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November 30, 2021

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Direction of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Title V Reports

Director of the Air Division, USEPA Region IX
75 Hawthorne Street
San Francisco, CA 94105
Attn: Air-3

Subject: Combined 8-34 Semi-Annual Report, 40 CFR Subpart AAAA Semi-Annual Report, and Title V Semi-Annual Monitoring 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, and Title V Semi-Annual Monitoring Report to the BAAQMD and the U.S. Environmental Protection Agency (EPA) Region IX for WCCSL.

The Title V Semi-Annual Monitoring Report, the BAAQMD Rule 8-34 Semi-Annual Report, and the SSM Plan Report cover the period from May 1, 2021 through October 31, 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 and Subpart OOO), including 40 CFR 60.757(f). Please note that as of June 21, 2021, the facility complies with the new Emissions Guidelines (EG) requirements in California. The approved state plan for the EG includes compliance with Title 17 California Code of Regulations (CCR) Sections 95460 to 95476, known as AB 32 Landfill Methane Rule (LMR) and specific portions of 40 CFR Part 62 Subpart OOO. As of September 27, 2021, the federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart AAAA rule came into effect, superseding the major compliance provisions of the California EG Rule. 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
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NSPS/BAAQMD Rule 8-34 Semi-Annual Report, SSM Plan Semi-Annual Report, and Title V Semi-Annual Report
West Contra Costa Sanitary Landfill
Richmond, California (Title V Facility No. A1840)

Prepared for:

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For Submittal to:

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SCS ENGINEERS

01204082.02 Task 1 | November 2021

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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, and the Title V Semi-Annual Monitoring Report for the West Contra Costa Sanitary Landfill in Richmond, California, dated November 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), Part 62 (Subpart OOO), Bay Area Air Quality Management District (BAAQMD or District) Rule 8-34 Semi-Annual Report (SAR), and Semi-Annual Startup, Shutdown and Malfunction (SSM) Plan Report pertaining to WCCSL for the period of May 1, 2021 through October 31, 2021 to the BAAQMD and the United States Environmental Protection Agency (EPA).

Please note that as of June 21, 2021, the facility complies with the new Emission Guidelines (EG) requirements in California. The approved state plan for the EG includes compliance with Title 17 California Code of Regulations (CCR) Sections 95460 to 95476, known as the AB 32 Landfill Methane Rule (LMR) and specific portions of 40 CFR Part 62 Subpart OOO. The NSPS/EG references will be updated in the next semi-annual report.

This Semi-Annual report also meets the requirements of the revised federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart AAAA rule for MSW landfills, 40 CFR 63, Subpart AAAA, which went into effect on September 27, 2021, and complies with the requirements specified in WCCSL's Title V permit. The revised NESHAP supersedes the major compliance provisions of the California EG Rule. The new standards did not apply to this reporting period, except for September 27 through October 31, 2021, and will be discussed in this report as needed, and WCCSL complied with the pre-September 27, 2021 version of the NESHAP rule during the May 1, 2021 to September 27, 2021 reporting period.

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 one [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 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, NESHAPs, 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 eighteen (18) occasions for a total of 54.33 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 six (6) power outages, which resulted in shutdowns of the GCCS that occurred on May 5, 2021 from 10:33 to 10:48, May

25, 2021 from 18:59 to 21:04, June 2, 2021 from 12:42 to 07:34, June 24, 2021 from 07:24 to 07:56, October 7, 2021 from 20:18 to 20:30, and October 24, 2021 at 09:08 to October 25, 2021 at 9:08. 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 56.20 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. 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 4,416 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 2,462.2 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 parts per million by volume (ppm_v) 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 May 1, 2021 through October 31, 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 May 1, 2021 through October 31, 2021, the minimum temperature above which the A-8 Flare was required to operate was 1,575°F (source test results minus 50°F), based on the December 28, 2020 source test (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, was included in the previous 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 ppm_v, 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 Second Quarter 2021 Monitoring

SCS Field Services (SCSFS) personnel conducted the component leak monitoring of the flare station, LFGTE Plant, waste water treatment plant, and wellfield in conjunction with quarterly Surface Emission Monitoring (SEM) on May 11, 2021. No component leaks above 1,000 ppm_v were detected at the flare station, wellfield, or LFGTE facility during second quarter 2021 monitoring event. These results are included in **Appendix D**.

3.2.2 Third Quarter 2021 Monitoring

SCSFS personnel conducted the component leak monitoring of flare station, LFGTE Plant, waste water treatment plant, and wellfield in conjunction with quarterly SEM on July 16, 2021. No component leaks above 1,000 ppm_v were detected at the flare station, wellfield, or LFGTE facility during third quarter 2021 monitoring event. These results are included in **Appendix D**.

3.2.3 Fourth Quarter 2021 Monitoring

SCSFS personnel conducted the component leak monitoring of the flare station, LFGTE Plant, waste water treatment plant, and wellfield in conjunction with quarterly SEM on October 8 and 11, 2021. No component leaks above 1,000 ppm_v were detected at the flare station, wellfield, or LFGTE facility during fourth quarter 2021 monitoring event. These results will be included in the next semi-annual report.

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 ppm_v 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 ppm_v. 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, were included in the previous 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 ppm_v 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 ppm_v. 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, were included in the previous 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 ppm_v 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 ppm_v 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, and is therefore out of service.

An excerpt of the most recent S-6 engine source test report was included in the previous report.

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 Second Quarter 2021 Monitoring

SCSFS personnel monitored the landfill surface for leaks with a methane concentration of greater than 500 ppm_v above background on May 10, 11, and 12, 2021. No surface emissions in excess of 500 ppm_v were detected during the second quarter 2021 monitoring event. As there was no surface emissions in excess of 500 ppm_v during the quarter, subsequent re-monitoring was not required. The results of the second quarter 2021 monitoring event are provided in the second quarter 2021 SEM (**Appendix D**).

3.4.2 Third Quarter 2021 Monitoring

SCSFS personnel monitored the landfill surface for leaks with a methane concentration of greater than 25 ppm_v and 500 ppm_v on July 9 and 16, 2021. Surface emissions in excess of 500 ppm_v were detected at four (4) locations during the third quarter 2021 monitoring event. System adjustments and repair work were performed by SCSFS. The subsequent 10-day re-monitoring, which was conducted on July 23, 2021, indicated that the four (4) areas with instantaneous exceedances had returned to compliance. One-month re-monitoring event was conducted, as required by 8-34 and the NSPS, on August 13, 2021, and all locations remained in compliance.

The results of the third quarter 2021 monitoring event are provided in the third quarter 2021 SEM report (**Appendix D**).

3.4.3 Fourth Quarter 2021 Monitoring

SCSFS personnel monitored the landfill surface for leaks with a methane concentration of greater than 500 ppm_v above background on October 8 and 11, 2021. No surface emissions in excess of 500 ppm_v were detected during the fourth quarter 2021 monitoring event. As there was no surface emissions in excess of 500 ppm_v during the quarter, subsequent re-monitoring was not required.

The results of the fourth quarter 2021 monitoring event will be provided in the next semi-annual report.

3.5 WELLHEAD MONTHLY MONITORING

Monthly wellhead monitoring for pressure, temperature, and oxygen content was conducted by 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. Root cause analysis forms were completed for wells that had pressure exceedances that exceeded 15 days. There were no instances were pressure exceedances exceeded 60 days.

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):

- WCLFH01A, WCLFH01B, WCLFH02A, WCLFH02B, WCLFH03A, WCLFH03B, WCLFH04A, WCLFH04B, WCLFH05A, WCLFH05B, WCLFH06B, WCLFH07A, WCLFH08A, WCLFH08B, WCLFH09B, WCLFH10A, WCLFH10B, WCLFR001, WCLFR002, WCLFR003, WCLFR004, WCLFR005, WCLFR006, WCLFR007, WCLFR008, WCLFR009, WCLFR010, WCLFR011, WCLFR012, WCLFR013, WCLFR014, WCLFR015, and WCLFR016.

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 WCLF0602, WCLF0606, WCLF0812, WCLF0821, WCLF0826, WCLF0827, WCLFH05A, WCLFH05B, WCLFH07B, WCLFH10B, WCLFR001, WCLFR002, WCLFR003, WCLFR004, WCLFR005, WCLFR006, WCLFR009, WCLFR010, WCLFR013, and WCLFR014.

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). Note, wells were subject to the oxygen exceedance level of 5 percent until June 21, 2021 under the NSPS Subpart WWW, after this date the Landfill was subject to the California state plan/Subpart OOO which requires monthly monitoring of oxygen but oxygen in excess of 5% is no longer is an exceedance, therefore the oxygen requirement after June 21, 2021 is a District only requirement.

As of the end of the previous reporting period, wells WCLF0515, WCLF0607, WCLF0832, WCLFH01A, WCLFH01B, WCLFH05A, WCLFH05B, WCLFH08B, WCLFH09A, WCLFR001, WCLFR002, WCLFR003, WCLFR005, WCLFR006, WCLFR007, WCLFR009, WCLFR012, WCLFR014, and WCLFR015 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 or were taken offline pursuant to Condition Numbers 20754 Part 2(c)(iii), 25293 Part 7(b)(iii) and 25293 Part 7(c)(ii).

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 the following dates:

- May 3, 6, 7, 12, 14, 20, 21, 27, and 28;
- June 3, 4, 7, 10, 16, 17, 21, 22, 24, 28, and 30;
- July 1, 2, 9, 12, 13, 14, 16, 19, 22, 26, and 30;
- August 3, 6, 11, 12, 18, 20, 23, 26, 27 and 30;
- September 1, 2, 7, 9, 10, 15, 16, 17, 20, 23, 28 and 29; and
- October 5, 6, 7, 11, 15, 20, 22, 25, 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 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 May 1, 2021 through September 26, 2021, as SSM recordkeeping and reporting requirements were no longer applicable after that, as the updated NESHAPs took effect on September 27, 2021, and are documented below.

- During the reporting period, the GCCS had eighteen (18) SSM events. Details of these events are included in **Table 1a**.
- During the reporting period, A-161 Flare had twenty (20) SSM events. Details of these events are included in **Table 1b**.
- During the reporting period, A-8 Flare had no SSM events. Details of these events are included in **Table 1c**.
- During the reporting period, eighty-one (81) 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, five (5) wellfield SSM events occurred. In addition, there were nine (9) 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.

This report should be considered a closeout report for SSM requirements under NESHAP Subpart AAAA.

