model# 26

CALIBRATION GAS EXPIRATION DATE: June 16, 2023

Location	DATE CALIBRATED	SERIAL NUMBER	Methane LEL* SENSOR alarm 10,000 ppm	MAINTENANCE PERFORMED / COMMENTS ON MONITOR CONDITION
Main Office	10-18-22	1500700086GAM	YES	Good Condition
Scale House	10-18-22	1819303476GCN	YES	Good Condition
Break Trailer	10-18-22	1819303478GCN	YES	Good Condition

** This form must be retained for 12 months after completion.

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION
REPORT

Landfill Name: KORDE Date: 10/18/22
Time: 030 AM _____ PM
Instrument Make: Thermo Model: TVA-1000 B S/N: 0928538411

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.
Stable Reading = 502 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): 2 ppm (b)

Calculate Background Value:

$$\frac{(a) + (b)}{2} \text{ Background} = \underline{1} \text{ ppm}$$

Performed By: Rdd

CALIBRATION PRECISION TEST RECORD

Date: 10/06/22

Expiration Date (3 months): 1/06/23

Time: 0625 AM _____ PM

Instrument Make: Thermo Model: TVA-1000B S/N: 0928538411

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: 502 ppm (d)

Measurement #3:

Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 502 ppm (f)

Calculate Precision:

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

_____ % (must be < than 10%)

Performed By: Robles

RESPONSE TIME TEST RECORD

Date: 10/6/22

Expiration Date (3 months): 1/6/23

Time: 625 AM _____ PM

Instrument Make: Thermo Model: TVA-1000B S/N: 0928538411

Measurement #1:

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: 7 seconds (a)

Measurement #2:

Stabilized Reading Using Calibration Gas: 502 ppm
90% of the Stabilized Reading: 451 ppm
Time to Reach 90% of Stabilized Reading after
switching from Zero Air to Calibration Gas: 4 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 502 ppm
90% of the Stabilized Reading: 451 ppm
Time to Reach 90% of Stabilized Reading after
switching from Zero Air to Calibration Gas: 5 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = \text{_____ seconds (must be less than 30 seconds)}$$

Performed By: Robles



Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
PO Box 1870
Morgan Hill, California 95037
T: 408.779.2206

October 3, 2022

Ms. Becky Azevedo
Kirby Canyon Recycling & Disposal Facility
910 Coyote Creek Golf Drive
San Jose, CA 95037

**Re: Third Quarter 2022 Perimeter gas and Methane in Structure Monitoring Report
Kirby Canyon Recycling & Disposal Facility**

Dear Ms. Azevedo:

This report for the “Kirby Canyon Recycling and Disposal Facility (KCRDF) Landfill” contains the results of the Third Quarter 2022 Perimeter Gas and Methane in Structure Monitoring conducted at the KCRDF. All monitoring was conducted by KCRDF 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). Results for both probes and structures are summarized in Table 1. Field data are presented in Attachment B.

No exceedances of Subtitle D (40 CFR 258.23) and California Code of Regulations (CCR) Title 27, Division 2, Section 20919.5 were detected during any of the monitoring events.

Results for probes and are summarized in Table 1. All other Field data sheets are presented in Attachment B.

Ms. Becky Azevedo
Date: October 3, 2022

Kirby Canyon Recycling and Disposal Facility Perimeter Gas Monitoring Probe Results

Analyst: Tino Robles Date: 9/21/2022
Instrument: Gem 5000 Serial #: G502468
Atmospheric Temperature (Deg F): 81
Barometric Pressure: 29.96 Inch of HG
Wind Speed: 10 Mph Wind Direction: NW
Weather Condition: Overcast

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP01A	12:24 PM	0	-0.08	Ok	Ok	
KIRBP01B	12:26 PM	0	-0.02	Ok	Ok	
KIRBP02A	1:16 PM	0	-0.01	Ok	Ok	
KIRBP02B	1:18 PM	0	0.00	Ok	Ok	
KIRBP03A	1:23 PM	0	-0.01	Ok	Ok	
KIRBP03B	1:25 PM	0	-0.05	Ok	Ok	
KIRBP04A	1:28 PM	0	0.00	Ok	Ok	
KIRBP04B	1:30 PM	0	-0.01	Ok	Ok	
KIRBP05A	1:35 PM	0	0.00	Ok	Ok	
KIRBP05B	1:37 PM	0.1	-0.02	Ok	Ok	
KIRBP06A	1:32 PM	0	-0.01	Ok	Ok	
KIRBP06B	1:44 PM	0.1	-0.03	Ok	Ok	
KIRBP07A	1:47 PM	0	-0.04	Ok	Ok	
KIRBP07B	1:49 PM	0.1	-0.02	Ok	Ok	
KIRBP08A	1:55 PM	0	-0.01	Ok	Ok	
KIRBP08B	1:57 PM	0	-0.04	Ok	Ok	

Ms. Becky Azevedo
 Date: October 3, 2022

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP09A	12:46 PM	0	-0.02	Ok	Ok	
KIRBP09B	12:55 PM	0	-0.02	Ok	Ok	
KIRBP10A	12:32 PM	0	-0.06	Ok	Ok	
KIRBP10B	12:34 PM	0	-0.05	Ok	Ok	
KIRBP011A	11:44 AM	0	-0.01	Ok	Ok	
KIRBP011B	11:46 AM	0	-0.08	Ok	Ok	
KIRBP12A	12:38 PM	0	-0.03	Ok	Ok	
KIRBP12B	12:39 PM	0	-0.02	Ok	Ok	
KIRBP14A	2:07 PM	0.2	-0.05	Ok	Ok	
KIRBP14B	2:09 PM	0.2	0.00	Ok	Ok	
KIRBP15	12:18 PM	0	-0.11	Ok	Ok	

ND = No detection

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.

