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Director of the Air Division
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Attn: Air-3

Subject: Combined Title V Semi-Annual and Partial 8-34 Annual Report
40 CFR 63 Subpart AAAA Semi-Annual Report
West Contra Costa Sanitary Landfill
1 Parr Blvd, Richmond, California 94801
Facility Number A1840

TV Tracking #: 101

1. RECEIVED IN ENFORCEMENT: 11/25/2020

Dear Sir or Madam:

The West Contra Costa Sanitary Landfill (West County) is pleased to submit the attached Semi-Annual Report (SAR) and Partial 8-34 Annual Report for the period of May 1, 2020 through October 31, 2020 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 Title V Permit Condition Number 25293 Part 15 and Standard Condition I.F.

Based on the information and belief formed after reasonable inquiry, the statements and information contained in the document are true, accurate, and complete.

Sincerely,
West Contra Costa Sanitary Landfill


Rob Sherman
Responsible Official

11-25-2020
Date Signed

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

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

West Contra Costa Sanitary Landfill

Facility Number A1840

May 1, 2020 through October 31, 2020

NOVEMBER 25, 2020

PRESENTED TO

West Contra Costa Sanitary Landfill

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REPORT CERTIFICATION

The material and data in this report were prepared under the supervision and direction of the undersigned.



11/25/20

Nat Israel
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11/25/20

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Date

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1.0 INTRODUCTION

1.1 PURPOSE

This document is a Combined Semi-Annual Title V and Partial Bay Area Air Quality Management District (BAAQMD) Rule 8-34 Annual Report for the West Contra Costa Sanitary Landfill (WCCSL) pursuant to Title V Permit Standard Condition 1.F, Condition Number 17821 Part 15, Condition Number 20754 Part 12 and Permit to Operate Condition Number 25293 Part 15. This report satisfies the requirements of BAAQMD Regulation 8, Rule 34, Section 411 and Title 40 Code of Federal Regulations (CFR) Part 60 Subpart WWW, New Source Performance Standards (NSPS) for municipal solid waste (MSW) landfills. This Combined Report meets the requirements of Title V Standard Condition 1.F, BAAQMD Rule 8-34-411 and 40 CFR §60.757(f) and covers compliance activities conducted from May 1, 2020 through October 31, 2020. This Combined Report also includes the Semi-Annual Report (SAR) of Start-up, Shutdown, and Malfunction (SSM) Plan activities pursuant to the 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 8-34-411 and 40 CFR §60.757(f). Section 3 of this Combined Report includes a brief synopsis of the data from the Performance (Source) Tests completed during the reporting period. Section 4 of this Combined Report includes the Semi-Annual Report of the SSM Plan activities pursuant to the NESHAP, 40 CFR Part 63, Subpart AAAA for Landfills.

1.2 RECORD KEEPING AND REPORTING

Records are maintained and are available for inspection in accordance with BAAQMD Rule 8-34-501.12 and 40 CFR §60.758. The primary location for records storage is at WCCSL. Records are maintained at this location for a minimum of five years as required by federal regulations.

1.3 REPORT PREPARATION

This semi-annual report for the WCCSL has been prepared by Tetra Tech, as authorized under the compliance contract between WCCSL and Tetra Tech (formerly Cornerstone, a Tetra Tech Company). This report was prepared based on review of information submitted to Tetra Tech from WCCSL personnel and from the operations and maintenance (O&M) provider.

1.4 STATUS OF WCCSL TITLE V PERMIT

A Title V Permit Renewal Application was submitted to the BAAQMD on June 18, 2015. The current permit expired on December 19, 2015 however the site is covered under a permit shield until the BAAQMD issues the Title V Permit renewal.

2.0 COMBINED MONITORING REPORT

In accordance with Title V Permit Standard Condition 1.F, BAAQMD 8-34-411 and §60.757(f) in the NSPS, this report is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report that is required to be submitted by WCCSL. The report contains monitoring data for the operation of the landfill gas (LFG) collection and control system (GCCS). The operational records have been reviewed and summarized. The timeframe included in this report is May 1, 2020 through October 31, 2020. The following table lists the rules and regulations that are required to be included in this Combined Report.

Table 2-1. Combined Report Requirements.

Rule	Requirement	Location in Report
8-34-501.1 §60.757(f)(4)	All collection system downtime, including individual well shutdown times and the reason for the shutdown.	Section 2.1, Appendices C & D
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown.	Section 2.2, Appendix E
8-34-501.3, 8-34-507, §60.757(f)(1)	Continuous temperature for all operating flares and any enclosed combustor subject to Section 8-34-507.	Section 2.3, Appendix F
8-34-501.4, 8-34-505, 8-34-510	Monitoring performed to satisfy any of the requirements of this rule.	Section 2.4 & 2.10 Appendices G, K, & M
8-34-501.5	Monthly LFG flow rates and well concentration readings for facilities subject to 8-34-404.	Section 2.5 & 2.11 Appendix N & O
8-34-501.6, 8-34-503, 8-34-506, §60.757(f)(5)	For operations subject to Section 8-34-503 and 8-34-506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in parts per million by volume (ppmv), date of discovery, the action taken to repair the leak, date of the repair, date of any required re-monitoring, and the re-monitored concentration in ppmv.	Section 2.6 & 2.7, Appendices I
8-34-501.7	Annual waste acceptance rate and current amount of waste in-place (WIP).	Section 2.8
8-34-501.8	Records of the nature, location, amount, and date of deposition of non-degradable wastes, for any landfill areas excluded from the collection system requirement as documented in the GCCS Design Plan.	Section 2.9
8-34-501.9, 8-34-505, §60.757(f)(1)	For operations subject to Section 8-34-505, records of all monitoring dates and any excesses of the limits stated in Section 8-34-305 that are discovered by the operator, including well identification number, the measured excess, the action taken to repair the excess, and the date of repair.	Section 2.10, 2.10.1, Appendices J, K, L, and M
8-34-501.10, 8-34-508, §60.757(f)(1)	Continuous gas flow rate records for any site subject to Section 8-34-508.	Section 2.11, Appendices N & O
8-34-501.11, 8-34-509	For operations subject to Section 8-34-509, records or key emission control system operating parameters.	Section 2.2.2

8-34-501.12	The records required above shall be made available and retained for a period of five years.	Section 1.2
§60.757(f)(2)	Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.	Section 2.2.1
§60.757(f)(6)	The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), (c)(4) of §60.755.	Section 2.13, Appendices A, C & D
§60.10 (d)(5)(i)	SSM Events	Section 4, Appendices C, D, & E

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

Appendix A contains a current map of WCCSL's existing GCCS. WCCSL's GCCS is comprised of one flare (A-161), one back-up flare (A-8) and three Internal Combustion (IC) Engines (S-5, S-6, and S-37).

The Landfill is a closed Class II Landfill that accepted MSW, construction and demolition (C&D) debris, de-watered sludge from the West County area, and a small (less than one [1] percent) quantity of Group 1 hazardous wastes, including asbestos and infectious wastes, adjacent to the Class II Landfill is the Class I Hazardous Waste Management Facility (HWMF).

The A-120 Flare was replaced by the A-161 Flare in November 2017 and removed from the site in December 2017.

Section 2.1.1 includes the GCCS downtime for the reporting period. The information contained in Section 2.1.2 discusses the Wellfield SSM Log for the reporting period.

2.1.1 Collection System Downtime

During the period covered in this report, the GCCS was not shut down for more than five days on any one occasion. GCCS downtime is accrued when all emission control devices (A-161, A-8, S-5, S-6, and S-37) are not operating. There were 64.07 hours of downtime during the reporting period.

Appendix E contains the A-161 Flare, A-8 Back-Up Flare, and the S-5, S-6, and S-37 IC Engine Downtime Reports which list the dates, times, and duration of shutdowns for the reporting period including the year-to-date GCCS downtime as of October 31, 2020.

2.1.2 Wellfield SSM Log

During the May 1, 2020 through October 31, 2020 reporting period, there was one Class I well event reported during the reporting period pursuant to Permit to Operate (PTO) Condition Number 25293 Part 7(c)(ii). Additionally, there was one well decommissioned and six shutdowns and five startups of wells temporarily disconnected pursuant to permit Conditions Number 25293 Part 7(b) and (c)(ii) at the Class II Landfill. A decommissioning letter was submitted to the BAAQMD on June 18, 2020 for the one decommissioning event.

For details on well disconnection and reconnection events refer to Appendix C, Class I Wellfield SSM Log, and Appendix D, Class II Wellfield SSM Log.

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

The emission control system at WCCSL includes an Enclosed Flare (A-161) installed in December of 2017, one back-up flare (A-8) which began operation in 1990, two lean burn IC Engines (S-5 and S-6), which began operation in 1985 and one IC Engine (S-37) which began operation in 1987. The control system was not bypassed at any time during the reporting period. Raw LFG was not emitted during the reporting period. The SSM Logs for all destruction devices are located in Appendix E.

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

Title 40 CFR §60.757(f)(2) is not applicable at WCCSL 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)

BAAQMD 8-34-501.11 and 8-34-509 are not applicable to WCCSL because the control devices are subject to continuous temperature monitoring as required in BAAQMD 8-34-507 and §60.757(f)(1).

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

A-161 Flare

The A-161 Flare began operation in December 2017.

The combustion zone temperature of the A-161 Flare is monitored with a Thermo Sensors Corp (TSC) Thermocouple. The temperature is displayed with a Yokogawa digital recorder, from which data is downloaded and archived.

The A-161 Flare initial source test was conducted on January 30, 2018. In accordance with Title V Permit Condition Number 25293, Part 9, the A-161 Flare is to operate based on the same limitation as the previous A-120 Flare.

There were no deviations during the reporting period. Appendix F contains the A-161 Flare Temperature Deviation/Inoperative Monitor/Missing Data Report for May 1, 2020 through October 31, 2020.

A-8 Back-Up Flare

When operational, the combustion zone temperature of the A-8 Back-Up Flare is monitored with a TSC Thermocouple. The temperature is displayed on a Honeywell digital display and a circular chart recorder, which is routinely archived. On December 16, 2011, Ms. Carol Allen of the BAAQMD clarified that the A-8 Back-Up Flare combustion zone three-hour average temperature limit for a deviation is 1400 degrees Fahrenheit (°F) in accordance with Title V Permit Condition Number 17821 Part 9. Tetra Tech will continue to monitor instances where the A-8 Back-Up Flare drops below the limit established during source tests even though these instances, as clarified by the BAAQMD, are not currently deemed temperature deviations, and will not be reported as such.

The A-8 Flare temperature did not drop below permitted limit for the duration of the reporting period as the A-8 flare did not operate.

There were no temperature deviations during the reporting period of either the limit of 1,599°F limit established during the March 2, 2018 source test, or the 1400°F limit in accordance with Title V Permit Condition Number 17821 Part 9.

Appendix F contains the A-8 Back-Up Flare Temperature Deviation/Inoperative Monitor/Missing Data Report for May 1, 2020 through October 31, 2020.

IC Engines

The combustion zone temperatures of the S-5, S-6, and S-37 IC engines are monitored with an R. Blair Engineering Thermocouple. The temperature is displayed with Altronic 40 ETM Temperature Scanner connected to a Supervisory Control and Data Acquisition (SCADA) system, the data is then sent to a Yokogawa digital recorder, from which data is downloaded and archived.

There were no temperature deviations for the S-5, S-6, or S-37 IC engines during the reporting period. The S-5 and S-37 IC engine did not operate during the reporting period.

Appendix F contains the S-5, S-6, and S-37 IC Engine Temperature Deviation/Inoperative Monitor/Missing Data Report for May 1, 2020 through October 31, 2020.

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

The monthly cover integrity monitoring was performed at WCCSL on the following dates:

- May 29, 2020;
- June 29, 2020;
- July 27, 2020;
- August 31, 2020;
- September 25, 2020; and
- October 12, 2020.

Refer to the Monthly Cover Integrity Monitoring Logs, included in Appendix G.

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

WCCSL does not operate under BAAQMD 8-34-404 (Less Than Continuous Operation [LTCO]) and, therefore, is not required to submit monthly LFG flow rates.

2.6 SURFACE EMISSIONS MONITORING (BAAQMD 8-34-501.6, 8-34-506, §60.757(F)(5) & CALIFORNIA CODE OF REGULATIONS (CCR) §95469(A))

The Second Quarter 2020 Surface Emission Monitoring (SEM) Event was completed on May 19, 20, 21, and 26, 2020 and June 1 and 15, 2020.

The Third Quarter 2020 SEM Event was completed July 27 and 28, 2020 and August 5, 6, 12, 13, and 25, 2020.

A copy of Second Quarter 2020 and Third Quarter 2020 SEM Events Reports are included in Appendix H.

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

GCCS component leak testing is conducted at the Class I and Class II Landfills to satisfy the requirements of Title V Permit Condition 20754 Part 2(c)(v), PTO Condition Number 25293 Part 7(b)(iv) and BAAQMD 8-34-503.

The contracted operations and maintenance (O&M) contractor completed the Second Quarter 2020 and Third Quarter 2020 GCCS LFG component leak testing for the Class I and Class II landfills, GCCS Blower-Flare Station, and LFG to Energy Plant on the following days:

- June 1, 2020; and
- July 27, 2020.

Refer to the Class I and II Component Leak Monitoring Logs, located in Appendix I, for detailed results.

Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B). Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2. WCCSL documents all emissions exceeding the emissions limit of 500 ppmv of methane in order to be conservative regarding emissions from components (i.e. cover penetrations). There were no exceedances for component leak monitoring during the reporting period.

PTO Condition 25293 Part 7 allows for alternative operating conditions for the 16 Class I horizontal collectors and the 20 Class II horizontal collectors. Therefore, any GCCS components disconnected during the reporting period must be monitored for component leaks within ten and 30 days following the initial disconnection. Details of the GCCS component leak testing and results are included in the Class I and Class II Well SSM Log in Appendix C and D.

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

As of 2010, the WCCSL Class I and Class II Landfills are closed and no longer accept waste. The WIP in each landfill as of closure is approximately 376,110 tons and 12,330,387 tons, respectively.

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

The GCCS Design Plan for WCCSL does not contain non-degradable waste areas that are excluded from the collection system. Therefore, BAAQMD 8-34-501.8 is not applicable. A layer of MSW was placed in the Class I Hazardous Waste Material Facility (HWMF) landfill directly preceding closure in which the GCCS was installed; however, the waste below is generally considered non-degradable waste.

2.10 WELLHEAD MONITORING DATA (BAAQMD 8-34-501.4 & 8-34-505)

Wellhead monitoring was performed on a monthly basis pursuant to 8-34-505. The well readings for May 1, 2020 through October 31, 2020 are included in Appendices K and M. Each well was monitored in accordance with the following Rule requirements:

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

Wellhead monitoring was performed on the following dates for Class I:

- May 4, 12, 18, and 26, 2020;
- June 1, 9, 15, 22, and 29, 2020;
- July 10, 14, 20, and 28, 2020;

- August 3, 10, 17, and 25, 2020;
- September 1, 8, 11, 15, 21, and 28, 2020; and
- October 5, 12, 19, and 26, 2020.

Wellhead monitoring was performed on the following dates for Class II:

- May 4, 5, 8, 12, 15, 18, 19, 22, and 26, 2020;
- June 1, 2, 8, 9, 12, 16, 22, 23, and 26, 2020;
- July 10, 13, 14, 20, 21, 24, and 28, 2020;
- August 3, 4, 7, 10, 11, 17, 18, 21, and 24, 2020;
- September 1, 8, 11, 14, 15, 18, 21, 23, 25, and 28, 2020; and
- October 7, 8, 12, 13, 22, 23, and 30, 2020.

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

There were 14 wells in the Class I Landfill and 51 wells in the Class II Landfill with readings that exceeded the limits set forth in BAAQMD 8-34-305, PTO Condition Number Part 7(d)(iii) during the reporting period. In accordance with BAAQMD 8-34-414 corrective actions for the wells must be initiated within the required five-day time period and additional re-monitoring must be completed within 15 days of the initial deviation. There were four wells that were not re-monitored within the initial five-day period. All other wells with exceedances detected had corrective actions initiated and were re-monitored within the required timeframe of five-days. All wells were re-monitored within the 15-day requirement. All wells were returned to compliant operating levels within the 120-day timeline specified in BAAQMD 8-34.

See Appendices K and M, Class I and Class II Wellfield Deviation Log, for more detail.

2.10.2 Higher Operating Value (HOV) Wells

As of October 31, 2020, the following wells are approved to operate at a HOV of 15 percent oxygen by volume pursuant to Permit Condition Number 20754 Part 2(c)(ii) and Condition Number 25293 Part 7(d)(iii):

- All 16 Class I Wells; and
- All 20 Class II Horizontal Collectors.

These wells are also allowed to operate above 15 percent oxygen in order to meet the criteria to be temporarily disconnected from the GCCS.

2.11 GAS FLOW MONITORING RESULTS (BAAQMD 8-34-501.10, 8-34-508, & §60.757(F)(1))

The LFG flow rate at the A-161 Flare is measured with a Thermal Instrument Company Model 62-9/9500 flow meter. The Allen Bradley Micrologix 1200R programmable logic controller (PLC) displays the LFG flow and the digital Yokogawa data recorded records LFG flow and temperature every minute and is downloaded and saved to a compact flash drive.

The LFG flow rate at the A-8 Back-Up Flare is measured with an FCI Model ST-98 flow meter. The Honeywell Digital panel displays the LFG flow and the Honeywell Circular Chart data recorder records LFG flow continuously. Both record types are routinely archived.

The LFG flow rate at S-5, S-6, and S-37 IC Engines is measured with a Rosemount Model 1151DP flow meter. The Rockwell Automation panel displays the LFG flow rate. The SCADA records LFG flow every 15 minutes, then the data is sent to a Yokogawa digital recorder, from which data is downloaded and archived.

The flare and engines flow meters meet the requirements of BAAQMD 8-34-508 by recording data at least every 15 minutes. The flow meters are maintained and calibrated pursuant to manufacturer's recommendations. The A-8 flare, S-5 IC Engine, and the S-37 IC Engine did not operate during the reporting period. The flow data for the flares and IC engines that operated during the reporting period are available for review at WCCSL. Appendices N and O contain a summary of the monthly LFG flow rates for the flares and engines. Appendix F contains the Temperature Deviation/Inoperative Monitor/Missing Data Reports for May 1, 2020 through October 31, 2020.

2.12 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 17821 PART 10

Pursuant to Title V Permit Condition Number 17821, Part 10(a)(2) and PTO Condition Number 25293 Part 10, quarterly hydrogen sulfide (H₂S) readings were taken using Draeger tubes.

The Second Quarter 2020 and Third Quarter 2020 H₂S readings were taken on June 30, 2020 and September 8, 2020 respectively. The results were as follows:

- Second Quarter 2020: 10 ppm; and
- Third Quarter 2020: 12 ppm.

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."

PTO Condition Number 25293 Part 6(b) still allows for the installation of up to 90 new vertical wells, installation of up to 20 new horizontal wells, the decommissioning of up to 20 vertical wells, the decommissioning of up to nine horizontal collectors and connection of the leachate collection and recovery system (LCRS) to the GCCS. During the reporting period, one vertical LFG collection well was decommissioned. A decommissioning letter was submitted to the BAAQMD on June 18, 2020.

As of October 31, 2020, WCCSL consists of 16 horizontal collectors in the Class I, and 87 vertical wells and 20 horizontal collectors in the Class II landfills.

2.14 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 22792 FOR S-50 SOLID WASTE TRANSFER STATION; AND A-50 WATER MIST SYSTEM

The total quantity of waste accepted at the solid waste transfer station, S-50, for the period of May 1, 2020 through October 31, 2020 is included in Appendix Q. The total annual amount of waste accepted in the preceding consecutive 12-months as of October 31, 2020 is included in Appendix Q. This is within the limit of 2,000 tons per day (tpd) or 730,000 tons per any consecutive 12-month period pursuant to Title V Permit Condition Number 22792 Part 1. Monthly waste acceptance totals for the reporting period are included in Appendix Q. These records are maintained at WCCSL's Golden Bear Transfer Station and can be made available upon request.

Pursuant to Title V Permit Condition Number 22792 Part 2-4, all wastes (mixed wastes, green material and wood wastes) were removed from the transfer station within 48 hours after being accepted. All visible particulate emissions were prevented and/or minimized by use of water (A-50 water spray system) and/or dust suppressants applied on all unpaved roadways. All paved roadways were cleared from dirt and debris resulting in visible

particulate emissions at S-50 not exceeding Ringelmann 1.0 or resulting in fallout on neighboring property during the period of May 1, 2020 through October 31, 2020. Records of all vehicle route maintenance (cleaning of paved roads and application of water or dust suppressant on unpaved roads) are maintained at WCCSL's Golden Bear Transfer Station and can be made available upon request.

Pursuant to Title V Permit Condition Number 22792 Part 6 and 7 (c-d) the S-50 waste transfer station daily round-trip vehicle trips did not exceed 1,075 on any day and did not exceed 232,900 over any consecutive 12-month period. Monthly numbers of vehicle trip totals and consecutive 12-month vehicle trip totals for the reporting period are listed in Appendix Q.

2.15 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23220 AND AUTHORITY TO CONSTRUCT (ATC) APPLICATION NUMBER (A/N) 20621 CONDITION NUMBER 25004

Pursuant to Authority to Construct (ATC) A/N 20621 Condition Number 25004, the wastewater throughput at the inlet storage tanks (S-69, S-70, S-141 and S-156) and the leachate treatment facility (S-71, S-72, S-140, S-74, S-123, S-151, S-142, S-145, S-146, S-150, S-153, S-155 and S-157) from May 1, 2020 through October 31, 2020, did not exceed 40,800 gallons per day and 14,892,000 gallons during any consecutive 12-month period. The total throughput to the inlet storage tanks S-69, S-70, S-141, and S-156 and the leachate treatment facility sources for each month (gallons/month) and the total cumulative throughput for each rolling 12-month period were recorded. These records are available onsite at WCCSL upon request. A summary of the total combined wastewater throughput (gallons) and 12-month combined rolling throughput (gallons) for the period of May 1, 2020 through October 31, 2020 is listed for the Leachate Treatment System in Appendix R.

Pursuant to ATC A/N 20621 Condition Number 20054 Part 2, influent vapor flow to the A-20 and A-21 Carbon Absorbers did not exceed 200 scfm during the reporting period.

Pursuant to Title V Permit Condition Number 23220 and ATC A/N 20621 Condition Number 20054 Part 4, non-methane organic compounds (NMOC) leaks from all valves, flanges and pumps did not exceed concentrations above 100 ppmv during the reporting period. Monitoring results for the reporting period are included in Appendix U.

Pursuant to ATC A/N 20621 Condition Number 25004 Part 5 and 6, NMOC concentrations are measured with an FID at the inlet to A-20, outlet of A-920 and outlet of A-21. A-20 is changed out if NMOC concentrations at the A-20 outlet are ten ppmv or greater and are ten percent greater than the A-20 inlet concentrations. The A-21 is changed out when measured NMOC concentrations at the A-21 outlet are six ppmv or greater. Pursuant to Title V Permit Condition Number 23110 and ATC A/N 20621 Condition Number 20054 Part 8 NMOC concentrations are measured at the A-20 and A-21 at least once a month. The A-20 and the A-21 carbon vessels were not changed during this reporting period as breakthrough did not occur.

2.16 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23220 AND ATC A/N 20621 CONDITION NUMBER 20054 PART 3

Wastewater separators S-71, S-72, S-141 and S-156 were kept closed at all times during the period of May 1, 2020 through October 31, 2020 except when opening for inspection and maintenance. Records of all openings for inspection and maintenance are on-site and available upon request.

2.17 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23316 AND ATC A/N 20621 CONDITION NUMBER 25004 FOR S-48, S-120 AND S-130 AIR STRIPPERS AND A-14, A-15, A-16, A-17, A-18 AND A-19 CARBON ABSORBERS

Pursuant to ATC A/N 20621 Condition Number 20054 Parts 1 and 7, the total combined wastewater throughput at the S-120 and backup S-130 Air Strippers did not exceed 40,800 gallons per day and 14,892,000 gallons during any consecutive 12-month period. S-130 is a backup source and has not been used as of April 30, 2014. Liquid throughput information for S-120 is included in the total for the Leachate Treatment System throughput for the period of May 1, 2020 through October 31, 2020 as summarized in Appendix R. Individual source values are kept onsite and are available upon request.

Pursuant to Title V Permit Condition Number 23316 Part 2 and ATC A/N 20621 Condition Number 20054 Part 2, influent vapor flow to the A-14, A-15 and A-16 activated carbon vessels or the A-17, A-18, and A-19 activated carbon vessels did not exceed a cumulative flow rate of 850 scfm during May 1, 2020 through October 31, 2020.

Pursuant to Title V Permit Condition Number 23316 and ATC A/N 20621 Condition Number 20054 Part 3, NMOC leaks from all valves, flanges and pumps did not exceed concentrations above 100 ppmv during the reporting period.

Pursuant to Title V Permit Condition Number 23316 and ATC A/N 20621 Condition Number 20054 Part 4, 5 and 8, NMOC concentrations are measured with an FID, at the inlet to A-14, A-16 or A-18, outlet of A-14, A-16 or A-18 and the outlet of A-15, A-17, and A-19. The A-14 or A-16 is changed out if NMOC concentrations at the A-14 or A-16 outlet is 10 ppmv or greater and is ten percent greater than the A-14 or A-16 inlet concentrations. The A-15 or A-17 is changed out when measured NMOC concentrations at the A-15 or A-17 outlet are six ppmv or greater. Monitoring results for the reporting period are included in Appendix U.

Pursuant to ATC A/N 20621 Condition Number 25004, the A-14 and A-15 or the A-17 and A-18 are changed out if NMOC concentrations at the A-14 and A-15 outlet or the A-17 and A-18 outlet is ten ppmv or greater and is ten percent greater than NMOC concentrations at the A-14 and A-15 or A-17 and A-18 inlet concentrations. The A-16 or A-19 is changed out when measured NMOC concentrations at the A-16 or A-19 outlet are six ppmv or greater.

Pursuant to Title V Permit Condition Number 23316 and ATC A/N 20621 Condition Number 20054 Part 8, NMOC concentrations are measured at the A-14, A-15 and A-16 or the A-17, A-18, and A-19 at least once a month. During the reporting period, the A-14, A-15, A-16, A-17, A-18, and A-19 carbon vessels were not changed as breakthrough did not occur.

These records are available on-site at WCCSL upon request.

2.18 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23350 FOR S-111 CONCRETE CRUSHER AND A-111 WATER SPRAY SYSTEM

Pursuant to Title V Permit Condition Number 23350 Part 2, the S-111 Concrete Crusher did not operate during the reporting period and therefore did not exceed 30,000 tons of concrete throughput in any consecutive 12-month period during May 1, 2020 through October 31, 2020. Records of third party crushed concrete are available upon request on-site at WCCSL.

Pursuant to Title V Permit Condition Number 23350 Parts 3 and 4, S-111 did not produce visible emissions as dark as or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property occurred causing a public nuisance during the reporting period.

2.19 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23351 FOR S-112 CRUSHED CONCRETE SCREENER AND A-112 WATER SPRAY SYSTEM

Pursuant to Title V Permit Condition Number 23351 Part 2, the S-112 Crushed Concrete Screener did not operate during the reporting period and therefore did not exceed 30,000 tons of concrete throughput in any consecutive 12-month period during May 1, 2020 through October 31, 2020. Records are available on-site at WCCSL upon request.

Pursuant to Title V Permit Condition Number 23351 Part 3-4, S-112 was not in operation, therefore no visible emissions as dark as or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property occurred causing a public nuisance during the reporting period.

2.20 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23352 FOR S-113 CONCRETE/ASPHALT STORAGE PILES AND A-113 WATER SPRAY SYSTEM

Pursuant to Title V Permit Condition Number 23351 Part 1, the S-113 Concrete/Asphalt Storage Piles did not exceed 30,000 tons of concrete throughput or 5,000 tons of asphalt throughput in any consecutive 12-month period during May 1, 2020 through October 31, 2020. The total monthly and annual throughput to S-113 was recorded pursuant to Title V Permit Condition Number 23351 Part 4. Total monthly throughput is listed in Concrete and Asphalt Throughput in Appendix T, and all throughput records are available on-site upon request.

Pursuant to Title V Permit Condition Number 23352 Part 2-3, all times during operation of S-113, abated by A-113 as necessary, no visible emissions as dark or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property occurred causing a public nuisance during the reporting period.

2.21 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23353 FOR S-114 CONVEYORS (CRUSHED CONCRETE) AND A-114 WATER SPRAY SYSTEM

Pursuant to Title V Permit Condition Number 23353 Part 1, the S-114 Conveyors did not operate during the reporting period and therefore did not exceed 30,000 tons of crushed concrete throughput in any consecutive 12-month period during May 1, 2020 through October 31, 2020. The total monthly and annual throughput to S-114 is recorded pursuant to Title V Permit Condition Number 23353 Part 5 and is available on-site at WCCSL upon request.

Pursuant to Title V Permit Condition Number 23353 Parts 3 and 4, all times during operation of S-114, abated by A-114, no visible emissions as dark as or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property occurred causing a public nuisance during the reporting period.

2.22 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23354 FOR S-115 WOOD/YARD WASTE SHREDDER (TUB GRINDER) AND A-115 WATER SPRAY SYSTEM

Pursuant to Title V Permit Condition Number 23354 Part 2, the S-115 Wood/Yard Waste inspection by the BAAQMD indicated no deviations per the pending Change of Permit Conditions (COPC) A/N 23078, which was filed on February 15, 2011, to increase the 12-month throughput limit.

On November 23, 2016, per ATC A/N 25019 S-115 was replaced by source S-185. Please refer to Condition 26087 for S-185 compliance.

The total monthly and annual throughputs to S-185 were recorded pursuant to the conditions listed above. The Wood Waste throughputs are listed in Appendix S. Records are available on-site at WCCSL upon request.

Pursuant to Title V Permit Condition Number 23354 Part 3-4, all times during operation of S-185, abated by A-185, no visible emissions as dark as or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property occurred causing a public nuisance during the reporting period.

In accordance with Title V Permit Condition Number 23354 Part 6, the facility received no NOV notices for public nuisance in a consecutive 12-month period (November 2019 through October 2020). Please refer to Section 2.28.4 for correspondence.

2.23 ATC A/N 25019 CONDITION 26087 FOR S-185 PORTABLE TROMMEL SCREEN/GRINDER OPERATION, AND ATC A/N 25019 CONDITION 26087 FOR S-189 WOOD WASTE STOCKPILES

On November 23, 2016, ATC A/N 25019 Condition 26087 for S-189 Wood Waste Stockpiles became effective. During the reporting period of May 1, 2020 through October 31, 2020, the operation was in compliance with the new limit of 130,000 tons of feedstock and an additional 30,000 tons of wood waste processed for non-composting activities throughput during any consecutive 12-month period.

The total monthly and annual throughput to S-185 and S-189 were recorded pursuant to the conditions listed above. The Wood Waste Throughputs are listed in Appendix S.

Pursuant to Title V Permit Condition Number 23354 Part 3-4 and ATC A/N 25019 Condition 26087 Parts 4, 6 and 7, at all times during operation of S-185 and S-189, abated by A-115, no visible emissions as dark as or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property were observed.

In accordance with Title V Permit Condition Number 23354 Part 6, the facility received no NOV notices for public nuisance in a consecutive 12-month period (November 2019 through October 2020). Please refer to Section 2.28.4 for correspondence.

2.24 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23355 FOR S-116 WOOD WASTE SCREENER AND A-116 WATER SPRAY SYSTEM

Pursuant to Title V Permit Condition Number 23355 Part 2, the S-116 Wood Waste Screener operated in compliance. Inspection by the BAAQMD indicated no deviations per the pending COPC A/N 23078, which was filed on February 15, 2011, to increase the 12-month throughput limit. The total monthly and annual throughput to S-116 was recorded pursuant to Title V Permit Condition Number 23355 Part 5 and is listed in the S-117 Composting (CASP) in Appendix S. Records are available on-site at WCCSL upon request.

During the reporting period of May 1, 2020 through October 31, 2020, S-117 operated in compliance with ATC AN 25019 Condition 26088 for S-117 Commercial Green Waste and Food Waste Composting (CASP) Method and did not exceed the new limit of 130,000 tons of feedstock and an additional 30,000 tons of wood waste processed for non-composting activities throughput during any consecutive 12-month period.

Pursuant to Title V Permit Condition Number 23355 Part 3-4, all times during operation of S-116, abated by A-116, no visible emissions as dark as or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property occurred causing a public nuisance during the reporting period were observed.

2.25 ATC A/N 25019 CONDITION 26086 FOR S-186 PORTABLE DIESEL ENGINE FOR TROMMEL SCREEN

On November 23, 2016, ATC A/N 25019 Condition 26086 for S-186 Portable Diesel Engine for Trommel Screen became effective. During the reporting period May 1, 2020 through October 31, 2020, WCCSL complied with all parts of Condition 26086 of ATC A/N 25019. Per Condition 26086, Part 5, records for the S-186 operation are maintained on-site and are available upon request.

2.26 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23356 FOR S-117 COMPOSTING OPERATION AND A-117 WATER SPRAY SYSTEM (WINDROWS METHOD)

Pursuant to Title V Permit Condition Number 23356 Part 1, the S-117 Composting operation did not exceed 19,000 tons of compost material throughput during the reporting period during May 1, 2020 through October 31, 2020. The windrows composting operation ceased actively receiving feedstock on November 23, 2016 when the Commercial Green Waste and Food Waste Composting CASP officially began operations under ATC for A/N 25019, Condition 26088 (see Section 2.28 for additional information). As of April 4, 2017, the last windrows for the composting operation were removed from the site. WCCSL considers the windrows composting operation closed as of April 5, 2017. No data regarding these operations are recorded or tracked as of this date and will not be reported in future SARs.

Waterborne petroleum resin dust suppressant or another equivalent chemical dust suppressant (which includes water) was applied to all unpaved on-site truck routes, to and from compost operations achieving a minimum Total Suspended Particulates (TSP) control efficiency of 75 percent by weight for the reporting period, pursuant to Title V Permit Condition Number 23356 Part 4.

In accordance with Title V Permit Condition Number 23356 Part 2-3 Composting Operation, the facility did not receive any NOVs for public nuisance during the May 1, 2020 through October 31, 2020 reporting period.

In accordance with Title V Permit Condition Number 23356 Part 6 Composting Operation, the facility did not receive any NOVs for odor complaints during the May 1, 2020 through October 31, 2020 reporting period.

Please refer to Appendix B, BAAQMD Correspondence for additional information.

2.27 COMPLIANCE WITH A/N 25019 AND ATC FOR S-117 COMMERCIAL GREEN WASTE AND FOOD WASTE COMPOSTING CASP METHOD

On November 23, 2016, the Commercial Green Waste and Food Waste Composting CASP began operation and all composting operations converted to the CASP method. A start-up notification was submitted to the BAAQMD on November 8, 2016 activating the ATC start-up period and operating conditions issued with A/N 25019.

2.27.1 ATC for A/N 25019, Condition 26088, Parts 1 and 18

Pursuant to ATC for A/N 25019, Condition 26088 Part 1 and 18, the S-117 Commercial Green Waste and Food Waste Composting CASP Method operation did not exceed the limit of 130,000 tons of feedstock material accepted during the consecutive 12-month period during May 1, 2020 through October 31, 2020. The total monthly and annual throughput to S-117 is listed in the S-117 Composting (CASP) in Appendix S.

2.27.2 ATC A/N 25019, Condition 26088 Parts 3-5, 19-20, and 22-24

In accordance with Condition 26088, Parts 3-5, 19-20, and 22-24, the S-117 CASP Method operation operated in compliance for the reporting period of May 1, 2020 through October 31, 2020 reporting period.

2.27.3 ATC A/N 25019, Condition 26088 Parts 6.b. and 6.c.

In accordance with ATC Condition Number 26088, Part 6.b. and 6.c, S-117 (CASP Method) operated in compliance for the reporting period of May 1, 2020 through October 31, 2020. On August 13, 2017, WCCSL self-discovered and reported that S-117, CASP operation, may have exceeded ATC A/N 25019, Condition Number 26088, Part 6.c, the permitted limit of 16,070 vehicle miles travelled on unpaved roads, in July 2017. A COPC application was submitted on September 8, 2017 to the BAAQMD requesting to increase the vehicle miles allowed on paved and unpaved roads associated with the composting operation. On September 26, 2017, Mr. Stanley Tom of the BAAQMD asked via email for California Environmental Quality Act (CEQA) documentation showing the amount of truck traffic approved for the CASP operation. Tetra Tech provided the 2004 Final Environmental Impact Report (FEIR) and 2008 EIR Addendum on September 29, 2017. As of November 7, 2017, Mr. Tom had not yet begun review of the application of the COPC to increase vehicle miles travelled (VMT) on paved and unpaved roads for the CASP operation. On May 5 and 29, 2020 and July 20, 2020, Tetra Tech followed-up with Mr. Stanley Tom on the status of the application, he noted he was still processing. On August 5, 2020, Tetra Tech requested additional information regarding the VMT application per questions received from Mr. Tom. WCCSL provided a response on August 28, 2020, Tetra Tech is working to compile responses for the questions as of the submittal of this report. The total monthly and 12-month rolling VMT are listed in Appendix S.

In accordance with ATC Condition Number 26088, Part 6.b. and 6.c, the S-117 operated in compliance for the reporting period of May 1, 2020 through October 31, 2020 reporting period.

2.27.4 ATC A/N 25019, Condition 26088 Parts 7-17

Pursuant to ATC Condition Number 26088, Parts 7-9, at all times during operation of S-177 (CASP Method), abated by A-18, no visible emissions as dark as or darker than Ringelmann 1.0 for periods over three minutes during any hour or any fallout onto adjacent property occurred causing a public nuisance during the reporting period were observed.

In accordance with ATC Condition Number 26088, Parts 10 and 13-16, S-117 (CASP Method) operated in compliance for the reporting period of May 1, 2020 through October 31, 2020.

Per ATC Condition Number 26088, Parts 17, if the plant received two or more NOVs from the BAAQMD for "Public Nuisance" in any consecutive 12-month period, the Permit Holder shall implement the control measures, as applicable, or any other measures that the BAAQMD deems necessary and appropriate within the time period specified by the BAAQMD. During the reporting period of May 1, 2020 through October 31, 2020, no confirmed odor complaints related to the CASP operation occurred. See Section 2.27 above for additional information.

Please refer to Appendix B, BAAQMD Correspondence for additional information.

2.27.5 ATC A/N 25019, Condition 26088 Part 21

Pursuant to ATC Condition 26088, Part 21, to show compliance with emission limits, a source test was conducted January 2020. Results from the source test were finalized and submitted to the BAAQMD. The source test results are included in Appendix V of the November 1, 2019 through April 30, 2020 SAR.

2.28 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 23357 FOR S-118 CRUSHING OF ASPHALT DEBRIS AND A-118 WATER SPRAY SYSTEM

Pursuant to Title V Permit Condition Number 23357 Part 1, the S-118 Crushing of Asphalt Debris did not operate and therefore did not exceed 5,000 tons of asphalt throughput in any consecutive 12-month period during May 1, 2020 through October 31, 2020 and Title V Permit Condition Number 23357 Parts 2,3, and 4 do not apply.

2.29 COMPLIANCE WITH ATC A/N 20621 CONDITION NUMBER 20054 PART 1A

For the reporting period, wastewater inlet to S-69, S-70, S-141, and S-156 did not have a volatile organic compounds (VOC) content, analyzed by method 8260 or 8021, in excess of 809 pounds per day or 295,285 pounds per year. Samples are taken, on a semi-annual basis, from the discharge side of the inlet storage tanks. Pursuant to ATC A/N 20621 Condition Number 20054, a sample was taken on November 12, 2020 and submitted to the BAAQMD Engineering Division. The VOC sample results are provided in Appendix U.

2.30 REPORTABLE EVENTS DURING THE REPORTING PERIOD

RCA ID 07S96 and ID 07S97: RCA IDs 07S96 (breakdown) and 07S97 (excursion) were submitted on April 7, 2020 for a site wide power outage on April 6, 2020 due to an unplanned PG&E power outage. A 10-Day Title V Report was submitted on April 16, 2020. A 30-Day Breakdown Report Follow-up and Title V Report was submitted on May 6, 2020.

RCA ID 07V54 and ID 07V55: RCA IDs 07V54 (breakdown) and 07V55 (excursion) were submitted on September 24, 2020 for a site wide power outage on September 24, 2020 due to an unplanned PG&E power outage. A combined 10/30-Day Title V Report was submitted on October 2, 2020.

RCA ID 07W06: RCA IDs 07W06 (excursion) was submitted on October 19, 2020 for a site wide power outage on October 18, 2020 due to an unplanned PG&E power outage. A breakdown was requested but not received. A combined 10/30-Day Title V Report was submitted on October 28, 2020.

RCA ID 07W20 and ID 07W21: RCA IDs 07W20 (breakdown) and 07W21 (excursion) were submitted on October 21, 2020 for a site wide power outage on October 21, 2020 due to an unplanned PG&E power outage. A combined 10/30-Day Title V Report was submitted on October 29, 2020.

RCA ID 07W34 and ID 07W54: RCA IDs 07W34 (breakdown) and 07W54 (excursion) were submitted on October 29, 2020 for a site wide power outage on October 28, 2020 due to an unplanned PG&E power outage. A combined 10/30-Day Title V Report was submitted on November 5, 2020.

3.0 PERFORMANCE TEST REPORT

In accordance with BAAQMD 8-34-413 and NSPS 40 CFR §60.757(g), a Performance (Source) Test Report is required to be submitted 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 the Performance Test Report section of this report. Both the S-6 IC Engine and the A-161 Flare source tests were performed during the November 1, 2019 through April 30, 2020 reporting period. The Source Test for the S-6 IC Engine was completed on February 13, 2020 and the Source Test for the A-161 Flare was completed on January 9, 2020.

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 Tests	Section 3.1, 3.2, 3.3 & 3.4
§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 3.5, 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 3.6
§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 3.7
§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 3.8
§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 3.9
§60.757(g)(6)	The provisions for the control of off-site migration.	Section 3.10 Appendix P

3.1 A-8 BACK-UP FLARE COMPLIANCE DEMONSTRATION TEST RESULTS (BAAQMD 8-34-412)

There was no Source Test completed for the A-8 flare during the reporting period. The 2018 Annual Source Test was performed on the A-8 Back-Up Flare by Blue Sky Environmental, Inc. (Blue Sky) on March 2, 2018 pursuant to Title V Permit Condition Number 17821, Part 11. A copy of the most recent Performance Test Report for the A-8 Flare was included in Appendix W of the November 1, 2017 through April 30, 2018 SAR, which was submitted to the BAAQMD and USEPA Region IX on May 31, 2018.

Pursuant to PTO Condition Number 25293 Part 11, the A-8 Back-Up Flare is required to be source tested at least once every 3 years. The A-8 Back-Up Flare is due to be source tested by March 2021.

3.2 A-120 FLARE COMPLIANCE DEMONSTRATION TEST RESULTS (BAAQMD 8-34-412)

The A-120 Flare was replaced by the A-161 Flare in November 2017 and removed from the site in December 2017, therefore the A-120 Flare no longer requires annual testing.

3.3 A-161 FLARE COMPLIANCE DEMONSTRATION TEST RESULTS (BAAQMD 8-34-412)

The annual Source Test for the A-161 Flare was completed during the reporting period on January 9, 2020, pursuant to PTO Condition Number 25293, Part 11. The results were included in Appendix V of the November 1, 2019 through April 30, 2020 SAR. The next source test of the A-161 Flare is required by January 9, 2021.

The results of the 2020 source test for the A-161 Flare indicate that the flare complies with BAAQMD 8-34-301.3, 40 CFR 60.8 and 60.752(b)(2)(iii)(B), the CARB Landfill Methane Control Measure, and compliant with PTO Condition Number 25293 Part 11.

3.4 S-5, S-6, AND S-37 IC ENGINE COMPLIANCE DEMONSTRATION TEST RESULTS (BAAQMD 8-34-412)

The 2016 Annual Source Test was performed on the S-5 IC Engine by Blue Sky on August 26, 2016, pursuant to Title V Permit Conditions Number 5771, Part 7 and 17812, Part 8. The S-5 engine has been out of service since December 27, 2017, due to a complete engine rebuild. Please refer to the October 7, 2016 source test results included in Appendix W of the Semi-Annual Report submitted for the November 1, 2016 through April 30, 2017 reporting period.

The annual Source Test for the S-6 IC Engine was completed during this reporting period on February 13, 2020, pursuant to Title V Permit Conditions Number 5771, Part 7 and 17812, Part 8. Please refer to the February 13, 2020 source test results included in Appendix V of the November 1, 2019 through April 30, 2020 SAR.

The 2017 Annual Source Test for the S-37 IC Engine was performed on December 4, 2017. The results of the test were included in Appendix W of the November 1, 2017 through April 30, 2018 SAR, which was submitted to the BAAQMD and USEPA Region IX on May 31, 2018. The S-37 IC Engine was due to be tested by December 4, 2018; however, the engine suffered a catastrophic failure on March 21, 2018 and is no longer able to operate without major repairs. Therefore, the annual source test will be conducted if/when the engine is able to be returned to service.

3.5 COMPLIANCE WITH §60.757(G)(1)

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

A map of the LFG collection system showing the location of all vertical wells, horizontal collectors, and other LFG extraction devices is included in Appendix A.

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

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

The existing GCCS conveyance piping and emission control devices have sufficient capacity to handle all current and future LFG flow rates (based on quarterly surface emissions monitoring results and monthly wellhead readings). New emission control devices will be designed and permitted as appropriate for future LFG generation rates.

3.7 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.”

Segregated areas or accumulations of asbestos material were not documented for the site in the GCCS Design Plan. Therefore, §60.757(g)(3) is not applicable.

3.8 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.”

There are no areas within the landfill footprint that have been excluded from the coverage of the GCCS. Therefore, §60.757(g)(4) is not applicable. A layer of MSW was placed in the Class I HWMF landfill directly preceding closure in which the GCCS was installed; however, the waste below is generally considered non-degradable waste.

3.9 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 existing GCCS conveyance piping and emission control devices have sufficient capacity to handle all current and future LFG flow rates. New emission control devices will be designed and permitted as appropriate for future LFG generation rates.

3.10 COMPLIANCE WITH §60.757(G)(6)

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

LFG migration monitoring, including all probes and on-site buildings, are performed weekly and monthly. LFG migration monitoring occurred on the following dates during each month for the reporting period:

- May 4, 12, 18, and 26, 2020;
- June 1, 9, 15, 22, and 29, 2020;
- July 10, 14, 20, and 28, 2020;
- August 3, 10, 17, 25 and 31, 2020;
- September 1, 11, 15, 21, and 28, 2020; and
- October 5, 12, 19, and 26, 2020.

There were no exceedances detected during May 1, 2020 through October 31, 2020 probe and building monitoring events. The LFG Probe and In-Structure Monitoring logs are included in Appendix P.

The Landfill operator will continue surface and perimeter monitoring in accordance with the approved monitoring plans. If the GCCS at WCCSL does not meet the measures of performance set forth in the NSPS, the GCCS will be adjusted or modified in accordance with the NSPS requirements. A CCR Title 27 perimeter LFG probe monitoring alternative was accepted on April 6, 2011, which exempts all probes except GP-1-97, GP-2-97, and GP-9-09 from the State required five percent methane limit.

4.0 START-UP, SHUTDOWN, MALFUNCTION (SSM) PLAN

4.1 SSM LOG FOR THE GCCS AT WCCSL

The NESHAP contained in 40 CFR Part 63, AAAA for MSW landfills to control HAPs 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 SARs 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. The SSM events that occurred from May 1, 2020 through October 31, 2020 are noted below. The following information is included as required:

- During the reporting period, no A-8 Flare SSM events occurred; the A-8 Flare did not operate during the reporting period. Refer to Appendix E, A-8 Back-Up Flare SSM Log for details.
- The A-120 Flare was replaced by the A-161 Flare in November 2017 and removed from the site in December 2017. Therefore, no A-120 Flare SSM events occurred.
- During the reporting period, 34 A-161 Flare SSM events occurred. Refer to Appendix E, A-161 Flare SSM Log, for details.
- The S-5 IC Engine did not operate during the reporting period. Therefore, no S-5 IC Engine SSM events occurred. Refer to Appendix E, S-5 IC Engine SSM Log for details.
- During the reporting period, 124 S-6 IC Engine SSM events occurred. Refer to Appendix E, S-6 IC Engine SSM Log for details.
- The S-37 IC Engine did not operate during the reporting period. Therefore, no S-37 IC Engine SSM events occurred. Refer to Appendix E, S-37 IC Engine SSM Log for details.
- During the reporting period, there was one Class I wellfield SSM Event and one well decommissioned and six shutdowns and three startups for the Class II Wellfield. Details are included in Appendix C and D, Class I and Class II Well SSM Logs.
- There were 169 events in total. In all 169 events, automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan. Details are included in Appendix B, Correspondence.

There were no exceedances during the reporting period of any applicable emission limitation in the landfills NESHAP (§63.10(d)(5)(i)). As of March 26, 2020, USEPA has implemented new NESHAP MSW Landfill Residual Risk and Technology Review requirements and allows eighteen months for the facility to comply with the changes. The applicable updates will be reflected in the subsequent SARs.

Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were not required (§63.6(e)(3)(viii)). Call-out boxes were installed and setup for automatic communication with designated site personnel in the event of a flare shutdown. The call-out boxes were installed in May 2018.

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.

Rob Sherman

11-25-2020

Signature of Responsible Official

Date

Rob SHERMAN

Name of Responsible Official

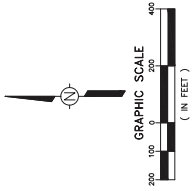
5.0 LIMITATIONS

The work product included in the attached was undertaken in full conformity with generally accepted professional consulting principles and practices and to the fullest extent as allowed by law we expressly disclaim all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose. The work product was completed in full conformity with the contract with our client and this document is solely for the use and reliance of our client (unless previously agreed upon that a third party could rely on the work product) and any reliance on this work product by an unapproved outside party is at such party's risk.

The work product herein (including opinions, conclusions, suggestions, etc.) was prepared based on the situations and circumstances as found at the time, location, scope and goal of our performance and thus should be relied upon and used by our client recognizing these considerations and limitations. Tetra Tech (formerly known as Cornerstone Environmental Group, LLC a Tetra Tech Company), shall not be liable for the consequences of any change in environmental standards, practices, or regulations following the completion of our work and there is no warrant to the veracity of information provided by third parties, or the partial utilization of this work product.

APPENDIX A

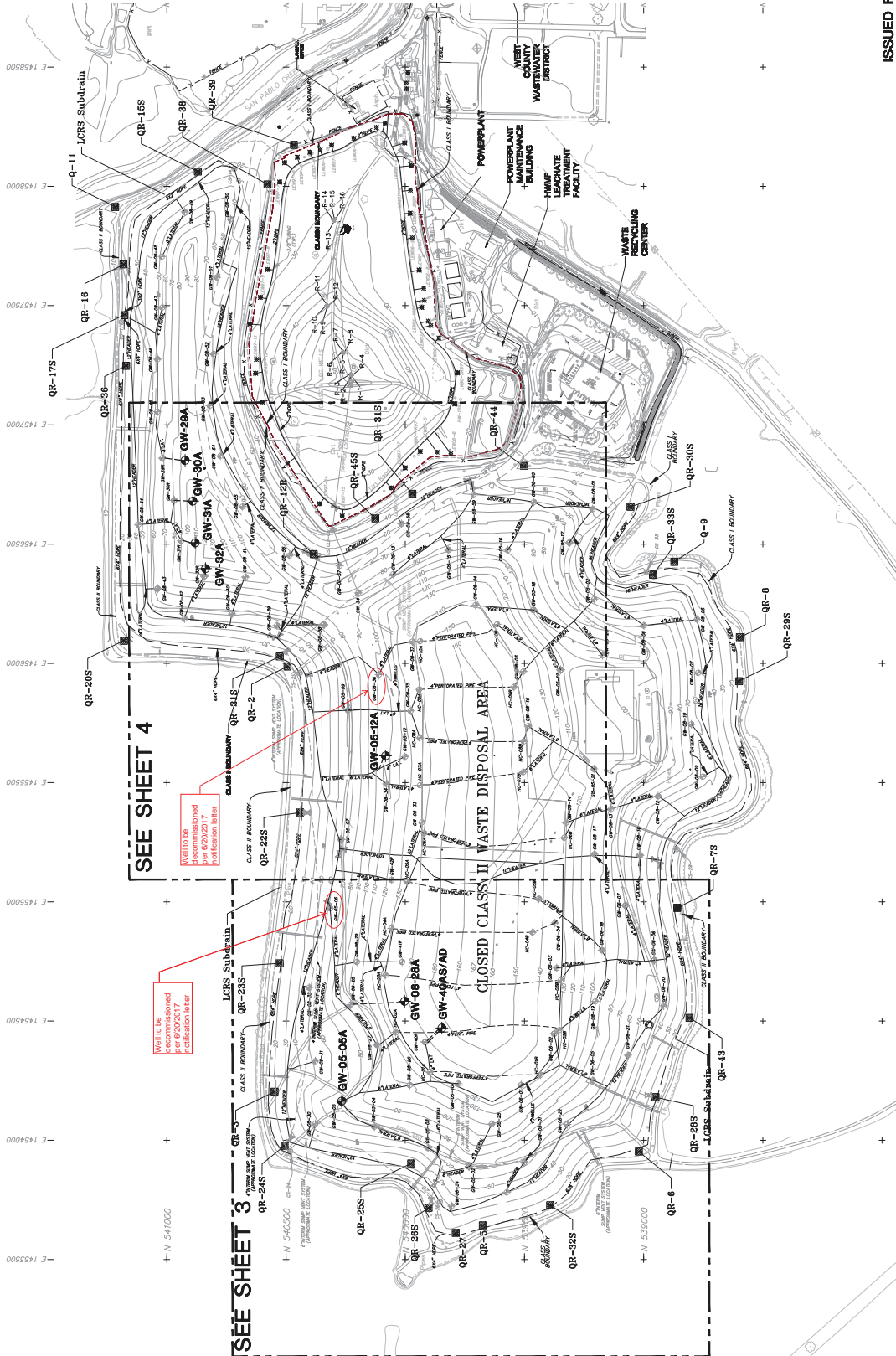
SITE MAP



LEGEND
 GW-29A PROPOSED VERTICAL GAS EXTRACTION WELL REPLACEMENT (8 LOCATIONS)
 --- PROPOSED WELL LATERAL

Tie and Graphics shown in red added by
 Cornerstone Environmental Group, a Terra Tech
 Company.

NOTES:
 1. EXISTING TOPOGRAPHY SHOWN OUTSIDE CLASS II
 WASTE DISPOSAL AREA (WASTE DISPOSAL AREA
 MAP, DANA POINT, CALIFORNIA, APRIL 1997).
 2. PROPOSED PINK GRADERS INSIDE CLASS II
 WASTE DISPOSAL AREA (WASTE DISPOSAL AREA
 MAP, DANA POINT, CALIFORNIA, APRIL 1997).
 3. PROPOSED LOCATIONS FOR THE VERTICAL GAS
 EXTRACTION WELLS, HORIZONTAL REPAIRS AND
 WELL CLOSURES. HORIZONTAL REPAIRS ARE
 ONLY APPROXIMATE AND MAY CHANGE BASED ON
 CONSTRUCTION AT THE TIME OF
 CONSTRUCTION.



SEE SHEET 4

WELL TO BE
 DISCOMMISSIONED
 INDICATED IN RED

WELL TO BE
 DISCOMMISSIONED
 INDICATED IN RED

SEE SHEET 3



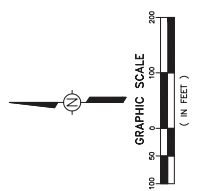
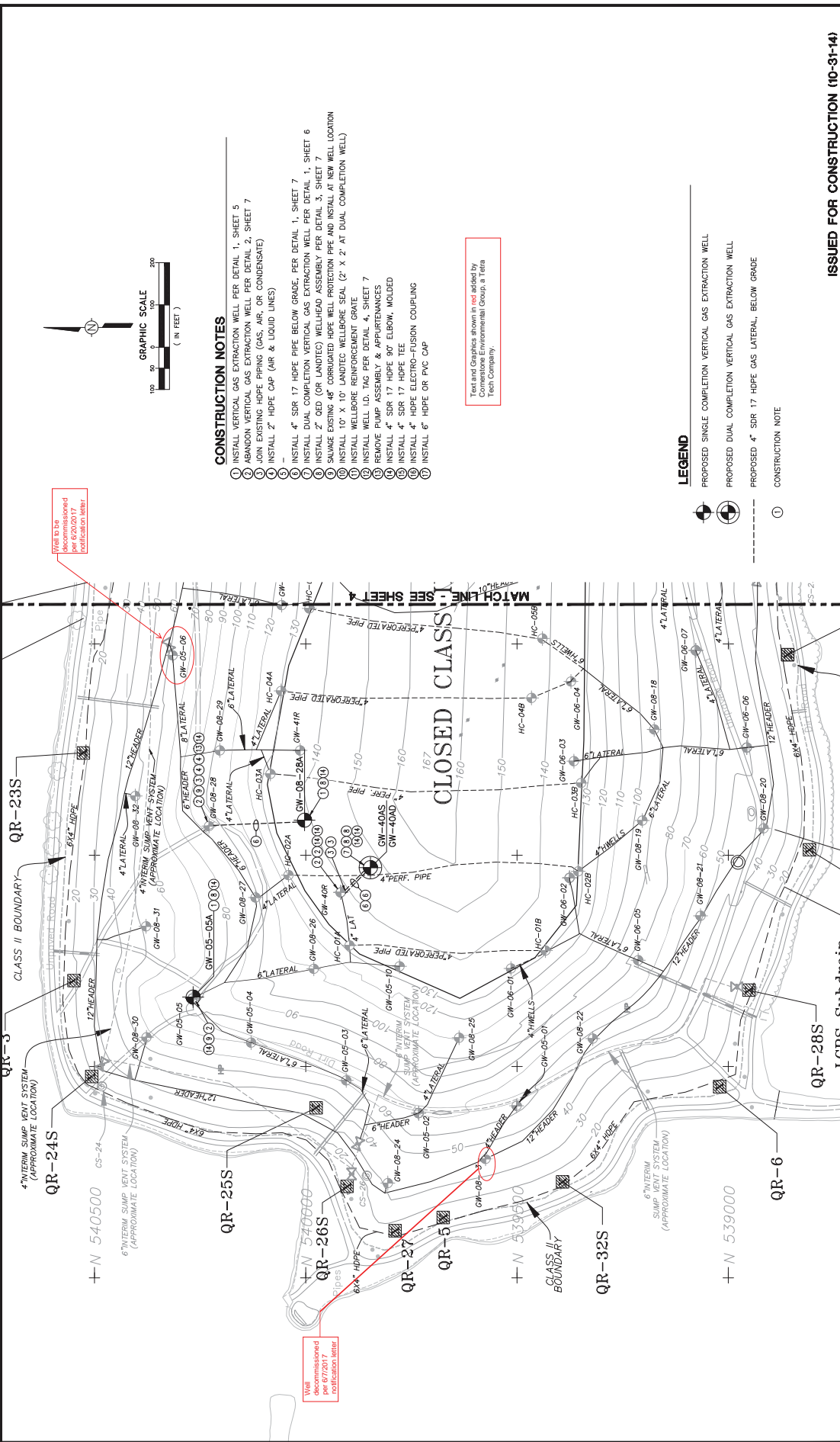
WASTE COLLECTION: REPUBLIC SERVICES, INC. (951) 998-8817



1380 Valley View Drive, Diamond Bar, CA 91718
 TEL: 909.858.7777 FAX: 909.858.8117

ISSUED FOR CONSTRUCTION (10-31-14)
 WEST CONTRA COSTA COUNTY LANDFILL
 2014 GAS SYSTEM IMPROVEMENTS
SITE PLAN AND INDEX TO PLAN SHEETS
 DESIGNED BY: RS/29A
 DRAWN BY: S. ANGUS
 CHECKED BY: E. TUNSVOLD
 APPROVED BY: G. GLASSER
 SCALE: AS SHOWN
 DATE: 10/31/14 FILE NO.: 02-02-20100M
 DATE: 10/31/14 SHEET 2 OF 7

NO.	REVISION DESCRIPTION	BY:



CONSTRUCTION NOTES

- 1) INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 5
- 2) ABANDON VERTICAL GAS EXTRACTION WELL PER DETAIL 2, SHEET 7
- 3) JOIN EXISTING PIPING (GAS, AIR, OR CONDENSATE)
- 4) INSTALL 2" HOPE CAP (AIR & LIQUID LINES)
- 5) INSTALL 4" SDR 17 HOPE PIPE BELOW GRADE PER DETAIL 1, SHEET 7
- 6) INSTALL DUAL COMPLETION VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 6
- 7) INSTALL 2" OED (OR LANDTEC) WELLHEAD ASSEMBLY PER DETAIL 3, SHEET 7
- 8) SALVAGE EXISTING 48" CORRUGATED HDPE WELL PROTECTION PIPE AND INSTALL AT NEW WELL LOCATION
- 9) INSTALL 10" X 10" LANDTEC WELLBORE SEAL (2" X 2" AT DUAL COMPLETION WELL)
- 10) INSTALL WELLBORE REINFORCEMENT GRATE
- 11) INSTALL WELL I.D. TAG PER DETAIL 4, SHEET 7
- 12) REMOVE PUMP ASSEMBLY & AFFURTEANCES
- 13) INSTALL 4" SDR 17 HOPE 90° ELBOW, MOLDED
- 14) INSTALL 4" SDR 17 HOPE TEE
- 15) INSTALL 4" HOPE ELECTRO-FUSION COUPLING
- 16) INSTALL 6" HOPE OR PVC CAP

Text and Graphics shown in red added by
Comestore Environmental Group, a Terra
Tech Company.

LEGEND

- PROPOSED SINGLE COMPLETION VERTICAL GAS EXTRACTION WELL
- PROPOSED DUAL COMPLETION VERTICAL GAS EXTRACTION WELL
- PROPOSED 4" SDR 17 HOPE GAS LATERAL, BELOW GRADE
- ① CONSTRUCTION NOTE

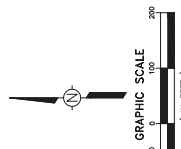
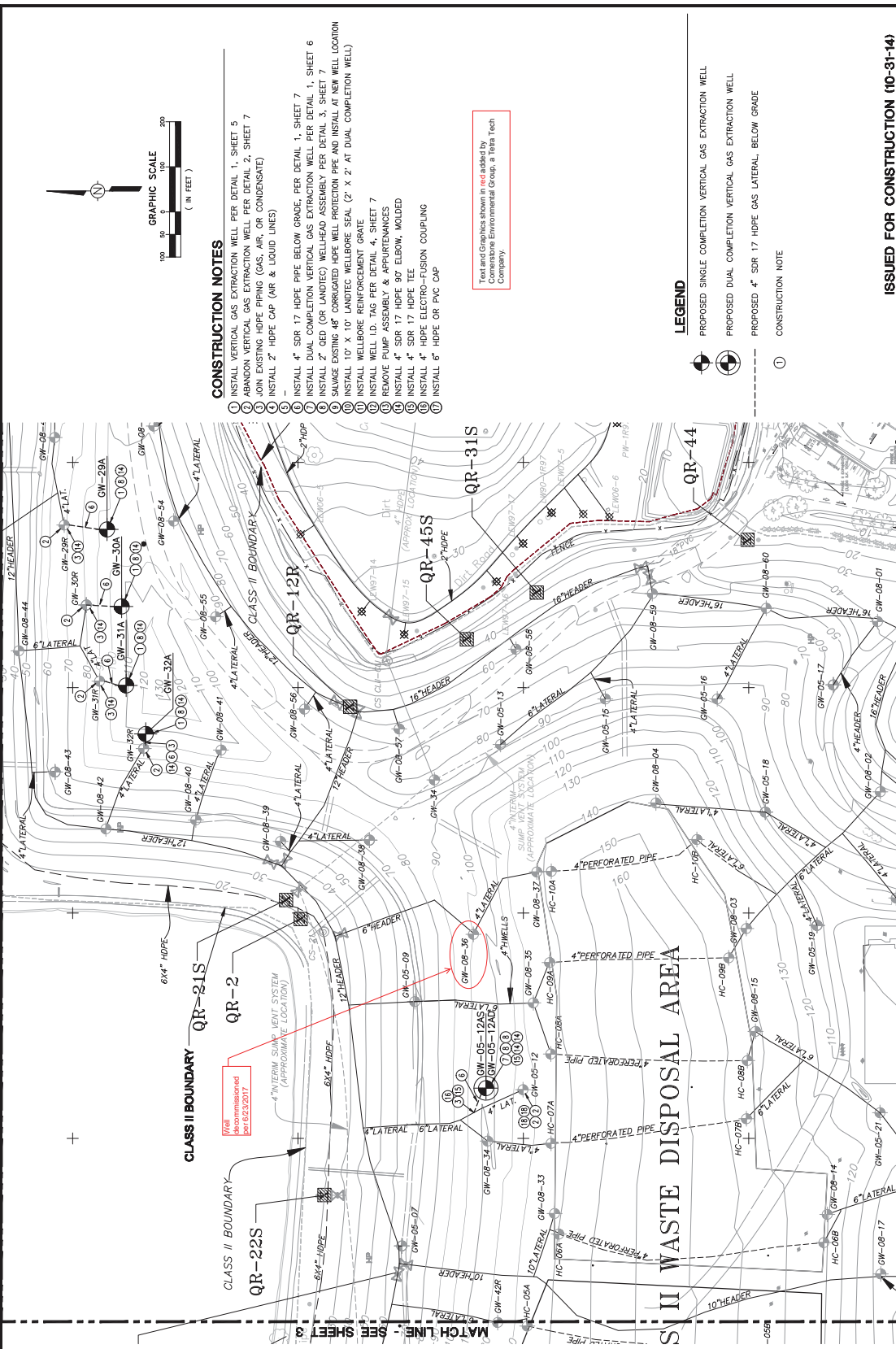
ISSUED FOR CONSTRUCTION (10-31-14)

WEST CONTRA COSTA COUNTY LANDFILL	
2014 GAS SYSTEM IMPROVEMENTS	
GAS SYSTEM IMPROVEMENT PLAN	
DESIGNED BY: R2/SNA	SCALE: 1" = 50'-0"
DRAWN BY: S. ANDRIS	DATE: 10/31/14
CHECKED BY: E. TENSVOLD	FILE NO.: 03-86-041GSP
APPROVED BY: G. GLASSER	DATE: 11/03/14
SHEET 3	OF 7

TETRA TECH BAS
1880 Valley View Drive, Diamond Bar, CA 91765
TEL: 909.866.7777 FAX: 909.866.8117

REPUBLIC SERVICES, INC.
WASTE COLLECTION, RECYCLING, AND DISPOSAL

NO.	REVISION DESCRIPTION	BY:



- CONSTRUCTION NOTES**
1. INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 5
 2. ABANDON VERTICAL GAS EXTRACTION WELL PER DETAIL 2, SHEET 7
 3. JOIN EXISTING HDPE PIPING (GAS, AIR, OR CONDENSATE)
 4. INSTALL 2" HDPE CAP (AIR & LIQUID LINES)
 5. INSTALL 4" SDR 17 HDPE PIPE BELOW GRADE, PER DETAIL 1, SHEET 7
 6. INSTALL DUAL COMPLETION VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 6
 7. INSTALL 2" RED (OR LANDTEC) WELLHEAD ASSEMBLY PER DETAIL 3, SHEET 7
 8. SALVAGE EXISTING 48" CORRUGATED HDPE WELL PROTECTION PIPE AND INSTALL AT NEW WELL LOCATION
 9. INSTALL 10' X 10' LANDTEC WELLBORE SEAL (2' X 2' AT DUAL COMPLETION WELL)
 10. INSTALL WELLBORE REINFORCEMENT GRATE
 11. INSTALL WELL I.D. TAG PER DETAIL 4, SHEET 7
 12. REMOVE PUMP ASSEMBLY & APPURTENANCES
 13. INSTALL 4" SDR 17 HDPE 90° ELBOW, MOLDED
 14. INSTALL 4" SDR 17 HDPE TEE
 15. INSTALL 4" HDPE ELECTRO-FUSION COUPLING
 16. INSTALL 6" HDPE OR PVC CAP

Text and Graphics shown in red added by Cornerstone Environmental Group, a Tetra Tech Company.

- LEGEND**
- PROPOSED SINGLE COMPLETION VERTICAL GAS EXTRACTION WELL
 - PROPOSED DUAL COMPLETION VERTICAL GAS EXTRACTION WELL
 - PROPOSED 4" SDR 17 HDPE GAS LATERAL, BELOW GRADE
 - CONSTRUCTION NOTE

ISSUED FOR CONSTRUCTION (10-31-14)

WEST CONTRA COSTA COUNTY LANDFILL
2014 GAS SYSTEM IMPROVEMENTS
GAS SYSTEM IMPROVEMENT PLAN

DESIGNED BY: R2/SNA	SCALE: AS SHOWN
DRAWN BY: S. ANDRIS	DATE: 10/31/14
CHECKED BY: E. TENSOLD	FILE NO.: 85-01426SP
APPROVED BY: C. GLASSER	DATE: 11/03/14
	SHEET 4 OF 7

TETRA TECH BAS
1380 Valley View Drive, Diamond Bar, CA 91765
TEL: 909.386.7777 FAX: 909.386.8117

REPUBLIC SERVICES, INC.
WASTE COLLECTION, RECYCLING, WASTE TREATMENT

NO.	REVISION DESCRIPTION	BY:

APPENDIX B

BAAQMD CORRESPONDENCE



May 6, 2020

Mr. Jeffrey Gove
Director of Compliance and Enforcement
Bay Area Air Quality Management District
Attn: Title V Reports and RCA 30-Day Report
375 Beale Street, Suite 600
San Francisco, CA 94105

Submitted via email to:
jgove@baaqmd.gov
compliance@baaqmd.gov

Re: 30-Day Breakdown Report Follow-Up and 30-Day Title V Report
Reportable Compliance Activity IDs 07S96 and 07S97
West Contra Costa Sanitary Landfill, Richmond, California
Facility Number A1840

Dear Mr. Gove:

West Contra Costa Sanitary Landfill (WCCSL), located in Richmond, California, submits this 30-Day Title V Report to the Bay Area Air Quality Management District (BAAQMD) to satisfy the written 30-day notification requirement per Title V Permit Standard Condition I.F (Monitoring Reports). On April 7, 2020, a Reportable Compliance Activity (RCA) Breakdown Relief Request/Excursion was submitted to the BAAQMD via email to rca@baaqmd.gov. Pursuant to Title V Permit Condition Number 25293, Part 5 the gas collection and control system (GCCS) shall remain in continuous operation. This letter also serves as the 30-Day Breakdown Follow Up Report.