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 May 1, 2021 through October 31, 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 E.**

Tables

Table 1a. GCCS Downtime
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime	Corrective Actions Taken
5/5/21 10:30	**5/5/21 10:46**	**0.27**	**Utility outage (RCA submitted)**	**Flare was inspected and adjusted before returning to service once power was restored.**
5/25/21 18:56	**5/25/21 21:04**	**2.13**	**Utility outage (RCA submitted)**	**Flare was inspected and adjusted before returning to service once power was restored.**
6/2/21 0:42	**6/2/21 7:30**	**6.80**	**Utility outage (RCA submitted)**	**Flare was inspected and adjusted before returning to service once power was restored.**
6/21/21 7:36	6/21/21 7:52	0.27	Blower inspection (113)	Planned shutdown for blower inspection and maintenance. Once flare maintenance activities were completed, flare was inspected and adjusted before returning to service and was restarted.
6/24/21 19:24	**6/24/21 19:52**	**0.47**	**Utility outage (RCA submitted)**	**Flare was inspected and adjusted before returning to service once power was restored.**
7/3/21 7:00	**7/3/21 9:30**	**2.50**	**Low temp shut down, Knockout pot servicing (113)**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit and for planned shutdown for knockout pot maintenance. Flare was inspected and adjusted before returning to service and was restarted.**
7/9/21 3:42	**7/9/21 8:50**	**5.13**	**Low temp shut down, condensate removal event (113)**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit and planned shutdown for condensate maintenance. Flare was inspected and adjusted before returning to service and was restarted.**
7/30/21 12:06	7/30/21 12:10	0.07	Blower inspection (113)	Planned shutdown for blower inspection and maintenance. Once flare maintenance activities were completed, flare was inspected and adjusted before returning to service and was restarted.
8/2/21 18:58	**8/2/21 20:12**	**1.23**	**Low temp shut down, pre programmed parametric shut down (113)**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
8/11/21 13:38	8/11/21 15:12	1.57	Flare shut down to connect generator power (113)	Planned shutdown to connect flare to generator power. Once flare maintenance activities were completed, flare was inspected and adjusted before returning to service and was restarted.
8/27/21 8:36	8/27/21 8:48	0.20	Flare shut down to connect generator power (113)	Planned shutdown to connect flare to generator power. Once flare maintenance activities were completed, flare was inspected and adjusted before returning to service and was restarted.
8/30/21 7:28	8/30/21 8:04	0.60	Flare shut down to transfer to main grid (113)	Flare was inspected and adjusted before returning to service and was restarted.
9/18/21 23:34	**9/19/21 7:26**	**7.87**	**Low temp Shut down pre programmed parametric shut down (113)**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
10/7/21 20:18	**10/7/21 20:28**	**0.17**	**Utility outage (RCA submitted)**	**Flare was inspected and adjusted before returning to service once power was restored.**
10/8/21 7:40	10/8/21 7:46	0.10	Flare inspection and maintenance following PG&E utility outage (113)	Flare was inspected and adjusted before returning to service once power was restored.
10/24/21 9:08	**10/25/21 8:58**	**23.83**	**Utility outage (RCA submitted)**	**Flare was inspected and adjusted before returning to service once power was restored.**
10/29/21 9:46	**10/29/21 10:00**	**0.23**	**Engine Start Up/Flare Flame Failure (113)**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
10/30/21 12:04	**10/30/21 12:58**	**0.90**	**Engine Start Up/Flare Flame Failure (113)**	**Shutdown was pre-programmed to avoid non-compliance with temperature limit. Flare was inspected and adjusted before returning to service and was restarted.**
	Total:	**54.33**		

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 5/5, 5/25, 6/2, 6/24, 10/7, and 10/24, 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
(May 1, 2021 through October 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
5/5/21 10:30	**5/5/21 10:46**	**0.27**	**Utility outage (RCA submitted)**
5/25/21 18:56	**5/25/21 21:04**	**2.13**	**Utility outage (RCA submitted)**
6/2/21 0:42	**6/2/21 7:30**	**6.80**	**Utility outage (RCA submitted)**
6/17/21 11:36	6/17/21 11:42	0.10	Engine Start up (113)
6/21/21 7:36	6/21/21 7:54	0.30	Blower inspection (113)
6/24/21 19:24	**6/24/21 19:52**	**0.47**	**Utility outage (RCA submitted)**
7/3/21 7:00	**7/3/21 9:30**	**2.50**	**Low temp shut down, Knockout pot servicing (113)**
7/9/21 3:42	**7/9/21 8:50**	**5.13**	**Low temp shut down, condensate removal event (113)**
7/30/21 12:06	7/30/21 12:10	0.07	Blower inspection (113)
8/2/21 18:58	**8/2/21 20:12**	**1.23**	**Low temp shut down, pre programmed parametric shut down (113)**
8/11/2021 13:18	8/11/2021 15:12	1.90	Flare shut down to connect generator power (113)
8/12/2021 8:40	8/12/2021 9:34	0.90	Flare shut down to transfer to main grid (113)
8/27/2021 8:08	8/27/2021 8:48	0.67	Flare shut down to connect generator power (113)
8/30/2021 7:28	8/30/2021 8:04	0.60	Flare shut down to transfer to main grid (113)
9/18/2021 23:34	**9/19/2021 7:26**	**7.87**	**Low temp Shut down pre programmed parametric shut down (113)**
10/7/2021 20:18	**10/7/2021 20:28**	**0.17**	**Utility outage (RCA submitted)**
10/8/2021 7:38	10/8/2021 7:46	0.13	Flare inspection and maintenance following PG&E utility outage (113)
10/24/2021 9:08	**10/25/2021 8:58**	**23.83**	**Utility outage (RCA submitted)**
10/29/2021 9:46	**10/29/2021 10:00**	**0.23**	**Engine Start Up/Flare Flame Failure (113)**
10/30/2021 12:04	**10/30/2021 12:58**	**0.90**	**Engine Start Up/Flare Flame Failure (113)**
Total		**56.20**	

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 5/5, 5/25, 6/2, 6/24, 10/7, and 10/24, 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
(May 1, 2021 through October 31, 2021)

Shutdown*	Startup*	Downtime Hours	Reason for Downtime
5/1/2021 0:00	11/1/2021 0:00	4416.00	Flare shutdown to remain as backup control device
Total		**4416.00**	

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 May 1, 2021 at 00:00 and ending on November 1, 2021 at 00:00, respectively.

Table 2. Individual Well Startups, Shutdowns and Decommissions
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 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)
WCLFR012*	5/12/21 13:48	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)
WCLFR007*	5/12/21 12:53	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)
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)
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	Ongoing	Ongoing	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)
WCLFH04A*	4/29/21 18:31	NA	Ongoing	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLFH04B*	5/20/21 12:06	NA	Ongoing	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)
WCLF0515	7/2/21	NA	NA	Vertical Well Decommissioned due to Poor Gas Quality
WCLFH01A*	7/12/21 17:06	Ongoing	Ongoing	Temporarily disconnected pursuant to Condition Number 25293 Part 7(c)(ii)

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 November 1, 2021 at 00:00.

Table 3. Wells with Positive Pressure
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
WCLF0519	9/7/2021 11:59	16.34	16.34	Adjusted Valve
WCLF0519	9/7/2021 12:01	16.11	16.12	Second Reading
WCLF0519	9/23/2021 12:07	17.11	17.11	Adjusted Valve
WCLF0519	9/23/2021 12:08	16.85	16.88	Second Reading
WCLF0519	10/5/2021 8:59	16.37	-0.89	Adjusted Valve, In Compliance
WCLF0835	5/6/2021 12:33	0.04	0.04	Adjusted Valve
WCLF0835	5/21/2021 10:20	-0.12	-0.11	In Compliance
WCLF0835	6/10/2021 13:41	0.01	-2.55	Adjusted Valve, In Compliance
WCLF0839	9/15/2021 11:03	1.29	1.31	Adjusted Valve
WCLF0839	9/15/2021 11:04	1.35	1.35	Second Reading
WCLF0839	9/17/2021 12:58	1.42	-0.06	Adjusted Valve, In Compliance
WCLF0844	9/17/2021 12:47	1.11	-3.11	Adjusted Valve, In Compliance
WCLF0850	9/2/2021 13:18	0.04	-0.11	Adjusted Valve, In Compliance
WCLF0851	9/15/2021 11:26	0.14	0.15	Adjusted Valve
WCLF0851	9/15/2021 11:28	0.19	0.21	Second Reading
WCLF0851	9/17/2021 13:07	0.09	-0.55	Adjusted Valve, In Compliance
WCLF0856	9/2/2021 12:57	0.22	-0.07	Adjusted Valve, In Compliance
WCLFH01A	7/22/2021 16:49	0.04	0.04	Adjusted Valve
WCLFH01A	7/22/2021 16:51	0.01	0.02	Second Reading
WCLFH01A	8/11/2021 11:26	-0.72	-0.7	In Compliance
WCLFH02A	6/10/2021 12:49	0.05	0.05	Adjusted Valve
WCLFH02A	6/10/2021 12:50	0.07	0.08	Second Reading
WCLFH02A	6/30/2021 9:28	-0.23	-0.23	In Compliance
WCLFH02A	7/12/2021 17:36	0.07	0.07	Adjusted Valve
WCLFH02A	7/12/2021 17:39	0.01	-0.04	Adjusted Valve, In Compliance
WCLFH02A	7/22/2021 17:02	0.02	0.05	Adjusted Valve
WCLFH02A	7/22/2021 17:03	0.07	0.09	Second Reading
WCLFH02A	8/11/2021 11:57	-0.51	-0.48	In Compliance
WCLFH03A	6/10/2021 13:04	0.01	0.01	Adjusted Valve
WCLFH03A	6/10/2021 13:05	-0.03	-0.02	Adjusted Valve, In Compliance
WCLFH03A	7/22/2021 17:10	0.18	0.18	Adjusted Valve
WCLFH03A	7/22/2021 17:12	0.06	0.09	Second Reading
WCLFH03A	8/3/2021 16:19	-0.01	-0.01	In Compliance

Table 3. Wells with Positive Pressure
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
WCLFH03B	6/10/2021 10:43	-2.56	0.01	Adjusted Valve
WCLFH03B	6/10/2021 10:44	-0.03	-0.03	In Compliance
WCLFH03B	6/24/2021 17:49	-0.01	0.02	Adjusted Valve
WCLFH03B	7/12/2021 12:13	-1.39	-0.21	In Compliance
WCLFH03B	7/22/2021 15:51	0.01	0.01	Adjusted Valve
WCLFH03B	8/3/2021 15:58	0.02	0	Second Reading
WCLFH03B	8/3/2021 16:00	0.04	0.04	Adjusted Valve
WCLFH03B	8/18/2021 13:00	-1.28	-0.63	In Compliance
WCLFH04A	6/7/2021 16:41	0.08	0.09	Adjusted Valve
WCLFH04A	6/7/2021 16:44	0.03	0.05	Second Reading
WCLFH04A	6/30/2021 9:57	-0.25	-0.25	In Compliance
WCLFH04A	7/22/2021 17:19	0.04	0.04	Adjusted Valve
WCLFH04A	7/22/2021 17:21	0.03	0.02	Second Reading
WCLFH04A	8/11/2021 9:40	-0.32	-0.3	In Compliance
WCLFH04A	9/15/2021 10:01	0.51	0.57	Adjusted Valve
WCLFH04A	9/15/2021 10:02	0.38	0.39	Second Reading
WCLFH04A	9/29/2021 9:35	-0.35	-0.31	In Compliance
WCLFH04B	7/12/2021 12:01	0.14	0.14	Adjusted Valve
WCLFH04B	7/12/2021 12:03	-0.1	-0.09	In Compliance
WCLFH04B	7/26/2021 15:26	0.17	0.16	Adjusted Valve
WCLFH04B	7/26/2021 15:28	0.06	0.07	Second Reading
WCLFH04B	8/11/2021 11:01	-1.59	-0.99	In Compliance
WCLFH05A	9/15/2021 10:06	0.23	0.23	Adjusted Valve
WCLFH05A	9/15/2021 10:07	0.27	0.27	Second Reading
WCLFH05A	9/29/2021 9:39	-0.63	-0.62	In Compliance
WCLFH06B	7/26/2021 15:39	0.13	0.13	Adjusted Valve
WCLFH06B	7/26/2021 15:41	0.01	0.02	Second Reading
WCLFH06B	8/11/2021 10:45	-0.47	-0.42	In Compliance
WCLFH07A	7/22/2021 17:37	-0.14	0.03	Adjusted Valve
WCLFH07A	7/22/2021 17:38	0.05	0.06	Second Reading
WCLFH07A	8/3/2021 16:30	-0.04	-0.1	In Compliance
WCLFH07B	9/2/2021 16:03	0.39	-1.14	Adjusted Valve, In Compliance
WCLFH07B	9/2/2021 16:07	0.3	0.31	Adjusted Valve
WCLFH07B	9/29/2021 12:34	-0.11	-0.08	In Compliance