Note: The reading should not exceed 25% LEL = 1.25% CH₄ = 12,500 ppm CH₄

Immediately notify compliance personnel of any readings in excess of 5 percent methane.

STRUCTURE FID MONITORING DATA

Analyst: Tino Robles

Date: 9-2-22

Instrument: FID

Serial #: 0928538411

Monitored Location	Time	PPM	Comments
Scale House	7:15 AM	0	
Admin Building	6:55 AM	0	
Operations Break Trailer	7:00 AM	0	

ND = No detection

Immediately notify compliance personnel of any readings in excess of 1.25 percent methane

Ms. Becky Azevedo
Date: October 3, 2022

MONITORING EQUIPMENT AND METHODOLOGY [TITLE 27 §20934(a)(4)]

Perimeter Gas Monitoring

The facility conducted the required monitoring using a CES-Landtec GEM-5000 gas analyzer (GEM). The monitoring was conducted by Tino Robles on September 21, 2022. The static pressure of each probe was monitored using the GEM's internal pressure transducers and the probes were monitored to determine methane concentration.

Facility Structures

Tino Robles used a TVA 1000 to monitor buildings and structures to check for the presence of methane on September 2, 2022. The instrument was calibrated on September 2, 2022, 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 Tino Robles on September 2, 2022.

GENERAL WEATHER CONDITIONS [TITLE 27 §20934(a)(3)]

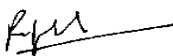
General weather conditions during the time of monitoring are presented in Table 3.

Table 3 General Weather Conditions

Description	September 21, 2022
General conditions	Overcast
Avg Wind Speed (mph)	11.8
Wind Direction	N
Barometric Pressure, (Inches of Hg)	29.96
Average Ambient (Temperature Deg F)	66

If you have any questions regarding this notification, please do not hesitate to contact me at rphadnis@wm.com

Thank you,
Waste Management,



Rajan Phadnis
EP Air Specialist- Northern California-Nevada

Attachments: Perimeter Gas Probe Location Map
KCRDF Field Data

ATTACHMENT A

SITE MAP



FIGURE 1
PERIMETER GAS PROBE LOCATIONS
 KIRBY CANYON RECYCLING & DISPOSAL FACILITY
 SANTA CLARA COUNTY, CALIFORNIA

DATE:	09/30/19
FILENAME:	SITE0919-LFGpr
PROJ. No.	WM8701

ATTACHMENT B

FIELD DATA

Kirby Canyon Recycling and Disposal Facility Perimeter Gas Monitoring Probe Results

Analyst: Tino Robles Date: 9/21/2022
 Instrument: Gem 5000 Serial #: G502468
 Atmospheric Temperature (Deg F): 81
 Barometric Pressure: 29.96 Inch of HG
 Wind Speed: 10 Mph Wind Direction: NW
 Weather Condition: Overcast

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP01A	12:24 PM	0	-0.08	Ok	Ok	
KIRBP01B	12:26 PM	0	-0.02	Ok	Ok	
KIRBP02A	1:16 PM	0	-0.01	Ok	Ok	
KIRBP02B	1:18 PM	0	0.00	Ok	Ok	
KIRBP03A	1:23 PM	0	-0.01	Ok	Ok	
KIRBP03B	1:25 PM	0	-0.05	Ok	Ok	
KIRBP04A	1:28 PM	0	0.00	Ok	Ok	
KIRBP04B	1:30 PM	0	-0.01	Ok	Ok	
KIRBP05A	1:35 PM	0	0.00	Ok	Ok	
KIRBP05B	1:37 PM	0.1	-0.02	Ok	Ok	
KIRBP06A	1:32 PM	0	-0.01	Ok	Ok	
KIRBP06B	1:44 PM	0.1	-0.03	Ok	Ok	
KIRBP07A	1:47 PM	0	-0.04	Ok	Ok	
KIRBP07B	1:49 PM	0.1	-0.02	Ok	Ok	
KIRBP08A	1:55 PM	0	-0.01	Ok	Ok	
KIRBP08B	1:57 PM	0	-0.04	Ok	Ok	
KIRBP09A	12:46 PM	0	-0.02	Ok	Ok	
KIRBP09B	12:55 PM	0	-0.02	Ok	Ok	
KIRBP10A	12:32 PM	0	-0.06	Ok	Ok	

Probe ID	Time	CH ₄ (%)	Probe Pressure (in-H ₂ O)	Probe Condition (clean, capped, locked)		Comments
				Arrival	Departure	
KIRBP10B	12:34 PM	0	-0.05	Ok	Ok	
KIRBP011A	11:44 AM	0	-0.01	Ok	Ok	
KIRBP011B	11:46 AM	0	-0.08	Ok	Ok	
KIRBP12A	12:38 PM	0	-0.03	Ok	Ok	
KIRBP12B	12:39 PM	0	-0.02	Ok	Ok	
KIRBP14A	2:07 PM	0.2	-0.05	Ok	Ok	
KIRBP14B	2:09 PM	0.2	0.00	Ok	Ok	
KIRBP15	12:18 PM	0	-0.11	Ok	Ok	

ND = No detection

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.