On Monday, April 6, 2020, at approximately 16:47, WCCSL lost power due to an unplanned Pacific Gas and Electric (PG&E) power outage as a result of a damaged electrical transformer. Operations and maintenance (O&M) personnel were dispatched to the site and confirmed. The WCCSL Environmental Manager, Ed Baquerizo contacted BAAQMD Inspector, Chris Coelho by telephone at approximately 17:00 to report the incident and submitted a formal request for breakdown relief to BAAQMD (via e-mail) at 18:39. At approximately 18:12, PG&E restored power to the surrounding area, but due to the damaged transformer that specifically conducts electricity to the site, power was unable to be returned to WCCSL. As stated above, the RCA Breakdown Relief Request/Excursion Form was submitted to the BAAQMD on April 7, 2020.

The Breakdown Request/RCA Notification was assigned an RCA Identification Number (RCA ID) of 07S96 (Breakdown) and 07S97 (Excursion) by the BAAQMD. It was determined that no breakdown of equipment owned and operated by WCCSL occurred, but that the operation of the equipment onsite was interfered with due to a PG&E unplanned utility outage.

Mr. Jeffery Gove

May 6, 2020

Page 2

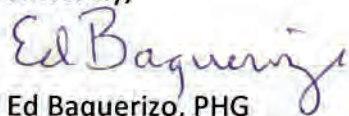
WCCSL tried to obtain two generators to power the site and flare until the transformer could be fully repaired. Due to the novel coronavirus and Shelter-in-Place orders, locating and mobilizing the generators to the site was prolonged due to limited availability of personnel to provide a generator. During this period of downtime, applicable inspection and maintenance (I&M) measures were taken pursuant to BAAQMD Regulation 8, Rule 34, Section 113 (8-34-113), which allows for up to 240 hours of GCCS downtime in any calendar year to allow for I&M of the GCCS. Once the damaged transformer was replaced by WCCSL, O&M personnel inspected all systems of the A-161 Flare, in accordance with WCCSL's Start-Up, Shutdown, and Malfunction Plan (SSMP) to ensure proper working order. After O&M personnel inspected the A-161 Flare and related systems, it was determined that no maintenance was required. The flare was restarted by O&M personnel at 15:26 on April 7, 2020.

It is not believed that excess emissions occurred during this event. The A-161 Flare contains an automated block valve that will close shut during instances of non-operation, ensuring no fugitive landfill gas (LFG) is emitted. At the time of this submittal, the A-161 Flare is operating within normal parameters. In order to mitigate any delays with returning power to the control device(s) and the operation of the GCCS, WCCSL is investigating alternative powers options that can be readily accessible should a similar event occur in the future.

Although a request for breakdown relief was submitted for the power outage event, WCCSL does not believe that filing for breakdown relief was the appropriate measure, as there was no "breakdown" of any WCCSL-owned control device. During a power outage, no equipment had power to operate, therefore there is no missing data. This event highlights the difference between lack of data recorded due to no power versus lack of data recorded due to a true equipment malfunction. The cause of the event was outside of the control of WCCSL. The RCA was submitted out of an abundance of caution as previously instructed by BAAQMD inspectors.

As of the date of this letter, WCCSL has not received any correspondence from the BAAQMD inspector. WCCSL respectfully requests that the BAAQMD grant breakdown relief for this event. If you have any questions or require additional information, please do not hesitate to contact me at (510) 970-7248. Alternatively, you may contact Maria Bowen at (925) 241-1063 or by email at maria.bowen@tetrattech.com.

Sincerely,



Ed Baquerizo, PHG

Environmental Manager

West Contra Costa Sanitary Landfill

Attachment: RCA Form IDs 07S96 and 07S97

Mr. Jeffery Gove

May 6, 2020

Page 3

cc: Rob Sherman, WCCSL
Maria Bowen, Tetra Tech
Suzan Pankenier, Tetra Tech
David Burt, Republic
Judith George, Republic
Niki Wuestenberg, Republic
Thomas M. Bruen, Law Offices of Thomas M. Bruen, P.C.
Scott W. Gordon, Law Offices of Scott W. Gordon, P.C.
Chris Coelho, BAAQMD

Attachment A
RCA Form 07S96 and 07S97



COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

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

1. **BREAKDOWN RELIEF: *District Use Only* BREAKDOWN REFERENCE #:** 07S96

2. **MONITOR EXCESS EMISSION or EXCURSION: *District Use Only* REFERENCE #:** 07S97

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Maria Bowen	Phone #	925-241-1063
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	22.65 hours
Start Time/Date	4/6/2020 at 16:47	Clear Time	4/7/2020 15:26
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Monday, April 6, 2020 at 16:47 a Pacific Gas and Electric (PG&E) transformer malfunctioned causing a disruption of power at West Contra Costa Sanitary Landfill (WCCSL) and in the surrounding area. At approximately 18:12, PG&E restored power to the area, but due to the damaged transformer, that specifically conducts electricity to the site, power was unable to be returned to WCCSL. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on the same day, at 18:39 by the onsite environmental manager. The transformer is being replaced by Republic Services; however, the site also tried to obtain two generators to power the site and flare until the transformer could be fully repaired. Due to the COVID-19 Virus and Shelter-in-Place orders, locating and getting the generators was prolonged due to limit availability of generator provider personnel. In the interim repair crews were able to replace the transformer and power was restored to the site at 15:26 today, April 7, 2020

District Use Only

Received by

Date

Time

General Instructions



June 18, 2020

Ms. Loi Chau
 Air Quality Engineer II
 Bay Area Air Quality Management District
 375 Beale Street, Suite 600
 San Francisco, CA 94105

Re: Well Decommissioning Notification Letter – One Vertical Landfill Gas Well
 Title V Permit Condition No. 25293, Plant No. 1840
 West Contra Costa Sanitary Landfill, Richmond, CA

Dear Ms. Chau:

Tetra Tech is submitting this letter on behalf of West Contra Costa Sanitary Landfill (WCCSL) to notify the Bay Area Air Quality Management District (BAAQMD) of the planned decommissioning of one vertical landfill gas (LFG) collection well (WCLF0604) at the WCCSL, pursuant to Title V Permit Condition Number 25293 Part 6(c). WCCSL is split into two separate landfills, Landfill I (S-46) and Landfill II (S-15). Landfill II is covered under Title V Permit Condition Number 25293 Part 6(b) and is discussed below, as one vertical well is to be decommissioned. Landfill I is covered under a separate permit condition and is not discussed in this letter.

The following table is a summation of the well actions at WCCSL detailed in this notification letter.

Well ID	Well Action	Date/Time Action Taken
WCLF0604	Vertical well decommissioning	June 22, 2020 by 17:00

This notification of well decommissioning is being made pursuant to the Title V Permit Condition Number 25293 Part 6(c) requirement which states that the BAAQMD must be notified at least three days before the decommissioning of an existing well.

The following table shows the status of decommissions, installations, and leachate cleanout riser connections to the gas collection and control system (GCCS) at Landfill II, per Title V Permit Condition Number 25293 Part 6(b).

Action	Allowable Actions Per PTO 21826 Condition 25293 Part 6(b)	Remaining Actions Per PTO 21826 Condition 25293 Part 6(b)
Vertical Gas Extraction Well Installations	94	90
Horizontal Collector Installations	20	20
Vertical Gas Extraction Well Decommissions	27	14
Horizontal Collector Decommissions	9	9
Vertical Well Replacements	Unlimited	Unlimited

Ms. Loi Chau
June 18, 2020

Based on the March 27, 2020 LFG Well Decommissioning and Startup Notification Letter, the Landfill II GCCS consisted of 88 active vertical LFG collection wells and 20 active horizontal collectors. With the decommissioning of Well WCLF0604 as indicated in this Well Decommissioning Notification Letter, there will be 87 vertical LFG collection wells and 20 active horizontal collectors at the GCCS at WCCSL's Landfill II. Title V Permit Condition Number 25293 Part 6(b) only applies to Landfill II, as the allowable actions for Landfill I are defined under a different permit condition.

Pursuant to Title V Permit Condition Number 25293 Part 6 (c)(i & ii) an updated well list is provided which includes the well name and well type, and an updated LFG extraction system drawing, in Attachments A and B, reflecting the modification.

If you have any questions regarding this notification, please do not hesitate to call Maria Bowen at (925) 241-1063.

Sincerely,

TETRA TECH



Nat Israel

Environmental Scientist



Maria Bowen
Project Manager

Enclosure: Attachment A – Updated Landfill II Well List
Attachment B – Site Map

cc: Ed Baquerizo, WCCSL
Rob Sherman, WCCSL
Mike Flanagan, WCCSL
Greg Solomon, BAAQMD

ATTACHMENT A- UPDATED WELL LIST

GEM Identification	Type of Collector
Landfill II	
WCLF029A	VW
WCLF030A	VW
WCLF031A	VW
WCLF032A	VW
WCLF034R	VW
WCLF40AD	VW
WCLF40AS	VW
WCLF042R	VW
WCLF0501	VW
WCLF0502	VW
WCLF0503	VW
WCLF0504	VW
WCLF505A	VW
WCLF0507	VW
WCLF0509	VW
WCLF0510	VW
WCLF510D	VW
WCL512AD	VW
WCL512AS	VW
WCLF0513	VW
WCLF0515	VW
WCLF0516	VW
WCLF0517	VW
WCLF0518	VW
WCLF0519	VW
WCLF519D	VW
WCLF0520	VW
WCLF0601	VW
WCLF601D	VW
WCLF0602	VW
WCLF0603	VW
WCLF0605	VW
WCLF0606	VW

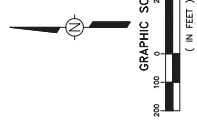
GEM Identification	Type of Collector
WCLF0607	VW
WCLF0801	VW
WCLF0802	VW
WCLF0803	VW
WCLF0804	VW
WCLF0806	VW
WCLF0807	VW
WCLF0809	VW
WCLF0810	VW
WCLF0812	VW
WCLF0813	VW
WCLF0814	VW
WCLF0815	VW
WCLF0816	VW
WCLF0817	VW
WCLF0818	VW
WCLF0819	VW
WCLF0820	VW
WCLF0821	VW
WCLF0822	VW
WCLF0824	VW
WCLF0825	VW
WCLF0826	VW
WCLF0827	VW
WCLF828A	VW
WCLF0829	VW
WCLF0830	VW
WCLF0832	VW
WCLF0833	VW
WCLF0834	VW
WCLF0835	VW
WCLF0837	VW
WCLF0838	VW
WCLF0839	VW
WCLF0840	VW
WCLF0841	VW

GEM Identification	Type of Collector
WCLF0842	VW
WCLF0843	VW
WCLF0844	VW
WCLF0845	VW
WCLF0846	VW
WCLF0847	VW
WCLF0848	VW
WCLF0849	VW
WCLF0850	VW
WCLF0851	VW
WCLF0852	VW
WCLF0853	VW
WCLF0854	VW
WCLF0855	VW
WCLF0856	VW
WCLF0857	VW
WCLF0858	VW
WCLF0860	VW
WCLFH01A	HC
WCLFH01B	HC
WCLFH02A	HC
WCLFH02B	HC
WCLFH03A	HC
WCLFH03B	HC
WCLFH04A	HC
WCLFH04B	HC
WCLFH05A	HC
WCLFH05B	HC
WCLFH06A	HC
WCLFH06B	HC
WCLFH07A	HC
WCLFH07B	HC
WCLFH08A	HC
WCLFH08B	HC
WCLFH09A	HC

GEM Identification	Type of Collector
WCLFH09B	HC
WCLFH10A	HC
WCLFH10B	HC

Vertical Well	VW	87
Horizontal Collector	HC	20
Active count:		107

ATTACHMENT B- SITE MAP

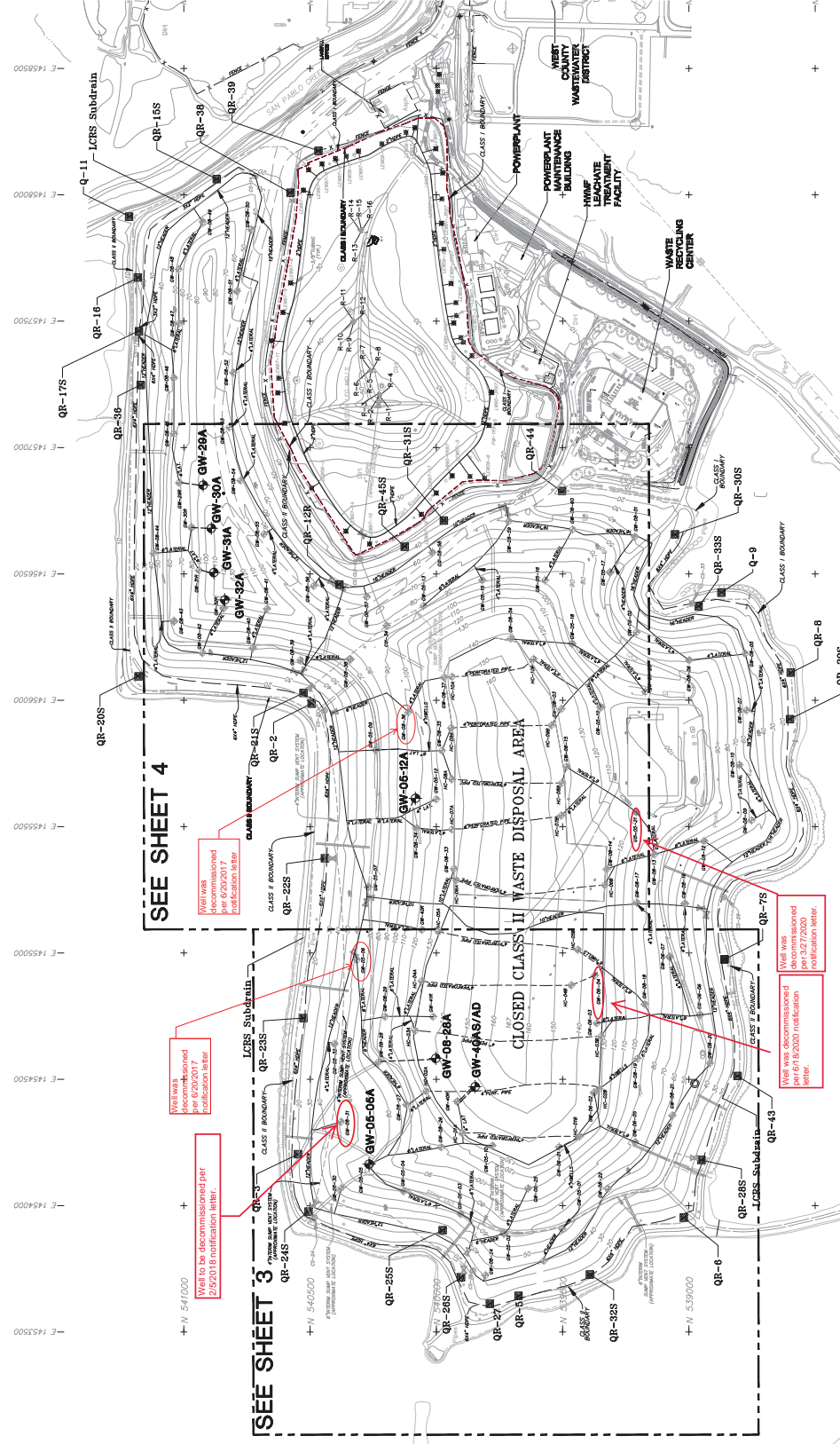


LEGEND

- EXPOSED VERTICAL GAS EXTRACTION WELL REPLACEMENT (8 LOCATIONS)
- PROPOSED WELL LATERAL

Tie and Graphics shown in red added by
Comerstone Environmental Group, a Terra Tech
Company.

- NOTES:**
- EXISTING TOPOGRAPHY SHOWN OUTSIDE CLASS II WASTE DISPOSAL AREA, CALIFORNIA, APRIL 19, 2007.
 - PROPOSED PINK GRADERS INSIDE CLASS II WASTE DISPOSAL AREA, CALIFORNIA, APRIL 19, 2007.
 - PROPOSED LOCATIONS FOR THE VERTICAL GAS EXTRACTION WELLS. HORIZONTAL TRENCHES ARE ONLY APPROXIMATE AND MAY CHANGE BASED ON CONSTRUCTION.



SEE SHEET 4

Well was decommissioned per 6/19/2020 notification letter.

Well was decommissioned per 6/19/2020 notification letter.

Well was decommissioned per 6/19/2020 notification letter.

Well was decommissioned per 6/19/2020 notification letter.

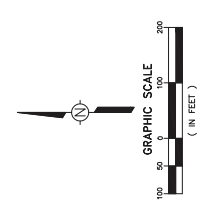
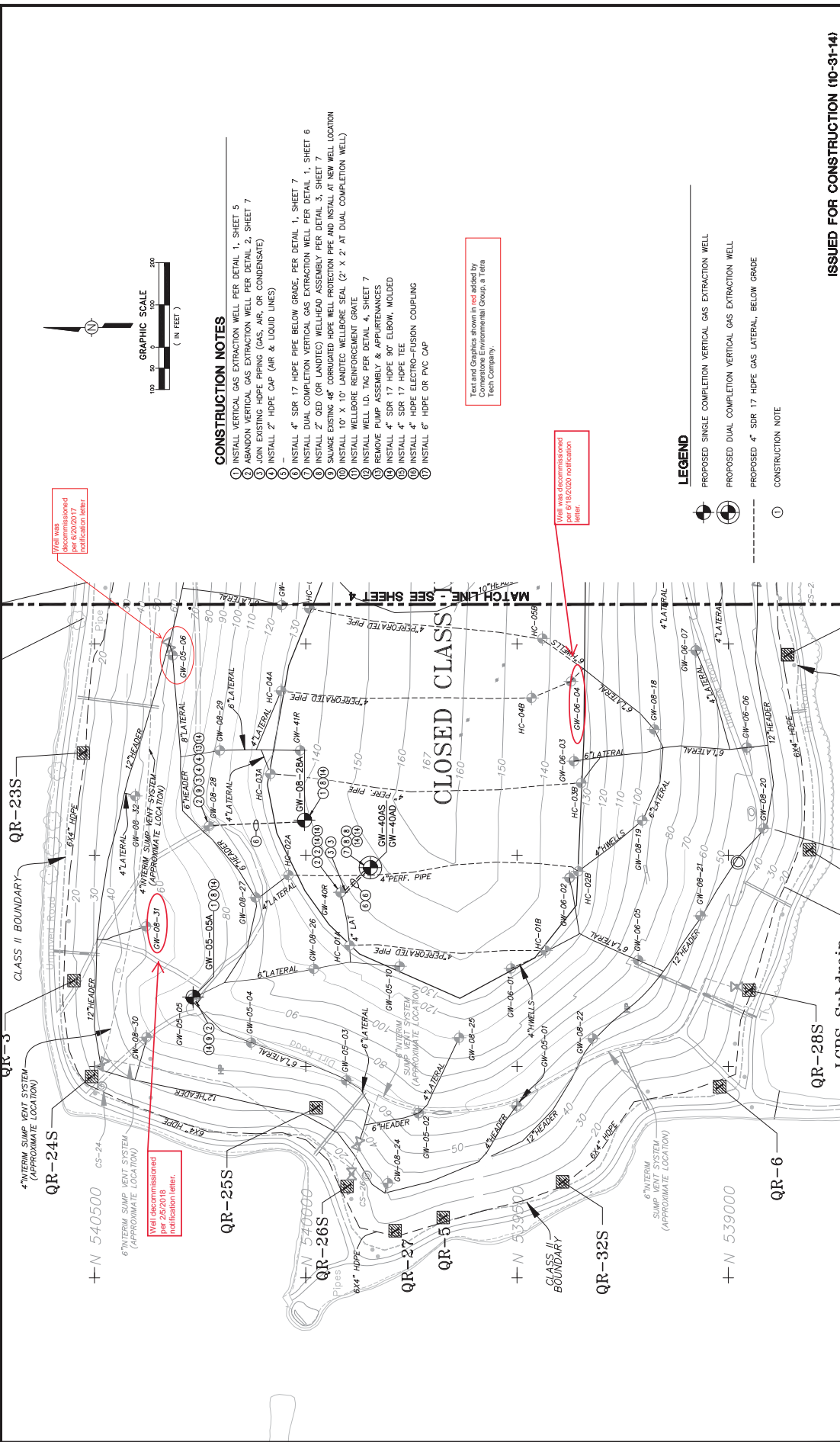
ISSUED FOR CONSTRUCTION (10-31-14)

WEST CONTRA COSTA COUNTY LANDFILL
2014 GAS SYSTEM IMPROVEMENTS
SITE PLAN AND INDEX TO PLAN SHEETS
DESIGNED BY : RS/29A
SCALE : AS SHOWN
DRAWN BY : S. ANGUS
DATE : 10/31/14
FILE NO. : 02-02-201100M
CHECKED BY : E. TERNSTROM
DATE : 10/31/14
SHEET 2 OF 7

TETRA TECH BAS
1300 Valley View Drive, Diamond Bar, CA 91765
TEL: 909.858.7777 FAX: 909.858.0117

REPUBLIC SERVICES, INC.
WASTE COLLECTION: 909.438.7140
WASTE DISPOSAL: 909.438.7140

NO.	REVISION DESCRIPTION	BY:



- CONSTRUCTION NOTES**
- INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 5
 - ABANDON VERTICAL GAS EXTRACTION WELL PER DETAIL 2, SHEET 7
 - JOIN EXISTING PIPE TO GAS, AIR, OR CONDENSATE
 - INSTALL 2" HOPE CAP (AIR & LIQUID LINES)
 - INSTALL 4" SDR 17 HOPE PIPE BELOW GRADE PER DETAIL 1, SHEET 7
 - INSTALL DUAL COMPLETION VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 6
 - INSTALL 2" OED (OR LANDTEC) WELLHEAD ASSEMBLY PER DETAIL 3, SHEET 7
 - SAVE EXISTING 4" CORRUGATED HOPE WELL PROTECTION PIPE AND INSTALL AT NEW WELL LOCATION
 - INSTALL 10" X 10" LANDTEC WELLBORE SEAL (2" X 2" AT DUAL COMPLETION WELL)
 - INSTALL WELLBORE REINFORCEMENT GRATE
 - INSTALL WELL I.D. TAG PER DETAIL 4, SHEET 7
 - REMOVE PUMP ASSEMBLY & AFFURTEANCES
 - INSTALL 4" SDR 17 HOPE 90° ELBOW, MOLDED
 - INSTALL 4" SDR 17 HOPE TEE
 - INSTALL 4" HOPE ELECTRO-FUSION COUPLING
 - INSTALL 6" HOPE OR PVC CAP

Text and Graphics shown in red added by Comestore Environmental Group, a Terra Tech Company.

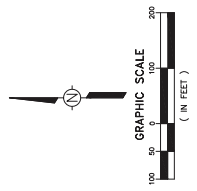
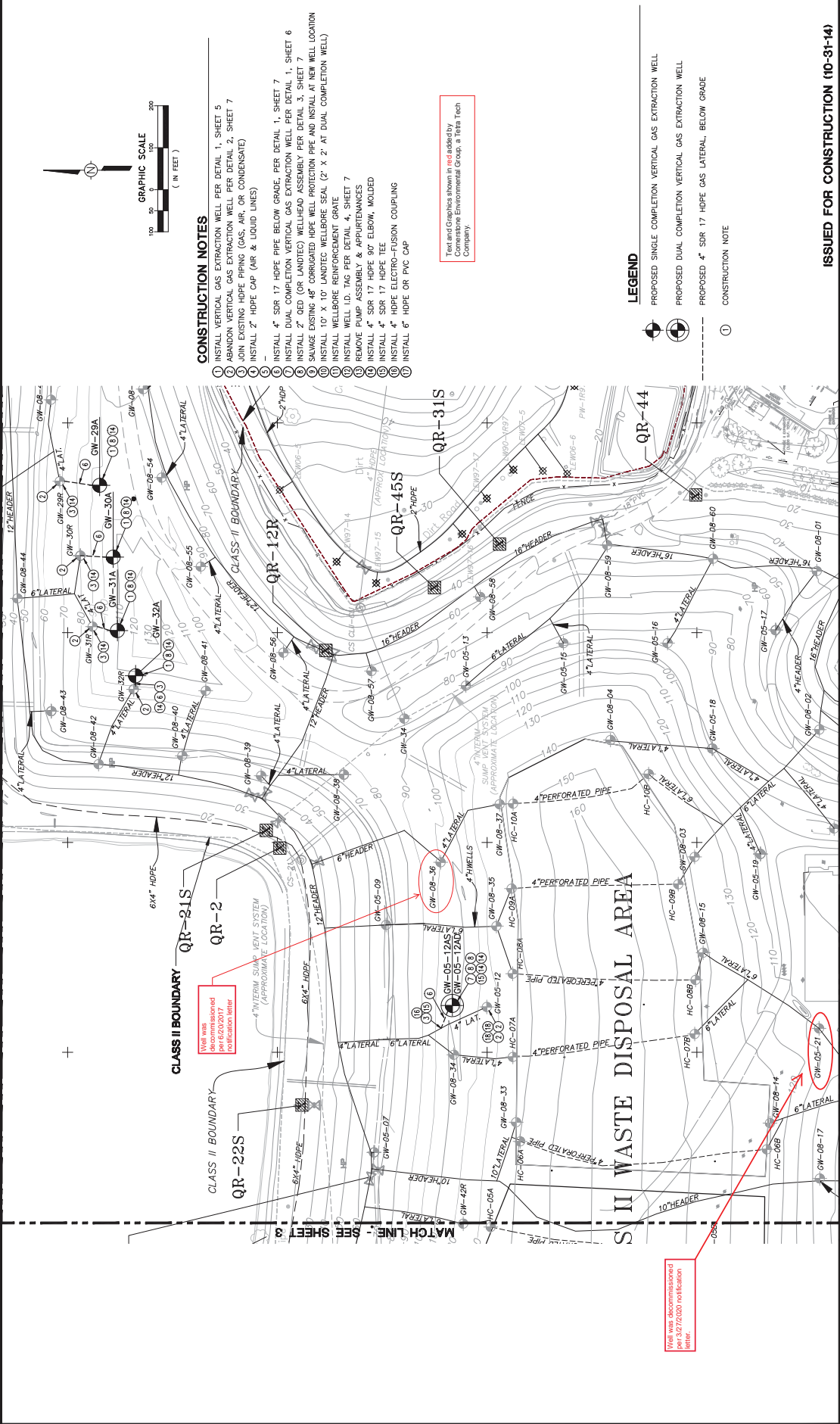
Well was decommissioned per 6/18/2020 notification letter.

- LEGEND**
- PROPOSED SINGLE COMPLETION VERTICAL GAS EXTRACTION WELL
 - PROPOSED DUAL COMPLETION VERTICAL GAS EXTRACTION WELL
 - PROPOSED 4" SDR 17 HOPE GAS LATERAL, BELOW GRADE
 - CONSTRUCTION NOTE

ISSUED FOR CONSTRUCTION (10-31-14)

WEST CONTRA COSTA COUNTY LANDFILL	
2014 GAS SYSTEM IMPROVEMENTS	
GAS SYSTEM IMPROVEMENT PLAN	
DESIGNED BY: R2/SNA	SCALE: 1" = 50'-0"
DRAWN BY: S. ANDRIS	DATE: 10/31/14 FILE NO.: 03-86-041GSP
CHECKED BY: E. TENSVOLD	DATE: 11/03/14
APPROVED BY: C. GLASSER	DATE: 11/03/14
SHEET 3	OF 7

 TETRA TECH BAS 1800 Valley View Drive, Diamond Bar, CA 91765 TEL: 909.866.7777 FAX: 909.866.8117	
 REPUBLIC SERVICES, INC. WASTE COLLECTION/RECYCLING/WATER/SUBURBAN	
NO.	REVISION DESCRIPTION



CONSTRUCTION NOTES

- 1 INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 5
- 2 ABANDON VERTICAL GAS EXTRACTION WELL PER DETAIL 2, SHEET 7
- 3 JOIN EXISTING HDPE PIPING (GAS, AIR, OR CONDENSATE)
- 4 INSTALL 2" HDPE CAP (AIR & LIQUID LINES)
- 5
- 6 INSTALL 4" SDR 17 HDPE PIPE BELOW GRADE, PER DETAIL 1, SHEET 7
- 7 INSTALL DUAL COMPLETION VERTICAL GAS EXTRACTION WELL PER DETAIL 1, SHEET 6
- 8 INSTALL 2" RED (OR LANDTEC) WELLHEAD ASSEMBLY PER DETAIL 3, SHEET 7
- 9 SALVAGE EXISTING 48" CORRUGATED HDPE WELL PROTECTION PIPE AND INSTALL AT NEW WELL LOCATION
- 10 INSTALL 10' X 10' LANDTEC WELLBORE SEAL (2' X 2' AT DUAL COMPLETION WELL)
- 11 INSTALL WELLBORE REINFORCEMENT GRATE
- 12 INSTALL WELL I.D. TAG PER DETAIL 4, SHEET 7
- 13 REMOVE PUMP ASSEMBLY & APPURTENANCES
- 14 INSTALL 4" SDR 17 HDPE 90° ELBOW, MOLDED
- 15 INSTALL 4" SDR 17 HDPE TEE
- 16 INSTALL 4" HDPE ELECTRO-FUSION COUPLING
- 17 INSTALL 6" HDPE OR PVC CAP

Test and Graphics shown in red added by
 Cornerstone Environmental Group, a Tetra Tech
 Company.

LEGEND

- PROPOSED SINGLE COMPLETION VERTICAL GAS EXTRACTION WELL
- PROPOSED DUAL COMPLETION VERTICAL GAS EXTRACTION WELL
- PROPOSED 4" SDR 17 HDPE GAS LATERAL, BELOW GRADE
- CONSTRUCTION NOTE

ISSUED FOR CONSTRUCTION (10-31-14)

WEST CONTRA COSTA COUNTY LANDFILL 2014 GAS SYSTEM IMPROVEMENTS GAS SYSTEM IMPROVEMENT PLAN	
DESIGNED BY: R2/SNA	SCALE: AS SHOWN
DRAWN BY: S. ANDRIS	DATE: 10/31/14
CHECKED BY: E. TEISVOLD	FILE NO.: 85-01426SP
APPROVED BY: C. GLASSER	DATE: 10/31/14
SHEET 4	OF 7

TETRA TECH BAS
 1380 Valley View Drive, Diamond Bar, CA 91765
 TEL: 909.866.7777 FAX: 909.866.8117

REPUBLIC SERVICES, INC.
 WASTE COLLECTION, RECYCLING, WASTE TREATMENT

NO.	REVISION DESCRIPTION	BY:



COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

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

1. **BREAKDOWN RELIEF: *District Use Only* BREAKDOWN REFERENCE #:07V54**

2. **MONITOR EXCESS EMISSION or EXCURSION: *District Use Only* REFERENCE #:07V55**

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Kendra Kent, Tetra Tech	Phone #	520-275-7270
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	7.30 Hours
Start Time/Date	9/24/2020 at 07:20	Clear Time	9/24/2020 at 14:38
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Thursday, September 24, 2020 at approximately 07:20 AM, a waste transport vehicle struck overhead phone lines and Pacific Gas and Electric (PG&E) power lines causing a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on the same day at 08:40, by subcontractor personnel. Emergency and utility services were immediately notified. An independent electrical contractor and AT&T arrived on site at approximately 12:30 PM and began replacing and reconnecting the damaged components. At 14:28 PM the same day, power was restored to the Gas Collection and Control System (GCCS) and the A-161 flare began normal startup procedures.

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.



October 2, 2020

Mr. Jeffrey Gove
Director of Compliance and Enforcement
Bay Area Air Quality Management District
Attn: Title V Reports and RCA 30-Day Report
375 Beale Street, Suite 600
San Francisco, CA 94105

Submitted via email to:
jgove@baaqmd.gov
compliance@baaqmd.gov

Re: Combined 10/30-day Title V Report and 30-day Breakdown Follow-up Letter
Reportable Compliance Activity IDs 07V54 (Breakdown) and 07V55 (Excursion)
West Contra Costa Sanitary Landfill, Richmond, California
Facility Number A1840

Dear Mr. Gove:

West Contra Costa Sanitary Landfill (WCCSL), located in Richmond, California, submits this Combined 30-Day Breakdown Follow-Up Letter and 10/30-Day Title V Report to the Bay Area Air Quality Management District (BAAQMD) to satisfy the notification requirements per Title V Permit Standard Condition I.F (Monitoring Reports). On September 24, 2020, a Reportable Compliance Activity (RCA) Breakdown Relief Request/Excursion was submitted to the BAAQMD via email to rca@baaqmd.gov. Pursuant to Title V Permit Condition Number 25293, Part 5 the gas collection and control system (GCCS) shall remain in continuous operation.

On Thursday, September 24, 2020 at approximately 7:20 AM, a waste transport vehicle snagged overhead utility lines and damaged utility poles in the immediate area as a result. Since the utility poles are used for both power and phone lines, the site was not immediately able to identify if the lines involved in the incident were phone or power. Therefore, WCCSL site personnel intentionally disconnected the power to the site out of an abundance of caution to protect site personnel and emergency responders from injury due to possibly downed energized power lines. Once site personnel had a chance to deal with the immediate hazard, a breakdown report was made to the BAAQMD on the same day at 8:40 AM, by subcontractor personnel. Emergency and utility services were immediately notified to restore the phone lines and to guarantee the safe restoration of power to the site. An independent electrical contractor and AT&T arrived on site at approximately 12:30 PM and began replacing and reconnecting the damaged components. Once the damaged electrical components were replaced by an independent contractor, operations and management (O&M) personnel inspected all systems of the A-161 Flare, in accordance with WCCSL's Start-Up, Shutdown, and Malfunction Plan (SSMP) to ensure proper working order. After O&M personnel inspected the A-161 Flare and

Mr. Jeffery Gove

October 2, 2020

Page 2

related systems, it was determined that no maintenance was required. The flare was then restarted by O&M personnel at 14:28 PM on September 24, 2020.

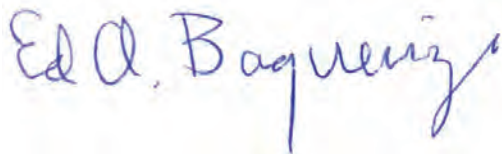
The Breakdown Request/RCA Notification was assigned RCA IDs of 07V54 (Breakdown) and 07V55 (Excursion) by the BAAQMD. There was no breakdown of equipment owned and operated by WCCSL, but the operation of the equipment onsite was interfered with due to the emergency power shutoff. During this period of downtime, applicable inspection and maintenance (I&M) measures were taken pursuant to BAAQMD Regulation 8, Rule 34, Section 113 (8-34-113), which allows for up to 240 hours of GCCS downtime in any calendar year to allow for I&M of the GCCS.

It is not believed that excess emissions occurred during this event. The destruction devices at WCCSL have automated features that close valves to isolate the GCCS system. This prevents emissions outside of the system when the destruction devices are not in operation. At the time of this submittal, the GCCS is operating within normal parameters. In order to prevent this type of event in the future, WCCSL is working with the waste transport company to ensure that their drivers receive additional information and training on the rules and standard operating procedures required when disposing of waste materials at WCCSL.

Although a request for breakdown relief was submitted for the power outage event, WCCSL does not believe that filing for breakdown relief was the appropriate measure, as there was no "breakdown" of any WCCSL-owned control device. During a power outage, no equipment had power to operate, therefore there is no missing data. Although, WCCSL and their site personnel were not directly responsible for the initial cause of this event, WCCSL personnel had no choice but to shutoff power to the site, including to the GCCS and abatement devices, to ensure the health and safety of all workers present on site per their emergency protocols. This event was reported, and an RCA was submitted out of an abundance of caution as previously instructed by BAAQMD inspectors.

As of the date of this letter, WCCSL has not received any correspondence from the BAAQMD inspector. WCCSL respectfully requests that the BAAQMD grant breakdown relief for this event. If you have any questions or require additional information, please do not hesitate to contact me at (510) 970-7248. Alternatively, you may contact Maria Bowen at (925) 241-1063 or by email at maria.bowen@tetrattech.com.

Sincerely,



Ed Baquerizo, PHG

Environmental Manager

West Contra Costa Sanitary Landfill

Mr. Jeffery Gove
October 2, 2020
Page 3

Attachments: A - RCA Form IDs 07V54 (Breakdown) and 07V55 (Excursion)
B - Title V 10-Day Notification Form
C - 30-Day Deviation Summary Form

cc: Rob Sherman, WCCSL
Maria Bowen, Tetra Tech
Kendra Kent, Tetra Tech

Attachment A
RCA Form IDs 07V54 and 07V55



COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

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

1. **BREAKDOWN RELIEF: *District Use Only* BREAKDOWN REFERENCE #:07V54**

2. **MONITOR EXCESS EMISSION or EXCURSION: *District Use Only* REFERENCE #:07V55**

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Kendra Kent, Tetra Tech	Phone #	520-275-7270
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	7.30 Hours
Start Time/Date	9/24/2020 at 07:20	Clear Time	9/24/2020 at 14:38
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Thursday, September 24, 2020 at approximately 07:20 AM, a waste transport vehicle struck overhead phone lines and Pacific Gas and Electric (PG&E) power lines causing a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on the same day at 08:40, by subcontractor personnel. Emergency and utility services were immediately notified. An independent electrical contractor and AT&T arrived on site at approximately 12:30 PM and began replacing and reconnecting the damaged components. At 14:28 PM the same day, power was restored to the Gas Collection and Control System (GCCS) and the A-161 flare began normal startup procedures.

District Use Only

Received by

Date

Time

General Instructions

Attachment B
Title V 10-Day Notification Form

BAAQMD Title V Permit 10 Day Deviation Notification

Section I: Facility Information

Facility Name: West Contra Costa Sanitray Landfill Facility ID: A1840

Address: 1 Parr Blvd.

City: Richmond State: CA Zip Code: 94806

Mailing Address: 1 Parr Blvd.

City: Richmond State: CA Zip Code: 94806

Name, title and phone number of person to contact for further information:

Ed Baquerizo
Contact

Environmental Manager
Title

510-230-8580
Phone

Section II: Event Information

Incident Occurred on: 9/24/2020 at 7:20 AM

Incident Discovered on: 9/24/2020 at 7:20 AM

Incident Has Stopped? on 9/24/2020 at 14:38 PM

Total Duration: Days: 0 Hours: 7.30 Hours

Event Description:

On Thursday, September 24, 2020 at approximately 7:20 AM, a waste transport vehicle snagged overhead utility lines and damaged utility poles in the immediate area as a result. Since the utility poles are used for both power and phone lines, the site was not immediately able to identify if the lines involved in the incident were phone or power. Therefore, WCCSL site personnel intentionally disconnected the power to the site out of an abundance of caution to protect site personnel and emergency responders from injury due to possibly downed energized power lines. Once site personnel had a chance to deal with the immediate hazard, a breakdown report was made to the BAAQMD on the same day at 8:40 AM, by subcontractor personnel. Emergency and utility services were immediately notified to restore the phone lines and to guarantee the safe restoration of power to the site. An independent electrical contractor and AT&T arrived on site at approximately 12:30 PM and began replacing and reconnecting the damaged components. Once the damaged electrical components were replaced by an independent contractor, operations and management (O&M) personnel inspected all systems of the A-161 Flare, in accordance with WCCSL's Start-Up, Shutdown, and Malfunction Plan (SSMP) to ensure proper working order. After O&M personnel inspected the A-161 Flare and related systems, it was determined that no maintenance was required. The flare was then restarted by O&M personnel at 14:28 PM on September 24, 2020.

The incident may have resulted in a:

Deviation from Permit Conditions(s): Condition 25293, Part 5

Deviation from BAAQMD Rules(s): 8-34-301.1

Other deviations (CFR, CARB, etc.) : N/A

Source (S#): S-15

Source (S#): S-6

Abatement Device (A#): A-161

Emission Point (#P): _____

Attachment C
30-Day Deviation Summary Form

**BAAQMD Title V Permit
30 Day Deviation Summary
Report
October 2, 2020**

Site #:	Site Name:
<u>Facility Address:</u> 1 Parr Blvd	<u>Mailing Address:</u> 1 Parr Blvd
City: <u>Richmond</u>	City: <u>Richmond</u>
State: <u>CA</u>	State: <u>CA</u>
Zip Code: <u>94801</u>	Zip Code: <u>94801</u>
Contact: <u>Ed Baquerizo</u>	Environmental Manager
Title: _____	Phone: <u>510-230-8580</u>

<u>Date</u>	<u>Time</u>
Event Started: <u>9/24/2020</u>	<u>7:20 AM</u>
Stopped: <u>9/24/2020</u>	<u>14:28 PM</u>
	<u>Ongoing Event</u>

Source Number: <u>S-15, S-6</u>
Abatement Device: <u>A-161</u>
Emission Point: _____

May have resulted in a violation of:
Permit: <u>Condition 25293 Part 5</u>
AQMD: <u>8-34-301.1</u>
Other: _____

Event Description: On Thursday, September 24, 2020 at approximately 7:20 AM, a waste transport vehicle snagged overhead utility lines and damaged utility poles in the immediate area as a result. Since the utility poles are used for both power and phone lines, the site was not immediately able to identify if the lines involved in the incident were phone or power. Therefore, WCCSL site personnel intentionally disconnected the power to the site out of an abundance of caution to protect site personnel and emergency responders from injury due to possibly downed energized power lines. Once site personnel had a chance to deal with the immediate hazard, a breakdown report was made to the BAAQMD on the same day at 8:40 AM, by subcontractor personnel. Emergency and utility services were immediately notified to restore the phone lines and to guarantee the safe restoration of power to the site. An independent electrical contractor and AT&T arrived on site at approximately 12:30 PM and began replacing and reconnecting the damaged components. Once the damaged electrical components were replaced by an independent contractor, operations and management (O&M) personnel inspected all systems of the A-161 Flare, in accordance with WCCSL's Start-Up, Shutdown, and Malfunction Plan (SSMP) to ensure proper working order. After O&M personnel inspected the A-161 Flare and related systems, it was determined that no maintenance was required. The flare was then restarted by O&M personnel at 14:28 PM on September 24, 2020.

Probable Cause: A waste transport vehicle snagged overhead utility lines and damaged associated power poles. Due to potential hazards as a result of possible downed PG&E power lines WCCSL personnel shutdown power to the site out of an abundance of caution for health and safety reasons.

Corrective action or preventive steps taken: Once the damaged electrical components were replaced by an independent contractor, operations and management (O&M) personnel inspected all systems of the A-161 Flare, in accordance with WCCSL's Start-Up, Shutdown, and Malfunction Plan (SSMP) to ensure proper working order. After O&M personnel inspected the A-161 Flare and related systems, it was determined that no maintenance was required. The flare was restarted by O&M personnel at 14:28 PM on September 24, 2020.

Certification Statement
I certify under penalty of law that based on the information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate, and complete.

X Rob Sherman
Signature of Responsible Official

Rob Sherman
Print Name

General Manager
Title

10-2-20
Date



COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

See back of form for instructions →

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

2. **MONITOR EXCESS EMISSION or EXCURSION: District Use Only REFERENCE #:07W06**

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Nat Israel, Tetra Tech	Phone #	530-409-0225
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	0.23 Hours
Start Time/Date	10/18/2020 at 15:01	Clear Time	10/18/2020 at 15:15
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Sunday, October 18, 2020 at approximately 15:01, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). At 15:15 the same day, power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 15:25 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 19, 2020 at 10:58, by subcontractor personnel.

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.



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

See back of form for instructions →

1. **BREAKDOWN RELIEF: District Use Only BREAKDOWN REFERENCE #:** 07W20

2. **MONITOR EXCESS EMISSION or EXCURSION: District Use Only REFERENCE #:** 07W21

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Nat Israel, Tetra Tech	Phone #	530-409-0225
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	0.15 Hours
Start Time/Date	10/21/2020 at 15:53	Clear Time	10/21/2020 at 16:02
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Wednesday, October 21, 2020 at approximately 15:53, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). Moments later, the power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 16:02 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 21, 2020 at 16:24, by subcontractor personnel.

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.



October 28, 2020

Mr. Jeffrey Gove
Director of Compliance and Enforcement
Bay Area Air Quality Management District
Attn: Title V Reports and RCA 30-Day Report
375 Beale Street, Suite 600
San Francisco, CA 94105

Submitted via email to:
jgove@baaqmd.gov
compliance@baaqmd.gov

Re: Combined 10/30-day Title V Report and 30-day Breakdown Follow-up Letter
Reportable Compliance Activity ID 07W06 (Excursion)
West Contra Costa Sanitary Landfill, Richmond, California
Facility Number A1840

Dear Mr. Gove:

West Contra Costa Sanitary Landfill (WCCSL), located in Richmond, California, submits this Combined 10/30-Day Title V Report and 30-Day Breakdown Follow-Up Letter to the Bay Area Air Quality Management District (BAAQMD) to satisfy the notification requirements per Title V Permit Standard Condition I.F (Monitoring Reports). On October 19, 2020, a Reportable Compliance Activity (RCA) Breakdown Relief Request/Excursion was submitted to the BAAQMD via email to rca@baaqmd.gov. Pursuant to Title V Permit Condition Number 25293, Part 5 the gas collection and control system (GCCS) shall remain in continuous operation.

On Sunday, October 18, 2020 at approximately 15:01, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). At 15:15 the same day, power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures and at 15:25 the A-161 Flare reached its normal operating temperature. Out of an overabundance of caution, a breakdown report was made to the BAAQMD on October 19, 2020 at 10:58, at the request of WCCSL by subcontractor personnel.

The Breakdown Request/RCA Notification was assigned RCA ID 07W06 (Excursion) by the BAAQMD. No Breakdown ID number was assigned to this event. There was no breakdown of equipment owned and operated by WCCSL, but the operation of the equipment onsite was interfered with due to the power shutoff. During this period of downtime, applicable inspection and maintenance (I&M) measures were taken pursuant to BAAQMD Regulation 8, Rule 34, Section 113 (8-34-113), which allows for up to 240 hours of GCCS downtime in any calendar year to allow for I&M of the GCCS.

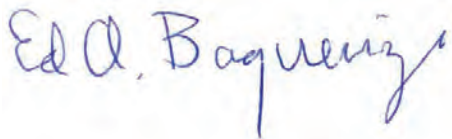
Mr. Jeffery Gove
October 28, 2020
Page 2

It is not believed that excess emissions occurred during this event. The destruction devices at WCCSL have automated features that close valves to isolate the GCCS system. This prevents emissions outside of the system when the destruction devices are not in operation. At the time of this submittal, the GCCS is operating within normal parameters. WCCSL respectfully requests that the BAAQMD grant breakdown relief for this event, as WCCSL made every effort to remain in operation during the PG&E event, which was outside of site control.

Although a request for breakdown relief was submitted for the power outage event, WCCSL does not believe that filing for breakdown relief was the appropriate measure, as there was no "breakdown" of any WCCSL-owned control device. During a power outage, no equipment had power to operate, therefore there is no missing data. This event was reported, and an RCA was submitted out of an overabundance of caution as previously instructed by BAAQMD inspectors.

BAAQMD inspector, Chris Coelho, has requested a meeting to discuss this and subsequent events resulting in the filing of RCAs with the BAAQMD. WCCSL and the BAAQMD are currently discussing possible meeting times. If you have any questions or require additional information, please do not hesitate to contact me at (510) 970-7248. Alternatively, you may contact Maria Bowen at (925) 241-1063 or by email at maria.bowen@tetrattech.com.

Sincerely,

A handwritten signature in blue ink that reads "Ed A. Baquerizo". The signature is written in a cursive style with a large, stylized "B".

Ed Baquerizo, PHG
Environmental Manager
West Contra Costa Sanitary Landfill

Attachments: A - RCA Form IDs 07W06 (Excursion)
B - Title V 10-Day Notification Form
C - 30-Day Deviation Summary Form

cc: Rob Sherman, WCCSL
Maria Bowen, Tetra Tech
Kendra Kent, Tetra Tech

Attachment A
RCA Form ID 07W06



COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

See back of form for instructions →

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

2. **MONITOR EXCESS EMISSION or EXCURSION: District Use Only REFERENCE #:07W06**

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Nat Israel, Tetra Tech	Phone #	530-409-0225
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	0.23 Hours
Start Time/Date	10/18/2020 at 15:01	Clear Time	10/18/2020 at 15:15
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Sunday, October 18, 2020 at approximately 15:01, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). At 15:15 the same day, power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 15:25 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 19, 2020 at 10:58, by subcontractor personnel.

District Use Only

Received by

Date

Time

General Instructions

Attachment B
Title V 10-Day Notification Form

BAAQMD Title V Permit 10 Day Deviation Notification

Section I: Facility Information

Facility Name: West Contra Costa Sanitray Landfill Facility ID: A1840

Address: 1 Parr Blvd.

City: Richmond State: CA Zip Code: 94806

Mailing Address: 1 Parr Blvd.

City: Richmond State: CA Zip Code: 94806

Name, title and phone number of person to contact for further information:

Ed Baquerizo
Contact

Environmental Manager
Title

510-230-8580
Phone

Section II: Event Information

Incident Occurred on: 10/18/2020 at 15:01:00 PM

Incident Discovered on: 10/18/2020 at 15:01:00 PM

Incident Has Stopped? on 10/18/2020 at 15:15 PM

Total Duration: Days: 0 Hours: 0.23 Hours

Event Description:

On Sunday, October 18, 2020 at approximately 15:01, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). At 15:15 the same day, power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 15:25 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 19, 2020 at 10:58, by subcontractor personnel.

The incident may have resulted in a:

Deviation from Permit Conditions(s): Condition 25293, Part 5

Deviation from BAAQMD Rules(s): 8-34-301.1

Other deviations (CFR, CARB, etc.) : N/A

Source (S#): S-15

Source (S#): S-6

Abatement Device (A#): A-161

Emission Point (#P): _____

Attachment C
30-Day Deviation Summary Form

BAAQMD Title V Permit
30 Day Deviation Summary Report
 October 18, 2020

Site #: _____ **Site Name:** **West Contra Costa Sanitary Landfill**

A1840

Facility Address:

1 Parr Blvd

City: Richmond

State: CA

Zip Code: 94801

Mailing Address:

1 Parr Blvd

City: Richmond

State: CA

Zip Code: 94801

Contact: _____

Ed Baquerizo

Title: _____

Environmental Manager

Phone: _____

510-230-8580

Date

Time

Event Started: 10/18/2020

15:01 PM

Stopped: 10/18/2020

15:15 PM

Ongoing Event

Source Number: S-15, S-6

Abatement Device: A-161

Emission Point: _____

May have resulted in a violation of:

Permit: Condition 25293 Part 5

AQMD: 8-34-301.1

Other: _____

Event Description:

On Sunday, October 18, 2020 at approximately 15:01, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). At 15:15 the same day, power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 15:25 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 19, 2020 at 10:58, by subcontractor personnel.

Probable Cause:

A power surge caused by PG&E power lines.

Corrective action or preventive steps taken:

On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 15:25 the A-161 Flare reached its normal operating temperature.

Certification Statement

I certify under penalty of law that based on the information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate, and complete.

X Rob Sherman Rob Sherman General Manager 10-28-2020
Signature of Responsible Official Print Name Title Date



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

See back of form for instructions →

1. **BREAKDOWN RELIEF: *District Use Only* BREAKDOWN REFERENCE #: 07W34**

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

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Nat Israel, Tetra Tech	Phone #	530-409-0225
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	1.92 Hours
Start Time/Date	10/28/2020 at 13:54	Clear Time	10/28/2020 at 15:49
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Wednesday, October 28, 2020 at approximately 13:54, an off-site Pacific Gas and Electric (PG&E) power pole and associated power lines were damaged, causing a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). PG&E quickly repaired the damaged components and at 15:40, the power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 15:49 the A-161 Flare reached its normal operating temperature. A breakdown report was made the Bay Area Air Quality and Management District on October 28, at 14:27, by subcontractor personnel. The breakdown event was assigned RCA ID number 07W34.

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.



October 29, 2020

Mr. Jeffrey Gove
Director of Compliance and Enforcement
Bay Area Air Quality Management District
Attn: Title V Reports and RCA 30-Day Report
375 Beale Street, Suite 600
San Francisco, CA 94105

Submitted via email to:
jgove@baaqmd.gov
compliance@baaqmd.gov

Re: Combined 10/30-day Title V Report and 30-day Breakdown Follow-up Letter
Reportable Compliance Activity IDs 07W21 (Excursion) and 07W20 (Breakdown)
West Contra Costa Sanitary Landfill, Richmond, California
Facility Number A1840

Dear Mr. Gove:

West Contra Costa Sanitary Landfill (WCCSL), located in Richmond, California, submits this Combined 10/30-day Title V Report and 30-day Breakdown Follow-up Letter to the Bay Area Air Quality Management District (BAAQMD) to satisfy the notification requirements per Title V Permit Standard Condition I.F (Monitoring Reports). On October 21, 2020, a Reportable Compliance Activity (RCA) Breakdown Relief Request/Excursion was submitted to the BAAQMD via email to rca@baaqmd.gov. Pursuant to Title V Permit Condition Number 25293, Part 5 the gas collection and control system (GCCS) shall remain in continuous operation.

On Wednesday, October 21, 2020 at approximately 15:53, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). Moments later, the power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures and at 16:02 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the BAAQMD on October 21, 2020 at 16:24, at the request of WCCSL by subcontractor personnel.

The Breakdown Request/RCA Notification was assigned RCA IDs 07W20 (Breakdown) and 07W21 (Excursion) by the BAAQMD. There was no breakdown of equipment owned and operated by WCCSL, but the operation of the equipment onsite was interfered with due to the power shutoff. During this period of downtime, applicable inspection and maintenance (I&M) measures were taken pursuant to BAAQMD Regulation 8, Rule 34, Section 113 (8-34-113), which allows for up to 240 hours of GCCS downtime in any calendar year to allow for I&M of the GCCS.

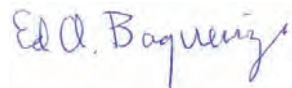
Mr. Jeffery Gove
October 28, 2020
Page 2

It is not believed that excess emissions occurred during this event. The destruction devices at WCCSL have automated features that close valves to isolate the GCCS system. This prevents emissions outside of the system when the destruction devices are not in operation. At the time of this submittal, the GCCS is operating within normal parameters. WCCSL respectfully requests that the BAAQMD grant breakdown relief for this event, as WCCSL made every effort to remain in operation during the PG&E event, which was outside of site control.

Although a request for breakdown relief was submitted for the power outage event, WCCSL does not believe that filing for breakdown relief was the appropriate measure, as there was no "breakdown" of any WCCSL-owned control device. During a power outage, no equipment had power to operate, therefore there is no missing data. This event was reported, and an RCA was submitted out of an overabundance of caution as previously instructed by BAAQMD inspectors.

BAAQMD inspector, Chris Coelho, has requested a meeting to discuss this and subsequent events resulting in the filing of RCAs with the BAAQMD. WCCSL and the BAAQMD are currently discussing possible meeting times. If you have any questions or require additional information, please do not hesitate to contact me at (510) 970-7248. Alternatively, you may contact Maria Bowen at (925) 241-1063 or by email at maria.bowen@tetratech.com.

Sincerely,



Ed Baquerizo, PHG
Environmental Manager
West Contra Costa Sanitary Landfill

Attachments: A - RCA Form IDs 07W20 (Breakdown) and 07W21 (Excursion)
B - Title V 10-Day Notification Form
C - 30-Day Deviation Summary Form

cc: Rob Sherman, WCCSL
Maria Bowen, Tetra Tech
Kendra Kent, Tetra Tech

Attachment A
RCA Form IDs 07W20 and 07W21



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

See back of form for instructions →

1. **BREAKDOWN RELIEF: District Use Only BREAKDOWN REFERENCE #:** 07W20

2. **MONITOR EXCESS EMISSION or EXCURSION: District Use Only REFERENCE #:** 07W21

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

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

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	West Contra Costa Sanitary Landfill Inc.	Site #	A1840
Address	1 Parr Blvd Richmond, CA 94801	Source #	S-15, S-6, A-161
Reported by	Nat Israel, Tetra Tech	Phone #	530-409-0225
Indicated Excess	Utility Outage	Fax #	
Allowable Limit	8-34-301.1; Condition 25293 Part 5	Averaging Time	0.15 Hours
Start Time/Date	10/21/2020 at 15:53	Clear Time	10/21/2020 at 16:02
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input checked="" 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"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input checked="" type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ TRS
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ NH ₃
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"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input checked="" type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg
		<input checked="" type="checkbox"/> ▶ Other (SCFM)	

Event Description: On Wednesday, October 21, 2020 at approximately 15:53, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). Moments later, the power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 16:02 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 21, 2020 at 16:24, by subcontractor personnel.

District Use Only

Received by

Date

Time

General Instructions

Attachment B
Title V 10-Day Notification Form

BAAQMD Title V Permit 10 Day Deviation Notification

Section I: Facility Information

Facility Name: West Contra Costa Sanitary Landfill Facility ID: A1840

Address: 1 Parr Blvd.

City: Richmond State: CA Zip Code: 94806

Mailing Address: 1 Parr Blvd.

City: Richmond State: CA Zip Code: 94806

Name, title and phone number of person to contact for further information:

Ed Baquerizo Environmental Manager 510-230-8580
Contact Title Phone

Section II: Event Information

Incident Occurred on: 10/21/2020 at 15:53:00 PM

Incident Discovered on: 10/21/2020 at 15:53:00 PM

Incident Has Stopped? on 10/21/2020 at 15:53 PM

Total Duration: Days: 0 Hours: 0.15 Hours

Event Description:

On Wednesday, October 21, 2020 at approximately 15:53, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). Moments later, the power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 16:02 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 21, 2020 at 16:24, by subcontractor personnel.

The incident may have resulted in a:

Deviation from Permit Conditions(s): Condition 25293, Part 5

Deviation from BAAQMD Rules(s): 8-34-301.1

Other deviations (CFR, CARB, etc.) : N/A

Source (S#): S-15

Source (S#): S-6

Abatement Device (A#): A-161

Emission Point (#P): _____

Attachment C
30-Day Deviation Summary Form

BAAQMD Title V Permit
30 Day Deviation Summary Report
October 21, 2020

Site #: _____ **Site Name:** **West Contra Costa Sanitary Landfill**

A1840

Facility Address:

1 Parr Blvd

City: Richmond

State: CA

Zip Code: 94801

Mailing Address:

1 Parr Blvd

City: Richmond

State: CA

Zip Code: 94801

Contact: _____

Ed Baquerizo

Title: _____

Environmental Manager

Phone: _____

510-230-8580

Date

Time

Event Started: 10/21/2020

15:53 PM

Stopped: 10/21/2020

16:02 PM

Ongoing Event

Event Description:

On Wednesday, October 21, 2020 at approximately 15:53, a Pacific Gas and Electric (PG&E) power outage caused a disruption of power at West Contra Costa Sanitary Landfill (WCCSL). Moments later, the power was restored to the gas collection and control system (GCCS). On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 16:02 the A-161 Flare reached its normal operating temperature. A breakdown report was made to the Bay Area Air Quality and Management District (BAAQMD) on October 21, 2020 at 16:24, by subcontractor personnel.

Probable Cause:

A power surge caused by PG&E power lines.

Corrective action or

preventive steps taken:

On-site personnel inspected the flare station and deemed that the A-161 Flare was safe to begin normal startup procedures. At 16:02 the A-161 Flare reached its normal operating temperature.

May have resulted in a violation of:
Permit: Condition 25293 Part 5
AQMD: 8-34-301.1
Other: _____

Source Number: S-15, S-6
Abatement Device: A-161
Emission Point: _____

Certification Statement

I certify under penalty of law that based on the information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate, and complete.

X Rob Sherman

Signature of Responsible Official

Rob Sherman

Print Name

General Manager

Title

10-30-2020

Date

APPENDIX C

CLASS I WELL SSM LOG

West Contra Costa Sanitary Landfill (Class I), Richmond, CA

AFFECTED EQUIPMENT: WELLFIELD

WEST CONTRA COSTA SANITARY LANDFILL (CLASS I), RICHMOND, CA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Completed By: Tetra Tech

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) Component Leak Testing (Startup and Shutdown Events Only)	
								X	Manual	3/12/2020	10-Day Testing Due
Well ID Number: WCLFR015											
X Startup Event	3/2/20 10:05	3/2/20 10:07	0.03	2,037.98 hours or 84.92 days	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	113: Inspection and Maintenance 116: Well Raising X 117: Gas Collection 118: Construction Activities	3/2/2020	X	Manual	3/9/2020	10-Day Testing Completed
X Shutdown Event									Automatic	0.0	Results (ppmv)
Well ID Number: WCLR015											
X Startup Event	5/26/20 8:04	5/26/20 8:06	0.03			113: Inspection and Maintenance 116: Well Raising X 117: Gas Collection 118: Construction Activities	5/26/2020	X	Manual	4/1/2020	30-Day Testing Due
X Shutdown Event									Automatic	3/16/2020	30-Day Testing Completed
Malfunction Event										0.0	Results (ppmv)

APPENDIX D

CLASS II WELL SSM LOG

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: WELLFIELD CLASS II

WEST CONTRA COSTA SANITARY LANDFILL (CLASS II) - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

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) Component Leak Testing (Startup and Shutdown Events Only)	
								X		X	
Well ID Number: WCLFH09B											
X Startup Event	10/29/19 8:45	10/29/19 8:47	0.03	8,847.25 hours or 368.6 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/29/2019	Manual	X	11/8/2019	10-Day Testing Due
X Shutdown Event								Automatic		10/29/2019	10-Day Testing Completed
Well ID Number:										0.0	Results (ppmv)
X Startup Event								Manual		11/28/2019	30-Day Testing Due
X Shutdown Event								Automatic		11/22/2019	30-Day Testing Completed
Well ID Number: WCLFH02A										0.0	Results (ppmv)
X Startup Event	11/4/19 9:40	11/4/19 9:42	0.03	8,702.32 hours or 362.6 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/4/2019	Manual	X	11/4/2019	10-Day Testing Due
X Shutdown Event								Automatic		11/4/2019	10-Day Testing Completed
Well ID Number:										0.0	Results (ppmv)
X Startup Event								Manual		12/4/2019	30-Day Testing Due
X Shutdown Event								Automatic		12/2/2019	30-Day Testing Completed
Well ID Number: WCLFH04A										0.0	Results (ppmv)
X Startup Event	11/22/19 8:19	11/22/19 8:21	0.03	8,271.67 hours or 344.7 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	11/22/2019	Manual	X	12/2/2019	10-Day Testing Due
X Shutdown Event								Automatic		11/22/2019	10-Day Testing Completed
Well ID Number:										0.5	Results (ppmv)
X Startup Event								Manual		12/22/2019	30-Day Testing Due
X Shutdown Event								Automatic		12/27/2020	30-Day Testing Completed
Well ID Number:										0.0	Results (ppmv)
X Startup Event	3/9/20 11:55	3/3/20 11:57	0.03	5,482.26 hours or 228.4 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	3/3/2020	Manual	X	3/13/2020	10-Day Testing Due
X Shutdown Event								Automatic		3/9/2020	10-Day Testing Completed
Well ID Number: WCLFH01A										5.0 ppm	Results (ppmv)
X Startup Event	3/17/20 13:44	3/17/20 13:46	0.03	5,482.26 hours or 228.4 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	3/17/2020	Manual	X	3/24/2020	10-Day Testing Due
X Shutdown Event								Automatic		3/17/2020	10-Day Testing Completed
Well ID Number:										1.1 ppm	Results (ppmv)
X Startup Event								Manual		4/16/2020	30-Day Testing Due
X Shutdown Event								Automatic		4/7/2020	30-Day Testing Completed
Well ID Number: WCLFH04										0.0 ppm	Results (ppmv)
X Startup Event	4/3/20 16:02	4/3/20 16:04	0.03	1,943.97 hours or 81.0 days	Temporarily disconnected pursuant to Condition Number 25293 Part 7(b). The well was decommissioned on June 23, 2020.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	4/3/2020	Manual	X	4/7/2020	10-Day Testing Due
X Shutdown Event								Automatic		4/7/2020	10-Day Testing Completed
Well ID Number: WCLFH03A										1.0 ppm	Results (ppmv)
X Startup Event	5/5/20 11:18	5/5/20 11:20	0.03	1,850.96 hours or 77.1 days	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	5/5/2020	Manual	X	5/15/2020	10-Day Testing Due
X Shutdown Event								Automatic		5/12/2020	10-Day Testing Completed
Well ID Number: WCLFH03A										1.0 ppm	Results (ppmv)
X Startup Event	7/21/20 14:16	7/21/20 14:18	0.03	4,307.72 hours or 179.5 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/21/2020	Manual	X	6/4/2020	30-Day Testing Due
X Shutdown Event								Automatic		5/26/2020	30-Day Testing Completed
Well ID Number: WCLFH03B										5.0 ppm	Results (ppmv)
X Startup Event	5/5/20 12:16	5/5/20 12:18	0.03	4,307.72 hours or 179.5 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	5/5/2020	Manual	X	5/15/2020	10-Day Testing Due
X Shutdown Event								Automatic		5/12/2020	10-Day Testing Completed
Well ID Number:										1.1 ppm	Results (ppmv)
X Startup Event								Manual		6/4/2020	30-Day Testing Due
X Shutdown Event								Automatic		5/26/2020	30-Day Testing Completed
Well ID Number:										0.0 ppm	Results (ppmv)
X Startup Event								Manual		5/15/2020	10-Day Testing Due
X Shutdown Event								Automatic		5/12/2020	10-Day Testing Completed

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: WELLFIELD CLASS II

WEST CONTRA COSTA SANITARY LANDFILL (CLASS II) - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

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) Component Leak Testing (Startup and Shutdown Events Only)
Well ID Number: WCLFH10B Startup Event	5/19/20 8:40	5/19/20 8:42	0.03	843.84 hours or 35.2 days	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	5/19/2020	X Manual	5/29/2020 10-Day Testing Due
X Shutdown Event									5/26/2020 10-Day Testing Completed
Malfunction Event									1.2 ppm Results (ppmv)
Well ID Number: WCLFH10B Startup Event	6/23/20 12:30	6/23/20 12:32	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	6/23/2020	X Manual	6/18/2020 30-Day Testing Due
X Shutdown Event									6/12/2020 30-Day Testing Completed
Malfunction Event									5.0 ppm Results (ppmv)
Well ID Number: WCLFH03A Startup Event	9/11/20 11:01	9/11/20 11:03	0.03	1,212.98 hours or 50.5 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/11/2020	X Manual	9/21/2020 10-Day Testing Due
X Shutdown Event									9/18/2020 10-Day Testing Completed
Malfunction Event									1.0 ppm Results (ppmv)
Well ID Number: Startup Event									
X Shutdown Event									
Malfunction Event									
Well ID Number: WCLF0835 Startup Event	9/25/20 11:05	9/25/20 11:07	0.03	876.91 hours or 36.5 days as of November 1, 2020	Temporarily disconnected pursuant to Condition Number 25293 Part 7(b).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	9/25/2020	X Manual	10/5/2020 10-Day Testing Due
X Shutdown Event									9/30/2020 10-Day Testing Completed
Malfunction Event									0.0 ppm Results (ppmv)
Well ID Number: Startup Event									
X Shutdown Event									
Malfunction Event									
Well ID Number: WCLFH08B Startup Event	10/5/20 9:00	10/5/20 9:02	0.03	194.98 hours or 8.1 days	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii).	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/5/2020	X Manual	10/15/2020 10-Day Testing Due
X Shutdown Event									10/13/2020 10-Day Testing Completed
Malfunction Event									5.0 ppm Results (ppmv)
Well ID Number: WCLFH08B Startup Event	10/13/20 11:58	10/13/20 12:00	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/13/2020	X Manual	11/4/2020 30-Day Testing Due
X Shutdown Event									N/A 30-Day Testing Completed
Malfunction Event									N/A Results (ppmv)

*Data was not available from the subcontractor performing the work at the time of issuance and will be updated in a future report.

APPENDIX E

**A-161 FLARE, A-8 BACK-UP FLARE, S-5, S-6 AND S-7 IC ENGINES SSM
LOG AND GCCS DOWNTIME**

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-8 BACK-UP FLARE

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: A-8 Flare								
Startup Event						113: Inspection and Maintenance		Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-8 Flare						118: Construction Activities		Automatic
Startup Event						113: Inspection and Maintenance		Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		Automatic
						118: Construction Activities		

The A-8 Flare did not operate during the May 1, 2020 through October 31, 2020 reporting period.

TOTAL DOWNTIME (HOURS) FOR REPORTING PERIOD:	4,416.00
TOTAL HOURS AVAILABLE FOR REPORTING PERIOD*:	4,416.00
TOTAL RUNTIME (HOURS) FOR REPORTING PERIOD:	0.00
RUNTIME PERCENTAGE FOR REPORTING PERIOD:	0.00%

*The A-8 Flare was offline for the duration of the reporting period, May 1, 2020 through October 31, 2020.

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-120 Flare

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: A-161 Flare								
Startup Event						113: Inspection and Maintenance		Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		Automatic
Component: A-161 Flare				4,416.00 hours	The A-120 was permanently removed from the site in December 2017. The A-120 Flare did not operate during the May 1, 2020 through October 31, 2020 reporting period.	118: Construction Activities		
Startup Event						113: Inspection and Maintenance		Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		Automatic
						118: Construction Activities		

TOTAL DOWNTIME (HOURS) FOR REPORTING PERIOD:	4,416.00
TOTAL HOURS AVAILABLE FOR REPORTING PERIOD*:	4,416.00
TOTAL RUNTIME (HOURS) FOR REPORTING PERIOD:	0.00
RUNTIME PERCENTAGE FOR REPORTING PERIOD:	0.00%

*The A-120 Flare was offline for the duration of the reporting period, May 1, 2020 through October 31, 2020.