Table 3. Wells with Positive Pressure
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
WCLFH08A	7/22/2021 17:41	0.01	0.01	Adjusted Valve
WCLFH08A	7/22/2021 17:42	0.02	0.03	Second Reading
WCLFH08A	8/3/2021 16:34	-0.01	-0.02	In Compliance
WCLFH08B	6/10/2021 14:38	0.04	0.05	Adjusted Valve
WCLFH08B	6/28/2021 18:37	-0.02	-1.8	In Compliance
WCLFH09B	6/10/2021 14:46	0.06	0.06	Adjusted Valve
WCLFH09B	6/10/2021 14:47	0.09	0.09	Second Reading
WCLFH09B	6/28/2021 18:46	-0.06	-0.02	In Compliance
WCLFH09B	7/13/2021 12:43	0.09	0.1	Adjusted Valve
WCLFH09B	7/13/2021 12:44	0.12	0.13	Second Reading
WCLFH09B	7/19/2021 17:03	0.03	0.06	Adjusted Valve
WCLFH09B	7/19/2021 17:04	0.03	0.06	Second Reading
WCLFH09B	8/12/2021 11:00	-0.14	-0.09	In Compliance
WCLFH10A	7/22/2021 17:57	-0.48	0.01	Adjusted Valve
WCLFH10A	7/22/2021 17:59	0.09	0.07	Second Reading
WCLFH10A	8/12/2021 11:23	-0.05	-0.02	In Compliance
WCLFH10B	9/2/2021 15:48	0.44	0.41	Adjusted Valve
WCLFH10B	9/2/2021 15:50	-0.37	-0.37	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
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0501	10/6/2021 10:45	6.6	Adjusted Valve
WCLF0501	10/6/2021 10:47	9.8	Second Reading
WCLF0501	10/20/2021 12:29	12.2	Adjusted Valve
WCLF0501	10/20/2021 12:31	0.2	In Compliance
WCLF0503	10/20/2021 13:18	10.8	Adjusted Valve
WCLF0503	10/20/2021 13:20	17	Second Reading
WCLF0503	10/29/2021 10:30	6.8	Adjusted Valve
WCLF0503	10/29/2021 10:32	4.6	In Compliance
WCLF0515	5/3/2021 15:52	20.7	Adjusted Valve
WCLF0515	5/3/2021 15:55	20.7	Second Reading
WCLF0515	5/20/2021 8:08	18.6	Adjusted Valve
WCLF0515	5/20/2021 8:10	20	Second Reading
WCLF0515	5/28/2021 15:13	14.7	Adjusted Valve
WCLF0515	5/28/2021 15:19	19.6	Second Reading
WCLF0515	6/4/2021 8:57	16.7	Adjusted Valve
WCLF0515	6/4/2021 8:59	16.5	Second Reading
WCLF0515	6/28/2021 11:21	10.7	Adjusted Valve
WCLF0515	6/28/2021 11:23	11.3	Second Reading
WCLF0515	7/2/2021 12:00	17	Adjusted Valve
WCLF0515	7/2/2021 12:01	17	Decommissioned due to Poor Gas Quality
WCLF0517	8/26/2021 12:49	7.7	Adjusted Valve
WCLF0517	8/26/2021 12:50	6.2	Second Reading
WCLF0517	9/2/2021 8:57	6.5	Adjusted Valve
WCLF0517	9/2/2021 8:59	4	In Compliance
WCLF0519	8/27/2021 12:34	10.6	Adjusted Valve
WCLF0519	8/27/2021 12:36	10.6	Second Reading
WCLF0519	9/2/2021 9:44	11.5	Adjusted Valve
WCLF0519	9/2/2021 9:46	19	Second Reading
WCLF0519	9/7/2021 11:59	0	In Compliance
WCLF0520	8/26/2021 14:09	10.3	Adjusted Valve
WCLF0520	8/26/2021 14:10	7.7	Second Reading
WCLF0520	9/2/2021 9:30	4.3	In Compliance
WCLF0602	7/22/2021 15:58	6.8	Adjusted Valve
WCLF0602	7/22/2021 15:59	6.6	Second Reading
WCLF0602	8/3/2021 16:08	0.7	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0602	8/27/2021 14:01	17.4	Adjusted Valve
WCLF0602	8/27/2021 14:02	15.3	Second Reading
WCLF0602	9/7/2021 13:23	11.1	Adjusted Valve
WCLF0602	9/7/2021 13:24	9.3	Second Reading
WCLF0602	9/29/2021 11:59	14.3	Adjusted Valve
WCLF0602	9/29/2021 12:00	11.8	Second Reading
WCLF0602	10/5/2021 10:26	10.9	Adjusted Valve
WCLF0602	10/5/2021 10:27	20.3	Second Reading
WCLF0602	10/29/2021 10:55	11.7	Adjusted Valve
WCLF0602	10/29/2021 10:56	12.3	Second Reading
WCLF0603	7/22/2021 15:42	5.4	Adjusted Valve
WCLF0603	7/22/2021 15:44	5.3	Second Reading
WCLF0603	8/3/2021 15:56	0.5	In Compliance
WCLF0603	8/27/2021 13:52	7.2	Adjusted Valve
WCLF0603	8/27/2021 13:53	8.3	Second Reading
WCLF0603	9/7/2021 13:50	4.4	In Compliance
WCLF0603	10/6/2021 11:56	17.1	Adjusted Valve
WCLF0603	10/6/2021 11:58	12.4	Second Reading
WCLF0603	10/20/2021 12:27	2	In Compliance
WCLF0606	5/7/2021 10:25	20.8	Adjusted Valve
WCLF0606	5/7/2021 10:27	20.8	Second Reading
WCLF0606	5/14/2021 11:59	19.3	Adjusted Valve
WCLF0606	5/14/2021 12:01	19.1	Second Reading
WCLF0606	5/21/2021 13:43	18.3	Adjusted Valve
WCLF0606	5/21/2021 13:45	18.4	Second Reading
WCLF0606	5/28/2021 14:44	19.8	Adjusted Valve
WCLF0606	5/28/2021 14:48	20.3	Second Reading
WCLF0606	6/7/2021 16:25	17	Adjusted Valve
WCLF0606	6/7/2021 16:27	16.9	Second Reading
WCLF0606	6/17/2021 10:08	19	Adjusted Valve
WCLF0606	6/17/2021 10:10	14.9	Second Reading
WCLF0606	7/2/2021 12:40	19.7	Adjusted Valve
WCLF0606	7/2/2021 12:42	0.2	In Compliance
WCLF0606	9/20/2021 10:16	18.2	Adjusted Valve
WCLF0606	9/20/2021 10:17	18.7	Second Reading
WCLF0606	9/29/2021 13:08	17.5	Adjusted Valve
WCLF0606	9/29/2021 13:09	18.5	Second Reading
WCLF0606	10/5/2021 11:50	20.9	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0606	10/5/2021 11:51	20.9	Second Reading
WCLF0606	10/20/2021 13:00	18	Adjusted Valve
WCLF0607	5/14/2021 11:52	19.9	(Initial Exceedance on 3/4) Adjusted Valve
WCLF0607	5/14/2021 11:55	19.3	Second Reading
WCLF0607	5/21/2021 13:34	20.8	Adjusted Valve
WCLF0607	5/21/2021 13:34	20.8	Second Reading
WCLF0607	5/21/2021 13:34	20.8	Third Reading
WCLF0607	5/21/2021 13:35	20.7	Fourth Reading
WCLF0607	6/7/2021 16:19	20	Adjusted Valve
WCLF0607	6/7/2021 16:20	19.4	Second Reading
WCLF0607	6/17/2021 10:03	15.9	Adjusted Valve
WCLF0607	6/17/2021 10:04	13.2	Second Reading
WCLF0607	7/2/2021 12:30	19.8	Adjusted Valve
WCLF0607	7/2/2021 12:34	0.2	In Compliance
WCLF0803	5/6/2021 11:13	6.5	Adjusted Valve
WCLF0803	5/6/2021 11:15	7.4	Second Reading
WCLF0803	5/20/2021 15:53	8.5	Adjusted Valve
WCLF0803	5/20/2021 15:53	8.5	Second Reading
WCLF0803	5/20/2021 15:54	8.6	Third Reading
WCLF0803	5/20/2021 15:54	8.6	Fourth Reading
WCLF0803	6/10/2021 14:49	10.5	Adjusted Valve
WCLF0803	6/10/2021 14:51	10.6	Second Reading
WCLF0803	6/28/2021 18:50	1.9	In Compliance
WCLF0806	8/27/2021 12:14	10.5	Adjusted Valve
WCLF0806	8/27/2021 12:16	7.3	Second Reading
WCLF0806	9/2/2021 9:12	9.5	Adjusted Valve
WCLF0806	9/2/2021 9:14	9.3	Second Reading
WCLF0806	9/29/2021 10:20	0	In Compliance
WCLF0810	8/26/2021 13:20	12.7	Adjusted Valve
WCLF0810	8/26/2021 13:21	10.7	Second Reading
WCLF0810	9/2/2021 8:33	0	In Compliance
WCLF0810	10/20/2021 12:46	18.7	Adjusted Valve
WCLF0810	10/20/2021 12:47	19.5	Second Reading
WCLF0810	10/25/2021 13:27	0	In Compliance
WCLF0812	10/29/2021 10:11	13.5	Adjusted Valve
WCLF0812	10/29/2021 10:13	13.6	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0815	8/27/2021 12:55	5.9	Adjusted Valve
WCLF0815	8/27/2021 12:56	4.1	In Compliance
WCLF0820	10/20/2021 13:03	19.4	Adjusted Valve
WCLF0820	10/20/2021 13:04	19.9	Second Reading
WCLF0820	10/25/2021 13:20	0	In Compliance
WCLF0821	5/14/2021 12:11	5.6	Adjusted Valve
WCLF0821	5/14/2021 12:11	5.6	Second Reading
WCLF0821	5/14/2021 12:12	5.6	Third Reading
WCLF0821	5/20/2021 16:35	0.3	In Compliance
WCLF0821	6/10/2021 8:57	7.7	Adjusted Valve
WCLF0821	6/10/2021 8:57	7.7	Second Reading
WCLF0821	6/10/2021 8:57	7.7	Third Reading
WCLF0821	6/10/2021 8:57	7.7	Fourth Reading
WCLF0821	6/10/2021 9:02	7.6	Fifth Reading
WCLF0821	6/17/2021 10:22	2.2	In Compliance
WCLF0821	7/2/2021 13:08	6.8	Adjusted Valve
WCLF0821	7/2/2021 13:10	6.8	Second Reading
WCLF0821	7/9/2021 14:28	6.4	Adjusted Valve
WCLF0821	7/26/2021 14:09	8.3	Adjusted Valve
WCLF0821	7/26/2021 14:11	8.4	Second Reading
WCLF0821	8/3/2021 14:51	2.7	In Compliance
WCLF0821	8/10/2021 12:48	7.9	Adjusted Valve
WCLF0821	8/10/2021 12:50	10	Second Reading
WCLF0821	8/18/2021 13:12	9.9	Adjusted Valve
WCLF0821	9/2/2021 10:07	9.9	Adjusted Valve
WCLF0821	9/2/2021 10:09	8.6	Second Reading
WCLF0821	9/20/2021 10:35	1.1	In Compliance
WCLF0821	10/6/2021 12:04	13.5	Adjusted Valve
WCLF0821	10/6/2021 12:06	12.2	Second Reading
WCLF0821	10/20/2021 12:39	16.9	Adjusted Valve
WCLF0821	10/20/2021 12:46	8.1	Second Reading
WCLF0821	10/20/2021 12:46	8.1	Third Reading
WCLF0826	5/21/2021 11:39	12.4	Adjusted Valve
WCLF0826	5/21/2021 11:41	12.4	Second Reading
WCLF0826	6/4/2021 15:10	3.4	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0826	10/25/2021 11:00	8.1	Adjusted Valve
WCLF0826	10/25/2021 11:01	8.1	Second Reading
WCLF0827	9/29/2021 9:17	18.9	Adjusted Valve
WCLF0827	9/29/2021 9:19	19.4	Second Reading
WCLF0827	10/5/2021 13:25	0.1	In Compliance
WCLF0827	10/25/2021 11:04	19.6	Adjusted Valve
WCLF0827	10/25/2021 11:05	19.9	Second Reading
WCLF0832	5/6/2021 15:41	12.7	(Initial Reading 4/26/21) Adjusted Valve
WCLF0832	5/6/2021 15:43	11.6	Second Reading
WCLF0832	5/21/2021 15:02	0	In Compliance
WCLF0832	6/4/2021 14:39	19.4	Adjusted Valve
WCLF0832	6/4/2021 14:40	19.3	Second Reading
WCLF0832	6/10/2021 15:33	19.6	Adjusted Valve
WCLF0832	6/10/2021 15:36	19.6	Second Reading
WCLF0832	6/17/2021 11:22	19.2	Adjusted Valve
WCLF0832	6/17/2021 11:24	19.4	Second Reading
WCLF0832	7/2/2021 14:07	20.4	Adjusted Valve
WCLF0832	7/2/2021 14:10	20.8	Second Reading
WCLF0832	7/26/2021 13:15	0	In Compliance
WCLF0832	8/3/2021 14:05	19.9	Adjusted Valve
WCLF0832	8/3/2021 14:13	20.4	Second Reading
WCLF0832	8/3/2021 14:15	19.9	Third Reading
WCLF0832	8/18/2021 13:30	19.8	Adjusted Valve
WCLF0832	8/18/2021 13:30	19.8	Second Reading
WCLF0832	9/2/2021 14:10	21	Adjusted Valve
WCLF0832	9/2/2021 14:12	21	Second Reading
WCLF0832	9/20/2021 11:54	0	In Compliance
WCLF0833	6/30/2021 10:21	8	Adjusted Valve
WCLF0833	6/30/2021 10:23	11.2	Second Reading
WCLF0833	7/9/2021 14:15	0.1	In Compliance
WCLF0833	8/12/2021 11:53	9.8	Adjusted Valve
WCLF0833	8/12/2021 11:54	9.8	Second Reading
WCLF0833	8/18/2021 11:57	12.2	Adjusted Valve
WCLF0833	9/7/2021 12:46	4.9	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0833	10/6/2021 8:54	8.5	Adjusted Valve
WCLF0833	10/6/2021 8:55	4	In Compliance
WCLF0835	5/6/2021 12:31	19.5	Adjusted Valve
WCLF0835	5/6/2021 12:33	19.5	Second Reading
WCLF0835	5/21/2021 10:20	20.6	Adjusted Valve
WCLF0835	5/21/2021 10:22	20.5	Second Reading
WCLF0835	6/10/2021 13:41	11.9	Adjusted Valve
WCLF0835	6/10/2021 13:44	12.7	Second Reading
WCLF0835	6/30/2021 10:55	20.9	Adjusted Valve
WCLF0835	6/30/2021 10:56	21.2	Second Reading
WCLF0835	7/13/2021 13:31	20.4	Adjusted Valve
WCLF0835	7/13/2021 13:34	20.6	Second Reading
WCLF0835	7/26/2021 9:42	20.4	Adjusted Valve
WCLF0835	7/26/2021 9:44	20.6	Second Reading
WCLF0835	8/12/2021 11:28	19.8	Adjusted Valve
WCLF0835	8/12/2021 11:29	20.5	Second Reading
WCLF0835	8/27/2021 13:22	20	Adjusted Valve
WCLF0835	8/27/2021 13:23	20.3	Second Reading
WCLF0835	9/7/2021 12:57	18.6	Well was temporarily taken offline pursuant to Condition Number 25293 Part 7(b)
WCLF0839	5/21/2021 15:21	6.5	Adjusted Valve
WCLF0839	5/21/2021 15:22	6.8	Second Reading
WCLF0839	6/4/2021 14:15	20.1	Adjusted Valve
WCLF0839	6/4/2021 14:17	13.1	Second Reading
WCLF0839	6/28/2021 12:17	8	Adjusted Valve
WCLF0839	6/28/2021 12:20	7.9	Second Reading
WCLF0839	7/13/2021 16:22	0.1	In Compliance
WCLF0839	7/26/2021 12:18	8.6	Adjusted Valve
WCLF0839	7/26/2021 12:24	8.5	Second Reading
WCLF0839	8/3/2021 13:10	7.3	Adjusted Valve
WCLF0839	8/3/2021 13:14	3.6	In Compliance
WCLF0839	9/1/2021 14:09	20.6	Adjusted Valve
WCLF0839	9/1/2021 14:12	20.6	Second Reading
WCLF0839	9/15/2021 11:03	0	In Compliance
WCLF0844	9/1/2021 14:58	20.3	Adjusted Valve
WCLF0844	9/1/2021 15:00	20.7	Second Reading
WCLF0844	9/15/2021 11:16	0	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLF0844	10/6/2021 11:52	5.4	Adjusted Valve
WCLF0844	10/6/2021 11:53	4.6	In Compliance
WCLF0845	8/27/2021 14:47	11.1	Adjusted Valve
WCLF0845	8/27/2021 14:48	10.2	Second Reading
WCLF0845	9/1/2021 15:09	6.5	Adjusted Valve
WCLF0845	9/1/2021 15:11	7.2	Second Reading
WCLF0845	9/29/2021 11:03	0	In Compliance
WCLF0846	8/27/2021 14:42	6.7	Adjusted Valve
WCLF0846	8/27/2021 14:44	6.2	Second Reading
WCLF0846	9/1/2021 15:16	2.4	In Compliance
WCLF0851	9/2/2021 13:27	8.9	Adjusted Valve
WCLF0851	9/2/2021 13:30	10.1	Second Reading
WCLF0851	9/15/2021 11:26	0	In Compliance
WCLF0855	9/2/2021 12:47	19.9	Adjusted Valve
WCLF0855	9/2/2021 12:50	9.2	Second Reading
WCLF0855	9/15/2021 11:32	0	In Compliance
WCLF0860	7/12/2021 9:27	5.4	Adjusted Valve
WCLF0860	7/12/2021 9:30	7.1	Second Reading
WCLF0860	7/26/2021 8:55	2.7	In Compliance
WCLF519D	8/27/2021 12:39	5.2	Adjusted Valve
WCLF519D	8/27/2021 12:41	3.9	In Compliance
WCLF601D	8/27/2021 14:14	12.2	Adjusted Valve
WCLF601D	8/27/2021 14:16	9.8	Second Reading
WCLF601D	9/7/2021 13:28	0	In Compliance
WCLFH01A	5/12/2021 18:56	20.4	(Initial Exceedance 4/12/2021) Adjusted Valve
WCLFH01A	5/12/2021 19:00	20.9	Second Reading
WCLFH01A	5/21/2021 11:47	16.7	Adjusted Valve
WCLFH01A	5/21/2021 11:50	16.7	Second Reading
WCLFH01A	6/10/2021 11:18	17.1	Adjusted Valve
WCLFH01A	6/10/2021 11:20	17	Second Reading
WCLFH01A	6/30/2021 9:40	20	Adjusted Valve
WCLFH01A	6/30/2021 9:41	20.6	Second Reading
WCLFH01A	7/12/2021 17:06	18.5	Well was temporarily taken offline pursuant to Condition Number 25293 Part 7(c)(iii)