Note: The reading should not exceed 25% LEL = 1.25% CH₄ = 12,500 ppm CH₄

Immediately notify compliance personnel of any readings in excess of 5 percent methane.

STRUCTURE FID MONITORING DATA

Analyst: Tino Robles

Date: 9-2-22

Instrument: TVA-1000

Serial #: 0928538411

Monitored Location	Time	PPM	Comments
Scale House	7:15 AM	0	
Admin Building	6:55 AM	0	
Operations Break Trailer	7:00 AM	0	

ND = No detection

Immediately notify compliance personnel of any readings in excess of 1.25 percent methane.



GAS DETECTOR CALIBRATION RECORD

LOCATION: KIRBY CANYON RECYCLING AND DISPOSAL FACILITY

MANUFACTURER & MODEL NUMBER: Sierra Monitor Corporation Model #2001

CALIBRATED BY / INSTRUMENT USED: Cal System Model# 26

CALIBRATION GAS EXPIRATION DATE: June 16, 2023

Location	DATE CALIBRATED	SERIAL NUMBER	Methane LEL* SENSOR alarm 10,000 ppm	MAINTENANCE PERFORMED / COMMENTS ON MONITOR CONDITION
Main Office	9-2-22	1500700086GAM	YES	Good Condition
Scale House	9-2-22	1819303476GCN	YES	Good Condition
Break Trailer	9-2-22	1819303478GCN	YES	Good Condition

** This form must be retained for 12 months after completion.

CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: KCRDF Date: 9/2/22
Time: 6:45 AM _____ PM
Instrument Make: Thermo Model: TJA1000B S/N: 0928538411

Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.
Stable Reading = 503 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): 2 ppm (b)

Calculate Background Value:

$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{1.5} \text{ ppm}$$

Performed By: Robles

CALIBRATION PRECISION TEST RECORD

Landfill Name: Krbt Date: 7/6/22
Expiration Date (3 months): 10/6/22
Time: 6:45 AM _____ PM
Instrument Make: TVA1003 Model: Thermal S/N: 0928538411
Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)
Meter Reading for Calibration Gas: 503 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: 501 ppm (f)

Calculate Precision:

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

_____ % (must be < than 10%)

Performed By: [Signature]

RESPONSE TIME TEST RECORD

Date: 7/6/22

Expiration Date (3 months): 10/6/22

Time: 645 AM _____ PM

Instrument Make: TVA 1000B Model: THERMAL S/N: 0928653411

Measurement #1:

Stabilized Reading Using Calibration Gas: 503 ppm
90% of the Stabilized Reading: 450 ppm
Time to Reach 90% of Stabilized Reading after
switching from Zero Air to Calibration Gas: 5 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: 4 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: 5 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = \text{_____ seconds (must be less than 30 seconds)}$$

Performed By: [Signature]

APPENDIX O

A-12 FLARE PERFORMANCE TEST SUMMARY OF RESULTS

Kirby Canyon Recycling and Disposal Facility

BAAQMD Facility # 1812

Compliance Test Report #22059

Landfill Gas Flare A-12

Located at:

Kirby Canyon Recycling and Disposal Facility

910 Coyote Creek Golf Drive

San Jose, CA 95037

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/Marco Hernandez

gespena@baaqmd.gov/mhernandez@baaqmd.gov

sourcetest@baaqmd.gov

Testing Performed on:

February 23rd, 2022

Final Report Submitted on:

April 6th, 2022

Performed and Reported by:

Blue Sky Environmental, Inc.

624 San Gabriel Avenue

Albany, CA 94706

Office (510) 508-3469/Mobile (510) 508 3469

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 (925) 338-4875.

Chuck Arrivas, QSTI
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 California, Inc. at the Kirby Canyon Recycling and Disposal Facility in San Jose, California. Testing was conducted to demonstrate that Landfill Gas Flare A-12 is operating in compliance with condition 1437 of the Bay Area Air Quality Management District (BAAQMD) permit to operate for Facility 1812.

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. Source Test Information

Test Location:	Kirby Canyon Recycling and Disposal Facility (KCRDF) 910 Coyote Creek Golf Drive, San Jose, CA 95037
Source Contact:	Rebecca Azevedo, Waste Management (408) 779-2206
Source Tested:	Flare A-12 – 124 MMBtu/hr LFG Specialties, Inc. enclosed landfill gas flare
Source Test Date:	February 23 rd , 2022
Test Objective:	Determine compliance with condition 1437 of the Bay Area Air Quality Management District (BAAQMD) permit to operate for Plant 1812; BAAQMD Regulation 8, Rule 34; and the State Landfill Methane Gas Rule under AB32 for Flare performance.
Test Performed by:	Blue Sky Environmental, Inc 624 San Gabriel Avenue, Albany, CA 94706 Chuck Arrivas (925) 338-4875 carrivas@blueskyenvironmental.com
Test Parameters:	<u>Landfill Gas</u> O ₂ , N ₂ , CO ₂ , BTU, THC, CH ₄ , NMOC, HHV, F-Factor, sulfur and VOC species, volumetric flow rate <u>Flare Emissions</u> THC, CH ₄ , NMOC, NO _x , CO, O ₂ , SO ₂ , moisture, volumetric flow rate.