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-161 Flare

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: A-161 Flare								
Startup Event	5/22/20 06:50	5/22/20 06:52	0.03	0.15 hours	Shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection X	5/22/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	5/22/20 06:59	5/22/20 07:01	0.03	0.42 hours	Shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection X	5/22/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	5/22/20 09:01	5/22/20 09:03	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection X	5/22/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	5/22/20 09:26	5/22/20 09:28	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection X	5/22/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/10/20 11:52	6/10/20 11:54	0.03	1.62 hours	Flare shutdown for a inspection.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/10/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/10/20 13:29	6/10/20 13:31	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/10/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/12/20 08:59	6/12/20 09:01	0.03	0.13 hours	Flare shutdown for a inspection.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/12/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/12/20 09:07	6/12/20 09:09	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/12/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/16/20 19:30	6/16/20 19:32	0.03	3.48 hours	Flare shutdown for propane line repair.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/16/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/16/20 22:59	6/16/20 23:01	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/16/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/21/20 07:33	6/21/20 07:35	0.03	1.67 hours	Flare shutdown for propane line repair.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/21/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	6/21/20 09:13	6/21/20 09:15	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	6/21/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	7/5/20 15:12	7/5/20 15:14	0.03	18.03 hours	Flare shutdown due to condensate pump issues.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	7/5/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	7/6/20 09:14	7/6/20 09:16	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities X	7/6/2020	Manual
Shutdown Event								Automatic
Malfunction Event								

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-161 Flare

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: A-161 Flare								
Startup Event	7/7/20 15:02	7/7/20 15:04	0.03	0.10 hours	Flare shutdown due to a blower trip.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/7/2020	Manual
Shutdown Event								Automatic
X Malfunction Event								X
Component: A-161 Flare								
X Startup Event	7/7/20 15:08	7/7/20 15:10	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/7/2020	Manual
Shutdown Event								Automatic
Malfunction Event								X
Component: A-161 Flare								
Startup Event	7/9/20 05:20	7/9/20 05:22	0.03	1.00 hours	Flare shutdown for condensate sump maintenance.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/9/2020	Manual
Shutdown Event								Automatic
X Malfunction Event								X
Component: A-161 Flare								
X Startup Event	7/9/20 06:20	7/9/20 06:22	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/9/2020	Manual
Shutdown Event								Automatic
Malfunction Event								X
Component: A-161 Flare								
Startup Event	7/16/20 06:56	7/16/20 06:58	0.03	0.43 hours	Flare shutdown for condensate sump maintenance.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/16/2020	Manual
Shutdown Event								Automatic
X Malfunction Event								X
Component: A-161 Flare								
X Startup Event	7/16/20 07:22	7/16/20 07:24	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/16/2020	Manual
Shutdown Event								Automatic
Malfunction Event								X
Component: A-161 Flare								
Startup Event	7/31/20 06:14	7/31/20 06:16	0.03	1.17 hours	Flare shutdown for condensate sump maintenance.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/31/2020	Manual
Shutdown Event								Automatic
X Malfunction Event								X
Component: A-161 Flare								
X Startup Event	7/31/20 07:24	7/31/20 07:26	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	7/31/2020	Manual
Shutdown Event								Automatic
Malfunction Event								X
Component: A-161 Flare								
Startup Event	8/8/20 08:00	8/8/20 08:02	0.03	2.63 hours	Flare shutdown due to maintenance.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/8/2020	Manual
Shutdown Event								Automatic
X Malfunction Event								X
Component: A-161 Flare								
X Startup Event	8/8/20 10:38	8/8/20 10:40	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/8/2020	Manual
Shutdown Event								Automatic
Malfunction Event								X
Component: A-161 Flare								
Startup Event	8/16/20 03:48	8/16/20 03:50	0.03	6.57 hours	Flare shutdown due to a high condensate alarm.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/16/2020	Manual
Shutdown Event								Automatic
X Malfunction Event								X
Component: A-161 Flare								
X Startup Event	8/16/20 10:22	8/16/20 10:24	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/16/2020	Manual
Shutdown Event								Automatic
Malfunction Event								X
Component: A-161 Flare								
Startup Event	8/17/20 08:30	8/17/20 08:32	0.03	0.47 hours	Flare shutdown due to troubleshoot condensate issue.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/17/2020	Manual
Shutdown Event								Automatic
X Malfunction Event								X
Component: A-161 Flare								
X Startup Event	8/17/20 08:58	8/17/20 09:00	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	8/17/2020	Manual
Shutdown Event								Automatic
Malfunction Event								X

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-161 Flare

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: A-161 Flare								
Startup Event	8/17/20 09:08	8/17/20 09:10	0.03	0.10 hours	Flare shutdown to troubleshoot condensate issue.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/17/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/17/20 09:14	8/17/20 09:16	0.03	0.30 hours	Flare shutdown to troubleshoot condensate issue.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/17/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/17/20 09:26	8/17/20 09:28	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/17/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/17/20 09:44	8/17/20 09:46	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/17/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/26/20 07:38	8/26/20 07:40	0.03	0.50 hours	Flare shutdown due to a high condensate alarm.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/26/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/26/20 08:08	8/26/20 08:10	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/26/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/26/20 08:18	8/26/20 08:20	0.03	2.77 hours	Flare shutdown due to a high condensate alarm.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/26/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/26/20 11:04	8/26/20 11:06	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/26/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/28/20 14:46	8/28/20 14:48	0.03	5.03 hours	Flare shutdown due to a high condensate alarm.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/28/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/28/20 19:48	8/28/20 19:50	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/28/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/31/20 11:14	8/31/20 11:16	0.03	0.13 hours	Flare shutdown to troubleshoot condensate issue.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/31/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/31/20 11:22	8/31/20 11:24	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/31/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/31/20 11:32	8/31/20 11:34	0.03	0.17 hours	Flare shutdown to troubleshoot condensate issue.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/31/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	8/31/20 11:42	8/31/20 11:44	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/31/2020	Manual
Shutdown Event								Automatic
Malfunction Event								

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-161 Flare

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

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Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: A-161 Flare								
Startup Event	9/2/20 10:10	9/2/20 10:12	0.03	0.17 hours	Flare shutdown for knock out pot (KOP) troubleshooting.	X 113: Inspection and Maintenance	9/2/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/2/20 10:20	9/2/20 10:22	0.03	0.10 hours	Flare shutdown for KOP troubleshooting.	X 113: Inspection and Maintenance	9/2/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/2/20 10:28	9/2/20 10:30	0.03	0.27 hours	Flare shutdown for KOP troubleshooting.	X 113: Inspection and Maintenance	9/2/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/2/20 10:38	9/2/20 10:40	0.03	0.87 hours	Flare shutdown for KOP troubleshooting.	X 113: Inspection and Maintenance	9/3/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/2/20 10:54	9/2/20 10:56	0.03	3.60 hours	Flare shutdown due to blower shutdown.	X 113: Inspection and Maintenance	9/3/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/3/20 08:48	9/3/20 08:50	0.03	3.97 hours	Flare shutdown due to blower shutdown.	X 113: Inspection and Maintenance	9/19/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/3/20 09:40	9/3/20 09:42	0.03			X 113: Inspection and Maintenance	9/19/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/19/20 06:32	9/19/20 06:34	0.03			X 113: Inspection and Maintenance	9/19/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/19/20 10:08	9/19/20 10:10	0.03			X 113: Inspection and Maintenance	9/19/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/20/20 15:02	9/20/20 15:04	0.03			X 113: Inspection and Maintenance	9/20/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		
Startup Event	9/20/20 19:00	9/20/20 19:02	0.03			X 113: Inspection and Maintenance	9/20/2020	X Manual
Shutdown Event						116: Well Raising		
Malfunction Event						117: Gas Collection		
Component: A-161 Flare						118: Construction Activities		

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: A-161 Flare

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

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Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: A-161 Flare								
Startup Event	9/24/20 07:18	9/24/20 07:20	0.03	7.87 hours	Flare shutdown due to suspected damage to powerlines.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/24/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	9/24/20 15:10	9/24/20 15:12	0.03	0.33 hours	Flare shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/24/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/1/20 11:22	10/1/20 11:24	0.03	1.00 hours	Flare shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/1/2020	Manual
Shutdown Event								Automatic
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/1/20 11:42	10/1/20 11:44	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/14/20 15:14	10/14/20 15:16	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/14/20 16:14	10/14/20 16:16	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/18/20 15:02	10/18/20 15:04	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/18/20 15:22	10/18/20 15:24	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/21/20 15:54	10/21/20 15:56	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/21/20 16:00	10/21/20 16:02	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/25/20 15:12	10/25/20 15:14	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/25/20 18:30	10/25/20 18:32	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/28/20 13:54	10/28/20 13:56	0.03					
Shutdown Event								
Malfunction Event								
Component: A-161 Flare								
Startup Event	10/28/20 15:44	10/28/20 15:46	0.03					
Shutdown Event								
Malfunction Event								

TOTAL DOWNTIME (HOURS) FOR REPORTING PERIOD:	70.62
TOTAL HOURS AVAILABLE FOR REPORTING PERIOD:	4416.00
TOTAL RUNTIME (HOURS) FOR REPORTING PERIOD:	4345.38
RUNTIME PERCENTAGE FOR REPORTING PERIOD:	98.40%

**CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-5 IC Engine
WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA**

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-5 IC Engine					The S-5 IC Engine did not operate during the May 1, 2020 through October 31, 2020 reporting period.	113: Inspection and Maintenance			
Startup Event						116: Well Raising		Manual	
Shutdown Event						117: Gas Collection		Automatic	
Malfunction Event						118: Construction Activities			
Component: S-5 IC Engine				4,416.00 hours			113: Inspection and Maintenance		Manual
Startup Event							116: Well Raising		
Shutdown Event						117: Gas Collection			
Malfunction Event						118: Construction Activities		Automatic	

TOTAL DOWNTIME (HOURS) FOR REPORTING PERIOD:	4,416.00
TOTAL HOURS AVAILABLE FOR REPORTING PERIOD**:	4,416.00
TOTAL RUNTIME (HOURS) FOR REPORTING PERIOD:	0.00
RUNTIME PERCENTAGE FOR REPORTING PERIOD:	0.00%

**The S-5 IC Engine was offline for the duration of the reporting period, May 1, 2020 through October 31, 2020.

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
								Manual	Automatic
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Startup Event									
Shutdown Event									
Malfunction Event									
Component: S-6 IC Engine						113: Construction Activities			Automatic
X Startup Event	5/1/20 08:24	5/1/20 08:26	0.03	8.40	Engine shutdown for extensive tuning.*	X 113: Construction Activities	5/1/2020	X	Manual
Shutdown Event						116: Well Raising 117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Startup Event									
X Shutdown Event	5/1/20 08:32	5/1/20 08:34	0.03	71.53	Engine shutdown due to low temperature.	X 113: Inspection and Maintenance 117: Gas Collection	5/1/2020	X	Automatic
Malfunction Event						118: Construction Activities			
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
X Startup Event	5/4/20 08:04	5/4/20 08:06	0.03	3.53	Engine shutdown due to low temperature.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/4/2020	X	Automatic
Shutdown Event						118: Construction Activities			
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/4/20 08:58	5/4/20 09:00	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/4/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/4/20 12:30	5/4/20 12:32	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/4/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/4/20 12:36	5/4/20 12:38	0.03	0.13	Engine shutdown due to low temperature.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/4/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/4/20 12:44	5/4/20 12:46	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/4/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/4/20 12:54	5/4/20 12:56	0.03	19.07	Engine shutdown due to low temperature.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/4/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/5/20 07:58	5/5/20 08:00	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/5/20 08:06	5/5/20 08:08	0.03	0.03	Engine shutdown due to low temperature.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/5/20 08:08	5/5/20 08:10	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/5/20 08:24	5/5/20 08:26	0.03	0.30	Engine shutdown due to low temperature.	X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic
X Startup Event	5/5/20 08:42	5/5/20 08:44	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020	X	Manual
Shutdown Event						118: Construction Activities			Automatic
Malfunction Event						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Manual
Component: S-6 IC Engine						113: Inspection and Maintenance 116: Well Raising 117: Gas Collection			Automatic

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
								Manual	Automatic
Component: S-6 IC Engine									
X Startup Event	5/5/20 08:48	5/5/20 08:50	0.03	1.23	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 10:02	5/5/20 10:04	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 10:08	5/5/20 10:10	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 10:10	5/5/20 10:12	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 10:14	5/5/20 10:16	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 10:16	5/5/20 10:18	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 10:20	5/5/20 10:22	0.03	1.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 11:22	5/5/20 11:24	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/5/20 11:34	5/5/20 11:36	0.03	20.37	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/6/20 07:56	5/6/20 07:58	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/6/20 08:18	5/6/20 08:20	0.03	0.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/6/20 08:22	5/6/20 08:24	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/6/20 08:34	5/6/20 08:36	0.03	24.13	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	5/7/20 08:42	5/7/20 08:44	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/7/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	5/7/20 14:18	5/7/20 14:20	0.03	17.63	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/7/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/8/20 07:56	5/8/20 07:58	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/8/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/8/20 08:04	5/8/20 08:06	0.03	0.23	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/8/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/8/20 08:18	5/8/20 08:20	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/8/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/8/20 14:16	5/8/20 14:18	0.03	65.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/8/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/1/20 07:18	5/1/20 07:20	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/1/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/1/20 14:14	5/1/20 14:16	0.03	16.93	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/1/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/12/20 07:10	5/12/20 07:12	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/12/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/12/20 14:10	5/12/20 14:12	0.03	16.93	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/12/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/13/20 07:06	5/13/20 07:08	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/13/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/13/20 10:08	5/13/20 10:10	0.03	0.20	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/13/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/13/20 10:20	5/13/20 10:22	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/13/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/13/20 14:22	5/13/20 14:24	0.03	16.87	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/13/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	5/14/20 07:14	5/14/20 07:16	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/14/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	5/14/20 14:08	5/14/20 14:10	0.03	19.87	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/14/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/15/20 10:00	5/15/20 10:02	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/15/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/15/20 14:12	5/15/20 14:14	0.03	68.77	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/15/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/18/20 10:58	5/18/20 11:00	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/18/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/18/20 11:42	5/18/20 11:44	0.03	0.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/18/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/18/20 11:46	5/18/20 11:48	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/18/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/18/20 17:50	5/18/20 17:52	0.03	12.87	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/18/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/19/20 06:42	5/19/20 06:44	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/19/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/19/20 07:00	5/19/20 07:02	0.03	0.23	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/19/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/19/20 07:14	5/19/20 07:16	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/19/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/19/20 11:26	5/19/20 11:28	0.03	19.83	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/19/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/20/20 07:16	5/20/20 07:18	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/20/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/20/20 07:24	5/20/20 07:26	0.03	0.37	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/20/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/20/20 07:46	5/20/20 07:48	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/20/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	5/20/20 17:18	5/20/20 17:20	0.03	14.13	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/20/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/21/20 07:26	5/21/20 07:28	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/21/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/22/20 07:42	5/22/20 07:44	0.03	1.00	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/22/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/22/20 08:42	5/22/20 08:44	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/22/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/22/20 09:52	5/22/20 09:54	0.03	117.73	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/22/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/27/20 07:36	5/27/20 07:38	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/27/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/27/20 07:44	5/27/20 07:46	0.03	0.60	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/27/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/27/20 08:20	5/27/20 08:22	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/27/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/27/20 09:26	5/27/20 09:28	0.03	0.13	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/27/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/27/20 09:34	5/27/20 09:36	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/27/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/27/20 09:42	5/27/20 09:44	0.03	0.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/27/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/27/20 09:46	5/27/20 09:48	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/27/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/29/20 11:34	5/29/20 11:36	0.03	0.27	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/29/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	5/29/20 11:50	5/29/20 11:52	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	5/29/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
 AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	5/29/20 11:56	5/29/20 11:58	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance	5/29/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
X Startup Event	5/29/20 11:58	5/29/20 12:00	0.03			113: Inspection and Maintenance	5/29/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
Startup Event	5/29/20 18:16	5/29/20 18:18	0.03	60.83	Engine shutdown due to low temperature.	113: Inspection and Maintenance	5/29/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
X Startup Event	6/1/20 07:06	6/1/20 07:08	0.03			113: Inspection and Maintenance	6/1/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
Startup Event	6/1/20 17:08	6/1/20 17:10	0.03	13.67	Engine shutdown due to low temperature.	113: Inspection and Maintenance	6/1/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
X Startup Event	6/2/20 06:48	6/2/20 06:50	0.03			113: Inspection and Maintenance	6/2/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
Startup Event	6/3/20 14:28	6/3/20 14:30	0.03	16.43	Engine shutdown due to low temperature.	113: Inspection and Maintenance	6/3/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
X Startup Event	6/4/20 06:54	6/4/20 06:56	0.03			113: Inspection and Maintenance	6/4/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
Startup Event	6/4/20 14:28	6/4/20 14:30	0.03	16.60	Engine shutdown due to low temperature.	113: Inspection and Maintenance	6/4/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
X Startup Event	6/5/20 07:04	6/5/20 07:06	0.03			113: Inspection and Maintenance	6/5/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
Startup Event	6/5/20 11:58	6/5/20 12:00	0.03	237.00	Engine shutdown due to low temperature.	113: Inspection and Maintenance	6/5/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
X Startup Event	6/15/20 08:58	6/15/20 09:00	0.03			113: Inspection and Maintenance	6/15/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
Startup Event	6/15/20 10:12	6/15/20 10:14	0.03	0.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance	6/15/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			
X Startup Event	6/15/20 10:16	6/15/20 10:18	0.03			113: Inspection and Maintenance	6/15/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine						118: Construction Activities			

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

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Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
								Manual	Automatic
Component: S-6 IC Engine									
X Startup Event	6/16/20 19:22	6/16/20 19:24	0.03	11.93	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/16/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/17/20 07:18	6/17/20 07:20	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/17/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/17/20 07:26	6/17/20 07:28	0.03	0.03		113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/17/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/17/20 07:28	6/17/20 07:30	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/17/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/17/20 14:02	6/17/20 14:04	0.03	161.67		113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/17/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/24/20 07:42	6/24/20 07:44	0.03		Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/24/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/24/20 08:02	6/24/20 08:04	0.03	0.13		113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/24/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/24/20 08:10	6/24/20 08:12	0.03		Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/24/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/24/20 23:04	6/24/20 23:06	0.03	8.67		113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/24/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/25/20 07:44	6/25/20 07:46	0.03		Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/25/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/25/20 08:00	6/25/20 08:02	0.03	0.50		113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/25/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/25/20 08:30	6/25/20 08:32	0.03		Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/25/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/27/20 14:28	6/27/20 14:30	0.03	40.63		113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/27/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic
Component: S-6 IC Engine									
X Startup Event	6/29/20 07:06	6/29/20 07:08	0.03		Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	6/29/2020		Manual
X Shutdown Event Malfunction Event						118: Construction Activities		X	Automatic

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

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Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
								Manual	Automatic
Component: S-6 IC Engine									
X Startup Event	7/3/20 05:34	7/3/20 05:36	0.03	79.57	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/3/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/6/20 13:08	7/6/20 13:10	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/6/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/6/20 13:20	7/6/20 13:22	0.03	0.27	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/6/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/6/20 13:36	7/6/20 13:38	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/6/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/6/20 14:08	7/6/20 14:10	0.03	17.33	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/6/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 07:28	7/7/20 07:30	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 07:36	7/7/20 07:38	0.03	1.10	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 08:42	7/7/20 08:44	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 09:34	7/7/20 09:36	0.03	0.60	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 10:10	7/7/20 10:12	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 10:22	7/7/20 10:24	0.03	1.10	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 11:28	7/7/20 11:30	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/7/20 11:56	7/7/20 11:58	0.03	22.50	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/7/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/8/20 10:26	7/8/20 10:28	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/8/2020	X	Manual
X Shutdown Event									Automatic
Malfunction Event									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
								Manual	Automatic
Component: S-6 IC Engine									
X Startup Event	7/9/20 05:20	7/9/20 05:22	0.03	2.30	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/9/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/9/20 07:38	7/9/20 07:40	0.03	14.23	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/10/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/9/20 17:08	7/9/20 17:10	0.03	0.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/13/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/10/20 07:22	7/10/20 07:24	0.03	17.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/13/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/13/20 14:18	7/13/20 14:20	0.03	16.63	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/14/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/13/20 14:22	7/13/20 14:24	0.03	18.00	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/15/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/14/20 07:42	7/14/20 07:44	0.03	3.37	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/14/20 14:50	7/14/20 14:52	0.03	7/17/2020	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/15/20 07:28	7/15/20 07:30	0.03	7/17/2020	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/15/20 13:26	7/15/20 13:28	0.03	7/17/2020	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/16/20 07:26	7/16/20 07:28	0.03	7/17/2020	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/17/20 04:04	7/17/20 04:06	0.03	7/17/2020	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/17/20 07:26	7/17/20 07:28	0.03	7/17/2020	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									
X Startup Event	7/17/20 07:26	7/17/20 07:28	0.03	7/17/2020	Engine shutdown due to low temperature.	113: Inspection and Maintenance	7/17/2020		Manual
X Shutdown Event						116: Well Raising		X	Automatic
Malfunction Event						117: Gas Collection			
Component: S-6 IC Engine									

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AFFECTED EQUIPMENT: S-6 IC Engine**

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: S-6 IC Engine								
X Startup Event	7/17/20 07:30	7/17/20 07:32	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/17/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/17/20 07:32	7/17/20 07:34	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/17/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/17/20 07:40	7/17/20 07:42	0.03	2.00	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/17/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/17/20 09:40	7/17/20 09:42	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/17/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/17/20 14:38	7/17/20 14:40	0.03	64.57	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/17/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/20/20 07:12	7/20/20 07:14	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/20/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/20/20 14:22	7/20/20 14:24	0.03	0.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/20/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/20/20 14:26	7/20/20 14:28	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/20/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/20/20 15:10	7/20/20 15:12	0.03	15.67	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/20/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/21/20 06:50	7/21/20 06:52	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/21/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/21/20 14:34	7/21/20 14:36	0.03	16.73	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/21/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/22/20 07:18	7/22/20 07:20	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/22/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/22/20 15:50	7/22/20 15:52	0.03	15.57	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/22/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	7/23/20 07:24	7/23/20 07:26	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/23/2020	Manual
X Shutdown Event								Automatic
Malfunction Event								

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	7/28/20 17:04	7/28/20 17:06	0.03	13.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/28/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/29/20 06:08	7/29/20 06:10	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/29/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/30/20 14:44	7/30/20 14:46	0.03	17.23	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/30/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/31/20 07:58	7/31/20 08:00	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/31/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	7/31/20 16:12	7/31/20 16:14	0.03	63.97	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	7/31/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/3/20 08:10	8/3/20 08:12	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/3/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/4/20 16:56	8/4/20 16:58	0.03	14.27	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/4/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/5/20 07:12	8/5/20 07:14	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/5/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/6/20 04:30	8/6/20 04:32	0.03	3.17	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/6/20 07:40	8/6/20 07:42	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/6/20 07:56	8/6/20 07:58	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/6/20 07:58	8/6/20 08:00	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/6/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/8/20 09:56	8/8/20 09:58	0.03	45.67	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/8/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/10/20 07:36	8/10/20 07:38	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/10/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	8/10/20 14:04	8/10/20 14:06	0.03	165.60	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/10/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/17/20 11:40	8/17/20 11:42	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/17/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/18/20 15:10	8/18/20 15:12	0.03	16.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/18/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/19/20 07:14	8/19/20 07:16	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/19/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/28/20 14:38	8/28/20 14:40	0.03	64.73	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/28/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/31/20 07:22	8/31/20 07:24	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/31/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	8/31/20 12:32	8/31/20 12:34	0.03	18.00	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	8/31/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	9/1/20 06:32	9/1/20 06:34	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/1/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	9/1/20 14:22	9/1/20 14:24	0.03	19.40	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/1/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	9/2/20 09:46	9/2/20 09:48	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/2/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	9/2/20 10:44	9/2/20 10:46	0.03	140.37	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/2/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	9/8/20 07:06	9/8/20 07:08	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/8/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	9/8/20 14:42	9/8/20 14:44	0.03	16.43	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/8/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	9/9/20 07:08	9/9/20 07:10	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	9/9/20 17:26	9/9/20 17:28	0.03	13.70	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/9/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/10/20 07:08	9/10/20 07:10	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/10/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/10/20 15:38	9/10/20 15:40	0.03	16.43	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/10/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/11/20 08:04	9/11/20 08:06	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/11/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/11/20 23:10	9/11/20 23:12	0.03	56.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/11/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/14/20 07:14	9/14/20 07:16	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/14/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/14/20 14:04	9/14/20 14:06	0.03	17.20	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/14/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/15/20 07:16	9/15/20 07:18	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/15/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/15/20 07:42	9/15/20 07:44	0.03	0.10	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/15/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/15/20 07:48	9/15/20 07:50	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/15/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/19/20 06:32	9/19/20 06:34	0.03	49.17	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/19/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/21/20 07:42	9/21/20 07:44	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/21/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/24/20 07:18	9/24/20 07:20	0.03	96.33	Engine shutdown due to suspected damaged powerlines.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/24/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic
Component: S-6 IC Engine									
X Startup Event	9/28/20 07:38	9/28/20 07:40	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	9/28/2020	X	Manual
X Shutdown Event Malfunction Event						118: Construction Activities			Automatic

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: S-6 IC Engine								
X Startup Event	9/28/20 08:16	9/28/20 08:18	0.03	2.23	Engine shutdown due to low temperature.	113: Inspection and Maintenance	9/28/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	9/28/20 10:30	9/28/20 10:32	0.03	11.63	Engine shutdown due to low temperature.	113: Inspection and Maintenance	9/28/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	9/28/20 19:58	9/28/20 20:00	0.03	1.77	Engine shutdown due to low temperature.	113: Inspection and Maintenance	9/30/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	9/29/20 07:36	9/29/20 07:38	0.03	0.43	Engine shutdown due to low temperature.	113: Inspection and Maintenance	9/30/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	9/30/20 05:34	9/30/20 05:36	0.03	50.10	Engine shutdown due to low temperature.	113: Inspection and Maintenance	9/30/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	9/30/20 07:38	9/30/20 07:40	0.03	140.20	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/2/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	9/30/20 08:04	9/30/20 08:06	0.03	0.13	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/9/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	9/30/20 08:06	9/30/20 08:08	0.03	0.03		113: Inspection and Maintenance	10/9/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	10/2/20 10:12	10/2/20 10:14	0.03	0.03		113: Inspection and Maintenance	10/9/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	10/3/20 11:20	10/3/20 11:22	0.03	0.03		113: Inspection and Maintenance	10/9/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	10/9/20 07:32	10/9/20 07:34	0.03	0.03		113: Inspection and Maintenance	10/9/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	10/9/20 07:50	10/9/20 07:52	0.03	0.03		113: Inspection and Maintenance	10/9/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		
Component: S-6 IC Engine								
X Startup Event	10/9/20 07:58	10/9/20 08:00	0.03	0.03		113: Inspection and Maintenance	10/9/2020	Manual
X Shutdown Event						116: Well Raising		Automatic
Malfunction Event						117: Gas Collection		

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
								Manual	Automatic
Component: S-6 IC Engine									
X Startup Event	10/9/20 08:14	10/9/20 08:16	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/9/20 08:16	10/9/20 08:18	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/9/20 08:30	10/9/20 08:32	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/9/20 08:32	10/9/20 08:34	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/9/20 09:16	10/9/20 09:18	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/9/20 09:32	10/9/20 09:34	0.03	0.27	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/9/20 09:52	10/9/20 09:54	0.03	70.00	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/9/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 07:52	10/12/20 07:54	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 08:06	10/12/20 08:08	0.03	0.37	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 08:28	10/12/20 08:30	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 08:42	10/12/20 08:44	0.03	1.87	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 10:34	10/12/20 10:36	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 10:48	10/12/20 10:50	0.03	0.30	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 11:06	10/12/20 11:08	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)	
Component: S-6 IC Engine									
X Startup Event	10/12/20 13:32	10/12/20 13:34	0.03	0.13	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/12/20 13:40	10/12/20 13:42	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/12/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/13/20 02:48	10/13/20 02:50	0.03	28.47	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/13/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/14/20 07:16	10/14/20 07:18	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/14/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/14/20 09:56	10/14/20 09:58	0.03	0.07	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/14/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/14/20 10:00	10/14/20 10:02	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/14/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/14/20 15:16	10/14/20 15:18	0.03	16.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/14/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/15/20 07:18	10/15/20 07:20	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/15/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/18/20 15:02	10/18/20 15:04	0.03	16.43	Engine shutdown due to Pacific Gas and Electric (PG&E) utility outage.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/18/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/19/20 07:28	10/19/20 07:30	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/19/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/19/20 07:46	10/19/20 07:48	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/19/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/19/20 07:48	10/19/20 07:50	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/19/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/19/20 08:10	10/19/20 08:12	0.03	0.17	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/19/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									
Component: S-6 IC Engine									
X Startup Event	10/19/20 08:20	10/19/20 08:22	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	10/19/2020		Manual
X Shutdown Event								X	Automatic
Malfunction Event									

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)		
								Manual	Automatic	
Component: S-6 IC Engine										
X Startup Event	10/19/20 08:26	10/19/20 08:28	0.03	0.23	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/19/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/19/20 08:40	10/19/20 08:42	0.03	3.47	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/21/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/21/20 09:32	10/21/20 09:34	0.03	24.90	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/21/20 09:50	10/21/20 09:52	0.03	0.70	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/22/20 10:44	10/22/20 10:46	0.03	0.70	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/22/20 10:50	10/22/20 10:52	0.03	0.37	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/22/20 11:32	10/22/20 11:34	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/22/20 11:54	10/22/20 11:56	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/22/20 12:16	10/22/20 12:18	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/22/20 12:20	10/22/20 12:22	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/22/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/22/20 12:22	10/22/20 12:24	0.03	35.47	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/24/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										
X Startup Event	10/26/20 07:18	10/26/20 07:20	0.03	0.03	Engine shutdown due to low temperature.	113: Inspection and Maintenance	10/26/2020		Manual	
X Shutdown Event						116: Well Raising			X	Automatic
Malfunction Event						117: Gas Collection				
Component: S-6 IC Engine										

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG
AFFECTED EQUIPMENT: S-6 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: S-6 IC Engine								
X Startup Event	10/26/20 11:56	10/26/20 11:58	0.03	20.00	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/26/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/27/20 07:56	10/27/20 07:58	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/27/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/27/20 15:00	10/27/20 15:02	0.03	15.83	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/27/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/28/20 06:50	10/28/20 06:52	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/28/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/28/20 13:54	10/28/20 13:56	0.03	19.60	Engine shutdown due to PG&E utility outage.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/28/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/29/20 09:30	10/29/20 09:32	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/29/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/29/20 10:30	10/29/20 10:32	0.03	20.63	Engine shutdown due to low temperature.	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/29/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/30/20 07:08	10/30/20 07:10	0.03			113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/30/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event	10/30/20 10:24	10/30/20 10:26	0.03	37.60	Engine shutdown due to low temperature.*	113: Inspection and Maintenance 116: Well Raising 117: Gas Collection 118: Construction Activities	10/30/2020	Manual
X Shutdown Event								Automatic
X Malfunction Event								
Component: S-6 IC Engine								
X Startup Event								Manual
X Shutdown Event								Automatic
X Malfunction Event								

TOTAL DOWNTIME (HOURS) FOR REPORTING PERIOD:	2,783.13
TOTAL HOURS AVAILABLE FOR REPORTING PERIOD:	4,416.00
TOTAL RUNTIME (HOURS) FOR REPORTING PERIOD:	1,632.87
RUNTIME PERCENTAGE FOR REPORTING PERIOD:	36.98%

*The S-6 IC Engine was shutdown at the beginning of May 2020 and at the end of October 2020. For reporting purposes, the duration of the shutdown is calculated starting from May 1, 2020 at 00:00 and ending on November 1, 2020 at 00:00, respectively.

CONTROL DEVICE AND LFG COLLECTION SYSTEM DOWNTIME LOG

AFFECTED EQUIPMENT: S-37 IC Engine

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA

STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020

Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) Type of Event (Startup and Shutdown Events Only)
Component: S-37 IC Engine					The S-37 IC Engine did not operate during the May 1, 2020 through October 31, 2020 reporting period.	113: Inspection and Maintenance		Manual
Startup Event				4,416.00 hours		116: Well Raising		Manual
Shutdown Event						117: Gas Collection		Automatic
Malfunction Event						118: Construction Activities		Manual
Component: S-37 IC Engine						113: Inspection and Maintenance		Automatic
Startup Event					116: Well Raising		Manual	
Shutdown Event					117: Gas Collection		Automatic	
Malfunction Event					118: Construction Activities		Automatic	

TOTAL DOWNTIME (HOURS) FOR REPORTING PERIOD:	4,416.00
TOTAL HOURS AVAILABLE FOR REPORTING PERIOD:	4,416.00
TOTAL RUNTIME (HOURS) FOR REPORTING PERIOD:	0.00
RUNTIME PERCENTAGE FOR REPORTING PERIOD:	0.00%

*The S-37 IC Engine was offline for the duration of the reporting period, May 1, 2020 through October 31, 2020.

**EMISSION CONTROL DEVICES
GAS COLLECTION AND CONTROL SYSTEM (GCCS) DOWNTIME SUMMARY***

**WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
STARTUP SHUTDOWN AND MAINTENANCE REPORT (SSM) REPORT - FROM MAY 1, 2020 THROUGH OCTOBER 31, 2020**

SHUTDOWN DATE/TIME	START-UP DATE/TIME	TOTAL DOWNTIME (hours)	COMMENTS OR REASONS	INSPECTION/MAINTENANCE CONDUCTED PER 113 INSPECTION AND MAINTENANCE PROTOCOL	ACTION TAKEN
6/10/2020 11:52	6/10/2020 13:28	1.60	The A-161 Flare shutdown due to a inspection. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
6/12/2020 8:59	6/12/2020 9:06	0.12	The A-161 Flare shutdown due to a inspection. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
6/16/2020 19:30	6/16/2020 22:58	3.47	The A-161 Flare shutdown for propane line repair. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
6/21/2020 7:33	6/21/2020 9:12	1.65	The A-161 Flare shutdown for propane line repair. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
7/5/2020 15:12	7/6/2020 9:14	18.03	The A-161 Flare shutdown due to condensate pump issues. The S-6 Engine shutdown due to low temperature.	Yes	Inspection and maintenance was performed and the flare was manually restarted.
7/7/2020 15:02	7/7/2020 15:08	0.10	The A-161 Flare shutdown due to a blower trip. The S-6 Engine shutdown due to low temperature.	Yes	Flare was automatically restarted.
7/9/2020 5:20	7/9/2020 6:20	1.00	The A-161 Flare shutdown due to condensate sump maintenance. The S-6 Engine shutdown due to low temperature.	Yes	Inspection and maintenance was performed to the condensate sump; then flare was manually restarted.
7/16/2020 6:56	7/16/2020 7:22	0.43	The A-161 Flare shutdown due to condensate sump maintenance. The S-6 Engine shutdown due to low temperature.	Yes	Inspection and maintenance was performed to the condensate sump; then flare was manually restarted.
7/31/2020 6:14	7/31/2020 7:24	1.17	The A-161 Flare shutdown due to condensate sump maintenance. The S-6 Engine shutdown due to low temperature.	Yes	Inspection and maintenance was performed to the condensate sump; then flare was manually restarted.
8/6/2020 9:56	8/8/2020 10:38	0.70	The A-161 Flare shutdown due to low temperature. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
8/16/2020 3:48	8/16/2020 10:22	6.57	The A-161 Flare shutdown due to a high condensate alarm. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
8/17/2020 8:30	8/17/2020 8:58	0.47	The A-161 Flare shutdown due to troubleshooting. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
8/17/2020 9:08	8/17/2020 9:14	0.10	The A-161 Flare shutdown due to troubleshooting. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
8/17/2020 9:26	8/17/2020 9:44	0.30	The A-161 Flare shutdown due to troubleshooting. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
8/28/2020 14:46	8/28/2020 19:48	5.03	The A-161 Flare shutdown due to troubleshooting. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
9/2/2020 10:44	9/2/2020 10:54	0.17	The A-161 Flare shutdown due to knock out pot (KOP) troubleshooting. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
9/3/2020 8:48	9/3/2020 9:40	0.87	The A-161 Flare shutdown due to KOP troubleshooting. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
9/19/2020 6:32	9/19/2020 10:08	3.60	The A-161 Flare shutdown due to blower failure. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
9/20/2020 15:02	9/20/2020 19:00	3.97	A-161 Flare shutdown due to blower failure. S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
9/24/2020 7:18	9/24/2020 15:10	7.87	The A-161 Flare and S-6 Engine shutdown due to suspected damaged powerlines.	Yes	Flare was manually restarted.
10/1/2020 11:22	10/1/2020 11:42	0.33	The A-161 Flare and S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
10/14/2020 15:16	10/14/2020 16:14	0.97	The A-161 Flare and S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
10/18/2020 15:02	10/18/2020 15:22	0.33	The A-161 Flare and S-6 Engine shutdown due to a Pacific Gas and Electric (PG&E) utility outage.	Yes	Flare was manually restarted.
10/21/2020 15:54	10/21/2020 16:00	0.10	The A-161 Flare shutdown due to a PG&E utility outage. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
10/25/2020 15:12	10/25/2020 18:30	3.30	The A-161 Flare shutdown due to a blower malfunction. The S-6 Engine shutdown due to low temperature.	Yes	Flare was manually restarted.
10/28/2020 13:54	10/28/2020 15:44	1.83	The A-161 Flare and S-6 Engine shutdown due to a PG&E utility outage.	Yes	Flare was manually restarted.

Combined Emission Control Devices	
MAY 2020 THROUGH OCTOBER 2020 DOWNTIME:	64.07
ANNUAL 2020 TOTAL GCCS DOWNTIME (HOURS)**:	102.53
2020 DOWNTIME PERCENT OF 240 HOURS:	42.72%
TOTAL PERMITTED DOWNTIME (HOURS):	240.00

*GCCS Downtime is when all emission control devices are not operating.
 **Annual 2020 (January - December) GCCS downtime is a partial total through the current reporting period.

APPENDIX F

TEMPERATURE DEVIATION/INOPERATIVE MONITORING/MISSING DATA REPORTS

**WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
A-8 BACK-UP FLARE TEMPERATURE DEVIATION/ INOPERATIVE MONITOR/ REPORTABLE COMPLIANCE ACTIVITY REPORT
FROM May 1, 2020 THROUGH October 31, 2020**

REPORT PREPARED BY: Tetra Tech
TEMPERATURE SENSING DEVICE: Thermocouple

DATE: November 1, 2020
MODEL: Thermo-Electric

START DATE & TIME	END DATE & TIME	TEMP (°F) / FLOW (SCFM) / HEAT LIMIT (MMBTU)	CAUSE	EXPLANATION	ACTION TAKEN
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No deviations or inoperative monitors during the reporting period of May 2020 through October 2020.

COMMENTS:

- 1 In accordance with Permit to Operate (PTO) Condition Number 25293, Part 9, the A-8 Back-Up Flare combustion zone 3-hour average temperature did not drop below 1,400 degrees Fahrenheit (°F) while the flare was in operation.
- 2 The A-8 Back-Up Flare combustion zone 3-hour average temperature did not drop below the 1,599°F limit established during the March 2, 2018 annual source test, while the flare was in operation, pursuant to PTO Condition Number 25293, Part 9, and 40 CFR 60.752 b(2)(iii)(B)(2) in Subpart WWW of the NSPS.
- 3 On December 16, 2011, Carol Allen of the BAAQMD clarified that the Flare combustion zone 3-hour average temperature limit for a deviation is 1,400°F in accordance with Title V Permit Condition Number 17821 Part 9. Comerstone will continue to monitor instances where the A-8 Back-Up Flare drops below the 1,599°F limit established during the March 2, 2018 source test. However these instances, as clarified by BAAQMD, are not currently deemed temperature deviations, and will not be reported as such.
- 4 Pursuant to PTO Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested at least once every three years. The A-8 Back-Up Flare was last source tested on March 2, 2018. The A-8 Back-Up Flare will next be due to be source tested by March 2021.

**WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
A-120 FLARE TEMPERATURE DEVIATION/ INOPERATIVE MONITOR/ REPORTABLE COMPLIANCE ACTIVITY REPORT
FROM May 1, 2020 THROUGH October 31, 2020**

REPORT PREPARED BY: Tetra Tech
TEMPERATURE SENSING DEVICE: Thermocouple

DATE: November 1, 2020
MODEL: Thermo-Electric

START DATE & TIME	END DATE & TIME	TEMP (°F) / FLOW (SCFM) / HEAT LIMIT (MMBTU)	CAUSE	EXPLANATION	ACTION TAKEN
<p>COMMENTS:</p> <p>No deviations or inoperative monitors during the reporting period of May 2020 through October 2020.</p> <p>1 In accordance with Permit to Operate (PTO) Condition Number 25293, Part 9, the A-120 Flare combustion zone 3-hour average temperature did not drop below 1,400 degrees Fahrenheit (°F) while the flare was in operation.</p> <p>2 The A-120 Flare combustion zone 3-hour average temperature did not drop below the 1,418°F limit established during the January 21, 2016 annual source test, while the flare was in operation, pursuant to PTO Condition Number 25293, Part 9, and 40 CFR 60.752 b(2)(iii)(B)(2) in Subpart WWW of the NSPS.</p> <p>3 The A-120 Flare was permanently shut down in November 2017 and permanently removed from the site in December 2017.</p>					

**WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
A-161 FLARE TEMPERATURE DEVIATION/ INOPERATIVE MONITOR/ REPORTABLE COMPLIANCE ACTIVITY REPORT
FROM May 1, 2020 THROUGH October 31, 2020**

REPORT PREPARED BY: Tetra Tech
TEMPERATURE SENSING DEVICE: Thermocouple

DATE: November 1, 2020
MODEL: Thermo-Electric

START DATE & TIME	END DATE & TIME	TEMP (°F) / FLOW (SCFM) / HEAT LIMIT (MMBTU)	CAUSE	EXPLANATION	ACTION TAKEN
No deviations or inoperative monitors during the reporting period of May 2020 through October 2020.					
COMMENTS:					
<p>1 In accordance with Permit to Operate (PTO) Condition Number 25293, Part 9, the A-161 Flare combustion zone 3-hour average temperature did not drop below 1,400 degrees Fahrenheit (°F) while the flare was in operation.</p> <p>2 The A-161 Flare combustion zone 3-hour average temperature did not drop below the 1,600°F limit established during the January 24, 2019 annual source test, while the flare was in operation, pursuant to PTO Condition Number 25293, Part 9, and 40 CFR 60.752 b(2)(iii)(B)(2) in Subpart WWW of the NSPS.</p> <p>3 The A-161 Flare combustion zone 3-hour average temperature did not drop below the 1,579°F limit established during the January 9, 2020 annual source test, while the flare was in operation, pursuant to PTO Condition Number 25293, Part 9, and 40 CFR 60.752 b(2)(iii)(B)(2) in Subpart WWW of the NSPS.</p>					

**WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
S-5 IC ENGINE TEMPERATURE DEVIATION/INOPERATIVE MONITOR/ REPORTABLE COMPLIANCE ACTIVITY REPORT
FROM May 1, 2020 THROUGH October 31, 2020**

REPORT PREPARED BY: Tetra Tech
TEMPERATURE SENSING DEVICE: Thermocouple

DATE: November 1, 2020
MODEL: Thermo-Electric

START DATE & TIME	END DATE & TIME	TEMP (°F) / FLOW (SCFM) / HEAT LIMIT (MMBTU)	CAUSE	EXPLANATION	ACTION TAKEN
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No deviations or inoperative monitors during the reporting period of May 2020 through October 2020.

COMMENTS:

- 1 The S-6 IC Engine 3-hour average cylinder temperature did not drop below the temperature limit of 940° Fahrenheit while the IC Engine was in operation, pursuant to Title V Permit Condition Number 5771 Part 10.
- 2 Per Republic/Novo personnel, the report generating function of the Supervisory Control and Data Acquisition (SCADA) system at the Engine Plant occasionally generates anomalous temperature readings which are incorporated into the average temperature reports automatically generated by the SCADA system, causing spikes in the data that are not reflected in the engine data charts. Such instances are not considered temperature deviations.

**WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
S-6 IC ENGINE TEMPERATURE DEVIATION/ INOPERATIVE MONITOR/ REPORTABLE COMPLIANCE ACTIVITY REPORT
FROM May 1, 2020 THROUGH October 31, 2020**

REPORT PREPARED BY: Tetra Tech
TEMPERATURE SENSING DEVICE: Thermocouple

DATE: November 1, 2020
MODEL: Thermo-Electric

START DATE & TIME	END DATE & TIME	TEMP (°F)/ FLOW (SCFM)/ HEAT LIMIT (MMBTU)	CAUSE	EXPLANATION	ACTION TAKEN
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No deviations or inoperative monitors during the reporting period of May 2020 through October 2020.

COMMENTS:

- The S-6 IC Engine 3-hour average cylinder temperature did not drop below the temperature limit of 940° Fahrenheit while the IC Engine was in operation, pursuant to Title V Permit Condition Number 5771 Part 10.
- Per Republic/Nove personnel, the report generating function of the Supervisory Control and Data Acquisition (SCADA) system at the Engine Plant occasionally generates anomalous temperature readings which are incorporated into the average temperature reports automatically generated by the SCADA system, causing spikes in the data that are not reflected in the engine data charts. Such instances are not considered temperature deviations.

**WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
S-37 IC ENGINE TEMPERATURE DEVIATION/ INOPERATIVE MONITOR/ REPORTABLE COMPLIANCE ACTIVITY REPORT
FROM May 1, 2020 THROUGH October 31, 2020**

REPORT PREPARED BY: Tetra Tech
TEMPERATURE SENSING DEVICE: Thermocouple

DATE: November 1, 2020
MODEL: Thermo-Electric

START DATE & TIME	END DATE & TIME	TEMP (°F)/ FLOW (SCFM)/ HEAT LIMIT (MMBTU)	CAUSE	EXPLANATION	ACTION TAKEN
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No deviations or inoperative monitors during the reporting period of May 2020 through October 2020.

COMMENTS:

1 The S-37 IC Engine 3-hour average cylinder temperature did not drop below the temperature limit of 940° Fahrenheit while the IC Engine was in operation, pursuant to Title V Permit Condition Number 5771 Part 10.

2 Per Republic/Nove personnel, the report generating function of the Supervisory Control and Data Acquisition (SCADA) system at the Engine Plant occasionally generates anomalous temperature readings which are incorporated into the average temperature reports automatically generated by the SCADA system, causing spikes in the data that are not reflected in the engine data charts. Such instances are not considered temperature deviations.

APPENDIX G

COVER INTEGRITY MONITORING LOGS

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT
Monthly Cover Monitoring

LOCATION: West Contra Costa Sanitary Landfill
INSPECTION DATE: May 29, 2020
TECHNICIAN: Rafael Carranza

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	X		
Signs clearly posted	X		
Evidence of trespassing		X	
Litter or debris on-site	X		Normal, wind blows loose bags
Fence in good condition	X		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		X	
Dead vegetation	X		Normal for this time of year.
Erosion on cap system		X	
Erosion on side slopes		X	
Ponding of water on cap		X	
Surface cracking	X		West side, by 812
Acceptable vegetation	X		
Exposed waste		X	

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	X		
Flare/Blower station secured	X		

ADDITIONAL COMMENTS:

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT
Monthly Cover Monitoring

LOCATION: West Contra Costa Sanitary Landfill
INSPECTION DATE: June 29, 2020
TECHNICIAN: Rafael Carranza

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	X		
Signs clearly posted	X		
Evidence of trespassing		X	
Litter or debris on-site		X	
Fence in good condition	X		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		X	
Dead vegetation	X		Normal for this time of year.
Erosion on cap system		X	
Erosion on side slopes		X	
Ponding of water on cap		X	
Surface cracking		X	
Acceptable vegetation	X		
Exposed waste	X		

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	X		
Flare/Blower station secured	X		

ADDITIONAL COMMENTS:

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT
Monthly Cover Monitoring

LOCATION: West Contra Costa Sanitary Landfill
INSPECTION DATE: July 27, 2020
TECHNICIAN: Rafael Carranza

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	X		
Signs clearly posted	X		
Evidence of trespassing		X	
Litter or debris on-site		X	
Fence in good condition	X		

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

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	X		
Flare/Blower station secured	X		

ADDITIONAL COMMENTS:

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT
Monthly Cover Monitoring

LOCATION: West Contra Costa Sanitary Landfill
INSPECTION DATE: August 31, 2020
TECHNICIAN: Rafael Carranza

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	X		
Signs clearly posted	X		
Evidence of trespassing		X	
Litter or debris on-site		X	
Fence in good condition	X		

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

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	X		
Flare/Blower station secured	X		

ADDITIONAL COMMENTS:

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT
Monthly Cover Monitoring

LOCATION: West Contra Costa Sanitary Landfill
INSPECTION DATE: September 25, 2020
TECHNICIAN: Rafael Carranza

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	X		
Signs clearly posted	X		
Evidence of trespassing		X	
Litter or debris on-site		X	
Fence in good condition	X		

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

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	X		
Flare/Blower station secured	X		

ADDITIONAL COMMENTS:

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT
Monthly Cover Monitoring

LOCATION: West Contra Costa Sanitary Landfill
INSPECTION DATE: October 12, 2020
TECHNICIAN: Camilla Martinez

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	X		
Signs clearly posted	X		
Evidence of trespassing		X	
Litter or debris on-site		X	
Fence in good condition	X		

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

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	X		
Flare/Blower station secured	X		

ADDITIONAL COMMENTS:

APPENDIX H

ANNUAL SURFACE EMISSIONS MONITORING REPORT

July 30, 2020
Project No. 07219040.00

Mr. Ed Baquerizo
Republic Services, Inc.
1 Parr Boulevard
Richmond, California 94801

Subject: West Contra Costa County Landfill – Richmond, California
Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS)
Surface Emissions Monitoring for Second Quarter 2020.

Dear Mr. Baquerizo:

SCS Field Services (SCS-FS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Closed West Contra Costa Sanitary Landfill (Site) during the second quarter 2020. This report includes the results of surface scan, component emissions and blower/flare station emissions monitoring for the Site for this monitoring period.

SCS-FS appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Michael Flanagan at (925) 421-9768 or Whitney Stackhouse (209) 338-7990 if you have any questions or comments.

Sincerely,



Whitney M. Stackhouse
Project Manager
SCS Field Services



Michael Flanagan
Project Manager
SCS Field Services

WS

cc: Enclosure Sean Bass, SCS Field Services
Art Jones, SCS Field Services

West Contra Costa County Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring

Second Quarter 2020

Presented to:



Mr. Ed Baquerizo
Republic Services, Inc.
1 Parr Boulevard
Richmond, California 94801

SCS FIELD SERVICES

File No. 07219040.00 | July 30, 2020

SCS FIELD SERVICES
4730 Enterprise Way
Modesto, CA 95356

West Contra Costa County Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring Second Quarter 2020

INTRODUCTION

This letter provides results of the May 19, 20, 21 and 26, 2020 and June 1 and 15, 2020, LMR and NSPS landfill surface emissions monitoring (SEM) performed by SCS Field Services (SCS) at the closed West Contra Costa County Landfill. All work was performed in accordance with our approved Work Scope dated September 13, 2018, and the LMR requirements.

SUMMARY AND CONCLUSIONS

On May 19, 20, 21 and 26, 2020 and June 1 and 15, 2020, instantaneous and integrated surface emissions monitoring was performed over the surface of the site. Testing results indicated no uncorrectable exceedances of the LMR and NSPS instantaneous threshold limit of 500 parts per million by volume (ppmv), or the integrated average of 25 ppmv as required by the LMR, above background. Based on these monitoring results no further follow up testing was required.

On May 19, 20, 21 and 26, 2020, 2020, SCS performed the second quarter 2020 surface emissions monitoring testing as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that two (2) locations exceeded the 500 ppmv maximum concentration on the above-mentioned date (Table 1 in Attachment 3). The required 10 and 30-day NSPS and LMR follow-up monitoring indicated that both areas had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results no follow up testing was required.

Also, during the instantaneous monitoring event, SCS performed integrated monitoring of the landfill surface. As required by the LMR, the landfill was divided into 50,000 square foot areas. The West Contra Costa County Landfill surface area was therefore divided into 165 grids, as shown on Figure 1 in Attachment 1. During this monitoring event, several grids were not monitored, in accordance with the regulations, due to ongoing active composting activities, unsafe conditions, or there was no waste in place prior to the monitoring event.

During the monitoring event, there were no areas observed to exceed the LMR integrated average of 25 ppmv (Table 2 in Attachment 4). Based on these monitoring results no follow up testing was required. These results are discussed in a subsequent section of this report.

In addition, quarterly monitoring of the pressurized piping or components of the Gas Collection and Control System (GCCS) that are under positive pressure must be performed quarterly. Results of the testing of the landfill gas (LFG) Blower Flare Station (BFS) pressurized pipe and components indicated that all test locations were in compliance with the 500 ppmv requirements.

Further, as required under the LMR, any location on the landfill that has an observed instantaneous methane concentration above 200 ppmv, must be stake-marked and Global Positioning System (GPS) located on a site figure. No locations were observed to exceed the 200 ppmv threshold (Attachment 3). If concentrations exceeding 200 ppmv are observed during monitoring events, they are reported to site personnel and will be reported in the next submittal of the annual LMR report.

As stipulated in LMR, if uncorrectable exceedances within the 10-day limitation are detected or emissions are discovered during an inspection by Regulatory Agencies, the landfill must perform monitoring on a 25-foot pathway on a quarterly basis for active disposal sites. Upon completion of four consecutive SEM events without an uncorrectable exceedance of the 25 ppmv or 500 ppmv standards, other than non-repeatable momentary readings, the landfill may perform the monitoring on a 100-foot spacing on an annual basis for closed landfills or quarterly for active disposal sites. In accordance with the provisions of the LMR, the monitoring of the landfill will be done quarterly on a 25-foot pathway based on a regulatory inspection during September 2019, in which exceedances were observed. Note that the subsequent monitoring since the inspection has shown no uncorrectable exceedances.

Finally, to help prevent potential future exceedances, SCS routinely inspects the landfill surface, and any observed areas in need of repair would be noted, and the findings sent directly to the client.

BACKGROUND

The West Contra Costa Sanitary Landfill is an inactive organic refuse disposal site. By way of background, organic materials buried in a landfill decompose anaerobically (in the absence of oxygen) producing a combustible gas, which contains approximately 50 to 60 percent methane, 40 to 50 percent carbon dioxide, and trace amounts of various other gases, some of which are odorous. The West Contra Costa Sanitary Landfill property contains a GCCS to control the combustible gases generated in the landfill that may otherwise either vent vertically to the atmosphere or migrate horizontally through subsurface soil to locations on adjacent properties.

SURFACE EMISSIONS MONITORING

On May 19, 20, 21 and 26, 2020 and June 1 and 15, 2020, the instantaneous and integrated SEM was performed over the surface of the subject site. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the LMR threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring in the 50,000 square foot grids as required under the LMR. During this event, SCS performed the annual monitoring on a 25-foot pathway in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

Instruments used to perform the landfill surface emission testing consisted of the following:

- Thermo Scientific TVA 2020 portable Flame Ionization Detector (FID). This instrument measures methane in air over a range of 1 to 50,000 ppmv. The TVA 2020 meets the State of California Air Resources Board (CARB) requirements for combined instantaneous and integrated monitoring and was calibrated in accordance with United States Environmental Protection Agency (US EPA) Method 21.

- Electronic Weather Anemometer with continuous recorder for meteorological conditions in accordance with the LMR.

Instrument calibration logs and weather information are shown in Attachments 5 and 6.

SURFACE EMISSIONS MONITORING PROCEDURES

Surface emissions monitoring was conducted in accordance with the LMR and NSPS requirements. Monitoring was performed with the FID inlet held within 3-inches of the landfill surface while a technician walked a grid in parallel paths not more than 25 or 100-feet apart over the surface of the landfill. Cracks, holes and other cover penetrations in the surface were also tested. Surface emissions readings were monitored continuously and recorded every 5 seconds. Any areas in exceedance of the 200 or 500 ppmv standards (reporting and compliance levels, respectively) would be GPS tagged and stake-marked for on-site personnel to perform remediation or repairs.

The integrated average is based on the readings stored on the instrument, which are recorded every 5 seconds. The readings are then downloaded and the averages are calculated for each grid using SCS eTools®. All readings are maintained in this secure SCS Database. The readings are not provided in the report due to the volume of readings, but can be furnished upon request.

Recorded wind speed results are shown in Attachment 5. Wind speed averages were observed to remain below 5 miles per hour, and no instantaneous speeds exceeded 10 miles per hour. No rainfall had occurred within the 72 hour of the monitoring events. Therefore, site meteorological conditions were within the LMR requirements on the above mentioned date.

TESTING RESULTS

During this event, SCS performed the quarterly monitoring on a 25-foot pathway in accordance with the rule as required under the LMR and NSPS. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the LMR or NSPS threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring (LMR).

On May 19, 20 and 21, 2020 and June 1, 2020, SCS performed the second quarter 2020 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that two (2) locations exceeded the 500 ppmv maximum concentration. The required 10 and 30-day NSPS and LMR follow-up monitoring (performed on May 26, 2020 and June 15, 2020) indicated that both areas had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results, no additional follow up testing is required. Results of the monitoring are shown in Attachments 2 and 3 (Table 1). SCS would like to note that these two locations also had elevated reading during the previous event. SCS recommends these locations be evaluated for replacement, repair or abandonment to eliminate the potential for future exceedances.

Additionally, calculated integrated monitoring indicated no integrated exceedances of the 25-ppmv requirement. Results of the monitoring are shown in Attachment 4 (Table 2). Based on these monitoring results no follow up testing was required. Calibration logs for the monitoring equipment are provided in Attachment 5.

During this monitoring event, several grids were not monitored, in accordance with the LMR, due to active composting activities, unsafe conditions, heavy vegetation or no waste in place. SCS will continue to monitor all accessible locations during the third quarter 2020.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On June 1, 2020, quarterly leak monitoring was performed in accordance with the LMR. SCS performed LFG pressurized pipe and component leak monitoring at the BFS. Monitoring was performed with the detector inlet held one-half of an inch from pressurized pipe and associated components. No locations exceeding the 500 ppmv threshold were observed during our monitoring event. The maximum reading, which was 1.8 ppmv, was well below the maximum threshold (see Table 1 for component results). Therefore, all pressurized pipe and components located at the LFG BFS were in compliance at the time of our testing.

PROJECT SCHEDULE

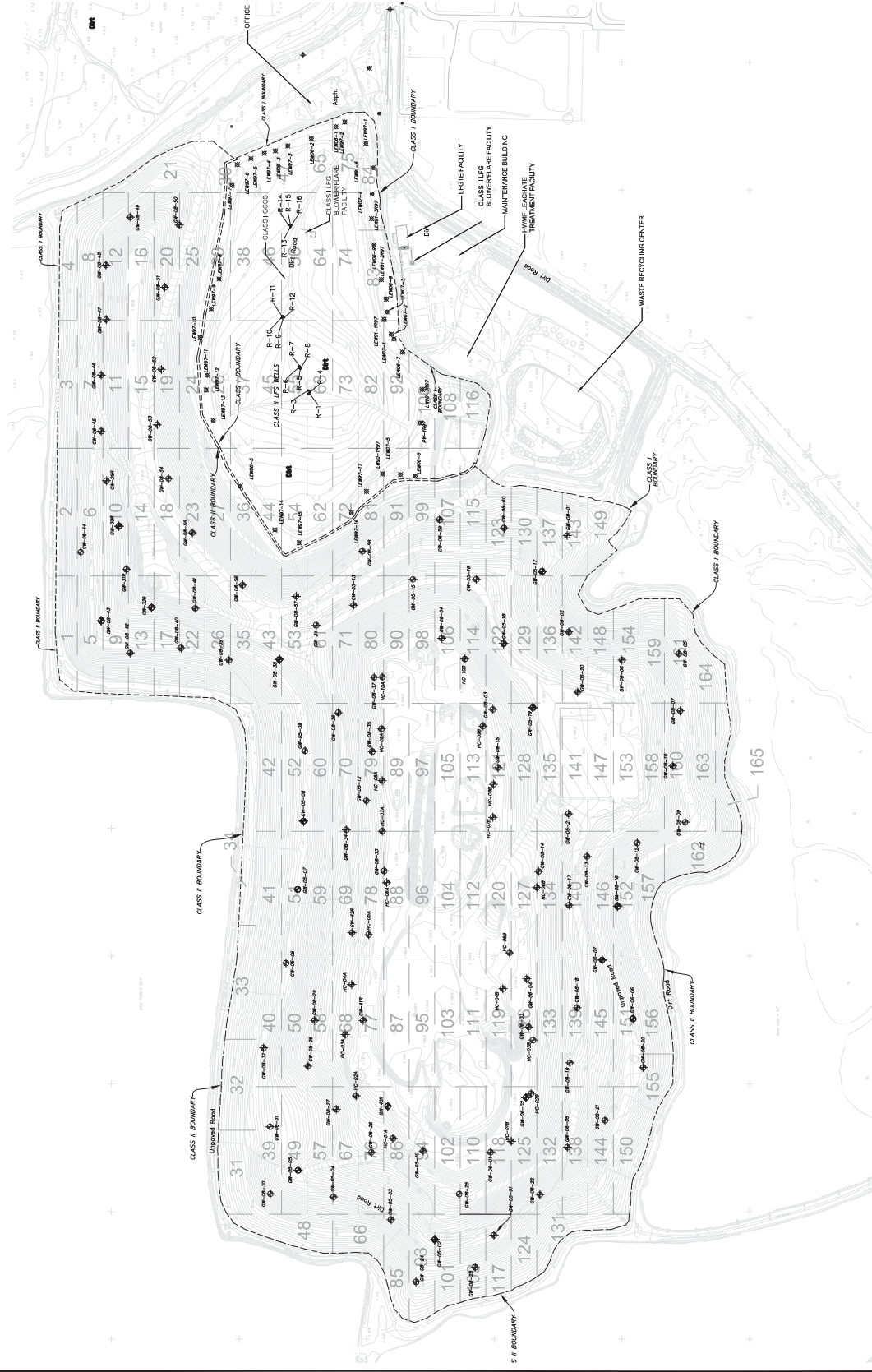
In accordance with our approved Work Scope, the next quarterly event is scheduled to be performed by the end of September 2020.

STANDARD PROVISIONS

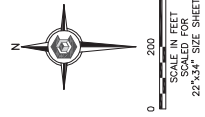
This report addresses conditions of the subject site during the testing dates only. Accordingly, we assume no responsibility for any changes that may occur subsequent to our testing which could affect the surface emissions at the subject site or adjacent properties.

Attachment 1

Landfill Grid



- LEGEND**
- EXISTING CLASS 1 SOLID WASTE BOUNDARY
 - EXISTING CLASS 2 SOLID WASTE BOUNDARY
 - EXISTING 10' CONTOUR
 - EXISTING 2' CONTOUR
 - SEW GRID BLOCK
 - SEW GRID BLOCK WITH NO WASTE IN PLACE



NOTES:

- TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY H.W. GEOSPATIAL, INC. THE CALIFORNIA STATE BOARD OF SURVEYORS AND LAND ADJUSTERS HAS APPROVED THESE CONTOURS UNDER THE CALIFORNIA COORDINATE SYSTEM, ZONE 10, NAD27.

DRAFT

SHEET NO. **1**
PROJECT NO. 102618

WEST COSTA COUNTY SANITARY LANDFILL
CONTRA COSTA COUNTY, CALIFORNIA
SURFACE EMISSIONS MONITORING
GRID MAP



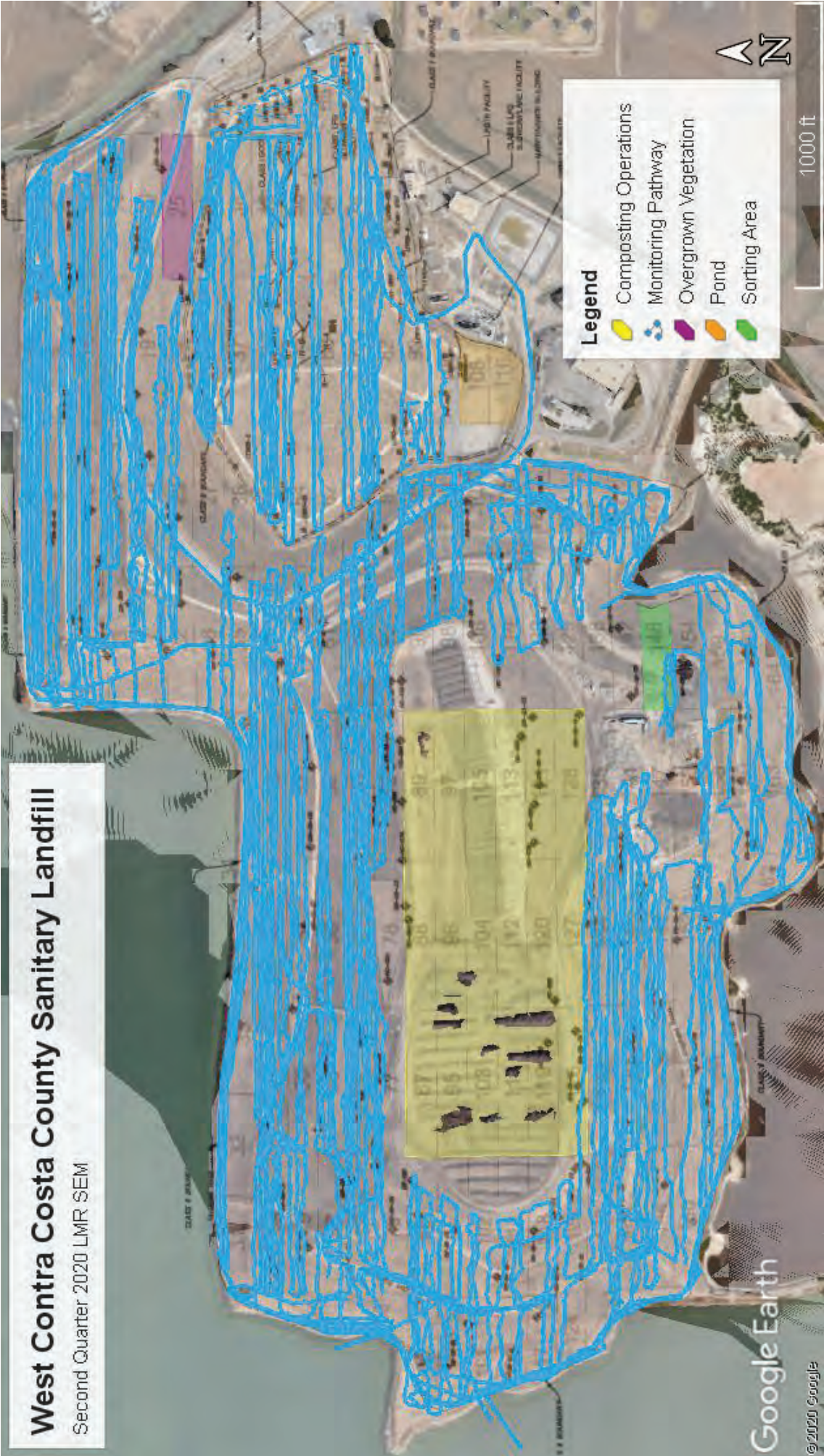
REV.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	DATE
1	5/7/11/2011		LDW	RFJ	
DESIGNED BY: LDW			APPROVED BY: RFJ		

Attachment 2

Surface Pathway

West Contra Costa County Sanitary Landfill

Second Quarter 2020 LMR SEM



Second Quarter 2020

LMR Surface Emissions Monitoring Pathway

West Contra Costa County Sanitary Landfill, Contra Costa County, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

Second Quarter 2020

Table 1. LMR Instantaneous Surface and Component

Emissions Monitoring Results

West Contra Costa County Landfill, Contra Costa County, California

Instantaneous Data Report for May 19, 20, 21 and 26, 2020 and June 1 and 15, 2020

Location	Initial Concentration (ppmv)	First 10-Day Concentration (ppmv)	30-Day Concentration (ppmv)
	May 19, 2020	May 26, 2020	June 15, 2020
EW-08-01	500	0.0	0.5
EW-08-39	1,500	140	45.6

Pressurized Pipe and Component Results

Route	Date	Concentration (ppmv)
Flare	6/1/2020	1.8

No other exceedances of the 200 or 500 ppm thresholds were observed during the monitoring performed during the second quarter 2020. The highest reading observed was 1,500 ppmv.

