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May 26, 2021

1. ☐ RECEIVED IN ENFORCEMENT: 05/26/2021

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TV Tracking #: 234 (Annual)

Subject: Combined 8-34 Semi-Annual Report, 40 CFR Subpart AAA Semi-Annual Report, Title V Semi-Annual Monitoring Report, and Title V Annual Compliance Certification Report West Contra Costa Sanitary Landfill, Richmond, California (Title V Facility No. A1840)

Dear Sir or Madam:

The West Contra Costa Sanitary Landfill (WCCSL) is pleased to submit the enclosed combined Bay Area Air Quality Management District (BAAQMD), Regulation 8, Rule 34 Semi-Annual Report; Semi-Annual Startup, Shutdown and Malfunction (SSM) Plan Report, Title V Semi-Annual Monitoring Report, and the Title V Annual Compliance Certification (ACC) Report to the BAAQMD and the U.S. Environmental Protection Agency (EPA) Region IX for WCCSL.

The Title V ACC Report covers the period from May 1, 2020 through April 30, 2021. The Title V Semi-Annual Monitoring Report, the BAAQMD Rule 8-34 Semi-Annual Report and the SSM Plan Report cover the period from November 1, 2020 through April 30, 2021.

The Title V reports meet the requirements specified in the Title V permit, BAAQMD guidance on Title V report submittals, and Regulation 2, Rule 6. The Rule 8-34 report includes the information required by BAAQMD Rule 8-34-411 and also satisfies the requirements under the New Source Performance Standards (NSPS) for municipal solid waste landfills (40 California Code of Regulation [CFR] Part 60, Subpart WWW), including 40 CFR 60.757(f). The Semi-Annual SSM Plan Report satisfies the requirements under the Maximum Achievable Control Technology (MACT) rule for semi-annual reporting of SSM Plan implementation including 40 CFR 63.10(d)(S). The Title V reports and the SSM Plan report each includes a certification by the responsible official for WCCSL.

If you have any questions regarding this submittal, please do not hesitate to call me at (510) 970-7248 or email me at EBaquerizo@republicservices.com.

Sincerely,

Ed Baquerizo

Ed Baquerizo
Environmental Manager
West Contra Costa Sanitary Landfill

cc: Rob Sherman, West Contra Costa Sanitary Landfill
Michael O'Connor, SCS Engineers
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NSPS/BAAQMD Rule 8-34 Semi-Annual Report, SSM Plan Semi-Annual Report, Title V Semi-Annual Report, and Title V Annual Certification
West Contra Costa Sanitary Landfill
Richmond, California (Title V Facility No. A1840)

Prepared for:

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This submittal, consisting of the New Source Performance Standards (NSPS)/Bay Area Air Quality Management District (BAAQMD) Rule 8-34 Semi-Annual Report, the Semi-Annual Startup, Shutdown, and Malfunction Plan Report, the Title V Semi-Annual Monitoring Report, and the Title V Annual Compliance Certification for the West Contra Costa Sanitary Landfill in Richmond, California, dated May 2021, was prepared and reviewed by the following:

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SECTION I. NSPS/BAAQMD RULE 8-34 SEMI-ANNUAL REPORT

1.0 INTRODUCTION

On behalf of West Contra Costa Sanitary Landfill, Inc. (WCCSL), SCS Engineers (SCS) prepared this combined New Source Performance Standard (NSPS), 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW), Bay Area Air Quality Management District (BAAQMD or District) Rule 8-34 Semi-Annual Report (SAR) pertaining to WCCSL for the period of November 1, 2020 through April 30, 2021 to the BAAQMD and the United States Environmental Protection Agency (EPA).

The Semi-Annual Report pertains to the landfill gas (LFG) collection and control system (GCCS) operated at WCCSL.

This report includes the following information, as required by BAAQMD Rule 8-34-411:

- All collection system and/or component downtime and reasons for the shutdown (8-34-501.1).
- All emission control system downtime and reason for the shutdown (8-34-501.2).
- Continuous temperature monitoring and dates of any excesses (8-34-501.3 and 507).
- Testing performed to satisfy the requirements of this Rule (8-34-501.4).
- Monthly LFG flow rates and excesses (8-34-501.5).
- Collection and emission control system leak testing and any excesses, action taken to correct excesses, and re-monitored concentrations (8-34-501.6 and 503).
- Landfill surface monitoring, location of excesses, excess concentration, date discovered, actions taken to repair the excess, and re-monitored concentrations (8-34-501.6 and 506).
- Annual waste acceptance rate and the current amount of waste in-place (8-34-501.7).
- Records of non-degradable waste if area is excluded from LFG collection (8-34-501.8).
- Well head monitoring including gauge pressure, LFG temperature, and LFG oxygen concentration (8-34-501.9 and 505).
- Continuous flow monitoring (8-34-501.10).

Information summarizing the monitoring activities associated with the above-listed items is provided in the following sections.

2.0 SITE BACKGROUND INFORMATION

WCCSL is a closed combined municipal solid waste (MSW) (Class II) and hazardous waste landfill (Class I) located in Richmond, California. The Class II landfill accepted MSW, construction and demolition (C&D) debris, de-watered sludge, and a small (less than [1] percent) quantity of Group 1 hazardous wastes, including asbestos and infectious wastes. The Class I Hazardous Waste Management Facility (HWMF) is adjacent to the Class II landfill. The Class I LFG GCCS was installed in 2004 and began operation in 2005. A layer of MSW was placed in the Class I landfill directly preceding closure; therefore, a GCCS was installed to control the landfill gas (LFG) from the decomposing MSW. The Class II GCCS was originally installed in 1985 and was partially replaced in October 2008. The new system began full operation in March 2009. As of December 15, 2012, the GCCS for Class I and Class II have been combined.

2.1 EXISTING AIR PERMITS

WCCSL maintains a BAAQMD permit to operate (PTO) (Plant No. 1840). PTO Condition No. 25293 includes requirements for the closed Class I and II waste disposal areas and the associated wellfield, collection system, and flares A-161 (primary flare) and A-8 (backup flare). PTO Condition No. 20754 includes requirements for the HWMF and the associated wellfield components. WCCSL also maintains BAAQMD PTOs for three LFG-fired engines (S-5, S-6, and S-37). S-5 and S-6 are permitted under PTO Condition No. 5771 and S-37 is permitted under PTO Condition No. 17812.

WCCSL also maintains BAAQMD PTOs for a Leachate Treatment System (Condition No. 25004), a Solid Waste Transfer Station (Condition No. 22792), and an Authority to Construct (ATC) for a Covered Aerated Static Pile Composting (CASP) operation (Conditions No. 26086 through 26088), as well as PTOs for other various processing equipment.

Condition Nos. 25293 and 20754 incorporate all applicable requirements from NSPS Subpart WWW and from BAAQMD Rule 8-34, which are addressed in this report. WCCSL also maintains a Major Facility Review (MFR or Title V) Permit (Facility No. A1840), which expired on December 19, 2015. A timely and complete renewal application was completed and submitted to the BAAQMD prior to June 19, 2015, as required. The renewal application is still under review by the BAAQMD. As such, WCCSL is operating under a permit shield pending issuance of the new MFR Permit.

A GCCS Design Plan was prepared for the site to review and determine the adequacy of the existing LFG system. The current design of the system was determined to be adequate to comply with both NSPS and BAAQMD Rule 8-34 requirements. The system design is based on the density of wells calculated to sufficiently extract the maximum flow of LFG generated, according to the EPA LFG emissions model (LandGEM). The GCCS is designed to control surface emissions, as well as to minimize subsurface lateral migration of LFG. Both the perimeter of the landfill and the landfill surface are monitored on a quarterly basis. Additional details regarding the GCCS are in the GCCS Design Plan that was previously submitted to the BAAQMD. A drawing showing the existing GCCS is provided in Appendix B.

2.2 EXISTING LANDFILL GAS COLLECTION AND CONTROL SYSTEM

The GCCS at WCCSL consists of extraction wells used to collect the LFG from within the landfill (the "wellfield") and a piping system (the "collection system") used to convey the collected LFG to the

control systems for destruction. The LFG is extracted from the landfill through a combination of vertical gas extraction wells and horizontal gas extraction trenches/pipes, as well as leachate collection system components.

The LFG is controlled by the emission control system. The emission control system consists of a LFG-to-energy (LFGTE) facility, which consists of three lean burn internal combustion (IC) engines (S-5, S-6, S-37), an enclosed flare (A-161), and a back-up flare (A-8). The S-5 engine has been out of service since December 2017, and the S-37 engine is no longer able to operate due to a catastrophic failure in March 2018. As such, the S-6 engine is currently the only engine in operation.

The A-161 Flare was installed in November 2017 and replaced the A-120 Flare. The A-8 Flare acts as a backup control device to the A-161 Flare.

A diagram of the GCCS displaying system component locations is shown in the site plan provided in Appendix B.

3.0 MONITORING AND RECORDS

3.1 CONTINUOUSLY MONITORED PARAMETERS

According to BAAQMD Rule 8-34-301.1, the GCCS must be operated continuously. To comply with this requirement, the landfill owner/operator is required to maintain full-time operation of the LFG collection system and control system, as well as individual extraction wells. Downtime for any of these components must be reported in the Rule 8-34 Semi-Annual Report. This information is summarized below and in the attached tables. Records of continuously monitored parameters are available for review at the site.

3.1.1 Gas Extraction System Downtime

During the reporting period, the LFG extraction system was off-line on twenty-four (24) occasions for a total of 34.47 hours. Shutdowns involved pre-programmed or manual system shutdowns for inspection, maintenance and/or repair of the GCCS, and thus meet the criteria for allowed GCCS downtime, as specified in Rule 8-34-113 and in accordance with the BAAQMD November 5, 2018 Compliance Advisory, with the exception of five events. These events included five power outages, which resulted in a shutdown of the GCCS that occurred on January 19, 2021 from 2:40 to 2:46, January 19, 2021 from 4:04 to 4:18, February 26, 2021 from 13:04 to 15:08, and March 13, 2021 from 21:04 to 22:58, and April 15, 2021 from 7:14 to 7:28. These events were reported to the BAAQMD as reportable compliance activities (RCA) and breakdown relief was requested. Due to the short duration of these events, there is no reason to believe there were any excess LFG surface emissions during these GCCS downtimes.

A summary of the GCCS downtime for this reporting period is provided in Table 1a, including the date, reason for the downtime, description of the corrective measure(s) implemented to resume GCCS operation, and the total elapsed time for each event. Gas extraction system downtime records are available for review at the site. These include periods of times when the entire GCCS was offline.

3.1.2 Emission Control System Downtime

A-161 Flare

During the reporting period, the A-161 Flare was off-line on several occasions. A summary of the A-161 Flare downtime is provided in **Table 1b**, including the date, reason for the downtime, and the total elapsed time for each event. During the reporting period, downtime for the A-161 Flare occurred over a cumulative period of approximately 45.70 hours. Emission control system downtime records are available for review at the site.

A-8 Backup Flare

During the reporting period, the A-8 Flare was off-line the entire reporting period with the exception of one startup on December 28, 2020 for the required source testing event. A summary of the A-8 Flare downtime is provided in **Table 1c**, including the date, reason for the downtime, and the total elapsed time for each event. During the reporting period, downtime for the A-8 Flare occurred over a cumulative period of approximately 4,341.63 hours. Emission control system downtime records are available for review at the site.

LFGTE Facility

During the reporting period, individual IC engines may go offline. In addition, there may be periods when the entire LFGTE facility is offline (all engines offline concurrently). However, note that the S-5 engine has been out of service since December 2017, and the S-37 engine is no longer able to operate due to a catastrophic failure which occurred in March 2018. Therefore, during the entire reporting period S-6 was the only operating engine. During the reporting period, the entire LFGTE facility was offline for a total of 1,436.53 hours. Downtime logs, which include individual IC engine shut downs, are included in **Appendix C**.

3.1.3 Individual Well Downtime

Individual well downtime is permitted in accordance with Condition 20754, Part 2(c) of WCCSL's permit which states a minimum of eight (8) horizontal collectors within the Class I Landfill shall be operated at any one time. A horizontal collector or leachate/gas extraction well may be temporarily disconnected from the vacuum system if the methane concentration detected in the collector or well is less than 5.0% by volume and the oxygen concentration detected in the collector or well is 15% by volume or more. There are no limits for how long the horizontal collectors can remain offline as long as the methane content does not exceed 5%.

In addition, well downtown is permitted in accordance with Condition 25293(7)(a) through (c) of WCCSL's for the wells located in the Class II Landfill. Condition 25293(7)(a) allows an unspecified number of leachate collection and recovery system (LCRS) components to be disconnected from the vacuum system when methane concentration in the component is less than 5.0% by volume, or when oxygen concentration in the component is 15% by volume or more, or when abatement is no longer necessary to maintain compliance with applicable component and surface leak limits. Condition 25293(7)(b) allows no more than five (5) vertical wells be temporarily disconnected from the vacuum system as long as the total vacuum system disconnection time does not exceed 120 days during any 12-month period. Condition 25293(7)(c) states that an unspecified number of horizontal collectors can be temporarily disconnected from the vacuum system when methane

concentration in the component is less than 5.0% by volume, or when oxygen concentration is the component is 15% by volume or more. There are no limits for how long the LCRS components or horizontal collectors can remain offline as long as the methane content does not exceed 5%.

As required per Condition 20754, Part 2(v)(5) and Condition 25293(7)(c)(iv), collection system components that are temporarily disconnected from the vacuum system are required to be monitored for component leaks: within seven days after being disconnected for Class I Landfill components and within ten days after being disconnected for Class II Landfill component. In addition, follow-up component leak testing is required within 30 days of disconnecting both Class I and Class II Landfill components from vacuum. If a component leak is detected at a component, all necessary steps to reduce the leak below the 8-34 1,000-ppmv leak limit is required, which typically consists of bringing the well back online. During the reporting period, component leak monitoring was conducted in accordance with these permit conditions.

All well disconnections were in compliance with the conditions specified above.

Details of individual well shutdown and well startups occurring during the reporting period are provided in **Table 2**.

3.1.4 Flow Meter and Temperature Gauge Downtime

The continuous operation of the GCCS is measured through the continuous monitoring of LFG flow to each flare and flare combustion temperature. As required by Rule 8-34, the A-161 and A-8 Flares at WCCSL are equipped with flow measuring devices and temperature gauges that provide continuous readout displays using digital chart recorders. During the reporting period, the flow meter(s) and temperature gauge(s)/recorders at the flare station did not go out of operation due to malfunction or other breakdown conditions.

Continuous monitoring and calibration information are available for review at the site.

3.1.5 Flare Combustion Zone Temperature

WCCSL is required by permit condition No. 25293, Part 9 to operate the A-161 and A-8 Flares in such a manner that the combustion zone temperature within the flare does not drop below the permitted limit of 1,400 degrees Fahrenheit (°F) (averaged over a 3-hour period), or a higher temperature based on the most recent source test.

From November 1, 2020 through February 9, 2021, the minimum temperature above which the A-161 Flare was required to operate was 1,619 °F (source test results minus 50°F), based on the January 9, 2020 source test (test report dated February 28, 2020). From February 10 through April 30, 2021, the minimum temperature above which the A-161 Flare was required to operate was 1,580°F (source test results minus 50°F), based on the December 28, 2020 source test (test report dated February 10, 2021).

From November 1, 2020 through February 9, 2021, the minimum temperature above which the A-8 Flare was required to operate was 1,599 °F (source test results minis 50°F), based on the March 2, 2018 source test. From February 10 through April 30, 2021, the minimum temperature above which the A-8 Flare was required to operate was 1,625°F (source test results minus 50°F), based on the December 28, 2020 source test (report dated February 10, 2021). During the reporting

period, the A-161 and A-8 flares operated above the minimum established temperatures at all times, except during periods of startup, shutdown, and malfunction (SSM) which are exempt.

Flare temperature records are available for review at the site. Excerpts from the February 10, 2021 source test report, summarizing the test results for the flares, is included in this report.

3.2 COMPONENT LEAK QUARTERLY MONITORING

During the reporting period, quarterly testing of the GCCS components for any leaks with a methane concentration of greater than 1,000 parts per million by volume (ppmv), as required by BAAQMD Rule 8-34-503, was conducted. Testing in the wellfield and at the flare station was performed using an organic vapor analyzer (OVA), which was calibrated on the same day as the testing. Monitoring results are provided in **Appendix D** and are available for review at the site.

3.2.1 Fourth Quarter 2020 Monitoring

SCS Field Services (SCSFS) personnel conducted the component leak monitoring of the flare station, LFGTE Plant, waste water treatment plant, and wellfield, plant on November 11, 2020. No component leaks above 1,000 ppmv were detected at the flare station, wellfield, or LFGTE facility during fourth quarter 2020 monitoring event. These results are included in **Appendix D**.

3.2.2 First Quarter 2021 Monitoring

SCS Field Services (SCSFS) personnel conducted the component leak monitoring of flare station, LFGTE Plant, waste water treatment plant, and wellfield on January 13, 2021. No component leaks above 1,000 ppmv were detected at the flare station, wellfield, or LFGTE facility during first quarter 2021 monitoring event. These results are included in **Appendix D**.

3.3 CONTROL EFFICIENCY

Flare A-8

LFG flare A-8 was tested on December 28, 2020 to demonstrate compliance with the control efficiency standard of 98 percent non-methane organic compound (NMOC) destruction efficiency or outlet concentration of 30 ppmv of NMOC as methane, corrected to 3% oxygen (for flares) as required by BAAQMD Rules 8-34-301.3, 8-34-412, and 8-34-501.4. The NMOC destruction efficiency for the A-8 Flare during the December 2020 source test was measured to be 99.46 percent by weight, and the NMOC as methane concentration in the flare outlet was <1.4 ppmv. As such, flare A-8 is in compliance with the aforementioned rules.

Excerpts from the December 2020 source test report dated February 10, 2021, summarizing the test results, are included in this report.

Flare A-161

LFG flare A-161 was tested on December 28, 2020 to demonstrate compliance with the control efficiency standard of 98 percent NMOC destruction efficiency or outlet concentration of 30 ppmv of NMOC as methane, corrected to 3% oxygen (for flares) as required by BAAQMD Rules 8-34-301.3, 8-34-412, and 8-34-501.4. The NMOC destruction efficiency for the A-161 Flare during the December

2020 source test was measured to be 99.997 percent by weight, and the NMOC as methane concentration in the flare outlet was <2.2 ppmv. As such, flare A-161 is in compliance with the aforementioned rules.

Excerpts from the December 2020 source test report dated February 10, 2021, summarizing the test results, are included in this report.

IC Engines (S-5, S-6, and S-37)

The IC engines are required to demonstrate compliance with the control efficiency standard of 97 percent NMOC destruction efficiency or outlet concentration of 120 ppmv of NMOC as methane, corrected to 3% oxygen (for energy recovery devices) as required by BAAQMD Rules 8-34-301.4, 8-34-412, and 8-34-501.4. The most recent source testing results for the S-6 engine are summarized below. The S-6 engine met the outlet concentration limit of 120 ppmv of NMOC as methane, corrected to 3% oxygen during the most recent source tests.

Engine	Source Test Date	Results (ppm as CH_4 @ 3% O_2)
S-6	February 4, 2021	90.1

Note: The S-5 engine has been out of service since December 2017, and the S-37 engine is no longer able to operate due to a catastrophic failure in March 2018.

An excerpt of the most recent S-6 engine source test report is included in **Appendix E**.

3.4 LANDFILL SURFACE EMISSIONS MONITORING

Surface emissions monitoring (SEM) was conducted at WCCSL on a quarterly basis during the reporting period, in accordance with BAAQMD Rule 8-34-303 and 8-34-506. The SEM events were conducted in accordance with the SEM plan in the landfill's GCCS Design Plan. Testing was performed using a Trimble SiteFID Landfill Gas Monitor Portable Flame Ionization Detector (FID), which was calibrated the same day as the testing. The results of this monitoring are summarized below. Reports for each quarterly monitoring event are provided in **Appendix D**.

3.4.1 Fourth Quarter 2020 Monitoring

SCSFS personnel monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv above background on November 5, 6, 9, 10 and 11, 2020 and December 4, 2020. Surface emissions in excess of 500 ppmv were detected at three (3) locations during the fourth quarter 2020 monitoring event. System adjustments and repair work were performed by SCSFS. The subsequent 10-day re-monitoring, which was conducted on November 6, 2020, indicated that the three (3) areas with instantaneous exceedances had returned to compliance. One-month re-monitoring event was conducted, as required by 8-34 and the NSPS, on December 6, 2020, and all locations remained in compliance.

The locations with the exceedances and associated methane concentrations are provided in the fourth quarter 2020 SEM report (**Appendix D**).

3.4.2 First Quarter 2020 Monitoring

SCSFS personnel monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv on January 13, 2021. There were no surface emissions in excess of 500 ppmv detected during the monitoring event. Therefore, no further monitoring was required. The results of the first quarter 2021 monitoring event are provided in the first quarter 2021 SEM report (**Appendix D**).

3.5 WELLHEAD MONTHLY MONITORING

Monthly wellhead monitoring for pressure, temperature, and oxygen content was conducted by Tetra Tech O&M and SCS personnel during the reporting period to comply with BAAQMD Rule 8-34-305 and 9-34-414. The results of this monitoring are summarized below.

3.5.1 Pressure

The majority of the operational extraction wells were under negative pressure during the monitoring events conducted during the reporting period, in accordance with BAAQMD Rule 8-34-305 and 8-34-414. For any wells that exhibited positive pressure during this reporting period, the identification number and dates on which each well was operating with positive pressure are provided in **Table 3**. The table also includes corrective action and re-monitoring results. In all instances, corrective action and re-monitoring were performed in accordance with the 5- and 15-day requirements specified in the NSPS regulations and in Rule 8-34.

No operating wells demonstrated a positive pressure reading during the final monitoring event of the reporting period.

3.5.2 Oxygen

WCCSL has elected to use oxygen as its compliance standard under Rule 8-34-305, rather than nitrogen.

As of October 31, 2020, the following wells are approved to operate under at a higher operating value (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):

- WCLFH01B, WCLFH03A, WCLFH04A, WCLFH08B, WCLFH04B, WCLFH01A, WCLFH05A, WCLFH09B, WCLFH10B, WCLFH08A, WCLFH10A, WCLFH03B, WCLFH07A, WCLFH05B, WCLFH06B, WCLFH02A, WCLFR005, WCLFR008, WCLFR012, WCLFR013, WCLFR016, WCLFR003, WCLFR006, WCLFR009, WCLFR010, WCLFR011, WCLFR001, WCLFR015, WCLFR002, WCLFR004, WCLFR007, and WCLFR014.

The majority of the wells were operating within their respective regulatory limits of 5% or 15% oxygen during the monitoring events conducted during the reporting period. The dates when wells were operating with excessive oxygen, and the well identification number, corrective actions, and re-monitoring results for these wells are provided in **Table 4**.

As of the end of the reporting period, all of the operating wells were operating with an oxygen concentration below their respective 5% or 15% limits except for wells WCLF0515, WCLF0607, WCLF0815, WCLF0832, WCLFH01A, WCLFH01B, WCLFH04A, WCLFH05A, WCLFH05B, WCLFH08B,

WCLFH09A, WCLFR001, WCLFR002, WCLFR003, WCLFR005, WCLFR006, WCLFR007, WCLFR009, WCLFR012, WCLFR014, and WCLFR015. These wells will be returned to below their respective 5% or 15% limit by the applicable compliance dates, as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report. Alternatively, if these wells continue to demonstrate high oxygen readings and low methane concentrations (less than 5%), they may be temporarily taken offline prior to the 120-day deadline pursuant to Condition Numbers 20754 Part 2(c)(iii), 25293 Part 7(b)(iii) and 25293 Part 7(c)(ii).

These 120-day compliance dates are as follows: March 23, 2021 (WCLFR015), May 18, 2021 (WCLFR012), May 25, 2021 (WCLFR007), June 12, 2021 (WCLFH04A), July 2, 2021 (WCLF0515 and WCLF0607), July 9, 2021 (WCLFH08B), July 24, 2021 (WCLFR005 and WCLFR009), August 3, 2021 (WCLFR002), August 6, 2021 (WCLFH05A), August 10, 2021 (WCLFH01A), August 17, 2021 (WCLFH01B), August 20, 2021 (WCLFR001, WCLFR003, and WCLFR006), August 24, 2021 (WCLF0832 and WCLFH05B), August 27, 2021 (WCLFR014), and August 28, 2021 (WCLFH09A).

As of the end of the previous reporting period, wells WCLFR002, WCLFR003, WCLFR004, WCLFR005, WCLFR009, WCLFR011, WCLFR012, WCLFR015, WCLFR016, WCLF0602, WCLF0606, WCLF0812, WCLF0827, WCLF0833, WCLF0839, WCLF0844, WCLF0845, WCLFH01B, and WCLFH08A were operating with an oxygen concentration above their respective 5% or 15% limits. All of these wells were back in compliance within the timeline specified in 8-34-414.

3.5.3 Temperature

BAAQMD Rule 8-34-305 requires the landfill gas temperature in each wellhead to measure less than 55 degrees Celsius (°C) or 131°F.

All wells were operating under the temperature limit of 131°F during the monitoring events conducted during the reporting period.

3.6 COVER INTEGRITY MONITORING

Under BAAQMD Rule 8-34-510 and the NSPS, the landfill surface must be monitored at least monthly for evidence of cracks or other surface integrity issues, which could allow for surface emissions. During the reporting period, cover integrity monitoring was conducted by SCSFS personnel in conjunction with the wellhead monitoring on November 11, 2020 and December 28, 2020, January 4, 8, 11, 14, 18, 22, 24, and 28, 2021, February 4, 5, 8, 11, 12, 15, 18, 19, 22, and 25, 2021, March 1, 4, 5, 8, 11, 14, 19, 26, and 29, 2021, and April 1, 5, 8, 9, 12, 16, 19, 22, 26, 29, and 30, 2021. During the reporting period, the observations during these monthly monitoring events indicated the landfill surface was in good condition. In the event visual evidence suggested otherwise, the surface will be promptly repaired.

3.7 GAS GENERATION ESTIMATE AND MONTHLY LANDFILL GAS FLOW RATES

WCCSL is not subject to Rule 8-34-404 because the Landfill does not operate less than continuously. Therefore, monthly flow data are not required to be reported.

3.8 ANNUAL WASTE ACCEPTANCE RATE AND REFUSE IN PLACE

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.

3.8.1 Non-Degradable Waste Areas

No areas of non-degradable waste deposition are known to exist. There are no landfill areas that are excluded from the collection system requirements. Therefore, BAAQMD Regulation 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.

SECTION II. SSM PLAN REPORT

This Semi-Annual report also meets the requirements of the National Emissions for Hazardous Air Pollutants (NESHAP) for MSW landfills, 40 CFR 63, Subpart AAAA and complies with the requirements specified in WCCSL's Title V permit. This Semi-Annual report includes a certification signed by a Responsible Official which is provided in **Appendix A**. In accordance with the NESHAP for Landfills, this report is submitted semi-annually.

WCCSL maintains a SSM Plan which describes the procedures for operating and maintaining the affected elements of the GCCS during startup, shutdown, and malfunction (SSM). The SSM events that occurred during the reporting period of November 1, 2020 through April 30, 2021 are documented below.

- During the reporting period, the GCCS had twenty-four (24) SSM events. Details of these events are included in **Table 1a**.
- During the reporting period, A-161 Flare had twenty-six (26) SSM events. Details of these events are included in **Table 1b**.
- During the reporting period, one-hundred and nineteen (119) SSM events occurred at the S-6 Engine. The S-5 and S-37 Engines did not operate during the reporting period. The S-6 Engine was shut down and restarted during the reporting period due to the reasons noted in the downtime logs provided in **Appendix C**.
- During the reporting period, two (2) wellfield SSM events occurred. In addition, there were eight (8) wells that went offline during previous reporting periods which remained offline during the entire reporting period. Details are included **Table 2**.
- During the reporting period, there were no SSM events associated with the LFG monitoring equipment (e.g. flow measuring/recording device, temperature measuring/recording device).
- In all events, automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan. There were no deviations from the SSM plan.
- Exceedances were not identified during the reporting period for any applicable emission limitation in the landfills NESHAP (§63.10(d)(5)(i)).
- Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).
- A copy of the SSM Plan and all revisions/addenda are kept on file at the facility for at least five (5) years and are available to appropriate regulatory agency personnel for inspection.

SECTION III. TITLE V SEMI-ANNUAL REPORT

As specified in 40 Code of Federal Regulation (CFR) Part 70, reports of any required monitoring must be submitted at least every 6 months. All instances of deviations from permit requirements for the semi-annual reporting period, specified in the Landfill's Title V Permit as November 1 through April 30 and May 1 through October 31, must be clearly identified in each report. This Title V Report covers the November 1, 2020 through April 30, 2021 reporting period.

This report has been prepared based on Part VII (Applicable Limits and Compliance Monitoring Requirements) of the Landfill's MFR Permit. The report includes a certification by a responsible official, consistent with §70.5(d).

The full Title V Semi-Annual Report, including certification by a responsible official, is provided as Appendix F.

SECTION IV. ANNUAL TITLE V COMPLIANCE CERTIFICATION

A Title V Annual Compliance Certification has been prepared for the annual period specified in the Title V permit. The annual certification period for this report extends from May 1, 2020 to April 30, 2021.

As specified in 40 CFR Part 70, the compliance certification shall include all of the following:

- The identification of each federally-enforceable term or condition of the permit that is the basis of the certification;

- The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; and

- The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent.

The full Compliance Certification is provided as **Appendix G**.

Tables

Table 1a. GCCS Downtime
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime	Corrective Actions Taken
11/24/20 17:58	**11/24/20 19:30**	**1.53**	**A-161 flare shutdown due to a blower shutdown.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
12/4/20 7:38	**12/4/20 7:48**	**0.17**	**A-161 flare shutdown due to a blower shutdown.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
12/6/20 11:32	**12/6/20 11:54**	**0.37**	**A-161 flare shutdown due to a blower shutdown.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
12/7/20 15:10	12/7/20 15:20	0.17	A-161 flare shutdown due to A-8 flare inspection and testing.	Planned shutdown for flare inspection and testing. S-6 Engine was inspected and restarted. Once flare maintenance activities were completed, flare was inspected and adjusted before returning to service and was restarted.
12/11/20 16:46	**12/11/20 17:02**	**0.27**	**A-161 flare shutdown due to a blower shutdown.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
12/14/20 8:44	**12/14/20 9:04**	**0.33**	**A-161 flare shutdown due to blower shutdown.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
12/14/20 9:16	**12/14/20 9:42**	**0.43**	**A-161 flare shutdown due to blower shutdown.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
12/14/20 12:20	12/14/20 14:04	1.73	A-161 flare shutdown due to A-8 flare inspection and testing.	Shutdown was planned to conduct inspection and testing. Flare was inspected and adjusted before returning to service and was restarted.
12/28/20 14:56	12/28/20 15:28	0.53	A-161 flare shutdown for A-8 flare source test.	Planned Shutdown for Source Testing. Flare was inspected and adjusted before returning to service and was restarted.
12/28/20 17:50	12/28/20 18:10	0.33	A-8 flare shutdown after source test completion. A-161 flare startup.	Planned Shutdown for Source Testing. Flare was inspected and adjusted before returning to service and was restarted.
1/7/21 12:50	1/7/21 14:12	1.37	Shutdown for blower swap and maintenance.	Planned shut down for maintenance. Flare was inspected and adjusted before returning to service and was restarted.
1/11/21 14:58	1/11/21 15:12	0.23	Shutdown due to S-6 engine startup	Planned shut down to allow for the startup of the S-6 engine. Flare was inspected and adjusted before returning to service and was restarted.
1/19/21 2:40	**1/19/21 2:46**	**0.10**	**Site shutdown due to Power Outage. Breakdown relief was requested.**	**Flare was inspected and adjusted before returning to service once power was restored.**
1/19/21 4:04	**1/19/21 4:18**	**0.23**	**Site shutdown due to Power Outage. Breakdown relief was requested.**	**Flare was inspected and adjusted before returning to service once power was restored.**

Table 1a. GCCS Downtime
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime	Corrective Actions Taken
1/25/21 23:46	**1/26/21 8:40**	**8.90**	**Shutdown caused by main blower autovalve shutdown.**	**Shutdown was pre-programmed to avoid non-compliance and avoid equipment damage. Flare was inspected and adjusted before returning to service and was restarted.**
1/26/21 13:40	**1/26/21 15:46**	**2.10**	**Shutdown caused by main blower valve maintenance.**	**Planned shut down to inspect and perform maintenance. Flare was inspected and adjusted before returning to service and was restarted.**
1/26/21 21:44	**1/27/21 6:50**	**9.10**	**Shutdown caused by main blower autovalve shutdown.**	**Shutdown was pre-programmed to avoid non-compliance and avoid equipment damage. Flare was inspected and adjusted before returning to service and was restarted.**
2/8/21 7:20	2/8/21 7:34	0.23	Shutdown due to S-6 engine startup.	Planned shut down to allow for the startup of the S-6 engine. Flare was inspected and adjusted before returning to service and was restarted.
2/12/21 11:30	**2/12/21 11:46**	**0.27**	**Engine shutdown due to low temperature.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
2/12/21 13:32	**2/12/21 13:50**	**0.30**	**Engine shutdown due to low temperature.**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
2/26/21 13:04	**2/26/21 15:08**	**2.07**	**Site shutdown due to Power Outage. Breakdown relief was requested.**	**Flare was inspected and adjusted before returning to service once power was restored.**
3/13/21 21:04	**3/13/21 22:58**	**1.90**	**Site shutdown due to Power Outage. Breakdown relief was requested.**	**Flare was inspected and adjusted before returning to service once power was restored.**
4/11/21 18:34	4/11/21 20:08	1.57	A-161 flare shutdown due to blower shutdown.	Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.
4/15/21 7:14	**4/15/21 7:28**	**0.23**	**Site shutdown due to Power Outage. Breakdown relief was requested.**	**Flare was inspected and adjusted before returning to service once power was restored.**
	Total:	**34.47**		

Notes:
Events in bold type denotes malfunctions as defined in the SSM Plan/NESHAP Regulation.
Downtimes listed represent periods when all landfill gas combustion devices were offline concurrently (no gas flow from the collection system).

All events listed involved inspection and/or maintenance activities prior to startup (or as soon as feasible following programmed startups) in accordance with Rule 8-34-113 requirements and the BAAQMD Compliance Advisory for Municipal Solid Waste Landfills, dated November 5, 2018, with the exception of the events that occurred on 1/19/21, 2/26/21, 3/13/21, and 4/15/21, which involved power outages. These events were considered reportable compliance activity (RCA) and breakdown relief was requested.

Table 1b. Flare (A-161) Downtime
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
11/24/20 17:58	**11/24/20 19:30**	**1.53**	**Flare shutdown due to a blower shutdown**
12/4/20 7:38	**12/4/20 7:48**	**0.17**	**Flare shutdown due to blower shutdown**
12/6/20 11:32	**12/6/20 11:54**	**0.37**	**Flare shutdown due to blower shutdown**
12/7/20 8:02	12/7/20 15:20	7.30	Flare shutdown due to inspection and testing
12/11/20 16:46	**12/11/20 17:02**	**0.27**	**Flare shutdown due to blower shutdown**
12/14/20 8:44	**12/14/20 9:04**	**0.33**	**Flare shutdown due to blower shutdown**
12/14/20 9:16	12/14/20 9:42	0.43	Flare shutdown due to flare adjustments
12/14/20 12:20	12/14/20 14:04	1.73	Flare shutdown due to inspection and testing
12/28/20 10:36	**12/28/20 10:54**	**0.30**	**Flare shutdown due to blower shutdown**
12/28/20 14:56	12/28/20 18:10	3.23	Flare shutdown due to flare source test
1/7/2021 12:50	1/7/2021 14:12	1.37	Blower Swap and Maintenance
1/11/2021 14:58	1/11/2021 15:12	0.23	S-6 Engine Startup
1/19/2021 2:40	**1/19/2021 2:46**	**0.10**	**Power Outage**
1/19/2021 4:04	**1/19/2021 4:18**	**0.23**	**Power Outage**
1/25/2021 23:46	**1/26/2021 8:40**	**8.90**	**Main Blower Autovalve Shut Down**
1/26/2021 13:40	1/26/2021 15:46	2.10	Main Blower Valve Maintenance
1/26/2021 21:44	**1/27/2021 6:50**	**9.10**	**Main Blower Autovalve Shut Down**
2/8/2021 7:20	2/8/2021 7:34	0.23	S-6 Engine Start Up
2/12/2021 11:20	2/12/2021 11:46	0.43	S-6 Engine Start Up
2/12/2021 12:30	2/12/2021 13:50	1.33	S-6 Engine Start Up
2/26/2021 13:04	**2/26/2021 15:08**	**2.07**	**Power Outage**
3/5/2021 8:06	3/5/2021 8:14	0.13	Blower Swap
3/13/2021 21:04	**3/13/2021 22:58**	**1.90**	**Power Outage**
4/1/2021 11:32	**4/1/2021 11:38**	**0.10**	**Flare shutdown due to blower shutdown**
4/11/2021 18:34	**4/11/2021 20:08**	**1.57**	**Flare shutdown due to blower shutdown**
4/15/2021 7:14	**4/15/2021 7:28**	**0.23**	**Power Outage**
Total		**45.70**	

Notes:

Events in bold type denotes malfunctions as defined in the SSM Plan/NESHAP Regulation.

All events listed involved inspection and/or maintenance activities prior to startup (or as soon as feasible following programmed startups) in accordance with Rule 8-34-113 requirements and the BAAQMD Compliance Advisory for Municipal Solid Waste Landfills, dated November 5, 2018, with the exception of the events that occurred on 1/19/21, 2/26/21, 3/13/21, and 4/15/21, which involved power outages. These events were considered reportable compliance activity (RCA) and breakdown relief was requested.

Table 1c. Backup Flare (A-8) Downtime
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Shutdown*	Startup*	Downtime Hours	Reason for Downtime
11/1/2020 0:00	12/28/2020 15:28	1383.47	Flare shutdown to remain as backup control device
12/28/2020 17:50	5/1/2021 0:00	2958.17	Flare shutdown after source test completed
Total		**4341.63**	

Notes:

Events in bold type denotes malfunctions as defined in the SSM Plan/NESHAP Regulation (none occurred during the reporting period).

All events listed involved inspection and/or maintenance activities prior to startup (or as soon as feasible following programmed startups) in accordance with Rule 8-34-113 requirements and the BAAQMD Compliance Advisory for Municipal Solid Waste Landfills, dated November 5, 2018.

*The A-8 backup flare was offline at the beginning and end of the reporting period. For reporting purposes, the shutdown is calculated as beginning on November 1, 2020 at 00:00 and ending on May 1, 2021 at 00:00, respectively.

Table 2. Individual Well Startups, Shutdowns and Decommissions
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Shutdown	Start-up	Days Offline	Reason for Shutdown/Startup
Wells in Class I Landfill Wellfield				
WCLFR016*	11/23/20 10:24	Ongoing	Ongoing	Well was temporarily disconnected pursuant to Condition Number 20754 Part 2(c)(iii)
WCLFR015	3/15/21 12:46	Ongoing	Ongoing	Well was temporarily disconnected pursuant to Condition Number 20754 Part 2(c)(iii)
Wells in Class II Landfill Wellfield				
WCLFH09B*	10/29/19 8:45	Ongoing	Ongoing	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLFH02A*	11/4/19 9:40	Ongoing	Ongoing	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLFH04A	11/22/19 8:19	11/6/20 10:37	350.1	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLFH04B*	3/3/20 11:55	5/12/21 18:11	435.3	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLFH01A	3/17/20 13:44	11/6/20 10:12	233.9	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLFH03B*	5/5/20 12:16	Ongoing	Ongoing	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLFH03A*	9/11/20 11:01	12/14/20 11:02	94.0	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLF0835*	9/25/20 11:05	Ongoing	Ongoing	Well was temporarily disconnected pursuant to Condition Number 25293 Part 7(a)

Note: All well downtime events listed are consistent with applicable Rule 8-34 provisions and BAAQMD permit conditions.
*These wells were offline at the end of the reporting period. For reporting purposes, the shutdown is calculated as ending on May 1, 2021 at 00:00.

Table 3. Wells with Positive Pressure
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
WCLF0812	11/6/2020 11:34	0.42	0.43	Adjusted Valve
WCLF0812	11/6/2020 11:35	0.39	0.4	Second Reading
WCLF0812	11/30/2020 7:50	-0.97	-0.94	In Compliance
WCLFH01B	11/6/2020 10:55	0.06	0.11	Adjusted Valve
WCLFH01B	11/6/2020 10:56	-9.36	0.09	Second Reading
WCLFH01B	11/6/2020 10:57	0	0.01	Third Reading
WCLFH01B	11/30/2020 10:33	-0.31	-0.29	In Compliance
WCLFH02B	11/6/2020 11:03	-0.01	0.02	Adjusted Valve
WCLFH02B	11/6/2020 11:04	0.22	0.23	Second Reading
WCLFH02B	11/6/2020 12:24	0.16	-0.03	Adjusted Valve, In Compliance
WCLFH04A	11/6/2020 10:37	0.02	0.02	Adjusted Valve
WCLFH04A	11/6/2020 10:38	-0.11	-0.07	Second Reading, In Compliance
WCLFH08B	11/30/2020 11:03	0.04	0.04	Adjusted Valve
WCLFH08B	11/30/2020 11:05	0.03	0.03	Second Reading
WCLFH08B	12/14/2020 12:16	-1.77	-2.48	In Compliance
WCLFH09B	11/30/2020 11:11	0.03	0.06	Adjusted Valve
WCLFH09B	11/30/2020 11:13	0.04	0.06	Second Reading
WCLFH09B	12/14/2020 12:08	-0.04	-0.03	In Compliance
WCLFR001	11/16/2020 12:58	0.3	0.14	Adjusted Valve
WCLFR001	11/16/2020 12:59	-0.06	-0.03	In Compliance
WCLFR001	12/14/2020 11:15	0.03	-0.01	Adjusted Valve, In Compliance
WCLFR015	12/31/2020 10:28	0.01	0.01	Adjusted Valve
WCLFR015	1/4/2021 11:42	-0.24	-0.23	In Compliance

Note: All required corrective action and remonitoring was completed in accordance with Rule 8-34 and NSPS timelines.