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFH01B	5/12/2021 18:40	12.3	(Initial Exceedance 4/19/2021) In Compliance
WCLFH01B	6/10/2021 11:00	18	Adjusted Valve
WCLFH01B	6/10/2021 11:01	18	Second Reading
WCLFH01B	6/24/2021 17:54	1.6	In Compliance
WCLFH01B	8/27/2021 14:20	16.2	Adjusted Valve
WCLFH01B	8/27/2021 14:22	16.9	Second Reading
WCLFH01B	9/2/2021 16:54	20.1	Adjusted Valve
WCLFH01B	9/29/2021 11:56	14	In Compliance
WCLFH01B	9/29/2021 11:57	16.5	Adjusted Valve
WCLFH01B	9/29/2021 13:03	14	In Compliance
WCLFH03A	5/7/2021 10:54	20.1	Adjusted Valve
WCLFH03A	5/7/2021 10:55	20.1	Second Reading
WCLFH03A	5/21/2021 11:00	20.9	Adjusted Valve
WCLFH03A	5/21/2021 11:01	20.9	Second Reading
WCLFH03A	6/10/2021 13:04	19.9	Adjusted Valve
WCLFH03A	6/10/2021 13:05	19.9	Second Reading
WCLFH03A	6/30/2021 12:39	20.4	Adjusted Valve
WCLFH03A	6/30/2021 12:40	20.6	Second Reading
WCLFH03A	7/12/2021 17:50	14.7	In Compliance
WCLFH03A	7/22/2021 17:10	20.5	Adjusted Valve
WCLFH03A	7/22/2021 17:12	20.5	Second Reading
WCLFH03A	8/3/2021 16:19	12.3	In Compliance
WCLFH03A	8/26/2021 12:00	16.8	Adjusted Valve
WCLFH03A	8/26/2021 12:01	16.8	Second Reading
WCLFH03A	9/10/2021 7:23	19	Adjusted Valve
WCLFH03A	9/10/2021 7:24	19.2	Second Reading
WCLFH03A	9/29/2021 9:27	19.5	Adjusted Valve
WCLFH03A	9/29/2021 9:28	19.8	Second Reading
WCLFH03A	10/6/2021 8:29	15.9	Adjusted Valve
WCLFH03A	10/25/2021 11:16	3.8	In Compliance
WCLFH05A	5/6/2021 13:03	20.2	(Initial Exceedance 4/8) Adjusted Valve
WCLFH05A	5/6/2021 13:05	20.5	Second Reading
WCLFH05A	5/21/2021 10:41	20.9	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFH05A	5/21/2021 10:44	20.9	Second Reading
WCLFH05A	6/10/2021 13:10	20.5	Adjusted Valve
WCLFH05A	6/10/2021 13:11	20.6	Second Reading
WCLFH05A	6/30/2021 10:13	20.7	Adjusted Valve
WCLFH05A	6/30/2021 10:14	21.3	Second Reading
WCLFH05A	7/13/2021 15:59	5.3	In Compliance
WCLFH05A	7/22/2021 17:27	18.1	Adjusted Valve
WCLFH05A	7/22/2021 17:28	17.7	Second Reading
WCLFH05A	8/3/2021 16:25	15.7	Adjusted Valve
WCLFH05A	8/3/2021 16:26	15.6	Second Reading
WCLFH05A	8/18/2021 12:02	20.8	Adjusted Valve
WCLFH05A	9/15/2021 10:06	18.9	Adjusted Valve
WCLFH05A	9/15/2021 10:07	18.9	Second Reading
WCLFH05A	9/29/2021 9:39	20.1	Adjusted Valve
WCLFH05A	9/29/2021 9:40	20.2	Second Reading
WCLFH05A	10/6/2021 8:41	19.4	Adjusted Valve
WCLFH05A	10/6/2021 8:43	20.7	Second Reading
WCLFH05A	10/25/2021 11:28	12.2	In Compliance
WCLFH05A	10/25/2021 11:29	16.6	Adjusted Valve
WCLFH05A	10/30/2021 13:20	17.5	Adjusted Valve
WCLFH05A	10/30/2021 13:23	17	Second Reading
WCLFH05B	5/7/2021 10:18	17.6	(Initial Exceedance 4/26) Adjusted Valve
WCLFH05B	5/7/2021 10:20	17.6	Second Reading
WCLFH05B	5/20/2021 11:45	16.8	Adjusted Valve
WCLFH05B	6/10/2021 9:55	18.7	Adjusted Valve
WCLFH05B	6/10/2021 9:57	18.6	Second Reading
WCLFH05B	6/17/2021 12:17	2.3	In Compliance
WCLFH05B	7/12/2021 11:09	17.3	Adjusted Valve
WCLFH05B	7/12/2021 11:13	18	Second Reading
WCLFH05B	7/26/2021 15:33	20.5	Adjusted Valve
WCLFH05B	7/26/2021 15:36	20.2	Second Reading
WCLFH05B	8/11/2021 10:47	18.9	Adjusted Valve
WCLFH05B	8/11/2021 10:49	19.7	Second Reading
WCLFH05B	8/26/2021 9:46	18	Adjusted Valve
WCLFH05B	8/26/2021 9:47	18.5	Second Reading
WCLFH05B	9/2/2021 17:10	20.8	Adjusted Valve
WCLFH05B	9/23/2021 10:03	18.2	Adjusted Valve
WCLFH05B	9/23/2021 10:04	18.7	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFH05B	10/6/2021 8:32	19.2	Adjusted Valve
WCLFH05B	10/6/2021 8:34	20.1	Second Reading
WCLFH05B	10/22/2021 10:58	19.5	Adjusted Valve
WCLFH05B	10/22/2021 10:59	19.9	Second Reading
WCLFH06A	6/30/2021 10:18	7.8	Adjusted Valve
WCLFH06A	7/9/2021 14:17	3.6	In Compliance
WCLFH06A	10/6/2021 8:50	11.1	Adjusted Valve
WCLFH06A	10/25/2021 11:32	0.1	In Compliance
WCLFH07A	5/6/2021 12:43	18.1	Adjusted Valve
WCLFH07A	5/6/2021 12:45	18	Second Reading
WCLFH07A	5/20/2021 16:09	0	In Compliance
WCLFH07A	7/22/2021 17:37	19.4	Adjusted Valve
WCLFH07A	7/22/2021 17:38	19.6	Second Reading
WCLFH07A	8/3/2021 16:30	0.2	In Compliance
WCLFH07A	8/27/2021 13:33	18.5	Adjusted Valve
WCLFH07A	8/27/2021 13:35	18.7	Second Reading
WCLFH07A	9/2/2021 15:57	18.7	Adjusted Valve
WCLFH07A	9/20/2021 12:51	2.8	In Compliance
WCLFH07B	8/27/2021 13:03	7.1	Adjusted Valve
WCLFH07B	8/27/2021 13:04	12	Second Reading
WCLFH07B	9/2/2021 16:03	0	In Compliance
WCLFH07B	10/29/2021 11:13	19.7	Adjusted Valve
WCLFH07B	10/29/2021 11:14	19.8	Second Reading
WCLFH08A	5/6/2021 12:36	16.2	Adjusted Valve
WCLFH08A	5/6/2021 12:38	16.1	Second Reading
WCLFH08A	5/20/2021 16:12	0	In Compliance
WCLFH08A	7/22/2021 17:41	20.6	Adjusted Valve
WCLFH08A	7/22/2021 17:42	20.4	Second Reading
WCLFH08A	8/3/2021 16:34	18.7	Adjusted Valve
WCLFH08A	8/3/2021 16:35	18.7	Second Reading
WCLFH08A	8/27/2021 13:30	0.1	In Compliance
WCLFH08A	9/7/2021 12:54	17.8	Adjusted Valve
WCLFH08A	9/7/2021 12:55	17.9	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFH08A	9/15/2021 11:39	18.1	Adjusted Valve
WCLFH08A	9/15/2021 11:41	18.2	Second Reading
WCLFH08A	9/20/2021 12:47	19.3	Adjusted Valve
WCLFH08A	9/20/2021 12:48	19.3	Second Reading
WCLFH08A	10/6/2021 9:04	20.2	Adjusted Valve
WCLFH08A	10/6/2021 9:06	20.8	Second Reading
WCLFH08A	10/25/2021 11:41	14.1	In Compliance
WCLFH08A	10/25/2021 11:42	15.9	Adjusted Valve
WCLFH08A	10/30/2021 13:43	14	In Compliance
WCLFH08B	5/6/2021 10:44	20.4	(Initial Exceedance 3/11) Adjusted Valve
WCLFH08B	5/6/2021 10:49	20.2	Second Reading
WCLFH08B	5/20/2021 15:31	20.1	Adjusted Valve
WCLFH08B	5/20/2021 15:34	20.9	Second Reading
WCLFH08B	6/10/2021 14:37	19.2	Adjusted Valve
WCLFH08B	6/10/2021 14:38	19.3	Second Reading
WCLFH08B	6/28/2021 18:37	0	In Compliance
WCLFH08B	7/13/2021 12:33	19.2	Adjusted Valve
WCLFH08B	7/13/2021 12:35	18.7	Second Reading
WCLFH08B	7/19/2021 16:57	0	In Compliance
WCLFH09A	5/6/2021 12:22	6.9	(Initial Exceedance 4/30) In Compliance
WCLFH10B	5/6/2021 10:02	17.5	Adjusted Valve
WCLFH10B	5/6/2021 10:11	17.6	Second Reading
WCLFH10B	5/20/2021 15:08	12.7	In Compliance
WCLFH10B	8/10/2021 12:00	17.5	Adjusted Valve
WCLFH10B	8/12/2021 10:47	14.1	In Compliance
WCLFH10B	8/26/2021 13:49	15.5	Adjusted Valve
WCLFH10B	8/26/2021 13:50	20	Second Reading
WCLFH10B	9/2/2021 15:48	14.1	In Compliance
WCLFH10B	9/23/2021 12:15	15.6	Adjusted Valve
WCLFH10B	9/28/2021 12:35	17.6	Second Reading
WCLFH10B	10/5/2021 8:43	20.7	Adjusted Valve
WCLFH10B	10/5/2021 8:46	21.6	Second Reading
WCLFH10B	10/22/2021 10:37	17.7	Adjusted Valve
WCLFH10B	10/22/2021 10:38	18.4	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR001	5/3/2021 11:21	16.1	(Initial Exceedance 4/22) Adjusted Valve
WCLFR001	5/3/2021 11:22	16.2	Second Reading
WCLFR001	5/12/2021 12:11	18.9	Adjusted Valve
WCLFR001	5/12/2021 12:13	18.9	Second Reading
WCLFR001	5/20/2021 9:09	18.9	Adjusted Valve
WCLFR001	5/20/2021 9:12	18.9	Second Reading
WCLFR001	5/28/2021 10:06	8.7	In Compliance
WCLFR001	6/21/2021 10:22	17.2	Adjusted Valve
WCLFR001	6/21/2021 10:24	17.2	Second Reading
WCLFR001	7/1/2021 10:05	15.7	Adjusted Valve
WCLFR001	7/1/2021 10:06	15.7	Second Reading
WCLFR001	7/9/2021 11:49	14.4	In Compliance
WCLFR001	8/23/2021 10:42	17.5	Adjusted Valve
WCLFR001	8/23/2021 10:43	17.5	Second Reading
WCLFR001	8/30/2021 14:16	14.1	In Compliance
WCLFR001	10/6/2021 14:14	16.2	Adjusted Valve
WCLFR001	10/6/2021 14:15	16.2	Second Reading
WCLFR001	10/11/2021 11:06	14.3	In Compliance
WCLFR001	10/20/2021 11:23	19.6	Adjusted Valve
WCLFR001	10/20/2021 11:25	19.4	Second Reading
WCLFR001	10/26/2021 9:26	20.6	Adjusted Valve
WCLFR001	10/26/2021 9:27	20.5	Second Reading
WCLFR002	5/20/2021 9:15	20	(Initial Exceedance 4/5) Adjusted Valve
WCLFR002	5/20/2021 9:17	20	Second Reading
WCLFR002	5/28/2021 10:09	9.9	In Compliance
WCLFR002	6/21/2021 10:26	17.6	Adjusted Valve
WCLFR002	6/21/2021 10:29	17.6	Second Reading
WCLFR002	7/1/2021 10:07	16.8	Adjusted Valve
WCLFR002	7/1/2021 10:09	17	Second Reading
WCLFR002	7/9/2021 11:54	16.4	Adjusted Valve
WCLFR002	7/9/2021 11:54	16.4	Second Reading
WCLFR002	7/9/2021 11:55	16.1	Third Reading
WCLFR002	7/16/2021 9:57	13.5	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR002	7/19/2021 10:25	15.1	Adjusted Valve
WCLFR002	7/19/2021 10:27	15.2	Second Reading
WCLFR002	7/30/2021 12:57	15.9	Adjusted Valve
WCLFR002	7/30/2021 12:59	15.9	Second Reading
WCLFR002	8/3/2021 16:53	4.2	In Compliance
WCLFR002	8/11/2021 9:25	15.5	Adjusted Valve
WCLFR002	8/11/2021 9:26	15.6	Second Reading
WCLFR002	8/20/2021 14:31	9.7	In Compliance
WCLFR002	8/23/2021 10:45	19	Adjusted Valve
WCLFR002	8/30/2021 14:18	15.1	Adjusted Valve
WCLFR002	8/30/2021 14:19	15.1	Second Reading
WCLFR002	9/9/2021 13:07	16.1	Adjusted Valve
WCLFR002	9/9/2021 13:09	16.1	Second Reading
WCLFR002	9/16/2021 11:44	15.5	Adjusted Valve
WCLFR002	9/16/2021 11:45	15.5	Second Reading
WCLFR002	9/23/2021 14:29	9	In Compliance
WCLFR002	10/6/2021 14:17	16.3	Adjusted Valve
WCLFR002	10/6/2021 14:18	16.3	Second Reading
WCLFR002	10/11/2021 11:08	15.4	Adjusted Valve
WCLFR002	10/11/2021 11:09	15.5	Second Reading
WCLFR002	10/20/2021 11:27	19.6	Adjusted Valve
WCLFR002	10/20/2021 11:28	19.5	Second Reading
WCLFR002	10/26/2021 9:29	20.5	Adjusted Valve
WCLFR002	10/26/2021 9:30	20.5	Second Reading
WCLFR003	5/3/2021 11:31	16.3	(Initial Exceedance 4/22) Adjusted Valve
WCLFR003	5/3/2021 11:32	16.2	Second Reading
WCLFR003	5/12/2021 12:19	20.2	Adjusted Valve
WCLFR003	5/12/2021 12:21	20.2	Second Reading
WCLFR003	5/20/2021 9:21	19.6	Adjusted Valve
WCLFR003	5/20/2021 9:23	19.6	Second Reading
WCLFR003	5/28/2021 10:12	7.6	In Compliance
WCLFR003	6/21/2021 10:31	16.7	Adjusted Valve
WCLFR003	6/21/2021 10:33	16.7	Second Reading
WCLFR003	7/1/2021 10:10	14.4	In Compliance
WCLFR003	8/23/2021 10:47	15.1	Adjusted Valve
WCLFR003	8/23/2021 10:48	15	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR003	10/6/2021 14:21	15.6	Adjusted Valve
WCLFR003	10/6/2021 14:22	15.6	Second Reading
WCLFR003	10/11/2021 11:11	11.2	In Compliance
WCLFR003	10/20/2021 11:30	18.9	Adjusted Valve
WCLFR003	10/20/2021 11:31	18.9	Second Reading
WCLFR003	10/26/2021 9:34	20.2	Adjusted Valve
WCLFR003	10/26/2021 9:35	20.2	Second Reading
WCLFR003	10/26/2021 9:37	20.7	Third Reading
WCLFR004	6/21/2021 10:34	18.1	Adjusted Valve
WCLFR004	6/21/2021 10:37	17.6	Second Reading
WCLFR004	7/1/2021 10:12	15.8	Adjusted Valve
WCLFR004	7/1/2021 10:14	15.7	Second Reading
WCLFR004	7/9/2021 11:59	15.3	Adjusted Valve
WCLFR004	7/9/2021 12:01	15.1	Second Reading
WCLFR004	7/16/2021 10:02	12.1	In Compliance
WCLFR004	8/23/2021 10:51	17.8	Adjusted Valve
WCLFR004	8/23/2021 10:52	17.9	Second Reading
WCLFR004	8/30/2021 14:22	14.2	In Compliance
WCLFR004	9/9/2021 13:15	17.5	Adjusted Valve
WCLFR004	9/9/2021 13:16	17.6	Second Reading
WCLFR004	9/16/2021 11:50	16.9	Adjusted Valve
WCLFR004	9/16/2021 11:52	17	Second Reading
WCLFR004	9/23/2021 14:32	15.2	Adjusted Valve
WCLFR004	9/23/2021 14:32	15.2	Second Reading
WCLFR004	9/28/2021 13:11	18.7	Adjusted Valve
WCLFR004	9/28/2021 13:13	19.1	Second Reading
WCLFR004	10/6/2021 14:23	18.7	Adjusted Valve
WCLFR004	10/6/2021 14:24	18.8	Second Reading
WCLFR004	10/11/2021 11:12	17.3	Adjusted Valve
WCLFR004	10/11/2021 11:13	17.4	Second Reading
WCLFR004	10/20/2021 11:33	19.3	Adjusted Valve
WCLFR004	10/20/2021 11:34	20.3	Second Reading
WCLFR004	10/26/2021 9:39	20.8	Adjusted Valve
WCLFR004	10/26/2021 9:40	20.9	Second Reading
WCLFR005	5/3/2021 11:57	20.9	(Initial Exceedance 3/26) Adjusted Valve
WCLFR005	5/3/2021 11:58	20.9	Second Reading
WCLFR005	5/12/2021 12:45	20.9	Adjusted Valve
WCLFR005	5/12/2021 12:47	20.9	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR005	5/20/2021 9:59	18.1	Adjusted Valve
WCLFR005	5/20/2021 10:00	17.6	Second Reading
WCLFR005	5/28/2021 10:19	11	In Compliance
WCLFR005	6/21/2021 11:17	16.6	Adjusted Valve
WCLFR005	6/21/2021 11:20	16.6	Second Reading
WCLFR005	7/1/2021 10:18	15.7	Adjusted Valve
WCLFR005	7/1/2021 10:19	16.5	Second Reading
WCLFR005	7/9/2021 12:08	14.7	In Compliance
WCLFR005	8/23/2021 10:55	17.7	Adjusted Valve
WCLFR005	8/23/2021 10:56	17.7	Second Reading
WCLFR005	8/23/2021 10:56	17.7	Adjusted Valve
WCLFR005	8/30/2021 14:33	12.1	In Compliance
WCLFR005	10/20/2021 11:49	17.9	Adjusted Valve
WCLFR005	10/20/2021 11:50	17.9	Second Reading
WCLFR005	10/26/2021 9:53	19.9	Adjusted Valve
WCLFR005	10/26/2021 9:55	19.9	Second Reading
WCLFR006	5/3/2021 11:59	17.8	(Initial Exceedance 4/22) Adjusted Valve
WCLFR006	5/3/2021 12:00	17.7	Second Reading
WCLFR006	5/12/2021 12:49	20.9	Adjusted Valve
WCLFR006	5/12/2021 12:49	20.9	Second Reading
WCLFR006	5/12/2021 12:51	20.9	Third Reading
WCLFR006	5/20/2021 10:02	15.8	Adjusted Valve
WCLFR006	5/20/2021 10:03	15.7	Second Reading
WCLFR006	5/28/2021 10:21	10.3	In Compliance
WCLFR006	7/9/2021 12:13	15.9	Adjusted Valve
WCLFR006	7/14/2021 15:30	12.6	In Compliance
WCLFR006	7/30/2021 15:41	16.1	Adjusted Valve
WCLFR006	7/30/2021 15:43	16.5	Second Reading
WCLFR006	8/6/2021 10:08	12.2	In Compliance
WCLFR006	8/23/2021 10:58	15.7	Adjusted Valve
WCLFR006	8/23/2021 11:03	17.2	Second Reading
WCLFR006	8/30/2021 14:24	15	In Compliance
WCLFR006	8/30/2021 14:26	19.8	Adjusted Valve
WCLFR006	9/9/2021 13:26	21.3	Adjusted Valve
WCLFR006	9/9/2021 13:28	21.4	Second Reading