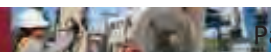
Attachment 4

Integrated Monitoring Results

Second Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 001	5/20/2020 09:00	3.28	
W.CoCo 002	5/20/2020 09:03	3.26	
W.CoCo 003	5/20/2020 08:59	3.31	
W.CoCo 004	5/20/2020 09:04	3.31	
W.CoCo 005	5/20/2020 08:10	3.88	
W.CoCo 006	5/20/2020 08:02	3.79	
W.CoCo 007	5/20/2020 08:07	3.64	
W.CoCo 008	5/20/2020 08:00	3.69	
W.CoCo 009	5/20/2020 09:00	3.01	
W.CoCo 010	5/20/2020 09:00	2.81	
W.CoCo 011	5/20/2020 09:00	2.79	
W.CoCo 012	5/20/2020 09:01	2.78	
W.CoCo 013	5/20/2020 09:43	2.97	
W.CoCo 014	5/20/2020 09:49	2.90	
W.CoCo 015	5/20/2020 09:47	2.92	
W.CoCo 016	5/20/2020 09:48	2.91	
W.CoCo 017	5/20/2020 08:59	3.46	
W.CoCo 018	5/20/2020 09:11	3.39	
W.CoCo 019	5/20/2020 09:09	3.41	
W.CoCo 020	5/20/2020 09:19	3.36	
W.CoCo 021	5/20/2020 09:38	2.98	
W.CoCo 022	5/20/2020 09:33	2.55	
W.CoCo 023	5/20/2020 09:46	2.43	
W.CoCo 024	5/20/2020 09:42	4.12	
W.CoCo 025	--	--	Overgrown Vegetation
W.CoCo 026	5/21/2020 09:19	3.16	
W.CoCo 027	5/21/2020 09:21	4.08	
W.CoCo 028	5/20/2020 11:35	2.49	
W.CoCo 029	5/20/2020 11:36	2.51	
W.CoCo 030	5/20/2020 10:14	3.52	
W.CoCo 031	6/1/2020 08:24	4.63	
W.CoCo 032	6/1/2020 08:23	3.51	
W.CoCo 033	6/1/2020 08:24	3.31	
W.CoCo 034	6/1/2020 08:25	3.82	
W.CoCo 035	6/1/2020 08:15	3.43	
W.CoCo 036	6/1/2020 08:14	3.44	
W.CoCo 037	5/20/2020 11:43	1.78	
W.CoCo 038	5/20/2020 11:43	1.81	
W.CoCo 039	5/21/2020 09:00	3.96	
W.CoCo 040	5/21/2020 09:11	4.25	



Second Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

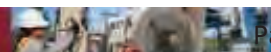
Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 041	5/21/2020 08:59	4.74	
W.CoCo 042	5/21/2020 09:03	4.26	
W.CoCo 043	5/21/2020 09:00	4.67	
W.CoCo 044	5/20/2020 12:03	2.33	
W.CoCo 045	5/20/2020 11:57	2.38	
W.CoCo 046	5/20/2020 11:59	2.37	
W.CoCo 047	5/20/2020 10:14	3.28	
W.CoCo 048	5/21/2020 10:01	4.19	
W.CoCo 049	5/21/2020 10:27	2.28	
W.CoCo 050	5/21/2020 10:23	2.89	
W.CoCo 051	5/21/2020 10:29	3.33	
W.CoCo 052	5/21/2020 10:29	2.50	
W.CoCo 053	5/21/2020 10:28	2.63	
W.CoCo 054	5/20/2020 12:08	1.84	
W.CoCo 055	5/20/2020 12:08	1.70	
W.CoCo 056	5/20/2020 12:08	1.78	
W.CoCo 057	6/1/2020 09:40	2.38	
W.CoCo 058	6/1/2020 09:35	2.72	
W.CoCo 059	6/1/2020 09:38	3.31	
W.CoCo 060	6/1/2020 09:37	3.06	
W.CoCo 061	6/1/2020 09:27	2.77	
W.CoCo 062	6/1/2020 09:27	3.25	
W.CoCo 063	5/20/2020 12:23	2.31	
W.CoCo 064	5/20/2020 12:23	2.34	
W.CoCo 065	5/20/2020 12:26	2.38	
W.CoCo 066	5/21/2020 12:02	1.91	
W.CoCo 067	5/21/2020 10:46	2.99	
W.CoCo 068	5/21/2020 10:55	3.59	
W.CoCo 069	5/21/2020 10:52	4.67	
W.CoCo 070	5/21/2020 10:50	3.62	
W.CoCo 071	5/21/2020 10:50	3.73	
W.CoCo 072	5/21/2020 16:08	3.03	
W.CoCo 073	5/21/2020 17:36	2.52	
W.CoCo 074	5/21/2020 17:35	2.77	
W.CoCo 075	5/21/2020 17:32	3.40	
W.CoCo 076	5/21/2020 12:29	1.53	
W.CoCo 077	5/21/2020 12:33	2.64	
W.CoCo 078	5/21/2020 12:18	5.69	
W.CoCo 079	5/21/2020 12:37	3.01	
W.CoCo 080	5/21/2020 12:37	2.42	



Second Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 081	5/21/2020 12:28	2.26	
W.CoCo 082	5/21/2020 16:38	3.59	
W.CoCo 083	5/21/2020 16:30	2.97	
W.CoCo 084	5/21/2020 16:27	3.90	
W.CoCo 085	6/1/2020 10:23	2.12	
W.CoCo 086	6/1/2020 10:23	2.12	
W.CoCo 087	--	--	Composting Operations
W.CoCo 088	--	--	Composting Operations
W.CoCo 089	--	--	Composting Operations
W.CoCo 090	5/21/2020 16:02	2.04	
W.CoCo 091	5/21/2020 16:04	2.02	
W.CoCo 092	5/21/2020 16:53	3.36	
W.CoCo 093	5/21/2020 12:22	2.77	
W.CoCo 094	5/21/2020 12:17	2.48	
W.CoCo 095	--	--	Composting Operations
W.CoCo 096	--	--	Composting Operations
W.CoCo 097	--	--	Composting Operations
W.CoCo 098	5/21/2020 16:11	4.04	
W.CoCo 099	5/21/2020 16:37	3.46	
W.CoCo 100	5/21/2020 18:00	3.15	
W.CoCo 101	5/21/2020 13:30	1.42	
W.CoCo 102	5/21/2020 13:32	2.00	
W.CoCo 103	--	--	Composting Operations
W.CoCo 104	--	--	Composting Operations
W.CoCo 105	--	--	Composting Operations
W.CoCo 106	5/21/2020 16:23	2.72	
W.CoCo 107	5/21/2020 16:23	2.69	
W.CoCo 108	--	--	Pond
W.CoCo 109	5/21/2020 13:39	2.67	
W.CoCo 110	5/21/2020 13:42	2.80	
W.CoCo 111	--	--	Composting Operations
W.CoCo 112	--	--	Composting Operations
W.CoCo 113	--	--	Composting Operations
W.CoCo 114	6/1/2020 12:22	2.34	
W.CoCo 115	6/1/2020 12:22	1.70	
W.CoCo 116	--	--	Pond
W.CoCo 117	5/21/2020 12:20	2.16	
W.CoCo 118	5/21/2020 12:21	2.18	
W.CoCo 119	--	--	Composting Operations
W.CoCo 120	--	--	Composting Operations



Second Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 121	--	--	Composting Operations
W.CoCo 122	5/21/2020 16:22	6.46	Composting Operations
W.CoCo 123	5/21/2020 16:29	2.04	
W.CoCo 124	5/21/2020 14:40	1.55	
W.CoCo 125	5/21/2020 14:40	1.41	
W.CoCo 126	--	--	Composting Operations
W.CoCo 127	--	--	Composting Operations
W.CoCo 128	--	--	Composting Operations
W.CoCo 129	6/1/2020 12:10	1.71	
W.CoCo 130	6/1/2020 12:10	1.75	
W.CoCo 131	5/21/2020 14:51	1.36	
W.CoCo 132	5/21/2020 14:24	2.62	
W.CoCo 133	5/21/2020 14:27	3.02	
W.CoCo 134	5/21/2020 14:15	2.98	
W.CoCo 135	5/21/2020 14:27	2.86	
W.CoCo 136	5/21/2020 16:44	1.46	
W.CoCo 137	5/21/2020 16:37	2.18	
W.CoCo 138	5/21/2020 12:42	2.08	
W.CoCo 139	5/21/2020 12:55	2.17	
W.CoCo 140	5/21/2020 12:53	2.29	
W.CoCo 141	5/21/2020 12:56	2.13	
W.CoCo 142	5/21/2020 13:00	2.08	
W.CoCo 143	6/1/2020 11:40	1.87	
W.CoCo 144	5/21/2020 15:17	1.40	
W.CoCo 145	5/21/2020 15:18	1.48	
W.CoCo 146	5/21/2020 15:15	1.41	
W.CoCo 147	5/21/2020 15:37	1.68	
W.CoCo 148	--	--	Sorting Area
W.CoCo 149	5/21/2020 16:47	2.06	
W.CoCo 150	5/21/2020 15:19	2.71	
W.CoCo 151	5/21/2020 15:21	2.72	
W.CoCo 152	5/21/2020 15:21	2.73	
W.CoCo 153	6/1/2020 11:12	1.90	
W.CoCo 154	6/1/2020 11:12	1.89	
W.CoCo 155	5/21/2020 13:25	2.09	
W.CoCo 156	5/21/2020 13:27	2.11	
W.CoCo 157	5/21/2020 13:27	2.12	
W.CoCo 158	6/1/2020 11:06	1.90	
W.CoCo 159	6/1/2020 11:07	1.92	
W.CoCo 160	6/1/2020 10:58	1.99	



Second Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 161	5/21/2020 17:32	3.40	
W.CoCo 162	6/1/2020 10:47	2.01	
W.CoCo 163	5/21/2020 17:39	1.38	
W.CoCo 164	5/21/2020 17:38	1.51	
W.CoCo 165	5/21/2020 18:35	2.05	



Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 5/20/20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: partially cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	501	1	2
2	3	501	1	1
3	3	501	1	1

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - 1 / 500 x 100%
 = 99.8 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>127143</u>	Counts Observed for the Span= <u>129968</u>
Counters Observed for the Zero= <u>2909</u>	Counters Observed for the Zero= <u>2821</u>
Trial 2:	
Counts Observed for the Span= <u>126982</u>	
Counters Observed for the Zero= <u>2689</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.7 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 5/20/20 Site Name: WCC
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: partially cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>502</u>	<u>2</u>	<u>1</u>
2	<u>1</u>	<u>501</u>	<u>1</u>	<u>1</u>
3	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1.3}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>125654</u>	Counts Observed for the Span= <u>127440</u>
Counters Observed for the Zero= <u>2783</u>	Counters Observed for the Zero= <u>2679</u>
Trial 2:	
Counts Observed for the Span= <u>128118</u>	
Counters Observed for the Zero= <u>2992</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.7 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SOURCE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5/20/20 Site Name: WCC post
 Inspector(s): Don Gibson Instrument: IVA2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: WNW Barometric Pressure: 30 "Hg
 Air Temperature: 73 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value

Instrument Serial Number: 1220 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>3</u>	<u>500</u>	<u>0</u>	<u>1</u>
2	<u>3</u>	<u>501</u>	<u>1</u>	<u>2</u>
3	<u>1</u>	<u>501</u>	<u>1</u>	<u>2</u>

Average Difference: 0.7
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc X 100%

$$= 100\% - \frac{.7}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>128638</u>	Counts Observed for the Span = <u>130997</u>
Counters Observed for the Zero = <u>2514</u>	Counters Observed for the Zero = <u>2480</u>
Trial 2:	
Counts Observed for the Span = <u>130564</u>	
Counters Observed for the Zero = <u>2682</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grnd 34 Reading: 1.7 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

**SO₂ AND O₃ EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5/20/20 Site Name: WCC Post
 Inspector(s): Chris Garcia Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: WNW Barometric Pressure: 30 "Hg
 Air Temperature: 73 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	1	502	2	2
2	1	500	0	2
3	3	501	1	1

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 2:	Trial 3:
Counts Observed for the Span= <u>129686</u>	Counts Observed for the Span= <u>130234</u>	Counts Observed for the Span= <u>127695</u>
Counters Observed for the Zero= <u>2746</u>	Counters Observed for the Zero= <u>2278</u>	Counters Observed for the Zero= <u>2654</u>

Post Monitoring Calibration Check

Zero Air Reading: 6 ppm Cal Gas Reading: 560 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.7 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SOURCE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5/20/20 Site Name: WCC
 Inspector(s): Chris Garcia Instrument: TVAZ020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: partially cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>
2	<u>3</u>	<u>501</u>	<u>1</u>	<u>1</u>
3	<u>3</u>	<u>500</u>	<u>0</u>	<u>2</u>

Average Difference: 0.7
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= 100\% - \frac{0.7}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>126067</u>	Counts Observed for the Span= <u>129562</u>
Counters Observed for the Zero= <u>3014</u>	Counters Observed for the Zero= <u>2841</u>
Trial 2:	
Counts Observed for the Span= <u>127771</u>	
Counters Observed for the Zero= <u>2650</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.7 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 5/20/20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: WNW Barometric Pressure: 30 "Hg
 Air Temperature: 73 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	2	502	2	
2	1	502	2	
3	2	500	0	

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. x 100%

$$= \frac{100\% \cdot 1.3}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>130123</u>	Counts Observed for the Span= <u>131347</u>
Counters Observed for the Zero= <u>2712</u>	Counters Observed for the Zero= <u>2615</u>
Trial 2:	
Counts Observed for the Span= <u>129635</u>	
Counters Observed for the Zero= <u>2378</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 37 Reading: 1.7 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 25/21/20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	501	1	2
2	1	501	1	1
3	3	501	1	2

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - 1 / 500 x 100%
 = 99.8 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>126974</u>	Counts Observed for the Span= <u>127568</u>
Counters Observed for the Zero= <u>2963</u>	Counters Observed for the Zero= <u>2571</u>
Trial 2:	
Counts Observed for the Span= <u>128007</u>	
Counters Observed for the Zero= <u>2845</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 5/21/20 Site Name: WCC
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>
2	<u>3</u>	<u>500</u>	<u>0</u>	<u>1</u>
3	<u>1</u>	<u>501</u>	<u>1</u>	<u>2</u>

Average Difference: .7

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% \frac{.7}{500} \times 100\%$$

$$= 99.8 \%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>129870</u>	Counts Observed for the Span= <u>127801</u>
Counters Observed for the Zero= <u>3123</u>	Counters Observed for the Zero= <u>2866</u>
Trial 2:	
Counts Observed for the Span= <u>130264</u>	
Counters Observed for the Zero= <u>3078</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 5/2/12 Site Name: WCC
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: sw Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	[Cal Gas Conc.-Cal Gas Reading]	Response Time (seconds)
1	<u>3</u>	<u>500</u>	<u>0</u>	<u>2</u>
2	<u>2</u>	<u>500</u>	<u>0</u>	<u>1</u>
3	<u>1</u>	<u>501</u>	<u>1</u>	<u>1</u>

Average Difference: 3.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{3.3}{500} \times 100\%$$

$$= 99.9\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>130685</u>	Counts Observed for the Span= <u>125054</u>
Counters Observed for the Zero= <u>2908</u>	Counters Observed for the Zero= <u>2713</u>
Trial 2:	
Counts Observed for the Span= <u>126976</u>	
Counters Observed for the Zero= <u>2883</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Post

Date: 5/21/20

Site Name: WCC

Inspector(s): Liam McGinn

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH

Wind Direction: S

Barometric Pressure: 30 "Hg

Air Temperature: 71 °F

General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223

Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>1</u>	<u>502</u>	<u>2</u>	<u>1</u>
2	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>
3	<u>1</u>	<u>500</u>	<u>0</u>	<u>1</u>

Average Difference: 1

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 2:
Counts Observed for the Span= <u>129365</u>	Counts Observed for the Span= <u>125752</u>
Counters Observed for the Zero= <u>2418</u>	Counters Observed for the Zero= <u>2597</u>

Trial 3:
Counts Observed for the Span= <u>130113</u>
Counters Observed for the Zero= <u>2489</u>

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm

Downwind Location Description: Grid 34 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Post

Date: 5/21/20

Site Name: WCC

Inspector(s): Don Gibson

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH

Wind Direction: S

Barometric Pressure: 30 "Hg

Air Temperature: 71 °F

General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220

Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>500</u>	<u>0</u>	<u>1</u>
2	<u>3</u>	<u>501</u>	<u>1</u>	<u>1</u>
3	<u>1</u>	<u>501</u>	<u>1</u>	<u>1</u>

Average Difference: .7

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{.7}{500} \times 100\%$$

$$= 99.8 \%$$

Span Sensitivity:

Trial 1:	Trial 2:
Counts Observed for the Span= <u>131608</u>	Counts Observed for the Span= <u>128267</u>
Counters Observed for the Zero= <u>2956</u>	Counters Observed for the Zero= <u>2714</u>

Trial 3:
Counts Observed for the Span= <u>125113</u>
Counters Observed for the Zero= <u>2508</u>

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance

Reading: 1.3 ppm

Downwind Location Description: Gnd 34

Reading: 1.0 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 5/21/20 Site Name: WCC
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: S Barometric Pressure: 30 "Hg
 Air Temperature: 71 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>1</u>	<u>501</u>	<u>1</u>	<u>2</u>
2	<u>1</u>	<u>501</u>	<u>1</u>	<u>2</u>
3	<u>1</u>	<u>501</u>	<u>1</u>	<u>3</u>

Average Difference: 1

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 998 \%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>133340</u>	Counts Observed for the Span= <u>128667</u>
Counters Observed for the Zero= <u>2568</u>	Counters Observed for the Zero= <u>2412</u>
Trial 2:	
Counts Observed for the Span= <u>129129</u>	
Counters Observed for the Zero= <u>2651</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 34 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 6-1-20 Site Name: V. con tra
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: SSW Barometric Pressure: 30 "Hg
 Air Temperature: 64 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>499</u>	<u>1</u>	<u>2</u>
2	<u>1</u>	<u>501</u>	<u>1</u>	<u>2</u>
3	<u>3</u>	<u>502</u>	<u>2</u>	<u>2</u>

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% \cdot \frac{1.3}{500} \times 100\% = 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>137889</u>	Counts Observed for the Span= <u>137521</u>
Counters Observed for the Zero= <u>2683</u>	Counters Observed for the Zero=
Trial 2:	
Counts Observed for the Span= <u>137728</u>	
Counters Observed for the Zero= <u>2652</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 31 Reading: 1.1 ppm
 Downwind Location Description: Flare Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

post

Date: 6-1-20
Inspector(s): Don Gibson

Site Name: W. Contra
Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
Air Temperature: 70 °F General Weather Conditions: sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	2	501	1	2
2	1	502	2	2
3	3	501	1	2

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1.3}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>138783</u>	Counts Observed for the Span= <u>138521</u>
Counters Observed for the Zero= <u>2692</u>	Counters Observed for the Zero= <u>2648</u>
Trial 2:	
Counts Observed for the Span= <u>138672</u>	
Counters Observed for the Zero= <u>2671</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

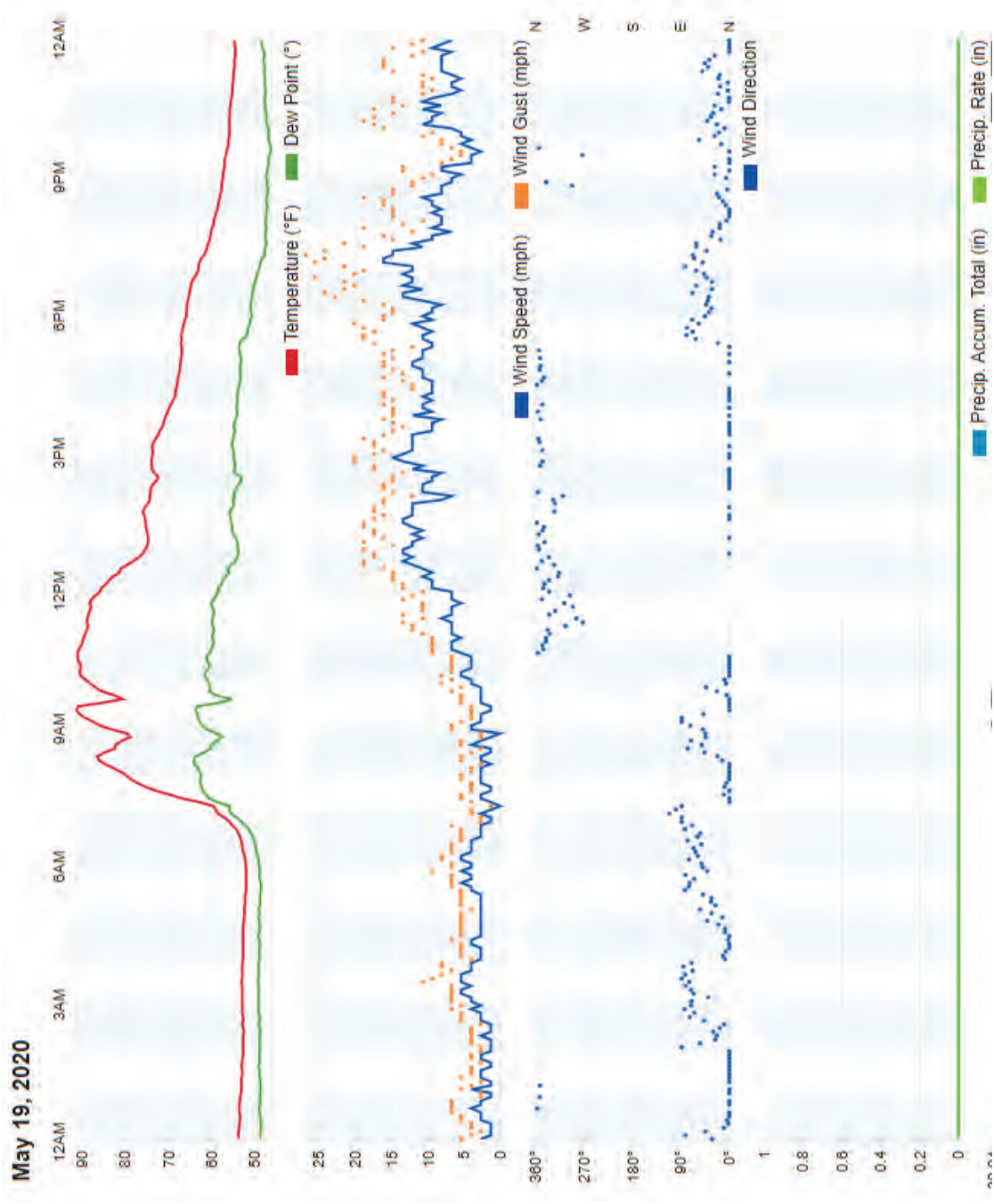
BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 31 Reading: 1.2 ppm
Downwind Location Description: Plare Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Attachment 6

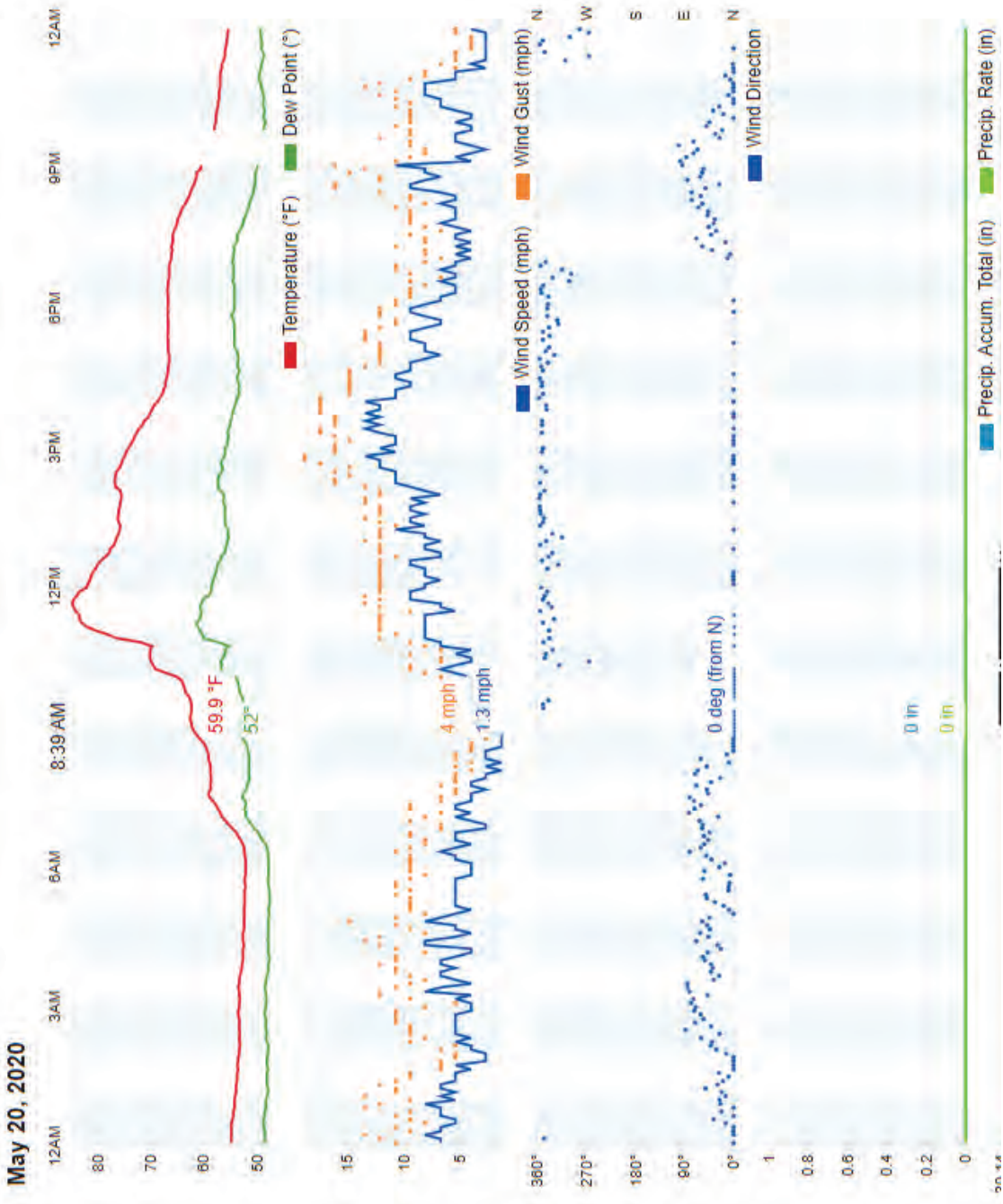
Weather Data



Second Quarter 2020

LMR Weather For May 19, 2020

West Contra Costa County Sanitary Landfill, Contra Costa County, California



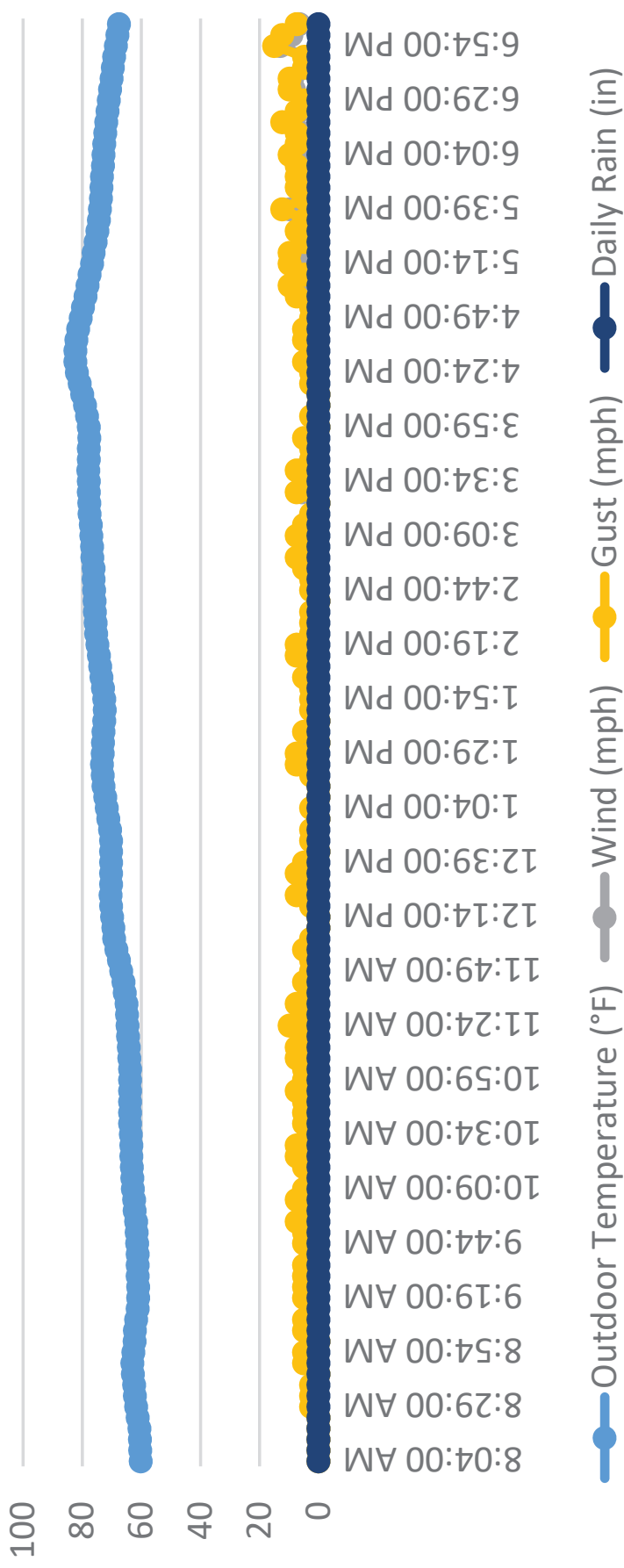
Second Quarter 2020

LMR Weather For May 20, 2020

West Contra Costa County Sanitary Landfill, Contra Costa County, California

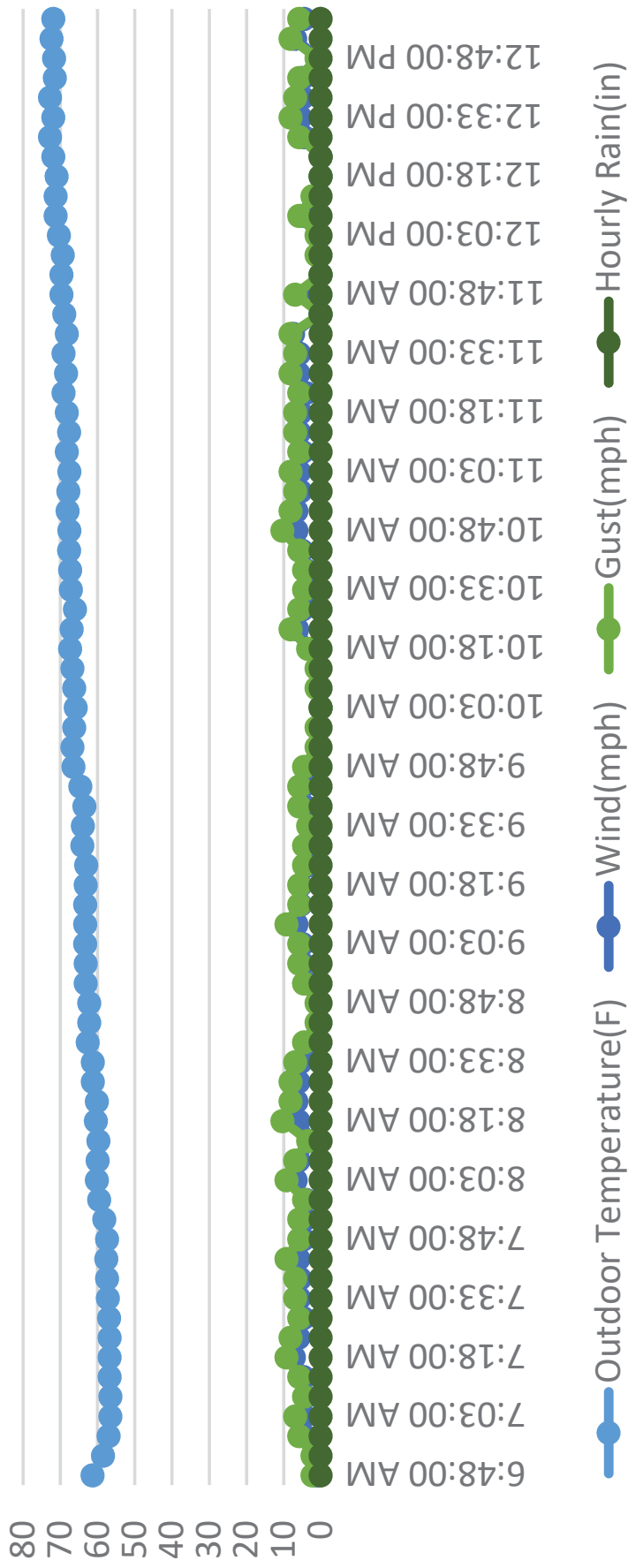
West Contra Costa County Sanitary Landfill Weather

May 21, 2020



West Contra Costa County Sanitary Landfill Weather

June 1, 2020



November 6, 2020
Project No. 07219040.00

Mr. Ed Baquerizo
Republic Services, Inc.
1 Parr Boulevard
Richmond, California 94801

Subject: West Contra Costa County Landfill – Richmond, California
Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS)
Surface Emissions Monitoring for Third Quarter 2020.

Dear Mr. Baquerizo:

SCS Field Services (SCS-FS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Closed West Contra Costa Sanitary Landfill (Site) during the third quarter 2020. This report includes the results of surface scan, component emissions and blower/flare station emissions monitoring for the Site for this monitoring period.

SCS-FS appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Michael Flanagan at (925) 421-9768 or Whitney Stackhouse (209) 338-7990 if you have any questions or comments.

Sincerely,



Whitney M. Stackhouse
Project Manager
SCS Field Services



Michael Flanagan
Project Manager
SCS Field Services

WS

cc: Enclosure Sean Bass, SCS Field Services
Art Jones, SCS Field Services

West Contra Costa County Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring

Third Quarter 2020

Presented to:



Mr. Ed Baquerizo
Republic Services, Inc.
1 Parr Boulevard
Richmond, California 94801

SCS FIELD SERVICES

File No. 07219040.00 | November 5, 2020

SCS FIELD SERVICES
4730 Enterprise Way
Modesto, CA 95356

West Contra Costa County Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring Third Quarter 2020

INTRODUCTION

This letter provides results of the July 27 and 28, 2020 and August 6, 12, 13 and 25, 2020, LMR and NSPS landfill surface emissions monitoring (SEM) performed by SCS Field Services (SCS) at the closed West Contra Costa County Landfill. All work was performed in accordance with our approved Work Scope dated September 13, 2018, and the LMR requirements.

SUMMARY AND CONCLUSIONS

On July 27 and 28, 2020 and August 6, 12, 13 and 25, 2020, instantaneous and integrated surface emissions monitoring was performed over the surface of the site. Testing results indicated no uncorrectable exceedances of the LMR and NSPS instantaneous threshold limit of 500 parts per million by volume (ppmv), or the integrated average of 25 ppmv as required by the LMR, above background. Based on these monitoring results no further follow up testing was required.

On July 27 and 28, 2020 and August 6, 12, 13 and 25, 2020, SCS performed Third Quarter 2020 surface emissions monitoring testing as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that one (1) location exceeded the 500 ppmv maximum concentration on the above-mentioned date (Table 1 in Attachment 3). The required 10 and 30-day NSPS and LMR follow-up monitoring indicated that this location had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results no follow up testing was required.

Also, during the instantaneous monitoring event, SCS performed integrated monitoring of the landfill surface. As required by the LMR, the landfill was divided into 50,000 square foot areas. The West Contra Costa County Landfill surface area was therefore divided into 165 grids, as shown on Figure 1 in Attachment 1. During this monitoring event, grids 87-89, 95-97, 103-105, 111- 113, 119-121, 126-128, 141, 147,148,153 and 154 were not monitored, in accordance with the regulations, due to ongoing active composting activities, unsafe conditions, or there was no waste in place prior to the monitoring event.

During the monitoring event, there were no areas observed to exceed the LMR integrated average of 25 ppmv (Table 2 in Attachment 4). Based on these monitoring results no follow up testing was required. These results are discussed in a subsequent section of this report.

In addition, quarterly monitoring of the pressurized piping or components of the Gas Collection and Control System (GCCS) that are under positive pressure must be performed quarterly. Results of the testing of the landfill gas (LFG) Blower Flare Station (BFS) pressurized pipe and components indicated that all test locations were in compliance with the 500 ppmv requirements.

Further, as required under the LMR, any location on the landfill that has an observed instantaneous methane concentration above 200 ppmv, must be stake-marked and Global Positioning System (GPS) located on a site figure. No locations were observed to exceed the 200 ppmv threshold (Attachment 3). If concentrations exceeding 200 ppmv are observed during monitoring events, they are reported to site personnel and will be reported in the next submittal of the annual LMR report.

As stipulated in LMR, if uncorrectable exceedances within the 10-day limitation are detected or emissions are discovered during an inspection by Regulatory Agencies, the landfill must perform monitoring on a 25-foot pathway on a quarterly basis for active disposal sites. Upon completion of four consecutive SEM events without an uncorrectable exceedance of the 25 ppmv or 500 ppmv standards, other than non-repeatable momentary readings, the landfill may perform the monitoring on a 100-foot spacing on an annual basis for closed landfills or quarterly for active disposal sites. In accordance with the provisions of the LMR, the monitoring of the landfill will be done quarterly on a 25-foot pathway based on a regulatory inspection during September 2019, in which exceedances were observed. Note that the subsequent monitoring since the First Quarter 2020 has shown no uncorrectable exceedances.

Finally, to help prevent potential future exceedances, SCS routinely inspects the landfill surface, and any observed areas in need of repair would be noted, and the findings sent directly to the client.

BACKGROUND

The West Contra Costa Sanitary Landfill is an inactive organic refuse disposal site. By way of background, organic materials buried in a landfill decompose anaerobically (in the absence of oxygen) producing a combustible gas, which contains approximately 50 to 60 percent methane, 40 to 50 percent carbon dioxide, and trace amounts of various other gases, some of which are odorous. The West Contra Costa Sanitary Landfill property contains a GCCS to control the combustible gases generated in the landfill that may otherwise either vent vertically to the atmosphere or migrate horizontally through subsurface soil to locations on adjacent properties.

SURFACE EMISSIONS MONITORING

On July 27 and 28, 2020 and August 5, 6, 12, 13 and 25, 2020, the instantaneous and integrated SEM was performed over the surface of the subject site. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the LMR threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring in the 50,000 square foot grids as required under the LMR. During this event, SCS performed the annual monitoring on a 25-foot pathway in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

Instruments used to perform the landfill surface emission testing consisted of the following:

- Thermo Scientific TVA 2020 portable Flame Ionization Detector (FID). This instrument measures methane in air over a range of 1 to 50,000 ppmv. The TVA 2020 meets the State of California Air Resources Board (CARB) requirements for combined instantaneous and integrated monitoring and was calibrated in accordance with United States Environmental Protection Agency (US EPA) Method 21.

- Electronic Weather Anemometer with continuous recorder for meteorological conditions in accordance with the LMR.

Instrument calibration logs and weather information are shown in Attachments 5 and 6.

SURFACE EMISSIONS MONITORING PROCEDURES

Surface emissions monitoring was conducted in accordance with the LMR and NSPS requirements. Monitoring was performed with the FID inlet held within 3-inches of the landfill surface while a technician walked a grid in parallel paths not more than 25 or 100-feet apart over the surface of the landfill. Cracks, holes and other cover penetrations in the surface were also tested. Surface emissions readings were monitored continuously and recorded every 5 seconds. Any areas in exceedance of the 200 or 500 ppmv standards (reporting and compliance levels, respectively) would be GPS tagged and stake-marked for on-site personnel to perform remediation or repairs.

The integrated average is based on the readings stored on the instrument, which are recorded every 5 seconds. The readings are then downloaded and the averages are calculated for each grid using SCS eTools®. All readings are maintained in this secure SCS Database. The readings are not provided in the report due to the volume of readings, but can be furnished upon request.

Recorded wind speed results are shown in Attachment 5. Wind speed averages were observed to remain below 5 miles per hour, and no instantaneous speeds exceeded 10 miles per hour. No rainfall had occurred within the 72 hour of the monitoring events. Therefore, site meteorological conditions were within the LMR requirements on the above mentioned date.

TESTING RESULTS

During this event, SCS performed the quarterly monitoring on a 25-foot pathway in accordance with the rule as required under the LMR and NSPS. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the LMR or NSPS threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring (LMR).

On July 27 and 28, 2020 and August 5, 6, 12 13 and 25, 2020, SCS performed Third Quarter 2020 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that one (1) locations exceeded the 500 ppmv maximum concentration. The required 10 and 30-day NSPS and LMR follow-up monitoring (performed on August 5 and 25, 2020) indicated that the location had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results, no additional follow up testing is required. Results of the monitoring are shown in Attachments 2 and 3 (Table 1).

Additionally, calculated integrated monitoring indicated no integrated exceedances of the 25-ppmv requirement. Results of the monitoring are shown in Attachment 4 (Table 2). Based on these monitoring results no follow up testing was required. Calibration logs for the monitoring equipment are provided in Attachment 5.

During this monitoring event, grids 87-89, 95-97, 103-105, 111- 113, 119-121, 126-128, 141, 147,148,153 and 154 were not monitored, in accordance with the LMR, due to active composting activities, unsafe conditions, heavy vegetation or no waste in place. SCS will continue to monitor all accessible locations during the Fourth Quarter 2020.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On July 28, 2020, quarterly leak monitoring was performed in accordance with the LMR. SCS performed LFG pressurized pipe and component leak monitoring at the BFS. Monitoring was performed with the detector inlet held one-half of an inch from pressurized pipe and associated components. No locations exceeding the 500 ppmv threshold were observed during our monitoring event. The maximum reading, which was 3.9 ppmv, was well below the maximum threshold (see Table 1 for component results). Therefore, all pressurized pipe and components located at the LFG BFS were in compliance at the time of our testing.

PROJECT SCHEDULE

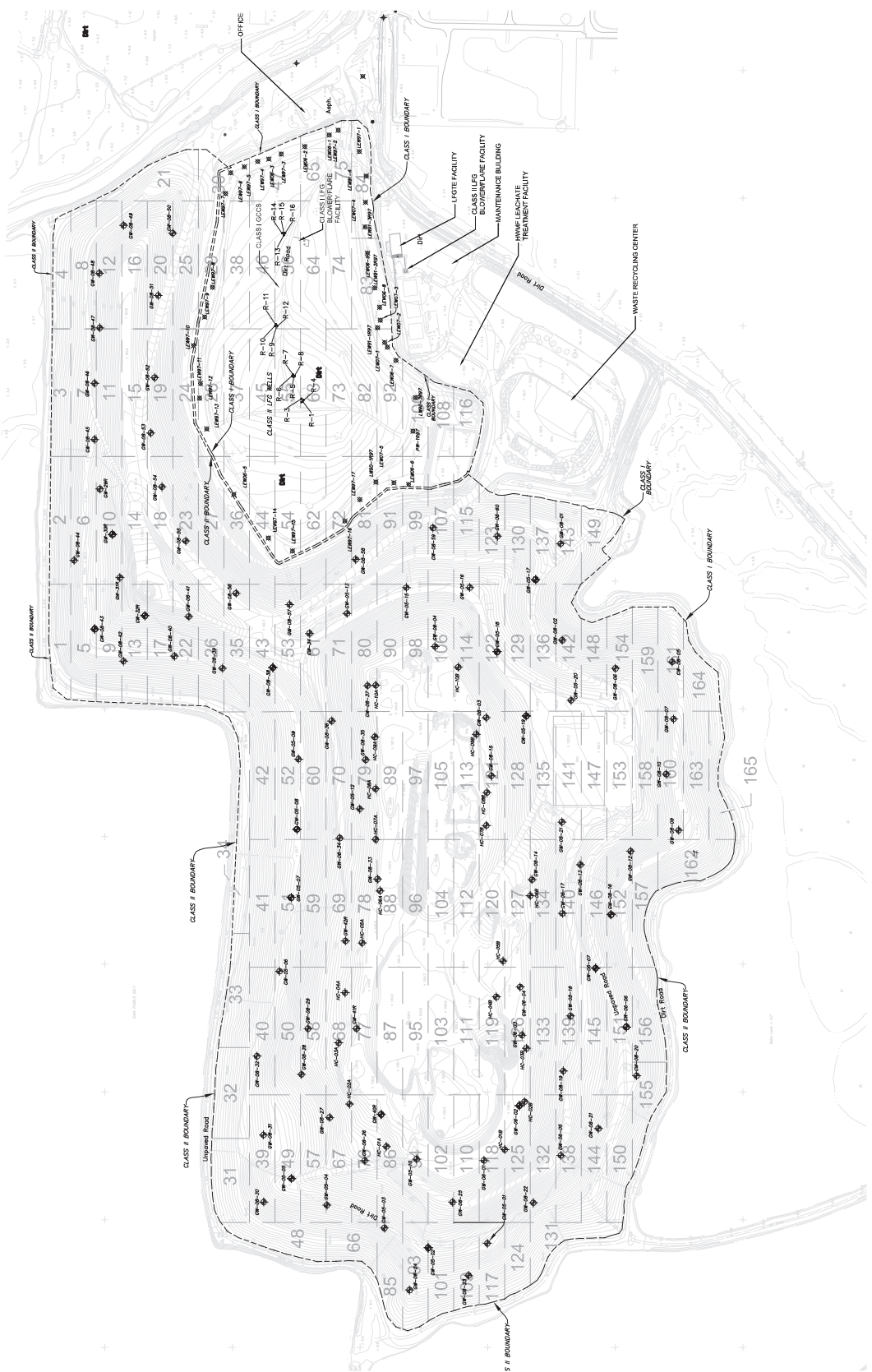
In accordance with our approved Work Scope, the next quarterly event is scheduled to be performed by the end of December 2020.

STANDARD PROVISIONS

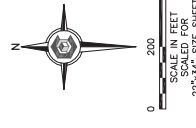
This report addresses conditions of the subject site during the testing dates only. Accordingly, we assume no responsibility for any changes that may occur subsequent to our testing which could affect the surface emissions at the subject site or adjacent properties.

Attachment 1

Landfill Grid



- LEGEND**
- EXISTING CLASS 1 SOLID WASTE BOUNDARY
 - EXISTING CLASS 2 SOLID WASTE BOUNDARY
 - EXISTING 10' CONTOUR
 - EXISTING 2' CONTOUR
 - SEW GRID BLOCK
 - SEW GRID BLOCK WITH NO WASTE IN PLACE



NOTES:

- TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY H.W. GEOSPATIAL, INC., A PROFESSIONAL ENGINEERING FIRM LICENSED UNDER THE CALIFORNIA PROFESSIONAL ENGINEERING ACT AND THE CALIFORNIA COORDINATE SYSTEM, ZONE 10, NAD27.

DRAFT

SHEET NO. **1**
 PROJECT NO. 10216
 WEST COSTA COUNTY SANITARY LANDFILL
 CONTRA COSTA COUNTY, CALIFORNIA
 SURFACE EMISSIONS MONITORING
 GRID MAP



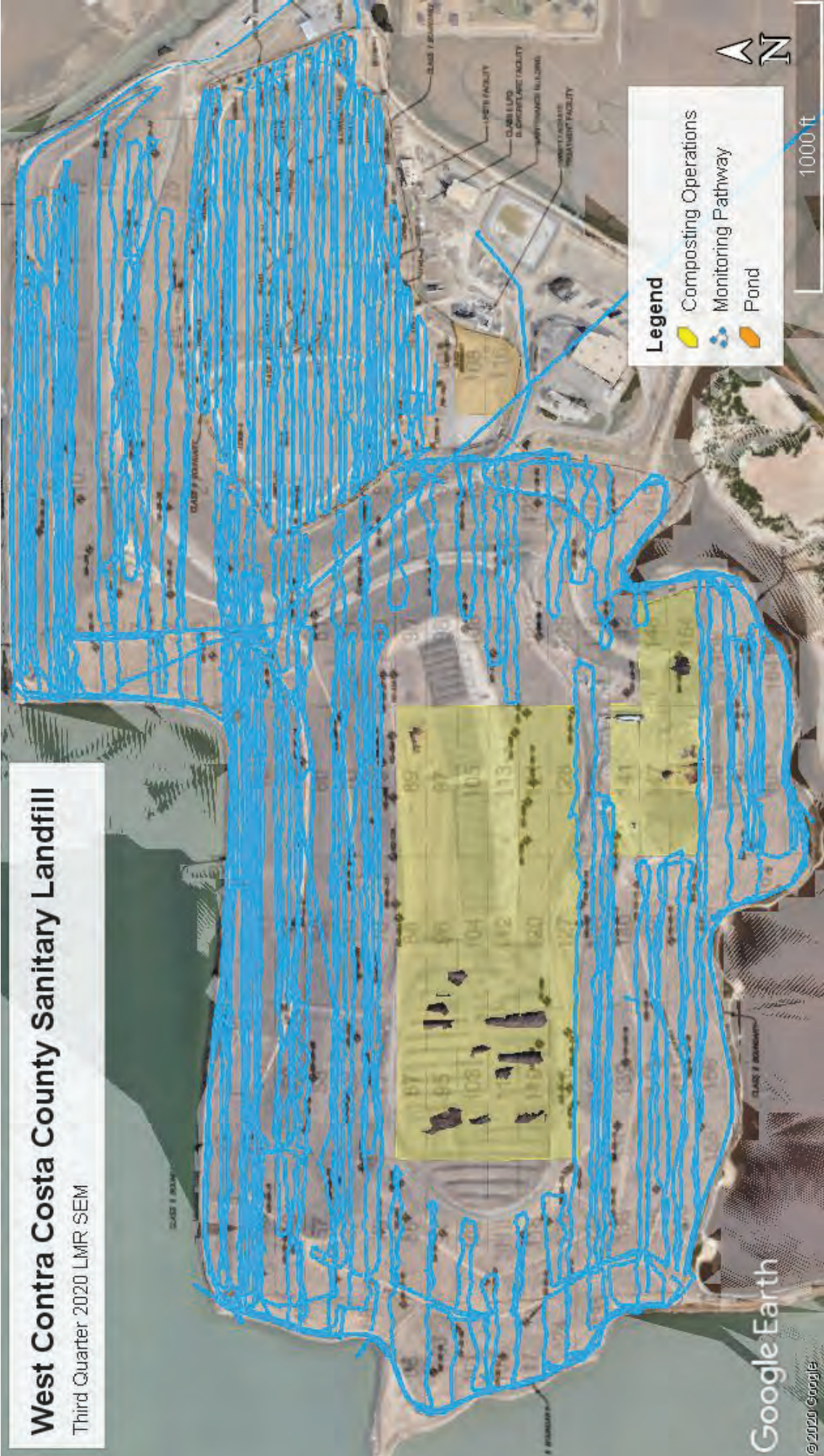
REV	DATE	DESCRIPTION	DWN BY	ISS BY	CHEK BY	APP BY
	5/7/11/2011		DJW	DJW		RFJ
DRAWN BY: DJW			CHECKED BY: RFJ			APPROVED BY: DJW

Attachment 2

Surface Pathway

West Contra Costa County Sanitary Landfill

Third Quarter 2020 LMR SEM



Third Quarter 2020

LMR Surface Emissions Monitoring Pathway

West Contra Costa County Sanitary Landfill, Contra Costa County, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

Third Quarter 2020

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Instantaneous Data Report for July 27 and 28, 2020 and August 5, 6, 12, 13 and 25, 2020

Location	Initial Concentration (ppmv)	First 10-Day Concentration (ppmv)	30-Day Concentration (ppmv)
	July 27, 2020	August 5, 2020	August 25, 2020
GW-05-09	800	250	<200

Pressurized Pipe and Component Results

Route	Date	Concentration (ppmv)
Flare	7/28/2020	3.9

No other exceedances of the 200 or 500 ppm thresholds were observed during the monitoring performed during the third quarter 2020. The highest reading observed was 800 ppmv.



Third Quarter 2020

Initial and Follow-Up Emissions Monitoring Results Greater Than 500 ppmv
West Contra Costa County Sanitary Landfill, Contra Costa County, California

Attachment 4

Integrated Monitoring Results

Third Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

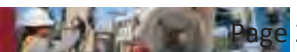
Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 001	8/13/2020	3.62	
W.CoCo 002	8/13/2020	3.34	
W.CoCo 003	8/13/2020	3.21	
W.CoCo 004	8/13/2020	4.55	
W.CoCo 005	8/13/2020	3.87	
W.CoCo 006	8/13/2020	3.04	
W.CoCo 007	8/13/2020	4.38	
W.CoCo 008	8/13/2020	4.40	
W.CoCo 009	8/13/2020	4.03	
W.CoCo 010	8/13/2020	4.21	
W.CoCo 011	8/13/2020	3.98	
W.CoCo 012	8/13/2020	4.03	
W.CoCo 013	8/13/2020	3.94	
W.CoCo 014	8/13/2020	3.86	
W.CoCo 015	8/13/2020	4.07	
W.CoCo 016	8/13/2020	3.83	
W.CoCo 017	8/13/2020	3.76	
W.CoCo 018	7/28/2020	3.94	
W.CoCo 019	8/13/2020	3.86	
W.CoCo 020	8/13/2020	3.58	
W.CoCo 021	7/28/2020	3.60	
W.CoCo 022	7/28/2020	3.34	
W.CoCo 023	7/28/2020	3.32	
W.CoCo 024	7/28/2020	4.47	
W.CoCo 025	7/28/2020	3.50	
W.CoCo 026	7/28/2020	3.65	
W.CoCo 027	7/28/2020	4.96	
W.CoCo 028	7/27/2020	4.05	
W.CoCo 029	7/27/2020	3.85	
W.CoCo 030	7/27/2020	4.21	
W.CoCo 031	8/6/2020	13.15	
W.CoCo 032	8/6/2020	3.10	
W.CoCo 033	8/6/2020	3.00	
W.CoCo 034	8/6/2020	3.43	
W.CoCo 035	7/28/2020	4.31	
W.CoCo 036	8/13/2020	4.02	
W.CoCo 037	8/13/2020	4.53	
W.CoCo 038	8/13/2020	3.04	
W.CoCo 039	8/13/2020	3.20	
W.CoCo 040	8/13/2020	4.54	
W.CoCo 041	8/13/2020	4.06	



Third Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 042	8/6/2020	4.44	
W.CoCo 043	8/6/2020	3.51	
W.CoCo 044	8/13/2020	3.66	
W.CoCo 045	8/12/2020	2.62	
W.CoCo 046	8/12/2020	2.43	
W.CoCo 047	8/12/2020	2.47	
W.CoCo 048	8/6/2020	5.30	
W.CoCo 049	8/6/2020	3.25	
W.CoCo 050	8/6/2020	3.46	
W.CoCo 051	8/6/2020	3.44	
W.CoCo 052	8/6/2020	3.41	
W.CoCo 053	8/13/2020	3.57	
W.CoCo 054	8/13/2020	3.52	
W.CoCo 055	8/13/2020	2.42	
W.CoCo 056	8/13/2020	2.35	
W.CoCo 057	8/6/2020	2.01	
W.CoCo 058	8/6/2020	2.09	
W.CoCo 059	8/6/2020	2.24	
W.CoCo 060	8/6/2020	2.03	
W.CoCo 061	8/6/2020	2.35	
W.CoCo 062	8/13/2020	2.64	
W.CoCo 063	8/13/2020	2.03	
W.CoCo 064	8/12/2020	2.17	
W.CoCo 065	8/12/2020	2.49	
W.CoCo 066	8/13/2020	2.96	
W.CoCo 067	8/13/2020	3.11	
W.CoCo 068	8/6/2020	3.35	
W.CoCo 069	8/6/2020	3.57	
W.CoCo 070	8/6/2020	3.02	
W.CoCo 071	8/13/2020	2.85	
W.CoCo 072	8/13/2020	2.88	
W.CoCo 073	8/13/2020	1.77	
W.CoCo 074	8/12/2020	1.83	
W.CoCo 075	8/12/2020	1.99	
W.CoCo 076	8/6/2020	2.68	
W.CoCo 077	8/6/2020	2.94	
W.CoCo 078	8/6/2020	2.96	
W.CoCo 079	8/6/2020	2.68	
W.CoCo 080	8/13/2020	2.89	
W.CoCo 081	8/13/2020	2.45	
W.CoCo 082	8/13/2020	1.56	



Third Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 083	8/13/2020	1.53	
W.CoCo 084	8/13/2020	1.92	
W.CoCo 085	8/13/2020	2.73	
W.CoCo 086	8/6/2020	2.52	
W.CoCo 087	--	--	Composting Operations
W.CoCo 089	--	--	Composting Operations
W.CoCo 089	--	--	Composting Operations
W.CoCo 090	8/13/2020	3.50	
W.CoCo 091	8/12/2020	3.20	
W.CoCo 092	8/12/2020	3.79	
W.CoCo 093	8/6/2020	2.49	
W.CoCo 094	8/6/2020	2.49	
W.CoCo 095	--	--	Composting Operations
W.CoCo 096	--	--	Composting Operations
W.CoCo 097	--	--	Composting Operations
W.CoCo 098	8/12/2020	2.10	
W.CoCo 099	8/12/2020	3.21	
W.CoCo 100	8/12/2020	1.16	
W.CoCo 101	8/6/2020	2.49	
W.CoCo 102	8/6/2020	2.49	
W.CoCo 103	--	--	Composting Operations
W.CoCo 104	--	--	Composting Operations
W.CoCo 105	--	--	Composting Operations
W.CoCo 106	8/12/2020	2.91	
W.CoCo 107	8/12/2020	3.15	
W.CoCo 108	--	--	Pond
W.CoCo 109	8/6/2020	1.95	
W.CoCo 110	8/6/2020	1.97	
W.CoCo 111	--	--	Composting Operations
W.CoCo 112	--	--	Composting Operations
W.CoCo 113	--	--	Composting Operations
W.CoCo 114	8/12/2020	2.95	
W.CoCo 115	8/12/2020	3.02	
W.CoCo 116	--	--	Pond
W.CoCo 117	8/6/2020	2.46	
W.CoCo 118	8/6/2020	2.42	
W.CoCo 119	--	--	Composting Operations
W.CoCo 120	--	--	Composting Operations
W.CoCo 121	--	--	Composting Operations
W.CoCo 122	8/12/2020	2.04	
W.CoCo 123	8/12/2020	3.07	

Third Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 124	8/6/2020	2.49	
W.CoCo 125	8/6/2020	2.47	
W.CoCo 126	--	--	Composting Operations
W.CoCo 127	--	--	Composting Operations
W.CoCo 128	--	--	Composting Operations
W.CoCo 129	8/13/2020	6.70	
W.CoCo 130	8/12/2020	3.01	
W.CoCo 131	8/13/2020	5.68	
W.CoCo 132	8/13/2020	8.16	
W.CoCo 133	8/13/2020	8.07	
W.CoCo 134	8/13/2020	5.90	
W.CoCo 135	8/13/2020	7.93	
W.CoCo 136	8/12/2020	3.58	
W.CoCo 137	8/12/2020	3.01	
W.CoCo 138	8/12/2020	1.44	
W.CoCo 139	8/12/2020	1.67	
W.CoCo 140	8/12/2020	1.82	
W.CoCo 141	--	--	Composting Operations
W.CoCo 142	8/12/2020	2.05	
W.CoCo 143	8/12/2020	2.15	
W.CoCo 144	8/12/2020	3.55	
W.CoCo 145	8/12/2020	3.61	
W.CoCo 146	8/12/2020	3.56	
W.CoCo 147	--	--	Composting Operations
W.CoCo 148	--	--	Composting Operations
W.CoCo 149	8/12/2020	3.80	
W.CoCo 150	8/12/2020	3.43	
W.CoCo 151	8/12/2020	3.40	
W.CoCo 152	8/12/2020	3.37	
W.CoCo 153	--	--	Composting Operations
W.CoCo 154	--	--	Composting Operations
W.CoCo 155	8/12/2020	1.26	
W.CoCo 156	8/12/2020	1.26	
W.CoCo 157	8/12/2020	1.25	
W.CoCo 158	8/12/2020	1.24	
W.CoCo 159	8/12/2020	2.18	
W.CoCo 160	8/12/2020	3.31	
W.CoCo 161	8/12/2020	4.01	
W.CoCo 162	8/12/2020	3.40	
W.CoCo 163	8/12/2020	1.07	
W.CoCo 164	8/12/2020	1.74	



Third Quarter 2020

Table 2. Integrated Surface Emissions Monitoring Results West Contra Costa County Landfill, Contra Costa County, California

Point Name	Record Date	FID Concentration (ppm)	Comments
W.CoCo 165	8/12/2020	1.01	



Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-27-20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	501	1	1
2	1	501	1	1
3	2	500	0	1

Average Difference: .7
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{.7}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>126654</u>	Counts Observed for the Span= <u>127004</u>
Counters Observed for the Zero= <u>2712</u>	Counters Observed for the Zero= <u>2735</u>
Trial 2:	
Counts Observed for the Span= <u>126146</u>	
Counters Observed for the Zero= <u>2678</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Flare Bay Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-27-20 Site Name: WCC
 Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>
2	<u>1</u>	<u>500</u>	<u>0</u>	<u>1</u>
3	<u>2</u>	<u>502</u>	<u>2</u>	<u>1</u>

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.8 \%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>125582</u>	Counts Observed for the Span= <u>125319</u>
Counters Observed for the Zero= <u>2615</u>	Counters Observed for the Zero= <u>2578</u>
Trial 2:	
Counts Observed for the Span= <u>126133</u>	
Counters Observed for the Zero= <u>2698</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Bay Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Post

Date: 7-27-20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: _____ MPH Wind Direction: _____ Barometric Pressure: _____ "Hg
 Air Temperature: _____ °F General Weather Conditions: _____

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>1</u>	<u>500</u>	<u>0</u>	
2	<u>2</u>	<u>502</u>	<u>2</u>	
3	<u>2</u>	<u>502</u>	<u>2</u>	

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - 1.3 / 500 x 100%
 = 99.7 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>129137</u>	Counts Observed for the Span= <u>129790</u>
Counters Observed for the Zero= <u>2504</u>	Counters Observed for the Zero= <u>2565</u>
Trial 2:	
Counts Observed for the Span= <u>128799</u>	
Counters Observed for the Zero= <u>2463</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Bay Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-27-20 Site Name: WCC post
 Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: _____ MPH Wind Direction: _____ Barometric Pressure: _____ "Hg
 Air Temperature: _____ °F General Weather Conditions: _____

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	2	500	0	1
2	1	500	0	1
3	1	502	2	2

Average Difference: -7
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% \cdot \frac{-7}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>128124</u>	Counts Observed for the Span= <u>129012</u>
Counters Observed for the Zero= <u>2437</u>	Counters Observed for the Zero= <u>2395</u>
Trial 2:	
Counts Observed for the Span= <u>128595</u>	
Counters Observed for the Zero= <u>2495</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Bay Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-28-20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SSW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: Overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>3</u>	<u>501</u>	<u>1</u>	<u>1</u>
2	<u>1</u>	<u>501</u>	<u>1</u>	<u>1</u>
3	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>126696</u>	Counts Observed for the Span= <u>127134</u>
Counters Observed for the Zero= <u>2715</u>	Counters Observed for the Zero= <u>2753</u>
Trial 2:	
Counts Observed for the Span= <u>127003</u>	
Counters Observed for the Zero= <u>2685</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 38 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-28-20 Site Name: WCC
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SSW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>1</u>	<u>500</u>	<u>0</u>	<u>1</u>
2	<u>1</u>	<u>501</u>	<u>1</u>	<u>1</u>
3	<u>2</u>	<u>501</u>	<u>1</u>	<u>3</u>

Average Difference: .7
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% \cdot \frac{.7}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>128821</u>	Counts Observed for the Span= <u>128551</u>
Counters Observed for the Zero= <u>2857</u>	Counters Observed for the Zero= <u>2755</u>
Trial 2:	
Counts Observed for the Span= <u>128093</u>	
Counters Observed for the Zero= <u>2799</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 3B Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-28-20 Site Name: WCC
 Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SSW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	2	502	2	1
2	1	502	2	1
3	2	500	0	1

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - 1.3 /500 x 100%
 = 99.7 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>127164</u>	Counts Observed for the Span= <u>125996</u>
Counters Observed for the Zero= <u>2718</u>	Counters Observed for the Zero= <u>2725</u>
Trial 2:	
Counts Observed for the Span= <u>127097</u>	
Counters Observed for the Zero= <u>2689</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grnd38 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-28-20 Site Name: WCC
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SSW Barometric Pressure: 30 "Hg
 Air Temperature: 54 °F General Weather Conditions: overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	562	2	1
2	3	501	1	1
3	1	500	0	2

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - $\frac{1}{500} \times 100\%$
 = **99.8** %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>126465</u>	Counts Observed for the Span= <u>127089</u>
Counters Observed for the Zero= <u>2697</u>	Counters Observed for the Zero= <u>2710</u>
Trial 2:	
Counts Observed for the Span= <u>126912</u>	
Counters Observed for the Zero= <u>2638</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 38 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Post

Date: 7-28-20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 79 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1723 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>
2	<u>2</u>	<u>500</u>	<u>0</u>	<u>1</u>
3	<u>1</u>	<u>500</u>	<u>0</u>	<u>2</u>

Average Difference: .3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - .3 / 500 x 100%
 = 99.9 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>129013</u>	Counts Observed for the Span= <u>128873</u>
Counters Observed for the Zero= <u>2556</u>	Counters Observed for the Zero= <u>2563</u>
Trial 2:	
Counts Observed for the Span= <u>128156</u>	
Counters Observed for the Zero= <u>2428</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grnd 38 Reading: 1.0 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Post

Date: 7-28-20 Site Name: WCC
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 79 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	500	0	1
2	2	499	1	1
3	1	501	1	1

Average Difference: .7
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{.7}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>130121</u>	Counts Observed for the Span= <u>129656</u>
Counters Observed for the Zero= <u>2669</u>	Counters Observed for the Zero= <u>2589</u>
Trial 2:	
Counts Observed for the Span= <u>129876</u>	
Counters Observed for the Zero= <u>2535</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 38 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-28-20 Site Name: WCC Post
 Inspector(s): Ryan Haslan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 79 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	500	0	1
2	1	502	2	1
3	3	502	2	2

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1.3}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>130501</u>	Counts Observed for the Span= <u>128365</u>
Counters Observed for the Zero= <u>2598</u>	Counters Observed for the Zero= <u>2512</u>
Trial 2:	
Counts Observed for the Span= <u>129939</u>	
Counters Observed for the Zero= <u>2468</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 38 Reading: 1.0 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 7-28-20 Site Name: WCC Post
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 79 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	501	1	1
2	1	501	1	1
3	1	501	1	1

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span <u>129732</u>	Counts Observed for the Span= <u>130016</u>
Counters Observed for the Zero= <u>2453</u>	Counters Observed for the Zero= <u>2566</u>
Trial 2:	
Counts Observed for the Span= <u>129546</u>	
Counters Observed for the Zero= <u>2480</u>	

Post Monitoring Calibration Check

Zero Air Reading: 6 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grnd 38 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-6-20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: S Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	501	501-1	1
2	1	502	2	1
3	1	501	1	1

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= 100\% - \frac{1.3}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>125112</u>	Counts Observed for the Span = <u>125454</u>
Counters Observed for the Zero = <u>2694</u>	Counters Observed for the Zero = <u>2636</u>
Trial 2:	
Counts Observed for the Span = <u>125884</u>	
Counters Observed for the Zero = <u>2727</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grnd 13 Reading: 1.0 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-6-20 Site Name: WCC
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: S Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the Instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1230 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	501	1	1
2	1	501	1	1
3	2	501	1	1

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= 100\% \cdot \frac{1}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>125657</u>	Counts Observed for the Span = <u>126012</u>
Counters Observed for the Zero = <u>2786</u>	Counters Observed for the Zero = <u>2704</u>
Trial 2:	
Counts Observed for the Span = <u>125161</u>	
Counters Observed for the Zero = <u>2675</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 13 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-6-20 Site Name: EWCC
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: S Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	502	2	1
2	2	500	0	1
3	2	502	2	1

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= 100\% - \frac{1.3}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>128210</u>	Counts Observed for the Span = <u>128575</u>
Counters Observed for the Zero = <u>2993</u>	Counters Observed for the Zero = <u>2834</u>
Trial 2:	
Counts Observed for the Span = <u>127971</u>	
Counters Observed for the Zero = <u>2969</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 13 Reading: 1.6 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-6-20 Site Name: WCC post
 Inspector(s): Liam McOrinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 83 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>1</u>	<u>502</u>	<u>2</u>	<u>1</u>
2	<u>1</u>	<u>501</u>	<u>1</u>	<u>1</u>
3	<u>1</u>	<u>500</u>	<u>0</u>	<u>1</u>

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 2:	Trial 3:
Counts Observed for the Span= <u>128512</u>	Counts Observed for the Span= <u>129413</u>	Counts Observed for the Span= <u>128959</u>
Counters Observed for the Zero= <u>2465</u>	Counters Observed for the Zero= <u>2536</u>	Counters Observed for the Zero= <u>2395</u>

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 5 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm
 Downwind Location Description: mid 13 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Post

Date: 8-6-20 Site Name: WCC
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 83 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	2	502	2	1
2	3	502	2	1
3	2	500	0	1

Average Difference: 1.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1.3}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>128286</u>	Counts Observed for the Span= <u>129013</u>
Counters Observed for the Zero= <u>2550</u>	Counters Observed for the Zero= <u>2515</u>
Trial 2:	
Counts Observed for the Span= <u>128397</u>	
Counters Observed for the Zero= <u>2386</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 13 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-6-20 Site Name: WCC Post
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 83 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>2</u>	<u>501</u>	<u>1</u>	<u>1</u>
2	<u>2</u>	<u>500</u>	<u>0</u>	<u>1</u>
3	<u>2</u>	<u>500</u>	<u>0</u>	<u>1</u>

Average Difference: .3
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= 100\% - \frac{.3}{500} \times 100\%$$

$$= 99.9\%$$

Span Sensitivity:

Trial 1:	Trial 2:	Trial 3:
Counts Observed for the Span = <u>131011</u>	Counts Observed for the Span = <u>130026</u>	Counts Observed for the Span = <u>131592</u>
Counters Observed for the Zero = <u>2668</u>	Counters Observed for the Zero = <u>2629</u>	Counters Observed for the Zero = <u>2668</u>

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Gr. di #3 Reading: 1.9 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-12-20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: *Recalibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration error must be less than or equal to 10% of the calibration gas value.*

Calibration Number: 1223 Calibration Gas Concentration: 500ppm

Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
<u>1</u>	<u>502</u>	<u>2</u>	<u>1</u>
<u>1</u>	<u>500</u>	<u>0</u>	<u>1</u>
<u>1</u>	<u>500</u>	<u>0</u>	<u>1</u>

Average Difference: 0.7

*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= \frac{100\% - 0.7}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>128113</u>	Counts Observed for the Span = <u>128229</u>
Counters Observed for the Zero = <u>2672</u>	Counters Observed for the Zero = <u>2784</u>
Trial 2:	
Counts Observed for the Span = <u>127820</u>	
Counters Observed for the Zero = <u>2710</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 1 Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-12-20 Site Name: WCC
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	2	501	1	1
2	1	501	1	1
3	1	501	1	1

Average Difference: 1

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>126651</u>	Counts Observed for the Span= <u>127681</u>
Counters Observed for the Zero= <u>2977</u>	Counters Observed for the Zero= <u>2845</u>
Trial 2:	
Counts Observed for the Span= <u>127232</u>	
Counters Observed for the Zero= <u>2883</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm
 Downwind Location Description: Grid 1 Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-12-20 Site Name: WCC
 Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	3	501	1	
2	1	501	1	
3	2	500	0	

Average Difference: 0.7

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{0.7}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>125523</u>	Counts Observed for the Span= <u>126374</u>
Counters Observed for the Zero= <u>2879</u>	Counters Observed for the Zero= <u>2712</u>
Trial 2:	
Counts Observed for the Span= <u>126019</u>	
Counters Observed for the Zero= <u>2836</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm
 Downwind Location Description: Grid 1 Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-12-20 Site Name: WCC
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SW Barometric Pressure: 30 "Hg
 Air Temperature: 56 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check
Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	500	0	1
2	2	500	0	1
3	1	501	1	1

Average Difference: 0.3
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% \cdot \frac{0.3}{500} \times 100\%$$

$$= 99.9\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>125190</u>	Counts Observed for the Span= <u>125468</u>
Counters Observed for the Zero= <u>3010</u>	Counters Observed for the Zero= <u>2913</u>
Trial 2:	
Counts Observed for the Span= <u>125885</u>	
Counters Observed for the Zero= <u>2938</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm
 Downwind Location Description: Grid 1 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Post

Date: 8-12-20 Site Name: WCC
 Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 79 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	2	501	1	1
2	2	501	1	1
3	1	502	2	1

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% \cdot \frac{1.3}{500} \times 100\%$$

$$= 99.7\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>136231</u>	Counts Observed for the Span= <u>129896</u>
Counters Observed for the Zero= <u>2481</u>	Counters Observed for the Zero= <u>2516</u>
Trial 2:	
Counts Observed for the Span= <u>129897</u>	
Counters Observed for the Zero= <u>2568</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm
 Downwind Location Description: Gradi Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-12-20 Site Name: WCC Post
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 79 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check
Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	502	2	1
2	1	500	0	1
3	2	501	1	2

Average Difference: 1
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>129005</u>	Counts Observed for the Span = <u>129312</u>
Counters Observed for the Zero = <u>2745</u>	Counters Observed for the Zero = <u>2663</u>
Trial 2:	
Counts Observed for the Span = <u>129134</u>	
Counters Observed for the Zero = <u>2660</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm
 Downwind Location Description: Gr. 1 Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Post

Date: 8-12-20

Site Name: WCC

Inspector(s): Ryan Haslam

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH

Wind Direction: W

Barometric Pressure: 30 "Hg

Air Temperature: 79 °F

General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1211

Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1		500	0	1
2		502	2	1
3		500	0	1

Average Difference: .7
*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{.7}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

<p>Trial 1:</p> <p>Counts Observed for the Span= <u>128182</u></p> <p>Counters Observed for the Zero= <u>2691</u></p>	<p>Trial 3:</p> <p>Counts Observed for the Span= <u>129010</u></p> <p>Counters Observed for the Zero= <u>2589</u></p>
<p>Trial 2:</p> <p>Counts Observed for the Span= <u>128604</u></p> <p>Counters Observed for the Zero= <u>2631</u></p>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm

Downwind Location Description: Grid 1 Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 8-12-20 Site Name: WCC Post
 Inspector(s): Chris Garcia Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: W Barometric Pressure: 30 "Hg
 Air Temperature: 79 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	1	501	1	1
2	1	501	1	1
3	3	501	1	1

Average Difference: 1

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

$$= 100\% - \frac{1}{500} \times 100\%$$

$$= 99.8 \%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>128665</u>	Counts Observed for the Span= <u>128606</u>
Counters Observed for the Zero= <u>2781</u>	Counters Observed for the Zero= <u>2781</u>
Trial 2:	
Counts Observed for the Span= <u>127103</u>	
Counters Observed for the Zero= <u>2712</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

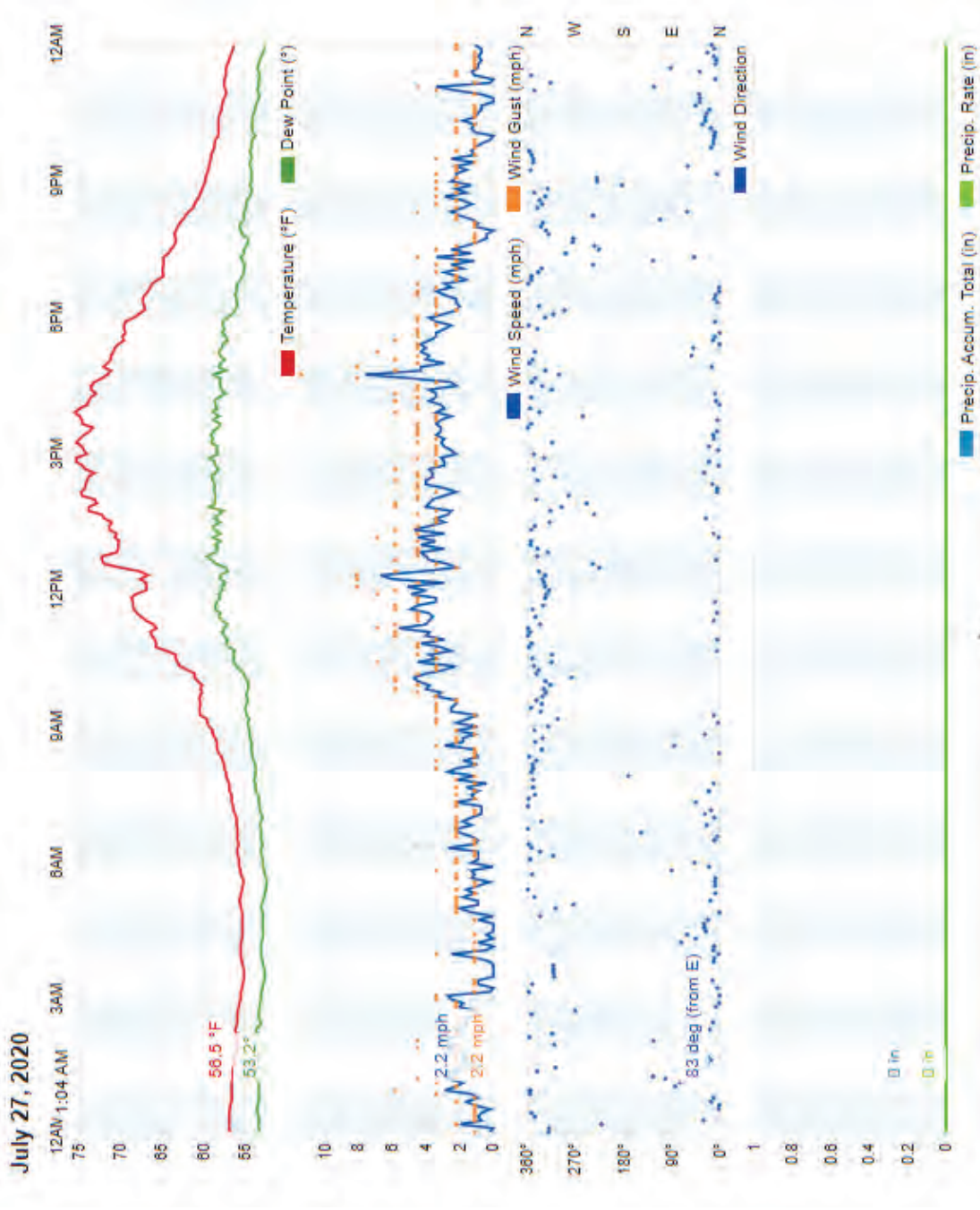
Upwind Location Description: entrance Reading: 1.1 ppm
 Downwind Location Description: Grid 1 Reading: 1.5 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.