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF034R	11/30/2020 9:40	12.8	Adjusted Valve
WCLF034R	11/30/2020 9:41	13.1	Second Reading
WCLF034R	12/14/2020 12:42	0.7	In Compliance
WCLF042R	11/30/2020 8:58	9.1	Adjusted Valve
WCLF042R	11/30/2020 8:59	12.5	Second Reading
WCLF042R	12/14/2020 11:16	2.2	In Compliance
WCLF0501	12/11/2020 9:38	20.4	Adjusted Valve
WCLF0501	12/11/2020 9:40	17	Second Reading
WCLF0501	12/14/2020 7:51	0.5	In Compliance
WCLF0507	12/11/2020 10:46	6.1	Adjusted Valve
WCLF0507	12/11/2020 10:48	5.8	Second Reading
WCLF0507	12/14/2020 8:04	1	In Compliance
WCLF0509	12/11/2020 10:51	16.7	Adjusted Valve
WCLF0509	12/11/2020 10:54	12.6	Second Reading
WCLF0509	12/14/2020 8:08	0	In Compliance
WCLF0510	11/30/2020 8:00	10	Adjusted Valve
WCLF0510	11/30/2020 8:02	12.2	Second Reading
WCLF0510	12/14/2020 10:36	0.2	In Compliance
WCLF0513	11/30/2020 9:44	10.8	Adjusted Valve
WCLF0513	11/30/2020 9:45	9.6	Second Reading
WCLF0513	12/14/2020 12:44	0.2	In Compliance
WCLF0515	11/30/2020 9:47	15	Adjusted Valve
WCLF0515	11/30/2020 9:48	19.2	Second Reading
WCLF0515	12/14/2020 12:47	10.6	Adjusted Valve
WCLF0515	12/14/2020 12:49	13.9	Second Reading
WCLF0515	12/17/2020 15:43	19.6	Adjusted Valve
WCLF0515	12/17/2020 15:45	19.5	Second Reading
WCLF0515	1/8/2021 12:53	7.1	Adjusted Valve
WCLF0515	1/8/2021 12:57	7	Second Reading
WCLF0515	1/8/2021 12:57	7	Third Reading
WCLF0515	1/25/2021 15:24	18.3	Adjusted Valve
WCLF0515	2/5/2021 15:31	4.9	In Compliance
WCLF0515	3/4/2021 9:27	18	Adjusted Valve
WCLF0515	3/4/2021 9:30	19.4	Second Reading
WCLF0515	3/15/2021 16:17	9.8	Adjusted Valve
WCLF0515	3/15/2021 16:19	11.5	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0515	3/19/2021 11:35	11.4	Adjusted Valve
WCLF0515	3/19/2021 11:36	10.4	Second Reading
WCLF0515	4/8/2021 12:10	12.4	Adjusted Valve
WCLF0515	4/8/2021 12:11	12.4	Second Reading
WCLF0515	4/30/2021 10:46	18.8	Adjusted Valve
WCLF0515	4/30/2021 10:48	19.5	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(b)(iii) within 120 days of the initial exceedance or by 7/2/21)
WCLF0519	12/31/2020 10:22	7.3	Adjusted Valve
WCLF0519	12/31/2020 10:23	5.1	Second Reading
WCLF0519	12/31/2020 10:25	3.4	In Compliance
WCLF0602	11/6/2020 11:00	20.5	Adjusted Valve
WCLF0602	11/6/2020 11:01	20.7	Second Reading
WCLF0602	11/30/2020 10:29	20.6	Adjusted Valve
WCLF0602	11/30/2020 10:30	20.8	Second Reading
WCLF0602	12/14/2020 10:21	1.6	In Compliance
WCLF0602	3/11/2021 10:19	7.1	Adjusted Valve
WCLF0602	3/11/2021 10:21	12.5	Second Reading
WCLF0602	3/26/2021 16:34	0.4	In Compliance
WCLF0603	11/30/2020 10:19	8.9	Adjusted Valve
WCLF0603	11/30/2020 10:21	7.6	Second Reading
WCLF0603	12/14/2020 10:12	0	In Compliance
WCLF0603	4/9/2021 16:52	13.5	Adjusted Valve
WCLF0603	4/9/2021 16:56	2.5	In Compliance
WCLF0606	11/6/2020 7:21	18.7	Adjusted Valve
WCLF0606	11/6/2020 7:22	15.4	Second Reading
WCLF0606	11/25/2020 11:45	4.2	In Compliance
WCLF0606	12/11/2020 8:40	20.9	Adjusted Valve
WCLF0606	12/11/2020 8:43	21	Second Reading
WCLF0606	12/14/2020 7:42	0.1	In Compliance
WCLF0606	4/26/2021 12:41	18.3	Adjusted Valve
WCLF0606	4/26/2021 12:44	18.3	Second Reading
WCLF0607	11/6/2020 7:16	20.4	Adjusted Valve
WCLF0607	11/6/2020 7:17	12.7	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0607	11/25/2020 11:41	0	In Compliance
WCLF0607	12/11/2020 8:27	7.1	Adjusted Valve
WCLF0607	12/11/2020 8:29	8.5	Second Reading
WCLF0607	12/14/2020 7:37	0	In Compliance
WCLF0607	3/4/2021 15:18	20.6	Adjusted Valve
WCLF0607	3/4/2021 15:30	19.3	Second Reading
WCLF0607	3/19/2021 11:15	20.5	Adjusted Valve
WCLF0607	3/19/2021 11:19	20	Second Reading
WCLF0607	3/29/2021 11:24	19.9	Adjusted Valve
WCLF0607	3/29/2021 11:26	20	Second Reading
WCLF0607	3/29/2021 15:26	20.2	Third Reading
WCLF0607	4/12/2021 11:14	18.9	Adjusted Valve
WCLF0607	4/12/2021 11:17	18.4	Second Reading
WCLF0607	4/19/2021 17:16	20.6	Adjusted Valve
WCLF0607	4/19/2021 17:17	20.4	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(b)(iii) within 120 days of the initial exceedance or by 7/2/21)
WCLF0801	12/28/2020 9:43	6.8	Adjusted Valve
WCLF0801	12/28/2020 9:45	1.9	In Compliance
WCLF0803	1/4/2021 17:30	6	Adjusted Valve
WCLF0803	1/4/2021 17:31	6.1	Second Reading
WCLF0803	1/11/2021 13:09	9.2	Adjusted Valve
WCLF0803	1/11/2021 13:12	0.3	In Compliance
WCLF0804	1/25/2021 16:36	20.4	Adjusted Valve
WCLF0804	1/25/2021 16:38	19.8	Second Reading
WCLF0804	2/4/2021 16:22	13.8	Adjusted Valve
WCLF0804	2/4/2021 16:25	13.1	Second Reading
WCLF0804	2/18/2021 12:41	20	Adjusted Valve
WCLF0804	2/18/2021 12:43	20.1	Second Reading
WCLF0804	2/19/2021 10:21	1.2	In Compliance
WCLF0812	11/30/2020 7:50	19.6	Adjusted Valve
WCLF0812	11/30/2020 7:52	19.5	Second Reading
WCLF0812	12/14/2020 17:09	6.1	Adjusted Valve
WCLF0812	12/14/2020 17:11	6	Second Reading
WCLF0812	12/28/2020 16:47	0	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0812	2/11/2021 14:41	14.2	Adjusted Valve
WCLF0812	2/11/2021 14:44	14.2	Second Reading
WCLF0812	2/22/2021 13:35	15.3	Adjusted Valve
WCLF0812	2/22/2021 13:38	15.5	Second Reading
WCLF0812	3/4/2021 14:56	17	Adjusted Valve
WCLF0812	3/4/2021 14:57	17	Second Reading
WCLF0812	3/19/2021 10:59	16.6	Adjusted Valve
WCLF0812	3/19/2021 11:03	16.7	Second Reading
WCLF0812	4/9/2021 16:13	3.5	In Compliance
WCLF0813	12/11/2020 8:10	7.6	Adjusted Valve
WCLF0813	12/11/2020 8:12	7.6	Second Reading
WCLF0813	12/14/2020 7:35	0	In Compliance
WCLF0815	11/30/2020 11:07	5.9	Adjusted Valve
WCLF0815	11/30/2020 11:08	3.8	In Compliance
WCLF0816	11/30/2020 7:43	9.2	Adjusted Valve
WCLF0816	11/30/2020 7:44	6.4	Second Reading
WCLF0816	12/11/2020 8:20	5.6	Adjusted Valve
WCLF0816	12/11/2020 8:22	4	In Compliance
WCLF0822	11/6/2020 7:31	7.3	Adjusted Valve
WCLF0822	11/6/2020 7:32	7.9	Second Reading
WCLF0822	11/25/2020 11:55	0	In Compliance
WCLF0822	12/11/2020 9:23	20.3	Adjusted Valve
WCLF0822	12/11/2020 9:24	20.6	Second Reading
WCLF0822	12/14/2020 7:47	0.7	In Compliance
WCLF0824	12/11/2020 9:07	8	Adjusted Valve
WCLF0824	12/11/2020 9:12	6.8	Second Reading
WCLF0824	12/14/2020 13:53	0	In Compliance
WCLF0827	11/6/2020 10:21	21.3	Adjusted Valve
WCLF0827	11/6/2020 10:22	21.3	Second Reading
WCLF0827	11/30/2020 8:12	21.9	Adjusted Valve
WCLF0827	11/30/2020 8:13	22	Second Reading
WCLF0827	12/14/2020 10:51	0.5	In Compliance
WCLF0827	1/18/2021 13:01	20.6	Adjusted Valve
WCLF0827	1/18/2021 13:01	20.6	Second Reading
WCLF0827	1/18/2021 13:03	20.5	Third Reading
WCLF0827	2/4/2021 16:49	0	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0832	12/11/2020 10:33	20.3	Adjusted Valve
WCLF0832	12/11/2020 10:35	20.3	Second Reading
WCLF0832	12/14/2020 7:56	19.4	Adjusted Valve
WCLF0832	12/14/2020 7:58	21.8	Second Reading
WCLF0832	12/23/2020 17:00	0.1	In Compliance
WCLF0832	2/5/2021 12:41	19.9	Adjusted Valve
WCLF0832	2/5/2021 12:49	20.7	Second Reading
WCLF0832	2/19/2021 10:42	19.4	Adjusted Valve
WCLF0832	2/19/2021 10:45	19.5	Second Reading
WCLF0832	3/5/2021 13:27	8	Adjusted Valve
WCLF0832	3/5/2021 13:31	12.8	Second Reading
WCLF0832	3/29/2021 12:47	0.3	In Compliance
WCLF0832	4/26/2021 16:03	20.3	Adjusted Valve
WCLF0832	4/26/2021 16:05	20.1	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(b)(iii) within 120 days of the initial exceedance or by 8/24/21)
WCLF0833	11/30/2020 9:11	10.9	Adjusted Valve
WCLF0833	11/30/2020 9:12	10.9	Second Reading
WCLF0833	12/14/2020 11:34	4.4	In Compliance
WCLF0833	1/8/2021 11:01	6.2	Adjusted Valve
WCLF0833	1/8/2021 11:07	0.7	In Compliance
WCLF0833	1/28/2021 10:50	7.5	Adjusted Valve
WCLF0833	1/28/2021 10:54	12.4	Second Reading
WCLF0833	2/5/2021 14:01	0	In Compliance
WCLF0833	2/18/2021 13:21	7.7	Adjusted Valve
WCLF0833	2/18/2021 13:26	8	Second Reading
WCLF0833	3/1/2021 16:38	0.3	In Compliance
WCLF0833	3/26/2021 16:09	7.3	Adjusted Valve
WCLF0833	3/26/2021 16:11	6.9	Second Reading
WCLF0833	4/8/2021 10:47	5.7	Adjusted Valve
WCLF0833	4/8/2021 10:51	5.5	Second Reading
WCLF0833	4/29/2021 18:53	1	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0839	11/6/2020 8:04	20.8	Adjusted Valve
WCLF0839	11/6/2020 8:06	21.3	Second Reading
WCLF0839	11/9/2020 13:18	0.1	In Compliance
WCLF0839	12/11/2020 11:01	21.3	Adjusted Valve
WCLF0839	12/11/2020 11:02	21.3	Second Reading
WCLF0839	12/14/2020 8:20	1.6	In Compliance
WCLF0839	3/29/2021 13:56	21.2	Adjusted Valve
WCLF0839	3/29/2021 13:57	21.2	Second Reading
WCLF0839	3/29/2021 14:46	0	In Compliance
WCLF0842	11/30/2020 11:52	6.4	Adjusted Valve
WCLF0842	11/30/2020 11:53	5.2	Second Reading
WCLF0842	12/11/2020 11:17	4.9	In Compliance
WCLF0843	12/11/2020 11:23	7.6	Adjusted Valve
WCLF0843	12/11/2020 11:25	7.2	Second Reading
WCLF0843	12/14/2020 8:27	0.5	In Compliance
WCLF0844	11/6/2020 8:33	10.1	Adjusted Valve
WCLF0844	11/6/2020 8:34	9.4	Second Reading
WCLF0844	11/30/2020 11:57	20.3	Adjusted Valve
WCLF0844	11/30/2020 11:58	20.9	Second Reading
WCLF0844	12/11/2020 11:29	21	Adjusted Valve
WCLF0844	12/11/2020 11:30	16.9	Second Reading
WCLF0844	12/28/2020 17:52	0	In Compliance
WCLF0844	4/29/2021 12:38	16.5	Adjusted Valve
WCLF0844	4/29/2021 12:42	19.7	Second Reading
WCLF0844	4/29/2021 13:29	0.6	In Compliance
WCLF0845	12/11/2020 12:18	15.9	Adjusted Valve
WCLF0845	12/11/2020 12:19	16.1	Second Reading
WCLF0845	12/14/2020 13:40	0.4	In Compliance
WCLF0847	11/25/2020 9:07	6.3	Adjusted Valve
WCLF0847	11/25/2020 9:10	9.1	Second Reading
WCLF0847	12/10/2020 15:25	6.7	Adjusted Valve
WCLF0847	12/11/2020 12:25	6.1	Adjusted Valve
WCLF0847	12/11/2020 12:27	4.9	In Compliance
WCLF40AD	11/30/2020 10:50	8.7	Adjusted Valve
WCLF40AD	11/30/2020 10:52	7.1	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
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Well ID	Date and Time	Oxygen (%)	Comments
WCLF40AD	12/14/2020 14:15	0.8	In Compliance
WCLFH01A	11/30/2020 8:06	19.8	Adjusted Valve
WCLFH01A	11/30/2020 8:07	20	Second Reading
WCLFH01A	12/14/2020 10:42	14.2	In Compliance
WCLFH01A	12/31/2020 8:54	16.9	Adjusted Valve
WCLFH01A	12/31/2020 8:56	14.6	In Compliance
WCLFH01A	4/12/2021 10:14	20.5	Adjusted Valve
WCLFH01A	4/12/2021 10:17	20.6	Second Reading
WCLFH01A	4/19/2021 15:29	17.9	Adjusted Valve
WCLFH01A	4/19/2021 15:30	18.3	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii) within 120 days of the initial exceedance or by 8/10/21)
WCLFH01B	11/30/2020 10:33	20.2	Adjusted Valve
WCLFH01B	11/30/2020 10:35	20	Second Reading
WCLFH01B	12/14/2020 10:27	13.5	In Compliance
WCLFH01B	1/11/2021 14:35	15	Adjusted Valve
WCLFH01B	1/11/2021 14:37	15.1	Second Reading
WCLFH01B	1/18/2021 11:58	18	Adjusted Valve
WCLFH01B	1/18/2021 12:01	18.4	Second Reading
WCLFH01B	1/25/2021 17:02	4.5	In Compliance
WCLFH01B	2/25/2021 14:24	20.1	Adjusted Valve
WCLFH01B	2/25/2021 14:25	20	Second Reading
WCLFH01B	3/8/2021 13:22	18.7	Adjusted Valve
WCLFH01B	3/8/2021 13:24	18.8	Second Reading
WCLFH01B	3/29/2021 11:57	13.8	In Compliance
WCLFH01B	4/19/2021 15:05	20.1	Adjusted Valve
WCLFH01B	4/19/2021 15:06	20.5	Second Reading
WCLFH01B	4/26/2021 18:08	19.9	Adjusted Valve
WCLFH01B	4/26/2021 18:09	20.8	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii) within 120 days of the initial exceedance or by 8/17/21)

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
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Well ID	Date and Time	Oxygen (%)	Comments
WCLFH04A	11/30/2020 8:48	21.2	Adjusted Valve
WCLFH04A	11/30/2020 8:49	21.3	Second Reading
WCLFH04A	12/14/2020 11:11	20	Adjusted Valve
WCLFH04A	12/31/2020 14:52	18	Adjusted Valve
WCLFH04A	1/8/2021 10:33	21	Adjusted Valve
WCLFH04A	1/18/2021 13:17	4.6	In Compliance
WCLFH04A	2/12/2021 8:21	18.7	Adjusted Valve
WCLFH04A	2/12/2021 8:25	19.9	Second Reading
WCLFH04A	2/22/2021 16:36	18.6	Adjusted Valve
WCLFH04A	2/22/2021 16:38	18.7	Second Reading
WCLFH04A	3/5/2021 14:56	15.2	Adjusted Valve
WCLFH04A	3/5/2021 14:57	16.5	Second Reading
WCLFH04A	3/29/2021 12:55	20.3	Adjusted Valve
WCLFH04A	3/29/2021 12:57	20	Second Reading
WCLFH04A	4/12/2021 17:57	19.8	Adjusted Valve
WCLFH04A	4/12/2021 17:59	19.8	Second Reading
WCLFH04A	4/29/2021 18:31	18.1	Adjusted Valve
WCLFH04A	4/29/2021 18:32	17.4	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii) within 120 days of the initial exceedance or by 6/12/21)
WCLFH05A	11/30/2020 9:03	21.3	Adjusted Valve
WCLFH05A	11/30/2020 9:04	21.3	Second Reading
WCLFH05A	12/14/2020 11:22	19.8	Adjusted Valve
WCLFH05A	12/14/2020 11:25	21.6	Second Reading
WCLFH05A	12/31/2020 14:56	21	Adjusted Valve
WCLFH05A	1/8/2021 10:44	20.7	Adjusted Valve
WCLFH05A	1/8/2021 10:46	20.8	Second Reading
WCLFH05A	1/28/2021 11:15	21.2	Adjusted Valve
WCLFH05A	1/28/2021 11:17	21.2	Second Reading
WCLFH05A	2/5/2021 14:17	4.4	In Compliance
WCLFH05A	2/25/2021 11:47	20.6	Adjusted Valve
WCLFH05A	2/25/2021 11:50	20.3	Second Reading
WCLFH05A	3/5/2021 15:04	1.5	In Compliance
WCLFH05A	4/8/2021 11:01	21	Adjusted Valve
WCLFH05A	4/8/2021 11:04	20.9	Second Reading
WCLFH05A	4/19/2021 17:04	20.6	Adjusted Valve
WCLFH05A	4/19/2021 17:05	20.6	Second Reading

Table 4. Wells with Oxygen Exceedances
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Well ID	Date and Time	Oxygen (%)	Comments
WCLFH05A	4/29/2021 18:37	20.7	Adjusted Valve
WCLFH05A	4/29/2021 18:39	21.4	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii) within 120 days of the initial exceedance or by 8/6/21)
WCLFH05B	11/25/2020 11:03	10.5	Adjusted Valve
WCLFH05B	12/15/2020 16:00	5.7	In Compliance
WCLFH05B	4/26/2021 11:14	16.9	Adjusted Valve
WCLFH05B	4/26/2021 11:16	16.8	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii) within 120 days of the initial exceedance or by 8/24/21)
WCLFH06A	1/8/2021 10:57	5	Adjusted Valve
WCLFH06A	1/28/2021 10:59	2.5	In Compliance
WCLFH06B	2/5/2021 8:49	17.3	Adjusted Valve
WCLFH06B	2/5/2021 8:51	20	Second Reading
WCLFH06B	2/19/2021 10:34	6.4	In Compliance
WCLFH06B	3/4/2021 14:47	15	Adjusted Valve
WCLFH06B	3/4/2021 14:48	16	Second Reading
WCLFH06B	3/19/2021 11:27	9.2	In Compliance
WCLFH07A	11/30/2020 9:15	16.4	Adjusted Valve
WCLFH07A	11/30/2020 9:16	16.4	Second Reading
WCLFH07A	12/14/2020 11:37	5.4	In Compliance
WCLFH07A	2/18/2021 13:13	18.8	Adjusted Valve
WCLFH07A	2/18/2021 13:16	18.9	Second Reading
WCLFH07A	3/1/2021 16:47	0	In Compliance
WCLFH07A	3/26/2021 16:03	18.8	Adjusted Valve
WCLFH07A	3/26/2021 16:06	18.4	Second Reading
WCLFH07A	4/8/2021 10:40	18.6	Adjusted Valve
WCLFH07A	4/8/2021 10:42	18.6	Second Reading
WCLFH07A	4/30/2021 11:08	12.7	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
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Well ID	Date and Time	Oxygen (%)	Comments
WCLFH07B	11/30/2020 11:01	5.4	Adjusted Valve
WCLFH07B	12/14/2020 12:18	0.4	In Compliance
WCLFH08A	11/6/2020 11:40	15.3	Adjusted Valve
WCLFH08A	11/6/2020 11:42	16.5	Second Reading
WCLFH08A	11/30/2020 9:19	14.7	In Compliance
WCLFH08A	1/28/2021 10:36	16.2	Adjusted Valve
WCLFH08A	1/28/2021 10:39	16	Second Reading
WCLFH08A	2/5/2021 13:50	0	In Compliance
WCLFH08A	3/26/2021 15:58	16.1	Adjusted Valve
WCLFH08A	3/26/2021 16:01	16.1	Second Reading
WCLFH08A	4/8/2021 10:35	16.6	Adjusted Valve
WCLFH08A	4/8/2021 10:37	16.6	Second Reading
WCLFH08A	4/30/2021 11:16	12.5	In Compliance
WCLFH08B	12/31/2020 11:26	17.2	Adjusted Valve
WCLFH08B	12/31/2020 11:28	17.1	Second Reading
WCLFH08B	1/4/2021 17:12	0.5	In Compliance
WCLFH08B	3/11/2021 11:39	19.9	Adjusted Valve
WCLFH08B	3/11/2021 11:41	20.2	Second Reading
WCLFH08B	3/26/2021 15:02	20.2	Adjusted Valve
WCLFH08B	3/26/2021 15:08	20.7	Second Reading
WCLFH08B	4/1/2021 16:19	19.9	Adjusted Valve
WCLFH08B	4/1/2021 16:21	20.2	Second Reading
WCLFH08B	4/26/2021 18:25	19.7	Adjusted Valve
WCLFH08B	4/26/2021 18:28	20	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii) within 120 days of the initial exceedance or by 7/9/21)
WCLFH09A	11/11/2020 8:12	5.3	Adjusted Valve
WCLFH09A	11/30/2020 9:26	2.1	In Compliance
WCLFH09A	1/14/2021 9:48	5.2	Adjusted Valve
WCLFH09A	1/14/2021 9:50	5.3	Second Reading
WCLFH09A	1/28/2021 10:23	3.3	In Compliance
WCLFH09A	2/25/2021 11:07	6.9	Adjusted Valve
WCLFH09A	2/25/2021 11:10	6.6	Second Reading
WCLFH09A	3/5/2021 15:41	0	In Compliance

Table 4. Wells with Oxygen Exceedances
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Well ID	Date and Time	Oxygen (%)	Comments
WCLFH09A	4/30/2021 11:26	5.8	Adjusted Valve
WCLFH09A	4/30/2021 11:28	5.6	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii) within 120 days of the initial exceedance or by 8/28/21)
WCLFH10A	1/14/2021 9:37	16.5	Adjusted Valve
WCLFH10A	1/14/2021 9:39	16.5	Second Reading
WCLFH10A	1/25/2021 16:46	9.6	In Compliance
WCLFH10A	3/11/2021 17:42	19.9	Adjusted Valve
WCLFH10A	3/11/2021 17:44	19.9	Second Reading
WCLFH10A	3/26/2021 15:38	12.1	In Compliance
WCLFH10A	4/8/2021 10:14	16.6	Adjusted Valve
WCLFH10A	4/9/2021 13:39	14	In Compliance
WCLFH10B	11/25/2020 10:15	20.5	Adjusted Valve
WCLFH10B	11/25/2020 10:18	20.6	Second Reading
WCLFH10B	12/10/2020 15:15	19.9	Adjusted Valve
WCLFH10B	12/14/2020 9:53	12.9	In Compliance
WCLFH10B	12/31/2020 10:39	20.1	Adjusted Valve
WCLFH10B	12/31/2020 10:42	20.3	Second Reading
WCLFH10B	1/4/2021 17:47	20.5	Adjusted Valve
WCLFH10B	1/4/2021 17:49	21.6	Second Reading
WCLFH10B	1/11/2021 13:23	0.1	In Compliance
WCLFR001	12/11/2020 11:41	17.8	Adjusted Valve
WCLFR001	12/11/2020 11:44	17.7	Second Reading
WCLFR001	12/14/2020 11:15	20.7	Adjusted Valve
WCLFR001	12/14/2020 11:17	7.1	In Compliance
WCLFR001	12/24/2020 8:13	16.3	Adjusted Valve
WCLFR001	12/24/2020 8:15	16.4	Second Reading
WCLFR001	12/28/2020 15:54	16.5	Adjusted Valve
WCLFR001	12/28/2020 15:54	16.6	Second Reading
WCLFR001	12/31/2020 9:45	16.8	Adjusted Valve
WCLFR001	12/31/2020 9:47	16.9	Second Reading
WCLFR001	1/4/2021 11:11	0	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
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Well ID	Date and Time	Oxygen (%)	Comments
WCLFR001	2/4/2021 9:46	16.2	Adjusted Valve
WCLFR001	2/4/2021 9:48	16.2	Second Reading
WCLFR001	2/8/2021 10:31	13.5	In Compliance
WCLFR001	3/26/2021 10:53	20.3	Adjusted Valve
WCLFR001	3/26/2021 10:53	20.3	Second Reading
WCLFR001	3/26/2021 10:54	20.3	Third Reading
WCLFR001	4/1/2021 12:07	11.9	In Compliance
WCLFR001	4/22/2021 10:43	18.4	Adjusted Valve
WCLFR001	4/22/2021 10:47	18.4	Second Reading
WCLFR001	4/29/2021 14:01	17.3	Adjusted Valve
WCLFR001	4/29/2021 14:03	17.3	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 20754 Part 2(c)(iii) within 120 days of the initial exceedance or by 8/20/21)
WCLFR002	12/11/2020 11:48	20.9	Adjusted Valve
WCLFR002	12/11/2020 11:57	20.6	Second Reading
WCLFR002	12/14/2020 11:19	17.4	Adjusted Valve
WCLFR002	12/14/2020 11:21	16.5	Second Reading
WCLFR002	12/24/2020 8:17	11.4	In Compliance
WCLFR002	3/26/2021 10:55	18.1	Adjusted Valve
WCLFR002	3/26/2021 10:56	18.1	Second Reading
WCLFR002	4/1/2021 12:37	9.3	In Compliance
WCLFR002	4/5/2021 11:25	16.5	Adjusted Valve
WCLFR002	4/5/2021 11:26	16.5	Second Reading
WCLFR002	4/16/2021 10:42	16.7	Adjusted Valve
WCLFR002	4/16/2021 10:44	16.7	Second Reading
WCLFR002	4/22/2021 10:49	19.9	Adjusted Valve
WCLFR002	4/22/2021 10:51	19.9	Second Reading
WCLFR002	4/29/2021 14:04	18.8	Adjusted Valve
WCLFR002	4/29/2021 14:05	18.8	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 20754 Part 2(c)(iii) within 120 days of the initial exceedance or by 8/3/21)
WCLFR003	3/8/2021 11:07	16.7	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
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Well ID	Date and Time	Oxygen (%)	Comments
WCLFR003	3/8/2021 11:09	16.9	Second Reading
WCLFR003	3/15/2021 11:48	0.2	In Compliance
WCLFR003	3/26/2021 10:58	20.8	Adjusted Valve
WCLFR003	3/26/2021 10:58	20.8	Second Reading
WCLFR003	3/26/2021 11:00	20.8	Third Reading
WCLFR003	4/1/2021 12:34	10.5	In Compliance
WCLFR003	4/22/2021 10:52	18.1	Adjusted Valve
WCLFR003	4/22/2021 10:54	18.1	Second Reading
WCLFR003	4/29/2021 14:06	18.6	Adjusted Valve
WCLFR003	4/29/2021 14:07	18.4	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 20754 Part 2(c)(iii) within 120 days of the initial exceedance or by 8/20/21)
WCLFR004	12/2/2020 9:50	15	Adjusted Valve
WCLFR004	12/7/2020 18:02	4.9	In Compliance
WCLFR004	12/11/2020 11:59	18.1	Adjusted Valve
WCLFR004	12/11/2020 12:02	18.1	Second Reading
WCLFR004	12/14/2020 11:26	6.7	In Compliance
WCLFR004	12/24/2020 8:24	21.2	Adjusted Valve
WCLFR004	12/24/2020 8:27	21.3	In Compliance
WCLFR004	12/31/2020 9:56	20.3	Adjusted Valve
WCLFR004	12/31/2020 9:57	20.6	In Compliance
WCLFR004	1/4/2021 11:19	14.6	In Compliance
WCLFR004	1/11/2021 9:28	21.5	Adjusted Valve
WCLFR004	1/11/2021 9:29	21.4	Second Reading
WCLFR004	1/18/2021 10:28	0.6	In Compliance
WCLFR005	12/14/2020 11:08	16	Adjusted Valve
WCLFR005	12/14/2020 11:09	16.1	Second Reading
WCLFR005	12/24/2020 8:55	0.3	In Compliance
WCLFR005	1/18/2021 10:57	20.8	Adjusted Valve
WCLFR005	1/18/2021 12:29	20.5	Second Reading
WCLFR005	1/25/2021 10:46	1.2	In Compliance
WCLFR005	2/4/2021 9:30	20.9	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR005	2/4/2021 9:32	20.9	Second Reading
WCLFR005	2/8/2021 10:51	5.5	In Compliance
WCLFR005	3/8/2021 11:15	20.8	Adjusted Valve
WCLFR005	3/8/2021 11:20	20.7	Second Reading
WCLFR005	3/15/2021 11:56	1.6	In Compliance
WCLFR005	3/26/2021 11:20	20.9	Adjusted Valve
WCLFR005	3/26/2021 11:21	20.9	Second Reading
WCLFR005	4/1/2021 13:00	20.9	Adjusted Valve
WCLFR005	4/1/2021 13:01	20.8	Second Reading
WCLFR005	4/5/2021 12:10	20.9	Adjusted Valve
WCLFR005	4/5/2021 12:12	20.9	Second Reading
WCLFR005	4/16/2021 11:06	20.9	Adjusted Valve
WCLFR005	4/16/2021 11:09	20.8	Second Reading
WCLFR005	4/22/2021 11:06	20.1	Adjusted Valve
WCLFR005	4/22/2021 11:07	20.9	Second Reading
WCLFR005	4/29/2021 14:14	20.9	Adjusted Valve
WCLFR005	4/29/2021 14:16	20.9	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 20754 Part 2(c)(iii) within 120 days of the initial exceedance or by 7/24/21)
WCLFR006	1/25/2021 10:48	20.5	Adjusted Valve
WCLFR006	1/25/2021 10:50	20.7	Second Reading
WCLFR006	2/4/2021 9:26	21	Adjusted Valve
WCLFR006	2/4/2021 9:28	21	Second Reading
WCLFR006	2/8/2021 10:55	21.3	Adjusted Valve
WCLFR006	2/8/2021 10:57	21.4	Second Reading
WCLFR006	2/15/2021 10:05	20.8	Adjusted Valve
WCLFR006	2/15/2021 10:08	20.7	Second Reading
WCLFR006	2/22/2021 11:04	10	In Compliance
WCLFR006	3/1/2021 11:28	20	Adjusted Valve
WCLFR006	3/1/2021 11:29	20.1	Second Reading
WCLFR006	3/8/2021 11:18	20.7	Adjusted Valve
WCLFR006	3/8/2021 11:19	20.7	Second Reading
WCLFR006	3/15/2021 11:58	13.8	In Compliance
WCLFR006	3/26/2021 11:22	20.9	Adjusted Valve
WCLFR006	3/26/2021 11:23	20.9	Second Reading
WCLFR006	4/1/2021 13:04	20.9	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR006	4/1/2021 13:05	20.9	Second Reading
WCLFR006	4/5/2021 12:13	18.5	Adjusted Valve
WCLFR006	4/5/2021 12:13	18.5	Second Reading
WCLFR006	4/5/2021 12:15	18.4	Third Reading
WCLFR006	4/16/2021 11:10	14.9	In Compliance
WCLFR006	4/22/2021 11:09	20.9	Adjusted Valve
WCLFR006	4/22/2021 11:11	20.9	Second Reading
WCLFR006	4/29/2021 14:17	18.4	Adjusted Valve
WCLFR006	4/29/2021 14:18	18.4	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 20754 Part 2(c)(iii) within 120 days of the initial exceedance or by 8/20/21)
WCLFR007	11/23/2020 10:02	20.2	Adjusted Valve
WCLFR007	11/23/2020 10:04	20.5	Second Reading
WCLFR007	12/2/2020 10:29	0.6	In Compliance
WCLFR007	12/24/2020 9:02	20.1	Adjusted Valve
WCLFR007	12/24/2020 9:03	20.2	Second Reading
WCLFR007	12/28/2020 13:57	19.5	Adjusted Valve
WCLFR007	12/28/2020 14:01	19.6	Second Reading
WCLFR007	1/4/2021 11:26	4.5	In Compliance
WCLFR007	1/25/2021 10:52	19.4	Adjusted Valve
WCLFR007	1/25/2021 10:53	19.4	Second Reading
WCLFR007	2/4/2021 9:22	20.6	Adjusted Valve
WCLFR007	2/4/2021 9:24	20.7	Second Reading
WCLFR007	2/8/2021 10:59	20.7	Adjusted Valve
WCLFR007	2/8/2021 11:02	20.7	Second Reading
WCLFR007	2/15/2021 10:06	19.2	Adjusted Valve
WCLFR007	2/15/2021 10:07	19.1	Second Reading
WCLFR007	2/22/2021 11:07	16.5	Adjusted Valve
WCLFR007	2/22/2021 11:09	16.6	Second Reading
WCLFR007	3/1/2021 11:31	17.7	Adjusted Valve
WCLFR007	3/1/2021 11:34	17.6	Second Reading
WCLFR007	3/8/2021 11:21	20.6	Adjusted Valve
WCLFR007	3/8/2021 11:22	20.5	Second Reading
WCLFR007	3/15/2021 12:02	18.7	Adjusted Valve
WCLFR007	3/15/2021 12:03	18.7	Second Reading
WCLFR007	3/26/2021 11:25	20.8	Adjusted Valve
WCLFR007	3/26/2021 11:26	20.8	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR007	4/1/2021 13:07	15.6	Adjusted Valve
WCLFR007	4/1/2021 13:09	15.6	Second Reading
WCLFR007	4/5/2021 12:17	19.6	Adjusted Valve
WCLFR007	4/5/2021 12:18	19.6	Second Reading
WCLFR007	4/16/2021 11:12	20	Adjusted Valve
WCLFR007	4/16/2021 11:14	20	Second Reading
WCLFR007	4/22/2021 11:12	20.8	Adjusted Valve
WCLFR007	4/22/2021 11:14	20.8	Second Reading
WCLFR007	4/29/2021 14:20	20.9	Adjusted Valve
WCLFR007	4/29/2021 14:22	20.9	Second Reading (Well temporarily disconnected on 5/25/21 due to high O2 and methane below 5% pursuant to Condition Number 20754 Part 2(c)(iii))
WCLFR008	12/11/2020 14:46	17.8	Second Reading
WCLFR008	12/14/2020 11:04	0.8	In Compliance
WCLFR008	3/8/2021 11:44	20.8	Adjusted Valve
WCLFR008	3/8/2021 11:47	20.8	Second Reading
WCLFR008	3/15/2021 12:05	0	In Compliance
WCLFR008	3/26/2021 11:27	20.9	Adjusted Valve
WCLFR008	3/26/2021 11:27	20.9	Second Reading
WCLFR008	3/26/2021 11:29	20.9	Third Reading
WCLFR008	4/1/2021 13:11	12.2	In Compliance
WCLFR008	4/22/2021 11:15	20.8	Adjusted Valve
WCLFR008	4/22/2021 11:16	20.8	Second Reading
WCLFR008	4/29/2021 14:23	20.9	Adjusted Valve
WCLFR008	4/29/2021 14:23	20.9	Second Reading
WCLFR008	4/29/2021 14:25	21	Third Reading
WCLFR009	11/2/2020 10:35	10	In Compliance
WCLFR009	12/14/2020 10:45	17.8	Adjusted Valve
WCLFR009	12/14/2020 10:46	17.8	Second Reading
WCLFR009	12/24/2020 9:14	0	In Compliance
WCLFR009	1/25/2021 11:09	20.3	Adjusted Valve
WCLFR009	1/25/2021 11:15	20.4	Second Reading
WCLFR009	2/4/2021 9:16	10.9	In Compliance
WCLFR009	3/8/2021 11:26	14.3	Adjusted Valve
WCLFR009	3/8/2021 11:30	14.3	Second Reading
WCLFR009	3/15/2021 12:25	1.8	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR009	3/26/2021 11:43	17.6	Adjusted Valve
WCLFR009	3/26/2021 11:44	17.5	Second Reading
WCLFR009	4/1/2021 13:17	8.1	Adjusted Valve
WCLFR009	4/1/2021 13:19	8.1	Second Reading
WCLFR009	4/5/2021 12:39	9.3	Adjusted Valve
WCLFR009	4/5/2021 12:39	9.3	Second Reading
WCLFR009	4/5/2021 12:41	9.2	Third Reading
WCLFR009	4/16/2021 11:25	11.9	Adjusted Valve
WCLFR009	4/16/2021 11:25	11.9	Second Reading
WCLFR009	4/16/2021 11:25	11.9	Third Reading
WCLFR009	4/16/2021 11:27	11.7	Fourth Reading
WCLFR009	4/22/2021 11:29	14.2	Adjusted Valve
WCLFR009	4/22/2021 11:31	14.1	Second Reading
WCLFR009	4/29/2021 14:31	15.7	Adjusted Valve
WCLFR009	4/29/2021 14:33	15.6	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 20754 Part 2(c)(iii) within 120 days of the initial exceedance or by 7/24/21)
WCLFR010	12/14/2020 10:40	16.9	Adjusted Valve
WCLFR010	12/14/2020 10:42	17	Second Reading
WCLFR010	12/24/2020 9:17	0	In Compliance
WCLFR010	1/25/2021 11:11	20.4	Adjusted Valve
WCLFR010	1/25/2021 11:13	20.4	Second Reading
WCLFR010	2/4/2021 9:12	7.6	In Compliance
WCLFR011	1/25/2021 11:17	20.4	Adjusted Valve
WCLFR011	1/25/2021 11:23	9.9	In Compliance
WCLFR012	12/11/2020 14:59	17.8	Adjusted Valve
WCLFR012	12/11/2020 15:00	18.3	Second Reading
WCLFR012	12/14/2020 10:51	11.1	In Compliance
WCLFR012	1/18/2021 12:16	17.1	Adjusted Valve
WCLFR012	1/18/2021 12:17	17.3	Second Reading
WCLFR012	1/25/2021 11:19	20.4	Adjusted Valve
WCLFR012	1/25/2021 11:21	20.4	Second Reading
WCLFR012	2/4/2021 9:03	20.7	Adjusted Valve
WCLFR012	2/4/2021 9:05	20.8	Second Reading
WCLFR012	2/8/2021 11:17	20.8	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR012	2/8/2021 11:18	21	Second Reading
WCLFR012	2/15/2021 10:26	20.5	Adjusted Valve
WCLFR012	2/15/2021 10:28	20.6	Second Reading
WCLFR012	2/22/2021 11:20	19.7	Adjusted Valve
WCLFR012	2/22/2021 11:21	19.8	Second Reading
WCLFR012	3/1/2021 12:18	18.5	Adjusted Valve
WCLFR012	3/1/2021 12:19	18.7	Second Reading
WCLFR012	3/8/2021 11:35	20.6	Adjusted Valve
WCLFR012	3/8/2021 11:36	20.7	Second Reading
WCLFR012	3/15/2021 12:31	20.2	Adjusted Valve
WCLFR012	3/15/2021 12:32	20.3	Second Reading
WCLFR012	3/26/2021 11:49	20.2	Adjusted Valve
WCLFR012	3/26/2021 11:51	20.4	Second Reading
WCLFR012	4/1/2021 13:24	18.8	Adjusted Valve
WCLFR012	4/1/2021 13:25	18.8	Second Reading
WCLFR012	4/5/2021 12:47	20.4	Adjusted Valve
WCLFR012	4/5/2021 12:49	20.5	Second Reading
WCLFR012	4/16/2021 11:32	20.3	Adjusted Valve
WCLFR012	4/16/2021 11:33	20.5	Second Reading
WCLFR012	4/22/2021 11:36	19.9	Adjusted Valve
WCLFR012	4/22/2021 11:38	20.5	Second Reading
WCLFR012	4/29/2021 14:39	20.9	Adjusted Valve
WCLFR012	4/29/2021 14:40	20.9	Second Reading (Well temporarily disconnected on 5/18/21 due to high O2 and methane below 5% pursuant to Condition Number 20754 Part 2(c)(iii))
WCLFR013	3/26/2021 12:08	15.1	Adjusted Valve
WCLFR013	3/26/2021 12:08	15.1	Second Reading
WCLFR013	3/26/2021 12:08	15.1	Third Reading
WCLFR013	3/26/2021 12:10	14.9	In Compliance
WCLFR014	3/26/2021 12:11	16	Adjusted Valve
WCLFR014	3/26/2021 12:13	16.1	Second Reading
WCLFR014	3/26/2021 12:13	16.1	Third Reading
WCLFR014	4/1/2021 13:33	7.4	In Compliance
WCLFR014	4/22/2021 11:46	15.1	Adjusted Valve
WCLFR014	4/22/2021 11:48	14.9	In Compliance
WCLFR014	4/29/2021 14:48	15.5	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR014	4/29/2021 14:50	15.4	Second Reading (well will return to compliance or will be temporarily taken offline pursuant to Condition Number 20754 Part 2(c)(iii) within 120 days of the initial exceedance or by 8/27/21)
WCLFR015	11/2/2020 10:46	19.2	Adjusted Valve
WCLFR015	11/11/2020 10:57	8	In Compliance
WCLFR015	11/23/2020 10:22	20.3	Adjusted Valve
WCLFR015	12/2/2020 11:07	19.1	Adjusted Valve
WCLFR015	12/7/2020 18:06	20.1	Adjusted Valve
WCLFR015	12/11/2020 15:09	20.3	Adjusted Valve
WCLFR015	12/11/2020 15:11	20.4	Second Reading
WCLFR015	12/14/2020 10:09	20.7	Adjusted Valve
WCLFR015	12/14/2020 10:14	20.6	Second Reading
WCLFR015	12/24/2020 9:32	20	Adjusted Valve
WCLFR015	12/24/2020 9:37	20.1	Second Reading
WCLFR015	12/31/2020 10:25	20.1	Adjusted Valve
WCLFR015	12/31/2020 10:28	20.3	Second Reading
WCLFR015	1/4/2021 11:42	19.7	Adjusted Valve
WCLFR015	1/11/2021 10:38	18.6	Adjusted Valve
WCLFR015	1/11/2021 10:40	18.7	Second Reading
WCLFR015	1/18/2021 11:49	19.7	Adjusted Valve
WCLFR015	1/18/2021 11:52	19.9	Second Reading
WCLFR015	1/25/2021 11:40	20.7	Adjusted Valve
WCLFR015	2/4/2021 8:53	20.4	Adjusted Valve
WCLFR015	2/4/2021 8:55	20.5	Second Reading
WCLFR015	2/8/2021 11:27	21.6	Adjusted Valve
WCLFR015	2/15/2021 10:37	20.7	Adjusted Valve
WCLFR015	2/15/2021 10:38	20.8	Second Reading
WCLFR015	2/22/2021 11:29	20.6	Adjusted Valve
WCLFR015	2/22/2021 11:31	20.8	Second Reading
WCLFR015	3/1/2021 12:35	20.5	Adjusted Valve
WCLFR015	3/1/2021 12:37	20.7	Second Reading
WCLFR015	3/8/2021 11:54	20.8	Adjusted Valve
WCLFR015	3/8/2021 11:56	20.9	Second Reading
WCLFR015	3/15/2021 12:45	20.7	Adjusted Valve
WCLFR015	3/15/2021 12:46	20.7	Second Reading (Well temporarily disconnected on 3/15/21 due to high O2 and methane below 5% pursuant to Condition Number 20754 Part 2(c)(iii))

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(November 1, 2020 through April 30, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR016	11/2/2020 10:47	16.9	Adjusted Valve
WCLFR016	11/11/2020 10:59	19.5	Adjusted Valve
WCLFR016	11/16/2020 14:10	0	In Compliance

Note: All required corrective action and monitoring was completed in accordance with Rule 8-34 and NSPS timelines.