Table 2. Compliance Summary

Condensate ON

Emission Parameter	Average Results (Flare A-12)	Permit Limit	Compliance Status
NO _x , lb/MMBtu	0.0474	0.06	In Compliance
CO, lb/MMBtu	0.00443	0.30	In Compliance
SO ₂ , ppmvd	28.6	300	In Compliance
NMOC, ppmvd @ 3% O ₂	3.84	30	In Compliance
NMOC Destruction Efficiency, %	98.88%	>98%	In Compliance
CH ₄ Destruction Efficiency, %	>99.97%	>99%	In Compliance

Condensate OFF

Emission Parameter	Average Results (Flare A-12)	Permit Limit	Compliance Status
NO _x , lb/MMBtu	0.0400	0.06	In Compliance
CO, lb/MMBtu	0.0061	0.30	In Compliance
SO ₂ , ppmvd	23.5	300	In Compliance
NMOC, ppmvd @ 3% O ₂	4.17	30	In Compliance
NMOC Destruction Efficiency, %	99.00%	>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-12 is operating in accordance with Bay Area Air Quality Management District (BAAQMD) permit condition #1437 for Facility #1812 and BAAQMD 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
EPA Method 7E	NO _x and NO ₂ Converter Check
EPA Method 4	Moisture Calculation
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 ₂ S) and TRS
EPA Method TO-15	Toxic Organic Compounds

2.3. Test Date(s)

Testing was conducted on February 23rd, 2022.

2.4. Sampling and Observing Personnel

Testing was conducted by Chuck Arrivas and Wesley Alder, representing Blue Sky Environmental, Inc.

Rajan Phadnis, Tino Robles and James Dutra of Waste Management (WM) were present to operate the flare and assist in coordinating testing and the collection of process data during testing. Jon Silva of SCS Engineers was also on-site to assist with the test program.

BAAQMD was notified of the scheduled testing in a plan submitted by SCS Engineers on behalf of Waste Management on January 21st, 2022. A Source Test Protocol acknowledgement (NST #7170) was received on January 24th, 2022; however, no agency observers 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

Kirby Canyon Recycling and Disposal Facility, located in San Jose, CA, is a multi-material landfill with a gas collection system that is abated by an industrial landfill gas flare. Flare A-12 has a 124 MMBtu/hr multiple nozzle burner. The flare shell is 50 feet high and 12.5 feet in diameter. The inside diameter (ID) is approximately 138 inches.

The flare temperature set-point is established at 1,565 °F. Methane quality typically ranges from 46 - 52%, with an oxygen content of $\leq 1.5\%$. Landfill gas condensate that is collected is periodically injected into the flare via one vertical nozzle positioned near the burner.

2.6. Source Operating Conditions

The flare was operated on landfill gas under normal operating conditions during testing with the condensate injection both on and off. The condensate injection rate averaged 1.32 gallons per minute (gpm) while in the “on” position.

The average exhaust temperature at normal operating condition was 1,533 °F. The LFG flowrate ranged from 1,773 to 1,787 SCFM. The Yokogawa clock is ahead for real-time by 34 minutes. The operating exhaust temperature, and LFG flowrate records are provided in Appendix F.

Landfill gas samples collected at the head of the flare showed an average methane content of 44.3% and an oxygen content of 2.8%.



SECTION 3. SAMPLING AND ANALYSIS PROCEDURES

3.1. Port Location

Sampling was conducted at the 50-foot exhaust stack of the flare through ports that were accessed with a 60-foot boom lift. The four 4-inch flange ports were located 45 feet above grade, approximately four stack diameters downstream from the burners and one stack diameter upstream from the exhaust.

3.2. Point Description/Labeling – Ports/Stack

Blue Sky Environmental, Inc. conducted two perpendicular 8-point traverses (90° apart) to check for the presence of cyclonic flow. Sampling was performed for two minutes per point for a total of 16 points over each 32-minute test run. O₂ stratification was greater than 10%; therefore, subsequent CEM sampling was conducted using all traverse points. The traverse points for the 138-inch diameter stack with 4-inch ports were 8.4, 18.5, 30.8, 48.6, 97.4, 115.2, 127.5 and 137.6 inches.

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

Six consecutive 30-minute gaseous emissions tests were conducted for oxides of nitrogen (NO_x), nitric oxide (NO), carbon monoxide (CO), carbon dioxide (CO₂), oxygen (O₂), and total hydrocarbons (THC) at the flare exhaust stack. Three tests were performed with the Condensate Injection On and three tests were performed with the Condensate Injection Off.