Attachment 6

Weather Data



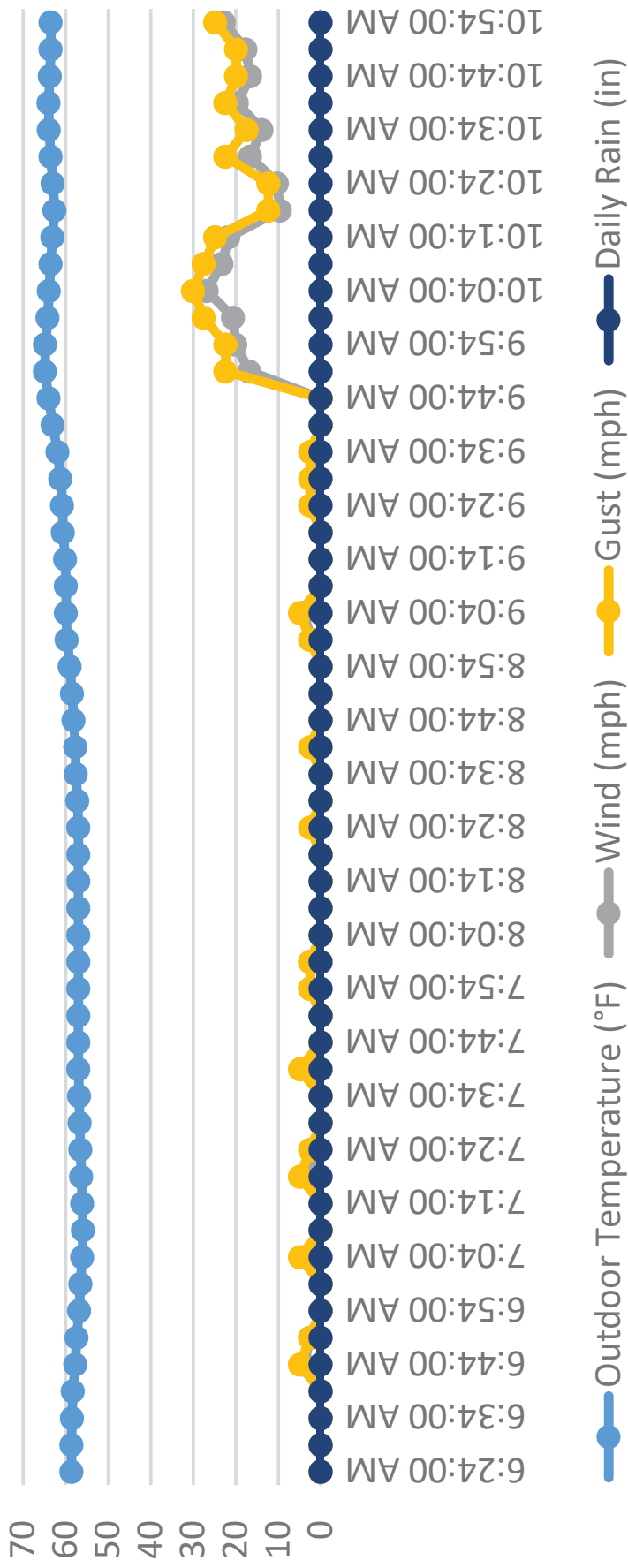
Third Quarter 2020

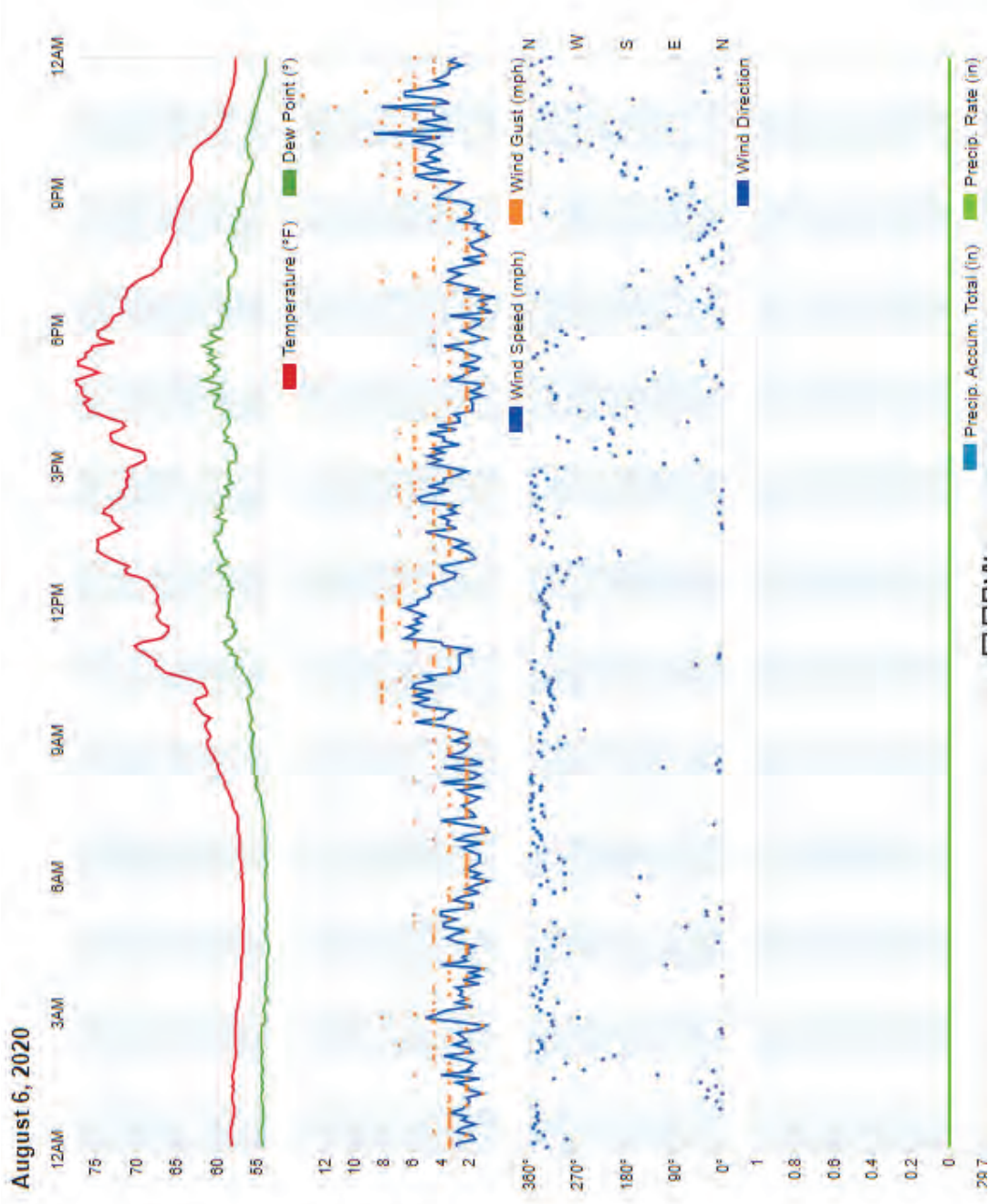
LMR Weather For July 27, 2020

West Contra Costa County Sanitary Landfill, Contra Costa County, California

West Contra Costa County Sanitary Landfill Weather

July 28, 2020





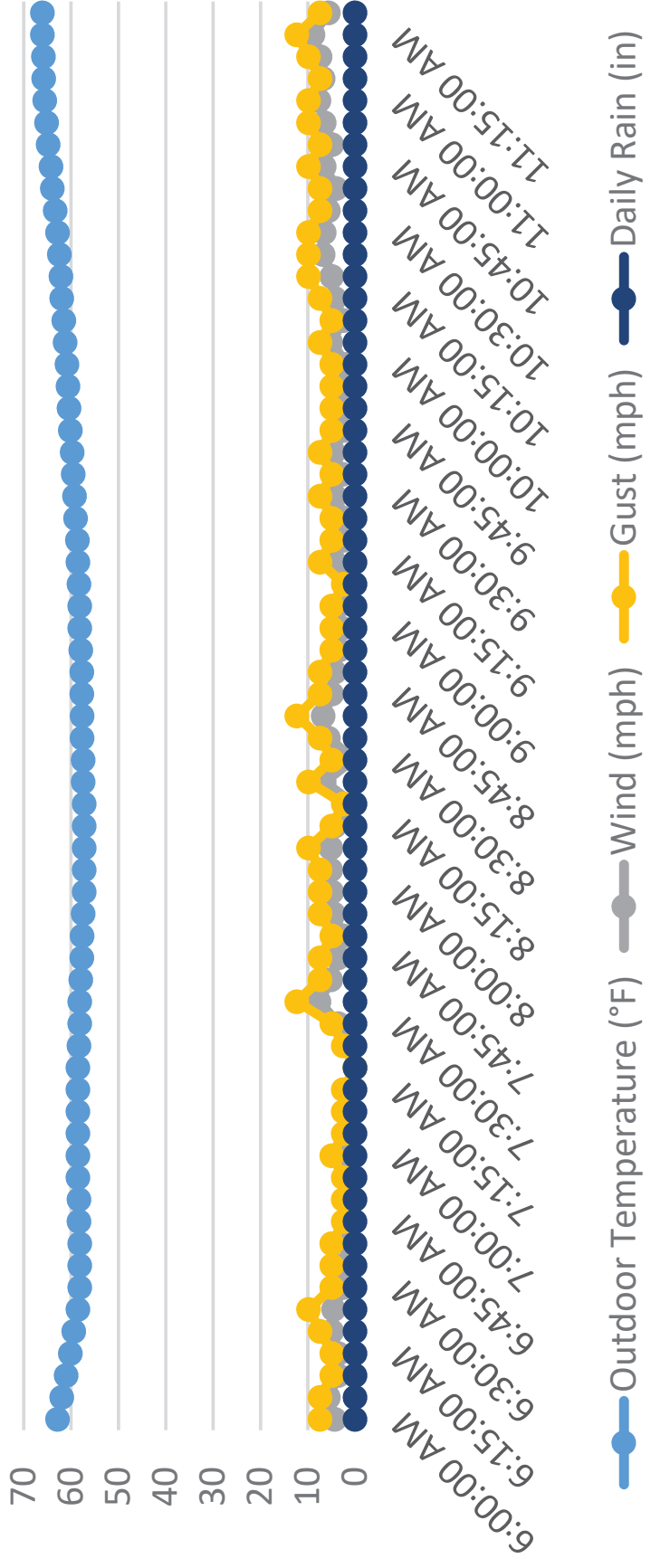
Third Quarter 2020

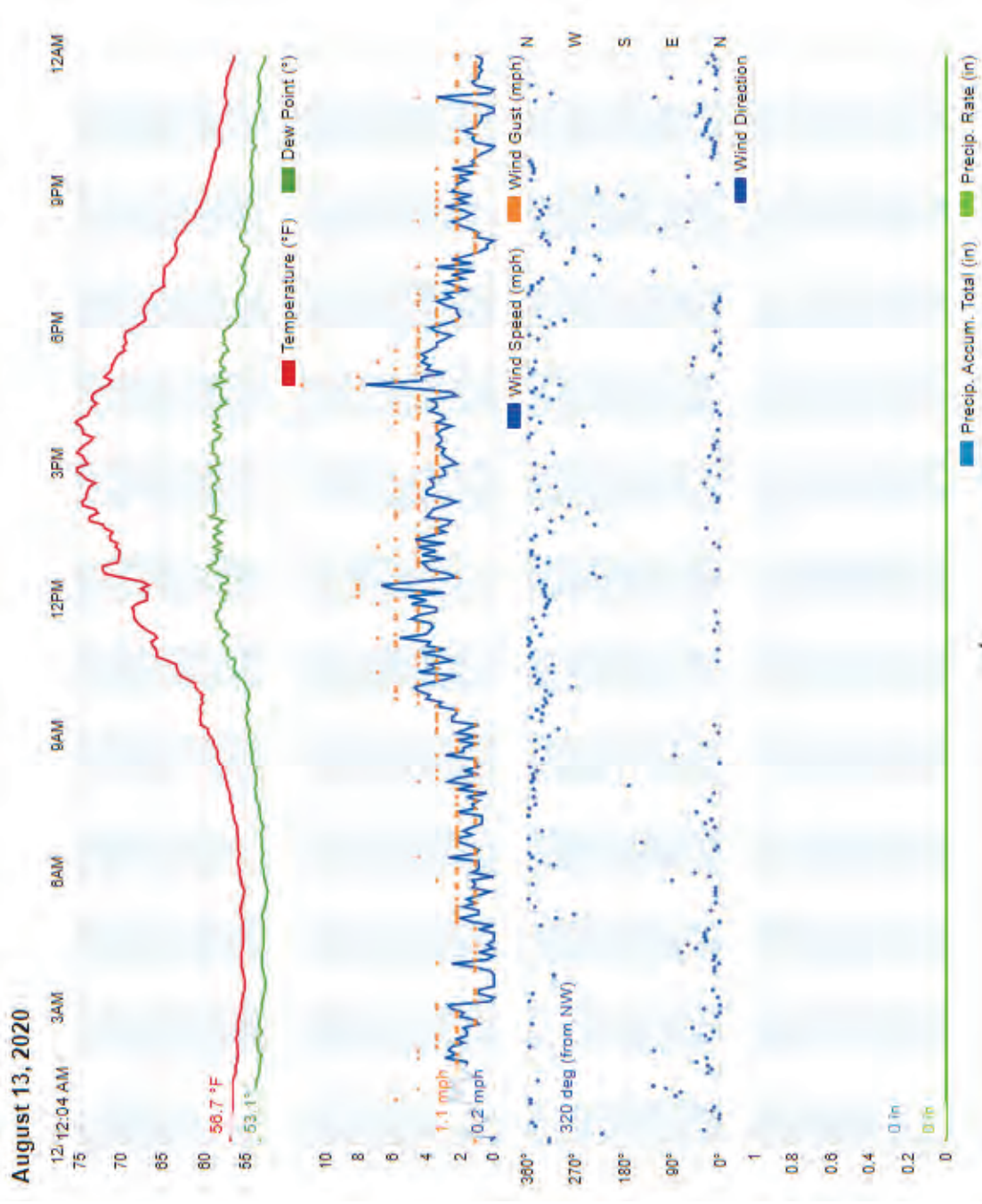
LMR Weather For August 6, 2020

West Contra Costa County Sanitary Landfill, Contra Costa County, California

West Contra Costa County Sanitary Landfill Weather

August 12, 2020

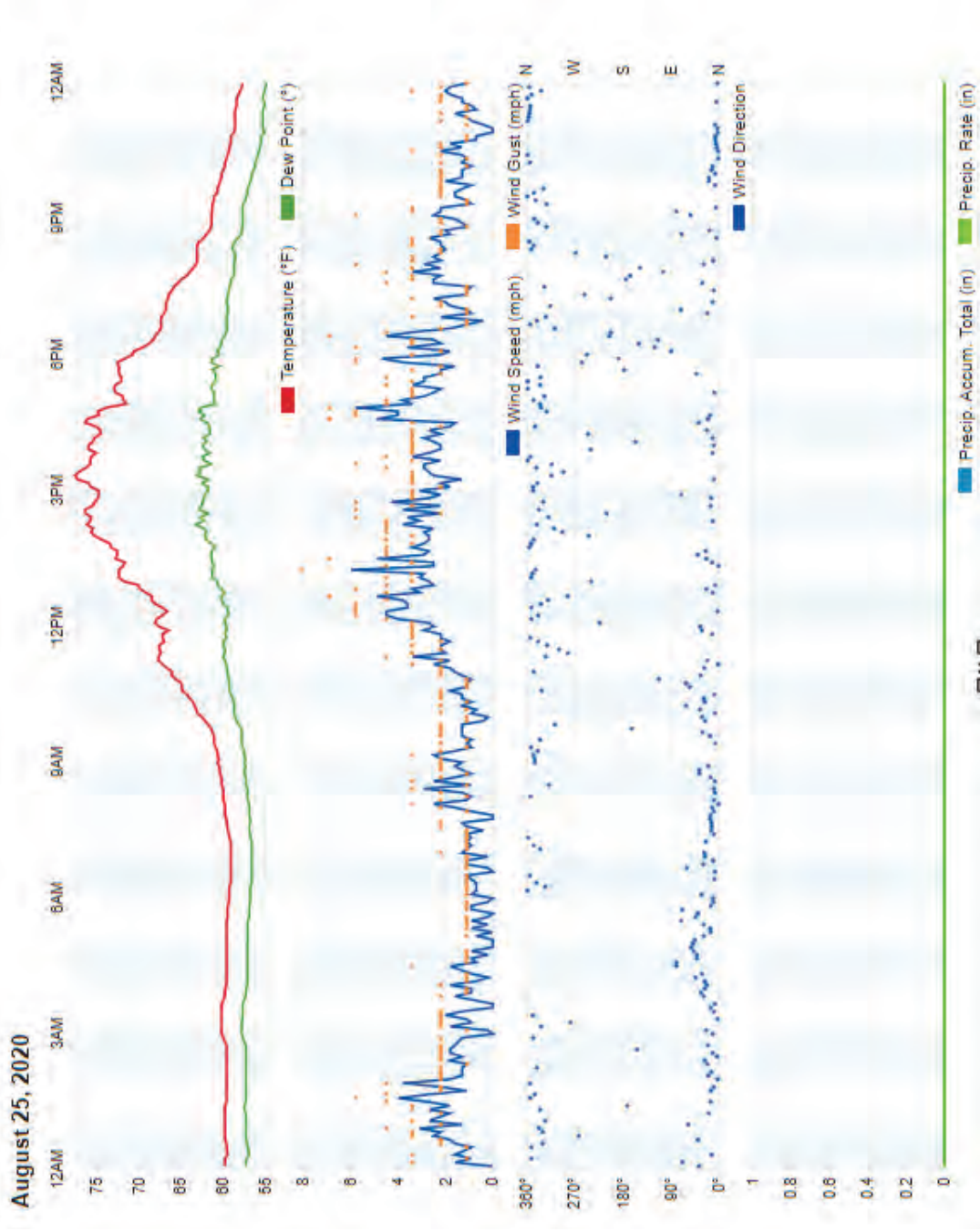




Third Quarter 2020

LMR Weather For August 13, 2020

West Contra Costa County Sanitary Landfill, Contra Costa County, California



Third Quarter 2020

LMR Weather For August 25, 2020

West Contra Costa County Sanitary Landfill, Contra Costa County, California

APPENDIX I

COMPONENT LEAK MONITORING

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector: Ecg	Date: 5/4/2020	Temperature: 20.0
Weather: Mostly clear	Wind: Vac Control	Barometric Pressure: 30.16
Start Time: 7:23:55 AM	Stop Time: 3:10:54 PM	

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector: Ecg	Date: 5/12/2020	Temperature: 20.0
Weather: Cloudy windy	Wind: Vac Control	Barometric Pressure: 30.02
Start Time: 2:26:02 PM	Stop Time: 4:12:02 PM	

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.3	0.3	0.3	
GW R-2	0.3	0.3	0.3	
GW R-3	0.3	0.3	0.3	
GW R-4	0.2	0.3	0.2	
GW R-5	0.1	0.2	0.2	
GW R-6	0.2	0.3	0.3	
GW R-7	0.0	0.2	0.1	
GW R-8	0.0	0.0	0.0	
GW R-9	0.1	0.1	0.1	
GW R-10	0.2	0.1	0.1	
GW R-11	0.1	0.0	0.1	
GW R-12	0.0	0.1	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector: Ecg	Date: 5/18/2020	Temperature: 20.0
Weather: Lmostly cloudy	Wind: Vac Control	Barometric Pressure: 30.02
Start Time: 2:26:02 PM	Stop Time: 4:12:02 PM	

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.3	0.0	0.0	
GW R-2	0.3	0.1	0.0	
GW R-3	0.4	0.1	0.0	
GW R-4	0.4	0.1	0.0	
GW R-5	0.3	0.0	0.1	
GW R-6	0.2	0.0	0.0	
GW R-7	0.3	0.0	0.0	
GW R-8	0.2	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	5/26/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.84
Start Time:	2:51:45 PM	Stop Time:	5:41:50 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>	
GW R-1	0.9	1.2	0.9		
GW R-2	0.8	1.0	0.9		
GW R-3	0.8	1.0	1.0		
GW R-4	0.8	0.8	0.8		
GW R-5	0.6	0.9	0.9		
GW R-6	0.5	0.8	0.9		
GW R-7	0.6	1.0	0.8		
GW R-8	0.6	0.6	0.4		
GW R-9	1.3	1.6	1.3		
GW R-10	1.3	1.5	1.2		
GW R-11	1.3	1.2	1.0		
GW R-12	1.4	1.2	1.0		
GW R-13	0.2	0.3	0.3		
GW R-14	0.2	0.3	0.3		
GW R-15	0.2	0.3	0.3		
GW R-16	0.2	0.2	0.2		

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	6/1/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.99
Start Time:	1:47:00 PM	Stop Time:	2:37:48 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	1.0	1.0	1.0	
GW R-2	0.9	1.0	1.0	
GW R-3	1.0	1.0	1.0	
GW R-4	1.0	1.0	1.0	
GW R-5	1.0	1.0	1.0	
GW R-6	1.0	1.0	1.0	
GW R-7	1.0	1.0	1.0	
GW R-8	1.0	1.0	1.0	
GW R-9	1.0	0.9	0.9	
GW R-10	1.0	0.9	0.9	
GW R-11	0.9	0.8	0.8	
GW R-12	0.8	0.8	0.8	
GW R-13	0.4	0.7	0.7	
GW R-14	0.4	0.7	0.7	
GW R-15	0.4	0.6	0.7	
GW R-16	0.4	0.6	0.6	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	6/9/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	30.13
Start Time:	11:47:00 AM	Stop Time:	2:20:26 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>	
GW R-1	0.1	0.1	0.1		
GW R-2	0.1	0.2	0.1		
GW R-3	0.1	0.1	0.1		
GW R-4	0.1	0.1	0.1		
GW R-5	0.0	0.0	0.0		
GW R-6	0.0	0.0	0.0		
GW R-7	0.0	0.0	0.0		
GW R-8	0.0	0.0	0.0		
GW R-9	0.0	0.0	0.0		
GW R-10	0.0	0.0	0.0		
GW R-11	0.0	0.0	0.0		
GW R-12	0.0	0.0	0.0		
GW R-13	0.0	0.0	0.0		
GW R-14	0.0	0.0	0.0		
GW R-15	0.0	0.0	0.0		
GW R-16	0.0	0.0	0.0		

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	6/15/2020	Temperature:	20.0
Weather:	Mostly clear	Wind:	Vac Control	Barometric Pressure:	30.01
Start Time:	8:20:48 AM	Stop Time:	12:58:11 PM		

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.2	0.1	0.1	
GW R-2	0.2	0.1	0.1	
GW R-3	0.3	0.1	0.1	
GW R-4	0.3	0.1	0.1	
GW R-5	0.3	0.1	0.0	
GW R-6	0.3	0.2	0.2	
GW R-7	0.3	0.2	0.2	
GW R-8	0.4	0.1	0.2	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	6/22/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.91
Start Time:	2:02:49 PM	Stop Time:	4:18:28 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.1	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecq	Date:	6/29/2020	Temperature:	20.0
Weather:	Clear windy	Wind:	Vac Control	Barometric Pressure:	29.87
Start Time:	1:37:30 PM	Stop Time:	4:30:49 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.2	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	7/10/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	30
Start Time:	2:03:02 PM	Stop Time:	4:26:43 PM		

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.1	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.1	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecq	Date:	7/14/2020	Temperature:	20.0
Weather:	Clear windy	Wind:	Vac Control	Barometric Pressure:	29.93
Start Time:	10:59:06 AM	Stop Time:	3:54:46 PM		

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.8	0.9	0.9	
GW R-2	0.9	0.9	0.9	
GW R-3	0.9	0.9	0.9	
GW R-4	0.9	0.9	0.9	
GW R-5	0.8	1.1	0.9	
GW R-6	0.9	1.1	1.1	
GW R-7	0.9	1.0	1.0	
GW R-8	1.1	0.9	0.9	
GW R-9	1.1	1.1	1.1	
GW R-10	1.0	0.9	1.0	
GW R-11	1.0	0.8	1.0	
GW R-12	0.9	1.0	0.9	
GW R-13	0.9	0.9	0.9	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	7/20/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.96
Start Time:	12:23:18 PM	Stop Time:	4:46:01 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.3	0.1	0.1	
GW R-2	0.3	0.1	0.1	
GW R-3	0.4	0.2	0.2	
GW R-4	0.4	0.2	0.2	
GW R-5	0.5	0.2	0.2	
GW R-6	0.4	0.2	0.1	
GW R-7	0.4	0.0	0.2	
GW R-8	0.4	0.2	0.0	
GW R-9	0.3	0.1	0.1	
GW R-10	0.3	0.3	0.1	
GW R-11	0.3	0.0	0.0	
GW R-12	0.2	0.0	0.0	
GW R-13	0.5	0.3	0.2	
GW R-14	0.2	0.1	0.1	
GW R-15	0.3	0.2	0.2	
GW R-16	0.2	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector: Ecg	Date: 7/28/2020	Temperature: 20.0
Weather: Clear windy	Wind: Vac Control	Barometric Pressure: 29.93
Start Time: 8:29:18 AM	Stop Time: 12:46:38 PM	

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.1	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	8/3/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	30.02
Start Time:	11:41:00 AM	Stop Time:	1:43:52 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>	
GW R-1	0.0	0.1	0.0		
GW R-2	0.0	0.0	0.0		
GW R-3	0.0	0.0	0.0		
GW R-4	0.0	0.0	0.0		
GW R-5	0.0	0.0	0.0		
GW R-6	0.0	0.0	0.0		
GW R-7	0.0	0.0	0.0		
GW R-8	0.0	0.0	0.0		
GW R-9	0.0	0.0	0.0		
GW R-10	0.0	0.0	0.0		
GW R-11	0.0	0.0	0.0		
GW R-12	0.0	0.0	0.0		
GW R-13	0.0	0.0	0.0		
GW R-14	0.0	0.0	0.0		
GW R-15	0.0	0.0	0.0		
GW R-16	0.0	0.0	0.0		

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	8/10/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.9
Start Time:	1:42:49 PM	Stop Time:	4:10:24 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>	
GW R-1	0.2	0.0	0.0		
GW R-2	0.3	0.0	0.0		
GW R-3	0.1	0.1	0.0		
GW R-4	0.0	0.0	0.0		
GW R-5	0.0	0.0	0.0		
GW R-6	0.0	0.0	0.0		
GW R-7	0.0	0.0	0.0		
GW R-8	0.0	0.0	0.0		
GW R-9	0.0	0.0	0.0		
GW R-10	0.0	0.0	0.0		
GW R-11	0.0	0.0	0.0		
GW R-12	0.0	0.0	0.0		
GW R-13	0.0	0.0	0.0		
GW R-14	0.0	0.0	0.0		
GW R-15	0.0	0.0	0.0		
GW R-16	0.0	0.0	0.0		

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector: Ecg	Date: 8/17/2020	Temperature: 20.0
Weather: Mostly cloudy	Wind: Vac Control	Barometric Pressure: 29.97
Start Time: 11:27:20 AM	Stop Time: 2:43:45 PM	

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector: Ecg	Date: 8/25/2020	Temperature: 20.0
Weather: Partly smokey	Wind: Vac Control	Barometric Pressure: 29.88
Start Time: 1:20:48 PM	Stop Time: 3:12:28 PM	

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.8	0.5	0.6	
GW R-2	0.7	0.3	0.4	
GW R-3	0.6	0.4	0.4	
GW R-4	0.6	0.3	0.3	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	9/1/2020	Temperature:	20.0
Weather:	Mostly clear	Wind:	Vac Control	Barometric Pressure:	29.96
Start Time:	12:53:11 PM	Stop Time:	4:49:39 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.1	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	9/11/2020	Temperature:	20.0
Weather:	Cloudy	Wind:	Vac Control	Barometric Pressure:	30.05
Start Time:	10:55:35 AM	Stop Time:	12:15:41 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Wcg	Date:	9/15/2020	Temperature:	20.0
Weather:	Mostly clear	Wind:	Vac Control	Barometric Pressure:	30.09
Start Time:	8:58:52 AM	Stop Time:	11:34:52 AM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.0	0.0	0.0	
GW R-10	0.0	0.0	0.0	
GW R-11	0.0	0.0	0.0	
GW R-12	0.0	0.0	0.0	
GW R-13	0.0	0.0	0.0	
GW R-14	0.0	0.0	0.0	
GW R-15	0.0	0.0	0.0	
GW R-16	0.0	0.0	0.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	9/25/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	30.01
Start Time:	12:26:05 PM	Stop Time:	2:38:23 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>	
GW R-1	0.3	0.2	0.2		
GW R-2	0.2	0.2	0.2		
GW R-3	0.2	0.2	0.2		
GW R-4	0.2	0.2	0.2		
GW R-5	0.0	0.0	0.0		
GW R-6	0.0	0.0	0.0		
GW R-7	0.0	0.0	0.0		
GW R-8	0.0	0.0	0.0		
GW R-9	0.0	0.0	0.0		
GW R-10	0.0	0.0	0.0		
GW R-11	0.0	0.0	0.0		
GW R-12	0.0	0.0	0.0		
GW R-13	0.0	0.0	0.0		
GW R-14	0.0	0.0	0.0		
GW R-15	0.0	0.0	0.0		
GW R-16	0.0	0.0	0.0		

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	Ecg	Date:	9/28/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.91
Start Time:	11:08:37 AM	Stop Time:	1:35:16 PM		

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	0.0	0.0	0.0	
GW R-2	0.0	0.0	0.0	
GW R-3	0.0	0.0	0.0	
GW R-4	0.0	0.0	0.0	
GW R-5	0.0	0.0	0.0	
GW R-6	0.0	0.0	0.0	
GW R-7	0.0	0.0	0.0	
GW R-8	0.0	0.0	0.0	
GW R-9	0.3	0.1	0.1	
GW R-10	0.3	0.2	0.0	
GW R-11	0.3	0.1	0.1	
GW R-12	0.4	0.1	0.1	
GW R-13	0.4	0.1	0.1	
GW R-14	0.4	0.1	0.1	
GW R-15	0.5	0.2	0.2	
GW R-16	0.4	0.2	0.2	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	C.Martinez	Date:	10/5/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.99
Start Time:	12:36:41 PM	Stop Time:	1:51:06 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>	
GW R-1	1.2	0.2	0.0		
GW R-2	1.2	0.2	25.6		
GW R-3	1.2	0.2	0.0		
GW R-4	1.2	0.4	0.2		
GW R-5	1.2	0.0	0.0		
GW R-6	1.2	0.0	122		
GW R-7	1.2	0.0	0.0		
GW R-8	1.2	0.0	0.0		
GW R-9	1.2	0.0	0.0		
GW R-10	1.2	0.0	0.0		
GW R-11	1.2	0.0	0.0		
GW R-12	1.2	0.0	0.0		
GW R-13	1.2	0.0	0.0		
GW R-14	1.2	0.0	0.0		
GW R-15	1.2	0.0	0.0		
GW R-16	1.2	0.0	0.0		

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	C.Martinez	Date:	10/12/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	30.08
Start Time:	12:58:47 PM	Stop Time:	2:19:39 PM		

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<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>	
GW R-1	0.2	0.1	0.3		
GW R-2	0.2	0.2	0.2		
GW R-3	0.2	0.1	0.1		
GW R-4	0.2	0.0	0.1		
GW R-5	0.2	0.2	0.3		
GW R-6	0.2	0.2	0.3		
GW R-7	0.2	0.2	0.2		
GW R-8	0.2	0.1	0.1		
GW R-9	0.2	0.1	0.0		
GW R-10	0.2	0.1	0.1		
GW R-11	0.2	0.1	0.0		
GW R-12	0.2	0.1	0.2		
GW R-13	0.2	0.1	0.1		
GW R-14	0.2	0.1	0.2		
GW R-15	0.2	0.1	0.1		
GW R-16	0.2	0.0	0.0		

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	C.Martinez	Date:	10/19/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	29.97
Start Time:	12:53:00 PM	Stop Time:	2:12:50 PM		

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	1.2	0.1	0.1	
GW R-2	1.2	0.0	0.1	
GW R-3	1.2	0.0	0.0	
GW R-4	1.2	0.0	0.0	
GW R-5	1.2	0.2	0.1	
GW R-6	1.2	0.2	0.1	
GW R-7	1.2	0.2	0.0	
GW R-8	1.2	0.0	0.0	
GW R-9	1.2	0.6	0.6	
GW R-10	1.2	0.5	0.6	
GW R-11	1.2	0.6	0.7	
GW R-12	1.2	0.7	0.7	
GW R-13	1.2	0.9	0.9	
GW R-14	1.2	0.9	0.8	
GW R-15	1.2	0.9	1.1	
GW R-16	1.2	1.1	1.0	

West Contra Costa County
Class I Weekly Fugitive Emissions Inspection Form

Inspector:	C.Martinez	Date:	10/26/2020	Temperature:	20.0
Weather:	Clear	Wind:	Vac Control	Barometric Pressure:	30.09
Start Time:	1:16:40 PM	Stop Time:	4:06:57 PM		

<i>Well ID</i>	<i>Background</i>	<i>Bore</i>	<i>Cap</i>	<i>Comments</i>
GW R-1	2.5	0.3	0.1	
GW R-2	2.5	0.2	0.3	
GW R-3	2.5	0.2	0.2	
GW R-4	2.5	0.3	0.3	
GW R-5	2.5	0.2	0.0	
GW R-6	2.5	0.2	0.1	
GW R-7	2.5	0.3	0.2	
GW R-8	2.5	0.2	0.2	
GW R-9	2.5	0.1	0.3	
GW R-10	2.5	0.2	0.3	
GW R-11	2.5	0.1	0.0	
GW R-12	2.5	0.2	0.1	
GW R-13	2.5	0.1	0.2	
GW R-14	2.5	0.1	0.1	
GW R-15	2.5	0.1	0.1	
GW R-16	2.5	0.1	0.1	

**SITE: West Contra Costa County
2020 2nd QUARTER LFG PLANT COMPONENT LEAK MONITORING**

INSTRUMENT FID
 MAKE: TVA
 MODEL: 2020
 S/N: 202016031211

DATE OF SAMPLING: June 1, 2020
 TECHNICIAN: D. Gibson

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 Component leaks detected	No Exceedances detected						
Main to blower	No Exceedances detected						
Blower skid	No Exceedances detected						
Knockout	No Exceedances detected						
Ambient Cooling Skid	No Exceedances detected						
Dehydration Skid	No Exceedances detected						
Venture Skid	No Exceedances detected						
Prechamber Skid	No Exceedances detected						
Main Line to engines	No Exceedances detected						

Comments:

Note: 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.

**SITE: West Contra Costa County
2020 3rd QUARTER LFG COMPONENT LEAK MONITORING**

INSTRUMENT FID
 MAKE: TVA
 MODEL: 2020
 S/N: 202016031211

DATE OF SAMPLING: July 27, 2020
 TECHNICIAN: R Haslam

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)
GW-05-09	800	7/27/2020	D Gibson	placed bentonite around well bore and hydrated	28-Jul	5-Aug	250

Comments: Note this is below the 1000 ppm threshold
 Note: 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.

**SITE: West Contra Costa County
2020 3rd QUARTER LFG PLANT COMPONENT LEAK MONITORING**

INSTRUMENT: FID
 MAKE: TVA
 MODEL: 2020
 S/N: 202016031211

DATE OF SAMPLING: July 27, 2020
 TECHNICIAN: R Haslam

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 Component leaks detected	No Exceedances detected						
Main to blower	No Exceedances detected						
Blower skid	No Exceedances detected						
Knockout	No Exceedances detected						
Ambient Cooling Skid	No Exceedances detected						
Dehydration Skid	No Exceedances detected						
Venture Skid	No Exceedances detected						
Prechamber Skid	No Exceedances detected						
Main Line to engines	No Exceedances detected						

Comments:

Note: 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.

SITE: West Contra Costa County
2020 3rd QUARTER LFG WASTE WATER TREATMENT PLANT COMPONENT LEAK MONITORING

INSTRUMENT FID
 MAKE: TVA
 MODEL:
 S/N:

DATE OF SAMPLING: July 27, 2020
 TECHNICIAN: R Haslam

2020
 202016031211

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)
Piping	No Exceedances detected						
Flanges	No Exceedances detected						
Valves	No Exceedances detected						
Filters	No Exceedances detected						

Comments:

Note: 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.

APPENDIX J

CLASS I WELLFIELD MONITORING LOGS

Device ID	Date and Time	CH ₄ %	CO ₂ %	2, 18, an %	BAL %	Initial Static Pressure in. wc.	Adjusted Static Pressure in. wc.	Lateral Pressure in. wc.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCLFR011	5/26/2020 7:42	44.3	27.8	3.5	24.4	-0.08	-0.08	-0.03	72.5	72.4	18.4	Comments:.....
WCLFR012	5/4/2020 13:50	2.1	9.2	10.2	78.5	-0.01	-0.01	-0.44	77.3	77.2	15.1	Comments:.....
WCLFR012	5/12/2020 9:08	0.1	0.2	20.7	79.0	-0.02	-0.03	-0.12	65.0	65.1	10.2	Comments:.....
WCLFR012	5/12/2020 9:10	0.1	0.2	20.7	79.0	-0.01	-0.01	-0.11	65.3	65.3	1	Comments:.....
WCLFR012	5/18/2020 7:30	9.4	15.7	0.3	74.6	-0.02	-0.02	-0.03	57.4	57.4	10	Comments:.....
WCLFR012	5/26/2020 7:46	19.9	18.3	0.1	61.7	-0.01	-0.01	-0.04	74.7	73.6	10	Comments:.....
WCLFR013	5/4/2020 13:52	25.0	14.6	6.4	54.0	-0.02	-0.03	-0.77	90.3	90.2	21.9	Comments:.....
WCLFR013	5/12/2020 9:18	0.1	0.3	20.8	78.8	-0.74	-0.75	-0.18	61.0	62.4	55.4	Comments:.....
WCLFR013	5/12/2020 9:19	0.1	0.2	20.8	78.9	-0.76	-0.76	-0.10	62.6	62.8	54.3	Comments:.....
WCLFR013	5/18/2020 7:40	15.5	8.8	11.3	64.4	-0.14	-0.14	-0.29	58.1	58.1	24.4	Comments:.....
WCLFR013	5/26/2020 7:58	30.4	16.6	4.6	48.4	-0.10	-0.10	-0.74	78.8	80.9	23.4	Comments:.....
WCLFR014	5/4/2020 13:54	47.6	26.1	0.2	26.1	-0.03	-0.02	-0.75	84.3	84.5	10.3	Comments:.....
WCLFR014	5/12/2020 9:21	0.1	0.2	20.7	79.0	-1.32	-1.31	-0.13	64.7	65.0	73.3	Comments:.....
WCLFR014	5/12/2020 9:22	0.1	0.1	20.7	79.1	-1.27	-1.28	-0.11	65.8	65.8	72.8	Comments:.....
WCLFR014	5/18/2020 7:41	21.2	12.6	10.3	55.9	-0.35	-0.35	-0.35	57.1	57.1	37.9	Comments:.....
WCLFR014	5/26/2020 8:02	33.9	19.0	4.5	42.6	-0.09	-0.09	-0.74	77.8	77.8	24	Comments:.....
WCLFR015	5/4/2020 13:56	3.7	2.3	17.9	76.1	-0.02	-0.02	-0.74	85.6	85.6	8	Comments:.....
WCLFR015	5/4/2020 13:57	3.8	2.1	18.0	76.1	-0.02	-0.02	-0.70	84.9	84.9	7.9	Comments:.....
WCLFR015	5/12/2020 9:24	0.1	0.1	20.7	79.1	-0.01	-0.01	-0.08	67.0	67.0	5.9	Comments:.....
WCLFR015	5/12/2020 9:24	0.1	0.1	20.7	79.1	-0.01	-0.01	-0.08	67.0	67.0	5.9	Comments:.....
WCLFR015	5/12/2020 9:26	0.1	0.1	20.7	79.1	-0.01	-0.01	-0.07	65.2	65.2	10.3	Comments:.....
WCLFR015	5/18/2020 7:43	0.2	1.1	17.9	80.8	-0.02	-0.02	-0.43	57.2	57.2	6.7	Comments:.....
WCLFR015	5/18/2020 7:45	0.2	1.0	18.1	80.7	-0.02	-0.02	-0.44	57.3	57.3	4.5	Comments:.....
WCLFR015	5/26/2020 8:04	0.0	2.8	12.8	84.4	-0.02	-0.02	-0.81	81.2	81.1	9.4	Comments:.....
WCLFR016	5/4/2020 13:59	3.0	7.8	10.2	79.0	-0.04	-0.03	-0.87	87.4	87.5	10.8	Comments:.....
WCLFR016	5/12/2020 9:27	0.4	2.0	17.2	80.4	-0.02	-0.03	-0.09	65.3	65.3	21.6	Comments:.....
WCLFR016	5/12/2020 9:29	0.1	0.6	20.0	79.3	-0.01	-0.01	-0.09	63.1	63.1	1.5	Comments:.....
WCLFR016	5/18/2020 7:47	18.1	11.9	0.3	69.7	-0.05	-0.05	-0.28	57.4	57.4	13.3	Comments:.....
WCLFR016	5/26/2020 8:11	15.3	12.7	0.4	71.6	-0.02	-0.02	-0.03	78.4	78.4	24.9	Comments:.....

Comments in **bold** added by Tetra Tech.

WCLF horizontal exceedances greater than 15% oxygen and/or pressures greater than 0.00 in. wc. while online or greater than 1.00 in. wc. pressure if offline.
Pursuant to Condition Number 25293, Part 7(c)(iv), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the GCCS.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0" or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.0" of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.
Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous tab as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are not tracked as exceedances.

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute

*Pursuant to Permit to Operate (PTO) Condition Number 25293 Part 7(d)(iii), the horizontal collectors in the Class I landfill are permitted to operate at up to 15 percent O₂.

**Some readings unavailable due to issues with values automatically recorded by the sampling device.

Device ID	Date and Time	CH ₄ %	CO ₂ %	O ₂ %	BAL %	Initial Static Pressure in. wc.	Adjusted Static Pressure in. wc.	Lateral Pressure in. wc.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCLFR016	6/29/2020 8:12	0.4	3.2	18.1	78.3	-0.03	-0.04	-0.09	68.6	68.6	21.9	Comments:
WCLFR016	6/29/2020 8:12	0.4	3.2	18.1	78.3	-0.03	-0.04	-0.09	68.6	68.6	21.9	Comments:
WCLFR016	6/29/2020 8:13	0.4	3.5	18.0	78.1	-0.06	-0.06	-0.09	68.8	68.8	22	Comments:

Comments in **bold** added by Tetra Tech.

WCLF horizontal exceedances greater than 15% oxygen and/or pressures greater than 0.00 in. wc. while online or greater than 1.00 in. wc. pressure if offline.

Pursuant to Condition Number 25293, Part 7(c)(iv), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the GCCS.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0' or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.0" of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.

Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous tab as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are not tracked as exceedances.

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute

*Pursuant to Permit to Operate (PTO) Condition Number 25293 Part 7(c)(iii), the horizontal collectors in the Class I landfill are permitted to operate at up to 15 percent O₂.

**Some readings unavailable due to issues with values automatically recorded by the sampling device.

West Contra Costa Sanitary Landfill (Class I), Richmond, CA
Wellfield Monitoring Report - July 10, 14, 20, and 28, 2020

Device ID	Date and Time	CH ₄	CO ₂	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Adjusted Temperature	Initial Flow	Comments as Noted By Field Technician
		%	%	%	%	in. wc.	in. wc.	in. wc.	Deg. F.	Deg. F.	scfm	
WCLFR001	7/10/2020 7:56	45.8	23.6	3.3	27.3	-0.34	-0.34	-0.38	58.3	58.3	5.7	Comments:.....
WCLFR001	7/14/2020 8:54	66.3	31.0	0.0	2.7	-0.07	-0.07	-0.07	65.1	65.1	1.1	Comments:.....
WCLFR001	7/20/2020 9:37	60.4	30.4	0.0	9.2	-0.01	-0.01	-0.01	63.1	63.1	3.5	Comments:.....
WCLFR001	7/28/2020 7:23	41.3	26.9	1.4	30.4	-0.42	-0.42	-0.45	62.8	62.8	18.3	Comments:.....
WCLFR002	7/10/2020 8:00	59.8	26.5	0.1	13.6	-0.03	-0.04	-0.19	58.5	58.5	16.6	Comments:.....
WCLFR002	7/14/2020 8:56	70.7	27.3	0.6	1.4	-0.07	-0.06	-0.07	64.9	64.9	10.6	Comments:.....
WCLFR002	7/20/2020 9:44	72.6	27.3	0.0	0.1	-0.05	-0.05	-0.08	65.0	65.0	21.9	Comments:.....
WCLFR002	7/28/2020 7:25	16.5	14.1	10.6	58.8	-0.47	-0.47	-0.45	64.6	64.6	21.8	Comments:.....
WCLFR003	7/10/2020 8:01	33.2	22.1	2.4	42.3	-0.01	-0.01	-0.13	61.6	61.5	15.4	Comments:.....
WCLFR003	7/14/2020 8:59	34.7	25.9	0.5	38.9	-0.01	-0.01	-0.03	60.3	60.6	12	Comments:.....
WCLFR003	7/20/2020 9:47	48.5	27.6	0.0	23.9	-0.01	-0.01	-0.04	62.9	63.1	14.2	Comments:.....
WCLFR003	7/28/2020 7:26	17.9	20.2	1.9	60.0	-0.39	-0.39	-0.43	61.7	61.7	17.2	Comments:.....
WCLFR004	7/10/2020 8:03	45.7	21.3	3.6	29.4	-5.41	-5.41	-0.16	57.2	57.2	161.4	Comments:.....
WCLFR004	7/14/2020 9:02	65.4	25.3	1.7	7.6	-5.79	-5.79	-0.06	63.4	63.4	171.8	Comments:.....
WCLFR004	7/20/2020 9:50	49.3	19.4	6.0	25.3	-3.11	-3.11	-0.07	62.6	62.6	122.5	Comments:.....
WCLFR004	7/28/2020 7:28	11.5	10.0	13.1	65.4	-3.69	-3.68	-0.40	58.4	58.4	118.1	Comments:.....
WCLFR005	7/10/2020 8:06	41.8	24.8	2.0	31.4	-0.11	-0.12	-4.93	63.0	63.1	25.1	Comments:.....
WCLFR005	7/14/2020 9:07	39.6	23.0	3.9	33.5	-0.01	-0.01	-5.45	66.6	66.5	17.2	Comments:.....
WCLFR005	7/20/2020 9:55	54.9	31.0	0.0	14.1	-0.03	-0.03	-3.06	65.3	65.3	17.3	Comments:.....
WCLFR005	7/28/2020 7:31	66.4	30.7	0.0	2.9	-0.38	-0.38	-3.47	60.8	60.8	17.7	Comments:.....
WCLFR006	7/10/2020 8:08	71.7	28.1	0.3		-5.37	-5.36	-4.98	64.2	64.1	165.1	Comments:.....
WCLFR006	7/14/2020 9:09	70.8	28.9	0.3	0.0	-5.34	-5.34	-5.26	67.2	67.2	164.3	Comments:.....
WCLFR006	7/20/2020 9:57	70.5	29.3	0.2	0.0	-3.02	-3.02	-3.06	66.4	66.4	123.5	Comments:.....
WCLFR006	7/28/2020 7:33	70.1	29.8	0.1	0.0	-3.73	-3.72	-3.54	61.5	61.5	130.4	Comments:.....
WCLFR007	7/10/2020 8:10	36.8	20.8	4.6	37.8	-0.04	-0.04	-5.13	62.1	62.1	13.9	Comments:.....
WCLFR007	7/14/2020 9:12	34.9	26.9	0.7	37.5	-0.02	-0.03	-4.25	70.5	70.5	22.8	Comments:.....
WCLFR007	7/20/2020 9:59	0.2	2.1	19.8	77.9	-0.01	-0.01	-3.85	67.7	67.6	18.4	Comments:.....
WCLFR007	7/28/2020 10:01	0.1	2.0	19.9	78.0	-0.01	-0.01	-3.21	66.8	66.9	17.7	Comments:.....
WCLFR007	7/28/2020 7:35	0.8	4.5	17.9	76.8	-0.03	-0.03	-3.60	64.9	64.9	20.7	Comments:.....
WCLFR007	7/28/2020 7:35	0.8	4.5	17.9	76.8	-0.03	-0.03	-3.60	64.9	64.9	20.7	Comments:.....
WCLFR007	7/28/2020 7:36	0.4	3.5	18.6	77.5	-0.06	-0.06	-3.77	63.1	63.1	18	Comments:.....
WCLFR008	7/10/2020 8:32	17.0	16.9	7.7	58.4	-0.14	-0.13	-6.03	62.0	62.0	21.3	Comments:.....
WCLFR008	7/14/2020 9:14	42.1	29.5	0.0	28.4	-0.10	-0.10	-4.15	65.1	65.0	22.5	Comments:.....
WCLFR008	7/20/2020 10:03	47.8	27.0	3.7	21.5	-0.04	-0.04	-3.24	64.2	64.2	20.4	Comments:.....
WCLFR008	7/28/2020 7:37	33.4	17.1	10.1	39.4	-0.11	-0.11	-4.01	57.9	57.8	26.2	Comments:.....
WCLFR009	7/10/2020 8:19	34.9	18.2	7.7	39.2	-0.17	-0.17	-5.09	66.5	66.5	27.5	Comments:.....
WCLFR009	7/14/2020 9:18	31.9	20.7	4.6	42.8	-0.03	-0.03	-0.27	68.6	68.6	23	Comments:.....
WCLFR009	7/20/2020 10:06	39.4	22.9	3.8	33.9	-0.07	-0.07	-0.02	66.3	66.3	21.6	Comments:.....
WCLFR009	7/28/2020 7:40	48.7	25.8	3.1	22.4	-0.14	-0.14	-0.10	57.5	57.5	26.9	Comments:.....
WCLFR010	7/10/2020 8:22	16.2	16.7	9.1	58.0	-0.55	-0.55	-5.35	63.6	63.7	47.4	Comments:.....
WCLFR010	7/14/2020 9:20	32.8	19.3	6.3	41.6	-0.02	-0.01	-0.09	71.3	71.3	23.2	Comments:.....
WCLFR010	7/20/2020 10:08	41.2	24.1	1.5	33.2	-0.06	-0.06	-0.03	66.6	66.6	21.3	Comments:.....
WCLFR010	7/28/2020 7:42	32.0	21.2	4.3	42.5	-0.15	-0.15	-0.07	59.5	59.5	26.8	Comments:.....
WCLFR011	7/10/2020 8:25	55.2	35.4	1.8	7.6	-0.29	-0.29	-5.14	59.5	59.5	36.6	Comments:.....
WCLFR011	7/14/2020 9:22	47.8	32.7	2.9	16.6	-0.13	-0.13	-0.15	68.7	68.7	32.8	Comments:.....
WCLFR011	7/20/2020 10:12	48.6	33.3	2.7	15.4	-0.01	-0.01	-0.01	66.3	66.3	19.4	Comments:.....
WCLFR011	7/28/2020 7:44	46.6	32.3	3.9	17.2	-0.15	-0.16	-0.12	60.8	60.7	27.3	Comments:.....
WCLFR012	7/10/2020 8:27	0.5	11.4	12.2	75.9	-0.02	-0.03	-5.19	66.7	66.6	28.2	Comments:.....
WCLFR012	7/14/2020 9:27	41.6	25.2	0.0	33.2	-0.02	-0.04	-0.11	67.4	67.7	31	Comments:.....
WCLFR012	7/20/2020 10:15	39.5	23.9	0.0	36.6	-0.01	-0.02	-0.01	66.8	66.8	13.6	Comments:.....
WCLFR012	7/28/2020 7:45	11.2	13.9	6.1	68.8	-0.01	-0.02	-0.01	59.7	59.9	10.8	Comments:.....
WCLFR013	7/10/2020 8:37	43.0	25.3	1.7	30.0	-0.17	-0.17	-0.18	63.8	63.9	24.1	Comments:.....
WCLFR013	7/14/2020 9:33	44.1	26.7	0.7	28.5	-0.11	-0.11	-0.10	71.2	71.2	22	Comments:.....
WCLFR013	7/20/2020 10:18	42.7	26.4	1.9	29.0	-0.08	-0.09	-0.14	64.8	64.9	19.3	Comments:.....

Device ID	Date and Time	CH ₄ %	CO ₂ %	O ₂ %	BAL %	Initial Static Pressure in. wc.	Adjusted Static Pressure in. wc.	Lateral Pressure in. wc.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCLFR013	7/28/2020 7:49	21.9	13.8	12.0	52.3	-0.15	-0.14	-0.14	57.6	57.6	27.2	Comments:.....
WCLFR014	7/10/2020 8:39	47.4	26.0	2.5	24.1	-0.38	-0.38	-0.36	64.6	64.6	38.2	Comments:.....
WCLFR014	7/14/2020 9:35	44.7	27.5	2.2	25.6	-0.22	-0.22	-0.17	69.9	69.9	30.7	Comments:.....
WCLFR014	7/20/2020 10:20	48.4	28.7	1.9	21.0	-0.02	-0.02	-0.12	65.8	65.8	12.6	Comments:.....
WCLFR014	7/28/2020 7:51	36.9	23.2	6.7	33.2	-0.15	-0.15	-0.17	58.4	58.4	28.5	Comments:.....
WCLFR015	7/10/2020 8:41	1.0	6.6	18.9	73.5	-0.02	-0.02	-0.18	67.3	67.3	5.2	Comments:.....
WCLFR015	7/10/2020 8:43	0.4	2.9	20.2	76.5	-0.01	-0.01	-0.15	64.1	64.4	1.8	Comments:.....
WCLFR015	7/14/2020 9:37	0.4	3.6	15.4	80.6	-0.01	-0.03	-0.08	69.9	69.4	26.1	Comments:.....
WCLFR015	7/14/2020 9:38	0.1	2.4	16.0	81.5	-0.02	-0.02	-0.07	68.6	68.7	9	Comments:.....
WCLFR015	7/20/2020 10:22	0.1	1.9	18.4	79.6	-0.01	-0.02	-0.04	66.2	66.0	17.1	Comments:.....
WCLFR015	7/20/2020 10:23	0.1	1.7	18.5	79.7	-0.01	-0.02	-0.05	66.2	65.8	21.4	Comments:.....
WCLFR015	7/28/2020 7:53	0.1	1.4	20.5	78.0	-0.01	-0.01	-0.08	61.3	61.3	7	Comments:.....
WCLFR015	7/28/2020 7:54	0.1	1.0	20.8	78.1	-0.01	-0.01	-0.10	60.1	60.2	6.4	Comments:.....
WCLFR016	7/10/2020 8:45	0.1	3.0	19.3	77.6	-0.05	-0.05	-0.11	67.9	67.9	6.8	Comments:.....
WCLFR016	7/10/2020 8:46	0.1	3.2	19.2	77.5	-0.03	-0.04	-0.11	67.0	67.2	14.2	Comments:.....
WCLFR016	7/14/2020 9:41	9.4	11.4	10.6	68.6	-0.01	-0.01	-0.06	70.4	70.4	11.8	Comments:.....
WCLFR016	7/20/2020 10:25	0.1	3.8	17.5	78.6	-0.01	-0.01	-0.03	68.5	68.5	7.4	Comments:.....
WCLFR016	7/20/2020 10:28	0.0	4.0	17.4	78.6	-0.01	-0.01	-0.02	68.7	68.8	4.6	Comments:.....
WCLFR016	7/28/2020 7:56	0.0	5.6	14.1	80.3	-0.04	-0.04	-0.06	62.6	62.6	11.6	Comments:.....

Comments in **bold** added by Teira Tech.

WCLF horizontal exceedances greater than 15% oxygen and/or pressures greater than 0.00 in. wc. while online or greater than 1.00 in. wc. pressure if offline.

Pursuant to Condition Number 25293, Part 7(c)(iv), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the GCCS.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0" or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.0" of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.

Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous tab as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are not tracked as exceedances.

NSPS CA1 = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute

*Pursuant to Permit to Operate (PTO) Condition Number 25293 Part 7(d)(iii), the horizontal collectors in the Class I landfill are permitted to operate at up to 15 percent O₂.

**Some readings unavailable due to issues with values automatically recorded by the sampling device.

West Contra Costa Sanitary Landfill (Class I), Richmond, CA
Wellfield Monitoring Report - August 3, 10, 17, and 25, 2020

Device ID	Date and Time	CH ₄ %	CO ₂ %	O ₂ %	BAL %	Initial Static Pressure in. wc.	Adjusted Static Pressure in. wc.	Lateral Pressure in. wc.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCLFR001	8/3/2020 10:03	36.3	24.5	1.8	37.4	-0.04	-0.04	-0.05	74.2	74.2	15.9	Comments.....
WCLFR001	8/10/2020 9:11	31.9	23.0	3.1	42.0	-0.21	-0.21	-0.24	69.2	69.2	21.8	Comments.....
WCLFR001	8/17/2020 6:50	56.7	23.2	3.6	16.5	-0.01	-0.01	-0.08	67.0	67.0	7.6	Comments.....
WCLFR001	8/25/2020 9:41	56.8	23.8	4.4	15.0	-0.31	-0.31	0.00	64.1	64.1	40.6	Comments.....
WCLFR002	8/3/2020 10:05	9.0	10.5	12.9	67.6	-0.06	-0.06	-0.28	72.5	72.5	17.7	Comments.....
WCLFR002	8/10/2020 9:13	7.4	9.0	13.9	69.7	-0.24	-0.24	-0.28	69.7	69.7	25.5	Comments.....
WCLFR002	8/17/2020 6:53	28.4	18.8	5.9	46.9	-0.15	-0.14	-0.14	69.0	69.0	26.5	Comments.....
WCLFR002	8/25/2020 9:45	3.9	5.9	16.6	73.6	-0.38	-0.42	-2.19	68.7	67.4	41.2	Comments.....
WCLFR002	8/25/2020 10:08	0.0	0.3	20.8	78.9	-0.36	-0.35	-3.67	65.3	65.4	36.2	Comments.....
WCLFR003	8/3/2020 10:07	10.0	16.2	5.0	68.8	-0.01	-0.01	-0.04	74.5	74.5	17.7	Comments.....
WCLFR003	8/10/2020 9:15	11.4	15.4	6.5	66.7	-0.18	-0.17	-0.25	70.3	70.2	9.6	Comments.....
WCLFR003	8/17/2020 6:59	65.6	29.3	0.0	5.1	-0.05	-0.05	-0.11	68.7	68.7	19.2	Comments.....
WCLFR003	8/25/2020 9:51	1.1	13.1	7.2	78.6	-0.63	-0.38	-5.59	68.9	66.8	46.6	Comments.....
WCLFR003	8/25/2020 10:06	0.1	2.2	18.5	79.2	-0.33	-0.32	-3.61	64.4	64.4	34.5	Comments.....
WCLFR003	8/25/2020 10:07	0.0	0.6	20.6	78.8	-0.33	-0.33	-3.78	64.1	64.1	34.2	Comments.....
WCLFR004	8/3/2020 10:10	8.1	10.6	12.2	69.1	-3.86	-0.04	-0.05	76.9	76.2	124.8	Comments.....
WCLFR004	8/10/2020 9:17	6.0	7.5	14.6	71.9	-3.83	-3.83	-0.27	69.1	69.0	123.8	Comments.....
WCLFR004	8/17/2020 7:01	27.0	16.9	7.7	48.4	-2.49	-2.49	-0.16	68.3	68.3	104.5	Comments.....
WCLFR004	8/25/2020 10:01	15.6	7.9	15.4	61.1	-4.69	-4.69	-3.23	65.7	65.7	141.1	Comments.....
WCLFR004	8/25/2020 10:02	0.5	0.7	20.5	78.3	-4.67	-4.35	-3.62	64.5	64.4	139.4	Comments.....
WCLFR005	8/3/2020 10:14	60.7	30.6	0.0	8.7	-0.02	-0.03	-3.33	75.0	75.0	17	Comments.....
WCLFR005	8/10/2020 9:26	32.9	23.7	3.9	39.5	-0.04	-0.04	-4.64	69.6	69.7	19.9	Comments.....
WCLFR005	8/17/2020 7:06	25.2	21.4	3.6	49.8	-0.04	-0.04	-2.54	68.6	68.6	17.9	Comments.....
WCLFR005	8/25/2020 10:13	18.6	17.6	7.5	56.3	-0.35	-0.34	-5.14	67.9	67.6	36.3	Comments.....
WCLFR006	8/3/2020 10:16	71.3	28.2	0.5	0.0	-3.19	-3.21	-3.24	76.2	76.2	127.2	Comments.....
WCLFR006	8/10/2020 9:27	70.3	29.4	0.2	0.1	-4.76	-4.76	-4.60	70.1	70.0	153.1	Comments.....
WCLFR006	8/17/2020 7:08	70.2	29.7	0.0	0.1	-2.69	-2.69	-2.65	69.4	69.4	115.3	Comments.....
WCLFR006	8/25/2020 10:14	70.5	29.0	0.5	0.0	-5.10	-5.10	-5.12	68.4	68.4	159.2	Comments.....
WCLFR007	8/3/2020 10:21	0.6	5.5	15.8	78.1	-0.03	-0.02	-3.23	77.6	77.6	34.2	Comments.....
WCLFR007	8/3/2020 10:23	0.6	5.4	15.8	78.2	-0.01	-0.01	-3.40	76.9	77.0	10.3	Comments.....
WCLFR007	8/10/2020 9:30	1.2	6.3	15.6	76.9	-0.02	-0.03	-5.07	68.2	68.1	4.9	Comments.....
WCLFR007	8/10/2020 9:32	1.0	5.8	16.1	77.1	-0.01	-0.01	-4.90	67.0	67.3	4	Comments.....
WCLFR007	8/17/2020 7:11	50.1	30.9	0.0	19.0	-0.01	-0.02	-1.46	68.8	68.9	18.6	Comments.....
WCLFR007	8/25/2020 10:18	0.1	0.7	20.3	78.9	-0.51	-0.21	-8.28	70.7	68.4	43.4	Comments.....
WCLFR007	8/25/2020 10:19	0.0	0.7	20.4	78.9	-0.20	-0.20	-8.31	67.4	67.5	26.8	Comments.....
WCLFR008	8/3/2020 10:24	50.4	26.6	3.7	19.3	-0.08	-0.08	-3.33	75.3	75.2	22.6	Comments.....
WCLFR008	8/10/2020 9:35	51.5	26.9	4.5	17.1	-0.05	-0.22	-4.79	64.9	66.3	16.5	Comments.....
WCLFR008	8/10/2020 9:37	65.1	34.2	0.7	0.0	-0.32	-0.32	-4.53	66.1	66.2	37.4	Comments.....
WCLFR008	8/17/2020 7:14	37.4	26.3	0.3	36.0	-0.06	-0.07	-1.44	68.5	68.5	21.6	Comments.....
WCLFR008	8/25/2020 10:22	45.4	27.7	0.0	26.9	-0.64	-0.64	-8.24	67.7	67.7	51.9	Comments.....
WCLFR009	8/3/2020 10:29	49.2	27.0	1.6	22.2	-0.05	-0.05	-0.03	80.3	80.3	21.5	Comments.....
WCLFR009	8/10/2020 9:40	31.5	18.2	9.2	41.1	-0.14	-0.14	-0.09	70.5	70.5	22	Comments.....
WCLFR009	8/17/2020 7:20	50.3	28.2	0.7	20.8	-0.04	-0.05	-0.06	69.1	69.1	13	Comments.....
WCLFR009	8/25/2020 10:28	38.3	21.8	4.2	35.7	-0.25	-0.26	-0.74	69.5	69.5	31	Comments.....
WCLFR010	8/3/2020 10:32	39.3	23.6	3.7	33.4	-0.03	-0.04	-0.01	79.6	79.6	19.3	Comments.....
WCLFR010	8/10/2020 9:43	27.6	17.8	6.1	48.5	-0.35	-0.35	-0.23	69.4	70.0	37	Comments.....
WCLFR010	8/17/2020 7:23	51.5	26.3	1.4	20.8	-0.06	-0.06	-0.06	68.4	68.4	14.5	Comments.....
WCLFR010	8/25/2020 10:33	28.5	15.8	8.8	46.9	-0.62	-0.62	-0.64	69.3	69.2	50.2	Comments.....
WCLFR010	8/25/2020 10:33	28.5	15.8	8.8	46.9	-0.62	-0.62	-0.64	69.3	69.2	50.2	Comments.....
WCLFR011	8/3/2020 10:39	54.2	37.1	0.3	8.4	-0.01	-0.01	-0.01	81.1	81.2	4.7	Comments.....
WCLFR011	8/10/2020 9:45	51.4	35.3	2.2	11.1	-0.15	-0.15	-0.11	70.7	70.7	25	Comments.....
WCLFR011	8/17/2020 7:25	54.5	37.6	1.0	6.9	-0.02	-0.02	-0.03	67.9	67.9	19.1	Comments.....
WCLFR011	8/25/2020 10:37	39.5	27.4	6.1	27.0	-0.29	-0.30	-0.24	71.3	71.3	35.1	Comments.....
WCLFR012	8/3/2020 10:41	8.0	15.0	1.7	75.3	-0.01	-0.02	0.00	80.7	80.9	1.8	Comments.....