Appendix A – Responsible Official Certification Form

Certification of Truth and Accuracy and Completeness:

I certify the following:

Based on the information and belief formed after reasonable inquiry, the information in this document are true, accurate, and complete:

Rob Sherman

Signature of Responsible Official

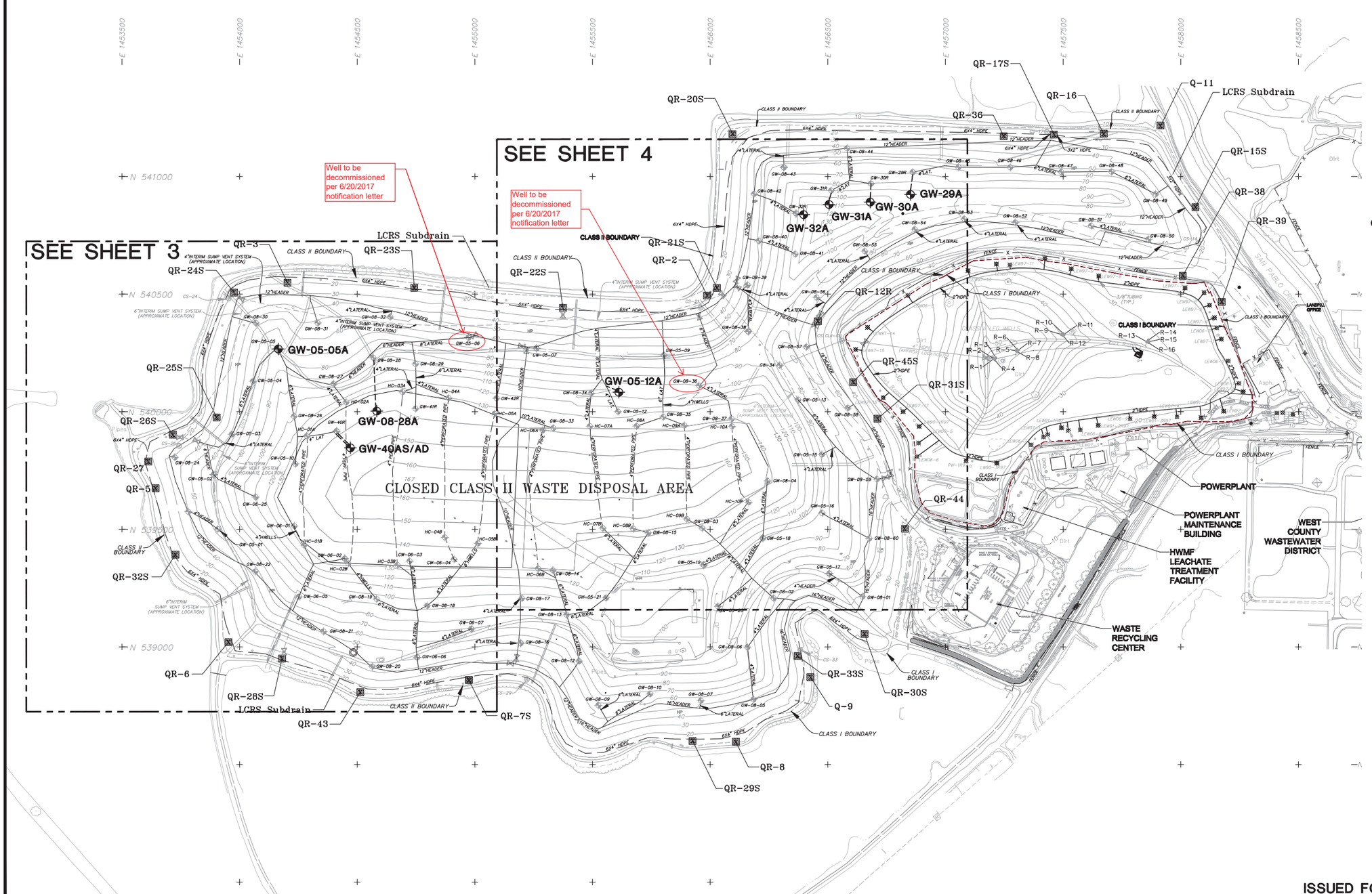
5-25-21

Date

Rob Sherman

Name of Responsible Official

Appendix B – Existing GCCS Layout



GRAPHIC SCALE

200 100 0 200 400

(IN FEET)

LEGEND

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

PROPOSED WELL LATERAL

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

NOTES:

1. EXISTING TOPOGRAPHY SHOWN OUTSIDE CLASS II WASTE LIMITS PREPARED BY HJW GEOSPATIAL, INC., OAKLAND, CALIFORNIA, APRIL 16, 2007.
2. PROPOSED FINAL GRADES INSIDE CLASS II LANDFILL FROM FINAL CAP ID MAP, DATED JUNE 2007.
3. PROPOSED LOCATIONS FOR THE VERTICAL LFG EXTRACTION WELLS, HORIZONTAL TRENCH COLLECTORS AND GCCS COLLECTION PIPING ARE ONLY APPROXIMATE AND MAY CHANGE BASED ON FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.

ISSUED FOR CONSTRUCTION (10-31-14)

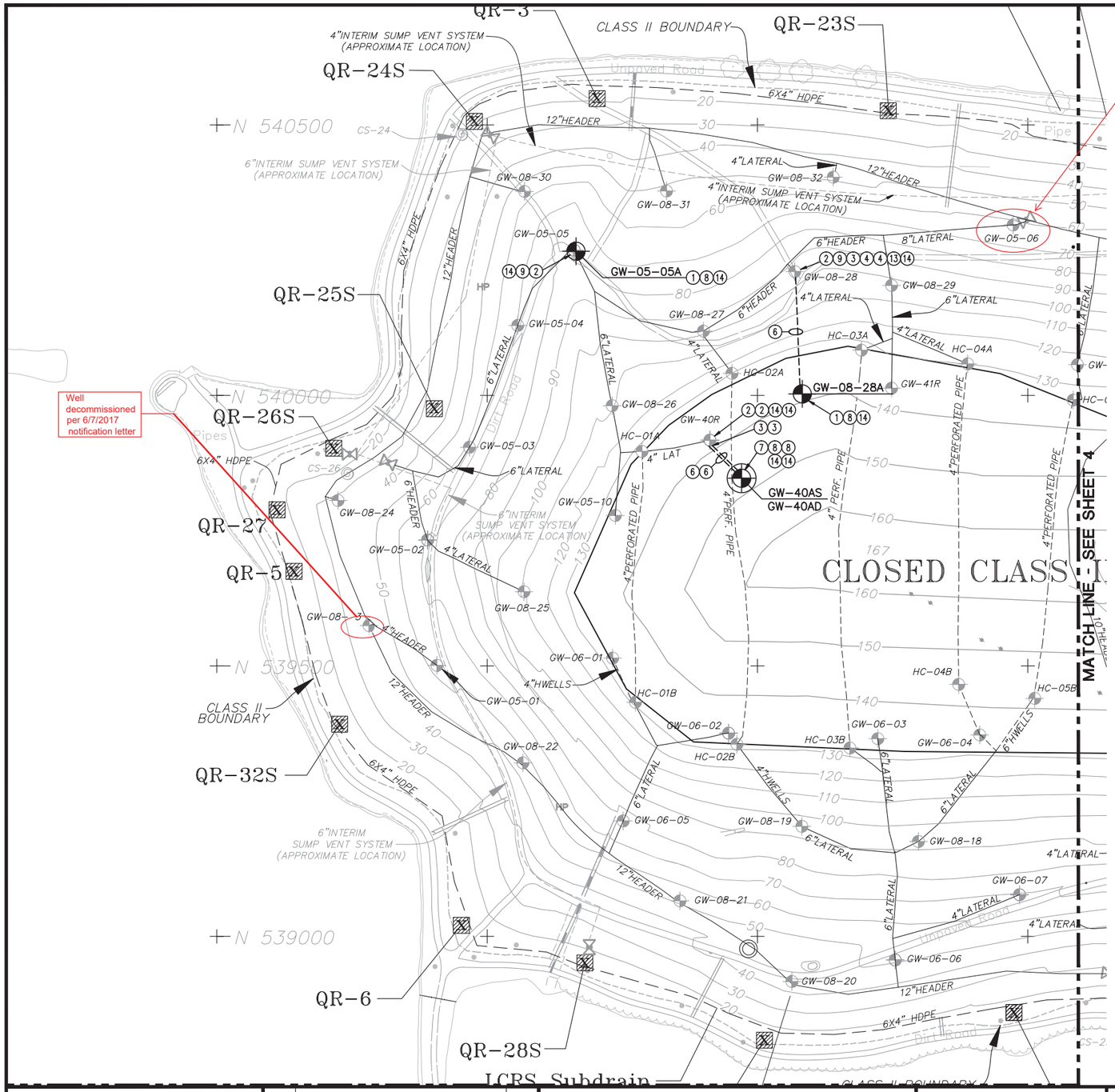
NO.	REVISION DESCRIPTION	BY:

REPUBLIC SERVICES, INC.
WASTE COLLECTION • RECYCLING • TRANSFER • DISPOSAL

TETRA TECH BAS
1360 Valley Vista Drive, Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

WEST CONTRA COSTA COUNTY LANDFILL
2014 GAS SYSTEM IMPROVEMENTS
SITE PLAN AND INDEX TO PLAN SHEETS

DESIGNED BY : RSI/SNA	SCALE : AS SHOWN		
DRAWN BY : S. ANGUS	DATE : 10/31/14	FILE NO.: 02-02-0131IXM	
CHECKED BY : E. TJENSVOLD	DATE : 10/31/14		
APPROVED BY : G. GLASSER	DATE : 10/31/14	SHEET 2 OF 7	



GRAPHIC SCALE

100 50 0 100 200

(IN FEET)

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" QED (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

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
- (1) CONSTRUCTION NOTE

ISSUED FOR CONSTRUCTION (10-31-14)

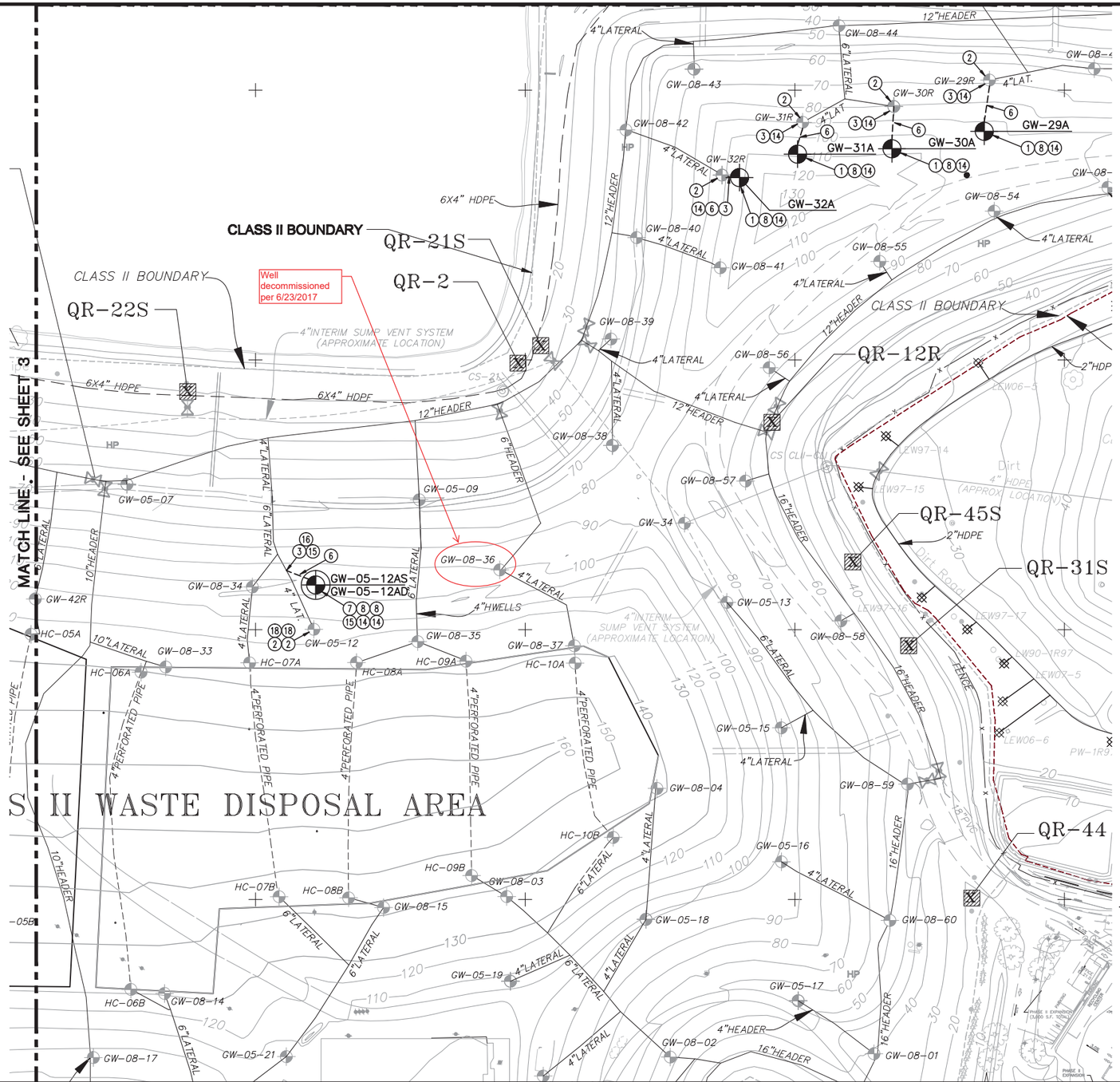
NO.	REVISION DESCRIPTION	BY:

REPUBLIC SERVICES, INC.
WASTE COLLECTION • RECYCLING • TRANSFER • DISPOSAL

TETRA TECH BAS
1360 Valley Vista Drive, Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

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

DESIGNED BY : RSI/SNA	SCALE : AS SHOWN		
DRAWN BY : S. ANGUS	DATE : 10/31/14	FILE NO.: 03–86–0141GSP	
CHECKED BY : E. TJENSVOLD	DATE : 10/31/14		
APPROVED BY : G. GLASSER	DATE : 10/31/14	SHEET 3 OF 7	



GRAPHIC SCALE

100 50 0 100 200

(IN FEET)

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" QED (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

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
- (1) CONSTRUCTION NOTE

ISSUED FOR CONSTRUCTION (10-31-14)

NO.	REVISION DESCRIPTION	BY:

REPUBLIC SERVICES, INC.
WASTE COLLECTION • RECYCLING • TRANSFER • DISPOSAL

TETRA TECH BAS
1360 Valley Vista Drive, Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

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

DESIGNED BY : RSI/SNA	SCALE : AS SHOWN		
DRAWN BY : S. ANGUS	DATE : 10/31/14	FILE NO.: 85-0142GSP	
CHECKED BY : E. TJENSVOLD	DATE : 10/31/14		
APPROVED BY : G. GLASSER	DATE : 10/31/14	SHEET 4 OF 7	

Appendix C – LFGTE Facility Downtime Logs

S-6 Engine Downtime
West Contra Costa Sanitary Landfill
(November 1, 2020 through April 30, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
11/1/2020 0:00	11/2/2020 12:10	36.17	Low temperature
11/2/2020 19:52	11/3/2020 7:20	11.47	Low temperature
11/4/2020 4:36	11/4/2020 7:24	2.80	Low temperature
11/4/2020 17:26	11/5/2020 7:16	13.83	Low temperature
11/5/2020 17:18	11/6/2020 7:12	13.90	Low temperature
11/7/2020 22:36	11/10/2020 7:14	56.63	Low temperature
11/11/2020 9:40	11/11/2020 10:18	0.63	Low temperature
11/13/2020 17:56	11/16/2020 12:08	66.20	Low temperature
11/16/2020 22:42	11/17/2020 7:16	8.57	Low temperature
11/17/2020 15:46	11/18/2020 7:14	15.47	Low temperature
11/18/2020 10:12	11/19/2020 7:12	21.00	Low temperature
11/19/2020 9:38	11/20/2020 7:30	21.87	Low temperature
11/20/2020 8:48	11/20/2020 8:56	0.13	Low temperature
11/20/2020 20:12	11/23/2020 7:24	59.20	Low temperature
11/23/2020 12:58	11/23/2020 13:04	0.10	Low temperature
11/24/2020 2:52	11/24/2020 7:50	4.97	Low temperature
11/24/2020 9:04	11/24/2020 10:10	1.10	Low temperature
11/24/2020 10:22	11/24/2020 10:36	0.23	Low temperature
11/24/2020 17:58	12/1/2020 12:02	162.07	Low temperature
12/1/2020 12:08	12/1/2020 12:14	0.10	Low temperature
12/1/2020 12:56	12/1/2020 13:16	0.33	Low temperature
12/1/2020 13:32	12/1/2020 13:40	0.13	Low temperature
12/1/2020 16:10	12/2/2020 7:12	15.03	Low temperature
12/2/2020 9:52	12/2/2020 10:06	0.23	Low temperature
12/2/2020 11:24	12/3/2020 7:14	19.83	Low temperature
12/3/2020 7:18	12/3/2020 7:44	0.43	Low temperature
12/3/2020 9:46	12/3/2020 9:50	0.07	Low temperature
12/3/2020 12:32	12/3/2020 12:52	0.33	Low temperature
12/3/2020 12:56	12/3/2020 13:04	0.13	Low temperature
12/3/2020 13:16	12/3/2020 13:24	0.13	Low temperature
12/3/2020 13:46	12/3/2020 13:52	0.10	Low temperature
12/3/2020 16:00	12/4/2020 7:18	15.30	Low temperature
12/4/2020 7:38	12/4/2020 7:54	0.27	Low temperature
12/4/2020 8:10	12/4/2020 8:20	0.17	Low temperature
12/4/2020 8:30	12/4/2020 8:38	0.13	Low temperature
12/4/2020 8:46	12/4/2020 9:48	1.03	Low temperature
12/4/2020 13:00	12/4/2020 13:50	0.83	Low temperature
12/5/2020 7:34	12/7/2020 7:14	47.67	Low temperature
12/7/2020 15:10	12/8/2020 7:46	16.60	Low temperature
12/8/2020 18:12	12/17/2020 8:48	206.60	Low temperature
12/18/2020 2:34	12/18/2020 7:14	4.67	Low temperature
12/19/2020 12:28	12/21/2020 7:18	42.83	Low temperature
12/21/2020 7:34	12/21/2020 7:36	0.03	Low temperature
12/21/2020 20:32	12/22/2020 7:12	10.67	Low temperature
12/26/2020 6:14	12/28/2020 7:20	49.10	Low temperature
12/28/2020 11:00	12/28/2020 11:04	0.07	Low temperature
12/28/2020 11:56	12/29/2020 7:34	19.63	Low temperature
1/1/2021 6:36	1/4/2021 7:42	73.10	Low temperature
1/4/2021 8:20	1/4/2021 8:32	0.20	Low temperature
1/4/2021 12:46	1/4/2021 14:06	1.33	Low temperature
1/4/2021 19:02	1/5/2021 7:44	12.70	Low temperature
1/5/2021 13:56	1/6/2021 7:06	17.17	Low temperature
1/7/2021 12:18	1/11/2021 8:32	92.23	Low temperature
1/11/2021 8:44	1/11/2021 9:48	1.07	Low temperature
1/11/2021 10:42	1/11/2021 11:08	0.43	Low temperature

S-6 Engine Downtime
West Contra Costa Sanitary Landfill
(November 1, 2020 through April 30, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
1/11/2021 11:58	1/12/2021 8:04	20.10	Low temperature
1/12/2021 8:16	1/12/2021 9:16	1.00	Low temperature
1/12/2021 16:38	1/13/2021 6:44	14.10	Low temperature
1/13/2021 14:14	1/14/2021 8:04	17.83	Low temperature
1/14/2021 8:18	1/14/2021 8:36	0.30	Low temperature
1/14/2021 13:44	1/15/2021 7:36	17.87	Low temperature
1/15/2021 14:20	1/18/2021 7:12	64.87	Low temperature
1/19/2021 2:40	1/20/2021 13:04	34.40	Low temperature
1/20/2021 18:34	1/21/2021 7:22	12.80	Low temperature
1/21/2021 9:10	1/21/2021 10:42	1.53	Low temperature
1/23/2021 3:58	1/25/2021 7:26	51.47	Low temperature
1/25/2021 8:20	1/25/2021 8:26	0.10	Low temperature
1/25/2021 16:44	1/26/2021 13:04	20.33	Low temperature
1/26/2021 13:38	1/27/2021 8:42	19.07	Low temperature
1/27/2021 10:48	1/27/2021 11:10	0.37	Low temperature
1/28/2021 21:54	1/29/2021 6:32	8.63	Low temperature
1/29/2021 15:10	2/1/2021 0:00	56.83	Low temperature
2/1/2021 0:00	2/1/2021 7:04	7.07	Low temperature
2/1/2021 23:42	2/2/2021 7:00	7.30	Low temperature
2/2/2021 21:02	2/3/2021 7:00	9.97	Low temperature
2/3/2021 14:22	2/4/2021 6:26	16.07	Low temperature
2/4/2021 13:56	2/5/2021 7:04	17.13	Low temperature
2/5/2021 9:40	2/5/2021 9:44	0.07	Low temperature
2/5/2021 14:16	2/8/2021 7:46	65.50	Low temperature
2/8/2021 20:00	2/9/2021 6:50	10.83	Low temperature
2/9/2021 9:22	2/9/2021 9:54	0.53	Low temperature
2/9/2021 10:12	2/9/2021 10:44	0.53	Low temperature
2/10/2021 4:48	2/10/2021 7:18	2.50	Low temperature
2/12/2021 11:30	2/12/2021 11:50	0.33	Low temperature
2/12/2021 13:32	2/16/2021 7:06	89.57	Low temperature
2/16/2021 7:18	2/17/2021 10:16	26.97	Low temperature
2/26/2021 13:04	3/1/2021 0:00	58.93	Power outage
3/1/2021 0:00	3/1/2021 8:08	8.13	Low temperature
3/3/2021 19:16	3/4/2021 7:00	11.73	Low temperature
3/9/2021 19:00	3/10/2021 7:44	12.73	Low temperature
3/10/2021 7:56	3/10/2021 7:58	0.03	Low temperature
3/10/2021 8:02	3/10/2021 8:04	0.03	Low temperature
3/10/2021 8:40	3/10/2021 9:04	0.40	Low temperature
3/10/2021 20:26	3/11/2021 11:08	14.70	Low temperature
3/13/2021 21:04	3/15/2021 7:16	34.20	Power outage
3/17/2021 14:52	3/18/2021 8:14	17.37	Low temperature
3/20/2021 19:30	3/22/2021 7:40	36.17	Low temperature
3/25/2021 22:16	3/26/2021 7:22	9.10	Low temperature
3/26/2021 21:38	3/29/2021 7:50	58.20	Low temperature
3/29/2021 20:58	3/30/2021 7:02	10.07	Low temperature
3/30/2021 20:36	3/31/2021 10:42	14.10	Low temperature
4/1/2021 11:38	4/1/2021 12:14	0.60	Low temperature
4/1/2021 20:32	4/2/2021 6:52	10.33	Low temperature
4/3/2021 1:40	4/5/2021 7:04	53.40	Low temperature
4/5/2021 15:54	4/6/2021 6:38	14.73	Low temperature
4/6/2021 23:44	4/7/2021 6:54	7.17	Low temperature
4/7/2021 8:10	4/7/2021 8:18	0.13	Low temperature
4/8/2021 16:36	4/9/2021 6:52	14.27	Low temperature
4/9/2021 23:00	4/12/2021 8:18	57.30	Low temperature
4/12/2021 9:10	4/12/2021 9:18	0.13	Low temperature

S-6 Engine Downtime
West Contra Costa Sanitary Landfill
(November 1, 2020 through April 30, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
4/14/2021 3:04	4/14/2021 6:46	3.70	Low temperature
4/14/2021 22:38	4/15/2021 7:02	8.40	Low temperature
4/15/2021 7:14	4/15/2021 7:42	0.47	Low temperature
4/16/2021 21:26	4/19/2021 7:00	57.57	Low temperature
4/22/2021 16:22	4/23/2021 6:22	14.00	Low temperature
4/23/2021 16:34	4/27/2021 6:56	86.37	Low temperature
4/27/2021 7:22	4/27/2021 7:36	0.23	Low temperature
4/27/2021 21:10	4/28/2021 6:28	9.30	Low temperature
4/29/2021 12:36	4/30/2021 6:56	18.33	Low temperature
TOTAL DOWNTIME (HOURS):		**2385.33**	

*The S-6 Engine was offline at the beginning of November 2020. For reporting purposes, the shutdown was calculated as having begun on November 1, 2020 at 00:00.

S-5 Engine Downtime
West Contra Costa Sanitary Landfill
(November 1, 2020 through April 30, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
11/1/2020 0:00	5/1/2021 0:00	4344.00	See note below
TOTAL DOWNTIME (HOURS):		**4344.00**	

*The S-5 engine has been out of service since December 2017; and therefore, did not operate during the reporting period.

S-37 Engine Downtime
West Contra Costa Sanitary Landfill
(November 1, 2020 through April 30, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
11/1/2020 0:00	5/1/2021 0:00	4344.00	See note below
TOTAL DOWNTIME (HOURS):		**4344.00**	

*The S-37 engine engine is no longer able to operate due to a catastrophic failure which occurred in March 2018; and therefore, did not operate during the reporting period.

Appendix D – Surface Emission and GCCS Component Leak Monitoring Results

February 26, 2021
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 Fourth 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 fourth 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

Fourth Quarter 2020

Presented to:

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

SCS FIELD SERVICES

File No. 07219040.00 | February 26, 2021

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 Fourth Quarter 2020

INTRODUCTION

This letter provides results of the November 5, 6, 9, 10 and 11, 2020 and December 4, 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 November 5, 6, 9, 10 and 11, 2020 and December 4, 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 November 5, 6, 9, 10 and 11, 2020 and December 4, 2020, SCS performed fourth quarter 2020 surface emissions monitoring testing as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that three (3) 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 these locations 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 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. 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 quarterly monitoring of the landfill was done 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. Therefore, in accordance with the rule, the site will return to annual monitoring on a 100-foot spacing beginning with the 2021 calendar year.

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 November 5, 6, 9, 10 and 11, 2020 and December 4, 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 November 5, 6, 9, 10 and 11, 2020, SCS performed fourth quarter 2020 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that three (3) locations exceeded the 500 ppmv maximum concentration. The required 10 and 30-day NSPS and LMR follow-up monitoring (performed on November 6, 2020 and December 6, 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, several girds 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 annual 2021 monitoring event.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On November 5, 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 1.7 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

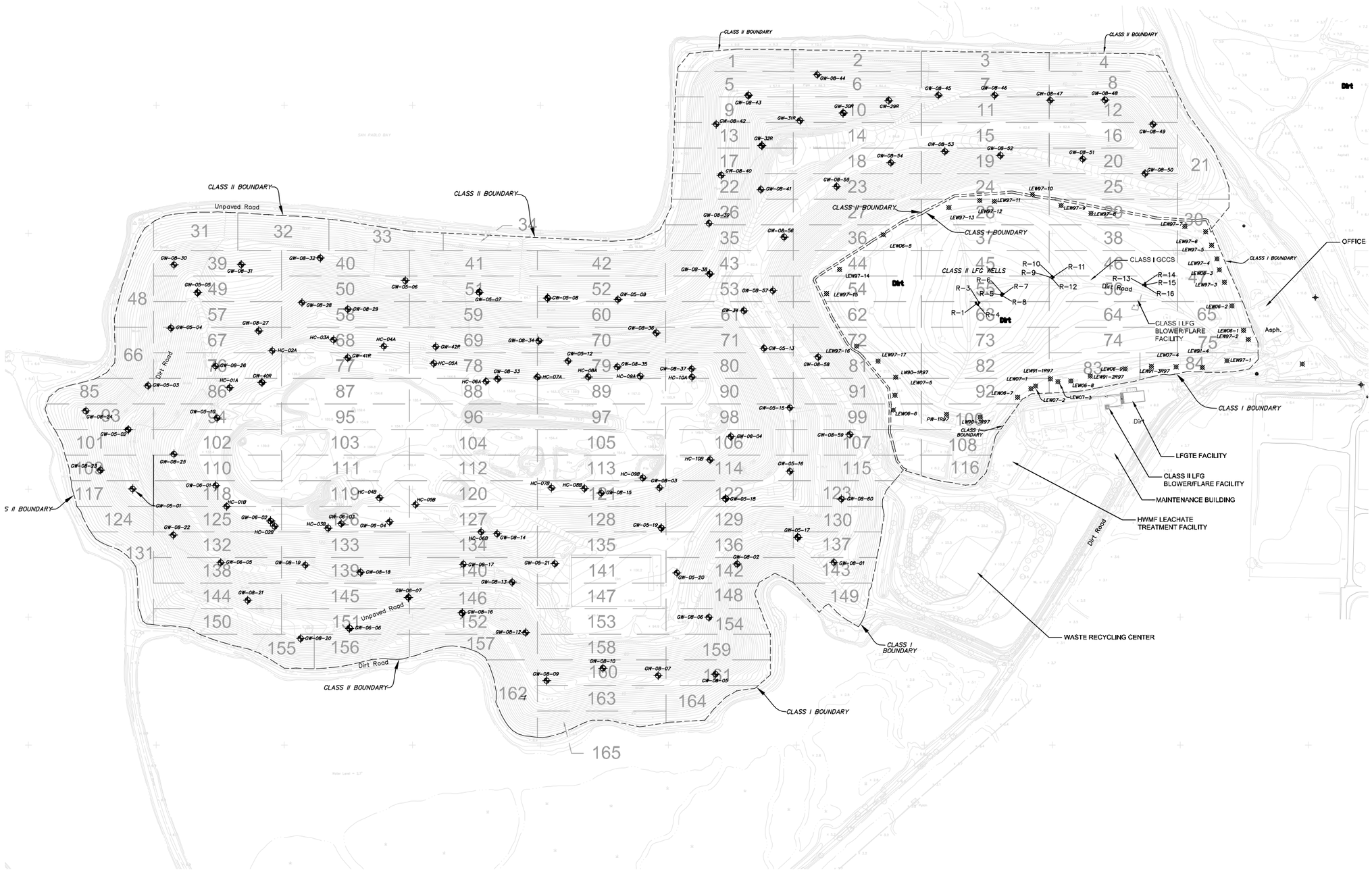
In accordance with our approved Work Scope, the next annual event is scheduled to be performed by the end of calendar year 2021.

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
- 1 — SEM GRID BLOCK
- 1 — SEM GRID BLOCK WITH NO WASTE IN PLACE

N

0 200 400

SCALE IN FEET
SCALED FOR
22"x34" SIZE SHEET

NOTES:

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY HJW GEOSPATIAL. DATE OF PHOTOGRAPHY: MARCH 20, 2008. DATUM: CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD27.

DRAFT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
	DATE OF ISSUE 5/11/2011	DRAWN BY JDW; DESIGNED BY JDW	CHECKED BY REF		APPROVED BY PJS	

CORNERSTONE Environmental Group, LLC

WEST CONTRA COSTA COUNTY SANITARY LANDFILL
CONTRA COSTA COUNTY, CALIFORNIA

SURFACE EMISSIONS MONITORING
GRID MAP

SHEET NO. **1**

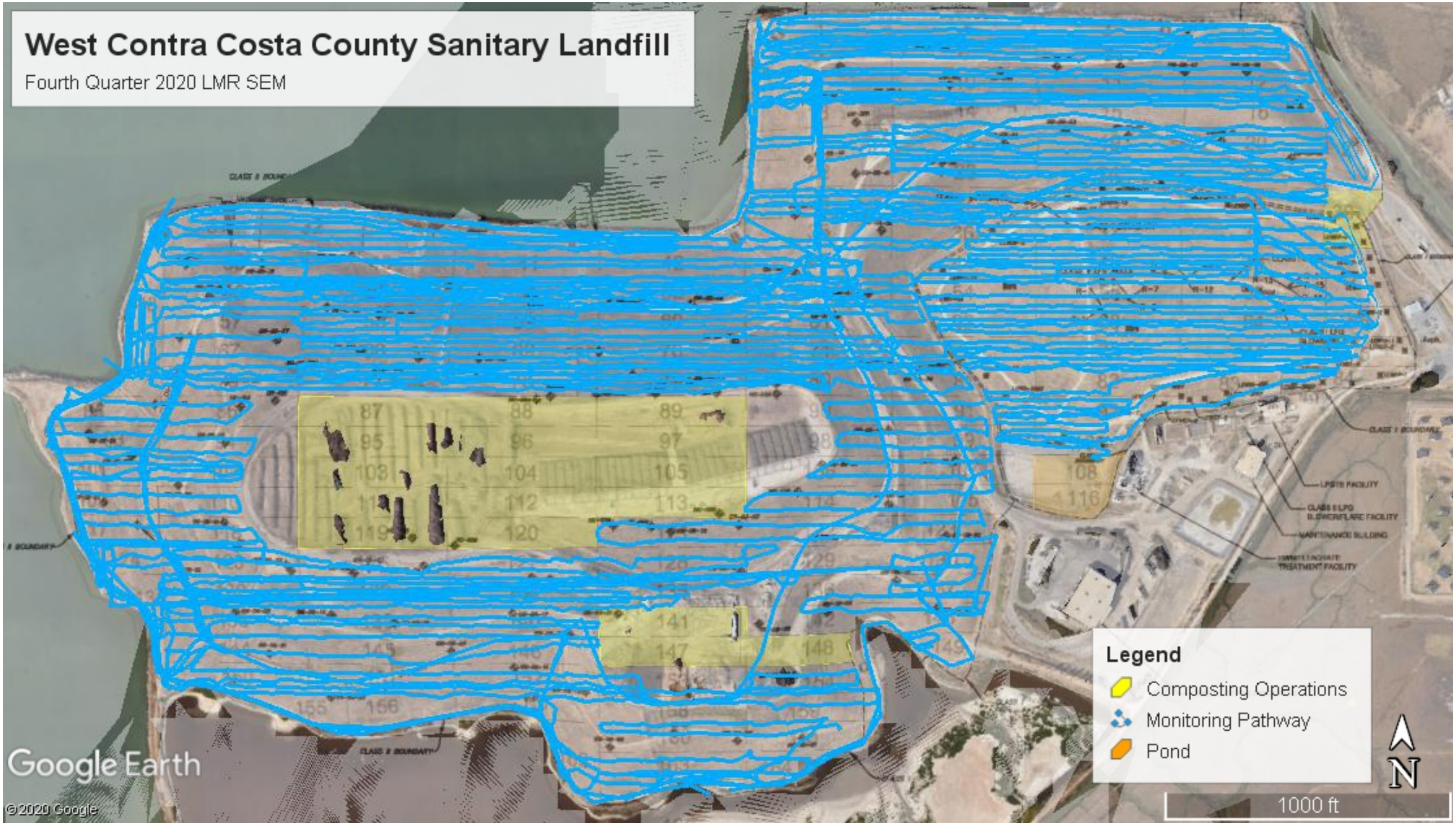
PROJECT NO. 110218

1" 1/2" 0" 1"

File: K:\PROJECTS\REPUBLIC (CORP)\xxxxx - CA LF WCA_West County\SEM_PROJECT DRAWINGS\dwg\SEMWCCSG- 2011 SEM GRID MAP.dwg Layout: Layout1 User: jonathonwise May 11, 2011 - 2:56pm

Attachment 2

Surface Pathway



Fourth 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

Fourth Quarter 2020

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

West Contra Costa County Landfill, Contra Costa County, California

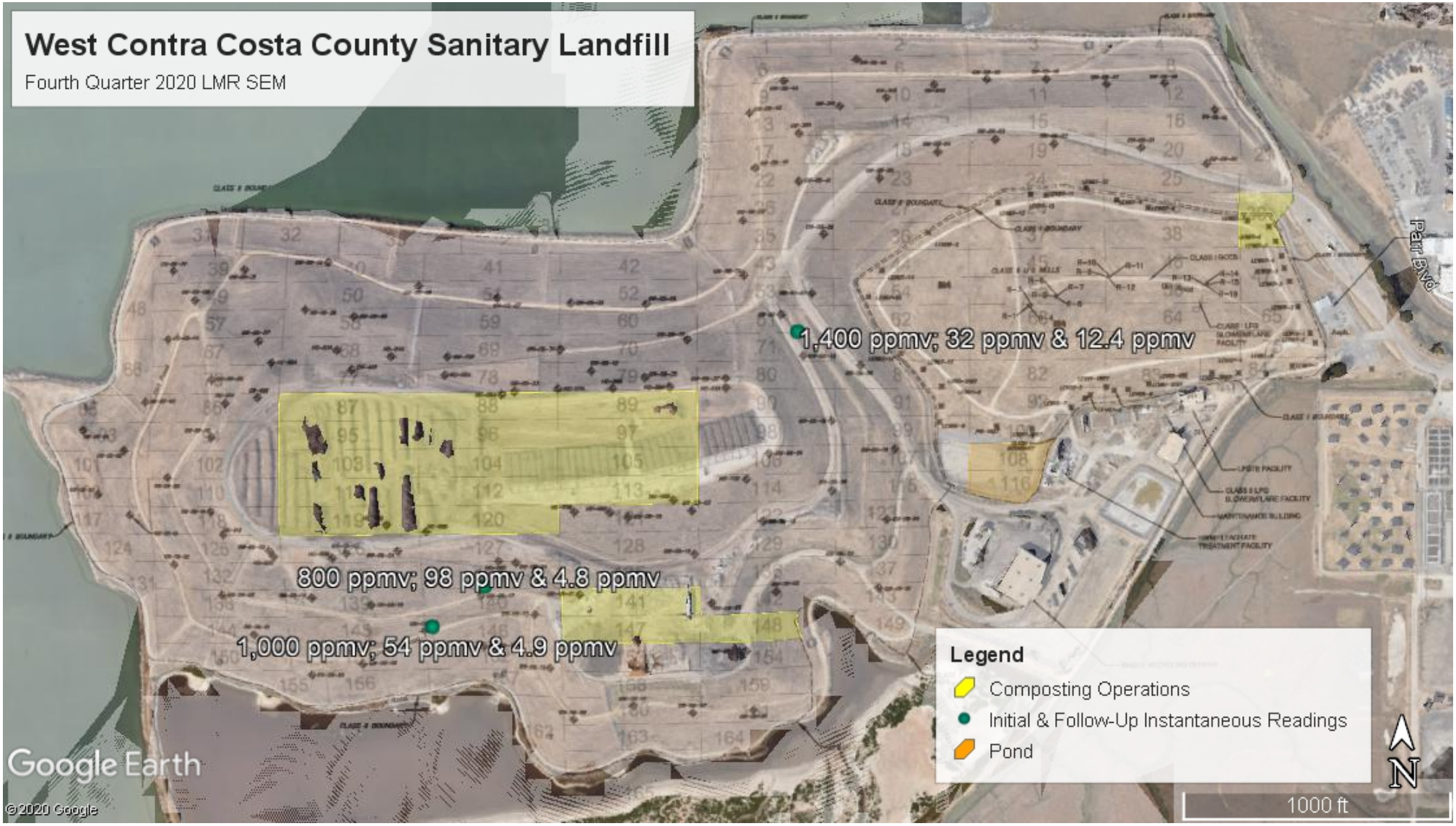
Instantaneous Data Report for November 5, 6, 9, 10 and 11, 2020 and December 4, 2020

Location	Initial Concentration (ppmv) November 6, 2020	First 10-Day Concentration (ppmv) November 6, 2020	30-Day Concentration (ppmv) December 6, 2020
607	1,000	54	4.9
817	800	98	4.8
034R	1,400	32	12.4

Pressurized Pipe and Component Results

Route	Date	Concentration (ppmv)
Flare	11/5/2020	1.7

No other exceedances of the 200 or 500 ppm thresholds were observed during the monitoring performed during the fourth quarter 2020. The highest reading observed was 1,400 ppmv.