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. 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 collected a total of six integrated fuel samples (three samples with the Condensate Injection On and three samples with the Condensate Injection Off) for off-site analysis by Atmospheric Analysis & Consulting, Inc., in Ventura, CA. The samples were collected in 6-liter SUMMA canisters and analyzed for hydrocarbons by EPA Method 25, sulfur species (incl. H₂S and TRS) by ASTM D-5504, toxic organic compounds by EPA Method TO-15 (AP-42 2.4-1), and HHV, F-factor, fixed gases, volatile organic compounds (VOCs), nonmethane organic compounds (NMOCs) and C¹-C⁶⁺ hydrocarbons by EPA Method 25C and ASTM D-1945.



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 (NO₂) concentrations are determined by passing the sample through a catalyst which reduces the NO₂ to NO. The total oxides of nitrogen concentration (NO₂ + NO) is then determined by chemiluminescence.

Section 16.2.2 of the method is used to determine the NO_x analyzer NO₂ 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 (<i>EPA Method 7E</i>)	≥ 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 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. Samples are analyzed on-site using a charcoal scrubber to remove the non-methane organics and determining the difference between the total hydrocarbon and non-methane hydrocarbon concentrations.



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 D1946/1945 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 CO₂ are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO₂ then reduced to methane and analyzed.



ASTM D1945 – 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 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/NO ₂	Chemiluminescence
TECO Model 48C	CO	Gas Filter Correlation/IR
TECO Model 55C	NMOC/CH ₄	Flame Ionization (FID)
Servomex Model 1440	CO ₂	Infrared (IR)
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. **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 measured emissions from the flare comply with the 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
- B. Calculations
- C. Laboratory Reports
- D. Field Data Sheets
- E. Strip Charts
- F. Process Information
- G. QC Calibration Certificates and Quality Assurance Records
- H. Sample Train Configuration and Stack Diagrams
- I. Related Correspondence (Source Test Plan and Email)
- J. BAAQMD Permit Conditions
- K. Flare Flow Meter Calibration Records



A Tabulated Results

TABLE #1

**Kirby Canyon Recycling & Disposal Facility
Flare A-12
Condensate - ON**

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	2/23/22	2/23/22	2/23/22		
Test Time	0848-0922	0940-1017	1105-1146		
Standard Temperature, °F	70	70	70		
Flare Temperature, °F Average	1,533	1,534	1,533	1,533	
Fuel:					
Condensate Injection, gpm	1.32	1.32	1.32	1.32	
Fuel Flow Rate, SCFM	1,775	1,773	1,781	1,776	
Fuel Heat Input, MMBtu/hr	47.1	47.1	47.9	47.3	
Stack Gas:					
Exhaust Flow Rate, DSCFM (EPA Method 19)	17,737	17,713	19,359	18,270	
Oxygen (O ₂), % volume dry	12.1	12.1	12.7	12.3	
Carbon Dioxide (CO ₂), % volume dry	7.04	7.24	7.30	7.19	
Water Vapor (H ₂ O), % volume (EPA Method 4)	9.52	9.39	7.61	8.84	
NO Emissions:					
NO, ppmvd	16.6	18.2	17.2	17.3	
NO ₂ , ppmvd	<1.0	<1.0	<1.0	<1.0	
NO ₂ /NO	<0.060	<0.055	<0.058	<0.058	
NO_x Emissions (calculated as NO₂):					
NO _x , ppmvd	16.5	18.0	17.2	17.2	
NO _x , ppmvd @ 15% O ₂	11.1	12.1	12.4	11.8	
NO _x , lb/hr	2.09	2.27	2.37	2.24	
NO _x , lb/MMBtu	0.0444	0.0483	0.0496	0.0474	0.06
CO Emissions:					
CO, ppmvd	1.55	2.14	4.13	2.61	
CO, ppmvd @ 15% O ₂	1.04	1.44	2.97	1.82	
CO, lb/hr	0.119	0.165	0.347	0.211	
CO, lb/MMBtu	0.00254	0.00351	0.00726	0.00443	0.3
Total Reduced Sulfurs (ASTM 5504):					
TRS as H ₂ S, ppmvd in Fuel	313	289	279	294	
SO₂ Emissions:					
SO ₂ , ppmvd (calculated)	31.3	28.9	25.7	28.6	300
Methane (CH₄) Emissions:					
CH ₄ , ppmvd wet (EPA Method 25.A)	<10.0	<10.0	<10.0	<10.0	
CH ₄ , ppmvd dry	<11.1	<11.1	<11.1	<11.1	
CH ₄ , lbs/hr	<0.487	<0.486	<0.531	<0.501	
NMOC Emissions (calculated as CH₄):					
NMOC, ppmv wet (EPA Method 25.A)	1.57	1.58	1.83	1.66	
NMOC, ppmvd	1.74	1.75	2.02	1.84	
NMOC, ppmvd @ 3% O ₂	3.53	3.56	4.41	3.84	30*
NMOC, lb/hr	0.0765	0.0769	0.0971	0.0835	
THC Emissions (reported as CH₄):					
THC, ppmv wet (Sum NMOC + CH ₄)	<11.6	<11.6	<11.8	<11.7	
THC, ppmvd	<12.8	<12.8	<13.1	<12.9	
THC, lb/hr	<0.563	<0.563	<0.628	<0.585	
Inlet Hydrocarbons (calculated as CH₄):					
Inlet NMOC (EPA Method 25.C)	1,396	1,700	2,020	1,705	
Inlet NMOC, lb/hr	6.15	7.48	8.93	7.52	
NMOC Destruction Efficiency, %	98.76%	98.97%	98.91%	98.88%	>98%*
Inlet CH ₄ , ppmvd	439,000	438,000	444,000	440,333	
Inlet CH ₄ , lb/hr	1,934	1,928	1,963	1,942	
CH₄ Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC, ppmvd	440,396	439,700	446,020	442,039	
Inlet THC, lb/hr	1,941	1,935	1,972	1,949	
THC Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	