Device ID	Date and Time	CH ₄ %	CO ₂ %	O ₂ %	BAL %	Initial Static Pressure in. w.c.	Adjusted Static Pressure in. w.c.	Lateral Pressure in. w.c.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCLFR012	8/10/2020 9:49	31.7	23.9	0.3	44.1	-0.01	-0.01	-0.05	73.4	73.4	6.7	Comments.....
WCLFR012	8/17/2020 7:27	10.2	10.8	10.4	68.6	-0.04	-0.04	-0.04	69.6	69.6	17.7	Comments.....
WCLFR012	8/25/2020 10:40	0.0	0.4	20.5	79.1	-0.06	-0.05	-0.05	70.8	70.9	15	Comments.....
WCLFR012	8/25/2020 10:43	0.0	0.4	20.5	79.1	-0.04	-0.04	-0.04	71.1	71.1	13.3	Comments.....
WCLFR013	8/3/2020 10:48	44.0	28.9	0.3	26.8	-0.08	-0.07	-0.06	82.5	82.6	20.3	Comments.....
WCLFR013	8/10/2020 9:56	37.9	25.3	4.6	32.2	-0.13	-0.13	-0.11	73.9	74.0	23.5	Comments.....
WCLFR013	8/17/2020 7:39	29.5	19.5	8.2	42.8	-0.09	-0.09	-0.07	69.9	69.9	22.3	Comments.....
WCLFR013	8/25/2020 10:53	25.0	17.3	8.5	49.2	-0.16	-0.16	-0.09	77.3	77.3	26.1	Comments.....
WCLFR014	8/3/2020 10:51	49.4	30.5	0.9	19.2	-0.02	-0.02	-0.03	80.7	80.8	14.2	Comments.....
WCLFR014	8/10/2020 9:58	47.0	30.3	2.4	20.3	-0.11	-0.11	-0.08	70.7	70.8	23.6	Comments.....
WCLFR014	8/17/2020 7:40	45.4	29.1	3.4	22.1	-0.07	-0.07	-0.06	70.7	70.7	19.4	Comments.....
WCLFR014	8/25/2020 10:54	49.2	30.5	2.3	18.0	-0.47	-0.45	-0.01	76.8	76.8	35	Comments.....
WCLFR015	8/3/2020 10:53	0.1	1.7	18.5	79.7	-0.01	-0.01	-0.01	81.1	81.1	9.2	Comments.....
WCLFR015	8/3/2020 10:55	0.0	1.2	18.8	80.0	-0.01	-0.01	-0.01	81.1	81.1	9.3	Comments.....
WCLFR015	8/10/2020 10:00	0.1	1.3	19.5	79.1	0.00	-0.01	-0.02	73.9	73.9	6.3	Comments.....
WCLFR015	8/10/2020 10:02	0.0	1.0	19.7	79.3	-0.01	-0.01	-0.02	72.6	72.5	19.8	Comments.....
WCLFR015	8/17/2020 7:43	0.2	1.7	19.1	79.0	-0.01	-0.02	-0.03	71.7	71.8	1.8	Comments.....
WCLFR015	8/17/2020 7:45	14.4	11.1	11.0	63.5	-0.02	-0.02	-0.03	71.8	71.8	19.5	Comments.....
WCLFR015	8/25/2020 10:56	0.1	0.9	19.9	79.1	-0.01	-0.01	-0.01	76.7	76.7	11.1	Comments.....
WCLFR015	8/25/2020 10:58	0.0	0.4	20.2	79.4	-0.01	-0.01	-0.02	76.3	76.3	13.7	Comments.....
WCLFR016	8/3/2020 10:57	0.0	4.6	15.3	80.1	-0.01	-0.01	-0.01	78.9	78.9	11.9	Comments.....
WCLFR016	8/3/2020 10:59	0.0	4.2	15.3	80.5	-0.01	-0.02	-0.03	79.5	79.5	9	Comments.....
WCLFR016	8/10/2020 10:04	0.0	5.0	15.0	80.0	-0.01	-0.01	-0.02	73.5	73.5	11.7	Comments.....
WCLFR016	8/10/2020 10:05	0.0	5.0	15.0	80.0	-0.01	-0.01	-0.03	72.2	71.7	9.3	Comments.....
WCLFR016	8/17/2020 7:48	14.3	10.8	13.4	61.5	-0.01	-0.02	-0.07	71.3	71.3		Comments.....
WCLFR016	8/25/2020 11:00	10.6	19.5	0.6	69.3	-0.04	-0.04	-0.03	77.1	77.1	14.7	Comments.....

Comments in **bold** added by Tetra Tech.

WCLF horizontal exceedances greater than 15% oxygen and/or pressures greater than 0.00 in. w.c. while online or greater than 1.00 in. w.c. pressure if offline.

Pursuant to Condition Number 25293, Part 7(c)(iv), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the GCCS.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0" or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.0" of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.

Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous tab as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are not tracked as exceedances.

NSPS CA1 = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute

*Pursuant to Permit to Operate (PTO) Condition Number 25293 Part 7(d)(iii), the horizontal collectors in the Class I landfill are permitted to operate at up to 15 percent O₂.

**Some readings unavailable due to issues with values automatically recorded by the sampling device.

West Contra Costa Sanitary Landfill (Class I), Richmond, CA
Wellfield Monitoring Report - September 1, 8, 11, 15, 21, and 28, 2020.

Device ID	Date and Time	CH ₄ %	CO ₂ %	O ₂ %	BAL %	Initial Static Pressure in wc.	Adjusted Static Pressure in wc.	Lateral Pressure in wc.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCFLR001	9/1/2020 9:24	62.1	30.6	0.2	7.1	-0.18	-0.18	0.00	61.6	61.6	27.4	Comments:.....
WCFLR001	9/1/2020 9:51	32.6	22.3	0.0	45.1	-0.03	-0.04	-0.04	67.5	67.5	12.7	Comments:.....
WCFLR001	9/15/2020 12:46	0.4	4.0	16.4	79.2	-0.04	-0.04	-0.03	86.7	86.7	17.3	Comments:.....
WCFLR001	9/15/2020 12:46	0.4	4.0	16.4	79.2	-0.04	-0.04	-0.03	86.7	86.7	17.3	Comments:.....
WCFLR001	9/15/2020 12:48	0.1	2.0	18.5	79.4	-0.05	-0.05	-0.04	85.0	85.0	17.7	Comments:.....
WCFLR001	9/21/2020 9:45	64.5	29.1	0.2	6.2	-0.16	-0.15	-0.13	68.8	68.8	28.7	Comments:.....
WCFLR001	9/28/2020 9:38	57.1	21.1	4.7	17.1	-0.03	-0.03	-0.04	93.3	93.3	21.3	Comments:.....
WCFLR002	9/1/2020 9:27	16.5	13.1	8.2	62.2	-0.16	-0.16	-0.21	62.3	62.3	24.5	Comments:.....
WCFLR002	9/1/2020 9:53	63.7	27.3	0.0	9.0	-0.02	-0.02	-0.01	66.8	66.8	12.4	Comments:.....
WCFLR002	9/15/2020 12:52	49.8	24.7	1.9	23.6	-0.01	-0.01	-0.01	86.2	86.2	14.8	Comments:.....
WCFLR002	9/21/2020 9:47	67.5	28.2	0.0	4.3	-0.14	-0.14	-0.12	71.8	71.8	29.7	Comments:.....
WCFLR002	9/28/2020 9:40	39.6	24.0	2.8	33.6	-0.02	-0.02	-0.03	95.8	95.8	23.2	Comments:.....
WCFLR003	9/1/2020 9:32	36.5	22.3	2.9	38.3	-0.09	-0.09	-0.21	61.8	61.8	18.8	Comments:.....
WCFLR003	9/11/2020 9:57	70.8	29.2	0.0	0.0	-0.03	-0.03	-0.12	67.2	67.2	6.7	Comments:.....
WCFLR003	9/15/2020 12:55	0.2	4.6	15.6	79.6	-0.01	-0.01	-0.01	82.9	82.9	14.4	Comments:.....
WCFLR003	9/15/2020 12:55	0.2	4.6	15.6	79.6	-0.01	-0.01	-0.01	82.9	82.9	14.4	Comments:.....
WCFLR003	9/15/2020 12:57	0.1	4.6	15.7	79.6	-0.02	-0.02	-0.02	81.3	81.4	12.6	Comments:.....
WCFLR003	9/21/2020 9:49	22.3	21.1	3.7	52.9	-0.10	-0.10	-0.10	71.3	71.3	27.2	Comments:.....
WCFLR003	9/28/2020 9:43	5.3	17.9	3.7	73.1	-0.03	-0.04	-0.03	90.4	90.4	23.3	Comments:.....
WCFLR004	9/1/2020 9:34	45.4	21.3	6.1	27.2	-4.96	-4.94	-0.22	62.9	62.8	150.8	Comments:.....
WCFLR004	9/11/2020 9:59	38.3	21.1	2.9	37.7	-4.26	-4.26	-4.23	66.5	66.5	138.7	Comments:.....
WCFLR004	9/15/2020 13:00	13.7	9.8	12.6	63.9	-2.50	-2.49	-0.04	86.1	86.2	101.9	Comments:.....
WCFLR004	9/21/2020 9:52	41.7	21.8	4.3	32.2	-2.77	-2.75	-0.12	68.8	68.9	111.9	Comments:.....
WCFLR004	9/28/2020 9:45	19.9	16.5	6.9	56.7	-2.61	-2.61	-0.01	93.7	93.7	105.2	Comments:.....
WCFLR005	9/1/2020 9:40	29.5	20.5	6.0	44.0	-0.16	-0.17	-4.51	63.1	63.1	24.6	Comments:.....
WCFLR005	9/11/2020 10:02	52.8	27.1	0.9	19.2	-0.11	-0.12	-2.02	66.7	66.7	25.1	Comments:.....
WCFLR005	9/15/2020 13:04	3.6	6.3	14.8	75.3	-0.19	-0.03	-4.83	78.3	78.9	31	Comments:.....
WCFLR005	9/15/2020 13:05	3.7	6.4	14.8	75.1	-0.04	-0.03	-4.85	79.9	80.0	12.9	Comments:.....
WCFLR005	9/21/2020 9:56	46.4	29.7	0.9	23.0	-0.12	-0.13	-2.60	71.2	71.2	30.2	Comments:.....
WCFLR005	9/28/2020 9:49	27.9	24.3	2.7	45.1	-0.05	-0.04	-2.57	93.9	93.9	25.3	Comments:.....
WCFLR006	9/1/2020 9:42	69.8	30.2	0.0	0.0	-4.71	-4.70	-4.50	65.6	65.6	152.4	Comments:.....
WCFLR006	9/11/2020 10:07	70.9	28.9	0.2	0.0	-2.11	-2.12	-2.13	68.4	68.4	106.2	Comments:.....
WCFLR006	9/15/2020 13:07	69.6	30.4	0.0	0.0	-4.79	-4.79	-4.65	82.8	82.9	153	Comments:.....
WCFLR006	9/21/2020 9:58	70.2	29.8	0.0	0.0	-2.69	-2.69	-2.65	72.1	72.0	115.7	Comments:.....
WCFLR006	9/28/2020 9:52	56.9	27.2	1.6	14.3	-0.09	-0.09	-4.69	93.4	93.4	115.9	Comments:.....
WCFLR007	9/1/2020 9:44	34.3	27.6	0.8	37.3	-0.03	-0.03	-2.10	68.3	68.3	15.5	Comments:.....
WCFLR007	9/11/2020 10:06	33.7	28.0	0.0	38.3	-0.02	-0.03	-3.61	79.4	79.0	20.6	Comments:.....
WCFLR007	9/15/2020 13:11	0.9	5.6	18.9	74.6	-0.10	-0.10	-2.62	72.2	72.2	27	Comments:.....
WCFLR007	9/21/2020 10:01	0.3	2.6	19.9	77.2	-0.05	-0.05	-3.21	70.4	70.5	24.6	Comments:.....
WCFLR007	9/28/2020 9:54	10.5	21.2	2.5	65.8	-0.03	-0.03	-2.65	97.1	97.1	22.5	Comments:.....
WCFLR008	9/1/2020 9:48	17.7	19.3	6.5	56.5	-0.49	-0.21	-5.02	61.4	61.4	43.2	Comments:.....
WCFLR008	9/1/2020 12:42	11.9	13.1	9.2	65.8	-0.09	-0.10	-3.87	72.7	72.7	31.8	Comments:.....
WCFLR008	9/11/2020 10:03	5.9	17.9	0.5	75.7	-0.24	-0.24	-2.07	68.0	68.1	31.4	Comments:.....
WCFLR008	9/15/2020 13:13	14.2	18.0	3.8	64.0	-0.03	-0.03	-4.01	82.2	82.3	17.1	Comments:.....
WCFLR008	9/21/2020 10:03	65.9	28.2	0.2	5.7	-0.18	-0.18	-3.24	71.6	71.6	33.6	Comments:.....
WCFLR008	9/28/2020 9:58	63.6	31.3	0.2	4.9	-0.03	-0.04	-2.45	94.3	94.3	29.4	Comments:.....
WCFLR009	9/1/2020 9:52	38.9	23.0	3.3	34.8	-0.16	-0.17	-0.05	61.5	61.6	23.5	Comments:.....

Device ID	Date and Time	CH ₄ %	CO ₂ %	O ₂ %	BAL %	Initial Static Pressure in. w.c.	Adjusted Static Pressure in. w.c.	Lateral Pressure in. w.c.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCLFR009	9/11/2020 10:15	46.7	22.2	5.6	25.5	-13.76	-0.15	-0.14	69.2	69.2		Comments:.....
WCLFR009	9/11/2020 10:16	42.3	20.5	6.9	30.3	-0.15	-0.13	-0.12	69.9	69.9		Comments:.....
WCLFR009	9/15/2020 13:19	31.1	21.1	3.5	44.3	-0.01	-0.01	-0.01	85.0	85.0	10.8	Comments:.....
WCLFR009	9/21/2020 10:08	55.0	31.7	0.0	13.3	-0.12	-0.12	-0.09	72.7	72.7	29	Comments:.....
WCLFR009	9/28/2020 10:01	0.0	1.3	18.6	80.1	-0.01	-0.01	-0.01	96.4	96.4	24.4	Comments:.....
WCLFR009	9/28/2020 10:02	0.0	0.9	19.1	80.0	-0.01	-0.01	-0.01	93.8	93.9	25.1	Comments:.....
WCLFR010	9/11/2020 9:55	8.2	9.5	14.3	68.0	-0.18	-0.17	-0.13	64.8	65.0	23.6	Comments:.....
WCLFR010	9/11/2020 10:19	20.3	13.4	11.4	54.9	-0.24	-0.18	-3.25	70.1	69.7	33.2	Comments:.....
WCLFR010	9/11/2020 10:22	1.3	1.3	19.6	77.8	-0.17	-0.14	-3.38	69.0	69.0		Comments:.....
WCLFR010	9/15/2020 13:23	0.0	0.9	19.8	79.3	-0.02	-0.01	-0.02	87.8	87.9	16.5	Comments:.....
WCLFR010	9/15/2020 13:24	0.0	0.4	20.5	79.1	-0.02	-0.01	-0.01	86.4	86.5	16.2	Comments:.....
WCLFR010	9/21/2020 10:13	41.3	22.1	6.6	30.0	-0.14	-0.14	-0.12	73.3	73.3	31.4	Comments:.....
WCLFR010	9/28/2020 10:05	31.4	14.2	9.8	44.6	-0.10	-0.08	-0.05	96.2	96.2	32.4	Comments:.....
WCLFR011	9/11/2020 9:57	37.9	25.1	7.6	29.4	-0.38	-0.38	-0.31	65.1	65.2	37.9	Comments:.....
WCLFR011	9/11/2020 10:11	48.2	33.7	3.3	14.8	-0.02	-0.02	-0.02	68.4	68.4	8.8	Comments:.....
WCLFR011	9/15/2020 13:29	51.8	35.9	1.5	10.8	-0.01	-0.01	-0.02	81.0	81.1	17.7	Comments:.....
WCLFR011	9/21/2020 10:15	28.9	18.0	9.3	43.8	-0.20	-0.21	-0.17	75.1	75.1	36	Comments:.....
WCLFR011	9/28/2020 10:07	0.0	1.0	18.8	80.2	-0.06	-0.06	-0.04	97.2	97.2	29.5	Comments:.....
WCLFR011	9/28/2020 10:08	0.0	0.9	18.9	80.2	-0.06	-0.06	-0.07	95.1	95.2	29.7	Comments:.....
WCLFR012	9/11/2020 9:59	0.1	4.2	19.6	76.1	-0.04	-0.03	-0.02	66.1	66.1	1	Comments:.....
WCLFR012	9/11/2020 10:00	0.0	2.9	20.0	77.1	-0.03	-0.03	-0.03	65.0	65.0	7.8	Comments:.....
WCLFR012	9/8/2020 14:09	21.6	22.6	1.3	54.5	-0.03	-0.04	-0.03	92.1	93.6	25.2	Comments:.....
WCLFR012	9/11/2020 10:09	0.5	1.9	18.7	78.9	-0.02	-0.02	-0.02	69.4	69.3	7.7	Comments:.....
WCLFR012	9/15/2020 13:31	0.2	1.5	18.8	79.5	-0.04	-0.04	-0.03	79.1	79.1	19.6	Comments:.....
WCLFR012	9/15/2020 13:33	0.2	1.4	18.9	79.5	-0.01	-0.01	-0.01	75.5	75.5	7.8	Comments:.....
WCLFR012	9/21/2020 10:17	1.0	4.7	19.7	74.6	-0.09	-0.09	-0.09	72.3	72.3	28.2	Comments:.....
WCLFR012	9/21/2020 10:19	0.1	0.7	20.9	78.3	-0.08	-0.10	-0.12	72.4	72.4	26.5	Comments:.....
WCLFR012	9/28/2020 10:11	0.0	0.7	19.0	80.3	-0.03	-0.04	-0.06	86.9	85.9	19.5	Comments:.....
WCLFR012	9/28/2020 10:14	0.0	0.7	19.1	80.2	-0.03	-0.03	-0.04	85.6	85.6	6.2	Comments:.....
WCLFR013	9/11/2020 10:09	35.3	22.9	5.4	36.4	-0.15	-0.15	-0.08	64.4	64.4	23.6	Comments:.....
WCLFR013	9/11/2020 10:35	35.1	25.7	1.9	37.3	-0.06	-0.06	-1.12	72.2	72.2	20.5	Comments:.....
WCLFR013	9/15/2020 13:39	32.3	28.0	0.6	39.1	-0.01	-0.01	-0.81	84.1	87.8	8	Comments:.....
WCLFR013	9/21/2020 10:29	49.5	29.1	0.0	21.4	-0.22	-0.22	-0.70	74.5	74.5	29.6	Comments:.....
WCLFR013	9/28/2020 10:18	54.9	29.4	0.1	15.6	-0.12	-0.11	-0.16	100.2	101.0	21.5	Comments:.....
WCLFR014	9/11/2020 10:11	38.7	25.3	5.4	30.6	-0.20	-0.21	-0.18	64.5	64.5	38.2	Comments:.....
WCLFR014	9/11/2020 10:37	38.1	31.1	0.4	30.4	-0.01	-0.01	-1.04	72.4	72.3	3.6	Comments:.....
WCLFR014	9/15/2020 13:42	49.5	34.0	0.0	16.5	-0.02	-0.01	-0.51	84.6	84.8	11.8	Comments:.....
WCLFR014	9/21/2020 10:31	52.3	31.0	0.3	16.4	-0.23	-0.23	-0.70	75.5	75.5	33.9	Comments:.....
WCLFR014	9/28/2020 10:20	44.0	27.9	0.5	27.6	-0.25	-0.25	-0.20	98.8	98.9	32.6	Comments:.....
WCLFR015	9/11/2020 10:14	0.5	8.1	4.2	87.2	-0.01	-0.01	-0.07	64.7	64.8	19.3	Comments:.....
WCLFR015	9/11/2020 10:30	0.2	6.2	12.5	81.1	-0.02	-0.01	-1.09	70.5	70.4	11.5	Comments:.....
WCLFR015	9/11/2020 10:31	0.0	5.9	13.1	81.0	-0.02	-0.02	-0.98	70.2	70.2	10.9	Comments:.....
WCLFR015	9/15/2020 13:43	0.1	1.0	19.9	79.0	-0.02	-0.01	-0.56	84.1	84.1	15.2	Comments:.....
WCLFR015	9/15/2020 13:44	0.0	0.6	20.2	79.2	-0.02	-0.02	-0.51	83.7	83.7	10.7	Comments:.....
WCLFR015	9/21/2020 10:33	0.6	4.6	19.4	75.4	-0.01	-0.01	-0.65	73.4	73.4	26.9	Comments:.....
WCLFR015	9/21/2020 10:34	0.1	1.7	20.4	77.8	-0.02	-0.02	-0.63	73.3	73.3	15.1	Comments:.....
WCLFR015	9/28/2020 10:21	0.0	1.3	18.9	79.8	-0.04	-0.03	-0.03	96.5	96.7	7.4	Comments:.....
WCLFR015	9/28/2020 10:22	0.0	0.8	19.1	80.1	-0.03	-0.03	-0.08	97.9	97.9	10.7	Comments:.....
WCLFR016	9/11/2020 10:16	25.2	20.3	1.7	52.8	-0.04	-0.04	-0.02	66.1	66.2	12.6	Comments:.....
WCLFR016	9/11/2020 10:28	24.7	19.7	4.5	51.1	-0.01	-0.01	-1.14	71.0	70.9	7.3	Comments:.....
WCLFR016	9/15/2020 13:47	24.7	20.9	0.2	54.2	-0.01	-0.01	-0.07	85.4	85.2	2.1	Comments:.....
WCLFR016	9/21/2020 10:36	0.0	2.3	18.7	79.0	-0.06	-0.05	-0.61	74.9	74.9	17.9	Comments:.....

Device ID	Date and Time	CH ₄ %	CO ₂ %	O ₂ %	BAL %	Initial Static Pressure in. wc.	Adjusted Static Pressure in. wc.	Lateral Pressure in. wc.	Initial Temperature Deg. F.	Adjusted Temperature Deg. F.	Initial Flow scfm	Comments as Noted By Field Technician
WCLFR016	9/21/2020 10:38	0.0	2.2	18.9	78.9	-0.07	-0.07	-0.69	74.5	74.6	17.7	Comments:.....
WCLFR016	9/28/2020 10:24	0.0	2.7	17.1	80.2	-0.03	-0.04	-0.08	94.3	94.3	17.3	Comments:.....
WCLFR016	9/28/2020 10:27	7.0	5.3	14.4	73.3	-0.01	-0.02	-0.10	100.3	100.0	6.1	Comments:.....

Comments in **bold** added by Tetra Tech.

WCLF horizontal exceedances greater than 15% oxygen and/or pressures greater than 0.00 in. wc. while online or greater than 1.00 in. wc. pressure if offline.

Pursuant to Condition Number 25293, Part 7(c)(iv), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the GCCS.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0' or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.07' of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.

Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous tab as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are not tracked as exceedances.

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute

*Pursuant to Permit to Operate (PTO) Condition Number 25293 Part 7(c)(iii), the horizontal collectors in the Class I landfill are permitted to operate at up to 15 percent O₂.

**Some readings unavailable due to issues with values automatically recorded by the sampling device.

APPENDIX K

CLASS I WELLFIELD DEVIATION LOGS

**WEST CONTRA COSTA SANITARY LANDFILL (CLASS I)
MAY 1, 2020 THROUGH OCTOBER 31, 2020 WELLFIELD DEVIATION REPORT**

REPORT PREPARED BY: TETRA TECH
UPDATED DATE: 11/1/2020
LFG MONITORING DEVICE: GEM
MODEL: 2000
DATE LAST CALIBRATED: DAILY

Well ID	Date and Time	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Balance Gas (%)	Static Pressure (in. w.c.)	Temperature (°F)	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
WCLFR001	4/28/2020 9:02	2.4	2.4	18.9	76.3	-0.30	70.5	Comments:.....	
WCLFR001	4/28/2020 9:03	0.7	0.8	20.5	78.0	-0.06	69.7	Comments:.....	
WCLFR001	5/4/2020 13:15	59.0	23.0	0.0	18.0	-0.01	77.6	Comments:.....	6
An oxygen exceedance was detected at WCLFR001 on 4/28/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/4/2020 and no further exceedance was detected.									
WCLFR001	5/12/2020 8:11	8.0	4.7	17.9	69.4	-3.10	63.5	Comments:.....	
WCLFR001	5/12/2020 8:12	0.1	0.7	20.9	78.3	-1.69	61.4	Comments:.....	
WCLFR001	5/18/2020 7:02	33.5	17.0	5.0	44.5	-0.01	56.9	Comments:.....	6
An oxygen exceedance was detected at WCLFR001 on 5/12/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/18/2020 and no further exceedance was detected.									
WCLFR001	6/1/2020 8:50	4.8	6.4	16.1	72.7	-1.15	66.6	Comments:.....	
WCLFR001	6/1/2020 8:52	0.4	0.9	20.6	78.1	-0.52	65.8	Comments:.....	
WCLFR001	6/9/2020 8:32	24.9	11.8	10.3	53.0	-0.29	76.2	Comments:.....	8
An oxygen exceedance was detected at WCLFR001 on 6/1/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 6/9/2020 and no further exceedance was detected.									
WCLFR001	9/15/2020 12:46	0.4	4.0	16.4	79.2	-0.04	86.7	Comments:.....	
WCLFR001	9/15/2020 12:46	0.4	4.0	16.4	79.2	-0.04	86.7	Comments:.....	
WCLFR001	9/15/2020 12:48	0.1	2.0	18.5	79.4	-0.05	85.0	Comments:.....	
WCLFR001	9/21/2020 9:45	64.5	29.1	0.2	6.2	-0.16	68.8	Comments:.....	6
An oxygen exceedance was detected at WCLFR002 on 9/15/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 9/21/2020 and no further exceedance was detected.									
WCLFR002	5/12/2020 8:14	5.2	2.5	19.3	73.0	-1.55	60.7	Comments:.....	
WCLFR002	5/12/2020 8:16	5.9	3.0	19.0	72.1	-1.44	61.2	Comments:.....	
WCLFR002	5/18/2020 7:03	16.1	14.6	3.9	65.4	-0.01	55.9	Comments:.....	6
An oxygen exceedance was detected at WCLFR002 on 5/12/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/18/2020 and no further exceedance was detected.									
WCLFR002	6/9/2020 8:36	3.0	3.7	17.9	75.4	-0.27	69.7	Comments:.....	
WCLFR002	6/9/2020 8:40	0.5	0.9	20.6	78.0	-0.07	71.8	Comments:.....	
WCLFR002	6/15/2020 7:00	18.1	16.5	1.5	63.9	-0.02	63.7	Comments:.....	6
An oxygen exceedance was detected at WCLFR002 on 6/9/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 6/15/2020 and no further exceedance was detected.									
WCLFR002	8/25/2020 9:45	3.9	5.9	16.6	73.6	-0.38	68.7	Comments:.....	
WCLFR002	8/25/2020 10:08	0.0	0.3	20.8	78.9	-0.36	65.3	Comments:.....	
WCLFR002	9/1/2020 9:27	16.5	13.1	8.2	62.2	-0.16	62.3	Comments:.....	7
An oxygen exceedance was detected at WCLFR002 on 8/25/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 9/1/2020 and no further exceedance was detected.									
WCLFR002	10/26/2020 11:47	1.9	4.2	17.8	76.1	-0.57	79.0	Comments:.....	
WCLFR002	10/26/2020 11:48	1.7	3.9	18.0	76.4	-0.33	78.8	Comments:.....	6 (as of November 1, 2020)
An oxygen exceedance was detected at WCLFR002 on 10/26/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remains in exceedance. The well was re-monitored on 11/1/2020 and no further exceedance was detected.									
WCLFR003	4/28/2020 8:30	3.7	4.8	15.6	75.9	-0.62	68.0	Comments:.....	
WCLFR003	4/28/2020 8:31	3.6	4.9	15.5	76.0	-0.24	66.5	Comments:.....	
WCLFR003	5/4/2020 13:22	13.7	19.0	2.6	64.7	-0.02	88.6	Comments:.....	6
An oxygen exceedance was detected at WCLFR003 on 4/28/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/4/2020 and no further exceedance was detected.									
WCLFR003	5/12/2020 8:18	1.1	3.8	17.0	78.1	-1.09	61.9	Comments:.....	
WCLFR003	5/12/2020 8:19	0.1	0.9	20.2	78.8	-1.06	60.3	Comments:.....	
WCLFR003	5/18/2020 7:06	9.8	15.1	3.4	71.7	-0.01	56.4	Comments:.....	6
An oxygen exceedance was detected at WCLFR003 on 5/12/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/18/2020 and no further exceedance was detected.									

WCLFR003	6/9/2020 8:44	0.4	4.4	15.5	79.7	-0.39	70.6	Comments:.....	
WCLFR003	6/9/2020 8:46	0.1	1.7	18.9	79.3	-0.15	71.6	Comments:.....	
WCLFR003	6/15/2020 7:04	15.8	16.7	0.7	66.8	-0.02	66.8	Comments:.....	
An oxygen exceedance was detected at WCLFR003 on 6/9/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 6/15/2020 and no further exceedance was detected.									
WCLFR003	8/25/2020 10:06	0.1	2.2	18.5	79.2	-0.33	64.4	Comments:.....	
WCLFR003	8/25/2020 10:07	0.0	0.6	20.6	78.8	-0.33	64.1	Comments:.....	
WCLFR003	9/1/2020 9:32	36.5	22.3	2.9	38.3	-0.09	61.8	Comments:.....	
An oxygen exceedance was detected at WCLFR003 on 8/25/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 9/1/2020 and no further exceedance was detected.									
WCLFR003	9/15/2020 12:55	0.2	4.6	15.6	79.6	-0.01	82.9	Comments:.....	
WCLFR003	9/15/2020 12:55	0.2	4.6	15.6	79.6	-0.01	82.9	Comments:.....	
WCLFR003	9/15/2020 12:57	0.1	4.6	15.7	79.6	-0.02	81.3	Comments:.....	
WCLFR003	9/21/2020 9:49	22.3	21.1	3.7	52.9	-0.10	71.3	Comments:.....	
An oxygen exceedance was detected at WCLFR003 on 9/15/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 9/21/2020 and no further exceedance was detected.									
WCLFR003	10/26/2020 11:52	0.0	1.2	19.7	79.1	-0.56	75.9	Comments:NSPS/EG CALDEC FLOW/VACUUM,.....	
WCLFR003	10/26/2020 11:53	0.0	1.2	19.8	79.0	-0.41	74.6	Comments:COMPLIANCE FOLLOW-UP READING,.....	
An oxygen exceedance was detected at WCLFR003 on 10/26/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remains in exceedance.									
WCLFR004	4/28/2020 8:33	3.9	4.7	15.6	75.8	-3.83	67.7	Comments:.....	
WCLFR004	4/28/2020 8:35	0.3	0.7	20.4	78.6	-3.71	67.8	Comments:.....	
WCLFR004	5/4/2020 13:24	18.0	9.0	11.4	61.6	-0.90	89.6	Comments:.....	
An oxygen exceedance was detected at WCLFR004 on 4/28/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/4/2020 and no further exceedance was detected.									
WCLFR004	5/12/2020 8:24	0.9	1.5	19.9	77.7	-10.41	59.7	Comments:.....	
WCLFR004	5/12/2020 8:27	0.0	0.2	20.9	78.9	-11.11	59.2	Comments:.....	
WCLFR004	5/18/2020 7:08	16.9	8.5	13.2	61.4	-4.45	55.9	Comments:.....	
An oxygen exceedance was detected at WCLFR004 on 5/12/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/18/2020 and no further exceedance was detected.									
WCLFR004	6/9/2020 8:49	1.1	2.7	18.0	78.2	-7.73	70.3	Comments:.....	
WCLFR004	6/9/2020 8:50	0.0	0.7	20.8	78.5	-7.80	68.4	Comments:.....	
WCLFR004	6/15/2020 7:07	25.2	10.9	12.5	51.4	-3.16	62.0	Comments:.....	
An oxygen exceedance was detected at WCLFR004 on 6/9/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 6/15/2020 and no further exceedance was detected.									
WCLFR004	6/22/2020 7:36	0.0	0.2	20.9	78.9	-5.76	56.7	Comments:.....	
WCLFR004	6/22/2020 7:36	0.0	0.2	20.9	78.9	-5.76	56.7	Comments:.....	
WCLFR004	6/22/2020 7:37	0.0	0.2	20.9	78.9	-5.78	57.1	Comments:.....	
WCLFR004	6/29/2020 7:18	23.4	12.3	12.5	51.8	-4.71	58.6	Comments:.....	
An oxygen exceedance was detected at WCLFR004 on 6/22/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 6/29/2020 and no further exceedance was detected.									
WCLFR004	8/25/2020 10:01	15.6	7.9	15.4	61.1	-4.69	65.7	Comments:.....	
WCLFR004	8/25/2020 10:02	0.5	0.7	20.5	78.3	-4.67	64.5	Comments:.....	
WCLFR004	9/1/2020 9:34	45.4	21.3	6.1	27.2	-4.96	62.9	Comments:.....	
An oxygen exceedance was detected at WCLFR004 on 8/25/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 9/1/2020 and no further exceedance was detected.									
WCLFR004	10/26/2020 11:55	0.5	2.1	19.3	78.1	-2.81	74.4	Comments:INCR FLOW/VACUUM,.....	
An oxygen exceedance was detected at WCLFR004 on 10/26/2020. O&M personnel initiated corrective action on the same day, but the well remains in exceedance.									
WCLFR005	5/12/2020 8:34	11.0	7.8	15.2	66.0	-1.51	62.1	Comments:.....	
WCLFR005	5/12/2020 8:35	0.5	0.8	20.5	78.2	-1.19	61.0	Comments:.....	
WCLFR005	5/18/2020 7:11	18.7	12.8	9.9	58.6	-0.05	57.1	Comments:.....	
An oxygen exceedance was detected at WCLFR005 on 5/12/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/18/2020 and no further exceedance was detected.									
WCLFR005	10/26/2020 12:07	0.0	3.1	18.8	78.1	-0.48	74.5	Comments:INCR FLOW/VACUUM,.....	
WCLFR005	10/26/2020 12:14	0.0	2.4	19.4	78.2	-0.48	73.7	Comments:.....	
An oxygen exceedance was detected at WCLFR005 on 10/26/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remains in exceedance.									

APPENDIX L

CLASS II WELLFIELD MONITORING LOGS

Table with columns: Device ID, Date and Time, CH4, CO2, O2, BAL, Initial Static Pressure, Adjusted Static Pressure, Initial Differential Pressure, Initial Temperature, Initial Flow, Comments as Noted By Field Technician. Rows include device IDs like WCLFH05A through WCLFH10B.

*Some readings not available due to the GEM not saving the data correctly. Additionally, not all readings were saved with comments from the O&M personnel conducting the monitoring. Comments in **bold** added by Tetra Tech.

**Wellfield startup and shutdown, and maintenance times and causes were developed from site provided data, but have not been confirmed by SCS at the time of report issuance.

WCLF horizontal exceedances greater than 15% oxygen, WCLF vertical LFG well exceedances greater than or equal to 5% oxygen, 131 °F, or positive pressure.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0" or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.0" of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.

Pursuant to Condition Number 25293, Part 7(c)(iv), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the GCCS.

Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous MOR as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are not tracked as exceedances.

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH4 = Methane CO2 = Carbon Dioxide O2 = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute N/A = Reading not available due to GEM Error

Device ID	Date and Time	CH ₄	CO ₂	O ₂	BAL *	Initial Static Pressure in. wc.	Adjusted Static Pressure in. wc.	Initial Differential Pressure in. wc.	Initial Temperature Deg. F.	Initial Flow*	Comments as Noted By Field Technician*
WCLFH10B	7/20/2020 12:28	% 34.5	% 25.2	% 7.7	% 32.6	in. wc. -0.02	in. wc. -0.02	in. wc. 0.00	Deg. F. 82.6	scfm 1.5	
WCLFH10B	7/20/2020 12:29	% 21.1	% 15.2	% 12.8	% 50.9	in. wc. -0.04	in. wc. -0.04	in. wc. 0.03	Deg. F. 87.4	scfm 9.7	Comments: High O ₂ Minimum Vacuum Setting..... Comments:.....

*Some readings not available due to the GEM not saving the data correctly. Additionally, not all readings were saved with comments from the O&M personnel conducting the monitoring.

Comments in **bold** added by Tetra Tech.

**Wellfield startup and shutdown, and maintenance times and causes were developed from site provided data, but have not been confirmed by SCS at the time of report issuance.

WCLFH horizontal exceedances greater than 15% oxygen, WCLF vertical LFG well exceedances greater than or equal to 5% oxygen, 131 °F, or positive pressure.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0" or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.0" of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.

Pursuant to Condition Number 25293, Part 7(c)(iv), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the GCCS.

Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous MOR as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are not tracked as exceedances.

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute N/A = Reading not available due to GEM Error

Device ID	Date and Time	CH ₄	CO ₂	O ₂	BAL*	Initial Static Pressure	Adjusted Static Pressure	Initial Differential Pressure	Initial Temperature	Initial Flow*	Comments as Noted By Field Technician*
		%	%	%	%	in. wc.	in. wc.	in. wc.	Deg. F.	scfm	
WCLFH09A	8/11/2020 11:00	26.9	23.7	6.3	43.1	-0.84	-0.84	0.01	78.9	4.6	Comments:.....
WCLFH09A	8/24/2020 13:05	49.0	35.7	0.6	14.7	-0.15	-0.15	0.14	84.5	23.8	Comments:.....
WCLFH09B	8/11/2020 10:33	0.1	0.6	20.8	78.5	-0.01	-0.01	0.08	66.7	18.0	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed,.....
WCLFH09B	8/11/2020 10:34	0.1	0.4	21.0	78.5	-0.01	-0.01	0.01	67.1	4.3	Comments:.....
WCLFH09B	8/18/2020 12:28	0.1	0.5	19.7	79.7	-0.01	-0.01	0.00	92.2	2.5	Comments:High O2,Minimum Vacuum Setting,.....
WCLFH09B	8/18/2020 12:29	0.0	0.3	19.7	80.0	-0.01	-0.02	0.00	92.1	3.5	Comments:.....
WCLFH10A	8/11/2020 10:53	6.0	23.5	1.8	68.7	-0.06	-0.06	0.00	74.8	3.7	Comments:.....
WCLFH10A	8/24/2020 13:02	7.9	23.2	2.6	66.3	-0.01	-0.02	0.01	84.0	5.3	Comments:.....
WCLFH10B	8/11/2020 10:05	0.1	1.1	21.0	77.8	-0.02	-0.02	0.01	70.4	4.5	Comments:High O2,Minimum Vacuum Setting,.....
WCLFH10B	8/11/2020 10:09	0.0	0.2	20.9	78.9	-0.01	-0.01	0.02	65.6	7.6	Comments:.....
WCLFH10B	8/24/2020 8:59	0.2	1.1	21.0	77.7	-0.02	-0.02	0.11	69.0	20.4	Comments:.....
WCLFH10B	8/24/2020 9:02	0.0	0.3	20.9	78.8	-0.03	-0.02	0.07	69.3	16.7	Comments:.....

*Some readings not available due to the GEM not saving the data correctly. Additionally, not all readings were saved with comments from the O&M personnel conducting the monitoring.

Comments in **bold** added by Tetra Tech .

**Wellfield startup and shutdown, and maintenance times and causes were developed from site provided data, but have not been confirmed by SCS at the time of report issuance.

WCLFH horizontal exceedances greater than 15% oxygen, WCLFH vertical LFG well exceedances greater than or equal to 5% oxygen, 131 °F, or positive pressure.

Pursuant to Condition Number 25293 Part 7(c) Class I and II horizontal collectors must be operated if methane is 5% or greater or pressure is 1.0" or greater. Pursuant to Condition Number 25293 Part 7(d) LCRS components or horizontal collectors for Class I and II must operate at less than 0.0" of pressure when in operation and when disconnected they may be operated at greater than 15% oxygen until returned to service.

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Device ID	Date and Time	CH ₄	CO ₂	O ₂	BAL*	Initial Static Pressure	Adjusted Static Pressure	Initial Differential Pressure	Initial Temperature	Initial Flow*	Comments as Noted By Field Technician*
		%	%	%	%	in. wc.	in. wc.	in. wc.	Deg. F.	scfm	
WCLFH07A	10/13/2020 13:49	31.0	32.8	0.1	36.1	-0.21	-0.22	0.35	97.6	35.9	Comments:.....
WCLFH07B	10/23/2020 7:34	2.8	8.8	14.1	74.3	-0.65	-0.64	0.01	73.1	4.9	Comments:No Change.....
WCLFH07C	10/13/2020 12:16	54.6	40.6	0.6	4.2	-2.17	-2.17	0.32	91.6	35.7	Comments:.....
WCLFH07D	10/23/2020 8:56	56.5	40.8	0.3	2.4	-2.54	-2.54	0.02	78.7	7.8	Comments:.....
WCLFH07E	10/13/2020 13:53	59.3	41.7	0.0	0.0	-0.90	-0.90	0.36	96.5	37.7	Comments:High O2.....
WCLFH07F	10/23/2020 7:37	6.0	5.7	17.2	71.1	-3.22	-3.22	-0.01	88.5	NA	Comments:No Change.....
WCLFH07G	10/23/2020 7:38	6.2	5.6	17.2	71.0	-3.20	-3.19	-0.08	89.7	NA	Comments:No Change.....
WCLFH07H	10/13/2020 11:58	55.8	44.2	0.0	0.0	-0.15	-0.15	0.35	103.6	36.6	Comments:.....
WCLFH07I	10/23/2020 8:59	52.4	42.6	0.4	4.6	-0.53	-0.49	-0.06	63.6	NA	Comments:.....
WCLFH07J	10/13/2020 14:02	59.3	40.7	0.0	0.0	-0.13	-0.65	0.37	87.6	39.0	Comments:Increased Flow/Vacuum.....
WCLFH07K	10/13/2020 14:03	57.8	40.0	0.0	2.2	-0.93	-0.94	0.39	85.3	39.7	Comments:.....
WCLFH07L	10/23/2020 7:45	30.3	26.6	5.8	37.3	-2.15	-2.13	0.01	82.5	5.7	Comments:Minimum Vacuum Setting.....
WCLFH07M	10/13/2020 11:51	0.6	5.9	18.9	74.6	-0.02	-0.03	0.32	99.7	34.0	Comments:.....
WCLFH07N	10/13/2020 11:53	0.5	3.7	19.3	76.5	-0.05	-0.05	0.32	99.7	34.4	Comments:High O2.....
WCLFH07O	10/23/2020 8:55	0.0	0.3	21.0	78.7	-0.48	-0.48	0.04	63.5	12.2	Comments:No Change.....
WCLFH07P	10/23/2020 8:56	0.0	0.1	21.1	78.8	-0.50	-0.49	0.05	64.4	13.3	Comments:Minimum Vacuum Setting.....
WCLFH07Q	10/13/2020 14:11	24.7	33.6	0.0	41.7	-0.29	-0.28	0.35	73.3	36.3	Comments:No Change.....
WCLFH07R	10/23/2020 7:48	33.9	39.4	0.0	26.7	-0.65	-0.63	0.02	54.3	7.4	Comments:High O2; Minimum Vacuum Setting.....
WCLFH07S	10/12/2020 6:58	8.1	8.1	17.1	66.7	-0.28	-0.28	-0.01	53.8	NA	Comments:High O2; Minimum Vacuum Setting.....
WCLFH07T	10/12/2020 7:09	2.4	5.2	19.4	73.0	-0.22	-0.22	-0.03	53.6	NA	Comments:.....
WCLFH07U	10/12/2020 7:09	2.4	5.2	19.4	73.0	-0.22	-0.22	-0.03	53.6	NA	Comments:.....
WCLFH07V	10/22/2020 10:29	14.1	10.0	14.7	61.2	-0.30	-0.29	-0.06	79.4	NA	Comments:.....

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Comments in **bold** added by Tetra Tech.

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APPENDIX M

CLASS II WELLFIELD DEVIATION LOGS

WCLF0847	4/17/2020 8:11	26.2	21.3	7.3	45.2	-0.43	79.2	Comments:High O2,Closed Valve 1/2 Turn or Less,Minimum Vacuum Setting,.....	
WCLF0847	4/17/2020 8:13	25.3	20.7	7.7	46.3	-0.41	74.9	Comments:.....	
WCLF0847	5/4/2020 12:41	17.2	16.0	8.3	58.5	-0.01	86.2	Comments:High O2,Minimum Vacuum Setting,.....	17
WCLF0847	5/4/2020 12:42	45.4	29.8	0.1	24.7	-0.01	87.0	Comments:.....	
An oxygen exceedance was detected at WCLF0847 on 4/17/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/4/2020 and no further exceedance was detected.									
WCLF0847	6/8/2020 10:40	0.4	11.8	9.9	77.9	-0.07	86.0	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed	
WCLF0847	6/8/2020 10:42	0.4	10.9	10.8	77.9	-0.06	85.7	Comments:.....	
WCLF0847	6/8/2020 10:42	0.4	10.9	10.8	77.9	-0.06	85.7	Comments:.....	
WCLF0847	6/22/2020 11:36	67.4	32.6	0.0	0.0	-0.03	86.5	Comments:.....	14
An oxygen exceedance was detected at WCLF0847 on 6/8/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 6/22/2020 and no further exceedance was detected.									
WCLF0848	5/18/2020 9:37	30.1	23.1	5.0	41.8	-0.31	82.6	Comments:Closed Valve 1/2 to 1 Turn,High O2,.....	
WCLF0848	5/18/2020 9:37	30.1	23.1	5.0	41.8	-0.31	82.6	Comments:.....	
WCLF0848	5/18/2020 9:38	30.4	23.5	4.6	41.5	-0.25	79.9	Comments:.....	<1
An oxygen exceedance was detected at WCLF0848 on 5/18/2020. O&M personnel initiated corrective action and re-monitored the well on the same day and no further exceedance was detected.									
WCLF0849	8/18/2020 11:27	34.9	23.1	6.1	35.9	-6.10	82.6	Comments:Closed Valve 1/2 to 1 Turn,High O2,.....	
WCLF0849	8/18/2020 11:28	42.3	27.7	3.1	26.9	-3.03	84.7	Comments:.....	<1
An oxygen exceedance was detected at WCLF0849 on 8/18/2020. O&M personnel initiated corrective action and re-monitored the well on the same day and no further exceedance was detected.									
WCLF0851	6/8/2020 10:13	0.0	0.3	20.9	78.8	-4.19	74.5	Comments:High O2,Closed Valve 1/2 to 1 Turn,Minimum Vacuum Setting,Valve 100% Closed	
WCLF0851	6/9/2020 11:41	49.2	29.0	0.1	21.7	-0.11	92.4	Comments:.....	1
An oxygen exceedance was detected at WCLF0851 on 6/8/2020. O&M personnel initiated corrective action on the same day. The well was re-monitored on 6/9/2020 and no further exceedance was detected.									
WCLF0851	7/21/2020 8:26	41.1	23.9	5.5	29.5	-5.14	76.7	Comments:High O2,Closed Valve 1/2 to 1 Turn,.....	
WCLF0851	7/21/2020 8:28	50.2	27.8	3.0	19.0	-2.72	72.4	Comments:.....	<1
An oxygen exceedance was detected at WCLF0851 on 7/21/2020. O&M personnel initiated corrective action and re-monitored the well on the same day and no further exceedance was detected.									
WCLF0855	8/4/2020 10:11	33.8	23.9	8.3	34.0	-9.18	98.9	Comments:High O2,Closed Valve 1/2 to 1 Turn,.....	
WCLF0855	8/4/2020 10:11	33.8	23.9	8.3	34.0	-9.18	98.9	Comments:.....	
WCLF0855	8/4/2020 10:12	43.5	30.5	4.8	21.2	-4.89	94.8	Comments:.....	<1
An oxygen exceedance was detected at WCLF0855 on 8/4/2020. O&M personnel initiated corrective action and re-monitored the well on the same day and no further exceedance was detected.									
WCLFH01B	5/12/2020 11:22	6.2	7.4	15.6	70.8	-0.55	70.6	Comments:High O2,Closed Valve 1/2 Turn or Less,Minimum Vacuum Setting,.....	
WCLFH01B	5/12/2020 11:23	1.8	2.4	19.2	76.6	-0.39	70.9	Comments:.....	
WCLFH01B	5/26/2020 12:34	16.1	19.1	6.5	58.3	-0.02	104.5	Comments:High O2,Minimum Vacuum Setting,.....	14
An oxygen exceedance was detected at WCLFH01B on 5/12/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/26/2020 and no further exceedance was detected.									
WCLFH01B	6/12/2020 7:32	1.3	5.6	17.4	75.7	-0.33	62.2	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed	
WCLFH01B	6/12/2020 7:35	1.4	5.2	17.5	75.9	-0.30	60.6	Comments:.....	
WCLFH01B	6/23/2020 13:14	0.0	4.1	17.5	78.4	-0.13	75.1	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed	
WCLFH01B	6/23/2020 13:14	0.0	4.1	17.5	78.4	-0.13	75.1	Comments:.....	
WCLFH01B	6/23/2020 13:15	0.0	2.6	18.8	78.6	-0.07	79.0	Comments:.....	
WCLFH01B	7/14/2020 12:54	0.1	1.7	20.2	78.0	-0.01	67.7	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed,.....	
WCLFH01B	7/14/2020 12:55	0.1	0.8	21.0	78.1	-0.01	69.3	Comments:.....	
WCLFH01B	7/24/2020 10:56	0.2	2.8	18.6	78.4	-0.02	68.2	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed,.....	
WCLFH01B	7/24/2020 10:59	0.2	3.1	18.3	78.4	-0.01	67.4	Comments:.....	
WCLFH01B	8/7/2020 11:26	0.3	3.4	18.2	78.1	-0.31	76.2	Comments:.....	
WCLFH01B	8/7/2020 11:28	0.2	2.5	18.8	78.5	-0.29	77.5	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed,.....	
WCLFH01B	8/24/2020 11:43	6.3	15.4	10.2	68.1	-0.23	87.0	Comments:Minimum Vacuum Setting,Valve 100% Closed,.....	73
An oxygen exceedance was detected at WCLFH01B on 6/12/2020. O&M personnel initiated corrective action and re-monitored the well on the same day and on the dates noted above, but the well remained in exceedance. The well was re-monitored on 8/24/2020 and no further exceedance was detected.									
WCLFH01B	9/1/2020 14:20	0.2	3.8	20.3	75.7	-0.14	75.8	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed,.....	
WCLFH01B	9/1/2020 14:22	0.0	1.6	21.0	77.4	-0.16	72.6	Comments:.....	
WCLFH01B	9/15/2020 14:26	2.8	17.8	7.8	71.6	-0.07	87.3	Comments:.....	14
An oxygen exceedance was detected at WCLFH01B on 9/1/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 9/15/2020 and no further exceedance was detected.									
WCLFH01B	9/21/2020 12:11	2.7	8.5	17.0	71.8	-0.18	84.2	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed,.....	
WCLFH01B	9/21/2020 12:13	2.5	6.3	17.6	73.6	-0.20	83.0	Comments:.....	
WCLFH01B	10/7/2020 11:25	14.7	27.6	4.8	52.9	-0.18	71.7	Comments:.....	16
An oxygen exceedance was detected at WCLFH01B on 9/21/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 10/7/2020 and no further exceedance was detected.									
WCLFH01B	10/23/2020 8:25	0.0	7.3	16.0	76.7	-0.85	57.8	Comments:High O2,.....	
WCLFH01B	10/23/2020 8:26	0.0	8.7	15.0	76.3	-0.90	58.4	Comments:No Charge,.....	9 (as of November 1, 2020)
An oxygen exceedance was detected at WCLF0823 on 10/23/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remains in exceedance.									
WCLFH03A	4/24/2020 14:22	36.2	29.6	0.7	33.5	0.00	86.9	Comments:.....	

An oxygen exceedance was detected at WCLFH09A on 5/19/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 6/1/2020 and no further oxygen exceedance was detected, but a additional pressure exceedance was detected. O&M personnel initiated corrective action and re-monitored the well on the same day and no further exceedances were detected.										
WCLFH10A	4/24/2020 15:45	0.2	3.6	18.2	78.0	-0.03	94.4	Comments:High O2,Minimum Vacuum Setting,.....		
WCLFH10A	4/24/2020 15:47	0.2	2.7	19.0	78.1	-0.02	93.3	Comments:.....		
WCLFH10A	5/8/2020 12:52	0.4	14.5	9.8	75.3	-0.01	90.4	Comments:High O2,Minimum Vacuum Setting,.....	14	
An oxygen exceedance was detected at WCLFH10A on 4/24/2020. O&M personnel initiated corrective action and re-monitored the well on the same day, but the well remained in exceedance. The well was re-monitored on 5/8/2020 and no further exceedance was detected.										
WCLFH10A	5/19/2020 9:21	0.0	9.4	15.8	74.8	-0.02	75.8	Comments:.....		
WCLFH10A	5/22/2020 14:14	0.1	9.8	13.2	76.9	-0.01	87.1	Comments:.....	3	
An oxygen exceedance was detected at WCLFH10A on 5/19/2020. O&M personnel initiated corrective action on the same day, but the well remained in exceedance. The well was re-monitored on 5/22/2020 and no further exceedance was detected.										
WCLFH10A	6/1/2020 12:55	0.0	5.6	16.1	78.3	-0.01	78.9	Comments:		
WCLFH10A	6/8/2020 12:33	0.0	8.5	13.0	78.5	-0.03	81.8	Comments:High O2	7	
An oxygen exceedance was detected at WCLFH10A on 6/1/2020. O&M personnel initiated corrective action on the same day. The well was re-monitored on 6/8/2020 and no further exceedance was detected.										
WCLFH10A	6/8/2020 12:36	0.0	5.5	15.4	79.1	-0.02	85.0	Comments:		
WCLFH10A	6/12/2020 11:35	0.0	9.5	13.5	77.0	-0.02	70.6	Comments:High O2,Minimum Vacuum Setting	4	
An oxygen exceedance was detected at WCLFH10A on 6/8/2020. O&M personnel initiated corrective action on the same day. The well was re-monitored on 6/12/2020 and no further exceedance was detected.										
WCLFH10A	6/23/2020 14:40	0.0	6.3	16.6	77.1	-0.02	82.1	Comments:		
WCLFH10A	6/23/2020 16:25	0.0	10.2	13.4	76.4	-0.01	83.0	Comments:	<1	
An oxygen exceedance was detected at WCLFH10A on 6/23/2020. O&M personnel initiated corrective action and re-monitored the well on the same day and no further exceedance was detected.										
WCLFH10B	7/13/2020 10:24	7.8	6.2	18.1	67.9	-0.02	69.8	Comments:.....		
WCLFH10B	7/20/2020 12:28	34.5	25.2	7.7	32.6	-0.02	82.6	Comments:High O2,Minimum Vacuum Setting,.....	7	
An oxygen exceedance was detected at WCLFH10B on 7/13/2020. O&M personnel initiated corrective action, but the well remained in exceedance. The well was re-monitored on 7/20/2020 and no further exceedance was detected.										
WCLFH10B	8/11/2020 10:05	0.1	1.1	21.0	77.8	-0.02	70.4	Comments:High O2,Minimum Vacuum Setting,.....		
WCLFH10B	8/11/2020 10:09	0.0	0.2	20.9	78.9	-0.01	65.6	Comments:.....		
WCLFH10B	8/24/2020 8:59	0.2	1.1	21.0	77.7	-0.02	69.0	Comments:.....		
WCLFH10B	8/24/2020 9:02	0.0	0.3	20.9	78.8	-0.03	69.3	Comments:.....		
WCLFH10B	9/14/2020 13:40	2.6	2.2	18.5	76.7	-0.01	97.9	Comments:High O2,Minimum Vacuum Setting,.....		
WCLFH10B	9/14/2020 13:43	0.0	0.3	20.9	78.8	-0.02	98.2	Comments:.....		
WCLFH10B	9/23/2020 10:43	1.5	2.7	19.4	76.4	-0.03	86.2	Comments:High O2,Minimum Vacuum Setting,Valve 100% Closed,....		
WCLFH10B	9/23/2020 10:45	0.5	1.1	20.2	78.2	-0.01	86.2	Comments:.....		
WCLFH10B	10/12/2020 6:58	8.1	8.1	17.1	66.7	-0.28	53.8	Comments:"High O2,Minimum Vacuum Setting,...."		
WCLFH10B	10/12/2020 6:58	8.1	8.1	17.1	66.7	-0.28	53.8	Comments:High O2,Minimum Vacuum Setting,.....		
WCLFH10B	10/12/2020 7:09	2.4	5.2	19.4	73.0	-0.22	53.6	Comments:"....."		
WCLFH10B	10/12/2020 7:09	2.4	5.2	19.4	73.0	-0.22	53.6	Comments:.....		
WCLFH10B	10/22/2020 10:29	14.1	10.0	14.7	61.2	-0.30	79.4	Comments:.....	72	
An oxygen exceedance was detected at WCLFH10B on 8/11/2020. O&M personnel initiated corrective action and re-monitored the well on the same day and on the dates noted above, but the well remained in exceedance. The well was re-monitored on 10/22/2020 and no further exceedance was detected.										

Notes:

WCLF horizontal exceedances greater than 15% oxygen, WCLF vertical LFG well exceedances greater than or equal to 5% oxygen, 131°F, or positive pressure.

Glass II horizontal collectors can operate up to 15% O2 pursuant to Permit to Operate (PTO) Condition Number 25293 Part 7(d)(iii)

Pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply to collection system components that are temporarily disconnected from the

Some readings not available due to the GEM not saving the data correctly. Additionally, not all readings were saved with comments from the O&M personnel conducting the monitoring.

Comments in bold added by Tetra Tech.

Horizontal wells that were offline at the start of the monitoring period are monitored per Republic SOP and may be noted in the previous tab as in exceedance but pursuant to PTO Condition Number 25293, Part 7(c)(iii), Regulation 8-34-305 Wellhead limits do not apply and are

O&M = Operations & Maintenance

NSPS= New Source Performance Standards

CAI= Corrective action initiated

WIPO= Watered in or pinched off

CH4 = Methane % = percent by volume CO2 = Carbon Dioxide O2 = Oxygen in-wc = inches of water column °F. = degrees in Fahrenheit

APPENDIX N

MONTHLY LANDFILL GAS FLOW RATES

**MONTHLY LFG Input to Back-Up Flare (A-8)
WEST CONTRA COSTA SANITARY LANDFILL (CLASS II) - RICHMOND, CALIFORNIA
FOR REPORTING PERIOD OF NOVEMBER 2019 THROUGH APRIL 2020**

Month	Total Available Runtime (hours)	Total Downtime (hours)	Total Runtime (hours)	Average Flow (scfm)	CH ₄ (%)*	Total LFG Volume (scf)	Average LFG Volume (scf)/Hr	Total CH ₄ Volume (scf)	Total Heat Input (MMBTU)
May-20	744.00	744.00	0.00	0.0	46.4	0.0	0.0	0.0	0.0
June-20	720.00	720.00	0.00	0.0	46.4	0.0	0.0	0.0	0.0
July-20	744.00	744.00	0.00	0.0	46.4	0.0	0.0	0.0	0.0
August-20	744.00	744.00	0.00	0.0	46.4	0.0	0.0	0.0	0.0
September-20	720.00	720.00	0.00	0.0	46.4	0.0	0.0	0.0	0.0
October-20	744.00	744.00	0.00	0.0	46.4	0.0	0.0	0.0	0.0
AVERAGE:				0.0	46.4		0.0		
TOTALS:	4,416.00	4,416.00	0.00			0.00		0.00	0.00

NOTES:

*Methane content is based on the March 2, 2018 Source Test.

Pursuant to PTO Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested once every three years. The A-8 Back-Up Flare is next due to be source tested in March 2021.

Pursuant to PTO Condition Number 25293, Part 8 the combined 12-month consecutive heat input limit for the A-8 Back-Up Flare, A-161 Flare, and S-5, S-6 and S-37 IC Engines is 780,134 MMBTU.

scfm= standard cubic feet per minute scf= standard cubic feet MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
A-8 Back-Up Flare

MONTH: May-20

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
5/1/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/2/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/3/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/4/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/5/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/6/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/7/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/8/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/9/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/10/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/11/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/12/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/13/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/14/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/15/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/16/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/17/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/18/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/19/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/20/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/21/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/22/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/23/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/24/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/25/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/26/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/27/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/28/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/29/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/30/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
5/31/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		46.4	0.0			1,013.0	
						Maximum	0.0

NOTES:

The A-8 Back-up Flare was put back into standby on December 13, 2017 when the new A-161 Flare was initially started.

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content is based on the most recent source test for the A-8 Flare.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested once every three years. The A-8 Back-Up Flare is next due to be source tested in March 2021.

Pursuant to PTO Condition Number 25293, Part 5, is currently a back-up control device to the A-161 Flare(s).

Pursuant to PTO Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161\ Flare, S-5, S-6 and S-37 IC Engines may not exceed 780,134 MMBTU in any consecutive 12-month period.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet
MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate
 A-8 Back-Up Flare

MONTH: June-20

Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
6/1/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/2/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/3/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/4/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/5/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/6/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/7/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/8/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/9/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/10/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/11/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/12/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/13/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/14/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/15/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/16/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/17/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/18/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/19/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/20/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/21/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/22/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/23/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/24/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/25/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/26/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/27/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/28/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/29/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
6/30/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		46.4	0.0			1,013.0	
						Maximum	0.0

NOTES:

The A-8 Back-up Flare was put back into standby on December 13, 2017 when the new A-161 Flare was initially started.

¹There were 743.00 hours in March 2020 due to a change in Daylight Savings Time (DST).

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content is based on the most recent source test for the A-8 Flare.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested once every three years. The A-8 Back-Up Flare is next due to be source tested in March 2021.

Pursuant to PTO Condition Number 25293, Part 5, is currently a back-up control device to the A-161 Flare(s).

Pursuant to PTO Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161\ Flare, S-5, S-6 and S-37 IC Engines may not exceed 780,134 MMBTU in any consecutive 12-month period.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
A-8 Back-Up Flare
MONTH:

July-20

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
7/1/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/2/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/3/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/4/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/5/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/6/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/7/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/8/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/9/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/10/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/11/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/12/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/13/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/14/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/15/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/16/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/17/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/18/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/19/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/20/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/21/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/22/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/23/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/24/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/25/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/26/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/27/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/28/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/29/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/30/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
7/31/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		46.4	0.0			1,013.0	
						Maximum	0.0

NOTES:

The A-8 Back-up Flare was put back into standby on December 13, 2017 when the new A-161 Flare was initially started.

¹There were 743.00 hours in March 2020 due to a change in Daylight Savings Time (DST).

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content is based on the most recent source test for the A-8 Flare.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested once every three years. The A-8 Back-Up Flare is next due to be source tested in March 2021.

Pursuant to PTO Condition Number 25293, Part 5, is currently a back-up control device to the A-161 Flare(s).

Pursuant to PTO Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161\ Flare, S-5, S-6 and S-37 IC Engines may not exceed 780,134 MMBTU in any consecutive 12-month period.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate
 A-8 Back-Up Flare
 MONTH: August-20

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
8/1/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/2/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/3/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/4/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/5/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/6/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/7/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/8/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/9/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/10/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/11/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/12/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/13/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/14/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/15/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/16/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/17/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/18/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/19/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/20/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/21/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/22/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/23/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/24/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/25/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/26/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/27/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/28/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/29/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/30/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
8/31/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		46.4	0.0			1,013.0	
						Maximum	0.0

NOTES:

The A-8 Back-up Flare was put back into standby on December 13, 2017 when the new A-161 Flare was initially started.

¹There were 743.00 hours in March 2020 due to a change in Daylight Savings Time (DST).

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content is based on the most recent source test for the A-8 Flare.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested once every three years. The A-8 Back-Up pursuant to PTO Condition Number 25293, Part 5, is currently a back-up control device to the A-161 Flare(s).

Pursuant to PTO Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161\ Flare, S-5, S-6 and S-37 IC Engines may not

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
A-8 Back-Up Flare

MONTH: September-20

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
9/1/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/2/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/3/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/4/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/5/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/6/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/7/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/8/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/9/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/10/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/11/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/12/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/13/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/14/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/15/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/16/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/17/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/18/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/19/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/20/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/21/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/22/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/23/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/24/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/25/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/26/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/27/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/28/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/29/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
9/30/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		46.4	0.0			1,013.0	
						Maximum	0.0

NOTES:

The A-8 Back-up Flare was put back into standby on December 13, 2017 when the new A-161 Flare was initially started.

¹There were 743.00 hours in March 2020 due to a change in Daylight Savings Time (DST).

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content is based on the most recent source test for the A-8 Flare.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested once every three years. The A-8 Back-Up pursuant to PTO Condition Number 25293, Part 5, is currently a back-up control device to the A-161 Flare(s).

Pursuant to PTO Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161 Flare, S-5, S-6 and S-37 IC Engines may not

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
 Richmond, California

Heat Input Rate
 A-8 Back-Up Flare
 MONTH:

October-20

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
10/1/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/2/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/3/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/4/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/5/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/6/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/7/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/8/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/9/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/10/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/11/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/12/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/13/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/14/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/15/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/16/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/17/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/18/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/19/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/20/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/21/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/22/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/23/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/24/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/25/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/26/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/27/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/28/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/29/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/30/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
10/31/2020	0.00	46.4	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		46.4	0.0			1,013.0	0.0
						Maximum	0.0

NOTES:

The A-8 Back-up Flare was put back into standby on December 13, 2017 when the new A-161 Flare was initially started.

¹There were 743.00 hours in March 2020 due to a change in Daylight Savings Time (DST).

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content is based on the most recent source test for the A-8 Flare.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 11, the A-8 Back-Up Flare is required to be source tested once every three years. The A-8 Back-Up Flare pursuant to PTO Condition Number 25293, Part 5, is currently a back-up control device to the A-161 Flare(s).