Fourth 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

Fourth 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	11/9/2020	2.01	
W.CoCo 002	11/9/2020	1.29	
W.CoCo 003	11/9/2020	1.46	
W.CoCo 004	11/9/2020	1.23	
W.CoCo 005	11/9/2020	1.64	
W.CoCo 006	11/9/2020	1.77	
W.CoCo 007	11/9/2020	1.86	
W.CoCo 008	11/9/2020	1.97	
W.CoCo 009	11/9/2020	1.44	
W.CoCo 010	11/9/2020	1.40	
W.CoCo 011	11/9/2020	1.84	
W.CoCo 012	11/9/2020	1.89	
W.CoCo 013	11/9/2020	1.32	
W.CoCo 014	11/9/2020	1.22	
W.CoCo 015	11/9/2020	1.26	
W.CoCo 016	11/9/2020	1.29	
W.CoCo 017	11/9/2020	2.14	
W.CoCo 018	11/9/2020	1.78	
W.CoCo 019	11/9/2020	1.80	
W.CoCo 020	11/9/2020	1.85	
W.CoCo 021	11/9/2020	1.93	
W.CoCo 022	11/9/2020	2.43	
W.CoCo 023	11/9/2020	2.34	
W.CoCo 024	11/9/2020	4.44	
W.CoCo 025	11/9/2020	2.39	
W.CoCo 026	11/9/2020	2.34	
W.CoCo 027	11/9/2020	2.87	
W.CoCo 028	11/5/2020	5.00	
W.CoCo 029	11/9/2020	2.62	
W.CoCo 030	--	--	Active
W.CoCo 031	11/9/2020	3.63	
W.CoCo 032	11/9/2020	1.88	
W.CoCo 033	11/9/2020	2.30	
W.CoCo 034	11/9/2020	4.20	
W.CoCo 035	11/9/2020	1.09	
W.CoCo 036	11/9/2020	1.85	
W.CoCo 037	11/5/2020	4.03	
W.CoCo 038	11/9/2020	4.97	
W.CoCo 039	11/9/2020	1.92	
W.CoCo 040	11/9/2020	2.08	
W.CoCo 041	11/9/2020	3.02	
W.CoCo 042	11/9/2020	2.67	
W.CoCo 043	11/9/2020	1.73	

Fourth 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 044	11/9/2020	4.01	
W.CoCo 045	11/5/2020	1.76	
W.CoCo 046	11/5/2020	1.68	
W.CoCo 047	11/5/2020	1.05	
W.CoCo 049	11/9/2020	2.00	
W.CoCo 050	11/9/2020	1.79	
W.CoCo 051	11/9/2020	2.13	
W.CoCo 052	11/9/2020	2.34	
W.CoCo 053	11/9/2020	2.13	
W.CoCo 054	11/5/2020	2.45	
W.CoCo 055	11/5/2020	1.90	
W.CoCo 056	11/5/2020	1.55	
W.CoCo 057	11/10/2020	3.72	
W.CoCo 058	11/10/2020	3.66	
W.CoCo 059	11/10/2020	4.28	
W.CoCo 060	11/10/2020	4.71	
W.CoCo 061	11/10/2020	4.54	
W.CoCo 062	11/10/2020	5.23	
W.CoCo 063	11/5/2020	2.63	
W.CoCo 064	11/5/2020	2.57	
W.CoCo 065	11/5/2020	2.52	
W.CoCo 066	11/10/2020	4.36	
W.CoCo 067	11/10/2020	1.24	
W.CoCo 068	11/10/2020	1.55	
W.CoCo 069	11/10/2020	1.98	
W.CoCo 070	11/10/2020	2.25	
W.CoCo 071	11/10/2020	1.42	
W.CoCo 072	11/10/2020	2.69	
W.CoCo 073	11/5/2020	1.71	
W.CoCo 074	11/5/2020	1.70	
W.CoCo 075	11/5/2020	1.62	
W.CoCo 076	11/10/2020	3.97	
W.CoCo 077	11/10/2020	3.62	
W.CoCo 078	11/10/2020	3.67	
W.CoCo 079	11/10/2020	4.06	
W.CoCo 080	11/10/2020	3.98	
W.CoCo 081	11/10/2020	4.50	
W.CoCo 082	11/5/2020	1.53	
W.CoCo 083	11/5/2020	1.49	
W.CoCo 084	11/5/2020	1.40	
W.CoCo 085	11/11/2020	3.39	
W.CoCo 086	11/11/2020	3.42	
W.CoCo 087	--	--	Composting Operations

Fourth 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 088	--	--	Composting Operations
W.CoCo 089	--	--	Composting Operations
W.CoCo 090	11/11/2020	4.65	
W.CoCo 091	11/11/2020	4.63	
W.CoCo 092	11/5/2020	2.38	
W.CoCo 093	11/10/2020	2.45	
W.CoCo 094	11/10/2020	3.35	
W.CoCo 095	--	--	Composting Operations
W.CoCo 096	--	--	Composting Operations
W.CoCo 097	--	--	Composting Operations
W.CoCo 098	11/11/2020	4.76	
W.CoCo 099	11/11/2020	4.38	
W.CoCo 100	11/5/2020	1.57	
W.CoCo 101	11/11/2020	3.54	
W.CoCo 102	11/11/2020	4.44	
W.CoCo 103	--	--	Composting Operations
W.CoCo 104	--	--	Composting Operations
W.CoCo 105	--	--	Composting Operations
W.CoCo 106	11/11/2020	4.26	
W.CoCo 107	11/11/2020	4.30	
W.CoCo 108	--	--	Pond
W.CoCo 109	11/11/2020	3.94	
W.CoCo 110	11/11/2020	5.52	
W.CoCo 111	--	--	Composting Operations
W.CoCo 112	--	--	Composting Operations
W.CoCo 113	--	--	Composting Operations
W.CoCo 114	11/11/2020	4.27	
W.CoCo 115	11/11/2020	4.34	
W.CoCo 116	--	--	Pond
W.CoCo 117	11/11/2020	4.16	
W.CoCo 118	11/11/2020	4.74	
W.CoCo 119	--	--	Composting Operations
W.CoCo 120	--	--	Composting Operations
W.CoCo 121	11/11/2020	3.88	
W.CoCo 122	11/11/2020	3.95	
W.CoCo 123	11/11/2020	4.31	
W.CoCo 124	11/11/2020	3.52	
W.CoCo 125	11/11/2020	5.35	
W.CoCo 126	11/11/2020	4.83	
W.CoCo 127	11/11/2020	3.97	
W.CoCo 128	11/11/2020	3.46	
W.CoCo 129	11/11/2020	3.33	
W.CoCo 130	11/11/2020	4.16	

Fourth 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 131	11/11/2020	2.67	
W.CoCo 132	11/11/2020	3.32	
W.CoCo 133	11/11/2020	3.38	
W.CoCo 134	11/11/2020	2.93	
W.CoCo 135	11/11/2020	2.72	
W.CoCo 136	11/11/2020	2.80	
W.CoCo 137	11/11/2020	3.78	
W.CoCo 138	11/11/2020	2.12	
W.CoCo 139	11/11/2020	4.05	
W.CoCo 140	11/11/2020	2.33	
W.CoCo 141	--	--	Composting Operations
W.CoCo 142	11/11/2020	1.65	
W.CoCo 143	11/11/2020	1.67	
W.CoCo 144	11/11/2020	3.47	
W.CoCo 145	11/11/2020	3.39	
W.CoCo 146	11/11/2020	3.24	
W.CoCo 147	--	--	Composting Operations
W.CoCo 148	--	--	Composting Operations
W.CoCo 149	11/11/2020	3.43	
W.CoCo 150	11/11/2020	2.41	
W.CoCo 151	11/11/2020	2.39	
W.CoCo 152	11/11/2020	2.41	
W.CoCo 153	11/11/2020	2.36	
W.CoCo 154	11/11/2020	2.43	
W.CoCo 155	11/11/2020	2.00	
W.CoCo 156	11/11/2020	1.87	
W.CoCo 157	11/11/2020	1.87	
W.CoCo 158	11/11/2020	1.82	
W.CoCo 159	11/11/2020	1.85	
W.CoCo 160	11/11/2020	2.78	
W.CoCo 161	11/11/2020	2.80	
W.CoCo 162	11/11/2020	1.47	
W.CoCo 163	11/11/2020	2.40	
W.CoCo 164	11/11/2020	3.02	
W.CoCo 165	11/11/2020	3.13	

Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 11-5-20 Site Name: West Contra

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 57 °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: 4106 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	2	499	1	2
2	1	501	1	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%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 128312
Counters Observed for the Zero= 2331

Trial 2:
Counts Observed for the Span= 129772
Counters Observed for the Zero= 2384

Trial 3:
Counts Observed for the Span= 131172
Counters Observed for the Zero= 2433

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.2 ppm

Downwind Location Description: Grid 136 Reading: 1.3 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: 11-5-20 Site Name: West contra

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 57 °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: 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
2	3	501	1	2
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%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 116940
Counters Observed for the Zero= 2932

Trial 2:
Counts Observed for the Span= 119948
Counters Observed for the Zero= 2892

Trial 3:
Counts Observed for the Span= 122492
Counters Observed for the Zero= 3113

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plare Reading: 1.2 ppm

Downwind Location Description: Grid 132 Reading: 1.3 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: 11-5-20 Site Name: West Contra

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 57 °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	501	1	2
2	2	499	1	2
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:
Counts Observed for the Span= 141652
Counters Observed for the Zero= 3611

Trial 2:
Counts Observed for the Span= 143916
Counters Observed for the Zero= 3591

Trial 3:
Counts Observed for the Span= 143248
Counters Observed for the Zero= 3625

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.2 ppm

Downwind Location Description: Gride 136 Reading: 1.3 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: 11-5-20 Site Name: West Contra

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: SW Barometric Pressure: 30 "Hg

Air Temperature: 63 °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: 4106 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	2	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%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 130923
Counters Observed for the Zero= 2421

Trial 2:
Counts Observed for the Span= 130158
Counters Observed for the Zero= 2389

Trial 3:
Counts Observed for the Span= 129875
Counters Observed for the Zero= 2302

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plant Reading: 1.2 ppm

Downwind Location Description: Grid 136 Reading: 1.3 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: 11-5-20 Site Name: West Contra

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: SW Barometric Pressure: 30 "Hg

Air Temperature: 63 °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	2	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%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140511
Counters Observed for the Zero= 3620

Trial 2:
Counts Observed for the Span= 141721
Counters Observed for the Zero= 3521

Trial 3:
Counts Observed for the Span= 142137
Counters Observed for the Zero= 3638

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plant Reading: 1.7 ppm

Downwind Location Description: Grid 136 Reading: 1.3 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: 11-5-20 Site Name: West contra

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: SW Barometric Pressure: 30 "Hg

Air Temperature: 63 °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: 1215 Cal Gas Concentration: 500ppm

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

Average Difference:

*Perform recalibration if average difference is greater than 10

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

= 100%- _____ /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 118830
Counters Observed for the Zero= 3112

Trial 2:
Counts Observed for the Span= 119812
Counters Observed for the Zero= 2981

Trial 3:
Counts Observed for the Span= 119381
Counters Observed for the Zero= 2831

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.2 ppm

Downwind Location Description: Grid 136 Reading: 1.3 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: 11-9-20 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 44 °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: 406 Cal Gas Concentration: 500ppm

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

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:
Counts Observed for the Span= 126932
Counters Observed for the Zero= 2363

Trial 2:
Counts Observed for the Span= 128244
Counters Observed for the Zero= 2344

Trial 3:
Counts Observed for the Span= 130204
Counters Observed for the Zero= 2344

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 36 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: 11-9-20 Site Name: WCC

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 44 °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	501	1	3
2	.3	501	1	7
3	.2	500	0	3

Average Difference: .7

*Perform recalibration if average difference is greater than 10

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

= 100%- .7 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 133988
Counters Observed for the Zero= 3785

Trial 2:
Counts Observed for the Span= 134096
Counters Observed for the Zero= 3770

Trial 3:
Counts Observed for the Span= 135220
Counters Observed for the Zero= 3760

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 36 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: 11-9-20 Site Name: WCC

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 44 °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	.2	501	1	3
2	.2	501	1	3
3	.2	501	1	3

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:
Counts Observed for the Span= 109588
Counters Observed for the Zero= 3936

Trial 2:
Counts Observed for the Span= 113740
Counters Observed for the Zero= 3937

Trial 3:
Counts Observed for the Span= 114740
Counters Observed for the Zero= 3950

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 36 Reading: 1.3 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: 11-9-20 Site Name: WCC

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 44 °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	.2	500	0	3
2	.2	501	1	3
3	.3	502	2	3

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:
Counts Observed for the Span= 118908
Counters Observed for the Zero= 3165

Trial 2:
Counts Observed for the Span= 118644
Counters Observed for the Zero= 3168

Trial 3:
Counts Observed for the Span= 118276
Counters Observed for the Zero= 3165

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 560 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm

Downwind Location Description: Grid 36 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: 11-9-20 Site Name: WCC Post

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: NE Barometric Pressure: 30 "Hg

Air Temperature: 59 °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: 4106 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.3	500	0	4
2	.3	502	2	3
3	.2	500	0	3

Average Difference: .7

*Perform recalibration if average difference is greater than 10

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

= 100%- .7 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129094
Counters Observed for the Zero= 2163

Trial 2:
Counts Observed for the Span= 130766
Counters Observed for the Zero= 2122

Trial 3:
Counts Observed for the Span= 132119
Counters Observed for the Zero= 2105

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 36 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: 11-9-20 Site Name: WCC

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: NE Barometric Pressure: 30 "Hg

Air Temperature: 59 °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	.3	501	1	3
2	.2	501	1	3
3	.3	501	1	3

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:
Counts Observed for the Span= 136377
Counters Observed for the Zero= 3541

Trial 2:
Counts Observed for the Span= 136999
Counters Observed for the Zero= 3498

Trial 3:
Counts Observed for the Span= 137058
Counters Observed for the Zero= 3511

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 36 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: 11-9-20 Site Name: WCC

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: NE Barometric Pressure: 30 "Hg

Air Temperature: 59 °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	.3	500	0	3
2	.3	501	1	3
3	.3	500	0	4

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:
Counts Observed for the Span= 114634
Counters Observed for the Zero= 3656

Trial 2:
Counts Observed for the Span= 117009
Counters Observed for the Zero= 3612

Trial 3:
Counts Observed for the Span= 116617
Counters Observed for the Zero= 3681

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 36 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: 11-9-20 Site Name: WCC Post

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: NE Barometric Pressure: 30 "Hg

Air Temperature: 59 °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	.2	501	1	3
2	.2	500	0	3
3	.2	502	2	3

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:
Counts Observed for the Span= 121655
Counters Observed for the Zero= 2871

Trial 2:
Counts Observed for the Span= 121309
Counters Observed for the Zero= 2848

Trial 3:
Counts Observed for the Span= 121504
Counters Observed for the Zero= 2870

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 506 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.1 ppm

Downwind Location Description: Grid 36 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: 11-10-20 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 41 °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: 4106 Cal Gas Concentration: 500ppm

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

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:
Counts Observed for the Span= 115024
Counters Observed for the Zero= 2597

Trial 2:
Counts Observed for the Span= 118701
Counters Observed for the Zero= 2550

Trial 3:
Counts Observed for the Span= 119100
Counters Observed for the Zero= 2581

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 36 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: 11-10-20 Site Name: WCC

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 41 °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	.2	500	0	3
2	.2	502	2	3
3	.3	500	0	4

Average Difference: .7

*Perform recalibration if average difference is greater than 10

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

= 100%- .7 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 105976
Counters Observed for the Zero= 4280

Trial 2:
Counts Observed for the Span= 108972
Counters Observed for the Zero= 4266

Trial 3:
Counts Observed for the Span= 109440
Counters Observed for the Zero= 4250

Post Monitoring Calibration Check

Zero Air Reading: 6 ppm Cal Gas Reading: 566 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.2 ppm

Downwind Location Description: Grid 36 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: 11-10-20 Site Name: WCC

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 41 °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	.3	502	2	3
2	.2	502	2	3
3	.3	500	0	3

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:
Counts Observed for the Span= 109084
Counters Observed for the Zero= 3288

Trial 2:
Counts Observed for the Span= 109508
Counters Observed for the Zero= 3285

Trial 3:
Counts Observed for the Span= 109672
Counters Observed for the Zero= 33041

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 36 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: 11-10-20 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: N Barometric Pressure: >0 "Hg

Air Temperature: 59 °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: 4106 Cal Gas Concentration: 500ppm

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

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:
Counts Observed for the Span= 118338
Counters Observed for the Zero= 2210

Trial 2:
Counts Observed for the Span= 121605
Counters Observed for the Zero= 2254

Trial 3:
Counts Observed for the Span= 122743
Counters Observed for the Zero= 2318

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 36 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: 11-10-20 Site Name: WCC post

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 59 °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	-3	501	1	3
2	.2	500	0	3
3	-3	501	1	3

Average Difference: .7

*Perform recalibration if average difference is greater than 10

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

= 100%- .7 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 109877
Counters Observed for the Zero= 3918

Trial 2:
Counts Observed for the Span= 110340
Counters Observed for the Zero= 3933

Trial 3:
Counts Observed for the Span= 111699
Counters Observed for the Zero= 3939

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

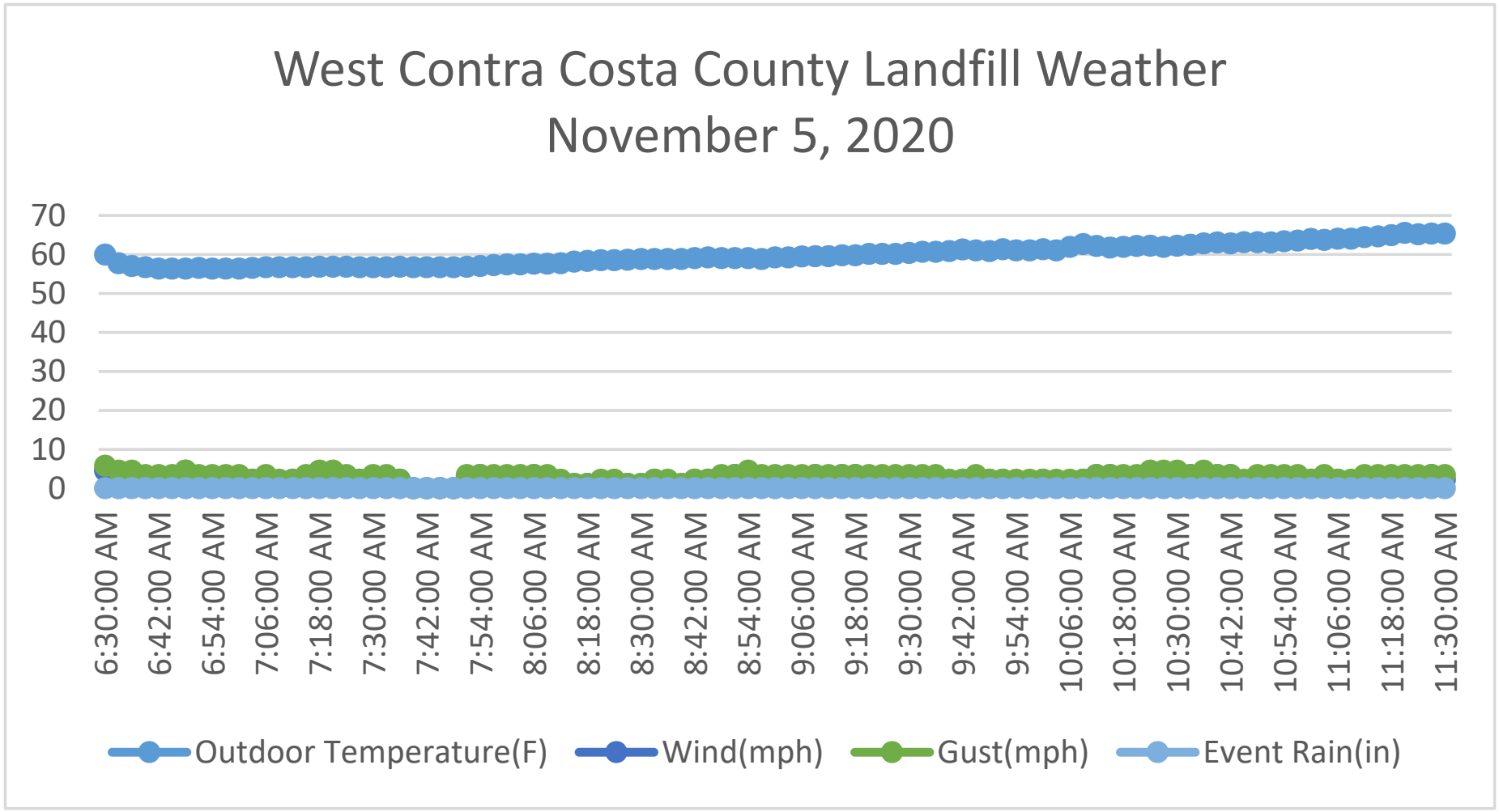
Upwind Location Description: entrance Reading: 1.2 ppm

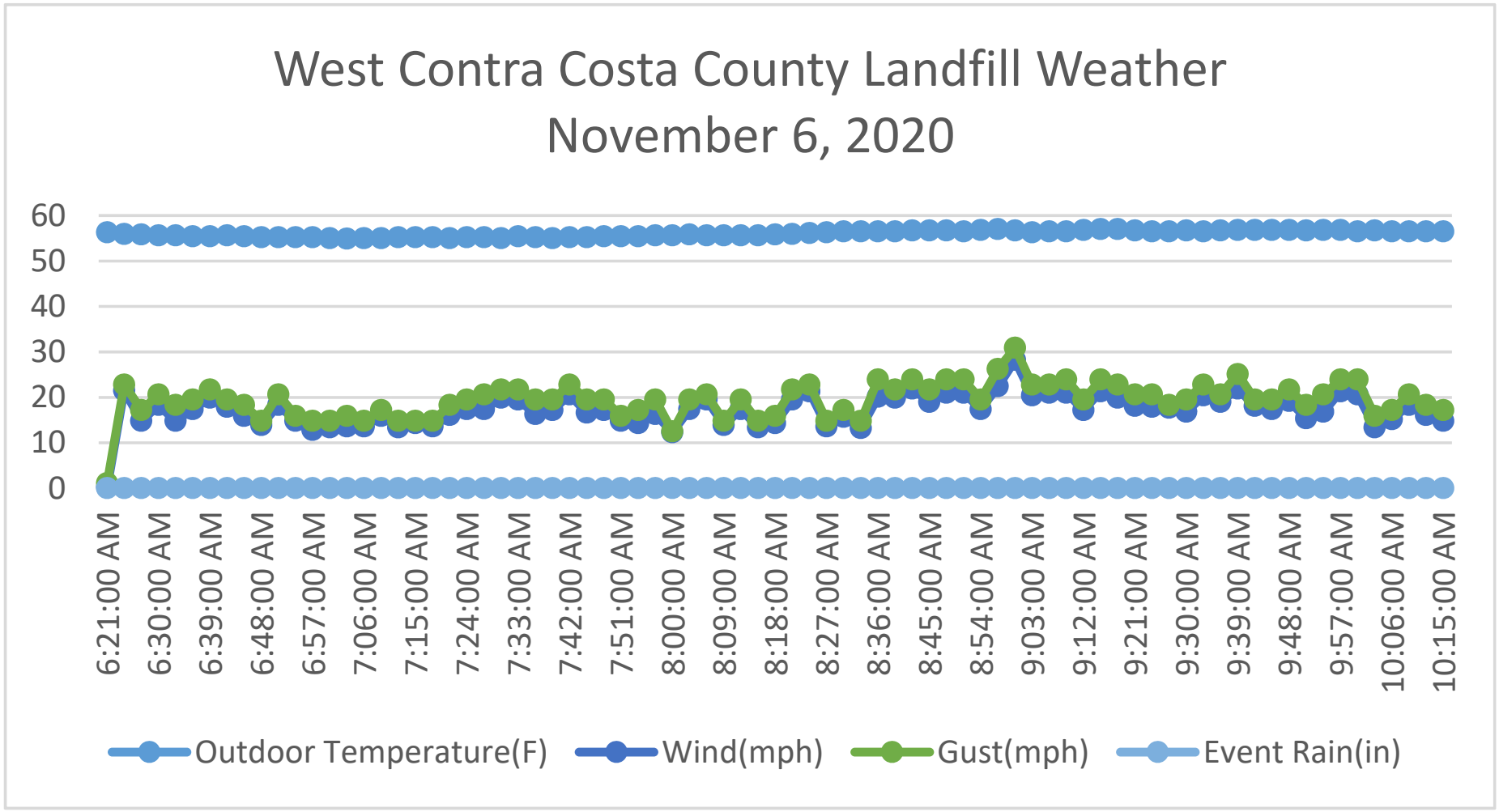
Downwind Location Description: Grid 36 Reading: 1.6 ppm

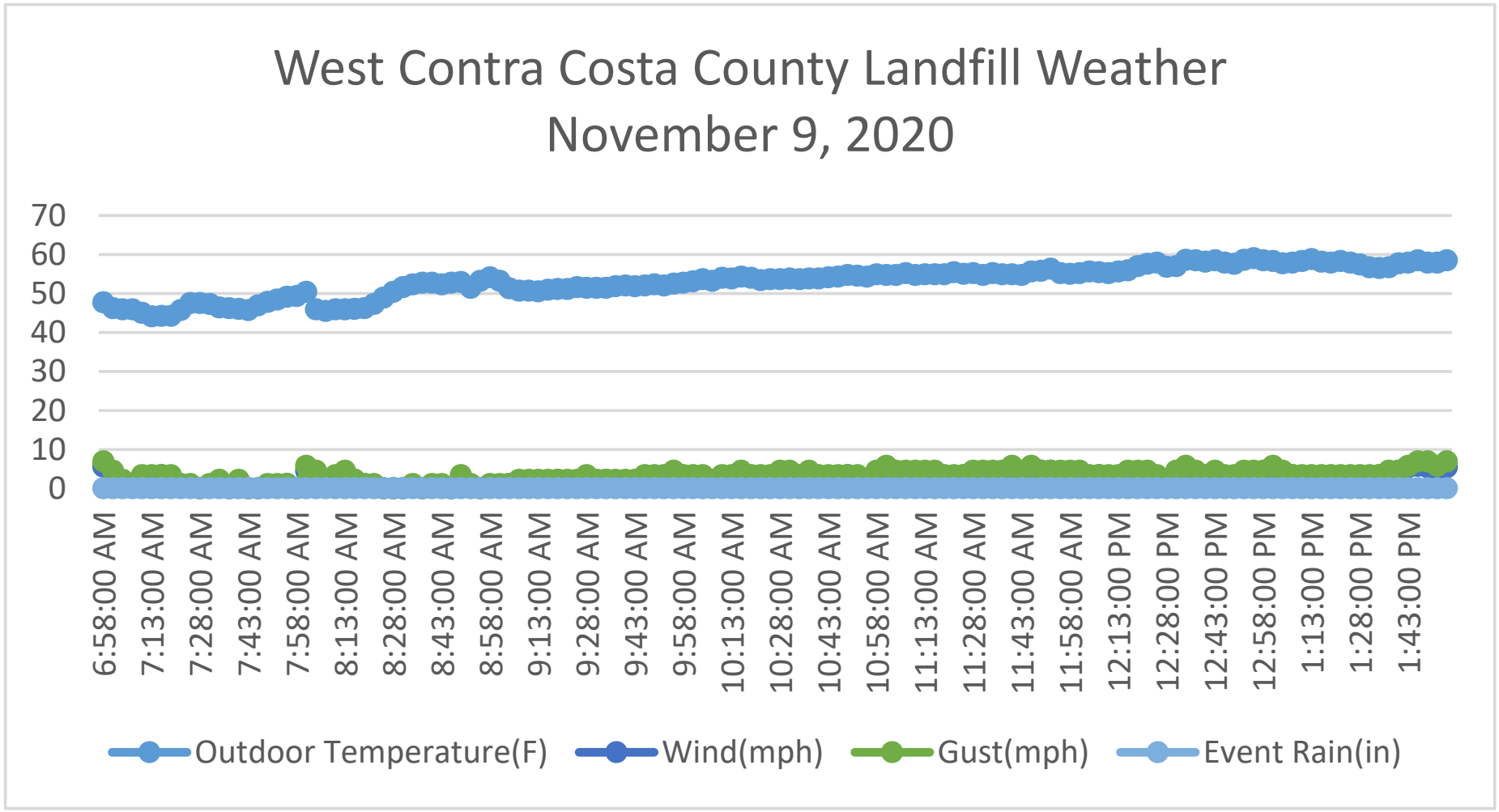
Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested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

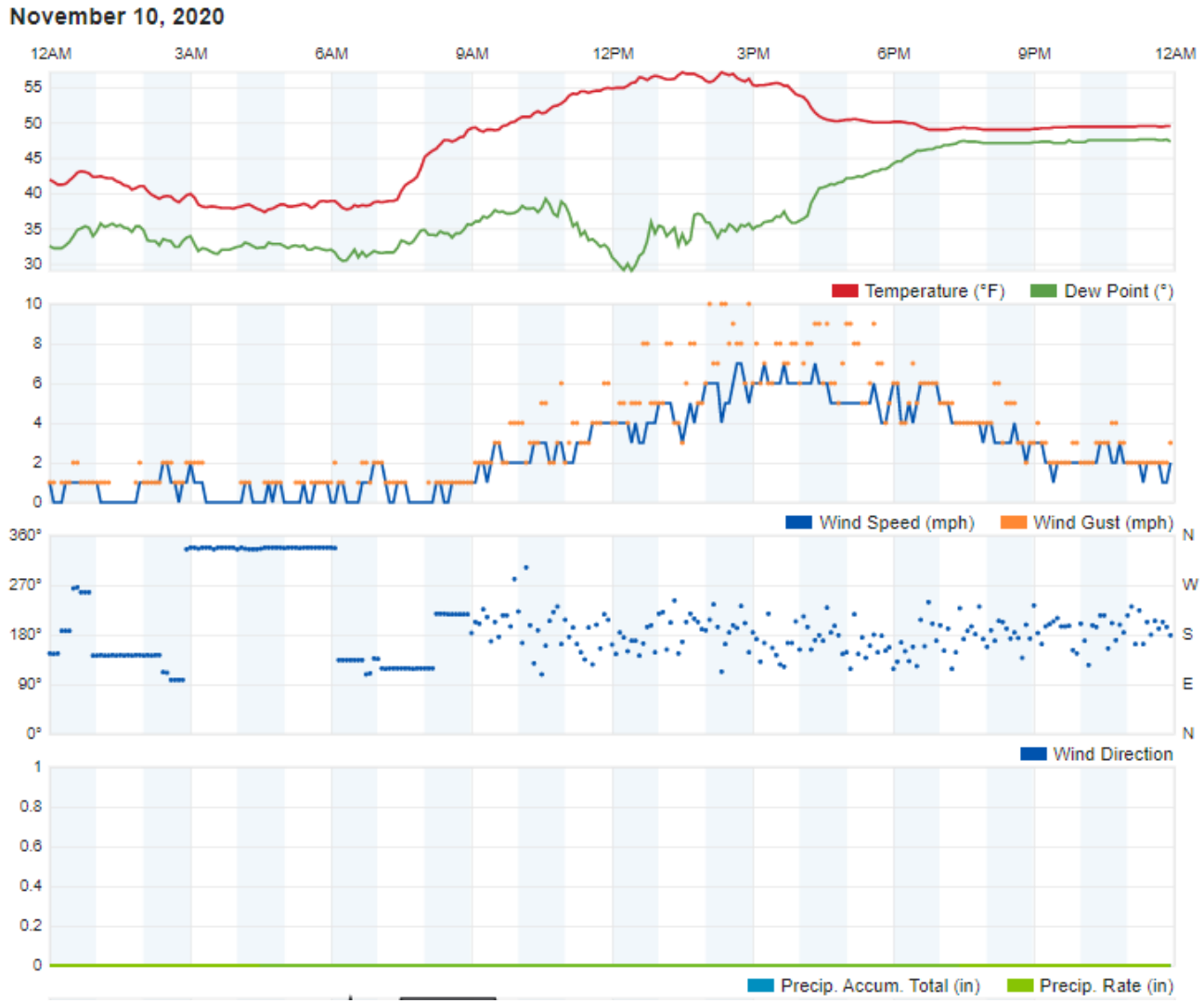
Attachment 6

Weather Data


West Contra Costa County Landfill Weather
November 5, 2020
70
60
50
40
30
20
10
0
6:30:00 AM
6:42:00 AM
6:54:00 AM
7:06:00 AM
7:18:00 AM
7:30:00 AM
7:42:00 AM
7:54:00 AM
8:06:00 AM
8:18:00 AM
8:30:00 AM
8:42:00 AM
8:54:00 AM
9:06:00 AM
9:18:00 AM
9:30:00 AM
9:42:00 AM
9:54:00 AM
10:06:00 AM
10:18:00 AM
10:30:00 AM
10:42:00 AM
10:54:00 AM
11:06:00 AM
11:18:00 AM
11:30:00 AM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)


West Contra Costa County Landfill Weather
November 6, 2020
60
50
40
30
20
10
0
6:21:00 AM
6:30:00 AM
6:39:00 AM
6:48:00 AM
6:57:00 AM
7:06:00 AM
7:15:00 AM
7:24:00 AM
7:33:00 AM
7:42:00 AM
7:51:00 AM
8:00:00 AM
8:09:00 AM
8:18:00 AM
8:27:00 AM
8:36:00 AM
8:45:00 AM
8:54:00 AM
9:03:00 AM
9:12:00 AM
9:21:00 AM
9:30:00 AM
9:39:00 AM
9:48:00 AM
9:57:00 AM
10:06:00 AM
10:15:00 AM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)

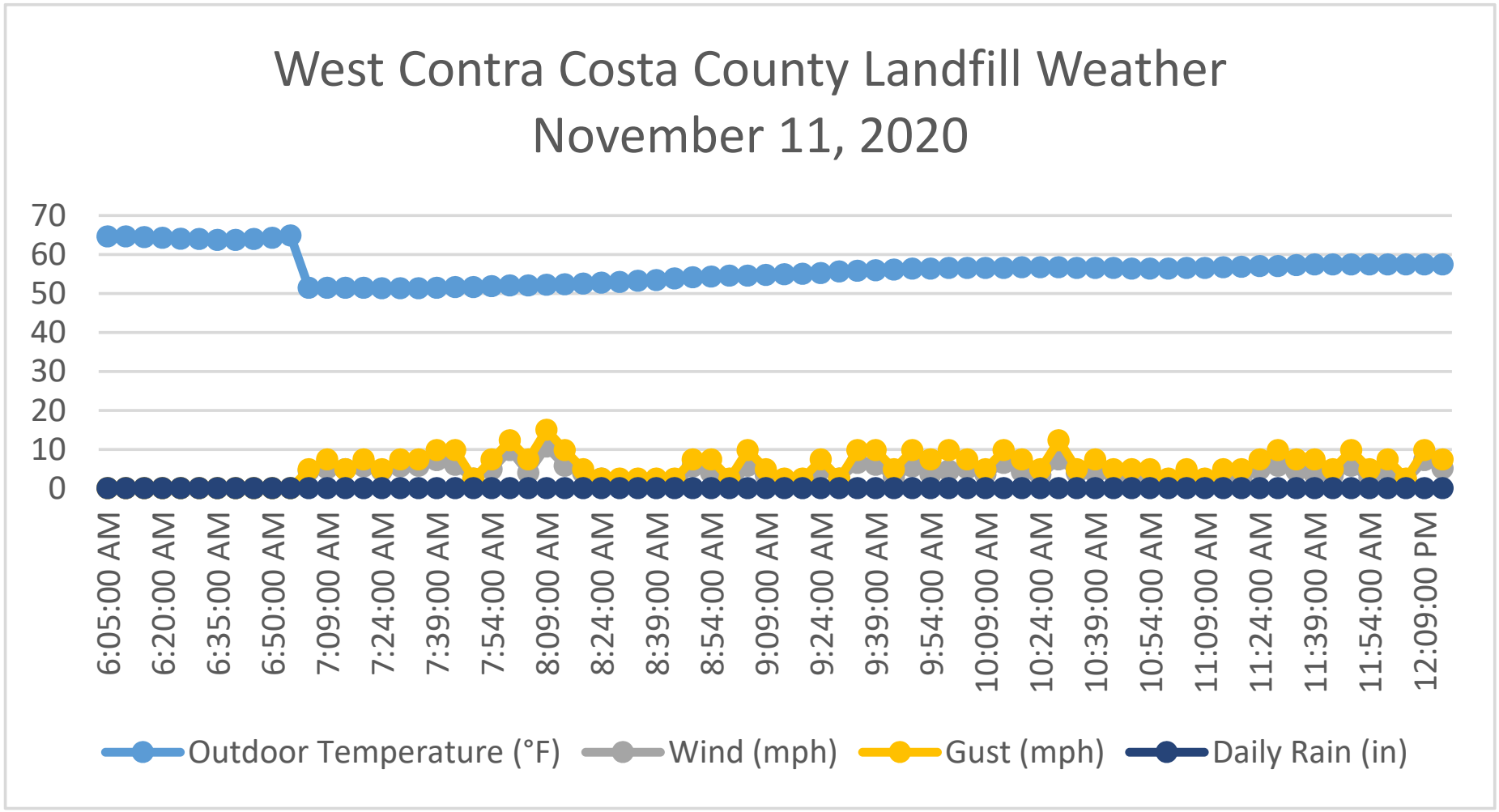

West Contra Costa County Landfill Weather
November 9, 2020
70
60
50
40
30
20
10
0
6:58:00 AM
7:13:00 AM
7:28:00 AM
7:43:00 AM
7:58:00 AM
8:13:00 AM
8:28:00 AM
8:43:00 AM
8:58:00 AM
9:13:00 AM
9:28:00 AM
9:43:00 AM
9:58:00 AM
10:13:00 AM
10:28:00 AM
10:43:00 AM
10:58:00 AM
11:13:00 AM
11:28:00 AM
11:43:00 AM
11:58:00 AM
12:13:00 PM
12:28:00 PM
12:43:00 PM
12:58:00 PM
1:13:00 PM
1:28:00 PM
1:43:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)

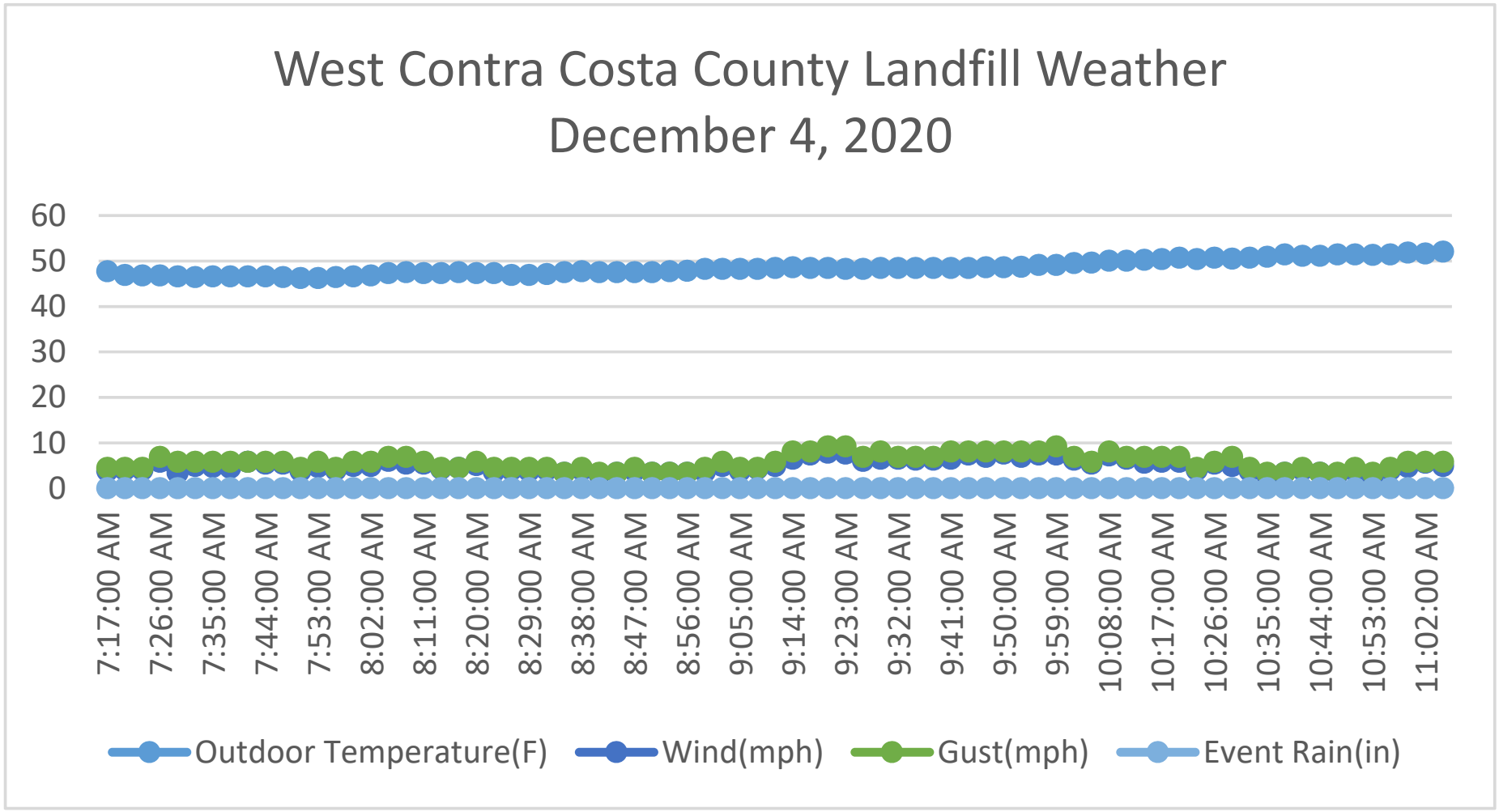


Fourth Quarter 2020

LMR Weather For November 10, 2020

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


West Contra Costa County Landfill Weather
November 11, 2020
70
60
50
40
30
20
10
0
6:05:00 AM
6:20:00 AM
6:35:00 AM
6:50:00 AM
7:09:00 AM
7:24:00 AM
7:39:00 AM
7:54:00 AM
8:09:00 AM
8:24:00 AM
8:39:00 AM
8:54:00 AM
9:09:00 AM
9:24:00 AM
9:39:00 AM
9:54:00 AM
10:09:00 AM
10:24:00 AM
10:39:00 AM
10:54:00 AM
11:09:00 AM
11:24:00 AM
11:39:00 AM
11:54:00 AM
12:09:00 PM
Outdoor Temperature (°F)
Wind (mph)
Gust (mph)
Daily Rain (in)


West Contra Costa County Landfill Weather
December 4, 2020
60
50
40
30
20
10
0
7:17:00 AM
7:26:00 AM
7:35:00 AM
7:44:00 AM
7:53:00 AM
8:02:00 AM
8:11:00 AM
8:20:00 AM
8:29:00 AM
8:38:00 AM
8:47:00 AM
8:56:00 AM
9:05:00 AM
9:14:00 AM
9:23:00 AM
9:32:00 AM
9:41:00 AM
9:50:00 AM
9:59:00 AM
10:08:00 AM
10:17:00 AM
10:26:00 AM
10:35:00 AM
10:44:00 AM
10:53:00 AM
11:02:00 AM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)

SITE: West Contra Costa County
2020 4th QUARTER FLARE LFG COMPONENT LEAK MONITORING

INSTRUMENT	FID		
MAKE:	TVA	DATE OF SAMPLING:	November 11, 2020
MODEL:	2020	TECHNICIAN:	D. Gibson
S/N:	202016031220		

LOCATION OF 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)
KOP	No Exceedances detected						
Flanges Vac side	No Exceedances detected						
Blowers	No Exceedances detected						
Instruments	No Exceedances detected						
Flanges Pos side	No Exceedances detected						
Flame Arrestor	No Exceedances detected						
Panels	No Exceedances detected						
Flare	No Exceedances detected						
Fittings to Blowers	No Exceedances detected						
Comments:							
Note:	In the event that an exceedance is detected, please intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

SITE: West Contra Costa County
2020 4th QUARTER LFG COMPONENT LEAK MONITORING

INSTRUMENT FID
MAKE: TVA
MODEL: 2020
S/N: 202016031220

DATE OF SAMPLING: November 11, 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 Exceedences dectected	No Exceedences dectected	11/11/2020					
Comments:	Note this is below the 1000 ppm threshold						
Note:	In the event that an exceedance is detected, please intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

SITE: West Contra Costa County
2020 4th QUARTER LFG PLANT COMPONENT LEAK MONITORING

INSTRUMENT FID
MAKE: TVA
MODEL: 2020
S/N: 202016031220

DATE OF SAMPLING: November 11, 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 intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

SITE: West Contra Costa County
2020 4th QUARTER LFG WASTE WATER TREAMENT PLANT COMPONENT LEAK MONITORING

INSTRUMENT FID
MAKE: TVA
MODEL: 2020
S/N: 202016031220

DATE OF SAMPLING: November 11, 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)
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 intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

West Contra Costa County Landfill

New Source Performance Standards (NSPS) Surface Emissions Monitoring

First Quarter 2021

Presented to:

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

SCS FIELD SERVICES

File No. 07219040.00 | May 21, 2021

SCS FIELD SERVICES
4730 Enterprise Way, Suite A
Modesto, CA 95356

West Contra Costa County Landfill

New Source Performance Standards (NSPS)
Surface Emissions Monitoring
First Quarter 2021

INTRODUCTION

On January 13, 2021, SCS Field Services (SCS) performed routine quarterly Surface Emissions Monitoring (SEM) at the West Contra Costa County Landfill (Site) for the first quarter of 2021. This monitoring was conducted in accordance with regulations set forth in the New Source Performance Standards (NSPS), Title 40 Code of Federal Regulations Section 60.755(c) and (d) (40 CFR §60.755(c) and (d)) and 40 CFR Part 60, Appendix A, Method 21, promulgated by the United States Environmental Protection Agency (USEPA).