* NMOC emission limits are 30 ppmvd @ 3% O₂ or destruction efficiency >98%

WHERE,

ppmv = 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 foot per minute
 NO_x = oxides of nitrogen, reported as NO₂ (MW = 46)
 CO = carbon monoxide (MW = 28)
 CH₄ = methane (MW = 16)
 THC = total hydrocarbons reported as CH₄ (MW = 16)
 NMOC = non-methane organic compounds reported as CH₄ (MW = 16)

CALCULATIONS,

ppm @ 15% O₂ = ppm · 5.9 / (20.9 - %O₂)
 ppm @ 3% O₂ = ppm · 17.9 / (20.9 - %O₂)
 lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
 lb/day = lb/hr · 24
 lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O₂)
 Destruction Efficiency = (inlet, lb/hr - outlet, lb/hr) / inlet, lb/hr
 <VALUE = 2% Value of Analyzer Range
 TRS = total reduced sulfurs, reported as sulfur dioxide (SO₂)

TABLE #2
Landfill Gas Characterization

Kirby Canyon Recycling & Disposal Facility
Flare A-12
Condensate - ON

Parameter	Units	Run 1	Run 2	Run 3	Average Results
Test Date		2/23/22	2/23/22	2/23/22	-
Acrylonitrile	ppb	<294	<334	<330	<319
Bromodichloromethane	ppb	<73.4	<83.6	<82.6	<79.9
Carbon Tetrachloride	ppb	<73.4	<83.6	<82.6	<79.9
Chlorobenzene	ppb	159	171	190	173
Chlorodifluoromethane	ppb	<73.4	<83.6	<82.6	<79.9
Chloromethane	ppb	<73.4	<83.6	<82.6	<79.9
Chloroethane	ppb	<73.4	<83.6	169	<108.7
Chloroform	ppb	<73.4	<83.6	<82.6	<79.9
1,1 Dichloroethane (Ethylidene Dichloride)	ppb	<73.4	<83.6	<82.6	<79.9
1,1 Dichloroethene (Vinylidene Chloride)	ppb	<73.4	<83.6	<82.6	<79.9
1,2 Dichloroethane (Ethylene Dichloride)	ppb	175	197	198	190
1,2 Dichloropropane	ppb	<73.4	<83.6	<82.6	<79.9
1,4 Dichlorobenzene	ppb	373	513	555	480
Dichlorodifluoromethane	ppb	101	107	114	107
Dichlorofluoromethane	ppb	<73.4	<83.6	<82.6	<79.9
1,4 Dioxane	ppb				
Ethanol	ppb	47,000	59,200	76,300	60,833
Ethylbenzene	ppb	7,050	8,090	8,670	7,937
Ethylene Dibromide (1,2 Dibromoethane)	ppb	<73.4	<83.6	<82.6	<79.9
Fluorotrichloromethane (Trichlorofluoromethane)	ppb	<73.4	<83.6	<82.6	<79.9
Hexane	ppb	<73.4	<83.6	<82.6	<79.9
Isopropyl Alcohol (IPA)	ppb	13,400	16,500	22,600	17,500
Methyl Ethyl Ketone (MEK) (2-Butanone)	ppb	9,830	10,600	11,000	10,477
Methylene Chloride	ppb	<147	<167	<165	<160
Methyl isobutyl ketone (MiBK)	ppb	1,060	1,190	1,310	1,187
Perchloroethylene (Tetrachloroethylene)	ppb	82.2	95.3	84.3	87.3
1,1,1 Trichloroethane	ppb	<73.4	<83.6	<82.6	<79.9
1,1,2,2 Tetrachloroethane	ppb	<73.4	<83.6	<82.6	<79.9
trans-1,2-Dichloroethane	ppb	<73.4	<83.6	<82.6	<79.9
Trichloroethylene (Trichloroethene)	ppb	<73.4	<83.6	<82.6	<79.9
Vinyl Chloride	ppb	<73.4	<83.6	<82.6	<79.9
Xylenes	ppb	12,000	14,040	14,880	13,640
Ethane	ppm	<3.7	<4.2	<4.1	<4.0
Propane	ppm	13.2	12.8	13.0	13.0
Butane	ppm	7.77	7.40	7.49	7.55
Pentane	ppm	15.6	16.6	19.2	17.1
Carbon Disulfide	ppm	0.123	0.134	0.149	0.135
Carbonyl Sulfide (COS/SO ₂)	ppm	0.352	0.417	0.317	0.362
Dimethyl Sulfide	ppm	2.27	2.28	2.81	2.45
Ethyl Mercaptan	ppm	0.106	0.200	0.200	0.169
Methyl Mercaptan	ppm	3.60	3.844	4.34	3.93
Hydrogen Sulfide (H ₂ S)	ppm	304	279	268	284
Total Reduced Sulfurs as H ₂ S	ppm	313	289	279	294