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR006	9/16/2021 12:01	20.8	Adjusted Valve
WCLFR006	9/16/2021 12:02	20.9	Second Reading
WCLFR006	9/23/2021 14:39	20.4	Adjusted Valve
WCLFR006	9/28/2021 13:21	21.4	Adjusted Valve
WCLFR006	9/28/2021 13:22	21.4	Second Reading
WCLFR006	10/6/2021 14:49	20	Adjusted Valve
WCLFR006	10/6/2021 14:50	20.2	Second Reading
WCLFR006	10/11/2021 11:35	12.7	In Compliance
WCLFR006	10/20/2021 11:53	21.1	Adjusted Valve
WCLFR006	10/20/2021 11:54	21.2	Second Reading
WCLFR006	10/26/2021 9:58	21.4	Adjusted Valve
WCLFR006	10/26/2021 9:59	21.6	Second Reading
WCLFR008	5/12/2021 12:55	20.9	Adjusted Valve
WCLFR008	5/12/2021 12:55	20.9	Second Reading
WCLFR008	5/12/2021 12:57	20.9	Third Reading
WCLFR008	5/20/2021 10:07	0.1	In Compliance
WCLFR008	8/30/2021 14:30	20.5	Adjusted Valve
WCLFR008	8/30/2021 14:31	20.7	Second Reading
WCLFR008	9/9/2021 13:35	17.5	Adjusted Valve
WCLFR008	9/9/2021 13:39	15.6	Second Reading
WCLFR008	9/16/2021 12:08	9	In Compliance
WCLFR008	10/11/2021 11:40	20.5	Adjusted Valve
WCLFR008	10/11/2021 11:40	20.5	Second Reading
WCLFR008	10/20/2021 12:02	3.9	In Compliance
WCLFR009	5/12/2021 13:38	17	(Initial Exceedance 3/26) Adjusted Valve
WCLFR009	5/12/2021 13:40	17	Second Reading
WCLFR009	5/20/2021 10:19	15.2	Adjusted Valve
WCLFR009	5/20/2021 10:20	15.2	Second Reading
WCLFR009	5/28/2021 10:48	9.7	In Compliance
WCLFR009	6/21/2021 12:14	15.8	Adjusted Valve
WCLFR009	6/21/2021 12:16	15.8	Second Reading
WCLFR009	7/1/2021 10:29	14	In Compliance
WCLFR009	8/23/2021 11:24	15.2	Adjusted Valve
WCLFR009	8/23/2021 11:24	15.2	Second Reading
WCLFR009	8/30/2021 14:40	13.9	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR009	10/20/2021 12:11	17.9	Adjusted Valve
WCLFR009	10/20/2021 12:11	17.9	Second Reading
WCLFR009	10/26/2021 10:15	19.7	Adjusted Valve
WCLFR009	10/26/2021 10:16	19.8	Second Reading
WCLFR010	5/3/2021 12:14	20.5	Adjusted Valve
WCLFR010	5/3/2021 12:15	20.7	Second Reading
WCLFR010	5/12/2021 13:41	12.6	In Compliance
WCLFR010	10/20/2021 12:15	15.1	Adjusted Valve
WCLFR010	10/20/2021 12:16	15.1	Second Reading
WCLFR010	10/26/2021 10:18	18.7	Adjusted Valve
WCLFR010	10/26/2021 10:20	18.7	Second Reading
WCLFR013	6/21/2021 12:31	15.1	Adjusted Valve
WCLFR013	6/21/2021 12:33	15	Second Reading
WCLFR013	7/1/2021 10:40	13.4	In Compliance
WCLFR013	10/20/2021 12:53	17.7	Adjusted Valve
WCLFR013	10/20/2021 12:55	17.6	Second Reading
WCLFR013	10/26/2021 10:36	19.3	Adjusted Valve
WCLFR013	10/26/2021 10:38	19.3	Second Reading
WCLFR014	5/20/2021 10:41	17.1	(Initial Exceedance 4/22) Adjusted Valve
WCLFR014	5/20/2021 10:43	17.1	Second Reading
WCLFR014	5/28/2021 11:01	13.3	In Compliance
WCLFR014	6/7/2021 11:25	16.5	Adjusted Valve
WCLFR014	6/7/2021 11:26	15.5	Second Reading
WCLFR014	6/16/2021 10:37	5.7	In Compliance
WCLFR014	7/1/2021 10:43	16.5	Adjusted Valve
WCLFR014	7/1/2021 10:45	16.3	Second Reading
WCLFR014	7/9/2021 13:55	13.9	In Compliance
WCLFR014	8/11/2021 9:57	17.8	Adjusted Valve
WCLFR014	8/11/2021 9:59	19.8	Second Reading
WCLFR014	8/20/2021 15:27	15.3	Adjusted Valve
WCLFR014	8/20/2021 15:28	14.5	In Compliance
WCLFR014	8/23/2021 11:37	17.7	Adjusted Valve
WCLFR014	8/23/2021 11:38	20.1	Second Reading
WCLFR014	8/30/2021 14:56	13.8	In Compliance