MONITORING PROCEDURES

A Thermo Scientific TVA-2020 flame ionization detector (FID) was used to perform the emissions monitoring. The calibration of the FID was verified at the beginning of the day, prior to use, in accordance with Environmental Protection Agency Method 21 requirements. Calibration logs were completed by the field technician performing the work and are included in Attachment A.

The monitoring route provided coverage of all waste disposal areas served by the active landfill gas collection system installed for NSPS compliance purposes, except those areas presenting a safety risk to the monitoring technician. If noted during monitoring, special attention was given to locations with unusual cover conditions (i.e., stressed vegetation, cracks, seeps, etc.) and any areas with unusual odors. A map of the monitoring route is included in Attachment B.

WEATHER CONDITIONS

In accordance with NSPS regulations, the monitoring event was performed during typical meteorological conditions.

MONITORING SUMMARY

During the monitoring event, SCS observed that the ground surface appeared to be in good condition and that there were no unusual odors. No readings exceeded the regulatory limit for surface emissions of methane (i.e., FID reading greater than 500 parts per million above background concentrations) on January 13, 2021. Therefore, based on these results, no follow up testing is required and the site was in compliance upon completion of the first quarter 2021 SEM event.

SCS is scheduled to perform the second quarter testing prior to the end of June 2021.

CLOSING

This report addresses conditions of the subject site on the test date only. Accordingly, we assume no responsibility for any changes that may occur subsequent to our testing which could affect the emissions at the subject site.

SCS-FS appreciates the opportunity to have provided Republic Services with quarterly SEM services for the Site. If you have any questions or comments concerning this report, please contact Carl Cortez at (562) 305-8461 or Art Jones (209) 702-6228.

Sincerely,

Whitney M. Stackhouse
Project Manager
SCS Field Services

Michael Flanagan
Project Manager
SCS Field Services

WS/AJ

cc: Enclosure
Sean Bass, SCS Field Services
Haley DeLong, SCS Engineers

Attachment A

Daily Calibration Logs

Republic SOP SEM Logs

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 1-13-21 Site Name: WCC

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 27 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 52 °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	3
2	3	498	2	4
3	2	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%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 1141876
Counters Observed for the Zero= 3268

Trial 2:
Counts Observed for the Span= 1141926
Counters Observed for the Zero= 3298

Trial 3:
Counts Observed for the Span= 1141842
Counters Observed for the Zero= 3312

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.8 ppm

Downwind Location Description: grid1 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: 1-13-21 Site Name: WCC

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 27 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 52 °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: 1153 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	2	498	2	4
2	2	501	1	3
3	1	499	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%- 1.3 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 149892
Counters Observed for the Zero= 3170

Trial 2:
Counts Observed for the Span= 149121
Counters Observed for the Zero= 3221

Trial 3:
Counts Observed for the Span= 149233
Counters Observed for the Zero= 3276

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.8 ppm

Downwind Location Description: Grid1 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 1-13-21 Site Name: WCC

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 57 °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: 1153 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	499	1	3
2	3	502	2	3
3	0	501	1	3

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:
Counts Observed for the Span= 148863
Counters Observed for the Zero= 8123

Trial 2:
Counts Observed for the Span= 148955
Counters Observed for the Zero= 8246

Trial 3:
Counts Observed for the Span= 149063
Counters Observed for the Zero= 3206

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid1 Reading: 1.3 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 1-13-21 Site Name: WCC

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 57 °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	498	2	3
2	0	501	1	3
3	0	501	1	4

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:
Counts Observed for the Span= 115122
Counters Observed for the Zero= 3241

Trial 2:
Counts Observed for the Span= 115096
Counters Observed for the Zero= 3288

Trial 3:
Counts Observed for the Span= 115273
Counters Observed for the Zero= 3311

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: grid 1 Reading: 1.2 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 1-13-21 Site Name: West Contra

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 57 °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	498	2	4
2	1	499	1	3
3	0	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%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 112532
Counters Observed for the Zero= 4032

Trial 2:
Counts Observed for the Span= 112476
Counters Observed for the Zero= 4012

Trial 3:
Counts Observed for the Span= 112679
Counters Observed for the Zero= 39 99

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.6 ppm

Downwind Location Description: Grid1 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: 1-13-21 Site Name: West Contra

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2.7 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 52 °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: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	2	500	0	4
2	1	502	2	3
3	2	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%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 112788
Counters Observed for the Zero= 11138

Trial 2:
Counts Observed for the Span= 112542
Counters Observed for the Zero= 41761

Trial 3:
Counts Observed for the Span= 112641
Counters Observed for the Zero= 42355

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

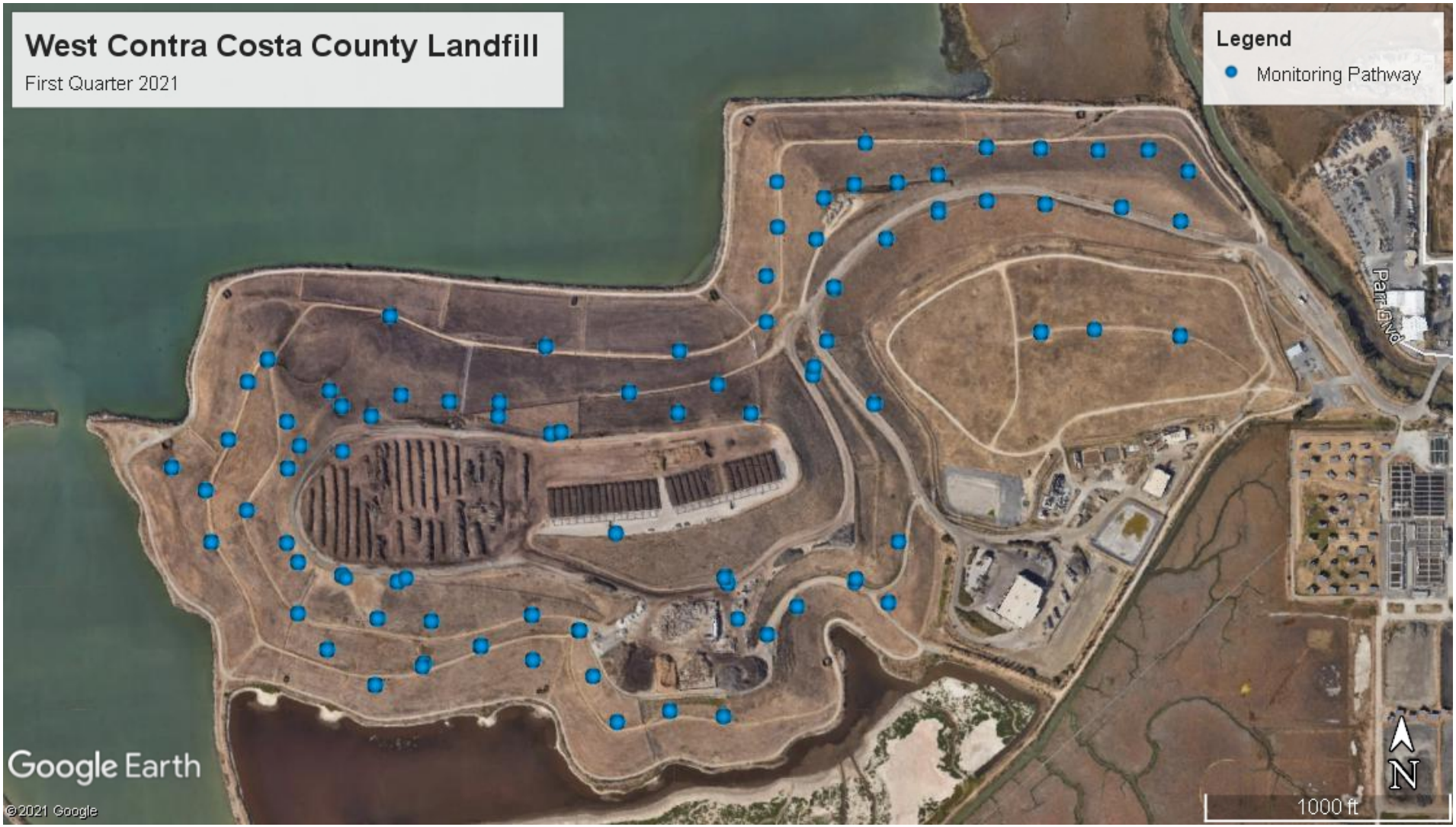
Upwind Location Description: Entrance Reading: 1.7 ppm

Downwind Location Description: Grid1 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.

Attachment B

SEM Route Map



First Quarter 2021
Surface Emissions Monitoring Pathway
West Contra Costa County Landfill, Contra Costa County, California

SITE: West Contra Costa County
2021 1st QUARTER FLARE LFG COMPONENT LEAK MONITORING

INSTRUMENT	FID		
MAKE:	TVA	DATE OF SAMPLING:	January 13, 2021
MODEL:	2020	TECHNICIAN:	R. Haslam
S/N:	2364		

LOCATION OF 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)
KOP	No Exceedances detected						
Flanges Vac side	No Exceedances detected						
Blowers	No Exceedances detected						
Instruments	No Exceedances detected						
Flanges Pos side	No Exceedances detected						
Flame Arrestor	No Exceedances detected						
Panels	No Exceedances detected						
Flare	No Exceedances detected						
Fittings to Blowers	No Exceedances detected						
Comments:							
Note:	In the event that an exceedance is detected, please intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

SITE: West Contra Costa County
2021 1st QUARTER LFG COMPONENT LEAK MONITORING

INSTRUMENT FID
MAKE: TVA
MODEL: 2020
S/N: 2364

DATE OF SAMPLING: January 13, 2021
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 Exceedences dectected	No Exceedences dectected	1/13/2021					
Comments:	Note this is below the 1000 ppm threshold						
Note:	In the event that an exceedance is detected, please intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

SITE: West Contra Costa County

2021 1st QUARTER LFG PLANT COMPONENT LEAK MONITORING

INSTRUMENT FID
MAKE: TVA
MODEL: 2020
S/N: 2364

DATE OF SAMPLING: January 13, 2021
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 intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

SITE: West Contra Costa County

2021 1st QUARTER LFG WASTE WATER TREAMENT PLANT COMPONENT LEAK MONITORING

INSTRUMENT FID
MAKE: TVA
MODEL: 2020
S/N: 2364

DATE OF SAMPLING: January 13, 2021
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)
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 intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance.						

Appendix E – Excerpts from the Source Test Reports Issued during the Reporting Period (A-161, A-8, and S-6)

Republic Services
West Contra Costa Sanitary Landfill

BAAQMD PLANT NO: 1840

Compliance Emissions Test Report #20380

Two - Enclosed Landfill Gas Flares (A-8 and A-161)

Located at:
West Contra Costa Sanitary Landfill
1 Parr Blvd
Richmond, CA 94806

Prepared for:
Republic Services
West Contra Costa Sanitary Landfill
3260 Blume Drive, Suite 200
Richmond, CA 94806
Attn: Matt Beat
mbeat@republicservices.com

For Submittal to:
Bay Area Air Quality Management District
Compliance & Enforcement Division
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Gloria Espena & Marco Hernandez
gespena@baaqmd.gov/mhernandez@baaqmd.gov
sourcetest@baaqmd.gov

Testing Performed on:
December 28th, 2020

Final Report Submitted on:
February 10th, 2021

Performed and Reported by:
Blue Sky Environmental, Inc.
624 San Gabriel Avenue
Albany, CA 94706
bluesky@blueskyenvironmental.com
Office (510) 525 1261/Mobile (510) 508 3469

Blue Sky Environmental, Inc
624 San Gabriel Avenue
Albany, CA 94706
Office (510) 525 1261
Cell (510) 508 3469
bluesky@blueskyenvironmental.com

February 10th, 2021

Republic Services
West Contra Costa Sanitary Landfill, Inc
3260 Blume Drive, Suite 200
Richmond, CA 94806

Attn: Matt Beat

Subject: Emissions report for testing to determine compliance of West Contra Costa Sanitary Landfill's Gas-Fired Flares (A-8 and A-161) with Bay Area Air Quality Management District (BAAQMD) Permit Condition 25293-11 for Plant#1840.

Test Date(s): Testing was performed on December 28th, 2020.

Sampling Location: Sampling was conducted at the mid-point in the outlet of each exhaust stack. Flare A-8 is approximately 43 feet tall and approximately 8 feet in diameter, which required a 40-foot boom lift to access the 4-inch ports. Flare A-161 is approximately 35 feet tall and approximately 8 feet in diameter which also required a 40-foot boom lift to access the 4-inch ports. The sample ports met the minimum EPA Method 1 criteria of two stack diameters downstream from the nearest disturbance and 0.5 stack diameters upstream from the nearest disturbance or exhaust.

Sampling Personnel: Sampling was performed by Guy Worthington of Blue Sky Environmental, Inc.

Observing Personnel: The BAAQMD was notified of the testing in a source test plan dated November 10th, 2020 (NST-6233); however, no agency observers from the BAAQMD were present during testing. Tyler Burt of SCS Engineers was present to assist with flare operations.

Process Description: The West Contra Costa County Sanitary Landfill (S-15), located in Richmond, CA is equipped with a gas collection system that is abated by two landfill gas flares. Flare A-161 is a 46-MMBtu/hr landfill gas flare used to burn excess landfill gas that is not being consumed by engines to generate power. Flare A-8 is a 45 MMBtu/hr landfill gas standby flare that is operated only as a backup to Flare A-181.

Test Program: Three consecutive 30-minute gaseous emissions tests were performed for oxides of nitrogen (NO_X), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2) and total hydrocarbons (THC) at the exhaust stack of each flare. The sampling system was checked for leaks before the start of the testing, by plugging the sample probe and observing the sample rotameter flow drop to zero. Analyzer external calibrations were performed before and after each run using EPA protocol certified gas standards. A NO_X analyzer converter efficiency check was performed before the first test run and found to be greater than 90%.

Concurrent with the emissions testing, Blue Sky Environmental collected a total of three LFG samples in six-liter Summa canisters from Flare A-161 for analysis of volatile organic compounds by EPA Method TO-15. An additional three LFG samples were collected from each flare for analysis of NMOC by EPA Method 25C and ASTM D-1945. These samples were analyzed by Atmospheric Analysis & Consulting, Inc. located in Ventura, CA.

Three LFG samples from each flare were collected by Draeger tube for H_2S analysis. Total reduced sulfur (TRS) was calculated by multiplying H_2S results by 1.2 in accordance with the permit.

Sampling and Analysis Methods: The following Bay Area Air Quality Management District (BAAQMD), US Environmental Protection Agency (EPA), and ASTM International sampling and analytical methods were used:

BAAQMD Method ST-6	CO Continuous Monitoring
BAAQMD Method ST-13A	NO_X Continuous Monitoring
BAAQMD Method ST-14	O_2 Continuous Monitoring
EPA Method 7E	NO_2 Conversation Check
EPA Method 19	Flow Rate from Fuel Btu, Fd-Factor, and Stack % O_2
EPA Method 25A	THC
EPA Method 18	CH_4
EPA Method TO-15	Toxic Air Contaminants
ASTM D-1945	Fuel Gas Composition, Btu and Fd-Factor Calculation

BAAQMD Source Test Procedure ST-6 – Carbon Monoxide, Continuous Sampling
This method is used to quantify carbon monoxide emissions and determine compliance with Regulation 8-1-110.3.

BAAQMD Source Test Procedure ST-13A – Oxides of Nitrogen, Continuous Sampling
This method is used to quantify nitrogen oxide emissions and determine compliance with Regulations 9-3-301, 9-3-302 and 10-1-301.

BAAQMD Source Test Procedure ST-14 – Oxygen, Continuous Sampling
This method is used to quantify oxygen emissions and determine compliance with Regulations 79-3-3-301 and 9-3-302.

BAAQMD Procedures ST-6, ST-13A and ST-14 are all continuous monitoring techniques using instrumental analyzers. Sampling is performed by extracting exhaust flue gas from the stack, conditioning the sample, and analyzing it by continuous monitoring gas analyzers in a continuing emissions monitoring (CEM) test van. The sampling system consists of a stainless steel sample probe, Teflon sample line, glass-fiber particulate filter, glass moisture-knockout condensers in ice, Teflon sample transfer tubing, a diaphragm pump, and a stainless steel/Teflon manifold and flow control/delivery system. A constant sample and calibration gas supply pressure of 5 PSI is provided to each analyzer to avoid pressure variable response differences. The entire sampling system is leak checked prior to and at the end of the sampling program.

The sampling and analytical system is calibrated at the beginning and end of each test run. Calibration gases are selected to fall approximately within 80-90% of the instrument range. Zero and calibration drift values are determined for each test. All calibration gases are EPA Protocol #1. The

analyzer data recording system consists of a Honeywell DRP3000 strip chart recorder supported by a PC/laptop-based Data Acquisition System (DAS).

EPA Method 7E – Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure nitrogen oxides in stationary source emissions using a continuous instrumental analyzer. Section 16.2.2 of the method is used to determine the NO_X analyzer NO_2 to NO conversion efficiency.

EPA Method 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates

This method is used to determine stack gas volumetric flow rates using oxygen-based F-factors. F-factors are ratios of combustion gas volumes to heat inputs. The heating value of the fuel in Btu per cubic foot is determined from analysis of fuel gas samples using ASTM D1946/1945 gas chromatography analytical procedures. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine emission rates.

EPA Method 18 – Measurement of Gaseous Organic Compound Emissions by Gas Chromatography

This method is used to determine emissions of volatile organics by gas chromatograph/mass spectroscopy (GC/MS). Gaseous emissions are drawn through a Teflon sample transfer line to a Summa canister or Tedlar bag held in a rigid leak proof bag container. The sample is drawn into the bag by evacuating the container to stack gas pressure to allow sample flow without using a pump to avoid contamination. Negative pressure is adjusted to maintain an integrated sample flow for the collection time. The bag samples are taken to a laboratory and analyzed within 72 hours.

ASTM D-1945 – Analysis of Natural Gas by Gas Chromatography

This method is used to measure fixed gases (such as oxygen, nitrogen, carbon monoxide, and carbon dioxide) and methane by gas chromatography (GC/TCD). Light hydrocarbons, including C1-C7, are analyzed by GC/FID. Samples are collected in pre-evacuated 6-Liter SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the TO-15 Method list of volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consisted of capillary orifice tubing designed to sample for a pre-set duration of 0.75hrs.

EPA Method 25A – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer

This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.

The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to

incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. All data is corrected according to the method.

EPA Compendium Method TO-15 – Determination of Toxic Organic Compounds in Ambient Air

This method is used to measure volatile organic compounds that are included in the hazardous air pollutants (HAPs) listed in Title III of the Clean Air Act Amendments of 1990 by GC/MS (gas chromatography/mass spectroscopy). Samples are collected in pre-evacuated 6-Liter SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the TO-15 Method list of volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consisted of capillary orifice tubing designed to sample for a pre-set duration of 0.75hrs.

Instrumentation: The following continuous emissions analyzers were used:

Instrument	Analyte	Principle
Servomex Model 1440	O_2	Paramagnetic
Servomex Model 1440	CO_2	IR
TECO Model 42C	NO_X	Chemiluminescence
TECO Model 43C	SO_2	Ultraviolet
TECO Model 48C	CO	GFC/IR
Ratfisch RS66	THC	FID

Test Results: The flares met all compliance criteria. The compliance summary is presented below. Detailed source test emission results including Toxic Air Contaminants are provided in Tables 1 through 3 on the following pages.

Emission Parameter	Average Results Flare (A-8)	Permit Limit	Status
NO_X, lbs/MMBtu	0.060	--	--
CO, lbs/MMBtu	0.002	--	--
SO_2 ppm	<1.6	--	--
Inlet - Total Reduced Sulfur (TRS), ppm	<10	300	In Compliance
Inlet – TNMOC, ppm as Hexane	209	392	In Compliance
TNMHC ppm @ 3% O_2	<1.4	30 or 98	In Compliance
NMOC Destruction Efficiency, %	99.46		
CH_4 Destruction Efficiency, %	99.998	99	In Compliance

Emission Parameter	Average Results Flare (A-161)	Permit Limit	Status
NO_X, lbs/MMBtu	0.041	0.05	In Compliance
CO, lbs/MMBtu	0.027	0.20	In Compliance
SO_2 ppm	<0.94	--	--
Inlet - Total Reduced Sulfur (TRS), ppm	<10	300	In Compliance
Inlet – TNMOC, ppm as Hexane	223	392	In Compliance
TNMHC ppm @ 3% O_2 as CH_4	<2.2	30 or 98	In Compliance
NMOC Destruction Efficiency, %	99.16		
CH_4 Destruction Efficiency, %	99.997	99	In Compliance
LFG Inlet TNMOC, ppm as Hexane	223	392	In Compliance

The appendices are organized as follows:

Calculations
All the calculations performed on the continuous emissions monitoring (CEM) data and flow rate calculations.

Laboratory Reports
All laboratory reports and chain of custody.

Field Data Sheets
All the CEMS data, any transcribed data from the strip charts.

Strip Chart Records
The strip chart records of all the CEM data are contained in this section.

Process Information
Relevant and available facility process operating documentation.

QC Calibration Gas Certifications
Certifications for the calibration gas standards.

Stack Diagram
Sketch or photograph of the stack.

Sample System Diagram
Schematic of the sampling system configuration

Permit / Authority to Construct
Permit to Operate / Authority to Construct

Source Test Plan
Sampling protocols submitted to the BAAQMD prior to testing

Comments: This source test was performed in accordance with the protocol submitted to the BAAQMD. No deviations from the protocol or anomalies were observed during testing. The measured emissions for both flares met their associated permitted limits.

The work performed herein was conducted under my supervision, and I certify that:

a) the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program,

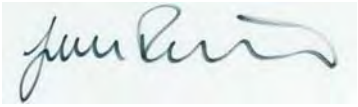
b) that the sampling and analytical procedures and data presented in the report is authentic and accurate,

c) that all testing details and conclusions are accurate and valid, and

d) that the production rate and/or heat input rate during the source test are reported accurately.

If this report is submitted for compliance purposes it should only be reproduced in its entirety. If there are any questions concerning this report, please contact Jeramie Richardson at (810) 923-3181, Chuck Arrivas at (925) 338-4875 or Guy Worthington at (510) 508-3469.

Prepared by,



Jessica Morris

Reviewed by,

Julie Wose-Jennings

TABLE #1

RS - West Contra Costa Sanitary Landfill
Flare A-8
1,625°F

RUN	1	2	3	AVERAGE	LIMITS
Test Date	12/28/20	12/28/20	12/28/20		
Test Time	1544-1614	1632-1702	1718-1748		
Standard Temperature, °F	70	70	70		
Flare Temperature, °F Average	1,626	1,621	1,629	1,625	**>1,500**
Fuel Flow Rate, SCFM	691.5	694.4	714.0	700.0	**250**
Fuel Heat Input, MMBtu/hr	16.9	18.7	19.6	18.4	
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	4,043	4,487	4,742	4,424	
Oxygen, O_2, %	6.9	6.9	7.0	6.9	
Carbon Dioxide, CO_2, %	11.9	12.0	12.0	12.0	
Water Vapor, H_2O, % *(EPA Method 4.16)*	7.5	7.5	7.6	7.5	
NOx, ppm	33.9	35.6	35.1	34.8	
NOx, ppm @ 15% O_2	14.2	15.0	14.9	14.7	
NOx, lbs/hr	0.98	1.14	1.19	1.10	
NOx, lbs/day	23.4	27.3	28.5	26.4	
NOx, lbs/MMBtu	0.058	0.061	0.061	0.060	
CO, ppm	3.5	1.3	0.5	1.8	
CO, ppm @ 15% O_2	1.5	0.5	0.2	0.7	
CO, lbs/hr	0.061	0.025	0.011	0.032	
CO, lbs/day	1.5	0.6	0.3	0.8	
CO, lbs/MMBtu	0.004	0.001	0.001	0.002	
TRS as H_2S, ppm in Fuel				**<10**	**300**
SO_2, ppm Exhaust (calculated)				<1.6	
SO_2, ppm @ 15% O_2				<0.668	
SO_2, ppm @ 3% O_2				<2.0	
SO_2, lbs/hr				<0.080	
SO_2, lbs/day				<1.9	
THC, ppm (wet) *(EPA Method 25A)*	<1.0	<1.0	<1.0	<1.0	
THC, ppm (dry)	<1.1	<1.1	<1.1	<1.1	
THC, lbs/hr as CH_4	<0.011	<0.012	<0.013	<0.012	
CH_4, ppm	<1.1	<1.1	<1.1	<1.1	
CH_4, lbs/hr	<0.011	<0.012	<0.013	<0.012	
TNMHC, ppm as CH_4	<1.1	<1.1	<1.1	<1.1	
TNMHC, lbs/hr as CH_4	<0.011	<0.012	<0.013	<0.012	
TNMHC, ppm @ 3% O_2 as CH_4	**<1.4**	**<1.4**	**<1.4**	**<1.4**	**30**
INLET TNMOC, ppm as CH_4 *(EPA Method 25C)*	1,260	1,270	1,233	1,254	
INLET TNMOC, ppm as Hexane	**210**	**212**	**206**	**209**	**392**
INLET NMOC lbs/hr as CH_4	2.2	2.2	2.2	2.2	
NMOC Destruction Efficiency	**99.50%**	**99.45%**	**99.42%**	**99.46%**	**>98%**
INLET CH_4, ppm	407,000	450,000	458,000	438,333	
INLET CH_4 lbs/hr	698.7	775.7	811.8	762	
CH_4 Destruction Efficiency	**>99.998%**	**>99.998%**	**>99.998%**	**>99.998%**	**>99%**

< Value = 2% of Analyzer Range

WHERE,

ppm = Parts per Million Concentration
Lbs/hr = Pound per Hour Emission Rate
Tstd. = Standard Temp. (°R = °F+460)
MW = Molecular Weight
DSCFM = Dry Standard Cubic Feet per Minute
NOx = Oxides of Nitrogen as NO_2 (MW = 46)
CO = Carbon Monoxide (MW = 28)
CH_4 = Methane (MW = 16)
TOC = THC = Total Organic Carbon as Methane including CH_4 (MW = 16)
THC = Total Hydrocarbons as Methane (MW = 16)
NMOC = Total Non-Methane Organic Carbon as Methane (MW = 16)
TNMOC as Hexane = Total Non-Methane Organic Carbon as Methane ÷ 6
TRS = Total Reduced Sulfur

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R
Lbs/day = Lbs/hr * 24
Destruction Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr

TABLE #2

RS-West Contra Costa Sanitary Landfill
Flare A-161
1,580°F

RUN	1	2	3	AVERAGE	LIMITS
Test Date	12/28/20	12/28/20	12/28/20		
Test Time	1221-1251	1306-1336	1353-1423		
Standard Temperature, °F	70	70	70		
Flare Temperature, °F Average	1,576	1,582	1,581	1,580	**>1,500**
Fuel Flow Rate, SCFM	696.2	699.0	717.4	704.2	**250**
Fuel Heat Input, MMBtu/hr	18.4	19.0	19.4	18.9	
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	7,551	7,427	7,591	7,523	
Oxygen, O_2, %	12.7	12.3	12.3	12.45	
Carbon Dioxide, CO_2, %	7.2	7.4	7.4	7.32	
Water Vapor, H_2O, % *(EPA Method 4.16)*	5.0	5.0	5.0	5.0	
NOx, ppm	14.2	14.8	14.3	14.4	
NOx, ppm @ 15% O_2	10.2	10.1	9.9	10.1	
NOx, lbs/hr	0.77	0.78	0.77	0.77	
NOx, lbs/day	18.4	18.8	18.6	18.6	
NOx, lbs/MMBtu	**0.042**	**0.041**	**0.040**	**0.041**	**0.05**
CO, ppm	17.7	14.3	14.3	15.4	
CO, ppm @ 15% O_2	12.7	9.8	9.9	10.8	
CO, lbs/hr	0.580	0.462	0.472	0.504	
CO, lbs/day	13.9	11.1	11.3	12.1	
CO, lbs/MMBtu	**0.032**	**0.024**	**0.024**	**0.027**	**0.20**
TRS as H_2S, ppm in Fuel				**<10**	**300**
SO_2, ppm Exhaust (calculated)				<0.94	
SO_2, ppm @ 15% O_2				<0.65	
SO_2, ppm @ 3% O_2				<2.0	
SO_2, lbs/hr				<0.08	
SO_2, lbs/day				<1.9	
THC, ppm (wet) *(EPA Method 25A)*	<1.0	<1.0	<1.0	<1.0	
THC, ppm (dry)	<1.1	<1.1	<1.1	<1.1	
THC, lbs/hr as CH_4	<0.020	<0.019	<0.020	<0.020	
CH_4, ppm	<1.1	<1.1	<1.1	<1.1	
CH_4, lbs/hr	<0.020	<0.019	<0.020	<0.020	
TNMHC, ppm as CH_4	<1.1	<1.1	<1.1	<1.1	
TNMHC, lbs/hr as CH_4	<0.020	<0.019	<0.020	<0.020	
TNMHC, ppm @ 3% O_2 as CH_4	**<2.3**	**<2.2**	**<2.2**	**<2.2**	**30**
INLET TNMOC, ppm as CH_4 *(EPA Method 25C)*	1,368	1,359	1,278	1,335	
INLET TNMOC, ppm as Hexane	**228**	**227**	**213**	**223**	**392**
INLET NMOC lbs/hr as CH_4	2.4	2.4	2.3	2.3	
NMOC Destruction Efficiency	**99.17%**	**99.18%**	**99.13%**	**99.16%**	**>98%**
INLET CH_4, ppm	441,000	454,000	451,000	448,667	
INLET CH_4 lbs/hr	762.2	787.8	803.2	784	
CH_4 Destruction Efficiency	**>99.997%**	**>99.998%**	**>99.998%**	**>99.997%**	**>99%**

< Value = 2% of Analyzer Range

WHERE,

ppm = Parts per Million Concentration
Lbs/hr = Pound per Hour Emission Rate
Tstd. = Standard Temp. (°R = °F+460)
MW = Molecular Weight
DSCFM = Dry Standard Cubic Feet per Minute
NOx = Oxides of Nitrogen as NO_2 (MW = 46)
CO = Carbon Monoxide (MW = 28)
CH_4 = Methane (MW = 16)
TOC = THC = Total Organic Carbon as Methane including CH_4 (MW = 16)
THC = Total Hydrocarbons as Methane (MW = 16)
NMOC = Total Non-Methane Organic Carbon as Methane (MW = 16)
TNMOC as Hexane = Total Non-Methane Organic Carbon as Methane ÷ 6

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R
Lbs/day = Lbs/hr * 24
Destruction Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr

TABLE # 3

RS-West Contra Costa Sanitary Landfill

Flare A-161

Landfill Gas Toxic Air Contaminants

RUN		A161-LFG-1	A161-LFG-2	A161-LFG-3	Average Result	Permit Limits
Test Date		12/28/20	12/28/20	12/28/20		
Test Time		1221-1251	1306-1336	1353-1423	ppb	ppb
Acrylonitrile (limit 10 ppm)	ppb	<161	<153	<29.1	<114	10,000
Benzene (limit 8.9 ppm)	ppb	959	1,050	563	857	8,900
Benzyl Chloride	ppb	<40.3	<38.4	<7.29	<28.7	
1,3 Butadiene	ppb	<40.3	130	<7.29	<59.2	
Carbon Tetrachloride	ppb	<40.3	<38.4	<7.29	<28.7	
Chlorobenzene (limit 1.5 ppm)	ppb	133	162	126	140	1,500
Chlorodifluoromethane	ppb	<40.3	<38.4	<7.29	<28.7	
Chloroform	ppb	<40.3	<38.4	10.1	<29.6	
1,1 Dichloroethane	ppb	240	277	172	230	
1,1 Dichloroethene	ppb	<40.3	<38.4	10.1	<29.6	
1,2 Dichloroethane (Ethylene Chloride) (limit 350 ppm)	ppb	42.8	48.3	37.6	42.9	350,000
1,4 Dichlorobenzene	ppb	248	354	330	311	
Dichlorodifluoromethane	ppb	126	134	91.4	117.1	
Dichlorofluoromethane	ppb	<40.3	<38.4	28.6	<35.8	
1,4 Dioxane	ppb	<80.7	<76.7	27.4	<61.6	
Ethylbenzene (limit 41 ppm)	ppb	2,060	2,060	936	1,685	41,000
Ethlyene Dibromide(1,2 Dibromoethane)	ppb	<40.3	<38.4	<7.29	<28.7	
Fluorotrichloromethane(Trichlorofluoromethane)	ppb	<40.3	<38.4	<7.29	<28.7	
Hexane	ppb	1,590	1,700	920	1403	
Isopropyl Alcohol	ppb	<161	<153	104	<139	
Methylene Chloride	ppb	699	729	499	642	
Methyl Ethyl Ketone	ppb	<80.7	<76.7	141	<99.5	
Methyl Tert Butyl Ether	ppb	<40.3	<38.4	<7.29	<28.7	
Perchloroethylene(Tetrachloroethylene) (limit 4 ppm)	ppb	221	230	159	203	4,000
Styrene	ppb	54.1	74.4	69.8	66.1	
Toluene (limit 110 ppm)	ppb	2,460	2,570	1,090	2,040	110,000
1,1,1 Trichloroethane	ppb	<40.3	<38.4	<7.29	<28.66	
1,1,2,2 Tetrachloroethane	ppb	<40.3	<38.4	<7.29	<28.66	
Trichloroethylene (limit 0.873 ppm)	ppb	89.6	92.1	69.9	83.9	873
Vinyl Chloride (limit 6.4 ppm)	ppb	271	328	213	271	6,400
Xylenes (limit 78 ppm)	ppb	2,646	3,195	2,021	2,621	78,000

APPENDICES

Calculations

Laboratory Reports

Field Data Sheets

Strip Chart Records

Process Information

QC Calibration Gas Certifications

Stack Diagram

Sample System Diagram

Permit/Authority to Construct

Source Test Plan

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

375 Beale Street, Suite 600
San Francisco, California 94105
(415) 771-6000

Contractor Source Test Supplemental Form

Site name: West Contra Costa Sanitary Landfill
NST number: 6309
Testing company: Blue Sky Environmental, Inc.

Test purpose:

- ☑ Routine compliance testing
- ☐ Compliance test required after previous source test failure
- ☐ Start-up test
- ☐ Other, ex: trial testing for permit changes, engineering studies
  Please explain _____
- ☐ Revised report with corrections noted
  Revision number _____

Preliminary test results:

- ☑ In compliance
- ☐ Not in compliance
- ☐ N/A
  Please explain_____

Republic Services, Inc.
West Contra Costa Sanitary Landfill
BAAQMD Plant #A1840

Compliance Emissions Test Report #21041
1,478 hp Waukesha IC Landfill Gas Engine (S-6)

Located at:
West Contra Costa Sanitary Landfill
1 Parr Boulevard
Richmond, CA 94801

Attn: Matt Beat
MBeat@republicservices.com

For Submittal to:
Bay Area Air Quality Management District
Compliance & Enforcement Division
375 Beale Street, Suite 600
San Francisco, CA 94105

Attn: Marco Hernandez/Gloria Espena
mhernandez@baaqmd.gov/gespena@baaqmd.gov
sourcetest@baaqmd.gov

Testing Performed on:
February 4th, 2021

Final Report Submitted on:
March 19th, 2020

Performed and Reported by:
Blue Sky Environmental, Inc.
624 San Gabriel Avenue
Albany, CA 94706

bluesky@blueskyenvironmental.com
office (510) 525 1261 / cell (510) 508-3469

Blue Sky Environmental, Inc.
San Gabriel Avenue
Albany, CA 94706
Office (510) 525-1261
Cell (510) 508-3469
bluesky@blueskyenvironmental.com

March 19th, 2021

Republic Services, Inc
West Contra Costa Sanitary Landfill, Inc
3260 Blume Drive, Suite 200
Richmond, CA 94806

Attn.: Matt Beat

Subject: Compliance Source Emission Test report for the Waukesha 7042GL Lean Burn Internal Combustion Engine #2 (S-6), located at West Contra Costa Sanitary Landfill, 1 Parr Boulevard, Richmond, CA 94801. BAAQMD Facility #1840, Condition 5771-4,5,6,7.