Pursuant to PTO Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161 Flare, S-5, S-6 and S-37 IC Engines may not

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**MONTHLY LFG Input to Flare (A-161)
WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA**

Month	Total Available Runtime (hours)	Total Downtime (hours)	Total Runtime (hours)	Average Flow (scfm)	CH ₄ (%) ¹	Total LFG Volume (scf)	Average LFG Volume (scf)/Hr	Total CH ₄ Volume (scf)	Total Heat Input (MMBTU)
May-20	744.00	0.58	743.42	730.39	53.2	32,582,992.2	43,828.7	35,118,991.6	17,559.5
June-20	720.00	6.90	713.10	672.6	53.2	28,809,265.2	40,400.0	31,051,547.9	15,525.8
July-20	744.00	20.73	723.27	611.6	53.2	26,560,117.5	36,722.4	28,627,344.6	14,313.7
August-20	744.00	18.67	725.33	567.5	53.2	24,708,588.7	34,065.1	26,631,707.6	13,315.9
September-20	720.00	16.83	703.17	614.6	53.2	25,900,473.0	36,834.0	27,916,358.6	13,958.2
October-20	744.00	6.90	737.10	641.7	53.2	28,362,359.8	38,478.3	30,546,874.1	15,273.4
2020 AVERAGE:				639.7	53.2		38,388.1		
2020 TOTALS:	4,416.00	70.62	4,345.38			166,923,796.4		179,892,824.4	89,946.4

NOTES:

¹Methane content of 53.2 is based on the January 9, 2020 source test.
Pursuant to PTO Condition Number 25293, Part 8 the combined 12-month consecutive heat input limit for the A-8 Back-Up Flare, A-161 Flare, S-5, S-6 and S-37 IC Engines is 780,134 MMBTU.
scfm= standard cubic feet per minute scf= standard cubic feet MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate

A-161 Flare

MONTH: May-20

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
5/1/2020	24.00	53.2	863.8	1,243,837.0	1,340,647.3	1,013.0	670.3
5/2/2020	24.00	53.2	851.9	1,226,779.0	1,322,261.7	1,013.0	661.1
5/3/2020	24.00	53.2	858.0	1,235,477.0	1,331,636.6	1,013.0	665.8
5/4/2020	24.00	53.2	864.8	1,245,320.0	1,342,245.7	1,013.0	671.1
5/5/2020	24.00	53.2	868.5	1,250,676.0	1,348,018.6	1,013.0	674.0
5/6/2020	24.00	53.2	884.2	1,273,297.0	1,372,400.3	1,013.0	686.2
5/7/2020	24.00	53.2	837.1	1,205,393.0	1,299,211.1	1,013.0	649.6
5/8/2020	24.00	53.2	816.2	1,175,352.0	1,266,832.0	1,013.0	633.4
5/9/2020	24.00	53.2	858.3	1,236,009.0	1,332,210.1	1,013.0	666.1
5/10/2020	24.00	53.2	855.6	1,232,116.0	1,328,014.1	1,013.0	664.0
5/11/2020	24.00	53.2	778.2	1,120,653.0	1,207,875.7	1,013.0	603.9
5/12/2020	24.00	53.2	722.7	1,040,749.0	1,121,752.6	1,013.0	560.9
5/13/2020	24.00	53.2	693.4	998,532.0	1,076,249.7	1,013.0	538.1
5/14/2020	24.00	53.2	696.8	1,003,428.0	1,081,526.8	1,013.0	540.8
5/15/2020	24.00	53.2	722.2	1,039,994.0	1,120,938.8	1,013.0	560.5
5/16/2020	24.00	53.2	763.1	1,098,841.0	1,184,366.0	1,013.0	592.2
5/17/2020	24.00	53.2	751.7	1,082,497.0	1,166,749.9	1,013.0	583.4
5/18/2020	24.00	53.2	675.2	972,246.0	1,047,917.9	1,013.0	524.0
5/19/2020	24.00	53.2	680.8	980,301.0	1,056,599.8	1,013.0	528.3
5/20/2020	24.00	53.2	614.4	884,669.0	953,524.6	1,013.0	476.8
5/21/2020	24.00	53.2	534.7	769,902.0	829,825.0	1,013.0	414.9
5/22/2020	23.42	53.2	619.5	870,449.0	938,197.8	1,013.0	469.1
5/23/2020	24.00	53.2	701.6	1,010,263.0	1,088,893.8	1,013.0	544.4
5/24/2020	24.00	53.2	707.3	1,018,567.0	1,097,844.1	1,013.0	548.9
5/25/2020	24.00	53.2	716.8	1,032,239.0	1,112,580.2	1,013.0	556.3
5/26/2020	24.00	53.2	731.1	1,052,738.2	1,134,674.9	1,013.0	567.3
5/27/2020	24.00	53.2	566.8	816,149.0	879,671.5	1,013.0	439.8
5/28/2020	24.00	53.2	473.7	682,154.0	735,247.4	1,013.0	367.6
5/29/2020	24.00	53.2	534.7	769,961.0	829,888.6	1,013.0	414.9
5/30/2020	24.00	53.2	699.3	1,006,922.0	1,085,292.8	1,013.0	542.6
5/31/2020	24.00	53.2	699.6	1,007,482.0	1,085,896.3	1,013.0	542.9
Monthly Total:	743.42			32,582,992.2	35,118,991.6		
Monthly Average:		53.2	730.4			1,013.0	
						Maximum	686.2

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content determined from the January 9, 2020 source test.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161 Flare, S-5, S-6 and S-37 IC Engines may not exceed 780,134 MMBTU in any consecutive 12- month period.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet
MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate
A-161 Flare

MONTH: Jun-20

Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
6/1/2020	24.00	53.2	597.1	859,776.0	926,694.1	1,013.0	463.3
6/2/2020	24.00	53.2	554.0	797,804.0	859,898.7	1,013.0	429.9
6/3/2020	24.00	53.2	609.6	877,849.0	946,173.7	1,013.0	473.1
6/4/2020	24.00	53.2	677.8	976,029.0	1,051,995.3	1,013.0	526.0
6/5/2020	24.00	53.2	677.0	974,818.0	1,050,690.0	1,013.0	525.3
6/6/2020	24.00	53.2	725.7	1,045,041.0	1,126,378.6	1,013.0	563.2
6/7/2020	24.00	53.2	745.0	1,072,853.0	1,156,355.3	1,013.0	578.2
6/8/2020	24.00	53.2	742.3	1,068,946.0	1,152,144.2	1,013.0	576.1
6/9/2020	24.00	53.2	737.4	1,061,809.0	1,144,451.7	1,013.0	572.2
6/10/2020	22.38	53.2	739.6	993,322.0	1,070,634.2	1,013.0	535.3
6/11/2020	24.00	53.2	730.9	1,052,445.0	1,134,358.9	1,013.0	567.2
6/12/2020	23.87	53.2	714.3	1,022,847.0	1,102,457.2	1,013.0	551.2
6/13/2020	24.00	53.2	724.1	1,042,685.0	1,123,839.3	1,013.0	561.9
6/14/2020	24.00	53.2	732.3	1,054,542.0	1,136,619.1	1,013.0	568.3
6/15/2020	24.00	53.2	541.0	779,079.0	839,716.3	1,013.0	419.9
6/16/2020	20.52	53.2	464.2	571,388.0	615,860.3	1,013.0	307.9
6/17/2020	24.00	53.2	698.0	1,005,185.0	1,083,420.6	1,013.0	541.7
6/18/2020	24.00	53.2	757.6	1,090,881.0	1,175,786.4	1,013.0	587.9
6/19/2020	24.00	53.2	728.3	1,048,766.0	1,130,393.6	1,013.0	565.2
6/20/2020	24.00	53.2	722.0	1,039,697.0	1,120,618.7	1,013.0	560.3
6/21/2020	22.33	53.2	741.8	994,054.0	1,071,423.2	1,013.0	535.7
6/22/2020	24.00	53.2	739.7	1,065,124.0	1,148,024.7	1,013.0	574.0
6/23/2020	24.00	53.2	766.5	1,103,820.0	1,189,732.5	1,013.0	594.9
6/24/2020	24.00	53.2	641.5	923,744.0	995,640.8	1,013.0	497.8
6/25/2020	24.00	53.2	605.3	871,605.0	939,443.8	1,013.0	469.7
6/26/2020	24.00	53.2	531.5	765,355.0	824,924.1	1,013.0	412.5
6/27/2020	24.00	53.2	636.1	915,970.0	987,261.8	1,013.0	493.6
6/28/2020	24.00	53.2	781.1	1,124,717.0	1,212,256.0	1,013.0	606.1
6/29/2020	24.00	53.2	589.4	848,691.2	914,746.5	1,013.0	457.4
6/30/2020	24.00	53.2	528.1	760,423.0	819,608.2	1,013.0	409.8
Monthly Total:	713.10			28,809,265.2	31,051,547.9		15,525.8
Monthly Average:		53.2	672.6			1,013.0	
						Maximum	606.1

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

¹There are 743 hours in March 2020 due to a change in Daylight Savings Time (DST).

*Methane content determined from the January 9, 2020 source test.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161 Flare, S-5, S-6 and S-37 IC Engines may not exceed 780,134 MMBTU in any consecutive 12- month period.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate

A-161 Flare

MONTH: Jul-20

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
7/1/2020	24.00	53.2	533.3	767,923.0	827,692.0	1,013.0	413.8
7/2/2020	24.00	53.2	501.6	722,341.0	778,562.2	1,013.0	389.3
7/3/2020	24.00	53.2	582.6	838,877.6	904,169.1	1,013.0	452.1
7/4/2020	24.00	53.2	431.0	620,575.4	668,876.0	1,013.0	334.4
7/5/2020	15.20	53.2	325.9	297,215.2	320,348.1	1,013.0	160.2
7/6/2020	14.77	53.2	838.5	742,905.8	800,727.6	1,013.0	400.4
7/7/2020	23.90	53.2	799.1	1,145,871.0	1,235,056.4	1,013.0	617.5
7/8/2020	24.00	53.2	628.5	905,052.6	975,494.7	1,013.0	487.7
7/9/2020	23.00	53.2	622.4	858,965.4	925,820.4	1,013.0	462.9
7/10/2020	24.00	53.2	597.6	860,589.0	927,570.4	1,013.0	463.8
7/11/2020	24.00	53.2	523.7	754,135.6	812,831.5	1,013.0	406.4
7/12/2020	24.00	53.2	532.3	766,528.6	826,189.1	1,013.0	413.1
7/13/2020	24.00	53.2	615.6	886,394.4	955,384.2	1,013.0	477.7
7/14/2020	24.00	53.2	698.7	1,006,072.1	1,084,376.7	1,013.0	542.2
7/15/2020	24.00	53.2	717.3	1,032,844.2	1,113,232.5	1,013.0	556.6
7/16/2020	23.57	53.2	610.1	862,700.8	929,846.5	1,013.0	464.9
7/17/2020	24.00	53.2	696.4	1,002,745.2	1,080,790.9	1,013.0	540.4
7/18/2020	24.00	53.2	776.0	1,117,511.4	1,204,489.5	1,013.0	602.2
7/19/2020	24.00	53.2	771.0	1,110,219.4	1,196,630.0	1,013.0	598.3
7/20/2020	24.00	53.2	693.5	998,686.8	1,076,416.6	1,013.0	538.2
7/21/2020	24.00	53.2	702.0	1,010,934.2	1,089,617.2	1,013.0	544.8
7/22/2020	24.00	53.2	689.8	993,381.2	1,070,698.0	1,013.0	535.3
7/23/2020	24.00	53.2	603.4	868,873.4	936,499.6	1,013.0	468.2
7/24/2020	24.00	53.2	512.9	738,625.4	796,114.1	1,013.0	398.1
7/25/2020	24.00	53.2	512.4	737,868.6	795,298.4	1,013.0	397.6
7/26/2020	24.00	53.2	510.3	734,790.2	791,980.4	1,013.0	396.0
7/27/2020	24.00	53.2	514.9	741,432.2	799,139.4	1,013.0	399.6
7/28/2020	24.00	53.2	582.9	839,429.2	904,763.7	1,013.0	452.4
7/29/2020	24.00	53.2	568.7	818,862.2	882,595.9	1,013.0	441.3
7/30/2020	24.00	53.2	594.8	856,485.2	923,147.2	1,013.0	461.6
7/31/2020	22.83	53.2	672.5	921,281.2	992,986.4	1,013.0	496.5
Monthly Total:	723.27			26,560,117.5	28,627,344.6		14,313.7
Monthly Average:		53.2	611.6			1,013.0	
						Maximum	617.5

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

¹There are 743 hours in March 2020 due to a change in Daylight Savings Time (DST).

*Methane content determined from the January 9, 2020 source test.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161 Flare, S-5, S-6 and S-37 IC Engines may not exceed 780,134 MMBTU in any consecutive 12- month period.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
A-161 Flare

MONTH: Aug-20

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
8/1/2020	24.00	53.2	755.8	1,088,388.6	1,173,100.1	1,013.0	586.6
8/2/2020	24.00	53.2	753.3	1,084,805.0	1,169,237.5	1,013.0	584.6
8/3/2020	24.00	53.2	594.1	855,501.8	922,087.2	1,013.0	461.0
8/4/2020	24.00	53.2	555.4	799,711.2	861,954.3	1,013.0	431.0
8/5/2020	24.00	53.2	561.8	809,047.8	872,017.6	1,013.0	436.0
8/6/2020	24.00	53.2	532.0	766,127.4	825,756.6	1,013.0	412.9
8/7/2020	24.00	53.2	462.7	666,230.4	718,084.4	1,013.0	359.0
8/8/2020	21.37	53.2	613.6	786,654.2	847,881.1	1,013.0	423.9
8/9/2020	24.00	53.2	714.4	1,028,677.0	1,108,741.0	1,013.0	554.4
8/10/2020	24.00	53.2	624.2	898,867.7	968,828.4	1,013.0	484.4
8/11/2020	24.00	53.2	656.8	945,839.8	1,019,456.4	1,013.0	509.7
8/12/2020	24.00	53.2	658.3	948,009.8	1,021,795.3	1,013.0	510.9
8/13/2020	24.00	53.2	521.7	751,222.8	809,692.0	1,013.0	404.8
8/14/2020	24.00	53.2	584.4	841,481.0	906,975.1	1,013.0	453.5
8/15/2020	24.00	53.2	691.1	995,183.8	1,072,640.9	1,013.0	536.3
8/16/2020	17.43	53.2	698.2	730,354.0	787,198.9	1,013.0	393.6
8/17/2020	23.13	53.2	530.9	736,918.2	794,274.0	1,013.0	397.1
8/18/2020	24.00	53.2	553.9	797,555.0	859,630.3	1,013.0	429.8
8/19/2020	24.00	53.2	549.9	791,785.4	853,411.6	1,013.0	426.7
8/20/2020	24.00	53.2	465.2	669,824.0	721,957.7	1,013.0	361.0
8/21/2020	24.00	53.2	473.3	681,576.2	734,624.6	1,013.0	367.3
8/22/2020	24.00	53.2	474.1	682,647.6	735,779.4	1,013.0	367.9
8/23/2020	24.00	53.2	468.4	674,436.4	726,929.1	1,013.0	363.5
8/24/2020	24.00	53.2	458.8	660,705.0	712,129.0	1,013.0	356.1
8/25/2020	24.00	53.2	428.2	616,633.2	664,627.0	1,013.0	332.3
8/26/2020	20.73	53.2	397.2	494,077.0	532,532.0	1,013.0	266.3
8/27/2020	24.00	53.2	374.8	539,719.6	581,727.1	1,013.0	290.9
8/28/2020	18.97	53.2	442.1	503,077.8	542,233.4	1,013.0	271.1
8/29/2020	24.00	53.2	681.9	981,987.4	1,058,417.4	1,013.0	529.2
8/30/2020	24.00	53.2	682.7	983,075.0	1,059,589.7	1,013.0	529.8
8/31/2020	23.70	53.2	631.8	898,468.6	968,398.2	1,013.0	484.2
Monthly Total:	725.33			24,708,588.7	26,631,707.6		
Monthly Average:		53.2	567.5			1,013.0	
						Maximum	586.6

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

¹There are 743 hours in March 2020 due to a change in Daylight Savings Time (DST).

*Methane content determined from the January 9, 2020 source test.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 8, the total combined heat input to the A-8 Back-Up Flare, A-161 Flare, S-5, S-6 and S-37 IC Engines may not exceed 780,134 MMBTU in any consecutive 12- month period.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate

A-161 Flare

MONTH: Sep-20

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
9/1/2020	24.00	53.2	587.9	846,547.7	912,436.2	1,013.0	456.2
9/2/2020	23.47	53.2	674.0	948,970.2	1,022,830.4	1,013.0	511.4
9/3/2020	23.13	53.2	685.8	951,937.4	1,026,028.6	1,013.0	513.0
9/4/2020	24.00	53.2	684.4	985,525.2	1,062,230.6	1,013.0	531.1
9/5/2020	24.00	53.2	708.8	1,020,736.0	1,100,181.9	1,013.0	550.1
9/6/2020	24.00	53.2	729.8	1,050,883.6	1,132,676.0	1,013.0	566.3
9/7/2020	24.00	53.2	726.6	1,046,300.4	1,127,736.1	1,013.0	563.9
9/8/2020	24.00	53.2	616.4	887,601.4	956,685.2	1,013.0	478.3
9/9/2020	24.00	53.2	559.5	805,692.4	868,401.1	1,013.0	434.2
9/10/2020	24.00	53.2	581.8	837,845.8	903,057.0	1,013.0	451.5
9/11/2020	24.00	53.2	546.4	786,810.8	848,049.9	1,013.0	424.0
9/12/2020	24.00	53.2	722.9	1,040,996.4	1,122,019.2	1,013.0	561.0
9/13/2020	24.00	53.2	695.8	1,001,888.0	1,079,866.9	1,013.0	539.9
9/14/2020	24.00	53.2	621.3	894,677.8	964,312.4	1,013.0	482.2
9/15/2020	24.00	53.2	536.6	772,639.0	832,775.0	1,013.0	416.4
9/16/2020	24.00	53.2	478.0	688,326.4	741,900.2	1,013.0	371.0
9/17/2020	24.00	53.2	469.3	675,748.6	728,343.5	1,013.0	364.2
9/18/2020	24.00	53.2	461.3	664,333.6	716,040.0	1,013.0	358.0
9/19/2020	20.40	53.2	639.9	783,261.0	844,223.8	1,013.0	422.1
9/20/2020	20.03	53.2	708.3	851,428.6	917,697.0	1,013.0	458.8
9/21/2020	24.00	53.2	541.0	779,082.0	839,719.5	1,013.0	419.9
9/22/2020	24.00	53.2	457.4	658,645.8	709,909.5	1,013.0	355.0
9/23/2020	24.00	53.2	462.2	665,593.4	717,397.9	1,013.0	358.7
9/24/2020	16.13	53.2	604.7	585,382.8	630,944.3	1,013.0	315.5
9/25/2020	24.00	53.2	701.2	1,009,785.0	1,088,378.6	1,013.0	544.2
9/26/2020	24.00	53.2	709.8	1,022,152.0	1,101,708.1	1,013.0	550.9
9/27/2020	24.00	53.2	724.0	1,042,623.2	1,123,772.6	1,013.0	561.9
9/28/2020	24.00	53.2	615.4	886,232.3	955,209.5	1,013.0	477.6
9/29/2020	24.00	53.2	533.5	768,299.6	828,097.9	1,013.0	414.0
9/30/2020	24.00	53.2	653.1	940,526.6	1,013,729.7	1,013.0	506.9
Monthly Total:	703.17			25,900,473.0	27,916,358.6		13,958.2
Monthly Average:		53.2	614.6			1,013.0	
						Maximum	566.3

NOTES:

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¹There are 743 hours in March 2020 due to a change in Daylight Savings Time (DST).

*Methane content determined from the January 9, 2020 source test.

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scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate

A-161 Flare

MONTH: Oct-20

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
10/1/2020	23.67	53.2	710.6	1,009,110.2	1,086,833.5	1,013.0	543.4
10/2/2020	24.00	53.2	567.8	817,699.4	880,679.9	1,013.0	440.3
10/3/2020	24.00	53.2	593.9	855,255.6	921,128.8	1,013.0	460.6
10/4/2020	24.00	53.2	683.1	983,716.4	1,059,483.8	1,013.0	529.7
10/5/2020	24.00	53.2	710.5	1,023,062.5	1,101,860.4	1,013.0	550.9
10/6/2020	24.00	53.2	720.7	1,037,864.4	1,117,802.4	1,013.0	558.9
10/7/2020	24.00	53.2	712.5	1,025,973.8	1,104,995.9	1,013.0	552.5
10/8/2020	24.00	53.2	712.1	1,025,421.2	1,104,400.8	1,013.0	552.2
10/9/2020	24.00	53.2	716.2	1,031,308.0	1,110,741.0	1,013.0	555.4
10/10/2020	24.00	53.2	721.7	1,039,295.0	1,119,343.2	1,013.0	559.7
10/11/2020	24.00	53.2	728.0	1,048,300.6	1,129,042.4	1,013.0	564.5
10/12/2020	24.00	53.2	609.3	877,429.8	945,010.8	1,013.0	472.5
10/13/2020	24.00	53.2	708.3	1,019,998.4	1,098,560.3	1,013.0	549.3
10/14/2020	23.00	53.2	670.4	925,188.2	996,447.7	1,013.0	498.2
10/15/2020	24.00	53.2	585.2	842,662.2	907,565.4	1,013.0	453.8
10/16/2020	24.00	53.2	506.5	729,427.4	785,609.1	1,013.0	392.8
10/17/2020	24.00	53.2	497.7	716,692.4	771,893.2	1,013.0	385.9
10/18/2020	23.67	53.2	570.2	809,654.4	872,015.3	1,013.0	436.0
10/19/2020	24.00	53.2	566.8	816,257.6	879,127.1	1,013.0	439.6
10/20/2020	24.00	53.2	487.6	702,200.2	756,284.8	1,013.0	378.1
10/21/2020	23.90	53.2	670.8	961,889.0	1,035,975.2	1,013.0	518.0
10/22/2020	24.00	53.2	601.6	866,286.4	933,009.2	1,013.0	466.5
10/23/2020	24.00	53.2	474.4	683,085.4	735,697.7	1,013.0	367.8
10/24/2020	24.00	53.2	520.8	749,956.2	807,719.0	1,013.0	403.9
10/25/2020	20.70	53.2	720.7	895,118.6	964,062.1	1,013.0	482.0
10/26/2020	24.00	53.2	676.7	974,390.2	1,049,439.3	1,013.0	524.7
10/27/2020	24.00	53.2	661.3	952,254.4	1,025,598.6	1,013.0	512.8
10/28/2020	22.17	53.2	650.3	864,912.5	931,529.4	1,013.0	465.8
10/29/2020	24.00	53.2	717.5	1,033,193.0	1,112,771.2	1,013.0	556.4
10/30/2020	24.00	53.2	693.4	998,424.4	1,075,324.6	1,013.0	537.7
10/31/2020	24.00	53.2	726.6	1,046,332.0	1,126,922.2	1,013.0	563.5
Monthly Total:	737.10			28,362,359.8	30,546,874.1		15,273.4
Monthly Average:		53.2	641.7			1,013.0	
						Maximum	564.5

NOTES:

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*Methane content determined from the January 9, 2020 source test.

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scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

Richmond, California

Heat Input Rate

S-5 IC Engine

MONTH: May-20

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
5/1/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/2/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/3/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/4/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/5/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/6/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/7/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/8/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/9/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/10/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/11/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/12/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/13/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/14/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/15/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/16/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/17/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/18/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/19/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/20/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/21/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/22/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/23/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/24/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/25/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/26/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/27/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/28/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/29/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/30/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
5/31/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		44.2	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the September 22, 2016 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-5 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-5 IC Engine

MONTH: June-20

Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
6/1/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/2/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/3/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/4/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/5/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/6/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/7/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/8/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/9/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/10/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/11/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/12/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/13/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/14/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/15/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/16/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/17/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/18/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/19/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/20/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/21/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/22/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/23/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/24/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/25/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/26/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/27/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/28/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/29/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
6/30/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		44.2	0.0			1,013.0	
						Maximum	0.0

NOTES:

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**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-5 IC Engine

MONTH: July-20

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
7/1/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/2/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/3/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/4/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/5/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/6/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/7/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/8/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/9/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/10/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/11/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/12/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/13/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/14/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/15/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/16/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/17/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/18/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/19/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/20/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/21/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/22/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/23/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/24/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/25/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/26/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/27/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/28/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/29/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/30/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
7/31/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		44.2	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the September 22, 2016 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-5 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate
 S-5 IC Engine

MONTH: August-20

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
8/1/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/2/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/3/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/4/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/5/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/6/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/7/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/8/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/9/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/10/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/11/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/12/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/13/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/14/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/15/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/16/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/17/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/18/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/19/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/20/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/21/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/22/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/23/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/24/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/25/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/26/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/27/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/28/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/29/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/30/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
8/31/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		44.2	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the September 22, 2016 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-5 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

West Contra Costa Sanitary Landfill
Richmond, California

Heat Input Rate

S-5 IC Engine

MONTH:

September-20

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
9/1/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/2/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/3/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/4/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/5/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/6/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/7/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/8/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/9/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/10/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/11/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/12/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/13/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/14/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/15/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/16/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/17/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/18/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/19/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/20/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/21/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/22/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/23/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/24/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/25/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/26/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/27/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/28/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/29/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
9/30/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		44.2	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the September 22, 2016 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-5 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate

S-5 IC Engine

MONTH: October-20

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
10/1/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/2/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/3/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/4/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/5/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/6/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/7/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/8/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/9/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/10/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/11/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/12/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/13/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/14/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/15/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/16/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/17/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/18/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/19/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/20/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/21/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/22/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/23/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/24/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/25/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/26/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/27/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/28/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/29/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/30/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
10/31/2020	0.00	44.2	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		44.2	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the September 22, 2016 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-5 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-6 IC Engine

MONTH: May-20

Date	Runtime (hours) ¹	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
5/1/2020	0.13	47.1	155.4	1,243.0	585.5	1,013.0	0.6
5/2/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/3/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/4/2020	1.17	47.1	213.1	14,918.5	7,026.6	1,013.0	7.1
5/5/2020	0.93	47.1	92.9	5,203.8	2,451.0	1,013.0	2.5
5/6/2020	0.57	47.1	177.9	6,047.8	2,848.5	1,013.0	2.9
5/7/2020	5.60	47.1	293.0	98,462.5	46,375.8	1,013.0	47.0
5/8/2020	6.10	47.1	300.2	109,871.5	51,749.5	1,013.0	52.4
5/9/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/10/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/11/2020	6.93	47.1	303.2	126,138.4	59,411.2	1,013.0	60.2
5/12/2020	7.00	47.1	307.5	129,157.4	60,833.1	1,013.0	61.6
5/13/2020	7.07	47.1	306.5	129,975.5	61,218.5	1,013.0	62.0
5/14/2020	6.90	47.1	307.1	127,154.7	59,889.9	1,013.0	60.7
5/15/2020	4.20	47.1	293.8	74,036.6	34,871.3	1,013.0	35.3
5/16/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/17/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/18/2020	6.80	47.1	292.9	119,517.3	56,292.6	1,013.0	57.0
5/19/2020	4.50	47.1	340.9	92,048.7	43,354.9	1,013.0	43.9
5/20/2020	9.67	47.1	297.2	172,377.3	81,189.7	1,013.0	82.2
5/21/2020	16.57	47.1	306.6	304,748.3	143,536.4	1,013.0	145.4
5/22/2020	8.87	47.1	310.8	165,356.4	77,882.9	1,013.0	78.9
5/23/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/24/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/25/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/26/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/27/2020	15.60	47.1	297.5	278,436.9	131,143.8	1,013.0	132.8
5/28/2020	24.00	47.1	315.7	454,635.6	214,133.4	1,013.0	216.9
5/29/2020	17.97	47.1	311.2	335,451.3	157,997.6	1,013.0	160.1
5/30/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
5/31/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	150.57			2,744,781.6	1,292,792.1		1,309.6
Monthly Average:		47.1	274.9			1,013.0	
						Maximum	216.9

NOTES:

*Methane content from the February 13, 2020 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-6 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-6 IC Engine
MONTH:

June-20

Date	Runtime (hours) ¹	CH ₄ (%) [*]	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
6/1/2020	10.03	47.1	306.6	184,553.4	86,924.7	1,013.0	88.1
6/2/2020	17.20	47.1	295.7	305,136.6	143,719.3	1,013.0	145.6
6/3/2020	14.47	47.1	284.5	246,916.8	116,297.8	1,013.0	117.8
6/4/2020	7.57	47.1	292.5	132,806.2	62,551.7	1,013.0	63.4
6/5/2020	4.90	47.1	288.6	84,842.6	39,960.9	1,013.0	40.5
6/6/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/7/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/8/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/9/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/10/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/11/2020	0.00	47.1	0.0	56.2	26.5	1,013.0	0.0
6/12/2020	0.00	47.1	0.0	801.2	377.4	1,013.0	0.4
6/13/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/14/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/15/2020	14.97	47.1	387.2	347,743.4	163,787.1	1,013.0	165.9
6/16/2020	19.37	47.1	400.4	465,235.2	219,125.8	1,013.0	222.0
6/17/2020	6.70	47.1	362.6	145,781.4	68,663.0	1,013.0	69.6
6/18/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/19/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/20/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/21/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/22/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/23/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/24/2020	15.23	47.1	359.4	328,446.4	154,698.3	1,013.0	156.7
6/25/2020	15.77	47.1	376.0	355,734.4	167,550.9	1,013.0	169.7
6/26/2020	24.00	47.1	381.7	549,630.0	258,875.7	1,013.0	262.2
6/27/2020	14.47	47.1	386.8	335,759.6	158,142.8	1,013.0	160.2
6/28/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
6/29/2020	16.90	47.1	383.4	388,762.0	183,106.9	1,013.0	185.5
6/30/2020	24.00	47.1	390.6	562,430.4	264,904.7	1,013.0	268.3
Monthly Total:	205.57			4,434,635.8	2,088,713.5		2,115.9
Monthly Average:		47.1	349.7			1,013.0	
						Maximum	268.3

NOTES:

*Methane content from the February 13, 2020 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-6 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-6 IC Engine

MONTH: July-20

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
7/1/2020	24.00	47.1	380.9	548,445.4	258,317.8	1,013.0	261.7
7/2/2020	24.00	47.1	382.5	550,825.8	259,439.0	1,013.0	262.8
7/3/2020	5.57	47.1	312.8	104,461.2	49,201.2	1,013.0	49.8
7/4/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
7/5/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
7/6/2020	0.73	47.1	232.7	10,239.4	4,822.8	1,013.0	4.9
7/7/2020	1.67	47.1	147.4	14,737.2	6,941.2	1,013.0	7.0
7/8/2020	13.57	47.1	375.1	305,311.6	143,801.8	1,013.0	145.7
7/9/2020	14.83	47.1	375.3	334,026.4	157,326.4	1,013.0	159.4
7/10/2020	16.63	47.1	385.7	384,950.0	181,311.5	1,013.0	183.7
7/11/2020	24.00	47.1	388.4	559,247.4	263,405.5	1,013.0	266.8
7/12/2020	24.00	47.1	388.3	559,149.6	263,359.5	1,013.0	266.8
7/13/2020	14.60	47.1	389.9	341,533.6	160,862.3	1,013.0	163.0
7/14/2020	7.13	47.1	385.2	164,868.8	77,653.2	1,013.0	78.7
7/15/2020	5.97	47.1	382.6	136,988.2	64,521.4	1,013.0	65.4
7/16/2020	16.57	47.1	384.1	381,802.0	179,828.7	1,013.0	182.2
7/17/2020	9.23	47.1	375.6	208,098.2	98,014.3	1,013.0	99.3
7/18/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
7/19/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
7/20/2020	7.90	47.1	381.6	180,896.6	85,202.3	1,013.0	86.3
7/21/2020	7.73	47.1	380.1	176,370.0	83,070.3	1,013.0	84.2
7/22/2020	8.53	47.1	372.4	190,652.2	89,797.2	1,013.0	91.0
7/23/2020	16.60	47.1	385.0	383,412.2	180,587.1	1,013.0	182.9
7/24/2020	24.00	47.1	391.6	563,962.8	265,626.5	1,013.0	269.1
7/25/2020	24.00	47.1	389.9	561,485.8	264,459.8	1,013.0	267.9
7/26/2020	24.00	47.1	389.6	560,966.0	264,215.0	1,013.0	267.6
7/27/2020	24.00	47.1	390.3	561,998.0	264,701.1	1,013.0	268.1
7/28/2020	17.07	47.1	390.9	400,273.4	188,528.8	1,013.0	191.0
7/29/2020	17.87	47.1	389.9	417,993.4	196,874.9	1,013.0	199.4
7/30/2020	14.73	47.1	396.8	350,768.4	165,211.9	1,013.0	167.4
7/31/2020	8.23	47.1	389.6	192,443.4	90,640.8	1,013.0	91.8
Monthly Total:	397.17			9,145,907.0	4,307,722.2		4,363.7
Monthly Average:		47.1	367.9			1,013.0	
						Maximum	269.1

NOTES:

*Methane content from the February 13, 2020 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-6 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-6 IC Engine

MONTH: August-20

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
8/1/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/2/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/3/2020	15.83	47.1	399.9	379,942.4	178,952.9	1,013.0	181.3
8/4/2020	16.93	47.1	410.8	417,392.6	196,591.9	1,013.0	199.1
8/5/2020	16.80	47.1	392.2	395,289.8	186,181.5	1,013.0	188.6
8/6/2020	20.80	47.1	378.7	472,632.4	222,609.9	1,013.0	225.5
8/7/2020	24.00	47.1	381.0	548,571.1	258,377.0	1,013.0	261.7
8/8/2020	9.93	47.1	385.3	229,662.4	108,171.0	1,013.0	109.6
8/9/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/10/2020	6.47	47.1	343.3	133,194.5	62,734.6	1,013.0	63.6
8/11/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/12/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/13/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/14/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/15/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/16/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/17/2020	12.33	47.1	386.2	285,795.1	134,609.5	1,013.0	136.4
8/18/2020	15.17	47.1	389.9	354,828.0	167,124.0	1,013.0	169.3
8/19/2020	16.77	47.1	371.4	373,600.2	175,965.7	1,013.0	178.3
8/20/2020	24.00	47.1	377.9	544,152.8	256,296.0	1,013.0	259.6
8/21/2020	24.00	47.1	375.4	540,615.8	254,630.0	1,013.0	257.9
8/22/2020	24.00	47.1	377.1	543,071.2	255,786.5	1,013.0	259.1
8/23/2020	24.00	47.1	377.3	543,279.6	255,884.7	1,013.0	259.2
8/24/2020	24.00	47.1	376.0	541,391.8	254,995.5	1,013.0	258.3
8/25/2020	24.00	47.1	376.0	541,473.0	255,033.8	1,013.0	258.3
8/26/2020	24.00	47.1	374.0	538,576.8	253,669.7	1,013.0	257.0
8/27/2020	24.00	47.1	373.1	537,216.0	253,028.7	1,013.0	256.3
8/28/2020	14.63	47.1	374.8	329,047.8	154,981.5	1,013.0	157.0
8/29/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/30/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
8/31/2020	5.17	47.1	361.5	112,058.0	52,779.3	1,013.0	53.5
Monthly Total:	366.83			8,361,791.3	3,938,403.7		3,989.6
Monthly Average:		47.1	379.1			1,013.0	
						Maximum	261.7

NOTES:

*Methane content from the February 13, 2020 Source Test.

¹There are 743 hours in March 2020 due to a change in Daylight Savings Time (DST).

Pursuant to PTO Condition 5771 Part 8, the S-6 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-6 IC Engine

MONTH: September-20

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
9/1/2020	7.83	47.1	370.3	174,042.4	81,974.0	1,013.0	83.0
9/2/2020	0.97	47.1	364.0	21,111.0	9,943.3	1,013.0	10.1
9/3/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/4/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/5/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/6/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/7/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/8/2020	7.60	47.1	363.9	165,950.0	78,162.5	1,013.0	79.2
9/9/2020	10.30	47.1	379.7	234,656.6	110,523.3	1,013.0	112.0
9/10/2020	8.50	47.1	384.8	196,267.6	92,442.0	1,013.0	93.6
9/11/2020	15.10	47.1	364.0	329,756.8	155,315.5	1,013.0	157.3
9/12/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/13/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/14/2020	6.83	47.1	372.3	152,630.0	71,888.7	1,013.0	72.8
9/15/2020	16.63	47.1	355.2	354,520.9	166,979.3	1,013.0	169.2
9/16/2020	24.00	47.1	360.6	519,240.2	244,562.1	1,013.0	247.7
9/17/2020	24.00	47.1	360.7	519,437.0	244,654.8	1,013.0	247.8
9/18/2020	24.00	47.1	359.1	517,173.2	243,588.6	1,013.0	246.8
9/19/2020	6.53	47.1	361.2	141,609.0	66,697.8	1,013.0	67.6
9/20/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/21/2020	16.30	47.1	354.6	346,755.6	163,321.9	1,013.0	165.4
9/22/2020	24.00	47.1	360.1	518,606.0	244,263.4	1,013.0	247.4
9/23/2020	24.00	47.1	361.2	520,176.6	245,003.2	1,013.0	248.2
9/24/2020	7.30	47.1	363.9	159,404.6	75,079.6	1,013.0	76.1
9/25/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/26/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/27/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
9/28/2020	10.10	47.1	352.5	213,612.9	100,611.7	1,013.0	101.9
9/29/2020	16.40	47.1	359.4	353,664.0	166,575.7	1,013.0	168.7
9/30/2020	5.90	47.1	352.7	124,859.2	58,808.7	1,013.0	59.6
Monthly Total:	256.30			5,563,473.6	2,620,396.1		2,654.5
Monthly Average:		47.1	363.2			1,013.0	
						Maximum	248.2

NOTES:

*Methane content from the February 13, 2020 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-6 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate

S-6 IC Engine

MONTH: October-20

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
10/1/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/2/2020	13.80	47.1	360.3	298,363.6	140,529.3	1,013.0	142.4
10/3/2020	11.33	47.1	336.9	229,058.8	107,886.7	1,013.0	109.3
10/4/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/5/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/6/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/7/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/8/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/9/2020	1.87	47.1	217.4	24,349.4	11,468.6	1,013.0	11.6
10/10/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/11/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/12/2020	13.47	47.1	327.6	264,740.2	124,692.6	1,013.0	126.3
10/13/2020	2.80	47.1	331.7	55,729.6	26,248.6	1,013.0	26.6
10/14/2020	7.93	47.1	324.8	154,627.4	72,829.5	1,013.0	73.8
10/15/2020	16.70	47.1	324.8	325,492.6	153,307.0	1,013.0	155.3
10/16/2020	24.00	47.1	331.2	476,955.4	224,646.0	1,013.0	227.6
10/17/2020	24.00	47.1	328.7	473,328.6	222,937.8	1,013.0	225.8
10/18/2020	15.03	47.1	334.2	301,420.8	141,969.2	1,013.0	143.8
10/19/2020	16.10	47.1	326.2	315,156.7	148,438.8	1,013.0	150.4
10/20/2020	24.00	47.1	333.8	480,705.6	226,412.3	1,013.0	229.4
10/21/2020	6.37	47.1	329.1	125,726.4	59,217.1	1,013.0	60.0
10/22/2020	12.17	47.1	317.9	232,084.4	109,311.8	1,013.0	110.7
10/23/2020	24.00	47.1	332.2	478,392.6	225,322.9	1,013.0	228.3
10/24/2020	19.83	47.1	333.4	396,799.0	186,892.3	1,013.0	189.3
10/25/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
10/26/2020	4.63	47.1	319.1	88,722.6	41,788.3	1,013.0	42.3
10/27/2020	7.07	47.1	320.1	135,731.8	63,929.7	1,013.0	64.8
10/28/2020	7.07	47.1	315.8	133,880.1	63,057.5	1,013.0	63.9
10/29/2020	1.00	47.1	230.4	13,826.0	6,512.0	1,013.0	6.6
10/30/2020	3.27	47.1	278.3	54,551.0	25,693.5	1,013.0	26.0
10/31/2020	0.00	47.1	0.0	0.0	0.0	1,013.0	0.0
Monthly Total:	256.43			5,059,642.6	2,383,091.7		2,414.1
Monthly Average:		47.1	316.9			1,013.0	
						Maximum	229.4

NOTES:

*Methane content from the February 13, 2020 Source Test.

Pursuant to PTO Condition 5771 Part 8, the S-6 IC Engine is limited to 285.6 MMBTU/day, or 104,250 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-37 IC Engine
MONTH:

May-20

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
5/1/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/2/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/3/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/4/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/5/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/6/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/7/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/8/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/9/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/10/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/11/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/12/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/13/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/14/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/15/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/16/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/17/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/18/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/19/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/20/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/21/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/22/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/23/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/24/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/25/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/26/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/27/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/28/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/29/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/30/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
5/31/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		49.3	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the S-37 Source Test conducted on December 4, 2017 was not consistent with the normal site conditions. Republic will repeat the gas analysis and source test when the engine is brought online again. In the interim, the methane content used for reporting purposes is based on the average of all the methane values for the three most recent source tests for S-37 IC Engine, A-161 Flare, and the A-8 Flare.

Pursuant to PTO Condition 17812 Part 2, the S-37 IC Engines are limited to 251.9 MMBTU/day, or 91,951 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-37 IC Engine
MONTH:

June-20

Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
6/1/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/2/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/3/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/4/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/5/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/6/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/7/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/8/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/9/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/10/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/11/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/12/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/13/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/14/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/15/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/16/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/17/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/18/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/19/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/20/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/21/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/22/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/23/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/24/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/25/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/26/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/27/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/28/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/29/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
6/30/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/1/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		49.3	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the S-37 Source Test conducted on December 4, 2017 was not consistent with the normal site conditions. Republic will repeat the gas analysis and source test when the engine is brought online again. In the interim, the methane content used for reporting purposes is based on the average of all the methane values for the three most recent source tests for S-37 IC Engine, A-161 Flare, and the A-8 Flare.

Pursuant to PTO Condition 17812 Part 2, the S-37 IC Engines are limited to 251.9 MMBTU/day, or 91,951 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-37 IC Engine
MONTH:

July-20

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
7/1/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/2/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/3/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/4/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/5/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/6/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/7/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/8/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/9/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/10/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/11/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/12/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/13/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/14/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/15/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/16/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/17/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/18/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/19/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/20/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/21/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/22/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/23/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/24/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/25/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/26/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/27/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/28/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/29/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/30/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
7/31/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		49.3	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the S-37 Source Test conducted on December 4, 2017 was not consistent with the normal site conditions. Republic will repeat the gas analysis and source test when the engine is brought online again. In the interim, the methane content used for reporting purposes is based on the average of all the methane values for the three most recent source tests for S-37 IC Engine, A-161 Flare, and the A-8 Flare.

Pursuant to PTO Condition 17812 Part 2, the S-37 IC Engines are limited to 251.9 MMBTU/day, or 91,951 MMBTU/year.

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MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-37 IC Engine
MONTH:

August-20

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
8/1/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/2/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/3/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/4/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/5/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/6/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/7/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/8/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/9/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/10/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/11/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/12/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/13/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/14/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/15/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/16/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/17/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/18/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/19/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/20/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/21/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/22/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/23/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/24/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/25/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/26/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/27/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/28/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/29/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/30/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
8/31/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		49.3	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the S-37 Source Test conducted on December 4, 2017 was not consistent with the normal site conditions. Republic will repeat the gas analysis and source test when the engine is brought online again. In the interim, the methane content used for reporting purposes is based on the average of all the methane values for the three most recent source tests for S-37 IC Engine, A-161 Flare, and the A-8 Flare.

Pursuant to PTO Condition 17812 Part 2, the S-37 IC Engines are limited to 251.9 MMBTU/day, or 91,951 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-37 IC Engine

MONTH: September-20

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
9/1/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/2/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/3/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/4/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/5/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/6/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/7/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/8/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/9/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/10/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/11/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/12/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/13/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/14/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/15/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/16/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/17/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/18/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/19/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/20/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/21/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/22/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/23/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/24/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/25/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/26/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/27/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/28/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/29/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
9/30/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		49.3	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the S-37 Source Test conducted on December 4, 2017 was not consistent with the normal site conditions. Republic will repeat the gas analysis and source test when the engine is brought online again. In the interim, the methane content used for reporting purposes is based on the average of all the methane values for the three most recent source tests for S-37 IC Engine, A-161 Flare, and the A-8 Flare.

Pursuant to PTO Condition 17812 Part 2, the S-37 IC Engines are limited to 251.9 MMBTU/day, or 91,951 MMBTU/year.

scfm= standard cubic feet per minute BTU/scf= British thermal unit per standard cubic feet scf= standard cubic feet
MMBTU= million British thermal units LFG= landfill gas CH₄= methane

**West Contra Costa Sanitary Landfill
Richmond, California**

Heat Input Rate
S-37 IC Engine

MONTH: October-20

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
10/1/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/2/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/3/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/4/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/5/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/6/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/7/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/8/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/9/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/10/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/11/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/12/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/13/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/14/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/15/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/16/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/17/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/18/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/19/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/20/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/21/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/22/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/23/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/24/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/25/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/26/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/27/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/28/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/29/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/30/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
10/31/2020	0.00	49.3	0.0	0.00	0.00	1,013.0	0.0
Monthly Total:	0.00			0.0	0.0		0.0
Monthly Average:		49.3	0.0			1,013.0	
						Maximum	0.0

NOTES:

Maximum daily values are indicated in **Bold** text for this reporting period.

*Methane content from the S-37 Source Test conducted on December 4, 2017 was not consistent with the normal site conditions. Republic will repeat the gas analysis and source test when the engine is brought online again. In the interim, the methane content used for reporting purposes is based on the average of all the methane values for the three most recent source tests for S-37 IC Engine, A-161 Flare, and the A-8 Flare.

Pursuant to PTO Condition 17812 Part 2, the S-37 IC Engines are limited to 251.9 MMBTU/day, or 91,951 MMBTU/year.

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MMBTU= million British thermal units LFG= landfill gas CH₄= methane

MMBTU= million British thermal units LFG= landfill gas CH₄= methane

APPENDIX O

S-15, 12-MONTH HEAT INPUT

12-MONTH CONSECUTIVE HEAT INPUT TO S-15 (A-120 Flare, A-161 Flare, A-8 Back-Up Flare, S-5, S-6, and S-37 IC Engines)

West Contra Costa Sanitary Landfill, Richmond, CA

S-15 Heat Input

Month*	A-161 Total Heat Input (MMBTU)	A-8 Back-Up Total Heat Input (MMBTU)	S-5 Total Heat Input (MMBTU)	S-6 Total Heat Input (MMBTU)	S-37 Total Heat Input (MMBTU)	Combined Total Heat Input (MMBTU)	Total combined 12-Month Consecutive Total (MMBTU)*
November-19	14,016.6	0.0	0.0	1,682.9	0.0	15,699.4	225,841.3
December-19	12,777.2	0.0	0.0	3,485.7	0.0	16,262.9	223,934.4
January-20	15,260.9	0.0	0.0	3,125.1	0.0	18,386.1	223,211.8
February-20	17,013.8	0.0	0.0	2,558.9	0.0	19,572.7	225,765.3
March-20	15,370.5	0.0	0.0	2,783.9	0.0	18,154.3	224,236.4
April-20	17,679.7	0.0	0.0	606.9	0.0	18,286.6	222,461.4
May-20	17,559.5	0.0	0.0	1,309.6	0.0	18,869.1	221,822.4
June-20	15,525.8	0.0	0.0	2,115.9	0.0	17,641.6	219,937.2
July-20	14,313.7	0.0	0.0	4,363.7	0.0	18,677.4	218,782.9
August-20	13,315.9	0.0	0.0	3,989.6	0.0	17,305.5	216,199.7
September-20	13,958.2	0.0	0.0	2,654.5	0.0	16,612.6	215,113.7
October-20	15,273.4	0.0	0.0	2,414.1	0.0	17,687.5	213,155.8

*The 12-month rolling heat input total for each month represents the sum of the monthly heat input rates calculated using the preceding 12 consecutive months.

Pursuant to Permit to Operate (PTO) Condition Number 25293, Part 8, the total combined 12-month consecutive heat input limit for the A-120 Flare, A-8 Back-Up Flare, S-5, S-6, and S-37 IC Engines combined is 780,134 million British thermal units (MMBTU).

APPENDIX P

PROBE AND IN-STRUCTURE MONITORING REPORTS

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 5/4/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	05-04-2020 09:00	4.9	
Class I Leachate Facility	05-04-2020 15:00	0.5	
Class II Accounting Office	05-04-2020 12:58	0.0	
Class II Nove Engine Room	05-04-2020 15:04	0.0	
Class II Nove Office	05-04-2020 15:05	0.2	
Class II Scalehouse Trailer 1	05-04-2020 12:55	0.0	
Class II Scalehouse Trailer 2		0.0	
GBTS Break Room	05-04-2020 14:06	0	
GBTS Office	05-04-2020 14:06	1.5	
GBTS Scalehouse Trailer	05-04-2020 14:07	0	

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

Ambient Temperature (degF): 72

Barometric Pressure (in Hg): 30.10

Weather Condition: Mostly clear

Wind Speed (mph): Ne

Wind Direction: Ne

**West Contra Costa County
GBTS Monitoring Inspection Form**

Inspector: Ecg		Date: 5/4/2020		Temp: 20.0		Start Time: 7:26:15 AM	
Weather: Mostly clear		Wind: Vac Control		Baro. Pressure: 30.16		Stop Time: 3:10:54 PM	
Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)	
A001	0	0.2	20.9	78.9	0	72	
A002	0	0.1	21	78.9	0	72	
V001	0	0.2	21	78.8	0	72	
V002	0	0.4	19.9	79.7	0	72	
V003	0	0.1	20.9	79	0	72	
V004	0	0.6	19.3	80.1	0	72	
WRC1	62.2	37.4	0.4	0	0	72	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form

Inspector: Ecg	Date: 5/4/2020	Temp: 20.0	Start Time: 7:23:55 AM			
Weather: Mostly clear	Wind: Vac Control	Baro. Pressure: 30.16	Stop Time: 8:01:58 AM			
Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)
GP01	0	4.9	12.8	82.3	-0.02	72
GP02	0	11.1	4.6	84.3	-0.01	72
GP03	73.1	25.2	0	1.7	-0.01	72
GP04	37.2	17.5	0	45.3	-0.22	72
GP05	0	13.1	3.6	83.3	-0.02	72
GP07	33.2	27.1	0	39.7	-0.02	72
GP08	61.4	35	0	3.6	0.01	72
GP09	0	0.3	20.7	79	0	72
GP10	50.8	44.8	0.1	4.3	0.03	72
LFG1	0	1.4	18.3	80.3	-0.05	72
LFG2	33.6	11.7	1.2	53.5	-0.08	72
M057	49.5	29.3	3.4	17.8	0	72
M069	26.3	11.7	11.1	50.9	0	72
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.					
Accounting Office						
Scalehouse Trailer 1						
Scalehouse Trailer 2						

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 5/12/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	05-12-2020 07:35	3.0	
Class I Leachate Facility	05-12-2020 09:00	1.0	
Class II Accounting Office	05-12-2020 14:21	0.8	
Class II Nove Engine Room	05-12-2020 14:44	20.0	
Class II Nove Office	05-12-2020 14:44	1.0	
Class II Scalehouse Trailer 1	05-12-2020 14:16	1.0	
Class II Scalehouse Trailer 2	05-12-2020 14:17	1.0	
GBTS Break Room	05-12-2020 14:39	0	
GBTS Office	05-12-2020 14:38	1.4	
GBTS Scalehouse Trailer	05-12-2020 14:34	0	

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

Ambient Temperature (degF): 63.0

Barometric Pressure (in Hg): 30.00

Weather Condition: Cloudy windy

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County GBTS Monitoring Inspection Form

Inspector: Ecg		Date: 5/12/2020		Temp: 20.0		Start Time: 2:26:02 PM	
Weather: Cloudy windy		Wind: Vac Control		Baro. Pressure: 30.02		Stop Time: 4:09:34 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.5	20.6	78.9	0	0	
A002	0	0.1	20.8	79.1	0	0	
V001	0	0.3	20.5	79.2	0	0	
V002	0	1.5	16.8	81.7	0	0	
V003	0	0.2	20.7	79.1	0	0	
V004	0	0.6	20.3	79.1	0	0	
WRC1	61.6	35.5	0.9	2	0	0	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form

Inspector: Ecg	Date: 5/12/2020	Temp: 20.0	Start Time: 3:30:53 PM			
Weather: Cloudy windy	Wind: Vac Control	Baro. Pressure: 30.02	Stop Time: 4:12:02 PM			
Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)
GP01	0	5.9	7.8	86.3	-0.13	0
GP02	0	10.8	4	85.2	-0.06	0
GP03	72.8	27	0	0.2	-0.05	0
GP04	37.8	17.7	0.1	44.4	-0.12	0
GP05	0	9.7	9.5	80.8	-0.08	0
GP07	34.2	28.8	0.1	36.9	-0.06	0
GP08	63.6	36.1	0.1	0.2	-0.04	0
GP09	0	0.4	20.5	79.1	-0.08	0
GP10	51.8	47.9	0.1	0.2	-0.25	0
LFG1	0.2	0.9	19.3	79.6	-0.06	0
LFG2	45.8	11.4	0.2	42.6	-0.04	0
M057	26.4	16.3	11.6	45.7	0	0
M069	9.2	3.7	17.4	69.7	0	0
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.					
Accounting Office						
Scalehouse Trailer 1						
Scalehouse Trailer 2						

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 5/18/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	05-18-2020 06:26	2.0	
Class I Leachate Facility	05-18-2020 12:00	1.5	
Class II Accounting Office	05-18-2020 11:50	0.0	
Class II Nove Engine Room	05-18-2020 12:28	20.2	
Class II Nove Office	05-18-2020 12:28	1.0	
Class II Scalehouse Trailer 1	05-18-2020 12:12	0.0	
Class II Scalehouse Trailer 2	05-18-2020 12:13	0.0	
GBTS Break Room	05-18-2020 12:02	0	
GBTS Office	05-18-2020 12:20	0.1	
GBTS Scalehouse Trailer	05-18-2020 12:05	0	

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

Ambient Temperature (degF): 65

Barometric Pressure (in Hg): 29.94

Weather Condition: Cloudy

Wind Speed (mph): Ne

Wind Direction: Ne

**West Contra Costa County
GBTS Monitoring Inspection Form**

Inspector: Ecg		Date: 5/18/2020		Temp: 20.0		Start Time: 12:22:06 PM	
Weather: Lmostly cloudy		Wind: Vac Control		Baro. Pressure: 29.95		Stop Time: 2:02:54 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.1	21	78.9	0	64	
A002	0	0.1	21	78.9	0	64	
V001	0	0.2	20.6	79.2	0	64	
V002	0	1.9	16	82.1	0	64	
V003	0	0.2	20.9	78.9	0	64	
V004	0	0.5	20.6	78.9	0	64	
WRC1	62.3	37.2	0.5	0	0	64	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form

Inspector: Ecg		Date: 5/18/2020		Temp: 20.0		Start Time: 1:25:02 PM	
Weather: cloudy		Wind: Vac Control		Baro. Pressure: 29.95		Stop Time: 2:04:38 PM	
Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)	
GP01	0	7.5	4.3	88.2	-0.06	64	
GP02	0	10.4	5.4	84.2	0.05	64	
GP03	71.1	28.9	0	0	-0.08	64	
GP04	38.4	18.6	0	43	-0.1	64	
GP05	0	9.9	9.5	80.6	-0.05	64	
GP07	34.5	30.9	0	34.6	0.1	64	
GP08	62.4	37.2	0.4	0	0.01	64	
GP09	0	0.4	20.8	78.8	0.07	64	
GP10	47.9	52	0.1	0	-0.07	64	
LFG1	0.2	1	18.9	79.9	0	64	
LFG2	36.5	11.2	0.7	51.6	-0.03	64	
M057	45.6	29.4	4.9	20.1	0	64	
M069	12.6	4.9	16.7	65.8	0	64	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 5/26/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	05-26-2020 06:50	2.4	
Class I Leachate Facility	05-26-2020 10:53	0.0	
Class II Accounting Office	05-26-2020 11:57	0.0	
Class II Nove Engine Room	05-26-2020 15:01	5.5	
Class II Nove Office	05-26-2020 14:58	0.2	
Class II Scalehouse Trailer 1	05-26-2020 12:03	0.6	
Class II Scalehouse Trailer 2	05-26-2020 12:04	0.0	
GBTS Break Room	05-26-2020 11:08	0	
GBTS Office	05-26-2020 11:09	0.0	
GBTS Scalehouse Trailer	05-26-2020 11:08	0	

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

Ambient Temperature (degF): 80

Barometric Pressure (in Hg): 29.85

Weather Condition: Clear

Wind Speed (mph): Ne

Wind Direction: Ne

**West Contra Costa County
GBTS Monitoring Inspection Form**

Inspector: Ecg		Date: 5/26/2020		Temp: 20.0		Start Time: 2:51:45 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.84		Stop Time: 5:39:28 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.9	20.9	78.2	0	80	
A002	0	0.1	20.9	79	0	80	
V001	0	0.3	20.8	78.9	0	80	
V002	0	0.5	19.4	80.1	0	80	
V003	0	0.1	20.9	79	0	80	
V004	0	0.8	20.3	78.9	0	80	
WRC1	60.3	36.9	0.2	2.6	0	80	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form

Inspector: Ecg		Date: 5/26/2020		Temp: 20.0		Start Time: 4:36:02 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.84		Stop Time: 5:41:50 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0.1	4.4	14.8	80.7	-0.19	80	
GP02	0	12.7	3.3	84	-0.12	80	
GP03	63.6	28.7	0	7.7	-0.26	80	
GP04	37.8	18.3	0	43.9	-0.25	80	
GP05	0	6.3	12.8	80.9	-0.27	80	
GP07	31.7	29.7	0.4	38.2	-0.01	80	
GP08	61	37.1	0.2	1.7	-0.19	80	
GP09	0	0.6	20.6	78.8	-0.08	80	
GP10	49.5	50.3	0.2	0	-0.18	80	
LFG1	0.3	0.9	19.3	79.5	-0.15	80	
LFG2	69.8	7.3	0.1	22.8	-0.27	80	
M057	34.6	22.7	8.2	34.5	0	80	
M069	4.3	2.3	18.8	74.6	0	80	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 6/1/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	06-01-2020 08:00	2.0	
Class I Leachate Facility	06-01-2020 14:28	1.0	
Class II Accounting Office	06-01-2020 10:23	0.4	
Class II Nove Engine Room	06-01-2020 14:38	25.2	
Class II Nove Office	06-01-2020 14:38	5.0	
Class II Scalehouse Trailer 1	06-01-2020 10:29	0.0	
Class II Scalehouse Trailer 2	06-01-2020 10:30	0.0	
GBTS Break Room	06-01-2020 13:55	0	
GBTS Office	06-01-2020 13:54	1.5	
GBTS Scalehouse Trailer	06-01-2020 13:55	0	

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

Ambient Temperature (degF): 65

Barometric Pressure (in Hg): 29.87

Weather Condition: Clear windy

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County GBTS Monitoring Inspection Form

Inspector: Ecg		Date: 6/1/2020		Temp: 20.0		Start Time: 1:47:00 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.99		Stop Time: 2:32:40 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.4	20.9	78.7	0	88	
A002	0	0.1	20.9	79	0	88	
V001	0	0.3	20.7	79	0	88	
V002	0	0.5	18.9	80.6	0	88	
V003	0	0.3	20.9	78.8	0	88	
V004	0	0.7	20.4	78.9	0	88	
WRC1	59.8	37.2	0.7	2.3	0	66	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form

Inspector: Ecg		Date: 6/1/2020		Temp: 20.0		Start Time: 2:01:42 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.99		Stop Time: 2:37:48 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.4	12.1	81.5	<i>0.07</i>	88	
GP02	0	13.2	3.7	83.1	<i>-0.06</i>	88	
GP03	66.4	29.4	0	4.2	<i>-0.05</i>	88	
GP04	37.4	17.7	0.2	44.7	<i>0.03</i>	88	
GP05	0	6.1	13.5	80.4	<i>0.1</i>	88	
GP07	33.4	31.1	0.1	35.4	<i>0.05</i>	88	
GP08	61.8	38	0.2	0	<i>0.15</i>	88	
GP09	0	0.6	20.6	78.8	<i>0.14</i>	88	
GP10	48.5	51.4	0.1	0	<i>0.11</i>	88	
LFG1	0.2	0.9	19.3	79.6	<i>-0.15</i>	88	
LFG2	78.5	6.4	1.3	13.8	<i>0.08</i>	88	
M057	30.8	20.2	10.3	38.7	<i>0</i>	88	
M069	9.7	3.7	16.8	69.8	<i>0</i>	88	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 6/9/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	06-09-2020 08:50	3.0	
Class I Leachate Facility	06-09-2020 12:00	1.0	
Class II Accounting Office	06-09-2020 10:15	0.0	
Class II Nove Engine Room	06-09-2020 12:29	10.8	
Class II Nove Office	06-09-2020 12:29	0.1	
Class II Scalehouse Trailer 1	06-09-2020 10:19	0.0	
Class II Scalehouse Trailer 2	06-09-2020 10:21	0.0	
GBTS Break Room	06-09-2020 00:16	0	
GBTS Office	06-09-2020 12:15	0.8	
GBTS Scalehouse Trailer	06-09-2020 12:18	0	

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

Ambient Temperature (degF): 77

Barometric Pressure (in Hg): 30.05

Weather Condition: Clear

Wind Speed (mph): Ne

Wind Direction: Ne

**West Contra Costa County
GBTS Monitoring Inspection Form**

Inspector: Ecg		Date: 6/9/2020		Temp: 20.0		Start Time: 11:47:00 AM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 30.13		Stop Time: 2:18:20 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.4	20.9	78.7	0	78	
A002	0	0	20.6	79.4	0	78	
V001	0	0.2	21	78.8	0	78	
V002	0	0.1	20.9	79	0	78	
V003	0	0	20.9	79.1	0	78	
V004	0	0.8	20	79.2	0	78	
WRC1	60.9	38.1	0.3	0.7	0	78	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

**West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form**

Inspector: Ecg		Date: 6/9/2020		Temp: 20.0		Start Time: 1:31:08 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 30.13		Stop Time: 2:20:26 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.3	13	80.7	-0.02	78	
GP02	0	13.2	4	82.8	-0.02	78	
GP03	66.3	29.8	0	3.9	-0.15	78	
GP04	39.3	18.7	0	42	-0.24	78	
GP05	0	5.8	13.6	80.6	-0.09	78	
GP07	33.6	30.9	0.2	35.3	-0.07	78	
GP08	62.4	37.3	0.3	0	-0.05	78	
GP09	0	0.4	20.3	79.3	-0.15	78	
GP10	49.7	50.1	0.2	0	-0.1	78	
LFG1	0.2	0.8	18.7	80.3	-0.24	78	
LFG2	75.9	6.3	2.1	15.7	-0.05	78	
M057	53	34.3	1.8	10.9	0	78	
M069	14.8	6	15	64.2	0	78	
<i>Nove</i>	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
<i>Accounting Office</i>							
<i>Scalehouse Trailer 1</i>							
<i>Scalehouse Trailer 2</i>							

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 6/15/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	06-15-2020 06:30	2.5	
Class I Leachate Facility	06-15-2020 08:35	0.0	
Class II Accounting Office	06-15-2020 07:52	0.1	
Class II Nove Engine Room	06-15-2020 11:25	28.6	
Class II Nove Office	06-15-2020 11:24	1.3	
Class II Scalehouse Trailer 1	06-15-2020 07:55	0.0	
Class II Scalehouse Trailer 2	06-15-2020 07:16	0.0	
GBTS Break Room	06-15-2020 08:25	0	
GBTS Office	06-15-2020 08:25	0.2	
GBTS Scalehouse Trailer	06-15-2020 08:24	0	

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

Ambient Temperature (degF): 67

Barometric Pressure (in Hg): 29.99

Weather Condition: Mostly clear

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County GBTS Monitoring Inspection Form

Inspector: Ecg		Date: 6/15/2020		Temp: 20.0		Start Time: 8:20:48 AM	
Weather: Mostly clear		Wind: Vac Control		Baro. Pressure: 30.01		Stop Time: 12:55:59 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.2	20.9	78.9	0	77	
A002	0	0.1	20.9	79	0	77	
V001	0	0.2	20.7	79.1	0	77	
V002	0	0.3	20	79.7	0	77	
V003	0	0.1	21	78.9	0	77	
V004	0	0.7	20.5	78.8	0	77	
WRC1	61.9	37.9	0.2	0	0	77	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form

Inspector: Ecg	Date: 6/15/2020	Temp: 20.0	Start Time: 12:03:34 PM			
Weather: Mostly clear	Wind: Vac Control	Baro. Pressure: 30.01	Stop Time: 12:58:11 PM			
Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)
GP01	0	5.2	15.4	79.4	0.13	77
GP02	0	13.3	4.1	82.6	0.09	77
GP03	66.8	29.7	0	3.5	-0.04	77
GP04	40.6	18.6	0.1	40.7	0.02	77
GP05	0	6.4	13	80.6	0.13	77
GP07	34.6	30.6	0.2	34.6	0.06	77
GP08	62.7	37.1	0.2	0	0.03	77
GP09	0	0.7	20.6	78.7	0.01	77
GP10	50.9	49	0.2	0	0.04	77
LFG1	0.5	1	19	79.5	0.15	77
LFG2	87.9	5.9	0.4	5.8	0.02	77
M057	46.5	29.2	4.7	19.6	0	77
M069	7.4	2.7	18.4	71.5	0	77
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.					
Accounting Office						
Scalehouse Trailer 1						
Scalehouse Trailer 2						

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 6/22/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	06-22-2020 07:00	1.9	
Class I Leachate Facility	06-22-2020 14:45	1.2	
Class II Accounting Office	06-22-2020 08:42	1.0	
Class II Nove Engine Room	06-22-2020 14:50	5.9	
Class II Nove Office	06-22-2020 14:50	0.0	
Class II Scalehouse Trailer 1	06-22-2020 08:45	0.5	
Class II Scalehouse Trailer 2	06-22-2020 08:46	0.2	
GBTS Break Room	06-22-2020 08:53	0	
GBTS Office	06-22-2020 08:53	0.5	
GBTS Scalehouse Trailer	06-22-2020 08:52	0	

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

Ambient Temperature (degF): 66

Barometric Pressure (in Hg): 29.90

Weather Condition: Clear

Wind Speed (mph): Ne

Wind Direction: Ne

**West Contra Costa County
GBTS Monitoring Inspection Form**

Inspector: Ecg		Date: 6/22/2020		Temp: 20.0		Start Time: 2:02:49 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.91		Stop Time: 4:16:18 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.5	20.4	79.1	0	66	
A002	0	0.1	20.9	79	0	66	
V001	0	0.3	20.4	79.3	0	66	
V002	0	0.2	20.3	79.5	0	66	
V003	0	0.2	20.8	79	0	66	
V004	0	0.6	20.4	79	0	66	
WRC1	61.8	37.1	0.2	0.9	0	66	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

**West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form**

Inspector: Ecg		Date: 6/22/2020		Temp: 20.0		Start Time: 3:31:07 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.91		Stop Time: 4:18:28 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	7	9.5	83.5	0.01	66	
GP02	0	13.7	4.1	82.2	0.06	66	
GP03	61.6	30.5	0	7.9	-0.11	66	
GP04	38.8	18.7	0.1	42.4	0.03	66	
GP05	0	5.2	15.7	79.1	-0.11	66	
GP07	34	31.7	0.1	34.2	-0.17	66	
GP08	62.6	37.2	0.1	0.1	0.06	66	
GP09	0	0.4	20.5	79.1	-0.09	66	
GP10	50.8	49	0.2	0	-0.04	66	
LFG1	0.6	1.1	18.9	79.4	0.02	66	
LFG2	89.3	6.2	0.4	4.1	0.02	66	
M057	39.5	27	6.5	27	0	66	
M069	5.7	2.3	19.1	72.9	0	66	
<i>Nove</i>	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
<i>Accounting Office</i>							
<i>Scalehouse Trailer 1</i>							
<i>Scalehouse Trailer 2</i>							

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 6/29/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	06-29-2020 06:25	3.1	
Class I Leachate Facility	06-29-2020 11:41		
Class II Accounting Office	06-29-2020 08:00	0.8	
Class II Nove Engine Room	06-29-2020 14:48	20.5	
Class II Nove Office	06-29-2020 14:47	1.2	
Class II Scalehouse Trailer 1	06-29-2020 07:57	1.0	
Class II Scalehouse Trailer 2	06-29-2020 07:57	0.1	
GBTS Break Room	06-29-2020 13:31	0	
GBTS Office	06-29-2020 13:30	1.0	
GBTS Scalehouse Trailer	06-29-2020 13:29	0	

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

Ambient Temperature (degF): 70.0

Barometric Pressure (in Hg): 28.86

Weather Condition: Clear windy

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County GBTS Monitoring Inspection Form

Inspector: Ecg		Date: 6/29/2020		Temp: 20.0		Start Time: 1:37:30 PM	
Weather: Clear windy		Wind: Vac Control		Baro. Pressure: 29.87		Stop Time: 4:25:21 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
A001	0	0.2	20.9	78.9	0	70	
A002	0	0.1	20.9	79	0	70	
V001	0	0.2	20.8	79	0	70	
V002	0	0.3	20	79.7	0	70	
V003	0	0.2	20.9	78.9	0	70	
V004	0	0.6	20.4	79	0	70	
WRC1	60.9	36.5	2.6	0	0	70	
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Break Room							
Scalehouse Trailer							

**West Contra Costa County
Class II Weekly Monitoring Probe Inspection Form**

Inspector: Ecg	Date: 6/29/2020	Temp: 20.0	Start Time: 3:04:19 PM			
Weather: Clear windy	Wind: Vac Control	Baro. Pressure: 29.87	Stop Time: 4:30:49 PM			
Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)
GP01	0	8.2	7.9	83.9	0.14	70
GP02	0	13.8	4.7	81.5	0.13	70
GP03	45	31.9	0	23.1	0	70
GP04	39.1	19.8	0.1	41	0.13	70
GP05	0	4.1	15.3	80.6	0.13	70
GP07	35	33.6	0.1	31.3	-0.07	70
GP08	61.2	38.5	0.2	0.1	0.15	70
GP09	0.1	0.6	20.4	78.9	0.08	70
GP10	48.4	51.3	0.3	0	0.1	70
LFG1	1.1	1.2	18.6	79.1	0.06	70
LFG2	82.2	4.4	2	11.4	0.08	70
M057	40.5	28.5	6.2	24.8	0	70
M069	2.4	1.4	19.9	76.3	0	70
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.					
Accounting Office						
Scalehouse Trailer 1						
Scalehouse Trailer 2						

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 7/10/2020		Temp: 20.0		Start Time: 3:59:37 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 30		Stop Time: 4:26:43 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.7	13.6	79.7	-0.03	70	
GP02	0	14.1	5.5	80.4	-0.03	70	
GP03	41.3	32.4	0	26.3	-0.1	70	
GP04	37.6	20.4	0.1	41.9	-0.11	70	
GP05	0.1	4.7	16	79.2	-0.01	70	
GP07	34	34.3	0.2	31.5	-0.05	70	
GP08	60.2	38.1	0.3	1.4	0	70	
GP09	0	1.2	20.4	78.4	-0.06	70	
GP10	47.9	51.6	0.2	0.3	-0.09	70	
LFG1	1.3	1.8	18.4	78.5	-0.79	70	
LFG2	88.4	5.8	0.3	5.5	-0.03	70	
M057	46.5	33.3	3.8	16.4	0	70	
M069	4.9	2.4	19.5	73.2	0	70	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 7/10/2020	Temp: 20.0	Start Time: 2:03:02 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 30	Stop Time: 4:24:26 PM

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<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.3	20.9	78.8	0	70
A002	0	0.1	20.9	79	0	70
V001	0	0.2	20.9	78.9	0	70
V002	0	0.2	20.8	79	0	70
V003	0	0.1	20.9	79	0	70
V004	0	1.7	20.7	77.6	0	70
WRC1	58.3	35.9	0.9	4.9	0	70

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 7/10/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	07-10-2020 06:55	3.0	
Class I Leachate Facility	07-10-2020 14:27	1.0	
Class II Accounting Office	07-10-2020 08:57	0.0	
Class II Nove Engine Room	07-10-2020 14:31	20.8	
Class II Nove Office	07-10-2020 14:31	1.2	
Class II Scalehouse Trailer 1	07-10-2020 09:06	0.0	
Class II Scalehouse Trailer 2	07-10-2020 09:07	0.0	
GBTS Break Room	07-10-2020 14:20	0	
GBTS Office	07-10-2020 14:20	0.2	
GBTS Scalehouse Trailer	07-10-2020 14:19	0	

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

Ambient Temperature (degF): 70

Barometric Pressure (in Hg): 30.01

Weather Condition: Clear

Wind Speed (mph): n

Wind Direction: n

**West Contra Costa County
Class II Weekly Probe Monitoring Form**

Inspector: Ecg		Date: 7/14/2020		Temp: 20.0		Start Time: 3:37:03 PM	
Weather: Clear windy		Wind: Vac Control		Baro. Pressure: 29.93		Stop Time: 3:54:46 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	7.2	11.8	81	-0.04	64	
GP02	0	14.3	5.3	80.4	-0.06	64	
GP03	38.4	31.3	0	30.3	0.02	64	
GP04	36.8	20.1	0	43.1	0	64	
GP05	0	4.2	15.6	80.2	-0.07	64	
GP07	33.9	33.3	0	32.8	-0.01	64	
GP08	58.8	36.3	0.3	4.6	-0.01	64	
GP09	0	0.7	20.5	78.8	-0.07	64	
GP10	48.1	48.6	0.4	2.9	-0.01	64	
LFG1	1.2	1.7	17.5	79.6	-0.01	64	
LFG2	86.8	5.3	0.1	7.8	-0.02	64	
M057	29	21.9	9.2	39.9	0	64	
M069	5.9	2.5	19	72.6	0	64	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 7/14/2020	Temp: 20.0	Start Time: 10:59:06 AM
Weather: Clear windy	Wind: Vac Control	Baro. Pressure: 29.93	Stop Time: 3:52:23 PM

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<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.4	20.9	78.7	0	64
A002	0	0.1	20.9	79	0	64
V001	0	0.4	20.9	78.7	0	64
V002	0	0.3	19.9	79.8	0	64
V003	0	0.2	20.9	78.9	0	64
V004	0	1	20.5	78.5	0	64
WRC1	56.8	34.8	1.8	6.6	0	64