TABLE #3

Kirby Canyon Recycling & Disposal Facility
Flare A-12
Condensate - OFF

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	2/23/22	2/23/22	2/23/22		
Test Time	1157-1237	1252-1327	1342-1420		
Standard Temperature, °F	70	70	70		
Flare Temperature, °F	1,533	1,533	1,533	1,533	
Fuel:					
Condensate Injection, gpm	0.00	0.00	0.00	0.00	
Fuel Flow Rate, SCFM	1,785	1,784	1,787	1,785	
Fuel Heat Input, MMBtu/hr	48.6	47.5	48.7	48.3	
Stack Gas:					
Exhaust Flow Rate, DSCFM (EPA Method 19)	19,827	19,770	20,280	19,959	
Oxygen (O ₂), % volume dry	12.8	13.0	13.0	12.9	
Carbon Dioxide (CO ₂), % volume dry	6.90	7.15	7.06	7.04	
Water Vapor (H ₂ O), % volume (EPA Method 4)	6.78	7.53	5.17	6.49	
NO Emissions:					
NO, ppmvd	13.6	13.7	13.6	13.6	
NO ₂ , ppmvd	<1.0	<1.0	<1.0	<1.0	
NO ₂ /NO	<0.073	<0.073	<0.074	<0.073	
NO_x Emissions (calculated as NO₂):					
NO _x , ppmvd	13.6	13.6	13.5	13.5	
NO _x , ppmvd @ 15% O ₂	9.86	10.1	10.0	10.0	
NO _x , lb/hr	1.92	1.92	1.95	1.93	
NO _x , lb/MMBtu	0.0396	0.0404	0.0401	0.0400	0.06
CO Emissions:					
CO, ppmvd	4.4	2.8	3.1	3.4	
CO, ppmvd @ 15% O ₂	3.2	2.1	2.3	2.5	
CO, lb/hr	0.38	0.24	0.27	0.30	
CO, lb/MMBtu	0.0078	0.0050	0.0056	0.0061	0.30
Total Reduced Sulfurs (ASTM 5504):					
TRS as H ₂ S, ppmvd in Fuel	276	228	285	263	
SO₂ Emissions:					
SO ₂ , ppmvd (calculated)	24.8	20.6	25.1	23.5	300
Methane (CH₄) Emissions:					
CH ₄ , ppmvd wet (EPA Method 25.A)	<10.0	<10.0	<10.0	<10.0	
CH ₄ , ppmvd dry	<10.7	<10.7	<10.7	<10.7	
CH ₄ , lbs/hr	<0.49	<0.49	<0.50	<0.50	
NMOC Emissions (calculated as CH₄):					
NMOC, ppmv wet (EPA Method 25.A)	1.95	1.89	1.75	1.86	
NMOC, ppmvd	2.09	2.03	1.88	2.00	
NMOC, ppmvd @ 3% O ₂	4.30	4.26	3.95	4.17	30
NMOC, lb/hr	0.096	0.093	0.088	0.092	
THC Emissions (calculated as CH₄):					
THC, ppmv wet (Sum NMOC + CH ₄)	<12.0	<11.9	<11.8	<11.9	
THC, ppmvd	<12.8	<12.9	<12.4	<12.7	
THC, lb/hr	<0.63	<0.63	<0.62	<0.63	
Inlet Hydrocarbons (calculated as CH₄):					
Inlet TNMOC (EPA Method 25C)	2,119	2,124	1,987	2,077	
Inlet NMOC, lb/hr	9.390	9.406	8.814	9.203	
NMOC Destruction Efficiency, %	98.98%	99.01%	99.00%	99.00%	>98%*
Inlet CH ₄ , ppmvd	450,000	439,000	450,000	446,333	
Inlet CH ₄ , lb/hr	1,994	1,944	1,996	1,978	
CH ₄ Destruction Efficiency, %	>99.98%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC, ppmvd	452,119	441,124	451,987	448,410	
Inlet THC, lb/hr	2,003	1,954	2,005	1,987	
THC Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	

* NMOC emission limits are 30 ppmvd @ 3% O₂ or destruction efficiency >98%

WHERE,

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 foot per minute
 NO_x = oxides of nitrogen, reported as NO₂ (MW = 46)
 CO = carbon monoxide (MW = 28)
 CH₄ = methane (MW = 16)
 THC = total hydrocarbons reported as CH₄ (MW = 16)
 NMOC = non-methane organic compounds reported as CH₄ (MW = 16)

CALCULATIONS,

ppm @ 15% O₂ = ppm · 5.9 / (20.9 - %O₂)
 ppm @ 3% O₂ = ppm · 17.9 / (20.9 - %O₂)
 lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
 lb/day = lb/hr · 24
 lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O₂)
 Destruction Efficiency = (inlet, lb/hr - outlet, lb/hr) / inlet, lb/hr
 <VALUE = 2% Value of Analyzer Range
 TRS = total reduced sulfurs, reported as sulfur dioxide (SO₂)