Test Date(s): Testing was conducted on February 4th, 2021.

Sampling Location: Sampling was conducted at the mid-point of the outlet exhaust stack of the engine through ports that were accessible from the roof of the facility. The ports were located near the elbow of the approximately 12-inch diameter exhaust stack, after the muffler.

Sampling Personnel: Sampling was performed by Jeramie Richardson of Blue Sky Environmental, Inc.

Observing and Facility Personnel: The BAAQMD was notified of the scheduled testing in a source test plan dated January 26th, 2021. A Source Test Protocol acknowledgement (NST #6309) was received by Blue Sky Environmental, Inc.; however, no agency observers from the BAAQMD were present during testing. Dave Sellers of Peterson Power was on site to operate the engines and provide operating records of fuel flow, load, and combustion temperature.

Process Description: West Contra Costa Sanitary Landfill operates three Waukesha Model 7042GL lean-burn IC engines to produce power. The engines operate on landfill gas.

The engine has control monitors that measure the generator Kilowatts the Amps and Volts. The engine Kilowatts were recorded and were used to calculate the engine load (Bhp) assuming 100% generator output efficiency. Combustion temperature is monitored at all cylinders and an average is calculated for recording purposes. Kilowatt and Fuel Flow were recorded during each run by the test crew, and these readings were used in the calculation of Horsepower and Method 19 Exhaust Flow Rate.

Test Program: This source test was conducted to evaluate emission rates of NO_X, CO, CH_4, NMOC, and NMOC removal efficiency, and determine compliance with BAAQMD Permit 1840, Condition 5771.

Three consecutive 35-minute gaseous emissions tests were performed for oxides of nitrogen (NO_X), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2), methane (CH_4) and nonmethane organic compounds (NMOC) at the exhaust stack of the engine. The sampling system was checked

for leaks before the start of testing. Analyzer external calibrations were performed before and after each run using EPA protocol certified gas standards. Calibration gases were introduced to the sample manifold at the same flow rate as the sample. A NOx analyzer converter efficiency check was performed before the first test run and found to be greater than 90%.

Concurrent with the exhaust sampling, Blue Sky Environmental collected a total of three LFG samples (one per test run) for fixed gases, BTU and F_d-factors by ASTM 1945/3588 and sulfur compounds using method ASTM 5504. The samples were collected in Tedlar bags using Teflon tubing connections that were filled and purged prior to sampling. Sampling was controlled with a rotameter to collect the integrated samples. The samples were shipped to Atmospheric Analysis & Consulting, Inc., located in Ventura, CA for testing.

The engine mass emission rate in gm/Bhp-hr, although not a required parameter, is reported based upon the engine exhaust flow rate calculated using EPA Method 19.

Sampling & Analytical Methods: The following U.S. Environmental Protection Agency (EPA) and ASTM International sampling and analytical methods were used:

EPA Method 1	Sample and Traverse Point Determination
EPA Method 3A	O_2 and CO_2, Stack Gas Molecular Weight
EPA Method 7E	NO_X Emissions & NO_2 Converter Efficiency
EPA Method 10	CO Emissions
EPA Method 18	CH_4 Emissions
EPA Method 19	Calculation of Stack Gas Flow Rate
EPA Method 25A/ALT-078	CH_4 & NMHC Emissions
EPA Method 4 part 16.4	Moisture, Calculated
ASTM 1945/3588	Fuel Analysis for BTU and F-Factors
ASTM D-5504	Analysis for sulfur species including H_2S and TRS
EPA Method 25C	Analysis of landfill gas for TNMHC (NMOC)

EPA Method 1 – Sample and Velocity Traverses for Stationary Sources
This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements.

EPA Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)
This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas.

EPA Method 7E – Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)
This method is used to measure nitrogen oxides in stationary source emissions using a continuous instrumental analyzer. Section 16.2.2 of the method is used to determine the NO_X analyzer NO_2 to NO conversion efficiency.

EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources
This method is used to measure carbon monoxide from integrated or continuous gas samples extracted from a sampling point.

EPA Methods 3A, 7E and 10 are all continuous monitoring techniques using instrumental analyzers. Sampling is performed by extracting exhaust flue gas from the stack, conditioning the sample, and analyzing it by continuous monitoring gas analyzers in a continuing emissions monitoring (CEM) test van. The sampling system consists of a stainless steel sample probe, Teflon sample line, glass-fiber particulate filter, and glass moisture-knockout condensers in ice, followed by thermoelectric coolers (optional), Teflon sample transfer tubing, a diaphragm pump, and a stainless steel/Teflon manifold and flow control/delivery system. A constant sample and calibration gas supply pressure of 5 PSI is provided to each analyzer to avoid pressure variable response differences. The entire sampling system is leak checked prior to and at the end of the sampling program.

The sampling and analytical system is checked for linearity with zero, mid (40-60%) and high span (80-100%) calibrations and is checked for system bias at the beginning and end of each run. System bias is determined by introducing calibration gas to the probe and pulling it through the entire sampling system. Individual test run calibrations use the calibration gas that most closely matches the stack gas effluent. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. EPA Methods 3A, 7E and 10 all defer to EPA Method 7E for the calculations of effluent concentration, span, calibration gas, analyzer calibration error (linearity), sampling system bias, zero drift, calibration drift and response time.

All calibration gases are EPA Protocol #1. The analyzer data recording system consists of a Honeywell DRP3000 strip chart recorder supported by a Data Acquisition System (DAS).

EPA Method 18 – Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
This method is used to determine emissions of volatile organics by gas chromatograph/mass spectroscopy (GC/MS). Gaseous emissions are drawn through a Teflon sample transfer line to a Tedlar bag held in a rigid leak proof bag container. The sample is drawn into the bag by evacuating the container to stack gas pressure to allow sample flow without using a pump to avoid contamination. Negative pressure is adjusted to maintain an integrated sample flow for the collection time. The bag samples are taken to a laboratory and analyzed within 72 hours.

EPA Method 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates
This method is used to determine stack gas volumetric flow rates using oxygen-based F-factors. F-factors are ratios of combustion gas volumes to heat inputs. The heating value of the fuel in Btu per cubic foot is determined from analysis of fuel gas samples using ASTM D1946/1945 gas chromatography analytical procedures. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine emission rates.

ASTM D1945 – Analysis of Natural Gas by Gas Chromatography
This method is used to measure fixed gases (such as oxygen, nitrogen, carbon monoxide, and carbon dioxide) and methane by gas chromatography (GC/TCD). Light hydrocarbons, including C1-C7, are analyzed by GC/FID.

ASTM D-3588 – Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels
This method uses the molar composition of gaseous fuel determined from Method ASTM D-1945 to calculate the heating value and F-factor.

ASTM D-5504 – Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence
This method is used for the determination of speciated volatile sulfur-containing compounds in high methane content gaseous fuels by gas chromatography. Sulfur compounds are processed using a flame ionization detector (GC/FID). The products are then analyzed with a sulfur chemiluminescence detector (GC/SCD). Samples may be collected in Tedlar bags and analyzed within 24 hours or in Silco SUMMA canisters and analyzed within 7 days.

EPA Method 25A/ALT-078 – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer
This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.

The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. All data is corrected according to the method.

EPA Method 25C – Determination of Nonmethane Organic Compounds (NMOC) in Landfill Gas
This method is used to sample and measure NMOC in landfill gases. The method is written for evacuated tank sampling but is adaptable to Tedlar bag sampling procedures. The sampling equipment consists of a stainless steel or glass lined probe with a short stainless-steel or Teflon transfer line to a Tedlar bag housed in a sealed chamber. The chamber is evacuated by pump at a prescribed rate for the test duration and the Tedlar bag capacity, so the sample is integrated over the test period. The sample is injected into a GC column where the methane and CO_2 are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO_2 then reduced to methane and analyzed.

Instrumentation: The following continuous emissions analyzers were used:

Instrument	Analyte	Principle
Servomex Model 1400	O_2	Paramagnetic
Servomex Model 1400	CO_2	IR
TECO Model 42C	NO_X	Chemiluminescence
TECO Model 48C	CO	GFC/IR
TECO Model 55C	THC/CH_4/NMOC	FID

Test Results: Emission results derived from the source test complied with permit conditions and are summarized below. Detailed results for individual test runs are provided in Table 1. All measured test parameters were in compliance with permit limits.

Emission Parameter	Average Emissions Engine #2 (S-6)	Permit Limits	Status
NO_X ppm @ 15% O_2	28.7	63	In Compliance
CO ppm @ 15% O_2	242.7	376	In Compliance
SO_2 ppm (calculated)	4.28	--	--
CH_4 ppm @ 15% O_2	1,489	3,000	In Compliance
TNMHC ppm @ 3% O_2	90.1	120 or >98%	In Compliance
TNMHC Removal Efficiency, %	>55.0%		

Note: POC (Precursor Organic Compounds and NMHC Non-Methane Hydrocarbons) are used synonymously
**Condition 19933 Part 8*

The appendices are organized as follows:

Calculations
: Calculations performed on the continuous emissions monitoring (CEM) data and flow rate calculations.

Laboratory Reports
: All laboratory reports and chain of custody.

Field Data Sheets
: CEMS data and any transcribed data from the strip charts.

Process Information
: Relevant and available facility process operating documentation.

Calibration Gas Certificates
: Certifications for the calibration gas standards.

Stack Diagram
: Sketch or photograph of the stack.

Sample System Diagram
: Schematic of the sampling system configuration.

Permit to Operate / ATC
: Permit to Operate / Authority to Construct.

Source Test Plan
: Sampling protocols submitted to the BAAQMD prior to testing.

Comments: This source test was performed in accordance with the protocol submitted to the BAAQMD. The engine kW output and fuel flows are continuously recorded by the facility and these records were used in this report. These records are included in the Process Data section of the appendices. No deviations from the protocol or anomalies were observed during testing.

The work performed herein was conducted under my supervision, and I certify that:

a) the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program,
b) that the sampling and analytical procedures and data presented in the report is authentic and accurate,
c) that all testing details and conclusions are accurate and valid, and
d) that the production rate and/or heat input rate during the source test are reported accurately.

If this report is submitted for compliance purposes it should only be reproduced in its entirety. If there are any questions concerning this report, please contact Jeramie Richardson at (810) 923-3181, Chuck Arrivas at (925) 338-4875 or Guy Worthington at (510) 508-3469.

Prepared by,

Anne Richardson

Reviewed by,

Julie Wose-Jennings

TABLE #1

West Contra Costa Sanitary Landfill
ENGINE #2 (S-6)

~850 kW Landfill Gas Engine

RUN	1	2	3	AVERAGE	LIMITS
Test Date	02/04/21	02/04/21	02/04/21		
Test Time	0904-0939	1007-1042	1112-1147		
Standard Temp., °F	70	70	70	70	
Engine kW	845	820	860	842	
Engine BHp	1,132	1,099	1,152	1,128	
Fuel Flow Rate, DSCFM	346.7	348.1	346.6	347.1	
Exhaust Flow Rate, DSCFM *(EPA M19)*	2,609	2,610	2,553	2,591	
Avg. Eng Cylinder Temp., °F	965	967	968	967	
Avg. Eng Exhaust Temp., °F	775	775	777	775	
Oxygen, O_2, %	9.1	9.0	9.0	9.0	
Carbon Dioxide, CO_2 %	10.5	10.5	10.6	10.5	
Carbon Dioxide, lbs/hr	1,873	1,880	1,840	1,864	
Water Vapor, H_2O, %	6.5	6.7	6.8	6.7	
NOx, ppm	56.5	54.8	61.4	57.6	
NOx, ppm @ 15% O_2	**28.2**	**27.2**	**30.5**	**28.6**	**63**
NOx, lbs/hr	1.05	1.02	1.12	1.06	
NOx, g/Bhp-hr	**0.4**	**0.4**	**0.4**	**0.4**	
CO, ppm	488.8	489.6	491.3	489.9	
CO, ppm @ 15% O_2	**243.8**	**243.1**	**244.1**	**243.7**	**376**
CO, lbs/hr	5.54	5.55	5.45	5.51	
CO, g/Bhp-hr	**2.2**	**2.3**	**2.1**	**2.2**	
Total Reduced Sulfur as H_2S in fuel, ppm	30.7	30.2	34.8	31.9	
SO_2, ppm (calculated)	4.08	4.03	4.72	4.28	
SO_2, ppm @ 15% O_2	2.03	2.00	2.35	2.13	
SO_2, lbs/hr	0.106	0.105	0.120	0.110	
SO_2, g/Bhp-hr	0.057	0.058	0.063	0.059	
THC, ppm (dry)	3,076	2,959	3,126	3,054	
THC, lbs/hr as CH_4	19.9	19.2	19.8	19.6	
CH_4, ppm (wet) *(EPA M25A)*	2,822	2,709	2,853	2,795	
CH_4, ppm (dry)	3,019	2,902	3,061	2,994	
CH_4, ppm @ 15% O_2	**1,506**	**1,441**	**1,521**	**1,489**	**3,000**
CH_4, lbs/hr	19.6	18.8	19.4	19.3	
TNMHC (POC), ppm as CH_4 (wet) *(EPA M25A)*	53.8	53.1	60.3	55.7	
TNMHC (POC), ppm as CH_4 (dry)	57.5	56.9	64.7	59.7	
TNMHC (POC), ppm as CH_4 @ 3%O_2	**87.1**	**85.7**	**97.6**	**90.1**	**120**
TNMHC, lbs/hr as CH_4	0.37	0.37	0.41	0.38	
TNMHC, g/Bhp-hr as CH_4	0.15	0.15	0.16	0.15	
INLET TNMHC ppm as CH_4 *(EPA M18)*	**959**	**1,003**	**1,011**	**991**	**or**
INLET TNMHC lbs/hr as CH_4	0.825	0.867	0.870	0.854	
TNMHC Removal Efficiency	**>54.84%**	**>57.46%**	**>52.84%**	**>55.05%**	**>98%**
INLET % CH_4 *(ASTM D1945 or EPA M25C)*	44.1	44.2	43.3	43.9	
INLET CH_4 lbs/hr	379.5	381.9	372.6	378.0	
CH_4 Removal Efficiency	**94.85%**	**95.08%**	**94.79%**	**94.91%**	
INLET THC (TOC) % as CH_4	44.2	44.3	43.4	44.0	
INLET THC (TOC) lbs/hr as CH_4	380.4	382.8	373.4	378.9	
THC (TOC) Removal Efficiency	**94.76%**	**94.99%**	**94.70%**	**94.82%**	

WHERE,

ppm = Parts Per Million Concentration
Lbs/hr = Pound Per Hour Emission Rate
Tstd. = Standard Temp. (°R = °F+460)
MW = Molecular Weight
DSCFM = Dry Standard Cubic Feet Per Minute
NOx = Oxides of Nitrogen as NO_2 (MW = 46)
CO = Carbon Monoxide (MW = 28)
TOC = THC = Total Organic Carbon as Methane (MW = 16)
THC = Total Hydrocarbons as Methane (MW = 16)
TNMHC = Total Non-Methane Hydrocarbons as Methane (MW = 16)
CH_4 = Methane (MW = 16)
POC = Precursor Organic Compounds (TNMNEOC)
SO_2 = Sulfur Dioxide (MW = 64.1)
H_2S = Hydrogen Sufide

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
lbs/hr = ppm * 8.223 E-05 * DSCFM * MW / Tstd. °R
lbs/day = Lbs/hr * 24
lbs/MMBtu = Fd * MW * ppm x 2.59E-9 * 20.9/(20.9 - %O_2)
Removal Efficiency = 100* (inlet lbs/hr - exhaust lbs/hr) / inlet lbs/hr
Engine BHp = Engine kW * 1.34
gm/BHp-hr = Lbs/hr * 453.6 / BHp
TNMHC Detection Limit +/- 2% of THC Value
PPM (dry) = PPM (wet) * 100 / (100 - H_2O%)
SO_2, ppm = H_2S in Fuel * Fuel Flow/Stack Gas Flow

APPENDICES

Calculations

Laboratory Reports

Field Data Sheets

Process Information

QC Calibration Gas Certificates

Stack Diagram

Sample System Diagram

Permit/Authority to Construct

Source Test Plan

Appendix F – Title V Semi-Annual Report

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: WEST CONTRA COSTA SANITARY LANDFILL	**FACILITY ID#:** A1840
REPORTING PERIOD: *from* 11/01/2020	*through* 04/30/2021

CERTIFICATION:

I declare, under penalty of perjury under the laws of the state of California, that, based on information and belief formed after reasonable inquiry, all information provided in this reporting package is true, accurate, and addresses all deviations during the reporting period:

Rob Sherman
Signature of Responsible Official

5-25-21
Date

Rob Sherman
Name of Responsible Official (please print)

General Manager
Title of Responsible Official (please print)

Mail to:

Director of Compliance and Enforcement
BAAQMD
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Title V reports

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: WEST CONTRA COSTA SANITARY LANDFILL	**FACILITY ID#:** A1840
REPORTING PERIOD: *from* 11/01/2020 *through* 04/30/2021	

List of Permitted Sources and Abatement Device in Title V Permit

Permit Unit Number	**Equipment Description**
S-#	**Description**
S-5	Internal Combustion Lean Burn Engine, fired exclusively on landfill gas
S-6	Internal Combustion Lean Burn Engine, fired exclusively on landfill gas
S-15	West Contra Costa Sanitary Landfill (Closed Class I and Class II Waste Disposal Areas), Waste Decomposition Process Equipped with Landfill Gas Collection System, and Landfill gas collection system
S-37	Internal Combustion Lean Burn Engine, fired exclusively on landfill gas
S-50	Solid Waste Transfer Station
S-69	Inlet Storage Tank #1
S-70	Inlet Storage Tank #2
S-71	Primary Oil Water Separator
S-72	Secondary Separator/Emulsion Breaker
S-74	Inclined Plate Clarifier
S-111	Concrete Crusher
S-112	Crushed Concrete Screener
S-113	Concrete/Asphalt Storage Piles
S-114	Conveyors (Crushed Concrete)
S-115	Wood/Yard Waste Shredder (Tub Grinder)
S-116	Wood Waste Screener
S-117	Composting Operation
S-118	Crushing of Asphalt Debris
S-120	Air Stripper
S-123	Air Stripper Holding (Feed) Tank
S-130	Standby Air Stripper
S-140	Clarifier Holding (Feed) Tank
S-141	Inlet Feed Holding Tank
S-142	Waste Oil Tank
S-145	E-22R Area Tank
S-146	Pretreatment Inlet Feed Tank
S-151	Waste Oil Tank
S-155	Oil Sludge Thickener
S-156	Three Day Tanks
S-157	Filter Press Surge Tank
A-8	Backup Landfill Gas Flare, burning landfill gas, 49.5 MM BTU/hour

Permit Unit Number	Equipment Description
A-14	Carbon Adsorber (three vessels in series with A-14 first, followed by A-15, followed by A-16)
A-15	Carbon Adsorber (three vessels in series with A-14 first, followed by A-15, followed by A-16)
A-16	Carbon Adsorber (three vessels in series with A-14 first, followed by a-15, followed by A-16)
A-120*	Landfill Gas Flare, burning landfill gas, 91.26 MM BTU/hour
A-17	Carbon Adsorber (three vessels in series with A-17 first, followed by A-18, followed by A-19)
A-18	Carbon Adsorber (three vessels in series with A-17 first, followed by A-18, followed by A-19)
A-19	Carbon Adsorber (three vessels in series with A-17 first, followed by A-18, followed by A-19)
A-20	Carbon Adsorber (two vessels in series)
A-21	Carbon Adsorber (two vessels in series)
A-50	Water Mist System
A-111	Water Spray System
A-112	Water Spray System
A-113	Water Spray System
A-114	Water Spray System
A-115	Water Spray System
A-116	Water Spray System
A-117	Water Spray Truck
A-118	Water Spray System

* The A-120 Flare was removed from WCCSL and replaced with the A-161 Flare in November 2017. The A-161 Flare was initially started in December 2017.

Notes:

- Authority to Construct (ATC) Application Number (AN) 20621
    - Includes conditions for leachate treatment facility and inlet storage tanks. A-20 and A-21 carbon adsorbers, S-71, S-72, S-141, and S-156 wastewater separators, S-120 and S-130 air strippers, A-14, A-15, A-16, A-17, A-18, and A-19 activated carbon vessels, S-69 and S-70 inlet storage tanks, S-141 inlet feed holding tank, and S-156 three day tanks. These changes have not yet been incorporated into the Title V Permit.

- ATC A/N 25019
    - Includes conditions for S-117 covered aerated static pile (CASP) composting operations, A-119 biofilter, S-185 portable trommel screen and grinder operation, A-115 water spray system, S-186 portable diesel engine for trommel screen, S-189 wood waste stockpiles, and A-115 water spray system. S-115 was replaced by S-185. Additional conditions issued for S-189 wood waste stockpiles. These changes have not yet been incorporated into the Title V Permit.

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-5 INTERNAL COMBUSTION LEAN BURN ENGINE; AND S-6 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	None	N/A	None	BAAQMD 6-1-301	Ringelmann No. 1 for < 3 minutes/hr	Continuous	N/A
Opacity	None	N/A	None	SIP 6-301	Ringelmann No. 1 for < 3 minutes/hr	Continuous	N/A
FP	None	N/A	None	BAAQMD 6-1-310	0.15 grains/dscf	Continuous	N/A
FP	None	N/A	None	SIP 6-310	0.15 grains/dscf	Continuous	N/A
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-501.6 and 8-34-503	Quarterly Inspection and Records	Periodic / Quarterly	BAAQMD 8-34-301.2	1000 ppmv as methane (component leak limit)	Continuous	N/A
Non- Methane Organic Compounds (NMOC)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 5771, Part 7	Initial and Annual Source Tests and Records	Periodic / Annually	BAAQMD 8-34-301.4 and BAAQMD Condition # 5771, Part 6	98% removal by weight OR < 120 ppmv, dry basis @ 3% O2, expressed as methane	Continuous	N/A
NMOC	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758(b)(2)	Initial Source Test and Records	Periodic	40 CFR 60.752(b)(2)(iii)(B)	98% removal by weight OR < 20 ppmv dry @ 3% O2, expressed as hexane	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-5 INTERNAL COMBUSTION LEAN BURN ENGINE; AND S-6 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
SO_2	None	N/A	None	BAAQMD 9-1-301	Property Line Ground Level Limits ≤ 0.5 ppm for 3 minutes, ≤ 0.25 ppm for 60 minutes, and ≤0.05 ppm for 24 hours	Continuous	N/A
SO_2	BAAQMD Condition #25293, Part 10 and BAAQMD Condition # 5771, Part 7	Quarterly Sulfur Analysis of Landfill Gas and Annual Source Test	Periodic / Quarterly and Periodic / Annually	BAAQMD 9-1-302	≤ 300 ppm (dry)	Continuous	N/A
H_2S	None	N/A	None	BAAQMD 9-2-301	Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm averaged over 60 minutes	Continuous	N/A
NO_x	BAAQMD Condition # 5771, Part 7	Annual Source Test	Periodic / Annually	BAAQMD 9-8-302.1	Waste Fuel Gas, Lean-Burn ≤ 70 ppmv, dry basis @ 15% O2	Continuous	N/A
NO_x	BAAQMD Condition # 5771, Part 7	Annual Source Test	Periodic / Annually	SIP 9-8-302.1	Waste Fuel Gas, Lean-Burn ≤ 140 ppmv, dry basis @ 15% O2	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-5 INTERNAL COMBUSTION LEAN BURN ENGINE; AND S-6 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
NO_x	BAAQMD Condition # 5771, Part 7	Annual Source Test	Periodic / Annually	BAAQMD Condition # 5771, Part 4	≤ 63 ppmv, dry basis @ 15% O2	Continuous	N/A
CO	BAAQMD Condition # 5771, Part 7	Annual Source Test	Periodic / Annually	BAAQMD 9-8-302.3	Waste Fuel Gas: ≤ 2000 ppmv, dry basis @ 15% O2	Continuous	N/A
CO	BAAQMD Condition # 5771, Part 7	Annual Source Test	Periodic / Annually	BAAQMD Condition # 5771, Part 5	≤ 376 ppmv, dry basis @ 15% O2	Continuous	N/A
Heat Input	BAAQMD Condition # 5771, Parts 3 and 9	Gas Flow Meter and Recorder and Records	Continuous	BAAQMD Condition # 5771, Part 8	285.6 MM BTU per day (each engine) and 104,250 MM BTU per year (each engine)	Continuous	N/A
Gas Flow	BAAQMD 8-34-501.10 and 508	Gas Flow Meter and Recorder (every 15 minutes)	Continuous	BAAQMD 8-34-301 and 301.1	Vent all collected gases to a properly operating control system and operate control system continuously.	Continuous	N/A
Gas Flow	BAAQMD Condition # 5771, Part 3	Gas Flow Meter and Recorder	Continuous	BAAQMD Condition # 5771, Part 2	Upon shut down of an engine (S-5 or S-6), automatically divert excess collected gas to either flare A-120 or backup A-8 Flare	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-5 INTERNAL COMBUSTION LEAN BURN ENGINE; AND S-6 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Gas Flow	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve & Lock and Records	Continuous and Periodic / Monthly	40 CFR 60.753(a) and (e)	Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	Continuous	N/A
Emission Control System Shutdown TIme	BAAQMD 8-34 501.2 and BAAQMD Condition # 5771, Part 9	Records	Periodic / Daily	BAAQMD 8-34-113.2	240 hours/year	Continuous	N/A
Emission Control System Startup Shutdown or Malfunction	40 CFR 60.7(b), 60.757(f)(2) and (f)(3), and 60.758(e)	Records of occurrence and duration	Periodic / Daily	40 CFR 60.755(e)	≤ 1 hour per event	Continuous	N/A
Startup Shutdown or Malfunction Procedures	40 CFR 63.1980(a-b)	Records (all occurrences, duration of each, corrective actions)	Periodic / on event basis	40 CFR 63.6(e)	Minimize Emissions by Implementing SSM Plan	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-5 INTERNAL COMBUSTION LEAN BURN ENGINE; AND S-6 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Engine Cylinder or Exhaust Temperature	BAAQMD 8-34-507 and 8-34-509	Temperature sensor and continuous recorder	Continuous	BAAQMD Condition #5771 Part 10	To be established during first source test conducted after permit issuance	Continuous	N/A
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.4	Records of occurrence and duration	Periodic / Daily	BAAQMD 1-523.2	15 consecutive days/incident and 30 calendar days/12 month period	Continuous	N/A
Continuous Monitors	40 CFR 60.7(b)	Records of occurrence and duration	Periodic / Daily	40 CFR 60.13€	Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Collection System Installation Dates	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 25293, Parts 14b-c	Records	Periodic / on event basis	BAAQMD 8-34-304.1	For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	Continuous	N/A
Collection System Installation Dates	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #25293, Parts 14b-c	Records	Periodic / on event basis	BAAQMD 8-34-304.2	For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	Continuous	N/A
Collection System Installation Dates	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #25293, Parts 14b-c	Records	Periodic / on event basis	BAAQMD 8-34-304.3	For Any Uncontrolled Areas or Cells: collection system components must be installed and operating within 60 days after the uncontrolled area or cell accumulates 1,000,000 tons of decomposable waste	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Collection System Installation Dates	40 CFR 60.758(a), (d)(1) and (d)(2), and 60.759(a)(3)	Records	Periodic / on event basis	40 CFR 60.753 (a)(2) and 60.755 (b)(2)	For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	Continuous	N/A
Collection System Installation Dates	40 CFR 60.758(a), (d)(1) and (d)(2)	Records	Periodic / on event basis	40 CFR 60.753 (a)(1) and 60.755 (b)(1)	For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	Continuous	N/A
Gas Flow	BAAQMD 8-34-501.5, 501.10 and 508	Gas Flow Meter and Recorder (every 15 minutes) and records	Continuous	BAAQMD 8-34-301 and 301.1 and 404	Landfill gas collection system shall operate continuously, except as described in condition #25293 part 7 and all collected gases shall be vented to a properly operating control system	Intermittent	There were five landfill gas collection and control system (GCCS) downtime events that did not meet the exemption criteria specified in Rule 8-34-113. These events included utility outages, which resulted in shutdowns of the GCCS that occurred on January 19, 2021 from 2:38 to 2:48 and 4:02 to 4:18, February 26, 2021 from 13:03 to 15:01,

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
							March 13, 2021 from 21:03 to 23:01, and April 15, 2021 from 7:14 to 7:31. These events were reported to the BAAQMD as reportable compliance activities (RCA) and breakdown relief was requested.
Gas Flow	BAAQMD Condition # 5771, Part 9; BAAQMD Condition #17812, Part 9; and BAAQMD Condition #25293, Parts 14b-d	Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Components	Periodic / Daily	BAAQMD Condition #25293, Parts 5, 6, and 7	Landfill gas collection system shall operate continuously, except as described in condition #25293 part 7 and all collected gases shall be vented to a properly operating control system	Continuous	N/A
Gas Flow	BAAQMD Condition #5771, Part 9; BAAQMD Condition #17812, Part	Records of Landfill Gas Flow Rates, Collection and Control Systems	Periodic / Daily	BAAQMD Condition #25293, Parts 5, 6, and 7	Landfill gas collection system shall operate less than continuously and all collected gases shall be vented to a	Continuous	N/A

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TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
	9; and BAAQMD Condition #25293, Parts 14b-d	Downtime, and Collection System Components			properly operating control system		
Gas Flow	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records	Continuous or Periodic / Monthly	40 CFR 60.753(a) and (e)	Operate a Collection System in each area or cell and vent all collected gases to a properly operating control system	Continuous	N/A
Collection and Control Systems Shutdown Time	BAAQMD 8-34-501.1	Operating Records	Periodic / Daily	BAAQMD 8-34-113.2	240 hours/year or 5 consecutive days	Continuous	N/A
Collection and Control	40 CFR 60.7(b),	Operating Records (all	Periodic / Daily	40 CFR 60.755(e)	5 days per event for collection system and	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
System Startup Shutdown or Malfunction	60.757(f)(2), (f)(3) and (f)(4)	occurrences and duration of each)			1 hour per event for control system		
Startup Shutdown or Malfunction Procedures	40 CFR 63.1980(a-b)	Records (all occurrences, duration of each, and corrective actions)	Periodic / on event basis	40 CFR 63.6(e)	Minimize Emissions by Implementing SSM Plan	Continuous	N/A
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.4	Operating Records for All Parametric Monitors	Periodic / Daily	BAAQMD 1-523.2	15 consecutive days/incident and 30 calendar days/12 month period	Continuous	N/A
Continuous Monitors	40 CFR 60.7(b)	Operating Records for All Continuous Monitors	Periodic / Daily	40 CFR 60.13(e)	Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Wellhead Pressure	BAAQMD 8-34-414, 501.9 and 505.1	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305.1	< 0 psig	Continuous	N/A
Wellhead Pressure	40 CFR 60.755(a)(3), 60.756(a)(1), and 60.758(c) and (e)	Monthly Inspection and Records	Periodic / Monthly	40 CFR 60.753(b)	< 0 psig	Continuous	N/A
Temperature of Gas at Wellhead	BAAQMD 8-34-414, 501.9 and 505.2	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305.2	< 55 ºC	Continuous	N/A
Temperature of Gas at Wellhead	40 CFR 60.755(a)(5), 60.756(a)(3), and 60.758(c) and (e)	Monthly Inspection and Records	Periodic / Monthly	40 CFR 60.753(c)	< 55 ºC	Continuous	N/A
Gas Concentrations at Wellhead	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4 and BAAQMD Condition	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305.3 or 305.4 and BAAQMD Condition #25293 Part 7d	Applies to Gas Collection System Components Other than Leachate Wells N2 < 20% OR O2 < 5% Applies to Leachate	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
	#25293 Part 7d				Wells When Connected to the LFG Collection System O2 < 15% by volume		
Gas Concentrations at Wellhead	40 CFR 60.755(a)(5), 60.756(a)(2), and 60.758(c) and (e)	Monthly Inspection and Records	Periodic / Monthly	40 CFR 60.753(c)	N2 < 20% **OR** O2 < 5%	Continuous	N/A
Well Shutdown Limits	BAAQMD 8-34-117.6 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-117.4	No more than 5 wells at a time or 10% of total collection system, whichever is less	Continuous	N/A
Well Shutdown Limits	BAAQMD 8-34-117.6 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-117.5	24 hours per well	Continuous	N/A
TOC (Total Organic Com- pounds Plus Methane)	BAAQMD 8-34-501.6 and 503	Quarterly Inspection of collection and control system components with OVA and Records	Periodic / Quarterly	BAAQMD 8-34-301.2	1000 ppmv as methane (component leak limit)	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
TOC	BAAQMD 8-34-415, 416, 501.6, 506 and 510	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records	Periodic / Monthly, Quarterly, and on event basis	BAAQMD 8-34-303	500 ppmv as methane at 2 inches above surface	Continuous	N/A
TOC	40 CFR 60.755(c)(1), (4) and (5), 60.756(f), and 60.758(c) and (e)	Monthly Visual Inspection of Cover, Quarterly Inspection with Portable Analyzer of Surface, Various Reinspection Times for Leaking Areas, and Records	Periodic / Monthly, Quarterly, and on event basis	40 CFR 60.753(d)	<500 ppmv as methane at 5-10 cm from surface	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Non- Methane Organic Compounds (NMOC)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition #25293, Parts 4, 11	Initial and Annual Source Tests and Records	Periodic / Annually	BAAQMD 8-34-301.3	98% removal by weight OR < 30 ppmv, dry basis @ 3% O2, expressed as methane (applies to A-120 and A-8 Flares only)	Continuous	N/A
NMOC	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758 (b)(2)(ii)	Initial Source Test and Records	Periodic / on event basis	40 CFR 60.752(b)(2)(iii)(B)	98% removal by weight OR < 20 ppmv dry @ 3% O2, expressed as hexane (applies to A-120 and A-8 Flares only)	Continuous	N/A
Temperature of Combustion Zone (CT)	BAAQMD 8-34-501.3 and 507, and BAAQMD Condition #25293, Part 14e	Temperature Sensor and Recorder (continuous)	Continuous	BAAQMD Condition #25293, Part 9	CT $\geq$ 1400 °F, CT > 1417 °F averaged over any 3-hour period (applies to A-8 and A-120 Flares only)	Continuous	N/A

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TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
CT	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	Temperature Sensor and Recorder (measured every 15 minutes and averaged over 3 hours)	Continuous	40 CFR 60.758 (c)(1)(i)	CT $\geq$ 1467 °F (3-hour average) from (CT $\geq$ CTPF – 28 °C), where CTPF is the average combustion temperature during the most recent complying performance test (applies to A-120 Flare only)	Continuous	N/A
Opacity	BAAQMD Condition #25293, Part 14e	Records of all site watering cleaning events and road	Periodic / on event basis, Monthly	BAAQMD 6-1-301	Ringelmann No. 1 for < 3 minutes/hr (applies to S-15 Landfill operations)	Continuous	N/A
Opacity	BAAQMD Condition #25293, Part 14e	Records of all site watering and road cleaning events	Periodic / on event basis, Monthly	SIP 6-301	Ringelmann No. 1 for < 3 minutes/hr (applies to S-15 Landfill operations)	Continuous	N/A
Opacity	None	N/A	None	BAAQMD 6-1-301	Ringelmann No. 1 for < 3 minutes/hr (applies to A-8 and A-	Continuous	N/A

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TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
					120 Flares)		
Opacity	None	N/A	None	SIP 6-301	Ringelmann No. 1 for < 3 minutes/hr (applies to A-8 and A-120 Flares)	Continuous	N/A
FP	None	N/A	None	BAAQMD 6-1-310	$\leq$ 0.15 grains/dscf (applies to A-8 and A-120 Flares only)	Continuous	N/A
FP	None	N/A	None	SIP 6-310	$\leq$ 0.15 grains/dscf (applies to A-8 and A-120 Flares only)	Continuous	N/A
SO_2	None	N/A	None	BAAQMD 9-1-301	Property Line Ground Level Limits: $\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 min. and $\leq$0.05 ppm for 24 hours	Continuous	N/A
SO_2	BAAQMD Condition #25293, Part 10	Source Test	Periodic / Annually	BAAQMD 9-1-302	$\leq$ 300 ppm (dry basis) (applies to A-8 and A-120 Flares only)	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 25293, Part 10	Sulfur analysis of landfill gas	Periodic / Quarterly	BAAQMD Condition #25293, Part 10	$\leq$ 300 ppmv	Continuous	N/A
H_2S	None	N/A	None	BAAQMD 9-2-301	Property Line Ground Level Limits: $\leq$ 0.06 ppm, averaged over 3 minutes and $\leq$ 0.03 ppm, averaged over 60 minutes	Continuous	N/A
Heat Input	BAAQMD Condition # 25293, Part 8	Records	Periodic / Daily	BAAQMD Condition # 25293 Part 8	$\leq$ 2137 MM BTU per day and $\leq$ 780,134 MM BTU per year	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-15 LANDFILL AND A-8 BACKUP LANDFILL GAS FLARE AND A-120 LANDFILL GAS FLARE (NOTE A-161 REPLACED A-120)	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Toxic Air Contaminants	BAAQMD Condition # 25293, Part 12	Annual Landfill Gas Analysis	Periodic / Annually	BAAQMD Condition # 25293 Part 13	Benzene 8.9 ppmv Chlorobenzene 1.5 ppmv Trichloroethylene 0.873 ppmv Ethylbenzene 41 ppmv Vinyl Chloride 6.4 ppmv Xylene 78 ppmv Toluene 110 ppmv Perchloroethylene 0.4 ppmv Acrylonitrile 10 ppmv Methylene Chloride 350 ppmv	Continuous	N/A
NOx	BAAQMD Condition # 25293 Part 16	Annual Source Test and Records	Periodic / Annually	BAAQMD Condition # 25293 Part 16	From A-120 only < 0.05 lbs/MMBTU	Continuous	N/A
CO	BAAQMD Condition # 25293 Part 17	Annual Source Test and Records	Periodic / Annually	BAAQMD Condition # 25293 Part 17	From A-120 only < 0.20 lbs/MM BTU	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-37 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	None	N/A	None	BAAQMD 6-1-301	Ringelmann No. 1 for < 3 minutes/hr	Continuous	N/A
Opacity	None	N/A	None	SIP 6-301	Ringelmann No. 1 for < 3 minutes/hr	Continuous	N/A
FP	None	N/A	None	BAAQMD 6-1-310	0.15 grains/dscf	Continuous	N/A
FP	None	N/A	None	SIP 6-310	0.15 grains/dscf	Continuous	N/A
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-501.6 and 8-34-503	Quarterly Inspection and Records	Periodic / Quarterly	BAAQMD 8-34-301.2	1000 ppmv as methane (component leak limit)	Continuous	N/A
Non- Methane Organic Compounds (NMOC)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 17812, Part 8	Initial and Annual Source Tests and Records	Periodic / Annually	BAAQMD 8-34-301.4	98% removal by weight OR < 120 ppmv, dry basis @ 3% O2, expressed as methane	Continuous	N/A
NMOC	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758(b)(2)	Initial Source Test and Records	Periodic / Initial	40 CFR 60.752(b)(2)(iii)(B)	98% removal by weight OR < 20 ppmv dry @ 3% O2, expressed as hexane	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-37 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
SO_2	None	N/A	None	BAAQMD 9-1-301	Property Line Ground Level Limits ≤ 0.5 ppm for 3 minutes, ≤ 0.25 ppm for 60 minutes, and ≤0.05 ppm for 24 hours	Continuous	N/A
SO_2	BAAQMD Condition #25293, Part 10 and BAAQMD Condition # 17812, Part 8	Quarterly Sulfur Analysis of Landfill Gas and Annual Source Test	Periodic / Quarterly and Periodic / Annually	BAAQMD 9-1-302	≤ 300 ppm (dry)	Continuous	N/A
H_2S	None	N/A	None	BAAQMD 9-2-301	Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes	Continuous	N/A
NO_x	BAAQMD Condition # 17812, Part 8	Annual Source Test	Periodic / Annually	BAAQMD 9-8-302.1	Waste Fuel Gas, Lean-Burn ≤ 70 ppmv, dry basis @ 15% O2	Continuous	N/A

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TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-37 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
NO_x	BAAQMD Condition #17812, Part 8	Annual Source Test	Periodic / Annually	SIP 9-8-302.1	Waste Fuel Gas, Lean-Burn $\leq$ 140 ppmv, dry basis @ 15% O2	Continuous	N/A
NO_x	BAAQMD Condition #17812, Part 8	Annual Source Test	Periodic / Annually	BAAQMD Condition #17812, Part 5	$\leq$ 63 ppmv, dry basis @ 15% O2	Continuous	N/A
CO	BAAQMD Condition #17812, Part 8	Annual Source Test	Periodic / Annually	BAAQMD 9-8-302.3	Waste Fuel Gas: $\leq$ 2000 ppmv, dry basis @ 15% O2	Continuous	N/A
CO	BAAQMD Condition #17812, Part 8	Annual Source Test	Periodic / Annually	BAAQMD Condition #17812, Part 6	$\leq$ 309 ppmv, dry basis @ 15% O2	Continuous	N/A
Heat Input	BAAQMD Condition #17812, Parts 7 and 9c-d	Gas Flow Meter and Recorder and Records	Continuous	BAAQMD Condition #17812, Part 2	251.9 MM BTU per day and 91,951 MM BTU per consecutive 12-month period	Continuous	N/A
Gas Flow	BAAQMD 8-34-501.10 and 508	Gas Flow Meter and Recorder (every 15 minutes)	Continuous	BAAQMD 8-34-301 and 301.1	Vent all collected gases to a properly operating control system and operate control system continuously.	Continuous	N/A