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 7/14/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	07-14-2020 08:45	1.6	
Class I Leachate Facility	07-14-2020 10:05	0.0	
Class II Accounting Office	07-14-2020 09:49	0.0	
Class II Nove Engine Room	07-14-2020 14:24	18.2	
Class II Nove Office	07-14-2020 14:24	0.6	
Class II Scalehouse Trailer 1	07-14-2020 10:01	1.0	
Class II Scalehouse Trailer 2	07-14-2020 10:02	0.0	
GBTS Break Room	07-14-2020 11:04	0	
GBTS Office	07-14-2020 11:05	1.3	
GBTS Scalehouse Trailer	07-14-2020 10:59	0	

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

Ambient Temperature (degF): 64

Barometric Pressure (in Hg): 29.80

Weather Condition: Clear

Wind Speed (mph): Ne

Wind Direction: Ne

**West Contra Costa County
Class II Weekly Probe Monitoring Form**

Inspector: Ecg		Date: 7/20/2020		Temp: 20.0		Start Time: 4:13:49 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.96		Stop Time: 4:46:01 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.7	12.8	80.5	<i>0.05</i>	<i>64</i>	
GP02	0	14.1	5.6	80.3	<i>-0.03</i>	<i>64</i>	
GP03	35.7	31.8	0	32.5	<i>0</i>	<i>64</i>	
GP04	37.4	20.4	0	42.2	<i>-0.04</i>	<i>64</i>	
GP05	0	4.6	16.1	79.3	<i>-0.02</i>	<i>64</i>	
GP07	35.1	33.8	0.1	31	<i>-0.06</i>	<i>64</i>	
GP08	59.4	37.8	0.2	2.6	<i>0.02</i>	<i>64</i>	
GP09	0	0.6	20.2	79.2	<i>-0.04</i>	<i>64</i>	
GP10	48.8	49.7	0.4	1.1	<i>-0.02</i>	<i>64</i>	
LFG1	1.1	1.9	17	80	<i>0.02</i>	<i>64</i>	
LFG2	82.2	6	1.2	10.6	<i>-0.03</i>	<i>64</i>	
M057	39	28.6	5.3	27.1	<i>0</i>	<i>64</i>	
M069	7.1	3.3	18.3	71.3	<i>0</i>	<i>64</i>	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 7/20/2020	Temp: 20.0	Start Time: 12:23:18 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 29.96	Stop Time: 4:39:42 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.4	20.9	78.7	0	64
A002	0	0.2	20.7	79.1	0	64
V001	0	0.4	20.5	79.1	0	64
V002	0	0.7	18.7	80.6	0	64
V003	0	0.3	20.7	79	0	64
V004	0	0.6	20.2	79.2	0	64
WRC1	60.1	38	0.3	1.6	0	64

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 7/20/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	07-20-2020 09:30	2.5	
Class I Leachate Facility	07-20-2020 13:50	1.0	
Class II Accounting Office	07-20-2020 10:55	2.0	
Class II Nove Engine Room	07-20-2020 15:30	22.1	
Class II Nove Office	07-20-2020 15:29	0.9	
Class II Scalehouse Trailer 1	07-20-2020 10:57	2.4	
Class II Scalehouse Trailer 2	07-20-2020 10:58	0.0	
GBTS Break Room	07-20-2020 15:36	0	
GBTS Office	07-20-2020 15:36	1.8	
GBTS Scalehouse Trailer	07-20-2020 15:36	0	

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

Ambient Temperature (degF): 64.0

Barometric Pressure (in Hg): 29.89

Weather Condition: Clear

Wind Speed (mph):

Wind Direction:

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 7/28/2020		Temp: 20.0		Start Time: 9:04:08 AM	
Weather: Clear windy		Wind: Vac Control		Baro. Pressure: 29.93		Stop Time: 12:45:11 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0.1	6.1	13.2	80.6	0.03	63	
GP02	0	13.3	5.6	81.1	0.1	63	
GP03	31.5	30.5	0	38	0.06	63	
GP04	36.3	19.6	0.2	43.9	0.06	63	
GP05	0	4.6	15.7	79.7	0.04	63	
GP07	34.2	31.9	0.3	33.6	0.08	63	
GP08	58.1	36.2	0.2	5.5	0.09	63	
GP09	0	0.6	20.8	78.6	0.08	63	
GP10	47.7	46.8	0.4	5.1	#N/A	#N/A	
LFG1	1.3	2.6	15.2	80.9	0.13	63	
LFG2	84.3	6.2	0.5	9	0.04	63	
M057	48	33.2	2.9	15.9	0	63	
M069	6.1	3.1	18.7	72.1	0	63	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 7/28/2020	Temp: 20.0	Start Time: 9:02:09 AM
Weather: Clear windy	Wind: Vac Control	Baro. Pressure: 29.93	Stop Time: 12:36:34 PM

Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)
A001	0	0.4	20.9	78.7	#N/A	#N/A
A002	0	0.1	21	78.9	#N/A	#N/A
V001	0	0.3	20.9	78.8	0	63
V002	0	0.4	20.4	79.2	#N/A	#N/A
V003	0	0.1	20.9	79	#N/A	#N/A
V004	0	0.8	20.9	78.3	#N/A	#N/A
WRC1	61.3	38.7	0.1	0	0	63

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 7/28/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	07-28-2020 06:18	2.5	
Class I Leachate Facility	07-28-2020 12:00	0.3	
Class II Accounting Office	07-28-2020 08:09		
Class II Nove Engine Room	07-28-2020 13:48	11.2	
Class II Nove Office	07-28-2020 13:48	0.0	
Class II Scalehouse Trailer 1	07-28-2020 08:13	0.0	
Class II Scalehouse Trailer 2	07-28-2020 08:12	0.0	
GBTS Break Room	07-28-2020 08:32	0	
GBTS Office	07-28-2020 08:33	1.5	
GBTS Scalehouse Trailer	07-28-2020 08:30	0	

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

Ambient Temperature (degF): 63

Barometric Pressure (in Hg): 29.91

Weather Condition: Clear windy

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 8/3/2020		Temp: 20.0		Start Time: 1:01:05 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 30.02		Stop Time: 1:43:52 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.1	12	81.9	-0.02	72	
GP02	0	14.1	5.3	80.6	0.01	72	
GP03	28.7	31.7	0	39.6	-0.01	72	
GP04	35.9	20.4	0	43.7	-0.02	72	
GP05	0	2.9	17.5	79.6	0	72	
GP07	33.8	34.6	0	31.6	-0.03	72	
GP08	58.9	39.6	0.1	1.4	0.02	72	
GP09	0	0.5	20.5	79	-0.03	72	
GP10	47.4	52.5	0.1	0	0.05	72	
LFG1	0.4	5	5	89.6	0	72	
LFG2	84.9	6.8	0.1	8.2	-0.01	72	
M057	26.6	19.3	11	43.1	0	72	
M069	5.8	2.4	18.9	72.9	0	72	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: Ecg	Date: 8/3/2020	Temp: 20.0	Start Time: 11:41:00 AM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 30.02	Stop Time: 1:40:17 PM

Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)
A001	0	0.5	20.9	78.6	0	72
A002	0	0.1	20.9	79	0	72
V001	0	0.3	20.9	78.8	0	72
V002	0	0.2	20.9	78.9	0	72
V003	0	0.1	20.9	79	0	72
V004	0	0.5	20.5	79	0	72
WRC1	61.6	37.9	0.2	0.3	0	72

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 8/3/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	08-03-2020 08:20	4.0	
Class I Leachate Facility	08-03-2020 11:55	0.0	
Class II Accounting Office	08-03-2020 11:09	0.0	
Class II Nove Engine Room	08-03-2020 12:37	16.8	
Class II Nove Office	08-03-2020 12:37	0.8	
Class II Scalehouse Trailer 1	08-03-2020 11:15	1.8	
Class II Scalehouse Trailer 2	07-03-2020 11:16	0.0	
GBTS Break Room	08-03-2020 11:50	0	
GBTS Office	08-03-2020 11:50	1.0	
GBTS Scalehouse Trailer	08-03-2020 11:52	0	

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

Ambient Temperature (degF): 72

Barometric Pressure (in Hg): 29.90

Weather Condition: Clear

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 8/10/2020		Temp: 20.0		Start Time: 3:27:43 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.9		Stop Time: 4:10:24 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.2	13.2	80.6	<i>0.01</i>	<i>66</i>	
GP02	0	13.6	5.5	80.9	<i>0.07</i>	<i>66</i>	
GP03	35.4	20.8	0	43.8	<i>0.09</i>	<i>66</i>	
GP04	25.7	32.1	0	42.2	<i>0.03</i>	<i>66</i>	
GP05	0	4.5	14.8	80.7	<i>0.05</i>	<i>66</i>	
GP07	33.9	35.3	0	30.8	<i>0.08</i>	<i>66</i>	
GP08	58.2	39.2	0.3	2.3	<i>0.09</i>	<i>66</i>	
GP09	0	0.5	20.6	78.9	<i>0.05</i>	<i>66</i>	
GP10	47.2	52.6	0.2	0	<i>0.04</i>	<i>66</i>	
LFG1	0.2	4.4	9.3	86.1	<i>0.02</i>	<i>66</i>	
LFG2	86.3	6.4	0.2	7.1	<i>0.05</i>	<i>66</i>	
M057	38.1	28.3	6.7	26.9	<i>0</i>	<i>66</i>	
M069	10.3	4.9	17.3	67.5	<i>0</i>	<i>66</i>	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 8/10/2020	Temp: 20.0	Start Time: 1:42:49 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 29.9	Stop Time: 4:07:36 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.2	20.9	78.9	0	66
A002	0	0.1	20.9	79	0	66
V001	0	0.2	21	78.8	0	66
V002	0	0.2	20.6	79.2	0	66
V003	0	0	20.9	79.1	0	66
V004	0	0.5	20.8	78.7	0	66
WRC1	58.4	37.8	0.2	3.6	0	66

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 8/10/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	8/10/20 8:45	2.6	0
Class I Leachate Facility	8/10/20 13:54	0	0
Class II Accounting Office	8/10/20 10:14	0	0
Class II Nove Engine Room	8/10/20 14:00	20.6	0
Class II Nove Office	8/10/20 14:59	1	0
Class II Scalehouse Trailer 1	8/10/20 10:17	0	0
Class II Scalehouse Trailer 2	8/10/20 10:16	0	0
GBTS Break Room	8/10/20 13:50	0	0
GBTS Office	8/10/20 13:48	0	0
GBTS Scalehouse Trailer	8/10/20 13:51	0	0

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

Ambient Temperature (degF): 66

Barometric Pressure (in Hg): 29.99

Weather Condition: Clear

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 8/17/2020		Temp: 20.0		Start Time: 1:55:44 PM	
Weather: Mostly cloudy		Wind: Vac Control		Baro. Pressure: 29.97		Stop Time: 2:43:45 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.3	12	81.7	<i>0.08</i>	<i>77</i>	
GP02	0	13	5.3	81.7	<i>0.09</i>	<i>77</i>	
GP03	22.1	30.6	0	47.3	<i>0.05</i>	<i>77</i>	
GP04	33.5	19.9	0	46.6	<i>0.08</i>	<i>77</i>	
GP05	0	4.5	15.4	80.1	<i>0.08</i>	<i>77</i>	
GP07	37.3	33.9	0.1	28.7	<i>0.04</i>	<i>77</i>	
GP08	58.2	38.3	0.4	3.1	<i>0.05</i>	<i>77</i>	
GP09	0	0.4	20.4	79.2	<i>0.05</i>	<i>77</i>	
GP10	47.5	51.2	0.3	1	<i>0.04</i>	<i>77</i>	
LFG1	0.2	2.9	9.8	87.1	<i>-0.18</i>	<i>77</i>	
LFG2	80	6.3	0.5	13.2	<i>0.08</i>	<i>77</i>	
M057	28.8	20.3	9.8	41.1	<i>0</i>	<i>77</i>	
M069	21	10.2	13.2	55.6	<i>0</i>	<i>77</i>	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: Ecg	Date: 8/17/2020	Temp: 20.0	Start Time: 11:27:20 AM
Weather: Mostly cloudy	Wind: Vac Control	Baro. Pressure: 29.97	Stop Time: 2:41:30 PM

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<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.2	20.9	78.9	0	77
A002	0	0.1	20.9	79	0	77
V001	0	0.4	20.1	79.5	0	77
V002	0	0.8	17.6	81.6	0	77
V003	0	0.1	20.4	79.5	0	77
V004	0	0.7	20.2	79.1	0	77
WRC1	60.9	39.1	0.1	0	0	77

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 8/17/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	8/17/20 6:10	3	0
Class I Leachate Facility	8/17/20 6:20	0	0
Class II Accounting Office	8/17/20 7:55	1.5	0
Class II Nove Engine Room	8/17/20 13:10	20.3	0
Class II Nove Office	8/17/20 13:09	1	0
Class II Scalehouse Trailer 1	8/17/20 8:03	0.5	0
Class II Scalehouse Trailer 2	8/17/20 8:04	0.1	0
GBTS Break Room	8/17/20 9:58	0	0
GBTS Office	8/17/20 9:58	1.6	0
GBTS Scalehouse Trailer	8/17/20 9:57	0	

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

Ambient Temperature (degF): 72

Barometric Pressure (in Hg): 29.9

Weather Condition: Cloudy

Wind Speed (mph): N

Wind Direction: N

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 8/25/2020		Temp: 20.0		Start Time: 2:28:47 PM	
Weather: smokey		Wind: Vac Control		Baro. Pressure: 29.88		Stop Time: 3:12:28 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	6.5	12.6	80.9	0.04	66	
GP02	0	13.3	5.2	81.5	0.06	66	
GP03	20.9	31.8	0	47.3	0.01	66	
GP04	35.2	20.7	0	44.1	0.06	66	
GP05	0	4.5	16	79.5	-0.05	66	
GP07	39.8	35.8	0	24.4	0.03	66	
GP08	59.4	40.5	0.1	0	0.04	66	
GP09	0	0.7	20.4	78.9	-0.01	66	
GP10	46.6	53.3	0.1	0	0.04	66	
LFG1	0.1	4.8	6.1	89	0.08	66	
LFG2	89.4	6.5	0.2	3.9	0.05	66	
M057	35.7	23.7	8.6	32	0	66	
M069	16.2	7.8	15.5	60.5	0	66	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 8/25/2020	Temp: 20.0	Start Time: 1:20:48 PM
Weather: Partly smokey	Wind: Vac Control	Baro. Pressure: 29.88	Stop Time: 3:09:58 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.3	20.9	78.8	0	66
A002	0	0.2	20.9	78.9	0	66
V001	0	0.3	20.7	79	0	66
V002	0	0.4	20.2	79.4	0	66
V003	0	0.1	20.9	79	0	66
V004	0	0.8	20.6	78.6	0	66
WRC1	61.9	37.6	0.5	0	0	66

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 8/25/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	8/25/20 20:34	2.5	0
Class I Leachate Facility	8/25/20 13:33	1	0
Class II Accounting Office	8/25/20 11:30	0	0
Class II Nove Engine Room	8/25/20 13:38	8.5	0
Class II Nove Office	8/25/20 13:38	0.3	0
Class II Scalehouse Trailer 1	8/25/20 11:36	0	0
Class II Scalehouse Trailer 2	8/25/20 11:36	0	0
GBTS Break Room	8/25/20 13:25	0	0
GBTS Office	8/25/20 13:25	0.9	0
GBTS Scalehouse Trailer	8/25/20 13:24	0	

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

Ambient Temperature (degF): 66

Barometric Pressure (in Hg): 29.87

Weather Condition: Partly smokey

Wind Speed (mph): Ne

Wind Direction: Ne

**West Contra Costa County
Class II Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 9/1/2020	Temp: 20.0	Start Time: 12:53:11 PM
Weather: Mostly clear	Wind: Vac Control	Baro. Pressure: 29.96	Stop Time: 4:49:39 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
GP01	0	6.6	11.5	81.9	-0.06	66
GP02	0	12.7	5.4	81.9	-0.01	66
GP03	16.6	29.7	0	53.7	-0.04	66
GP04	33.4	21	0	45.6	0.06	66
GP05	0	5	15.8	79.2	0.04	66
GP07	36.8	35.2	0	28	0.02	66
GP08	61.2	38.6	0.1	0.1	0.06	66
GP09	0	2.7	19.8	77.5	0.01	66
GP10	50.5	47.7	0.4	1.4	0.07	66
LFG1	1.6	6.6	0.1	91.7	0.07	66
LFG2	83.8	7	0.5	8.7	0.03	66
M057	28	19.7	10.6	41.7	0	66
M069	8.4	4.4	17.9	69.3	0	66

Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Accounting Office	
Scalehouse Trailer 1	
Scalehouse Trailer 2	

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: Ecg	Date: 9/1/2020	Temp: 20.0	Start Time: 1:36:05 PM
Weather: Mostly clear	Wind: Vac Control	Baro. Pressure: 29.96	Stop Time: 4:48:17 PM

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<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.6	20.9	78.5	0	66
A002	0	0.1	20.9	79	0	72
V001	0	0.3	20.8	78.9	0	66
V002	0	0.3	20.3	79.4	0	66
V003	0	0.2	21	78.8	0	66
V004	0	1.9	20.3	77.8	0	66
WRC1	59.6	36.6	1.1	2.7	0	66

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 8/31/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	8/31/20 7:30	0.9	0
Class I Leachate Facility	9/1/20 16:34	0	0
Class II Accounting Office	9/1/20 16:10	0	0
Class II Nove Engine Room	9/1/20 8:30	10.5	0
Class II Nove Office	9/1/20 8:32	0.9	0
Class II Scalehouse Trailer 1	1/0/00 0:00	0	0
Class II Scalehouse Trailer 2	1/0/00 0:00	0	0
GBTS Break Room	9/1/20 13:23	0	0
GBTS Office	9/1/20 13:23	0.3	0
GBTS Scalehouse Trailer	9/1/20 13:24	0	

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

Ambient Temperature (degF): 64

Barometric Pressure (in Hg): 29.95

Weather Condition: Windy partly cloudy

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 9/11/2020		Temp: 20.0		Start Time: 11:16:47 AM	
Weather: Cloudy		Wind: Vac Control		Baro. Pressure: 30.05		Stop Time: 12:15:41 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	5.4	14.5	80.1	<i>0.05</i>	<i>87</i>	
GP02	0	10.5	8.9	80.6	<i>0</i>	<i>87</i>	
GP03	14.1	29.4	0.1	56.4	<i>0</i>	<i>87</i>	
GP04	31.9	20.6	0	47.5	<i>0.03</i>	<i>87</i>	
GP05	0	4	15.9	80.1	<i>-0.01</i>	<i>87</i>	
GP07	34.6	34.8	0	30.6	<i>0</i>	<i>87</i>	
GP08	58.4	39.8	0.2	1.6	<i>-0.03</i>	<i>87</i>	
GP09	0	0.3	20.4	79.3	<i>0.05</i>	<i>87</i>	
GP10	46.2	52.2	0	1.6	<i>-0.01</i>	<i>87</i>	
LFG1	47.1	3.9	0.5	48.5	<i>0.01</i>	<i>87</i>	
LFG2	75.3	8.7	0.4	15.6	<i>0.02</i>	<i>87</i>	
M057	3.9	2.3	19.1	74.7	<i>0</i>	<i>87</i>	
M069	4.7	4	19.1	72.2	<i>0</i>	<i>87</i>	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: Ecg	Date: 9/11/2020	Temp: 20.0	Start Time: 10:58:03 AM
Weather: Cloudy	Wind: Vac Control	Baro. Pressure: 30.05	Stop Time: 11:37:45 AM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.3	20.3	79.4	0	87
A002	0	0.1	20.7	79.2	0	87
V001	0	0.3	19.9	79.8	0	87
V002	0	0.5	19.5	80	0	87
V003	0	0.2	20.4	79.4	0	87
V004	0	0.3	20.4	79.3	0	87
WRC1	61.2	38.3	0.4	0.1	0	87

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 9/11/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	09-11-2020 19:30	1.0	
Class I Leachate Facility	09-11-2020 12:13	0.0	
Class II Accounting Office	09-11-2020 11:50	0.0	
Class II Nove Engine Room	09-11-2020 13:02	10.4	
Class II Nove Office	09-11-2020 13:03	0.0	
Class II Scalehouse Trailer 1	09-11-2020 11:47	0.0	
Class II Scalehouse Trailer 2	09-11-2020 11:46	0.0	
GBTS Break Room	09-11-2020 11:43	0	
GBTS Office	09-11-2020 11:43	0.0	
GBTS Scalehouse Trailer	09-11-2020 11:40	0	

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

Ambient Temperature (degF): 70

Barometric Pressure (in Hg): 30.00

Weather Condition:

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Wcg		Date: 9/15/2020		Temp: 20.0		Start Time: 9:44:41 AM	
Weather: Mostly clear		Wind: Vac Control		Baro. Pressure: 30.09		Stop Time: 11:22:18 AM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	5.2	15.7	79.1	-0.14	70	
GP02	0	12.2	5.8	82	-0.19	70	
GP03	12.8	28	0	59.2	-0.2	70	
GP04	30.3	19.5	0	50.2	-0.11	70	
GP05	0	4.9	14.9	80.2	-0.12	70	
GP07	33.6	32.8	0.1	33.5	-0.16	70	
GP08	56.8	38.1	0.1	5	0	70	
GP09	0	0.7	20.5	78.8	-0.14	70	
GP10	44.6	50.4	0	5	#N/A	#N/A	
LFG1	64.9	1.9	0.4	32.8	-0.1	70	
LFG2	72.6	8.5	0.7	18.2	-0.24	70	
M057	41.3	29.4	5.1	24.2	0	70	
M069	5.5	3.4	18	73.1	0	70	
<i>Nove</i>	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
<i>Accounting Office</i>							
<i>Scalehouse Trailer 1</i>							
<i>Scalehouse Trailer 2</i>							

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: Wcg	Date: 9/15/2020	Temp: 20.0	Start Time: 10:23:29 AM
Weather: Mostly clear	Wind: Vac Control	Baro. Pressure: 30.09	Stop Time: 11:34:52 AM

Well ID	CH4(%)	CO2(%)	O2(%)	Balance(%)	SP(inWC)	Temp(F)
A001	0	0.2	20.9	78.9	#N/A	#N/A
A002	0	0.1	20.9	79	#N/A	#N/A
V001	0	0.2	21	78.8	0	70
V002	0	0.3	20.4	79.3	#N/A	#N/A
V003	0	0.2	20.9	78.9	#N/A	#N/A
V004	0	0.6	20.8	78.6	#N/A	#N/A
WRC1	59.5	40.5	0	0	0	70
GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.					
Break Room						
Scalehouse Trailer						

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 9/14/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	09-14-2020 07:55	0.0	
Class I Leachate Facility	09-15-2020 13:53	1.0	
Class II Accounting Office	09-15-2020 10:03	0.8	
Class II Nove Engine Room	09-15-2020 15:46	10.3	
Class II Nove Office	09-15-2020 15:46	0.3	
Class II Scalehouse Trailer 1	09-15-2020 10:07	0.0	
Class II Scalehouse Trailer 2	09-15-2020 10:06		0.0
GBTS Break Room	09-15-2020 11:40	0	0.9
GBTS Office	09-15-2020 11:40	0.0	
GBTS Scalehouse Trailer	09-15-2020 11:41	0	

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

Ambient Temperature (degF): 74.0

Barometric Pressure (in Hg): 29.90

Weather Condition: Mostly clear

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 9/25/2020		Temp: 20.0		Start Time: 2:03:37 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 30.01		Stop Time: 2:38:23 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	4.5	16.7	78.8	-0.04	0	
GP02	0	9.8	7.9	82.3	-0.01	0	
GP03	10.5	28.7	0.1	60.7	-0.09	0	
GP04	30.6	20.9	0.1	48.4	-0.03	0	
GP05	0	5.3	14.9	79.8	-0.03	0	
GP07	33.6	35.7	0.2	30.5	-0.07	0	
GP08	60	39.5	0.5	0	-0.01	0	
GP09	0	1	20.4	78.6	-0.11	0	
GP10	46.9	52.7	0.4	0	-0.01	0	
LFG1	99.1	0.7	0.2	0	-0.02	0	
LFG2	79	8.8	0.6	11.6	0.1	0	
M057	30.4	21.5	9.7	38.4	0	0	
M069	3.7	2.4	19.7	74.2	0	0	
<i>Nove</i>	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
<i>Accounting Office</i>							
<i>Scalehouse Trailer 1</i>							
<i>Scalehouse Trailer 2</i>							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: Ecg	Date: 9/25/2020	Temp: 20.0	Start Time: 12:26:05 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 30.01	Stop Time: 2:36:24 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.4	20.9	78.7	0	0
A002	0	0.1	20.9	79	0	0
V001	0	0.3	20.8	78.9	0	0
V002	0	0.3	20.9	78.8	0	0
V003	0	0.1	20.9	79	0	0
V004	0	1.3	20.5	78.2	0	0
WRC1	59.9	37.5	0	2.6	0	0

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 9/21/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	09-25-2020 08:39	1.9	
Class I Leachate Facility	09-25-2020 08:55	0.0	
Class II Accounting Office	09-25-2020 12:21	0.5	
Class II Nove Engine Room	09-25-2020 08:40	5.8	
Class II Nove Office	09-25-2020 08:41	0.0	
Class II Scalehouse Trailer 1	09-25-2020 12:20	0.9	
Class II Scalehouse Trailer 2	09-25-2020 12:20	1.2	
GBTS Break Room	09-25-2020 11:31	0	
GBTS Office	09-25-2020 11:30	1.9	
GBTS Scalehouse Trailer	09-25-2020 11:32	0	

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

Ambient Temperature (degF): 72

Barometric Pressure (in Hg): 30.07

Weather Condition: Clear

Wind Speed (mph): Ne

Wind Direction: Ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: Ecg		Date: 9/28/2020		Temp: 20.0		Start Time: 12:57:14 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.91		Stop Time: 1:35:16 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	4.6	13.6	81.8	0	88	
GP02	0	11.1	5.9	83	-0.23	88	
GP03	9.9	29.4	0	60.7	-0.04	88	
GP04	28.2	19	0.9	51.9	-0.04	88	
GP05	0	4.7	13.3	82	0.03	88	
GP07	32.6	35.2	0	32.2	0.02	88	
GP08	57.2	42.6	0.2	0	0.01	88	
GP09	0	0.8	20.3	78.9	0.02	88	
GP10	43.1	56.5	0.3	0.1	-0.05	88	
LFG1	98.7	0.6	0.1	0.6	0.03	88	
LFG2	81	7.4	0.2	11.4	0	88	
M057	47.6	35.6	2.4	14.4	0	88	
M069	17.6	9.7	13.5	59.2	0	88	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: Ecg	Date: 9/28/2020	Temp: 20.0	Start Time: 11:08:37 AM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 29.91	Stop Time: 1:32:58 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0	20.8	79.2	0	88
A002	0	0.1	20.9	79	0	88
V001	0	0.7	20.2	79.1	0	88
V002	0	0.4	19.3	80.3	0	88
V003	0	0.3	20.1	79.6	0	88
V004	0	0.9	20.4	78.7	0	88
WRC1	60.2	38	0.2	1.6	0	88

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Eduardo Carranza-Gutierrez

Date: 9/28/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	09-28-2020 08:10	2.0	
Class I Leachate Facility	09-28-2020 11:45	0.2	
Class II Accounting Office	09-28-2020 10:37	0.0	
Class II Nove Engine Room	09-28-2020 12:33	10.5	
Class II Nove Office	09-28-2020 12:33	1.0	
Class II Scalehouse Trailer 1	09-28-2020 10:53	0.9	
Class II Scalehouse Trailer 2	09-28-2020 10:54	1.0	
GBTS Break Room	09-28-2020 11:12	0	
GBTS Office	09-28-2020 11:10	0.5	
GBTS Scalehouse Trailer	09-28-2020 11:13	0	

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

Ambient Temperature (degF): 88.0

Barometric Pressure (in Hg): 29.80

Weather Condition: Clear

Wind Speed (mph): W

Wind Direction: W

**West Contra Costa County
Class II Weekly Probe Monitoring Form**

Inspector: C.Martinez		Date: 10/5/2020		Temp: 20.0		Start Time: 12:58:51 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.99		Stop Time: 1:44:56 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0.1	0.3	20.1	79.5	-0.03	79	
GP02	0	12.1	5.8	82.1	-0.02	79	
GP03	8.4	27.1	0.2	64.3	0.02	79	
GP04	28.4	20.1	0	51.5	0.03	79	
GP05	0	6.1	13.6	80.3	0.03	79	
GP07	31.9	34.5	0	33.6	0.03	79	
GP08	44.7	52.6	0.1	2.6	-0.06	79	
GP09	0	0.9	19.7	79.4	0.11	79	
GP10	4.2	21.2	12.2	62.4	1.36	79	
LFG1	80.2	1	0	18.8	-0.03	79	
LFG2	74.2	9	0.3	16.5	-0.34	79	
M057	2.3	2.1	19.2	76.4	-0.04	79	
M069	10.8	5.7	16.2	67.3	0.01	79	
<i>Nove</i>	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
<i>Accounting Office</i>							
<i>Scalehouse Trailer 1</i>							
<i>Scalehouse Trailer 2</i>							

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: C.Martinez	Date: 10/5/2020	Temp: 20.0	Start Time: 12:38:26 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 29.99	Stop Time: 1:51:06 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.3	20	79.7	0	79
A002	0	0.1	20.3	79.6	-0.14	79
V001	0	0.2	19.8	80	-0.01	79
V002	0	0.2	19.8	80	0.04	79
V003	0	0.1	20.1	79.8	0	79
V004	0	0.6	19.8	79.6	0.02	79
WRC1	60.2	37.5	0.1	2.2	0.03	79

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Camila Martinez

Date: 10/5/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	10-05-2020 09:39	0	
Class I Leachate Facility	10-05-2020 10:17	3.5	
Class II Accounting Office	10-05-2020 09:55	0	
Class II Nove Engine Room	10-05-2020 09:42	0	
Class II Nove Office	10-05-2020 09:42	0	
Class II Scalehouse Trailer 1	10-05-2020 10:09	1.4	
Class II Scalehouse Trailer 2	10-05-2020 10:17	0	
GBTS Break Room	10-05-2020 09:51	0	
GBTS Office	10-05-2020 09:42	0	
GBTS Scalehouse Trailer	10-05-2020 09:42	0	

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

Ambient Temperature (degF): 64

Barometric Pressure (in Hg): 30.06

Weather Condition: Mostly Cloudy

Wind Speed (mph): NE

Wind Direction: NE

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: C.Martinez		Date: 10/12/2020		Temp: 20.0		Start Time: 1:09:04 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 30.08		Stop Time: 2:14:14 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	4	16.6	79.4	<i>0.01</i>	<i>68</i>	
GP02	0	11.8	6	82.2	<i>0</i>	<i>68</i>	
GP03	7.5	27.6	0.1	64.8	<i>0.01</i>	<i>68</i>	
GP04	28.5	20.7	0	50.8	<i>0</i>	<i>68</i>	
GP05	0	6.6	11.6	81.8	<i>0.02</i>	<i>68</i>	
GP07	32.1	36.1	0	31.8	<i>0.02</i>	<i>68</i>	
GP08	57.4	42.6	0	0	<i>-0.05</i>	<i>68</i>	
GP09	0	0.9	19.7	79.4	<i>0.01</i>	<i>68</i>	
GP10	44.1	55.9	0.1	0	<i>-0.14</i>	<i>68</i>	
LFG1	53.6	2.9	0	43.5	<i>-0.02</i>	<i>68</i>	
LFG2	71	9.3	0	19.7	<i>-0.22</i>	<i>68</i>	
M057	1	1.1	20.1	77.8	<i>-0.1</i>	<i>68</i>	
M069	5.4	2.8	18.5	73.3	<i>-0.11</i>	<i>68</i>	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: C.Martinez	Date: 10/12/2020	Temp: 20.0	Start Time: 1:00:43 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 30.08	Stop Time: 2:19:39 PM

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<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.4	20	79.6	0.01	68
A002	0	0.1	20.5	79.4	-0.1	68
V001	0	0.3	19.8	79.9	-0.09	68
V002	0	0.1	20.2	79.7	-0.06	68
V003	0	0.1	20.4	79.5	-0.14	68
V004	0	0.6	20.3	79.1	0.02	68
WRC1	60.8	39	0.2	0	0	68

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Camila Martinez

Date: 10/12/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	10-12-2020 10:20	0.5	
Class I Leachate Facility	10-12-2020 10:19	0.0	
Class II Accounting Office	10-12-2020 10:03	1.0a	
Class II Nove Engine Room	10-12-2020 10:19	0.2	
Class II Nove Office	10-12-2020 10:20	0.6	
Class II Scalehouse Trailer 1	10-12-2020 10:08	2.9	a sanitizer was used before inspection
Class II Scalehouse Trailer 2	10-12-2020 10:10	2.2	
GBTS Break Room	10-12-2020 10:03	0	
GBTS Office	10-12-2020 10:19	1.6	
GBTS Scalehouse Trailer	10-12-2020 10:19	0	

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

Ambient Temperature (degF): 71

Barometric Pressure (in Hg): 30.14

Weather Condition: clear

Wind Speed (mph): ne

Wind Direction: ne

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: C.Martinez		Date: 10/19/2020		Temp: 20.0		Start Time: 1:02:47 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 29.97		Stop Time: 2:10:27 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	11.8	6.2	82	-0.01	73	
GP02	0	3.7	17.4	78.9	0	73	
GP03	6.9	26.2	0.2	66.7	-0.03	73	
GP04	27	20.3	0	52.7	-0.01	73	
GP05	0	6.5	14.6	78.9	0.05	73	
GP07	35.1	36.6	0	28.3	-0.01	73	
GP08	57.7	41.6	0	0.7	-0.01	73	
GP09	0	0.9	20.1	79	0	73	
GP10	44.7	54	0.1	1.2	-0.03	73	
LFG1	91.7	0.8	0	7.5	0	73	
LFG2	80.7	8.3	0	11	0.03	73	
M057	1	1.5	20	77.5	-0.01	73	
M069	13.4	7.7	15	63.9	-0.09	73	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

**West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form**

Inspector: C.Martinez	Date: 10/19/2020	Temp: 20.0	Start Time: 12:54:30 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 29.97	Stop Time: 2:12:50 PM

<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.2	20.8	79	-0.03	73
A002	0	0.1	20.8	79.1	-0.03	73
V001	0	0.2	20.8	79	-0.03	73
V002	0	0.4	19.9	79.7	-0.02	73
V003	0	0.2	20.6	79.2	0.01	73
V004	0	0.4	20.5	79.1	-0.01	73
WRC1	61.1	38.1	0.1	0.7	-0.03	73

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Camila Martinez

Date: 10/19/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	10-19-2020 10:37	0	
Class I Leachate Facility	10-19-2020 10:43	0	
Class II Accounting Office	10-19-2020 10:06	1.1	
Class II Nove Engine Room	10-19-2020 10:34	4.6	
Class II Nove Office	10-19-2020 10:39	1.7	
Class II Scalehouse Trailer 1	10-19-2020 10:14	1.9	
Class II Scalehouse Trailer 2	10-19-2020 10:23	0	
GBTS Break Room	10-19-2020 10:31	0	
GBTS Office	10-19-2020 10:30	0.9	
GBTS Scalehouse Trailer	10-19-2020 10:31	0	

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

Ambient Temperature (degF): 65

Barometric Pressure (in Hg): 30.02

Weather Condition: Clear

Wind Speed (mph): SE

Wind Direction: SE

West Contra Costa County Class II Weekly Probe Monitoring Form

Inspector: C.Martinez		Date: 10/26/2020		Temp: 20.0		Start Time: 1:16:40 PM	
Weather: Clear		Wind: Vac Control		Baro. Pressure: 30.09		Stop Time: 3:55:32 PM	
<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>	
GP01	0	3.5	17.5	79	-0.02	76	
GP02	0	11.8	6.1	82.1	#N/A	#N/A	
GP03	6.3	25.7	0.2	67.8	#N/A	#N/A	
GP04	26.8	20.1	0.2	52.9	#N/A	#N/A	
GP05	0	5.7	14.6	79.7	0.08	76	
GP07	32.9	35	0.1	32	#N/A	#N/A	
GP08	58.1	41.9	0.1	0	-0.03	76	
GP09	0	0.8	20.3	78.9	0	76	
GP10	45.5	54.1	0.2	0.2	#N/A	#N/A	
LFG1	65.6	1	1.1	32.3	0	76	
LFG2	76.4	8.3	0	15.3	#N/A	#N/A	
M057	1.3	1.4	20.3	77	-0.09	76	
M069	10.1	5.3	17.1	67.5	-0.01	76	
Nove	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.						
Accounting Office							
Scalehouse Trailer 1							
Scalehouse Trailer 2							

West Contra Costa County
Golden Bear Transfer Station Weekly Probe Monitoring Form

Inspector: C.Martinez	Date: 10/26/2020	Temp: 20.0	Start Time: 1:19:08 PM
Weather: Clear	Wind: Vac Control	Baro. Pressure: 30.09	Stop Time: 3:37:42 PM

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<i>Well ID</i>	<i>CH4(%)</i>	<i>CO2(%)</i>	<i>O2(%)</i>	<i>Balance(%)</i>	<i>SP(inWC)</i>	<i>Temp(F)</i>
A001	0	0.5	20.6	78.9	-0.02	76
A002	0	0.1	20.9	79	0	76
V001	0	0.3	20.8	78.9	-0.06	76
V002	0	0.1	20.9	79	-0.05	76
V003	0	0.1	21	78.9	-0.04	76
V004	0	0.7	20.8	78.5	-0.01	76
WRC1	57.2	35.7	1.4	5.7	-0.01	76

GBTS Office	Please refer to the West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring Form for monitoring of these locations.
Break Room	
Scalehouse Trailer	

West Contra Costa County Landfill and Golden Bear Transfer Station Structure Monitoring

Completed By: Camila Martinez

Date: 10/26/2020

Location	Date	Methane (ppm)	Comments
Class II Maintenance Building	10-26-2020 10:44	0.6	
Class I Leachate Facility	10-26-2020 10:48	0.0	
Class II Accounting Office	10-26-2020 10:10	0.4	
Class II Nove Engine Room	10-26-2020 10:41	41.9	
Class II Nove Office	10-26-2020 10:45	0.3	
Class II Scalehouse Trailer 1	10-26-2020 10:27	0.3	
Class II Scalehouse Trailer 2	10-25-2020 10:29	0.1	
GBTS Break Room	10-26-2020 10:39	0	
GBTS Office	10-26-2020 10:37	1.0	
GBTS Scalehouse Trailer	10-26-2020 10:40	0	

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

Ambient Temperature (degF): 69

Barometric Pressure (in Hg): 30.18

Weather Condition: Clear

Wind Speed (mph): NE

Wind Direction: NE

APPENDIX Q

SOLID WASTE TRANSFER STATION

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
Facility Number A1840
Title V Permit Condition Number 22792

S-50 Solid Waste Transfer Station				
Month	Waste Accepted		Vehicle Trips	
	Total Monthly (tons)	Rolling 12-Month Waste Acceptance (tons)*	Total Monthly Vehicle Trips	Rolling 12-month Vehicle Trip Totals*
Nov-19	13,986	147,149	4,688	44,429
Dec-19	14,411	148,643	4,049	44,391
Jan-20	14,992	163,635	4,470	44,157
Feb-20	11,991	162,549	4,107	48,264
Mar-20	12,742	175,291	4,071	52,335
Apr-20	11,476	172,180	4,013	56,348
May-20	12,251	168,576	4,734	56,030
Jun-20	13,941	168,560	5,246	56,221
Jul-20	13,959	166,870	5,356	56,184
Aug-20	12,995	163,979	5,093	55,967
Sep-20	13,221	161,426	5,072	56,063
Oct-20	13,475	159,442	5,314	56,213
Total for Reporting Period May 1, 2020 through October 31, 2020:	79,842		30,815	

Note:

Pursuant to Title V Permit Condition Number 22792 Part 1, waste accepted at S-50 is limited to 2,000 tons per day or 730,000 tons in any consecutive 12-month period.

Pursuant to Title V Permit Condition Number 22792 Part 6, roundtrip vehicle trips at S-50 are limited to 1,075 on any day or 232,900 trips in any consecutive 12-month period.

*The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.

APPENDIX R

LEACHATE TREATMENT SYSTEM

West Contra Costa County Sanitary Landfill

Richmond, California

Facility Number A1840

Title V Permit Condition Number 23220 and 23316

Authority to Construct (ATC) Application Number 20621 Condition Number 25004

Period:

May 1, 2020 through October 31, 2020

Combined Throughput to Leachate Treatment System		
Month:	Monthly Combined Liquid Throughput (gallons):	12-Month Rolling Throughput (gallons):
Nov-19	322,724	815,488
Dec-19	671,487	1,473,376
Jan-20	1,001,695	2,467,474
Feb-20	590,547	3,002,021
Mar-20	313,555	3,270,171
Apr-20	336,736	3,587,729
May-20	399,073	3,532,977
Jun-20	384,376	3,468,064
Jul-20	352,312	3,415,663
Aug-20	299,323	3,354,472
Sep-20	338,767	3,282,181
Oct-20	302,991	3,236,744

Note:

Pursuant to Title V Permit Condition Number 23220, 23316 and ATC AN 20621 Condition Number 20054 the combined wastewater throughput limit is 40,800 gallons per day and 14,892,000 gallons during any consecutive 12-month period.

APPENDIX S

COMPOSTING OPERATIONS

WEST CONTRA COSTA SANITARY LANDFILL - RICHMOND, CALIFORNIA
Facility Number A1840
Title V Permit Condition Number 23354

S-115 Wood/Yard Waste Shredder, abated by A-115		
Combined Throughput of Organic Materials Processing Facility and Recovered Wood		
Month:	Total Monthly Combined Throughput to S-115 (tons)^{1,2}:	12-Month Rolling Throughput (tons)*:
May-20	N/A see comment 2	0
Jun-20	N/A see comment 2	0
Jul-20	N/A see comment 2	0
Aug-20	N/A see comment 2	0
Sep-20	N/A see comment 2	0
Oct-20	N/A see comment 2	0

¹As of April 2012 recovered wood totals are included in the total combined compost throughput processed by S-115.

²As of November 23, 2016, the Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) began operations. On this date, S-115 was replaced by S-189 per AN 25019 ATC Condition 26088, Part 1 separately under S-189.

*The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.

West Contra Costa County Sanitary Landfill
Richmond, California
 Facility Number A1840
 ATC AN 25019 Condition Number 26087
Period:
 May 1, 2020 through October 31, 2020

S-185 Portable Trommel and Grinder Operation, abated by A-115		
Throughput for the Trommel and Grinder		
Month:	Total Monthly Combined Throughput to S-115 (tons)^{1,2,3}:	12-Month Rolling Throughput (tons)*:
Nov-19	6,789	71,009
Dec-19	7,073	75,900
Jan-20	6,160	76,320
Feb-20	5,780	77,649
Mar-20	6,394	78,366
Apr-20	8,256	78,988
May-20	7,969	79,600
Jun-20	7,744	81,305
Jul-20	7,396	82,177
Aug-20	6,578	82,779
Sep-20	6,404	83,026
Oct-20	6,658	83,200

¹As of November 23, 2016, the Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) began operations per AN 25019 ATC Condition 26088, Part 1.

²Per ATC AN 25019 Condition 26087, Part 1, total throughput of greenwaste feedstock at source S-185 cannot exceed 130,000 tons during any consecutive 12-month period for the trommel screener and 160,000 tons during any consecutive 12-month period for the tub grinder.

³Values for July through October 2019 have been revised since the last reporting period due to discrepancy found during the data compilation for the current reporting period.

*The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.

West Contra Costa County Sanitary Landfill

Richmond, California

Facility Number A1840

Title V Permit Condition Number 23355

Period:

May 1, 2020 through October 31, 2020

S-116 Wood Waste Screener, abated by A-116		
Month:	Monthly Combined Throughput (tons):	12-Month Rolling Throughput (tons)*:
Nov-19	N/A see comment 2	N/A see comment 2
Dec-19	N/A see comment 2	N/A see comment 2
Jan-20	N/A see comment 2	N/A see comment 2
Feb-20	N/A see comment 2	N/A see comment 2
Mar-20	N/A see comment 2	N/A see comment 2
Apr-20	N/A see comment 2	N/A see comment 2
May-20	N/A see comment 2	N/A see comment 2
Jun-20	N/A see comment 2	N/A see comment 2
Jul-20	N/A see comment 2	N/A see comment 2
Aug-20	N/A see comment 2	N/A see comment 2
Sep-20	N/A see comment 2	N/A see comment 2
Oct-20	N/A see comment 2	N/A see comment 2

¹Pursuant to Title V Permit Condition Number 23355, the consecutive rolling 12-month throughput limit of 19,000 tons was exceeded. A BAAQMD inspection indicated no deviation per the pending Change of Permit Conditions Application Number 23078, submitted on February 15, 2011, which increases the rolling consecutive 12-month total throughput limit.

²As of November 23, 2016, the Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) began operations. On this date, S-115 was replaced by S-189 per AN 25019 ATC Condition 26088, Part 1 separately under S-189.

*The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.

West Contra Costa County Sanitary Landfill

Richmond, California

Facility Number A1840

ATC AN 25019 Condition Number 26087

Period:

May 1, 2020 through October 31, 2020

S-189 Wood Waste Stockpiles, abated by A-115		
Combined Throughput of Wood Waste Stockpile through Grinder		
Month:	Total Monthly Combined Throughput to S-115 (tons)^{1,2,3}:	12-Month Rolling Throughput (tons)*:
Nov-19	743.1	5,277.4
Dec-19	89.2	5,366.6
Jan-20	497.1	5,863.6
Feb-20	411.4	6,275.0
Mar-20	407.1	6,682.1
Apr-20	345.5	7,027.7
May-20	334.5	6,241.0
Jun-20	525.1	5,815.6
Jul-20	292.7	5,396.6
Aug-20	310.6	5,162.1
Sep-20	441.3	5,085.5
Oct-20	278.5	4,676.1

¹As of November 23, 2016, the Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) began operations per AN 25019 ATC Condition 26088, Part 1.

²Per ATC AN 25019 Condition 26087, Part 2, total throughput of S-189 wood waste stockpile being processed through the tub grinder shall not exceed 30,000 tons of wood waste feedstock during any consecutive 12-month period.

³Values for May through October 2019 have been revised since the last reporting period due to discrepancy found during the data compilation for the current reporting period.

*The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.

West Contra Costa County Sanitary Landfill
Richmond, California
 Facility Number A1840
 Title V Permit Condition Number 23356
Period:
 May 1, 2020 through October 31, 2020

S-117 Composting Operation, abated by A-117 (Windrows)		
Month:	Total Monthly Combined Throughput (tons)^{1,2:}	12-Month Rolling Throughput (tons)*:
There was no material processed for windrow composting during the reporting period.		
¹ As of April 2012 recovered wood totals are included in the total combined compost throughput processed by S-115. ² As of November 23, 2016, the Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) began operations. The facility ceased delivery of compost to the windrows composting operation and began tracking the feedstock throughput under the S-117 Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) operation. *The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.		

West Contra Costa County Sanitary Landfill

Richmond, California

Facility Number A1840

ATC AN 25019 Condition Number 26088

Period:

May 1, 2020 through October 31, 2020

S-117 Composting Operation (CASP)		
Month:	Total Monthly Combined Throughput (tons)¹:	12-Month Rolling Throughput (tons)*:
Nov-19	6,273.99	64,803.15
Dec-19	6,308.13	68,929.86
Jan-20	5,596.79	68,786.64
Feb-20	5,319.63	69,654.77
Mar-20	5,757.17	69,734.96
Apr-20	7,647.71	69,749.03
May-20	7,386.57	73,642.93
Jun-20	7,059.36	77,790.59
Jul-20	6,742.16	77,772.64
Aug-20	5,970.06	76,928.87
Sep-20	5,893.86	76,772.00
Oct-20	6,107.75	76,063.18

¹As of November 15, 2016, the Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) began operations. In accordance with Authority to Construct (ATC) Condition Number 26088, Part 1, the total feedstock material delivered to the composting facility shall not exceed 130,000 tons during any consecutive rolling 12-month period.

*The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.

**West Contra Costa County Landfill
Covered Aerated Static Pile (CASP) Operations
Richmond, California**

Period: May 1, 2020 through October 31, 2020

Month	Number of Vehicles loading/unloading	Vehicle Miles Travelled				12-month Total Paved Miles	12-month Total Unpaved Miles
		Paved Miles (Round Trip)	Unpaved Miles (Round Trip)	12-month Total Paved Miles	12-month Total Unpaved Miles		
Nov-19	1,472	833.2	3,050.0	8,124.9	29,743.6		
Dec-19	1,243	703.5	2,575.5	8,415.3	30,806.5		
Jan-20	1,247	705.8	2,583.8	8,436.2	30,883.2		
Feb-20	1,161	657.1	2,405.6	8,534.7	31,243.7		
Mar-20	1,159	656.0	2,401.4	8,545.5	31,283.1		
Apr-20	1,413	799.8	2,927.7	8,572.1	31,380.4		
May-20	1,425	806.6	2,952.6	8,847.7	32,389.5		
Jun-20	1,444	817.3	2,992.0	9,229.8	33,788.1		
Jul-20	1,520	860.3	3,149.4	9,345.8	34,212.9		
Aug-20	1,310	741.5	2,714.3	9,227.5	33,779.8		
Sep-20	1,345	761.3	2,786.8	9,222.4	33,761.2		
Oct-20	1,341	759.0	2,778.6	9,101.3	33,317.8		

Calculated Paved Miles: 0.283 (one-way)

Calculated Unpaved Miles: 1.036 (one-way)

On August 13, 2017, WCCSL self-discovered and reported that S-117, CASP operation, may have exceeded ATC AN 25019, Condition Number 26088, Part 6c in July 2017. A Change of Permit Conditions (COPC) application was submitted on September 8, 2017 to the BAAQMD requesting to increase the vehicle miles allowed on paved and unpaved roads associated with the composting operation. WCCSL is awaiting BAAQMD review and approval.

APPENDIX T

CONCRETE AND ASPHALT THROUGHPUT

West Contra Costa County Sanitary Landfill
 Facility Number A1840
 Title V Permit Condition Number 23352

S-113 Concrete and Asphalt Storage Piles, Abated by A-113						
Month:	C&D Recovered Concrete	Concrete	Total Concrete:	Asphalt	Total Monthly Combined Concrete & Asphalt Throughput (tons):	12-Month Rolling Throughput (tons)*:
Nov-19	0.0	0.0	0.0	0.0	0.0	0.0
Dec-19	0.0	0.0	0.0	0.0	0.0	0.0
Jan-20	0.0	0.0	0.0	0.0	0.0	0.0
Feb-20	0.0	0.0	0.0	0.0	0.0	0.0
Mar-20	0.0	0.0	0.0	0.0	0.0	0.0
Apr-20	0.0	0.0	0.0	0.0	0.0	0.0
May-20	0.0	0.0	0.0	0.0	0.0	0.0
Jun-20	0.0	0.0	0.0	0.0	0.0	0.0
Jul-20	0.0	0.0	0.0	0.0	0.0	0.0
Aug-20	0.0	0.0	0.0	0.0	0.0	0.0
Sep-20	0.0	0.0	0.0	0.0	0.0	0.0
Oct-20	0.0	0.0	0.0	0.0	0.0	0.0

Pursuant to Title V Condition Number 23352, the limit for concrete and asphalt throughput to S-113 is 30,000 tons of concrete and 5,000 tons of asphalt in any consecutive 12-month period.

*The 12-month rolling total for each month represents the sum of the monthly rates calculated using the preceding 12 consecutive months.

APPENDIX U

LEACHATE TREATMENT SYSTEM VOC SAMPLE REPORT



Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 436303
Report Level: II
Report Date: 11/19/2020

Analytical Report *prepared for:*

Hugo Vazquez
SLR Consulting
17701 Cowan, Suite 210
Irvine, CA 92614

Location: Inlet Tanks

Authorized for release by:

Richard Villafania, Project Manager
richard.villafania@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Hugo Vazquez
SLR Consulting
17701 Cowan, Suite 210
Irvine, CA 92614

Lab Job #: 436303
Location: Inlet Tanks
Date Received: 11/12/20

Sample ID	Lab ID	Collected	Matrix
INLET TANKS	436303-001	11/12/20 11:30	Water

Case Narrative

SLR Consulting
17701 Cowan, Suite 210
Irvine, CA 92614
Hugo Vazquez

Lab Job Number: 436303
Location: Inlet Tanks
Date Received: 11/12/20

This data package contains sample and QC results for one water sample, requested for the above referenced project on 11/12/20. The sample was received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

CHAIN OF CUSTODY



Formerly Curtis & Tompkins Labs

2323 Fifth Street
Berkeley, CA 94710

ENTHALPY ANALYTICAL

Formerly Curtis & Tompkins Labs

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Project No: _____

Project Name: Inlet Tanks

Project P. O. No: _____

Report Level: II III IV

Turnaround Time: RUSH Standard

Sampler: Argo Vazquez

Report To: hwazquez@stremconsulting.com

Company: SCR International

Telephone: 510 673 0809

Email: hwazquez@stremconsulting.com

C&T LOGIN # 436303

Chain of Custody # _____

Page 1 of 1

Lab No.	Sample ID	Date Collected	Time Collected	Matrix	# of Containers	Chemical Preservative	HCl	H2SO4	HNO3	NaOH	None
	<u>Inlet tanks</u>	<u>11/12/10</u>	<u>11:30</u>	<u>Water</u>	<u>3</u>		<input checked="" type="checkbox"/>				

82605

Notes:

<p>SAMPLE RECEIPT</p> <p><input type="checkbox"/> Intact</p> <p><input type="checkbox"/> Cold</p> <p><input type="checkbox"/> On Ice</p> <p><input type="checkbox"/> Ambient</p>	<p>RELINQUISHED BY:</p> <p><u>[Signature]</u></p> <p>DATE: <u>11/12/10</u> TIME: <u>12:12</u></p> <p>DATE: <u>11/12/10</u> TIME: <u>13:22</u></p>
<p>RECEIVED BY:</p> <p><u>[Signature]</u></p> <p>DATE: <u>11/12/10</u> TIME: <u>12:12</u></p> <p>DATE: <u>11/13/10</u> TIME: <u>08:50</u></p>	<p>DATE: _____ TIME: _____</p> <p>DATE: _____ TIME: _____</p>

SAMPLE RECEIPT CHECKLIST

Section 1: Login # 436303
Date Received: 11-12-20

Client: SLR International
Project: _____



Section 2: Shipping info (if applicable) _____
Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, initials, None
Were custody seals intact upon arrival? Yes No N/A
Samples received in a cooler? Yes, how many? _____ No (skip Section 3 below)
If no cooler Sample Temp (°C): _____ using IR Gun # B, or C
 Samples received on ice directly from the field. Cooling process had begun
If in cooler: Date Opened 11-12-20 By (print) JH (sign) [Signature]

Section 3: *Important: Notify PM if temperature exceeds 6°C or arrive frozen.*

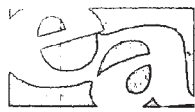
Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
Temperature measured using Thermometer ID: _____, or IR Gun # B C
Cooler Temp (°C): #1: _____, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	—		
Were Method 5035 sampling containers present?		—	
If YES, what time were they transferred to freezer? _____			
Did all bottles arrive unbroken/unopened?	—		
Are there any missing / extra samples?		—	
Are samples in the appropriate containers for indicated tests?	—		
Are sample labels present, in good condition and complete?	—		
Does the container count match the COC?	—		
Do the sample labels agree with custody papers?	—		
Was sufficient amount of sample sent for tests requested?	—		
Did you change the hold time in LIMS for unpreserved VOAs?			—
Did you change the hold time in LIMS for preserved terracores?			—
Are bubbles > 6mm present in VOA samples?		—	
Was the client contacted concerning this sample delivery?		—	
If YES, who was called? _____ By _____ Date: _____			

Section 5:	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check? pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:
Explanations/Comments: _____

Date Logged in 11/12/20 By (print) MAG For ZLA (sign) [Signature]
Date Labeled 11/12/20 By (print) MAG (sign) [Signature]



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: SLR CONSULTING Project: INLET TANKS
 Date Received: 11/13/20 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 1.3 #2: _____ #3: _____ #4: _____
 (Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: GLS

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 0.8 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?	<input checked="" type="checkbox"/>		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?		<input checked="" type="checkbox"/>	
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: [Signature] Date: 11/13/20



800-322-5555
www.gls-us.com

Ship From
ENTHALPY ANALYTICAL
JOHN GOYETTE
2323 5TH STREET
BERKELEY, CA 94710

Tracking #: 551153054

PDS



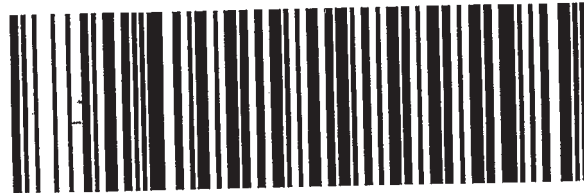
Ship To
ENTHALPY ANALYTICAL (ORG)
SAMPLE RECEIVING
931 W BARKLEY AVE.
ORANGE, CA 92868

ORANGE

S92868A

0.8 / 1-3

COD: \$0.00
Weight: 0 lb(s)
Reference:



Delivery Instructions:

Signature Type: STANDARD

30618000

ORC CA927-CI0

Print Date: 11/12/2020 2:08 PM

Analysis Results for 436303

Hugo Vazquez
SLR Consulting
17701 Cowan, Suite 210
Irvine, CA 92614

Lab Job #: 436303
Location: Inlet Tanks
Date Received: 11/12/20

Sample ID: INLET TANKS	Lab ID: 436303-001	Collected: 11/12/20 11:30
	Matrix: Water	

436303-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8260B									
Prep Method: EPA 5030B									
Freon 12	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Chloromethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Vinyl Chloride	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Bromomethane	ND		ug/L	5.0	5	256426	11/17/20	11/17/20	LYZ
Chloroethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Trichlorofluoromethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Acetone	ND		ug/L	250	5	256426	11/17/20	11/17/20	LYZ
Freon 113	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,1-Dichloroethene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Methylene Chloride	ND		ug/L	25	5	256426	11/17/20	11/17/20	LYZ
MTBE	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
trans-1,2-Dichloroethene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,1-Dichloroethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
2-Butanone	27		ug/L	25	5	256426	11/17/20	11/17/20	LYZ
cis-1,2-Dichloroethene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
2,2-Dichloropropane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Chloroform	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Bromochloromethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,1,1-Trichloroethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,1-Dichloropropene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Carbon Tetrachloride	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,2-Dichloroethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Benzene	86		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Trichloroethene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,2-Dichloropropane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Bromodichloromethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Dibromomethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
4-Methyl-2-Pentanone	ND		ug/L	25	5	256426	11/17/20	11/17/20	LYZ
cis-1,3-Dichloropropene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Toluene	35		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
trans-1,3-Dichloropropene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,1,2-Trichloroethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,3-Dichloropropane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Tetrachloroethene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Dibromochloromethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ

Analysis Results for 436303

436303-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
1,2-Dibromoethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Chlorobenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Ethylbenzene	15		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
m,p-Xylenes	170		ug/L	5.0	5	256426	11/17/20	11/17/20	LYZ
o-Xylene	26		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Styrene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Bromoform	ND		ug/L	5.0	5	256426	11/17/20	11/17/20	LYZ
Propylbenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Isopropylbenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,2,3-Trichloropropane	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Bromobenzene	ND		ug/L	5.0	5	256426	11/17/20	11/17/20	LYZ
1,3,5-Trimethylbenzene	7.6		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
2-Chlorotoluene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
4-Chlorotoluene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
tert-Butylbenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,2,4-Trimethylbenzene	12		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
sec-Butylbenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
para-Isopropyl Toluene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,3-Dichlorobenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,4-Dichlorobenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
n-Butylbenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,2-Dichlorobenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,2-Dibromo-3-Chloropropane	ND		ug/L	10	5	256426	11/17/20	11/17/20	LYZ
1,2,4-Trichlorobenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Hexachlorobutadiene	ND		ug/L	5.0	5	256426	11/17/20	11/17/20	LYZ
Naphthalene	11		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
1,2,3-Trichlorobenzene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
cis-1,4-Dichloro-2-butene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
trans-1,4-Dichloro-2-butene	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Isopropyl Ether (DIPE)	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Ethyl tert-Butyl Ether (ETBE)	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
tert-Butyl Alcohol (TBA)	4,100		ug/L	50	5	256426	11/17/20	11/17/20	LYZ
Methyl tert-Amyl Ether (TAME)	ND		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Xylene (total)	190		ug/L	2.5	5	256426	11/17/20	11/17/20	LYZ
Surrogates				Limits					
Dibromofluoromethane	84%		%REC	70-140	5	256426	11/17/20	11/17/20	LYZ
1,2-Dichloroethane-d4	104%		%REC	70-140	5	256426	11/17/20	11/17/20	LYZ
Toluene-d8	99%		%REC	70-140	5	256426	11/17/20	11/17/20	LYZ
Bromofluorobenzene	92%		%REC	70-140	5	256426	11/17/20	11/17/20	LYZ

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC895492	Batch: 256426
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC895492 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Freon 12	ND		ug/L	0.5	11/17/20	11/17/20
Chloromethane	ND		ug/L	0.5	11/17/20	11/17/20
Vinyl Chloride	ND		ug/L	0.5	11/17/20	11/17/20
Bromomethane	ND		ug/L	1.0	11/17/20	11/17/20
Chloroethane	ND		ug/L	0.5	11/17/20	11/17/20
Trichlorofluoromethane	ND		ug/L	0.5	11/17/20	11/17/20
Acetone	ND		ug/L	50	11/17/20	11/17/20
Freon 113	ND		ug/L	0.5	11/17/20	11/17/20
1,1-Dichloroethene	ND		ug/L	0.5	11/17/20	11/17/20
Methylene Chloride	ND		ug/L	5.0	11/17/20	11/17/20
MTBE	ND		ug/L	0.5	11/17/20	11/17/20
trans-1,2-Dichloroethene	ND		ug/L	0.5	11/17/20	11/17/20
1,1-Dichloroethane	ND		ug/L	0.5	11/17/20	11/17/20
2-Butanone	ND		ug/L	5.0	11/17/20	11/17/20
cis-1,2-Dichloroethene	ND		ug/L	0.5	11/17/20	11/17/20
2,2-Dichloropropane	ND		ug/L	0.5	11/17/20	11/17/20
Chloroform	ND		ug/L	0.5	11/17/20	11/17/20
Bromochloromethane	ND		ug/L	0.5	11/17/20	11/17/20
1,1,1-Trichloroethane	ND		ug/L	0.5	11/17/20	11/17/20
1,1-Dichloropropene	ND		ug/L	0.5	11/17/20	11/17/20
Carbon Tetrachloride	ND		ug/L	0.5	11/17/20	11/17/20
1,2-Dichloroethane	ND		ug/L	0.5	11/17/20	11/17/20
Benzene	ND		ug/L	0.5	11/17/20	11/17/20
Trichloroethene	ND		ug/L	0.5	11/17/20	11/17/20
1,2-Dichloropropane	ND		ug/L	0.5	11/17/20	11/17/20
Bromodichloromethane	ND		ug/L	0.5	11/17/20	11/17/20
Dibromomethane	ND		ug/L	0.5	11/17/20	11/17/20
4-Methyl-2-Pentanone	ND		ug/L	5.0	11/17/20	11/17/20
cis-1,3-Dichloropropene	ND		ug/L	0.5	11/17/20	11/17/20
Toluene	ND		ug/L	0.5	11/17/20	11/17/20
trans-1,3-Dichloropropene	ND		ug/L	0.5	11/17/20	11/17/20
1,1,2-Trichloroethane	ND		ug/L	0.5	11/17/20	11/17/20
1,3-Dichloropropane	ND		ug/L	0.5	11/17/20	11/17/20
Tetrachloroethene	ND		ug/L	0.5	11/17/20	11/17/20
Dibromochloromethane	ND		ug/L	0.5	11/17/20	11/17/20
1,2-Dibromoethane	ND		ug/L	0.5	11/17/20	11/17/20
Chlorobenzene	ND		ug/L	0.5	11/17/20	11/17/20
1,1,1,2-Tetrachloroethane	ND		ug/L	0.5	11/17/20	11/17/20
Ethylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
m,p-Xylenes	ND		ug/L	1.0	11/17/20	11/17/20
o-Xylene	ND		ug/L	0.5	11/17/20	11/17/20
Styrene	ND		ug/L	0.5	11/17/20	11/17/20

Batch QC

QC895492 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Bromoform	ND		ug/L	1.0	11/17/20	11/17/20
Propylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
Isopropylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
1,1,2,2-Tetrachloroethane	ND		ug/L	0.5	11/17/20	11/17/20
1,2,3-Trichloropropane	ND		ug/L	0.5	11/17/20	11/17/20
Bromobenzene	ND		ug/L	1.0	11/17/20	11/17/20
1,3,5-Trimethylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
2-Chlorotoluene	ND		ug/L	0.5	11/17/20	11/17/20
4-Chlorotoluene	ND		ug/L	0.5	11/17/20	11/17/20
tert-Butylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
1,2,4-Trimethylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
sec-Butylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
para-Isopropyl Toluene	ND		ug/L	0.5	11/17/20	11/17/20
1,3-Dichlorobenzene	ND		ug/L	0.5	11/17/20	11/17/20
1,4-Dichlorobenzene	ND		ug/L	0.5	11/17/20	11/17/20
n-Butylbenzene	ND		ug/L	0.5	11/17/20	11/17/20
1,2-Dichlorobenzene	ND		ug/L	0.5	11/17/20	11/17/20
1,2-Dibromo-3-Chloropropane	ND		ug/L	2.0	11/17/20	11/17/20
1,2,4-Trichlorobenzene	ND		ug/L	0.5	11/17/20	11/17/20
Hexachlorobutadiene	ND		ug/L	1.0	11/17/20	11/17/20
Naphthalene	ND		ug/L	0.5	11/17/20	11/17/20
1,2,3-Trichlorobenzene	ND		ug/L	0.5	11/17/20	11/17/20
cis-1,4-Dichloro-2-butene	ND		ug/L	0.5	11/17/20	11/17/20
trans-1,4-Dichloro-2-butene	ND		ug/L	0.5	11/17/20	11/17/20
Isopropyl Ether (DIPE)	ND		ug/L	0.5	11/17/20	11/17/20
Ethyl tert-Butyl Ether (ETBE)	ND		ug/L	0.5	11/17/20	11/17/20
tert-Butyl Alcohol (TBA)	ND		ug/L	10	11/17/20	11/17/20
Methyl tert-Amyl Ether (TAME)	ND		ug/L	0.5	11/17/20	11/17/20
Xylene (total)	ND		ug/L	0.5	11/17/20	11/17/20
Surrogates				Limits		
Dibromofluoromethane	90%		%REC	70-140	11/17/20	11/17/20
1,2-Dichloroethane-d4	109%		%REC	70-140	11/17/20	11/17/20
Toluene-d8	96%		%REC	70-140	11/17/20	11/17/20
Bromofluorobenzene	85%		%REC	70-140	11/17/20	11/17/20

Batch QC

Type: Lab Control Sample	Lab ID: QC895493	Batch: 256426
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC895493 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	56.47	50.00	ug/L	113%		70-135
MTBE	45.29	50.00	ug/L	91%		70-130
Benzene	51.58	50.00	ug/L	103%		70-130
Trichloroethene	40.31	50.00	ug/L	81%		70-130
Toluene	46.14	50.00	ug/L	92%		70-130
Chlorobenzene	43.22	50.00	ug/L	86%		70-130
Surrogates						
Dibromofluoromethane	47.32	50.00	ug/L	95%		70-140
1,2-Dichloroethane-d4	54.95	50.00	ug/L	110%		70-140
Toluene-d8	47.93	50.00	ug/L	96%		70-140
Bromofluorobenzene	44.62	50.00	ug/L	89%		70-140

Type: Matrix Spike	Lab ID: QC895494	Batch: 256426
Matrix (Source ID): Water (436366-008)	Method: EPA 8260B	Prep Method: EPA 5030B

QC895494 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1,1-Dichloroethene	51.28	ND	50.00	ug/L	103%		70-130	1
MTBE	44.95	ND	50.00	ug/L	90%		75-130	1
Benzene	47.95	ND	50.00	ug/L	96%		70-130	1
Trichloroethene	40.01	1.964	50.00	ug/L	76%		63-130	1
Toluene	42.87	ND	50.00	ug/L	86%		70-130	1
Chlorobenzene	40.70	ND	50.00	ug/L	81%		70-130	1
Surrogates								
Dibromofluoromethane	48.48		50.00	ug/L	97%		70-140	1
1,2-Dichloroethane-d4	55.28		50.00	ug/L	111%		70-140	1
Toluene-d8	48.02		50.00	ug/L	96%		70-140	1
Bromofluorobenzene	44.51		50.00	ug/L	89%		70-140	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC895495	Batch: 256426
Matrix (Source ID): Water (436366-008)	Method: EPA 8260B	Prep Method: EPA 5030B

QC895495 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1,1-Dichloroethene	52.81	ND	50.00	ug/L	106%		70-130	3	30	1
MTBE	47.52	ND	50.00	ug/L	95%		75-130	6	30	1
Benzene	50.23	ND	50.00	ug/L	100%		70-130	5	30	1
Trichloroethene	41.76	1.964	50.00	ug/L	80%		63-130	4	30	1
Toluene	44.95	ND	50.00	ug/L	90%		70-130	5	30	1
Chlorobenzene	44.30	ND	50.00	ug/L	89%		70-130	8	30	1
Surrogates										
Dibromofluoromethane	48.48		50.00	ug/L	97%		70-140			1
1,2-Dichloroethane-d4	55.28		50.00	ug/L	111%		70-140			1
Toluene-d8	48.35		50.00	ug/L	97%		70-140			1
Bromofluorobenzene	43.72		50.00	ug/L	87%		70-140			1

ND Not Detected

APPENDIX V

SOURCE TEST RESULTS

- A-161 - Please refer to the January 9, 2020 source test results included in Appendix V of the November 1, 2019 through April 30, 2020 SAR.
- A-8 - Please refer to the March 2, 2018 source test results included in Appendix W of the November 1, 2017 through April 30, 2018 SAR.
- S-6 - Please refer to the February 13, 2020 source test results included in Appendix V of the November 1, 2019 through April 30, 2020 SAR.
- S-5 - Please refer to the October 7, 2016 source test results included in Appendix W of the November 1, 2016 through April 30, 2017 SAR.
- S-37 - Please refer to the December 4, 2017 source test results included in Appendix W of the November 1, 2017 through April 30, 2018 SAR.