Table 4. Wells with Oxygen Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
WCLFR014	9/9/2021 14:04	20.4	Adjusted Valve
WCLFR014	9/9/2021 14:06	21.6	Second Reading
WCLFR014	9/16/2021 12:33	19.7	Adjusted Valve
WCLFR014	9/16/2021 12:35	20.6	Second Reading
WCLFR014	9/23/2021 14:59	18.3	Adjusted Valve
WCLFR014	9/23/2021 15:00	20.2	Second Reading
WCLFR014	9/23/2021 15:00	20.2	Third Reading
WCLFR014	9/28/2021 13:54	18.6	Adjusted Valve
WCLFR014	9/28/2021 13:55	19.3	Second Reading
WCLFR014	10/6/2021 15:45	20.4	Adjusted Valve
WCLFR014	10/6/2021 15:47	20.2	Second Reading
WCLFR014	10/11/2021 12:42	19.7	Adjusted Valve
WCLFR014	10/11/2021 12:43	20	Second Reading
WCLFR014	10/20/2021 12:56	19.9	Adjusted Valve
WCLFR014	10/20/2021 12:58	21	Second Reading
WCLFR014	10/26/2021 10:44	19.1	Adjusted Valve
WCLFR014	10/26/2021 10:46	21.1	Second Reading

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

Wells in ***bold italics*** indicate wells with a 15% higher operating value (HOV) for oxygen pursuant to Permit Condition Number 20754 Part 2(c)(ii) and Condition Number 25293 Part 7(d)(iii)

Table 5. Wells with Temperature Exceedances
West Contra Costa Sanitary Landfill, Richmond, California
(May 1, 2021 through October 31, 2021)

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
There were no temperature exceedances during this reporting period.				