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TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-37 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Gas Flow	BAAQMD Condition # 17812, Part 7	Gas Flow Meter and Recorder	Continuous	BAAQMD Condition #17812, Parts 3 & 4	Operate S-37 continuously; Upon shutdown of S-37 or if any amount of gas exceeds the capacity of S- 37, return gas to A-8 Flare automatically	Continuous	N/A
Gas Flow	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve & Lock and Records	Continuous and Periodic / Monthly	40 CFR 60.753(a) and (e)	Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	Continuous	N/A
Emission Control System Shutdown Time	BAAQMD 8-34-501.2 and BAAQMD Condition #17812, Part 9a	Records	Periodic / Daily	BAAQMD 8-34-113.2	240 hours/year	Continuous	N/A
Emission Control System Startup Shutdown or Malfunction	40 CFR 60.7(b), 60.757(f)(2) and (f)(3), and 60.758(e)	Records of occurrence and duration	Periodic / Daily	40 CFR 60.755(e)	$\leq$ 1 hour per event	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-37 INTERNAL COMBUSTION LEAN BURN ENGINE	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Startup Shutdown or Malfunction Procedures	40 CFR 63.1980(a-b)	Records (all occurrences, duration of each, corrective actions)	Periodic / on event basis	40 CFR 63.6(e)	Minimize Emissions by Implementing SSM Plan	Continuous	N/A
Engine Cylinder or Exhaust Temperature	BAAQMD 8-34-507 and 8-34-509	Temperature sensor and continuous recorder	Continuous	BAAQMD Condition #17812, Part 10	To be established during first source test conducted after permit issuance	Continuous	N/A
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.4	Records of occurrence and duration	Periodic / Daily	BAAQMD 1-523.2	15 consecutive days/incident and 30 calendar days/12 month period	Continuous	N/A
Continuous Monitors	40 CFR 60.7(b)	Records of occurrence and duration	Periodic / Daily	40 CFR 60.13(e)	Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-120 AIR STRIPPER; S-130 STANDBY AIR STRIPPER; ABATED BY: A-14 CARBON ADSORBER; A-15 CARBON ADSORBER, AND A-16 CARBON ADSORBER; OR A-17 CARBON ADSORBER; A-18 CARBON ADSORBER AND A-19 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Total Organic Compounds (TOC)	BAAQMD 8-47-501.1, 8-47-501.2, and 8-47-601 and BAAQMD Condition #23316, Parts 7 and 8	Monthly, Weekly, or Daily FID Measurements at Carbon Adsorbers, Daily Records of Wastewater Throughput and Monthly Records of Water Analyses	Periodic / Daily, Weekly, and Monthly	BAAQMD 8-47-301 and 8-47-302	control device shall reduce total organic compound emissions to the atmosphere by at least: 90% by weight	Continuous	N/A

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TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-120 AIR STRIPPER; S-130 STANDBY AIR STRIPPER; ABATED BY: A-14 CARBON ADSORBER; A-15 CARBON ADSORBER, AND A-16 CARBON ADSORBER; OR A-17 CARBON ADSORBER; A-18 CARBON ADSORBER AND A-19 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
NMOC	BAAQMD Condition #23316, Part 8	Monthly, Weekly, or Daily FID Measure-ments at Carbon Adsorbers (inlet and outlet) and Records	Periodic / Daily, Weekly, and Monthly	BAAQMD Condition #23316, Part 4	carbon replacement upon detection of an outlet NMOC concentration (from A-14, A-15 or A-17, A-18) that is 10% or more of the inlet NMOC concentration and is 10 ppmv or greater (measured as methane)	Continuous	N/A
NMOC	BAAQMD Condition #23316, Part 8	Monthly, Weekly, or Daily FID Measure-ments at Carbon Adsorbers (outlet) and Records	Periodic / Daily, Weekly, and Monthly	BAAQMD Condition #23316, Part 5	carbon replacement upon detection of an outlet NMOC concentration (from A-16 or A-19) of 6 ppmv (measured as methane)	Continuous	N/A
POC	None	N/A	None	BAAQMD Condition #23316, Part 3	Leak Limit for Valves, Flanges, and Pumps of: 100 ppmv of POC above background at 1 cm from any component	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-120 AIR STRIPPER; S-130 STANDBY AIR STRIPPER; ABATED BY: A-14 CARBON ADSORBER; A-15 CARBON ADSORBER, AND A-16 CARBON ADSORBER; OR A-17 CARBON ADSORBER; A-18 CARBON ADSORBER AND A-19 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Wastewater Throughput Limits	BAAQMD Condition #23316 Part 7	Records	Periodic / Daily	BAAQMD Condition #23316 Part 1	40,800 Gallons/Day 14,892,000 Gallons/Year	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-50 SOLID WASTE TRANSFER STATION; AND A-50 WATER MIST SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	BAAQMD Condition #18258, Part 3	Continuous Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	BAAQMD Condition #18258, Part 3	Continuous Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Amount of Waste Accepted	BAAQMD Condition #18258, Part 7	Records	Periodic / on event basis	BAAQMD Condition #22792, Part 1	2000 tons/day or 730,000 tons in any consecutive twelve month period	Continuous	N/A
Amount of Vehicle Traffic	BAAQMD Condition #18258, Part 7	Records	Periodic / on event basis	BAAQMD Condition #22792, Part 5 and 6	601 vehicle trips per day to both S-15 and S-50 while waste is accepted at S-15; 715 vehicle trips per day to S-50 after waste is no longer accepted at S-15	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-69 INLET STORAGE TANK #1; S-70 INLET STORAGE TANK #2; S-141 INLET FEED TANK; S-156 THREE DAY TANKS; EACH ABATED BY A-20 CARBON ADSORBER AND A-21 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Organic Compounds	BAAQMD 8-5-501 and BAAQMD Condition #23220, Parts 7 and 8	Monthly, Weekly, or Daily FID Measurements at Carbon Adsorbers and Daily Records of Wastewater Throughput	Periodic / Daily, Weekly, and Monthly	BAAQMD 8-5-301 and 306	Abatement efficiency of at least 95% by weight	Continuous	N/A
Organic Compounds	BAAQMD 8-5-501 and BAAQMD Condition #23220, Parts 7 and 8	Monthly, Weekly, or Daily FID Measurements at Carbon Adsorbers and Daily Records of Wastewater Throughput	Periodic / Daily, Weekly, and Monthly	SIP 8-5-301 and 306	Abatement efficiency of at least 95% by weight	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-69 INLET STORAGE TANK #1; S-70 INLET STORAGE TANK #2; S-141 INLET FEED TANK; S-156 THREE DAY TANKS; EACH ABATED BY A-20 CARBON ADSORBER AND A-21 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
NMOC	BAAQMD Condition #23220, Part 8	Monthly, Weekly, or Daily FID Measurements at Carbon Adsorbers (inlet and outlet) and Records	Periodic / Daily, Weekly, and Monthly	BAAQMD Condition #23220, Part 5	carbon replacement upon detection of an outlet NMOC concentration (from A-20) that is 10% or more of the inlet NMOC concentration and is 10 ppmv or greater (measured as methane)	Continuous	N/A
NMOC	BAAQMD Condition #23220, Part 8	Monthly, Weekly, or Daily FID Measurements at Carbon Adsorbers (outlet) and Records	Periodic / Daily, Weekly, and Monthly	BAAQMD Condition #23220, Part 6	carbon replacement upon detection of an outlet NMOC concentration (from A-21) of 6 ppmv (measured as methane)	Continuous	N/A
POC	None	N/A	None	BAAQMD Condition #23220, Part 4	Leak Limit for Valves, Flanges, and Pumps of: 100 ppmv of POC above background at 1 cm from any component	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-69 INLET STORAGE TANK #1; S-70 INLET STORAGE TANK #2; S-141 INLET FEED TANK; S-156 THREE DAY TANKS; EACH ABATED BY A-20 CARBON ADSORBER AND A-21 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Wastewater Throughput Limits	BAAQMD Condition #23220, Part 7	Records	Periodic / Daily	BAAQMD Condition #23220, Part 1	40,800 Gallons/Day 14,892,000 Gallons/Year	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-71 PRIMARY OIL WATER SEPARATOR; S-72 SECONDARY SEPARATOR/EMULSION BREAKER; AND S-157 FILTER PRESS SURGE TANK; ABATED BY: A-20 CARBON ADSORBER; AND A-21 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Organic Compounds	BAAQMD Condition #23220, Part 8	Monthly, Weekly, or Daily FID Measurements at Carbon Adsorbers	Periodic / Daily, Weekly, and Monthly	BAAQMD 8-8-301.3	combined collection and removal efficiency of at least 95% by weight	Continuous	N/A
Organic Compounds	BAAQMD Condition #23220, Part 8	Monthly, Weekly, or Daily FID Measurements at Carbon Adsorbers	Periodic / Daily, Weekly, and Monthly	SIP 8-8-301.3	combined collection and removal efficiency of at least 95% by weight	Continuous	N/A
Organic Compounds	None	N/A	None	BAAQMD 8-8-303	all gauging and sampling devices shall have vapor tight covers, seals, or lids	Continuous	N/A
POC	None	N/A	None	BAAQMD Condition #23220 Part 4	Leak Limit for Valves, Flanges, and Pumps of: 100 ppmv of POC above background at 1 cm from any component	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-74 INCLINED PLATE CLARIFIER; S-140 CLARIFIER HOLDING TANKS; S-123 AIR STRIPPER FEED TANK; S-145 E-22R AREA TANKS; S-146 PRETREATMENT INLET FEED TANK; S-155 OIL SLUDGE THICKENER; S-142 WASTE OIL TANK; S-151 WASTE OIL TANK; ABATED BY: A-20 CARBON ADSORBER; AND A-21 CARBON ADSORBER	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Total Carbon	BAAQMD Condition #23220, Part 7	Records	Periodic / Daily	BAAQMD 8-2-301	15 Pounds/Day or 300 ppm, dry basis	Continuous	N/A
Wastewater Throughput Limits	BAAQMD Condition #23220, Part 7	Records	Periodic / Daily	BAAQMD Condition #23220, Part 1	40,800 Gallons/Day 14,892,000 Gallons/Year	Continuous	N/A
POC	None	N/A	None	BAAQMD Condition #23220, Part 4	Leak Limit for Valves, Flanges, and Pumps of: 100 ppmv of POC above background at 1 cm from any component	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-111 CONCRETE CRUSHER; AND A-111 WATER SPRAY SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23350, Part 6	Records	Periodic / on event basis	BAAQMD Condition #23350, Part 2	30,000 tons of concrete in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23350, Part 4	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23350, Part 4	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
PM	BAAQMD Condition #23350, Part 6	Records	Periodic / on event basis	BAAQMD Condition #23350, Part 5	Application of dust suppressant to all unpaved on-site truck routes to and from the concrete and asphalt recycling operations to maintain a PM control efficiency of 75 % by weight	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-112 CRUSHED CONCRETE SCREENER; AND A-112 WATER SPRAY SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23351, Part 5	Records	Periodic / on event basis	BAAQMD Condition #23351, Part 2	30,000 tons of concrete in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23351, Part 4	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23351, Part 4	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-113 CONCRETE/ASPHALT STORAGE PILES; AND A-113 WATER SPRAY SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23352, Part 4	Records	Periodic / on event basis	BAAQMD Condition #23352, Part 1	30,000 tons of concrete in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23352, Part 3	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23352, Part 3	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-114 CONVEYORS (CRUSHED CONCRETE); AND A-114 WATER SPRAY SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23353, Part 5	Records	Periodic / on event basis	BAAQMD Condition #23353, Part 2	30,000 tons of concrete in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23353, Part 4	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23353, Part 4	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-115 WOOD/YARD WASTE SHREDDER (TUB GRINDER); AND A-115 WATER SPRAY SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23354, Part 7	Records	Periodic / on event basis	BAAQMD Condition #23354, Part 2	19,000 tons of wood waste in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23354, Part 4	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23354, Part 4	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-116 WOOD WASTE SCREENER; AND A-116 WATER SPRAY SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23355, Part 4	Records	Periodic / on event basis	BAAQMD Condition #23355, Part 1	19,000 tons of wood waste in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23355, Part 3	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23355, Part 3	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-117 COMPOSTING OPERATION; AND A-117 WATER SPRAY TRUCK	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23356, Part 5	Records	Periodic / on event basis	BAAQMD Condition #23356, Part 1	19,000 tons of wood waste in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23356, Part 3	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23356, Part 3	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
PM	BAAQMD Condition #23356, Part 5	Records	Periodic / on event basis	BAAQMD Condition #23356, Part 4	Application of dust suppressant or water to all unpaved on-site truck routes to and from the composting operation to maintain a PM control efficiency of 75 % by weight	Continuous	N/A

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: West Contra Costa Sanitary Landfill	**Facility ID#:** A2254
Permitted Unit: S-118 CRUSHING OF ASPHALT DEBRIS; AND A-118 WATER SPRAY SYSTEM	**Reporting Period:** *from* 11/01/2020 *through* 04/30/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Throughput	BAAQMD Condition #23357, Part 4	Records	Periodic / on event basis	BAAQMD Condition #23357, Part 1	5,000 tons of asphalt in any consecutive twelve month period	Continuous	N/A
Opacity	BAAQMD Regulation 6-1-401 and BAAQMD Condition #23357, Part 3	Observation of Source in Operation	Continuous	BAAQMD 6-1-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	SIP 6-401 and BAAQMD Condition #23357, Part 3	Observation of Source in Operation	Continuous	SIP 6-301	Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A

Appendix G – Title V Annual Compliance Certification

WEST CONTRA COSTA SANITARY LANDFILL

TITLE V ANNUAL CERTIFICATION

SITE: WEST CONTRA COSTA SANITARY LANDFILL	**FACILITY ID#:** A1840
REPORTING PERIOD: *from* 05/01/2020 *through* 04/30/2021	

CERTIFICATION:

I declare, under penalty of perjury under the laws of the state of California, that, based on information and belief formed after reasonable inquiry, all information provided in this reporting package is true, accurate, and addresses all deviations during the reporting period:

Rob Sherman
Signature of Responsible Official

5-25-21
Date

Rob Sherman
Name of Responsible Official (please print)

General Manager
Title of Responsible Official (please print)

Compliance Certification Report

Site #: A1840 **Site Name:** West Contra Costa Sanitary Landfill **Reporting Period:** 05/01/2020 to 04/30/2021

Address: 1 Parr Boulevard **City:** Richmond, CA **Zip Code:** 94801

Source #: Facility **Source Name:** Facility

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 1	General Provisions and Definitions (5/4/11)	N	C	
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y	C	
BAAQMD Regulation 2, Rule 1	General Requirements (12/19/12, effective 8/31/16)	Y	C	
BAAQMD 2-1-429	Federal Emissions Statement (12/21/04)	Y	C	
BAAQMD Regulation 2, Rule 5	New Source Review of Toxic Air Contaminants (12/7/16)	N	C	
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N	C	
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y	C	
BAAQMD Regulation 5	Open Burning (6/19/13)	N	C	
SIP Regulation 5	Open Burning (9/4/98)	Y	C	
BAAQMD Regulation 6, Rule 1	Particulate Matter and Visible Emissions (12/5/07)	N	C	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y	C	
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N	C	
BAAQMD Regulation 8, Rule 1	Organic Compounds – General Provisions (6/15/94)	Y	C	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	N	C	
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y	C	
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (7/1/09)	N	C	

Compliance Certification Report

Site #: A1840 **Site Name:** West Contra Costa Sanitary Landfill **Reporting Period:** 05/01/2020 to 04/30/2021

Address: 1 Parr Boulevard **City:** Richmond, CA **Zip Code:** 94801

Source #: Facility **Source Name:** Facility

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (1/2/04)	Y	C	
BAAQMD Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (10/16/02)	Y	C	
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y	C	
BAAQMD Regulation 8, Rule 16	Organic Compounds – Solvent Cleaning Operations (10/16/02)	Y	C	
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N	C	
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y	C	
BAAQMD Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N	C	
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	Y	C	
BAAQMD Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (12/20/95)	N	C	
SIP Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (3/22/95)	Y	C	
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N	C	
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y	C	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)	N	C	

Compliance Certification Report

Site #: A1840 **Site Name:** West Contra Costa Sanitary Landfill **Reporting Period:** 05/01/2020 to 04/30/2021

Address: 1 Parr Boulevard **City:** Richmond, CA **Zip Code:** 94801

Source #: Facility **Source Name:** Facility

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)	Y	C	
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants - Lead (3/17/82)	N	C	
SIP Regulation 11, Rule 1	Hazardous Pollutants - Lead (9/2/81)	Y	C	
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N	C	
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants – Asbestos-Containing Serpentine (7/17/91)	N	C	
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N	C	
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y	C	
California Code of Regulations Title 17, Section 93105	Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (10/8/02)	N	C	
California Code of Regulations Title 17, Section 93106	Asbestos Airborne Toxic Control Measure for Surfacing Applications (7/16/01)	N	C	
California Code of Regulations Title 17, Section 93115	Airborne Toxic Control Measure for Stationary Compression Ignition Engines (5/19/11)	N	C	
California Code of Regulations Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (2/19/11)	N	C	

Compliance Certification Report

Site #: A1840 **Site Name:** West Contra Costa Sanitary Landfill **Reporting Period:** 05/01/2020 to 04/30/2021

Address: 1 Parr Boulevard **City:** Richmond, CA **Zip Code:** 94801

Source #: Facility **Source Name:** Facility

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N	C	
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N	C	
40 CFR Part 61, Subpart A	National Emission Standards for Hazardous Air Pollutants – General Provisions (4/9/04)	Y	C	
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (7/20/04)	Y	C	
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)		C	
Subpart F, 40 CFR 82.154	Prohibitions	Y	C	
Subpart F, 40 CFR 82.156	Leak Repair	Y	C	
Subpart F, 40 CFR 82.158	Standards for Recycling and Recovery Equipment	Y	C	
Subpart F, 40 CFR 82.161	Certification of Technicians	Y	C	
Subpart F, 40 CFR 82.162	Certification by Owners of Recovery and Recycling Equipment	Y	C	
Subpart F, 40 CFR 82.166	Records of Refrigerant	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**			
1-523	Parametric Monitoring and Recordkeeping Procedures	N	C	
1-523.1	Reporting requirement for periods of in-operation > 24 hours	Y	C	
1-523.2	Limit on duration of in operation	Y	C	
1-523.3	Reporting requirement for violations of any applicable limits	N	C	
1-523.4	Records of in-operation, tests, calibrations, adjustments, & maintenance	Y	C	
1-523.5	Maintenance and calibration	N	C	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**			
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
1-523.3	Reports of Violations	Y	C	
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-310	Particle Weight Limitation	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-310	Particle Weight Limitation	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
6-401	Appearance of Emissions	Y	C	
BAAQMD Regulation 8, Rule 34	**Organic Compounds - Solid Waste Disposal Sites (6/15/05)**			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	C	
8-34-113.1	Emission Minimization Requirement	Y	C	
8-34-113.2	Shutdown Time Limitation	Y	C	
8-34-113.3	Record keeping Requirement	Y	C	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	C	
8-34-301.1	Continuous Operation	Y	C	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	C	
8-34-301.4	Limits for Other Emission Control Systems	Y	C	
8-34-404	Less than Continuous Operation Petition Contents	Y	C	
8-34-404.1	Monitoring requirements for individual gas collection system components that are subject to less than continuous operation provisions	Y	C	
8-34-404.2	Map showing components that are operating less than continuously	Y	C	
8-34-404.3	Operating, maintenance, and inspection schedule for components that are operating less than continuously	Y	C	
8-34-404.4	Operating conditions for components that are operating less than continuously	Y	C	
8-34-404.5	Renewal requirements apply whenever information submitted pursuant to 8-34-404.1 changes	Y	C	
8-34-412	Compliance Demonstration Tests	Y	C	

Compliance Certification Report

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City: Richmond, CA
Zip Code: 94801
Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-34-413	Performance Test Report	Y	C	The 2016 source test was performed on September 22, 2016 for the S-5 IC Engine. The Source Test Report was delivered to the BAAQMD within 45 days of the test date. S-5 has not been source tested since 2016. It has been inoperable and will be source tested after the S-5 engine is rehabilitated and is running again. S-6 was source tested on February 4, 2021.
8-34-501	Operating Records	Y	C	
8-34-501.2	Emission Control System Downtime	Y	C	
8-34-501.4	Testing	Y	C	
8-34-501.5	Record keeping requirements for components subject to Section 404 less than continuous operating provisions	Y	C	
8-34-501.6	Leak Discovery and Repair Records	Y	C	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	C	
8-34-501.11	Records of Key Emission Control System Operating Parameters	Y	C	
8-34-501.12	Records Retention for 5 Years	Y	C	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	C	
8-34-504	Portable Hydrocarbon Detector	Y	C	
8-34-508	Gas Flow Meter	Y	C	
8-34-509	Key emission control system operating parameters	Y	C	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**			
9-1-301	Limitations on Ground Level Concentrations	Y	C	

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Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
9-1-302	General Emission Limitations	Y	C	
BAAQMD Regulation 9, Rule 2	**Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)**			
9-2-301	Limitations on Hydrogen Sulfide	N	C	
BAAQMD Regulation 9 Rule 8	**Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (7/25/07)**			
9-8-302	Emission Limits – Waste Derived Fuel Gas	N	C	
9-8-302.1	Lean-Burn Engines: NOx Emission Limit	N	C	
9-8-302.3	CO Emission Limit	Y	C	
SIP Regulation 9 Rule 8	**Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (12/15/97)**			
9-8-302	Emission Limits- Waste Derived Fuel Gas	Y	C	
9-8-302.1	Lean Burn Engines: NOx Emission Limit	Y	C	
40 CFR Part 60, Subpart A	**Standards of Performance for New Stationary Sources – General Provisions (5/4/98)**			
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	C	
60.7	Notification and Record Keeping	Y	C	

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Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.8	Performance Tests	Y	C	The 2016 source test was performed on September 22, 2016 for the S-5 IC Engine. The Source Test Report was delivered to the BAAQMD within 45 days of the test date. S-5 has not been source tested since 2016. It has been inoperable and will be source tested after the S-5 engine is rehabilitated and is running again. S-6 was source tested on February 4, 2021.
60.11	Compliance with Standards and Maintenance Requirements	Y	C	
60.11(a)	Compliance determined by performance tests	Y	C	
60.11(d)	Good air pollution control practice	Y	C	
60.12	Circumvention	Y	C	
60.13	Monitoring Requirements	Y	C	
60.13(a)	Applies to all continuous monitoring systems	Y	C	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	C	
60.13(e)	Continuous monitors shall operate continuously	Y	C	
60.13(f)	Monitors shall be installed in proper locations	Y	C	
60.13(g)	Requires multiple monitors for multiple stacks	Y	C	
60.14	Modification	Y	C	
60.15	Reconstruction	Y	C	
60.19	General Notification and Reporting Requirements	Y	C	
40 CFR Part 60, Subpart WWW	**Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (4/10/00)**			

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Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	C	
60.752(b)	Comply with paragraph (b)(2) or calculate NMOC emission rate	Y	C	
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	C	
60.752 (b)(2)(i)	Submit a collection and control system design plan	Y	C	
60.752 (b)(2)(ii)	Install a collection and control system	Y	C	
60.752 (b)(2)(iii)	Route collected gases to a control system	Y	C	
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O2, dry basis	Y	C	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	C	
60.753	Operational Standards for Collection and Control Systems	Y	C	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii)	Y	C	
60.753(f)	Operate the control system at all times when collected gas is Routed to the control system	Y	C	
60.754	Test Methods and Procedures	Y	C	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	C	
60.755	Compliance Provisions	Y	C	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems	Y	C	

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Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.756	Monitoring of Operations	Y	C	
60.756(d)	Approval of other control devices	Y	C	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	C	
60.757	Reporting Requirements	Y	C	
60.757(c)	Submit a Collection and Control System Design Plan	Y	C	
60.757(e)	Submit Equipment Removal Report 30 days prior to removal or cessation of operation of the control equipment	Y	C	
60.757(f)	Submit Annual Reports containing information required by (f)(1), (f)(2), and (f)(3)	Y	C	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(b) or (e)	Y	C	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	C	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	C	
60.758	Recordkeeping Requirements	Y	C	
60.758(b)	Control Equipment Records (Control Device Vendor Specifications) Note: Subsections 1 through 4 do not apply.	Y	C	
60.758(c)	Records of parameters monitored pursuant to 60.756 (e)	Y	C	
60.758(e)	Records of any exceedance of 60.753(e) or (f)	Y	C	
40 CFR Part 62 Subpart F	**Approval and Promulgation of State Plans for Designated Facilities and Pollutants (6/9/03)**			
62.1100	Identification of Plan	Y	C	
62.1115	Identification of Sources	Y	C	

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Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
40 CFR Part 63, Subpart A	**National Emission Standards for Hazardous Air Pollutants: General Provisions (4/20/06)**			
63.4	Prohibited activities and circumvention	Y	C	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	C	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	C	
63.6(f)	Compliance with non-opacity emission standards	Y	C	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	C	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	C	
40 CFR Part 63, Subpart AAAA	**National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/03)**			
63.1945	When do I have to comply with this subpart?	Y	C	
63.1945(b)	Compliance date for existing affected landfills	Y	C	
63.1955	What requirements must I meet?	Y	C	
63.1955(a)(2)	Comply with State Plan that implements 40 CFR Part 60, Subpart Cc	Y	C	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	C	

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Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	C	
63.1960	How is compliance determined?	Y	C	
63.1965	What is a deviation?	Y	C	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	C	
63.1980	What records and reports must I keep and submit?	Y	C	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	C	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	C	
BAAQMD Condition # 5771				
Part 1	Fuel Restrictions (Cumulative Increase)	Y	C	
Part 2	Diverter Valve Requirement (Regulation 8-34-301)	Y	C	
Part 3	Gas Flow Meter Requirement (Cumulative Increase and Regulation 8-34-508)	Y	C	
Part 4	NOx Emissions Limit (BACT, Offsets)	Y	C	
Part 5	CO Emissions Limit (BACT)	Y	C	
Part 6	NMOC Emissions Limit (BACT and Regulation 8-34-301.4)	Y	C	

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Source #: 0005, 0006
Source Name: S-5 and S-6 Internal Combustion Lean Burn Engines

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 7	Annual Source Test Requirement (BACT and Regulations 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)	Y	C	The 2016 source test was performed on September 22, 2016 for the S-5 IC Engine. The Source Test Report was delivered to the BAAQMD within 45 days of the test date. S-5 has not been source tested since 2016. It has been inoperable and will be source tested after the S-5 engine is rehabilitated and is running again. S-6 was source tested on February 4, 2021.
Part 8	Heat Input Limitation (Regulation 2-1-301, Offsets)	Y	C	
Part 9	Daily Record Keeping Requirement (Offsets, Cumulative Increase, and Regulations 2-1-301, 2-6-501, and 8-34-301)	Y	C	
Part 10	Engine Temperature Limit and Temperature Monitoring Requirements (Regulations 8-34-301, 8-34-501.11, and 8-34-509)	Y	C	NOTE: Temperature requirements were changed as of January 1, 2020 by Application Number (AN) 29522.

Compliance Certification Report

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Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0015, A008, A0120, A0161
Source Name: Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-120 Landfill Gas Flare (through December 2017). Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-161 Landfill Gas Flare (beginning in January 2018)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**			
1-523	Parametric Monitoring and Recordkeeping Procedures	N	C	
1-523.1	Reporting requirement for periods of in operation > 24 hours	Y	C	
1-523.2	Limit on duration of in operation	Y	C	
1-523.3	Reporting requirement for violations of any applicable limits	N	C	
1-523.4	Records of in operation, tests, calibrations, adjustments, & maintenance	Y	C	
1-523.5	Maintenance and calibration	N	C	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**		C	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
1-523.3	Reports of Violations	Y	C	
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-310	Particle Weight Limitation (applies to A-8 Flare only)	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			

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Source #: 0015, A008, A0120, A0161
Source Name: Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-120 Landfill Gas Flare (through December 2017). Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-161 Landfill Gas Flare (beginning in January 2018)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-310	Particle Weight Limitation (applies to A-8 Flare only)	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Regulation 8, Rule 34	**Organic Compounds – Solid Waste Disposal Sites (6/15/05)**			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	C	
8-34-113.1	Emission Minimization Requirement	Y	C	
8-34-113.2	Shutdown Time Limitation	Y	C	
8-34-113.3	Recordkeeping Requirement	Y	C	
8-34-117	Limited Exemption, Gas Collection System Components	Y	C	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	C	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	C	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	C	
8-34-117.4	Limits on Number of Wells Shutdown	Y	C	
8-34-117.5	Shutdown Duration Limit	Y	C	
8-34-117.6	Well Disconnection Records	Y	C	
8-34-118	Limited Exemption, Construction Activities	Y	C	
8-34-118.1	Construction Plan	Y	C	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	C	

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Address: 1 Parr Boulevard
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Zip Code: 94801

Source #: 0015, A008, A0120, A0161
Source Name: Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-120 Landfill Gas Flare (through December 2017). Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-161 Landfill Gas Flare (beginning in January 2018)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	C	
8-34-118.4	Emission Minimization Requirement	Y	C	
8-34-118.5	Excavated Refuse Requirements	Y	C	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	C	
8-34-118.7	Installation Time Limit	Y	C	
8-34-118.8	Capping Required for New Components	Y	C	
8-34-118.9	Construction Activity Records	Y	C	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	C	
8-34-301.1	Continuous Operation	Y	I	There were unplanned shutdowns (power outages) of the gas collection and control system that did not meet the exemption criteria in Rule 8-34-113 on January 19, 2021 from 2:38 to 2:48 and 4:02 to 4:18, February 26, 2021 from 13:03 to 15:01, March 13, 2021 from 21:03 to 23:01, and April 15, 2021 from 7:14 to 7:31. These events were reported to the BAAQMD as reportable compliance activities (RCA) and breakdown relief was requested.
8-34-301.2	Collection and Control Systems Leak Limitations	Y	C	
8-34-301.3	Limits for Enclosed Flares	Y	C	
8-34-303	Landfill Surface Requirements	Y	C	
8-34-304	Gas Collection System Installation Requirements	Y	C	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	C	

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Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0015, A008, A0120, A0161
Source Name: Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-120 Landfill Gas Flare (through December 2017). Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-161 Landfill Gas Flare (beginning in January 2018)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-34-304.2	Based on Waste Age For Active Areas	Y	C	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	C	
8-34-304.4	Based on NMOC Emission Rate	Y	C	
8-34-305	Wellhead Requirements	Y	C	
8-34-305.1	Operate Under Vacuum	Y	C	
8-34-305.2	Temperature < 55 °C	Y	C	
8-34-305.3	Nitrogen < 20% or	Y	C	Requirements of 8-34-305.4 met instead.
8-34-305.4	Oxygen < 5%	Y	C	
8-34-404	Less than Continuous Operation Petition Contents	Y	C	
8-34-404.1	Monitoring requirements for individual gas collection system components that are subject to less than continuous operation provisions	Y	C	
8-34-404.2	Map showing components that are operating less than continuously	Y	C	
8-34-404.3	Operating, maintenance, and inspection schedule for components that are operating less than continuously	Y	C	
8-34-404.4	Operating conditions for components that are operating less than continuously	Y	C	
8-34-404.5	Renewal requirements apply whenever information submitted pursuant to 8-34-404.1 changes	Y	C	
8-34-405	Design Capacity Reports	Y	C	
8-34-408	Collection and Control System Design Plans	Y	C	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	C	

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Zip Code: 94801
Source #: 0015, A008, A0120, A0161
Source Name: Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-120 Landfill Gas Flare (through December 2017). Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-161 Landfill Gas Flare (beginning in January 2018)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-34-411	Annual Report	Y	C	
8-34-412	Compliance Demonstration Tests	Y	C	
8-34-413	Performance Test Report	Y	C	
8-34-414	Repair Schedule for Wellhead Excesses	Y	C	
8-34-414.1	Records of Excesses	Y	C	
8-34-414.2	Corrective Action	Y	C	
8-34-414.3	Collection System Expansion	Y	C	
8-34-414.4	Operational Due Date for Expansion	Y	C	
8-34-415	Repair Schedule for Surface Leak Excesses	Y	C	
8-34-415.1	Records of Excesses	Y	C	
8-34-415.2	Corrective Action	Y	C	
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	C	
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	C	
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	C	
8-34-415.6	Additional Corrective Action	Y	C	
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	C	
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	C	
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	C	
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	C	
8-34-415.11	Operational Due Date for Expansion	Y	C	
8-34-416	Cover Repairs	Y	C	
8-34-501	Operating Records	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-34-501.1	Collection System Downtime	Y	C	
8-34-501.2	Emission Control System Downtime	Y	C	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	C	
8-34-501.4	Testing	Y	C	
8-34-501.6	Leak Discovery and Repair Records	Y	C	
8-34-501.5	Record keeping requirements for components subject to Section 404 less than continuous operating provisions	Y	C	
8-34-501.7	Waste Acceptance Records	Y	C	
8-34-501.8	Non-decomposable Waste Records	Y	C	
8-34-501.9	Wellhead Excesses and Repair Records	Y	C	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	C	
8-34-501.12	Records Retention for 5 Years	Y	C	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	C	
8-34-504	Portable Hydrocarbon Detector	Y	C	
8-34-505	Well Head Monitoring	Y	C	
8-34-506	Landfill Surface Monitoring	Y	C	
8-34-507	Continuous Temperature Monitor and Recorded	Y	C	
8-34-508	Gas Flow Meter	Y	C	
8-34-510	Cover Integrity Monitoring	Y	C	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**			

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
9-1-301	Limitations on Ground Level Concentrations	Y	C	
9-1-302	General Emission Limitations (applies to flares only)	Y	C	
BAAQMD Regulation 9, Rule 2	**Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)**			
9-2-301	Limitations on Hydrogen Sulfide	N	C	
40 CFR Part 60, Subpart A	**Standards of Performance for New Stationary Sources – General Provisions (5/4/98)**			
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	C	
60.7	Notification and Record Keeping	Y	C	
60.8	Performance Tests	Y	C	
60.11	Compliance with Standards and Maintenance Requirements	Y	C	
60.11(a)	Compliance determined by performance tests	Y	C	
60.11(d)	Control devices operated using good air pollution control practice	Y	C	
60.12	Circumvention	Y	C	
60.13	Monitoring Requirements	Y	C	
60.13(a)	Applies to all continuous monitoring systems	Y	C	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	C	
60.13(e)	Continuous monitors shall operate continuously	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.13(f)	Monitors shall be installed in proper locations	Y	C	
60.13(g)	Requires multiple monitors for multiple stacks	Y	C	
60.14	Modification	Y	C	
60.15	Reconstruction	Y	C	
60.19	General Notification and Reporting Requirements	Y	C	
40 CFR Part 60, Subpart WWW	**Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (4/10/00)**			
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	C	
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m^3 (Large Designated Facilities)	Y	C	
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	C	
60.752 (b)(2)(i)	Submit a Collection and Control System Design Plan	Y	C	
60.752 (b)(2)(i)(A)	The collection and control system in the Design Plan shall comply with 60.752(b)(2)(ii)	Y	C	
60.752 (b)(2)(i)(B)	Design Plan shall include all proposed alternatives to 60.753 through 60.758	Y	C	
60.752 (b)(2)(i)(C)	Design Plan shall conform to 60.759 (active collection system) or demonstrate sufficiency of proposed alternatives	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.752 (b)(2)(ii)	Install a collection and control system	Y	C	
60.752 (b)(2)(iii)	Route collected gases to a control system.	Y	C	
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O_2, dry basis, as demonstrated by initial performance test within 180 days of start-up.	Y	C	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	C	
60.752(c)	Title V Operating Permit Requirements	Y	C	
60.752(c)(1)	Subject date is June 10, 1996 for Landfills new or modified between May 30, 1991 and March 12, 1996	Y	C	
60.753	Operational Standards for Collection and Control Systems	Y	C	
60.753(a)	Operate a Collection System in each area or cell in which:	Y	C	
60.753(a)(1)	Active Cell – solid waste in place for 5 years or more	Y	C	
60.753(a)(2)	Closed/Final Grade – solid waste in place for 2 years or more	Y	C	
60.753(b)	Operate each wellhead under negative pressure unless:	Y	C	
60.753(b)(1)	Fire or increased well temperature or to prevent fire	Y	C	
60.753(b)(2)	Use of geomembrane or synthetic cover (subject to alternative pressure limits)	Y	C	
60.753(b)(3)	Decommissioned well after approval received for shut-down	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.753(c)	Operate each wellhead at < 55 °C, and either < 20% N_2 or < than 5% O_2 (or other approved alternative levels)	Y	C	
60.753(c)(1)	N_2 determined by Method 3C	Y	C	
60.753(c)(2)	O_2 determined by 3A and as described in (2)(i-v)	Y	C	
60.753(d)	Surface Leak Limit is less than 500 ppm methane above background at landfill surface. This section also describes some surface monitoring procedures.	Y	C	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii). If collection or control system inoperable, shut down gas mover and close all vents within 1 hour	Y	C	
60.753(f)	Operate the control system at all times when collected gas is routed to the control system	Y	C	
60.753(g)	If monitoring demonstrates that 60.753(b), (c), or (d) are not being met, corrective action must be taken	Y	C	
60.754	Test Methods and Procedures	Y	C	
60.754(c)	For PSD, NMOC emissions shall be calculated using AP-42	Y	C	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	C	
60.755	Compliance Provisions	Y	C	
60.755(a)	For Gas Collection Systems	Y	C	
60.755(a)(1)	Calculation procedures for maximum expected gas generation flow rate	Y	C	
60.755 (a)(1)(i)	Equation for unknown year-to-year waste acceptance rate	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.755 (a)(1)(ii)	Equation for known year-to-year waste acceptance rate	Y	C	
60.755(a)(2)	Vertical wells and horizontal collectors shall be of sufficient density to meet all performance specifications	Y	C	
60.755(a)(3)	Measure wellhead pressure monthly. If pressure is positive, take corrective action (final corrective action = expand system within 120 days of initial positive pressure reading)	Y	C	
60.755(a)(4)	Expansion not required during first 180 days after startup.	Y	C	
60.755(a)(5)	Monitor wellheads monthly for temperature and either nitrogen or oxygen. If readings exceed limits, take corrective action up to expanding system within 120 days of first excess.	Y	C	
60.755(b)	Wells shall be placed in cells as described in Design Plan and no later than 60 days after:	Y	C	
60.755(b)(1)	Five years after initial waste placement in cell, for active cells	Y	C	
60.755(b)(2)	Two years after initial waste placement in cell, for closed/final grade cells.	Y	C	
60.755(c)	Procedures for complying with surface methane standard	Y	C	
60.755(c)(1)	Quarterly monitoring of surface and perimeter	Y	C	
60.755(c)(2)	Procedure for determining background concentration	Y	C	
60.755(c)(3)	Method 21 except probe inlet placed 5-10 cm above ground	Y	C	
60.755(c)(4)	Excess is any reading of 500 ppmv or more. Take corrective action indicated below (i-v).	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.755 (c)(4)(i)	Mark and record location of excess	Y	C	
60.755 (c)(4)(ii)	Repair cover or adjust vacuum. Re-monitor within 10 calendar days.	Y	C	
60.755 (c)(4)(iii)	If still exceeding 500 ppmv, take additional corrective action. Re-monitor within 10 calendar days of 2nd excess.	Y	C	
60.755 (c)(4)(iv)	Re-monitor within 1 month of initial excess.	Y	C	
60.755 (c)(4)(v)	For any location with 3 monitored excesses in a quarter, additional collectors (or other approved collection system repairs) shall be operational within 120 days of 1st excess.	Y	C	
60.755(c)(5)	Monitor cover integrity monthly and repair as needed.	Y	C	
60.755(d)	Instrumentation and procedures for complying with 60.755(c).	Y	C	
60.755(d)(1)	Portable analyzer meeting Method 21	Y	C	
60.755(d)(2)	Calibrated with methane diluted to 500 ppmv in air	Y	C	
60.755(d)(3)	Use Method 21, Section 4.4 instrument evaluation procedures	Y	C	
60.755(d)(4)	Calibrate per Method 21, Section 4.2 immediately before monitoring.	Y	C	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems.	Y	C	
60.756	Monitoring of Operations	Y	C	
60.756(a)	For active collection systems, install wellhead sampling port	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.756(a)(1)	Measure gauge pressure in wellhead on a monthly basis	Y	C	
60.756(a)(2)	Measure nitrogen or oxygen concentration in wellhead gas on a monthly basis.	Y	C	
60.756(a)(3)	Measure temperature of wellhead gas on a monthly basis.	Y	C	
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	C	
60.756(b)(1)	Temperature monitor and continuous recorder (not required for boilers and process heaters with capacity > 44 MW)	Y	C	
60.756(b)(2)	Device that records flow to or bypass of the control device (i or ii below)	Y	C	
60.756 (b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	C	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	C	
60.756(f)	Monitor surface on a quarterly basis.	Y	C	
60.757	Reporting Requirements	Y	C	
60.757(a)(3)	Amended Design Capacity Report required within 90 days of receiving a permitted increase in design capacity or within 90 days of an annual density calculation that results in a design capacity over the thresholds.	Y	C	
60.757(b)(3)	Sites with collection and control systems operating in compliance with this subpart are exempt from (b)(1) and (b)(2) above.	Y	C	
60.757(c)	Submit a Collection and Control System Design Plan within 1 year of first NMOC emission rate report showing NMOC > 50 MG/year, except as follows	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.757(f)	Submit Annual Reports containing information required by (f)(1) through (f)(6)	Y	C	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(a), (b) or (d)	Y	C	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	C	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	C	
60.757(f)(4)	All periods when collection system was not operating for more than 5 days.	Y	C	
60.757(f)(5)	Location of each surface emission excess and all re-monitoring dates and concentrations.	Y	C	
60.757(f)(6)	Location and installation dates for any wells or collectors added as a result of corrective action for a monitored excess.	Y	C	
60.757(g)	Initial Performance Test Report Requirements (g)(1-6)	Y	C	
60.757(g)(1)	Diagram of collection system showing positions of all existing collectors, proposed positions for future collectors, and areas to be excluded from control.	Y	C	
60.757(g)(2)	Basis for collector positioning to meet sufficient density req.	Y	C	
60.757(g)(3)	Documentation supporting percentage of asbestos or non-degradable material claims for areas without a collection system.	Y	C	