TABLE #4
Landfill Gas Characterization

Kirby Canyon Recycling & Disposal Facility
Flare A-12
Condensate - OFF

Parameter	Units	Run 4	Run 5	Run 6	Average Results
Test Date		2/23/22	2/23/22	2/23/22	-
Acrylonitrile	ppb	<291	<342	<340	<324
Bromodichloromethane	ppb	<72.8	<85.6	<85.0	<81.1
Carbon Tetrachloride	ppb	<72.8	<85.6	<85.0	<81.1
Chlorobenzene	ppb	163	176	189	176
Chlorodifluoromethane	ppb	<72.8	<85.6	<85.0	<81.1
Chloromethane	ppb	<72.8	<85.6	<85.0	<81.1
Chloroethane	ppb	<72.8	<85.6	<85.0	<81.1
Chloroform	ppb	<72.8	<85.6	<85.0	<81.1
1,1 Dichloroethane (Ethylidene Dichloride)	ppb	<72.8	<85.6	<85.0	<81.1
1,1 Dichloroethene (Vinylidene Chloride)	ppb	<72.8	<85.6	<85.0	<81.1
1,2 Dichloroethane (Ethylene Dichloride)	ppb	182	219	197	199
1,2 Dichloropropane	ppb	<72.8	<85.6	<85.0	<81.1
1,4 Dichlorobenzene	ppb	444	582	585	537
Dichlorodifluoromethane	ppb	105	118	117	113
Dichlorofluoromethane	ppb	<72.8	<85.6	<85.0	<81.1
Ethanol	ppb	84,900	88,900	76,800	83,533
Ethylbenzene	ppb	7,480	8,400	8,540	8,140
Ethylene Dibromide (1,2 Dibromoethane)	ppb	<72.8	<85.6	<85.0	<81.1
Fluorotrichloromethane (Trichlorofluoromethane)	ppb	<72.8	<85.6	<85.0	<81.1
Hexane	ppb	<72.8	<85.6	<85.0	<81.1
Isopropyl Alcohol (IPA)	ppb	24,400	23,900	21,800	23,367
Methyl Ethyl Ketone (MEK) (2-Butanone)	ppb	11,100	10,200	10,400	10,567
Methylene Chloride	ppb	<146	<171	<170	<162
Methyl isobutyl ketone (MiBK)	ppb	1,120	1,190	1,220	1,177
Perchloroethylene (Tetrachloroethylene)	ppb	85.9	94.2	90.1	90.1
1,1,1 Trichloroethane	ppb	<72.8	<85.6	<85.0	<81.1
1,1,2,2 Tetrachloroethane	ppb	<72.8	<85.6	<85.0	<81.1
trans-1,2-Dichloroethane	ppb	<72.8	<85.6	<85.0	<81.1
Trichloroethylene (Trichloroethene)	ppb	<72.8	<85.6	<85.0	<85.6
Vinyl Chloride	ppb	<72.8	<85.6	<85.0	<81.1
Xylenes	ppb	12,680	14,510	14,780	13,990
Ethane	ppm	<3.6	<4.3	<4.3	<4.1
Propane	ppm	13.0	12.65	13.0	12.9
Butane	ppm	7.45	7.67	7.23	7.45
Pentane	ppm	19.2	20.8	18.9	19.6
Carbon Disulfide	ppm	0.105	0.110	0.121	0.112
Carbonyl Sulfide (COS/SO ₂)	ppm	0.303	0.336	0.242	0.294
Dimethyl Sulfide	ppm	2.11	1.99	2.03	2.04
Ethyl Mercaptan	ppm	0.160	0.168	0.146	0.158
Methyl Mercaptan	ppm	3.73	3.11	3.50	3.45
Hydrogen Sulfide (H ₂ S)	ppm	267	220	276	254
Total Reduced Sulfurs as H ₂ S	ppm	276	228	285	263

APPENDIX P

A-12 FLARE 12-MONTH SULFUR DIOXIDE EMISSIONS LOG

12-MONTH CONSECUTIVE SO_x Emission Rate (Tons/Year) :2022
Kirby Canyon Recycling & Disposal Facility
Plant #1812, Condition 1437 Item 20

Month	SO₂ (Tons/Month)	SO₂ (12- Months Tons)
January-22	2.1	27.2
February-22	2.0	27.2
March-22	2.3	27.4
April-22	1.9	27.0
May-22	1.8	26.5
June-22	1.7	25.7
July-22	1.6	24.9
August-22	1.6	23.9
September-22	1.6	23.2
October-22	1.6	22.5
November-22	1.5	21.8
December-22	1.6	21.4

Pursuant to Title V Permit A1812, Condition Number 25301 Part 20, the Sulfur dioxide emissions from Flare A-12 shall not exceed 300 ppmv of SO₂ and sulfur dioxide emissions from A-12 shall not exceed 94.9 tons per year.

To demonstrate compliance with above limits, the site will conduct annual testing of total TRS at the landfill gas main header. The most recent TRS value will be used to calculate the monthly SO₂ emissions in tons.

Appendix P includes table with SO₂ 12-month tons during the reporting period. The sulfur dioxide emissions from A-12 did not exceed 94.9 tons per year.