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60.757(g)(4)	For areas excluded from collection due to non-productivity, calculations and gas generation rates for each non-productive area and the sum for all nonproductive areas.	Y	C	
60.757(g)(5)	Provisions for increasing gas mover equipment if current system is inadequate to handle maximum projected gas flow rate.	Y	C	
60.757(g)(6)	Provisions for control of off-site migration	Y	C	
60.758	Recordkeeping Requirements	Y	C	
60.758(a)	Design Capacity and Waste Acceptance Records (retain 5 years)	Y	C	
60.758(b)	Collection and Control Equipment Records (retain for life of control equipment except 5 years for monitoring data)	Y	C	
60.758(b)(1)	Collection System Records	Y	C	
60.758 (b)(1)(i)	Maximum expected gas generation flow rate.	Y	C	
60.758 (b)(1)(ii)	Density of wells and collectors	Y	C	
60.758(b)(2)	Control System Records - enclosed combustors other than boilers or process heaters with heat input > 44 MW	Y	C	
60.758 (b)(2)(i)	Combustion temperature measured every 15 minutes and averaged over the same time period as the performance test	Y	C	
60.758 (b)(2)(ii)	Percent NMOC reduction achieved by the control device	Y	C	
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years).	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.758(c)(1)	Exceedances subject to record keeping are	Y	C	
60.758 (c)(1)(i)	All 3-hour periods when average combustion temperature was more than 28 C below the average combustion temperature during the most recent complying performance test	Y	C	
60.758(c)(2)	Records of continuous flow to control device or monthly inspection records if seal and lock for bypass valves	Y	C	
60.758(d)	Plot map showing location of all existing and planned collectors with a unique label for each collector (retain for life of collection system)	Y	C	
60.758(d)(1)	Installation date and location of all newly installed collectors	Y	C	
60.758(d)(2)	Records of nature, deposition date, amount, and location of asbestos or non-degradable waste excluded from control	Y	C	
60.758(e)	Records of any exceedance of 60.753, location of exceedance and re-monitoring dates and data (for wellheads and surface). Retain for 5 years.	Y	C	
60.759	Specifications for Active Collection Systems	Y	C	
60.759(a)	Active wells and collectors shall be at sufficient density	Y	C	
60.759(a)(1)	Collection System in refuse shall be certified by PE to achieve comprehensive control of surface gas emissions	Y	C	
60.759(a)(2)	Collection Systems (active or passive) outside of refuse shall address migration control	Y	C	
60.759(a)(3)	All gas producing areas shall be controlled except as described below (i-iii).	Y	C	
60.759(b)	Gas Collection System Components	Y	C	

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60.759(b)(1)	Must be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved material and of suitable dimensions to convey projected gas amounts and withstand settling, traffic, etc.	Y	C	
60.759(b)(2)	Collectors shall not endanger liner, shall manage condensate and leachate, and shall prevent air intrusion and surface leaks.	Y	C	
60.759(b)(3)	Header connection assemblies shall include positive closing throttle valve, seals and couplings to prevent leaks, at least one sampling port, and shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved materials.	Y	C	
60.759(c)	Gas Mover Equipment shall be sized to handle maximum expected gas generation rate over the intended period of use.	Y	C	
60.759(c)(1)	For existing systems, flow data shall be used to project maximum flow rate.	Y	C	
60.759(c)(2)	For new systems, gas generation rate shall be calculated per 60.755(a)(1)	Y	C	
40 CFR Part 62 Subpart F	**Approval and Promulgation of State Plans for Designated Facilities and Pollutants (6/9/03)**			
62.1100	Identification of Plan	Y	C	
62.1115	Identification of Sources	Y	C	
40 CFR Part 63, Subpart A	**National Emission Standards for Hazardous Air Pollutants: General Provisions (4/20/06)**			

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
63.4	Prohibited activities and circumvention	Y	C	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	C	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	C	
63.6(f)	Compliance with non-opacity emission standards	Y	C	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	C	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	C	
40 CFR Part 63, Subpart AAAA	**National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/03)**			
63.1945	When do I have to comply with this subpart?	Y	C	
63.1945(b)	Compliance date for existing affected landfills	Y	C	
63.1955	What requirements must I meet?	Y	C	
63.1955(a)(2)	Comply with State Plan that implements 40 CFR Part 60, Subpart Cc	Y	C	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	C	
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
63.1960	How is compliance determined?	Y	C	
63.1965	What is a deviation?	Y	C	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	C	
63.1980	What records and reports must I keep and submit?	Y	C	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	C	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	C	
BAAQMD Condition #25293				
Part 1	Waste acceptance rate limits (Regulation 2-1-301, Cumulative Increase)	Y	C	
Part 2	Particulate emission control measures (Regulations 2-1-403, 6-1-301, and 6-1-305)	Y	C	
Part 3	Fugitive non-methane organic compounds (NMOC) emissions limit (Cumulative Increase and Regulation 2-1-301)	Y	C	
Part 4	Concentration limit of NMOC from S-15 (Cumulative Increase and Regulation 2-1-301)	Y	C	
Part 5	Control requirements for collected landfill gas (Regulation 8-34-301)	Y	C	

Compliance Certification Report

Site #: A1840
Address: 1 Parr Boulevard
Source #: 0015, A008, A0120, A0161

Site Name: West Contra Costa Sanitary Landfill
City: Richmond, CA
Source Name: Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-120 Landfill Gas Flare (through December 2017). Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-161 Landfill Gas Flare (beginning in January 2018)

Reporting Period: 05/01/2020 to 04/30/2021
Zip Code: 94801

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 6	Landfill gas collection system description (Regulations 2-1-301, 8-34-301.1, 8-34-304, and 8-34-305)	Y	I	There were unplanned shutdowns of the gas collection and control system that did not meet the exemption criteria in Rule 8-34-113 on January 19, 2021 from 2:38 to 2:48 and 4:02 to 4:18, February 26, 2021 from 13:03 to 15:01, March 13, 2021 from 21:03 to 23:01, and April 15, 2021 from 7:14 to 7:31. These events were reported to the BAAQMD as reportable compliance activities (RCA) and breakdown relief was requested.
Part 7	Landfill gas collection system operating requirements (Regulations 8-34-301.1, 8-34-404, 8-34-305, 8-34-414, 8-34-501.5 and 8-34-505)	Y	I	See above.
Part 8	Flare operating restrictions and heat input limits (Cumulative Increase and Regulations 2-1-301 and 8-34-301)	Y	C	
Part 9	Flare temperature limit (Regulations 2-5-301, 8-34-301.3, 8-34-501.3, and 40 CFR 60.756(b)(1))	Y	C	The A-120 Flare was removed from WCCSL and replaced with the A-161 Flare in November 2017. The A-161 Flare was initially started in December 2017. In accordance with Part 9, the A-161 Flare is to operate based on the same limitation as the previous A-120 Flare.
Part 10	Landfill gas sulfur content limit and monitoring requirements (Regulation 9-1-302 and Cumulative Increase)	Y	C	
Part 11	Annual source test (Regulations 8-34-301.3 and 8-34-412 and CCR 95464(b)(2)(A)(1))	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021

Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801

Source #: 0015, A008, A0120, A0161
Source Name: Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-120 Landfill Gas Flare (through December 2017). Landfill gas collection system with A-8 Back-Up Landfill Gas Flare and A-161 Landfill Gas Flare (beginning in January 2018)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 12	Annual landfill gas characterization test (Regulation 2, Rule 5, AB-2588 Air Toxics Hot Spots Act, and Regulation 8-34-412)	Y	C	
Part 13	Toxic compound concentration limits (Regulation 2-5-302 and AB-2588 Air Toxics Hot Spots Act)	N	C	
Part 14	Record keeping requirements (Cumulative Increase, Regulations 2-1-301, 2-5-302, 2-6-501, 6-1-301, 6-1-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)	Y	C	
Part 15	Reporting periods and report submittal due dates for the Regulation 8, Rule 34 report (Regulation 8-34-411 and 40 CFR 63.1980(a))	Y	C	
Part 16	NOx emission limit from Flare A-120 (Cumulative Increase)	Y	C	
Part 17	CO emission limit from Flare A-120 (Cumulative Increase)	Y	C	
Part 18	A-120 shall comply with NMOC emission limit (Cumulative Increase, 8-34-301.3; 40 CFR 60.752(b)(2)(iii)(B))		C	
Part 19	Record keeping of all planned and unanticipated shut downs of A-120 and of temperature excursions. (2-6-501, 8-34-501, 40 CFR 60.758)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**			
1-523	Parametric Monitoring and Record keeping Procedures	N	C	
1-523.1	Reporting requirement for periods of in-operation > 24 hours	Y	C	
1-523.2	Limit on duration of in operation	Y	C	
1-523.3	Reporting requirement for violations of any applicable limits	N	C	
1-523.4	Records of in-operation, tests, calibrations, adjustments, & maintenance	Y	C	
1-523.5	Maintenance and calibration	N	C	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**			
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
1-523.3	Reports of Violations	Y	C	
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-310	Particle Weight Limitation	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-310	Particle Weight Limitation	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
6-401	Appearance of Emissions	Y	C	
BAAQMD Regulation 8, Rule 34	**Organic Compounds - Solid Waste Disposal Sites (6/15/05)**			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	C	
8-34-113.1	Emission Minimization Requirement	Y	C	
8-34-113.2	Shutdown Time Limitation	Y	C	
8-34-113.3	Record keeping Requirement	Y	C	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	C	
8-34-301.1	Continuous Operation	Y	C	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	C	
8-34-301.4	Limits for Other Emission Control Systems	Y	C	
8-34-404	Less than Continuous Operation Petition Contents	Y	C	
8-34-404.1	Monitoring requirements for individual gas collection system components that are subject to less than continuous operation provisions	Y	C	
8-34-404.2	Map showing components that are operating less than continuously	Y	C	
8-34-404.3	Operating, maintenance, and inspection schedule for components that are operating less than continuously	Y	C	
8-34-404.4	Operating conditions for components that are operating less than continuously	Y	C	
8-34-404.5	Renewal requirements apply whenever information submitted pursuant to 8-34-404.1 changes	Y	C	
8-34-412	Compliance Demonstration Tests	Y	C	
8-34-413	Performance Test Report	Y	C	The 2017 source test was performed

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
				on December 4, 2017 for the S-37 IC Engine. The Source Test Report was delivered to the BAAQMD within 45 days of the test date. The 2017 source test of S-37 was delayed because the engine was inoperable as of December 2017, as it was undergoing extensive maintenance. A letter to request an extension of the source test date and to explain the maintenance being performed was submitted to the BAAQMD on August 24, 2017. The S-37 has not been source tested since 2017. It has been inoperable and will be source tested after the engine is rehabilitated and is running again.
8-34-501	Operating Records	Y	C	
8-34-501.2	Emission Control System Downtime	Y	C	
8-34-501.4	Testing	Y	C	
8-34-501.5	Record keeping requirements for components subject to Section 404 less than continuous operating provisions	Y	C	
8-34-501.6	Leak Discovery and Repair Records	Y	C	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	C	
8-34-501.11	Records of Key Emission Control System Operating Parameters	Y	C	
8-34-501.12	Records Retention for 5 Years	Y	C	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	C	
8-34-504	Portable Hydrocarbon Detector	Y	C	
8-34-508	Gas Flow Meter	Y	C	
8-34-509	Key emission control system operating parameters	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**			
9-1-301	Limitations on Ground Level Concentrations	Y	C	
9-1-302	General Emission Limitations	Y	C	
BAAQMD Regulation 9, Rule 2	**Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)**			
9-2-301	Limitations on Hydrogen Sulfide	N	C	
BAAQMD Regulation 9 Rule 8	**Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (7/25/07)**			
9-8-302	Emission Limits – Waste Derived Fuel Gas	N	C	
9-8-302.1	Lean-Burn Engines: NOx Emission Limit	N	C	
9-8-302.3	CO Emission Limit	Y	C	
SIP Regulation 9 Rule 8	**Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (12/15/97)**			
9-8-302	Emission Limits- Waste Derived Fuel Gas	Y	C	
9-8-302.1	Lean Burn Engines: NOx Emission Limit	Y	C	
40 CFR Part 60, Subpart A	**Standards of Performance for New Stationary Sources – General Provisions (5/4/98)**			
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	C	
60.7	Notification and Record Keeping	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.8	Performance Tests	Y	C	The 2017 source test was performed on December 4, 2017 for the S-37 IC Engine. The Source Test Report was delivered to the BAAQMD within 45 days of the test date. The 2017 source test of S-37 was delayed because the engine was inoperable as of December 2017, as it was undergoing extensive maintenance. A letter to request an extension of the source test date and to explain the maintenance being performed was submitted to the BAAQMD on August 24, 2017. The S-37 has not been source tested since 2017. It has been inoperable and will be source tested after the engine is rehabilitated and is running again.
60.11	Compliance with Standards and Maintenance Requirements	Y	C	
60.11(a)	Compliance determined by performance tests	Y	C	
60.11(d)	Good air pollution control practice	Y	C	
60.12	Circumvention	Y	C	
60.13	Monitoring Requirements	Y	C	
60.13(a)	Applies to all continuous monitoring systems	Y	C	
60.13(b)	Monitors shall be installed and operation before performing performance tests	Y	C	
60.13(e)	Continuous monitors shall operate continuously	Y	C	
60.13(f)	Monitors shall be installed in proper locations	Y	C	
60.13(g)	Requires multiple monitors for multiple stacks	Y	C	
60.14	Modification	Y	C	
60.15	Reconstruction	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.19	General Notification and Reporting Requirements	Y	C	
40 CFR Part 60, Subpart WWW	**Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (4/10/00)**			
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	C	
60.752(b)	Comply with paragraph (b)(2) or calculate NMOC emission rate	Y	C	
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	C	
60.752 (b)(2)(i)	Submit a collection and control system design plan	Y	C	
60.752 (b)(2)(ii)	Install a collection and control system	Y	C	
60.752 (b)(2)(iii)	Route collected gases to a control system	Y	C	
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O2, dry basis	Y	C	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	C	
60.753	Operational Standards for Collection and Control Systems	Y	C	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii)	Y	C	
60.753(f)	Operate the control system at all times when collected gas is Routed to the control system	Y	C	
60.754	Test Methods and Procedures	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	C	
60.755	Compliance Provisions	Y	C	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems	Y	C	
60.756	Monitoring of Operations	Y	C	
60.756(d)	Approval of other control devices	Y	C	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	C	
60.757	Reporting Requirements	Y	C	
60.757(c)	Submit a Collection and Control System Design Plan	Y	C	
60.757(e)	Submit Equipment Removal Report 30 days prior to removal or cessation of operation of the control equipment	Y	C	
60.757(f)	Submit Annual Reports containing information required by (f)(1), (f)(2), and (f)(3)	Y	C	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(b) or (e)	Y	C	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	C	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	C	
60.758	Recordkeeping Requirements	Y	C	
60.758(b)	Control Equipment Records (Control Device Vendor Specifications) Note: Subsections 1 through 4 do not apply.	Y	C	
60.758(c)	Records of parameters monitored pursuant to 60.756 (e)	Y	C	
60.758(e)	Records of any exceedance of 60.753(e) or (f)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
40 CFR Part 62 Subpart F	**Approval and Promulgation of State Plans for Designated Facilities and Pollutants (6/9/03)**			
62.1100	Identification of Plan	Y	C	
62.1115	Identification of Sources	Y	C	
40 CFR Part 63, Subpart A	**National Emission Standards for Hazardous Air Pollutants: General Provisions (4/20/06)**			
63.4	Prohibited activities and circumvention	Y	C	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	C	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	C	
63.6(f)	Compliance with non-opacity emission standards	Y	C	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	C	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	C	
40 CFR Part 63, Subpart AAAA	**National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/03)**			
63.1945	When do I have to comply with this subpart?	Y	C	
63.1945(b)	Compliance date for existing affected landfills	Y	C	
63.1955	What requirements must I meet?	Y	C	
63.1955(a)(2)	Comply with State Plan that implements 40 CFR Part 60, Subpart Cc	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	C	
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	C	
63.1960	How is compliance determined?	Y	C	
63.1965	What is a deviation?	Y	C	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	C	
63.1980	What records and reports must I keep and submit?	Y	C	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	C	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	C	
BAAQMD Condition # 17812				
Part 1	Fuel Restrictions (Offsets and Cumulative Increase)	Y	C	
Part 2	Heat Input Limits (Offsets and Cumulative Increase)	Y	C	
Part 3	Continuous operating requirement (Regulation 8-34-301.1)	Y	C	
Part 4	Diverter Valve Requirement (Regulation 8-34-301)	Y	C	
Part 5	NO_x Emission Limit (BACT, Offsets)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0037
Source Name: S-37 Internal Combustion (IC) Lean Burn Engine

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 6	CO Emission Limit (BACT)	Y	C	
Part 7	Gas flow meter and recorder requirement (Offsets and Cumulative Increase)	Y	C	
Part 8	Annual source test requirement (BACT and Regulations 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)	Y	C	The 2017 source test was performed on December 4, 2017 for the S-37 IC Engine. The Source Test Report was delivered to the BAAQMD within 45 days of the test date. The 2017 source test of S-37 was delayed because the engine was inoperable as of December 2017, as it was undergoing extensive maintenance. A letter to request an extension of the source test date and to explain the maintenance being performed was submitted to the BAAQMD on August 24, 2017. The S-37 has not been source tested since 2017. It has been inoperable and will be source tested after the engine is rehabilitated and is running again.
Part 9	Record keeping requirements (BACT, Offsets, Cumulative Increase, and Regulations 2-1-301, 2-6-501, and 8-34-501)	Y	C	
Part 10	Engine Temperature Limit and Temperature Monitoring Requirements (Regulations 8-34-301, 8-34-501.11, 8-34-509)	Y	C	NOTE: Temperature requirements were changed as of January 1, 2020 by Application Number (AN) 29522.

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0050, A50
Source Name: Solid Waste Transfer Station and A-50 Water Mist Station

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #22792				
Part 1	Waste Acceptance Rate Limits (Cumulative Increase)	Y	C	
Part 2	Requires That Mixed Wastes, Green Material and Wood Waste Be Removed Within 48 Hours of Being Received (Regulation 1-301)	Y	C	
Part 3	Visible Emissions – Particulate Fallout Restrictions for Operations at the Transfer Station (Regulations 1-301, 6-1-301 and 6-1-305)	Y	C	
Part 4	Visible Emissions – Maintenance and Cleaning Requirements for Roadways (Regulations 6-1-301 and 6-1-305)	Y	C	
Part 5	Requires that, within 90 days after start-up of S50 transfer station, waste is no longer accepted at S-15 landfill. (Cumulative Increase and Regulation 2-2-410)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0050, A50
Source Name: Solid Waste Transfer Station and A-50 Water Mist Station

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 6	Limitations on the Vehicle Traffic to S-50. (BACT and Cumulative Increase)	Y	C	
Part 7	Recordkeeping Requirements for Waste Accepted and Vehicle Traffic to S-50 (Cumulative Increase, Regulations 2-6-501, and 6-1-305)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0069, 0070, A12, A13
Source Name: Inlet Storage Tanks #1 and #2; A-12 and A-13 Carbon Adsorbers

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 5	**Organic Compounds – Storage of Organic Liquids (10/18/06)**			
8-5-301	Vapor Loss Control Device Requirement	N	C	
8-5-306	Approved Emission Control System Requirement	N	C	
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks and Blanketed Tanks	N	C	
8-5-307.1	Fixed roof tank shell condition	N	C	
8-5-307.2	Pressure tank criteria	N	C	
8-5-307.3	Sealing mechanism criteria	N	C	
8-5-328	Tank Degassing Requirements	N	C	
8-5-328.1	Control requirement for tanks > 75 cubic meters	N	C	
8-5-328.2	Tank degassing prohibitions	N	C	
8-5-328.3	Notification and approval requirement	N	C	
8-5-331	Tank Cleaning Requirements	N	C	
8-5-331.1	Agents used to clean tank interior	N	C	
8-5-331.2	Steam cleaning limitations	N	C	
8-5-331.3	Steam cleaning criteria	N	C	
8-5-332	Sludge Handling Requirements	N	C	
8-5-332.1	Sludge container leak limits	N	C	
8-5-322.2	Sludge container gap requirements	N	C	
SIP Regulation 8 Rule 5	Organic Compounds- Storage of Organic Liquids (6/5/2003)	Y	C	
8-5-301	Vapor Loss Control Device Requirement	Y	C	
8-5-306	Approved Emission Control System Requirement	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0069, 0070, A12, A13
Source Name: Inlet Storage Tanks #1 and #2; A-12 and A-13 Carbon Adsorbers

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-5-307	Requirements for Pressure Tanks and Blanketed Tanks	Y	C	
8-5-328	Tank Degassing Requirements	Y	C	
8-5-328.1	Control requirements for tanks > 75 cubic meters	Y	C	
8-5-328.2	Tank degassing prohibitions	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5 and 8-5-301)	Y	C	
Part 3	Operating requirements for Oil/Water Separators (Regulations 8-8-301 and 8-8-303)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 5	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 6	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 7	Wastewater monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 8	Methane and non-methane measurement method, and Carbon Adsorber monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5 and 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0071, 0072
Source Name: Primary Oil Water Separator and Secondary Separator/Emulsion Breaker

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 8	**Organic Compounds – Wastewater (Oil-Water) Separators (9/15/04)**			
8-8-301	Waste Water Separators Greater than 760 Liters Per Day and Smaller than 18.9 liters per second	Y	C	
8-8-301.3	OC Vapor Recovery System	N	C	
8-8-303	Gauging and Sampling Devices	Y	C	
8-8-304	Sludge-dewatering Unit	N	C	
8-8-305	Oil-Water Separator And/Or Air Floatation Unit Slop Oil Vessels	N	C	
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records	N	C	
8-8-503	Inspection and Repair Records	Y	C	
8-8-504	Portable Hydrocarbon Detector	Y	C	
SIP Regulation 8, Rule 8	**Organic Compounds – Wastewater (Oil-Water) Separators (8/29/94)**	Y	C	
8-8-301.3	OC Vapor Recovery System	Y	C	
8-8-304	Sludge-dewatering Unit	Y	C	
8-8-305	Oil-Water Separator And/Or Air Floatation Unit Slop Oil Vessels	Y	C	
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0071, 0072
Source Name: Primary Oil Water Separator and Secondary Separator/Emulsion Breaker

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5 and 8-5-301)	Y	C	
Part 3	Operating requirements for Oil/Water Separators (Regulations 8-8-301 and 8-8-303)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5 and 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0111, A111
Source Name: Concrete Crusher, and A-111 Water Spray System

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23350				
Part 1	Permit requirement for future power source (Regulation 2-1-301 and 302)	Y	C	
Part 2	Concrete Throughput Limit (Cumulative Increase)	Y	C	
Part 3	Abatement Requirement (Cumulative Increase)	Y	C	
Part 4	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301 and Regulation 1-301)	Y	C	
Part 5	Dust Suppressant Requirement on Unpaved Roads (Cumulative Increase)	N	C	
Part 6	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0112, A112
Source Name: Crushed Concrete Screener, and A-112 Water Spray System

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23351				
Part 1	Permit requirement for future power source (Regulation 2-1-301 and 302)	Y	C	
Part 2	Concrete Throughput Limit (Cumulative Increase)	Y	C	
Part 3	Abatement Requirement (Cumulative Increase)	Y	C	
Part 4	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301 and Regulation 1-301)	Y	C	
Part 5	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0113, A113
Source Name: Concrete/Asphalt Storage Piles, and A-113 Water Spray System

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23352				
Part 1	Concrete and Asphalt Throughput Limits (Cumulative Increase)	Y	C	
Part 2	Abatement Requirement (Cumulative Increase)	Y	C	
Part 3	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301 and Regulation 1-301)	Y	C	
Part 4	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0114, A114
Source Name: Conveyers (Crushed Concrete), and A-114 Water Spray System

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23353				
Part 1	Permit requirement for future power source (Regulation 2-1-301 and 302)	Y	C	
Part 2	Concrete Throughput Limit (Cumulative Increase)	Y	C	
Part 3	Abatement Requirement (Cumulative Increase)	Y	C	
Part 4	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301 and Regulation 1-301)	Y	C	
Part 5	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0115, A115
Source Name: S-115 Wood/Yard Waste Shredder (Tub Grinder), and A-115 Water Spray System

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23354				
Part 1	Permit requirement for future power source (Regulation 2-1-301 and 302)	Y	C	
Part 2	Wood Waste Throughput Limit (Cumulative Increase)	Y	C	
Part 3	Shredder Abatement Requirement (Cumulative Increase)	Y	C	
Part 4	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301 and Regulation 1-301)	Y	C	
Part 5	Unloading, stockpiling and loading Abatement Requirement (Cumulative Increase)	Y	C	
Part 6	Permit requirement for any required future modifications to controls emissions (Regulation 1-301)	N	C	
Part 7	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0116, A116
Source Name: S-116 Wood Waste Screener, and A-116 Water Spray System

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23355				
Part 1	Permit requirement for power source for this unit (Regulation 2-1-301 and 302)	Y	C	
Part 2	Wood Waste Throughput Limit (Cumulative Increase)	Y	C	
Part 3	Abatement Requirement (Cumulative Increase)	Y	C	
Part 4	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301 and Regulation 1-301)	Y	C	
Part 5	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0117, A117
Source Name: Composting Operation, and A-117 Water Spray Truck (05/01/16 through 11/22/2016)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23356				
Part 1	Wood Waste Throughput Limit (Cumulative Increase)	Y	C	
Part 2	Abatement Requirement (Cumulative Increase)	Y	C	
Part 3	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301 and Regulation 1-301)	Y	C	
Part 4	Dust Suppressant and Watering Requirements on Unpaved Roads (Cumulative Increase)	Y	C	
Part 5	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0117, A119
Source Name: Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) Method, and A119 Active Biofilter

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 1	**General Provisions and Definitions**			
1-301	Public Nuisance	N	C	
BAAQMD Regulation 2, Rule 5	**New Source Review of Toxic Air Contaminants**			
2-5-302	Project Risk Requirement	N	C	
BAAQMD Regulation 2, Rule 6	**Major Facility Review**			
2-6-423	District Procedures for Synthetic Minor Operating Permits	Y	C	
BAAQMD Regulation 6, Rule 1	**General Requirements**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
BAAQMD Regulation 7, Rule 1	**Odorous Substances**	N	C	
BAAQMD Regulation 8, Rule 2	**Miscellaneous Operations**			
8-2-301	Miscellaneous Operations	N	C	
Application No. 25019, Authority to Construct, BAAQMD	**Commercial Green Waste and Food Waste Composting (Issued 12/18/15, Start-up Notification submitted 11/15/16-Operations Started on 11/23/16)**			

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0117, A119
Source Name: Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) Method, and A119 Active Biofilter

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Condition 26088				
Part 1	Feedstock Material Throughput Limit (BACT, Offsets, and Cumulative increase)	Y	C	
Part 2	Covered Aerated Static Pile (CASP) Requirement (BACT, Offsets, and Cumulative increase)	Y	C	
Part 3	Additional Food Waste Usage Requirements (BACT, Offsets, Cumulative Increase; Regulation 2-5-302, and Regulation 2-6-423)	Y	C	
Part 4	Methanol Emissions Limit (Regulation 2-6-423)	Y	C	
Part 5	Total Carbon Emissions Limit (Regulation 8-2-301)	Y	C	
Part 6	Fleet Vehicle Limitations (Cumulative increase)	Y	I	During the previous 12-months, the highest 12-month rolling total unpaved miles totaled 34,212.9 miles, which was over the 31,420 miles limit. However, on September 7, 2017, WCCSL submitted a change of permit conditions (COPC) to the Bay Area Air Quality Management District (BAAQMD) to increase the allowable vehicle miles traveled. WCCSL is continuing to work with the BAAQMD to ensure this application is processed as quickly as possible.
Part 7	Abatement Requirement (Regulation 1-301 and 6-1-305)	Y	C	
Part 8	Dust Suppressant Requirement on Unpaved Roads (Regulation 1-301 and 6-1-305, BACT)	Y	C	
Part 9	Visible Emissions Limitation (Regulation 1-301, 6-1-301, and Regulation 6-1-305)	Y	C	
Part 10	Best Management Practices (BMP) for Aerated Static Pile Requirements (BMP for BACT)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0117, A119
Source Name: Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) Method, and A119 Active Biofilter

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 11	Green Waste Process and Incorporation Limitation (BMP for BACT, Regulation 1-301, and 7-1)	Y	C	
Part 12	CASP Disturbance Requirement (BMP for BACT)	Y	C	
Part 13	CASP Parameter Requirements (BMP for BACT)	Y	C	
Part 14	A-119 Biofilter Parameter Requirements (BMP for BACT)	Y	C	
Part 15	Liquid Handling Requirement (BMP for BACT)	Y	C	
Part 16	Material Storage Area Cleaning Requirement (BMP for BACT)	Y	C	
Part 17	Additional Control Measure Requirement (Regulation 1-301)	Y	C	
Part 18	Recordkeeping Procedures (BACT, Offsets, and Cumulative Increase)	Y	C	
Part 19	Compliance Testing Requirement - 2-4 (BACT, Offsets, and Cumulative Increase)	Y	C	In accordance with authority to construct (ATC) application number (A/N) 25019, Condition Number 26088, Parts 19 and 21, the initial source test shall be initiated within 60 days of the start- up. The CASP "start-up" was on November 22, 2016, annual source testing has been conducted since 2017. The 2019 CASP Source Test was conducted from May 14, 2019 through May 16, 2019. The Source Test Report was submitted to the BAAQMD on August 14, 2019, which indicated compliance with application number A/N 25019, Condition Number 26088, Part 3 for limits of precursor organic compounds (POC) and ammonia (NH3).

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0117, A119
Source Name: Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) Method, and A119 Active Biofilter

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 20	Compliance Testing Requirement - Methanol (BACT, Offsets, and Cumulative Increase)	Y	C	The 2019 CASP Source Test was conducted from May 14, 2019 through May 16, 2019. The Source Test Report was submitted to the BAAQMD on August 14, 2019, which indicated compliance with A/N 25019, Condition Number 26088, Part 3 for limits of POCs and NH3.
Part 21	Compliance Testing Requirement - Total Carbon (8-2-301)	Y	C	The 2019 CASP Source Test was conducted from May 14, 2019 through May 16, 2019. The Source Test Report was submitted to the BAAQMD on August 14, 2019, which indicated compliance with A/N 25019, Condition Number 26088, Part 3 for limits of POCs and NH3.
Part 22	Compliance Testing Requirement - Vehicle Fleet (Cumulative Increase)	Y	C	The 2019 CASP Source Test was conducted from May 14, 2019 through May 16, 2019. The Source Test Report was submitted to the BAAQMD on August 14, 2019, which indicated compliance with A/N 25019, Condition Number 26088, Part 3 for limits of POCs and NH3.

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0117, A119
Source Name: Commercial Green Waste and Food Waste Composting Covered Aerated Static Pile (CASP) Method, and A119 Active Biofilter

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 23	Compliance Testing Requirement - Dust Mitigation (BACT, Regulation 1-301, and 6-1-305)	Y	C	The 2019 CASP Source Test was conducted from May 14, 2019 through May 16, 2019. The Source Test Report was submitted to the BAAQMD on August 14, 2019, which indicated compliance with A/N 25019, Condition Number 26088, Part 3 for limits of POCs and NH3.
Part 24	Compliance Testing Requirement - BMPs for BACT (BMP for BACT)		C	The 2019 CASP Source Test was conducted from May 14, 2019 through May 16, 2019. The Source Test Report was submitted to the BAAQMD on August 14, 2019, which indicated compliance with A/N 25019, Condition Number 26088, Part 3 for limits of POCs and NH3.

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0118, A118
Source Name: Crushing of Asphalt Debris, and A-118 Water Spray System

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Condition #23357				
Part 1	Asphalt Throughput Limit (Cumulative Increase)	Y	C	
Part 2	Abatement Requirement (Cumulative Increase)	Y	C	
Part 3	Visible Emissions Limitation (Regulation 6-1-301, SIP Regulation 6-301, and Regulation 1-301)	Y	C	
Part 4	Recordkeeping Requirement (Cumulative Increase and Regulation 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0120, 0130, A14, A15, A16, A17, A18, A19
Source Name: Air Stripper and Standby Air Stripper; A-14, A-15, A-16, A-17, A-18, and A-19 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 47	**Air Stripping and Soil Vapor Extraction Operations (6/15/05)**			
8-47-301	Emission Control Requirement, Specific Compounds	Y	C	
8-47-302	Organic Compounds	Y	C	
8-47-501	Records	Y	C	
8-47-501.1	Water Analysis Records	Y	C	
8-47-501.2	Vapor Monitoring Results	Y	C	
8-47-601	Air Stripper Water Sampling	Y	C	
BAAQMD Condition #23316				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5 and 8-47-301-302)	Y	C	
Part 3	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 4	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 5	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 6	Requirements for Carbon Replacement Inventory (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 7	Wastewater monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0120, 0130, A14, A15, A16, A17, A18, A19
Source Name: Air Stripper and Standby Air Stripper; A-14, A-15, A-16, A-17, A-18, and A-19 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 8	Methane and non-methane measurement method, and Carbon Adsorber monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5 and 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Address: 1 Parr Boulevard
Source #: 074, 0123, 0140, 0142, 0145, 0146, 0151, 0155, A20, A21

Site Name: West Contra Costa Sanitary Landfill
City: Richmond, CA
Source Name: Clarifier Holding Tank, Clarifier Holding (Feed) Tank, Waste Oil Tank, E-22R Area Tank, Pre-Treatment Inlet Feed Tank, Waste Oil Tank, and Oil Sludge Thickener; A-20 and A-21 Carbon Vessels

Reporting Period: 05/01/2020 to 04/30/2021
Zip Code: 94801

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (7/20/05)**			
8-2-301	Miscellaneous Operations	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5 and 8-5-301)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5 and 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0141, A20, A21
Source Name: Inlet Feed High Density Linear Polyethylene (HDLPE) Tank; A-20 and A-21 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 5	**Organic Compounds – Storage of Organic Liquids (11/27/02)**			
8-5-301	Vapor Loss Control Device Requirement	N	C	
8-5-306	Approved Emission Control System Requirement	N	C	
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks and Blanketed Tanks	N	C	
8-5-307.1	Fixed roof tank shell condition	N	C	
8-5-307.2	Pressure tank criteria	N	C	
8-5-307.3	Sealing mechanism criteria	N	C	
8-5-328	Tank Degassing Requirements	N	C	
8-5-328.1	Control requirement for tanks > 75 cubic meters	N	C	
8-5-328.2	Tank degassing prohibitions	N	C	
8-5-328.3	Notification and approval requirement	N	C	
8-5-331	Tank Cleaning Requirements	N	C	
8-5-331.1	Agents used to clean tank interior	N	C	
8-5-331.2	Steam cleaning limitations	N	C	
8-5-331.3	Steam cleaning criteria	N	C	
8-5-332	Sludge Handling Requirements	N	C	
8-5-332.1	Sludge container leak limits	N	C	
8-5-322.2	Sludge container gap requirements	N	C	
SIP Regulation 8 Rule 5	Organic Compounds- Storage of Organic Liquids (6/5/2003)	Y	C	
8-5-301	Vapor Loss Control Device Requirement	Y	C	

Compliance Certification Report

Site #: A1840
Address: 1 Parr Boulevard
Source #: 0141, A20, A21

Site Name: West Contra Costa Sanitary Landfill
City: Richmond, CA
Source Name: Inlet Feed High Density Linear Polyethylene (HDLPE) Tank; A-20 and A-21 Carbon Vessels

Reporting Period: 05/01/2020 to 04/30/2021
Zip Code: 94801

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-5-306	Approved Emission Control System Requirement	Y	C	
8-5-307	Requirements for Pressure Tanks and Blanketed Tanks	Y	C	
8-5-328	Tank Degassing Requirements	Y	C	
8-5-328.1	Control requirements for tanks > 75 cubic meters	Y	C	
8-5-328.2	Tank degassing prohibitions	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5 and 8-5-301)	Y	C	
Part 3	Operating requirements for Oil/Water Separators (Regulations 8-8-301 and 8-8-303)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 5	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 6	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 7	Wastewater monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 8	Methane and non-methane measurement method, and Carbon Adsorber monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5 and 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0150, A20, A21
Source Name: Clarifier Holding Tank; A-20 and A-21 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (7/20/05)**			
8-2-301	Miscellaneous Operations	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	

Compliance Certification Report

Site #: A1840 **Site Name:** West Contra Costa Sanitary Landfill **Reporting Period:** 05/01/2020 to 04/30/2021

Address: 1 Parr Boulevard **City:** Richmond, CA **Zip Code:** 94801

Source #: 0153, A153 **Source Name:** HCL (acid) Tank; A-153 Scrubber

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 2, Rule 5	**New Source Review of Toxic Air Contaminants (1/6/10)**	N	C	
BAAQMD Regulation 2, Rule 6	**Monitoring and Records**			
2-6-501	Recordkeeping	Y	C	
BAAQMD Regulation 8, Rule 5	**Organic Compounds, Storage of Organic Liquids (11/27/02)**			
8-5-301	Storage Tank Control Requirements	N	C	
PTO BAAQMD Condition Number 20054				
Part 1	Wastewater throughput limits (Cumulative Increase, Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Regulation 8, Rule 5, Part 301; Cumulative Increase, Regulation 2, Rule 5)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 5	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 6	Requirements for Carbon Replacement Inventory (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 7	Wastewater monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 8	Methane and non-methane measurement method, and Carbon Adsorber monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5; Regulation 2-6-501)	Y	C	

*S-153 no longer operates at WCCSL. The Title V Permit issued June 1, 2017 no longer lists S-153 as a source.

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0155, A20, A21
Source Name: Oil Sludge Thickener; A-20 and A-21 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (7/20/05)**			
8-2-301	Miscellaneous Operations	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0156, A20, A21
Source Name: Day Tanks (D-1, D-2, D-3); A-20 and A-21 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 5	**Organic Compounds – Storage of Organic Liquids (11/27/02)**			
8-5-301	Storage Tank Control Requirements	N	C	
8-5-306	Approved Emission Control System Requirement	N	C	
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks and Blanketed Tanks	N	C	
8-5-307.1	Fixed roof tank shell condition	N	C	
8-5-307.2	Pressure tank criteria	N	C	
8-5-307.3	Sealing mechanism criteria	N	C	
8-5-328	Tank Degassing Requirements	N	C	
8-5-328.1	Control requirement for tanks > 75 cubic meters	N	C	
8-5-328.2	Tank degassing prohibitions	N	C	
8-5-328.3	Notification and approval requirement	N	C	
8-5-331	Tank Cleaning Requirements	N	C	
8-5-331.1	Agents used to clean tank interior	N	C	
8-5-331.2	Steam cleaning limitations	N	C	
8-5-331.3	Steam cleaning criteria	N	C	
8-5-332	Sludge Handling Requirements	N	C	
8-5-332.1	Sludge container leak limits	N	C	
8-5-322.2	Sludge container gap requirements	N	C	
SIP Regulation 8 Rule 5	Organic Compounds- Storage of Organic Liquids (6/5/2003)	Y	C	
8-5-301	Vapor Loss Control Device Requirement	Y	C	
8-5-306	Approved Emission Control System Requirement	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0156, A20, A21
Source Name: Day Tanks (D-1, D-2, D-3); A-20 and A-21 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
8-5-307	Requirements for Pressure Tanks and Blanketed Tanks	Y	C	
8-5-328	Tank Degassing Requirements	Y	C	
8-5-328.1	Control requirements for tanks > 75 cubic meters	Y	C	
8-5-328.2	Tank degassing prohibitions	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 3	Operating requirements for Oil/Water Separators (Regulations 8-8-301 and 8-8-303)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 5	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 6	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 7	Wastewater monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 8	Methane and non-methane measurement method, and Carbon Adsorber monitoring requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5 and 2-6-501)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0157, A20, A21
Source Name: Filter Press Surge Tank; A-20 and A-21 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8, Rule 8	**Organic Compounds – Wastewater (Oil-Water) Separators (9/15/04)**			
8-8-301	Waste Water Separators Greater than 760 Liters Per Day and Smaller than 18.9 liters per second	Y	C	
8-8-301.3	OC Vapor Recovery System	N	C	
8-8-303	Gauging and Sampling Devices	Y	C	
8-8-304	Sludge-dewatering Unit	N	C	
8-8-305	Oil-Water Separator And/Or Air Floatation Unit Slop Oil Vessels	N	C	
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records	N	C	
8-8-503	Inspection and Repair Records	Y	C	
8-8-504	Portable Hydrocarbon Detector	Y	C	
SIP Regulation 8, Rule 8	**Organic Compounds – Wastewater (Oil-Water) Separators (8/29/94)**	Y	C	
8-8-301.3	OC Vapor Recovery System	Y	C	
8-8-304	Sludge-dewatering Unit	Y	C	
8-8-305	Oil-Water Separator And/Or Air Floatation Unit Slop Oil Vessels	Y	C	
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records	Y	C	
BAAQMD Condition #23220				
Part 1	Wastewater throughput limits (Cumulative Increase and Regulation 2, Rule 5)	Y	C	

Compliance Certification Report

Site #: A1840
Site Name: West Contra Costa Sanitary Landfill
Reporting Period: 05/01/2020 to 04/30/2021
Address: 1 Parr Boulevard
City: Richmond, CA
Zip Code: 94801
Source #: 0157, A20, A21
Source Name: Filter Press Surge Tank; A-20 and A-21 Carbon Vessels

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Regulation 2, Rule 5)	Y	C	
Part 3	Operating requirements for Oil/Water Separators (Regulations 8-8-301 and 8-8-303)	Y	C	
Part 4	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	C	
Part 9	Record keeping requirements (Cumulative Increase and Regulation 2, Rule 5)	Y	C	