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

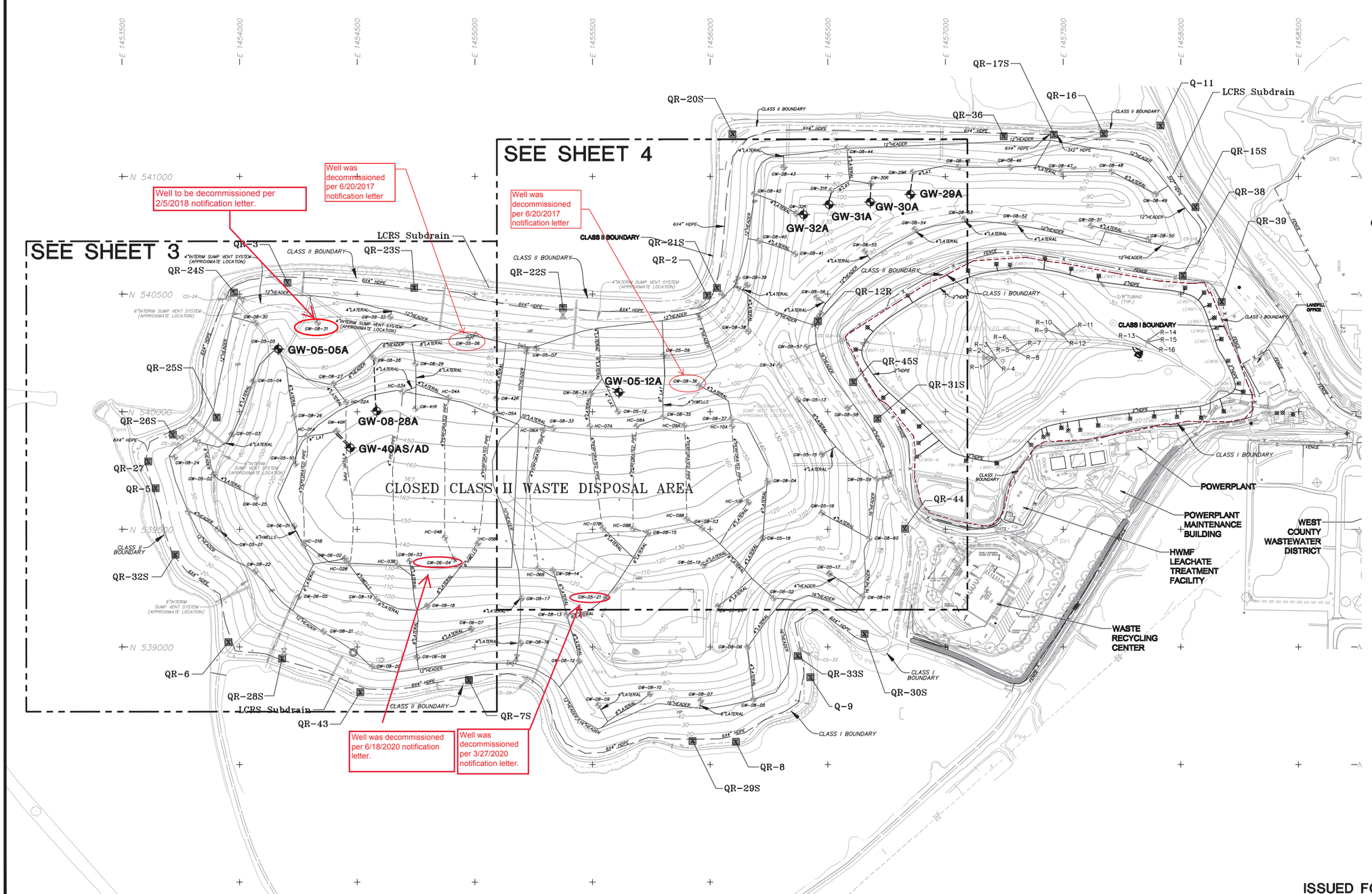
11-24-21

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)

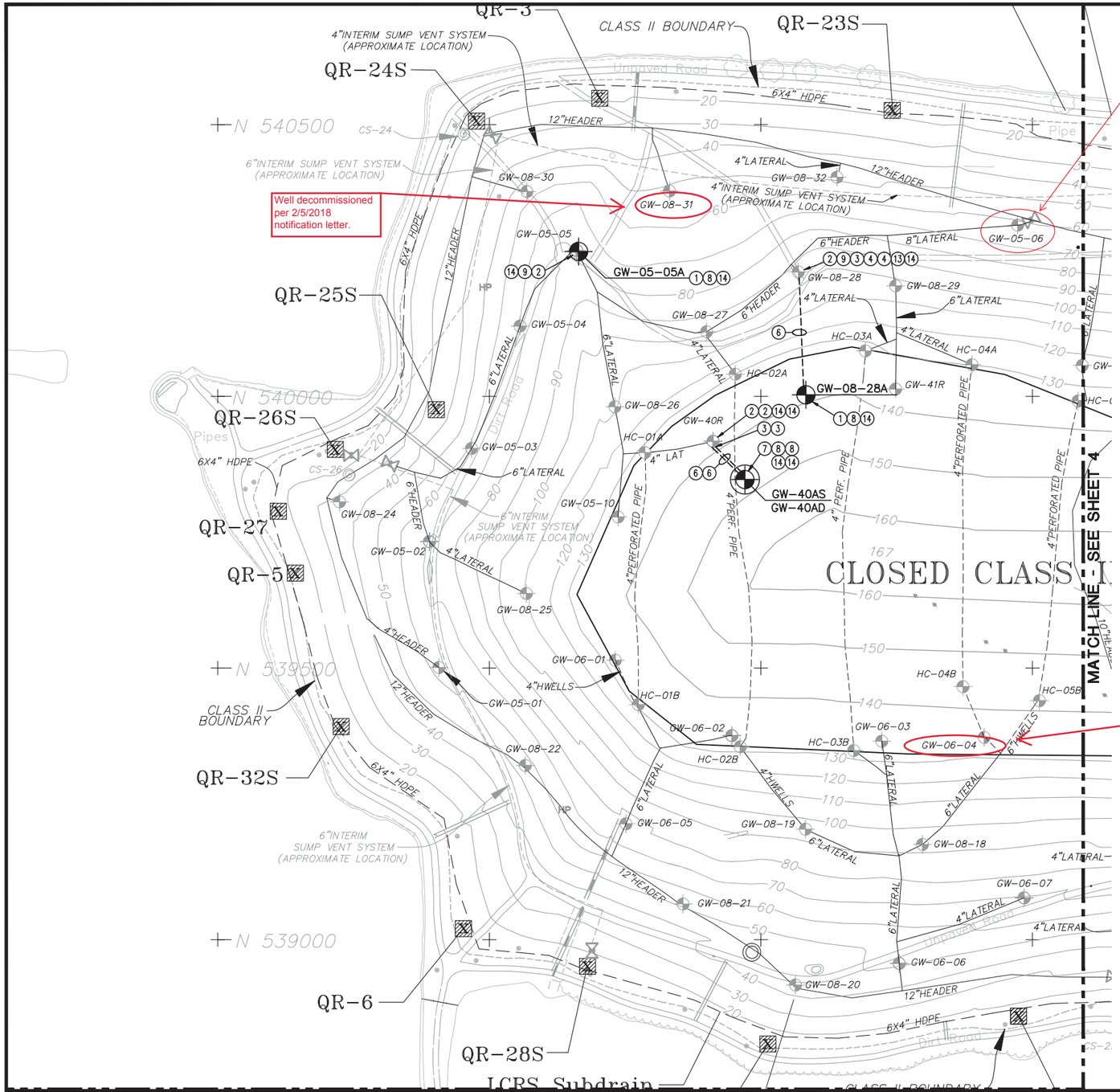
NO.	REVISION DESCRIPTION	BY:

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	



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)

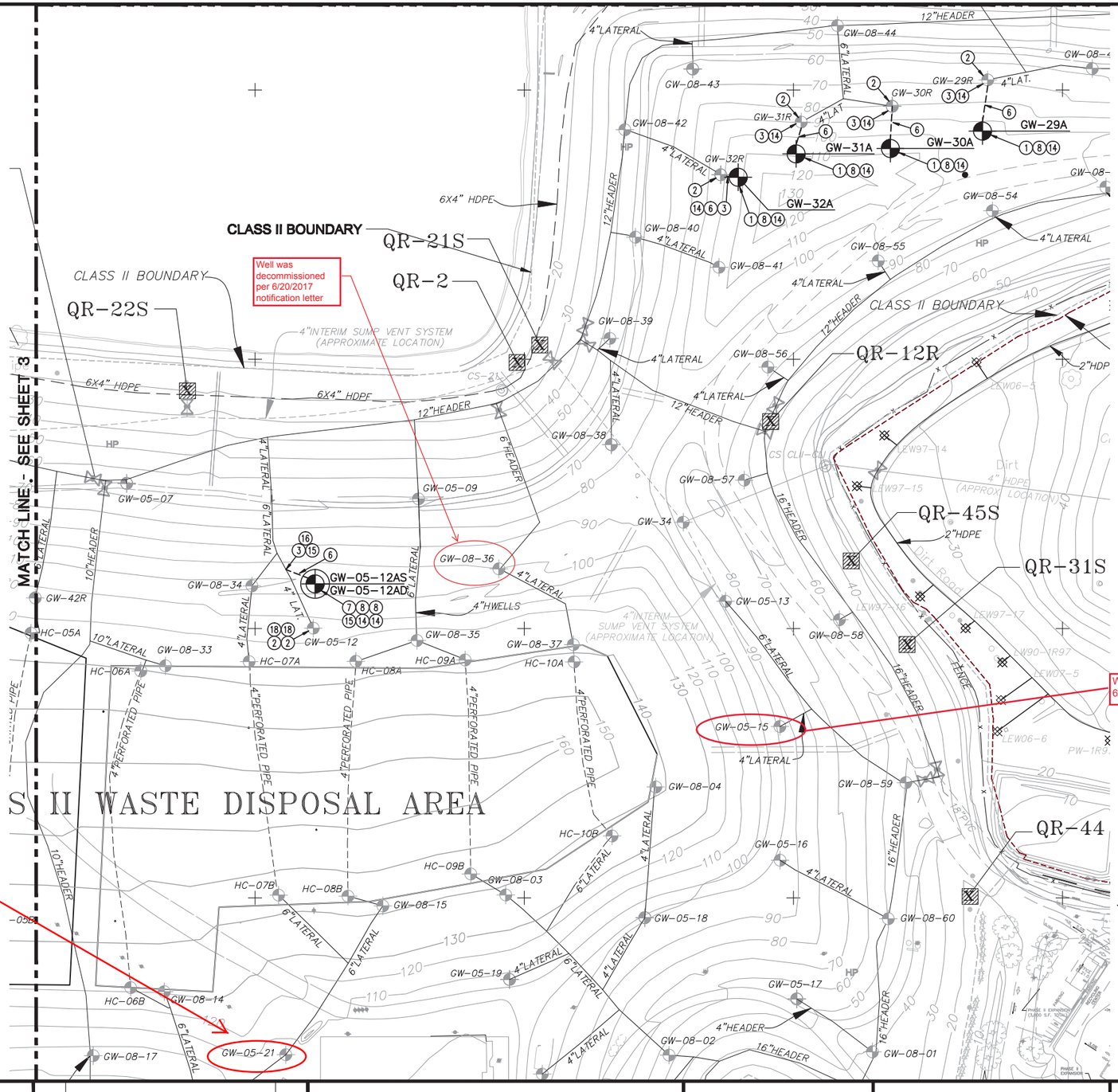
NO.	REVISION DESCRIPTION	BY:

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	SHEET 3 OF 7	
APPROVED BY : G. GLASSER	DATE : 10/31/14		



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
(May 1, 2021 through October 31, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
5/2/2021 21:38	5/3/2021 6:32	8.90	Low temperature
5/3/2021 16:56	5/4/2021 6:38	13.70	Low temperature
5/5/2021 10:30	5/5/2021 11:04	0.57	Main Voltage Trip, Power Outage
5/5/2021 13:18	5/5/2021 14:52	1.57	Low temperature
5/5/2021 15:42	5/5/2021 15:58	0.27	Low temperature
5/5/2021 19:30	5/6/2021 6:08	10.63	Low temperature
5/6/2021 13:30	5/7/2021 6:30	17.00	Low temperature
5/7/2021 22:06	5/10/2021 10:08	60.03	Low temperature
5/10/2021 13:50	5/10/2021 13:54	0.07	Low temperature
5/10/2021 20:46	5/11/2021 7:38	10.87	Low temperature
5/11/2021 7:52	5/11/2021 8:00	0.13	Low temperature
5/11/2021 20:38	5/12/2021 8:04	11.43	Low temperature
5/13/2021 3:12	5/13/2021 7:54	4.70	Low temperature
5/13/2021 22:54	5/14/2021 7:36	8.70	Low temperature
5/14/2021 21:06	5/17/2021 14:08	65.03	Low temperature
5/17/2021 14:28	5/18/2021 7:30	17.03	Low temperature
5/18/2021 10:58	5/18/2021 11:04	0.10	Low temperature
5/18/2021 11:42	5/18/2021 11:46	0.07	Low temperature
5/19/2021 20:50	5/20/2021 7:56	11.10	Low temperature
5/21/2021 21:12	5/24/2021 7:32	58.33	Low temperature
5/24/2021 21:44	5/25/2021 7:26	9.70	Low temperature
5/25/2021 18:56	5/26/2021 8:02	13.10	Low temperature
5/26/2021 8:08	5/26/2021 8:48	0.67	Low temperature
5/27/2021 5:02	5/27/2021 7:30	2.47	Low temperature
5/28/2021 20:38	6/1/2021 7:28	82.83	Low temperature
6/2/2021 0:42	6/2/2021 7:36	6.90	PG&E momentary trip
6/2/2021 7:58	6/2/2021 8:00	0.03	Low temperature
6/2/2021 21:38	6/3/2021 7:40	10.03	Low temperature
6/3/2021 22:40	6/4/2021 7:48	9.13	Low temperature
6/4/2021 22:36	6/7/2021 7:36	57.00	Low temperature
6/7/2021 22:44	6/8/2021 7:14	8.50	Low temperature
6/9/2021 22:16	6/10/2021 8:26	10.17	Low temperature
6/11/2021 22:42	6/14/2021 7:30	56.80	Low temperature
6/15/2021 16:46	6/16/2021 7:32	14.77	Low temperature
6/16/2021 17:46	6/17/2021 7:26	13.67	Low temperature
6/17/2021 15:18	6/18/2021 7:44	16.43	Low temperature
6/19/2021 23:18	6/21/2021 7:32	32.23	Low temperature
6/21/2021 7:36	6/21/2021 7:52	0.27	Low temperature
6/21/2021 7:56	6/21/2021 7:58	0.03	Low temperature
6/23/2021 23:52	6/24/2021 7:26	7.57	Low temperature
6/24/2021 19:24	6/25/2021 7:32	12.13	Low temperature
6/25/2021 22:06	6/28/2021 10:02	59.93	Low temperature
6/28/2021 10:16	6/28/2021 10:20	0.07	Low temperature
6/29/2021 23:52	6/30/2021 7:44	7.87	Low temperature
7/3/2021 6:48	7/6/2021 7:54	73.10	Low temperature
7/9/2021 3:30	7/9/2021 9:42	6.20	Low temperature
7/9/2021 19:24	7/12/2021 7:38	60.23	Low temperature
7/12/2021 7:50	7/12/2021 7:54	0.07	Low temperature
7/13/2021 21:08	7/14/2021 7:40	10.53	Low temperature
7/15/2021 16:08	7/16/2021 7:36	15.47	Low temperature
7/16/2021 16:08	7/19/2021 7:32	63.40	Low temperature
7/22/2021 6:34	7/22/2021 7:38	1.07	Low temperature
7/22/2021 11:38	7/29/2021 12:42	169.07	Low temperature
7/29/2021 23:26	8/2/2021 6:14	78.80	Low temperature
8/2/2021 15:42	8/3/2021 5:50	14.13	Low temperature

S-6 Engine Downtime
West Contra Costa Sanitary Landfill
(May 1, 2021 through October 31, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
8/3/2021 6:16	8/3/2021 6:34	0.30	Low temperature
8/3/2021 22:04	8/4/2021 6:22	8.30	Low temperature
8/4/2021 6:52	8/4/2021 6:56	0.07	Low temperature
8/4/2021 16:02	8/5/2021 6:32	14.50	Low temperature
8/6/2021 14:58	8/9/2021 7:32	64.57	Low temperature
8/9/2021 8:20	8/9/2021 8:26	0.10	Low temperature
8/9/2021 22:08	8/10/2021 7:40	9.53	Low temperature
8/10/2021 7:44	8/10/2021 7:46	0.03	Low temperature
8/10/2021 22:14	8/11/2021 7:56	9.70	Low temperature
8/11/2021 13:38	8/12/2021 8:10	18.53	Low temperature
8/12/2021 11:10	8/12/2021 11:36	0.43	Low temperature
8/12/2021 21:48	8/16/2021 7:36	81.80	Low temperature
8/17/2021 6:28	8/17/2021 7:38	1.17	Low temperature
8/17/2021 13:36	8/17/2021 13:40	0.07	Low temperature
8/18/2021 6:18	8/18/2021 7:40	1.37	Low temperature
8/27/2021 8:36	8/27/2021 8:54	0.30	Low temperature
8/27/2021 9:14	8/27/2021 9:38	0.40	Low temperature
8/28/2021 4:06	8/30/2021 8:20	52.23	Low temperature
8/30/2021 8:40	8/30/2021 9:04	0.40	Low temperature
8/30/2021 9:10	8/30/2021 9:34	0.40	Low temperature
8/31/2021 6:40	8/31/2021 7:14	0.57	Low temperature
8/31/2021 7:34	8/31/2021 7:44	0.17	Low temperature
8/31/2021 8:02	8/31/2021 8:18	0.27	Low temperature
8/31/2021 22:14	9/1/2021 7:16	9.03	Low temperature
9/1/2021 9:34	9/7/2021 7:40	142.10	Low temperature
9/7/2021 7:52	10/1/2021 0:00	568.13	Low temperature
10/1/2021 0:00	10/7/2021 8:06	152.10	Low temperature
10/7/2021 20:18	10/8/2021 7:34	11.27	Low temperature
10/8/2021 7:40	10/8/2021 7:54	0.23	Low temperature
10/14/2021 6:12	10/14/2021 7:22	1.17	Low temperature
10/15/2021 12:50	10/15/2021 12:56	0.10	Low temperature
10/18/2021 6:40	10/18/2021 7:34	0.90	Low temperature
10/20/2021 6:38	10/20/2021 7:20	0.70	Low temperature
10/21/2021 12:30	10/21/2021 12:44	0.23	Low temperature
10/21/2021 13:22	10/21/2021 14:08	0.77	Low temperature
10/21/2021 16:08	10/22/2021 7:24	15.27	Low temperature
10/24/2021 9:08	10/25/2021 10:52	25.73	Low temperature
10/25/2021 23:12	10/26/2021 7:22	8.17	Low temperature
10/29/2021 9:44	10/29/2021 10:16	0.53	Low temperature
10/30/2021 12:00	11/1/2021 0:00	36.00	Low temperature
TOTAL DOWNTIME (HOURS):		**2462.23**	

*The S-6 Engine was offline at the end of November 2021. For reporting purposes, the shutdown was calculated as having begun on November 1, 2021 at 00:00.

S-5 Engine Downtime
West Contra Costa Sanitary Landfill
(May 1, 2021 through October 31, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
5/1/2021 0:00	11/1/2021 0:00	4416.00	See note below
TOTAL DOWNTIME (HOURS):		**4416.00**	

*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
(May 1, 2021 through October 31, 2021)

Shutdown Date/Time*	Startup Date/Time	Duration (Hours)	Reason for Downtime
5/1/2021 0:00	11/1/2021 0:00	4416.00	See note below
TOTAL DOWNTIME (HOURS):		**4416.00**	

*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

West Contra Costa County Landfill

New Source Performance Standards (NSPS) Surface Emissions Monitoring

Second Quarter 2021

Presented to:

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

SCS FIELD SERVICES

File No 07219040.00 | September 3, 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 Second Quarter 2021

INTRODUCTION

On May 10, 11, and 12, 2021, SCS Field Services (SCS) performed routine quarterly Surface Emissions Monitoring (SEM) at the West Contra Costa County Landfill (Site) for the second 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 May 10, 11, and 12, 2021. Therefore, based on these results, no follow up testing is required and the site was in compliance upon completion of the second quarter 2021 SEM event.

SCS is scheduled to perform the third quarter testing prior to the end of September 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 Whitney Stackhouse at (209) 338-7990 or Michael Flanagan (510) 363-7796.

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: 5-10-21 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 29.9 "Hg

Air Temperature: 53 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: ~~1223~~ 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	1	501	1	3
3	1	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= 145876
Counters Observed for the Zero= 4322

Trial 2:
Counts Observed for the Span= 145937
Counters Observed for the Zero= 4330

Trial 3:
Counts Observed for the Span= 145887
Counters Observed for the Zero= 4330

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: 1.7 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-16-21 Site Name: WCC

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 29.9 "Hg

Air Temperature: 53 °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: 12-11 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	3
2	0	502	2	3
3	1	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= 109765
Counters Observed for the Zero= 3981

Trial 2:
Counts Observed for the Span= 109769
Counters Observed for the Zero= 3983

Trial 3:
Counts Observed for the Span= 109772
Counters Observed for the Zero= 3987

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

Post

Date: 5-18-21 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 11 MPH Wind Direction: N Barometric Pressure: 29.9 "Hg

Air Temperature: 68 °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: 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	0	500	0	3
3	0	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= 147419
Counters Observed for the Zero= 4036

Trial 2:
Counts Observed for the Span= 147451
Counters Observed for the Zero= 4042

Trial 3:
Counts Observed for the Span= 147563
Counters Observed for the Zero= 4056

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

Post

Date: 5-16-21 Site Name: WCC

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 11 MPH Wind Direction: N Barometric Pressure: 29.9 "Hg

Air Temperature: 68 °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: 121 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	3
2	0	501	1	3
3	0	500	0	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= 110126
Counters Observed for the Zero= 3766

Trial 2:
Counts Observed for the Span= 110130
Counters Observed for the Zero= 3763

Trial 3:
Counts Observed for the Span= 110131
Counters Observed for the Zero= 3762

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

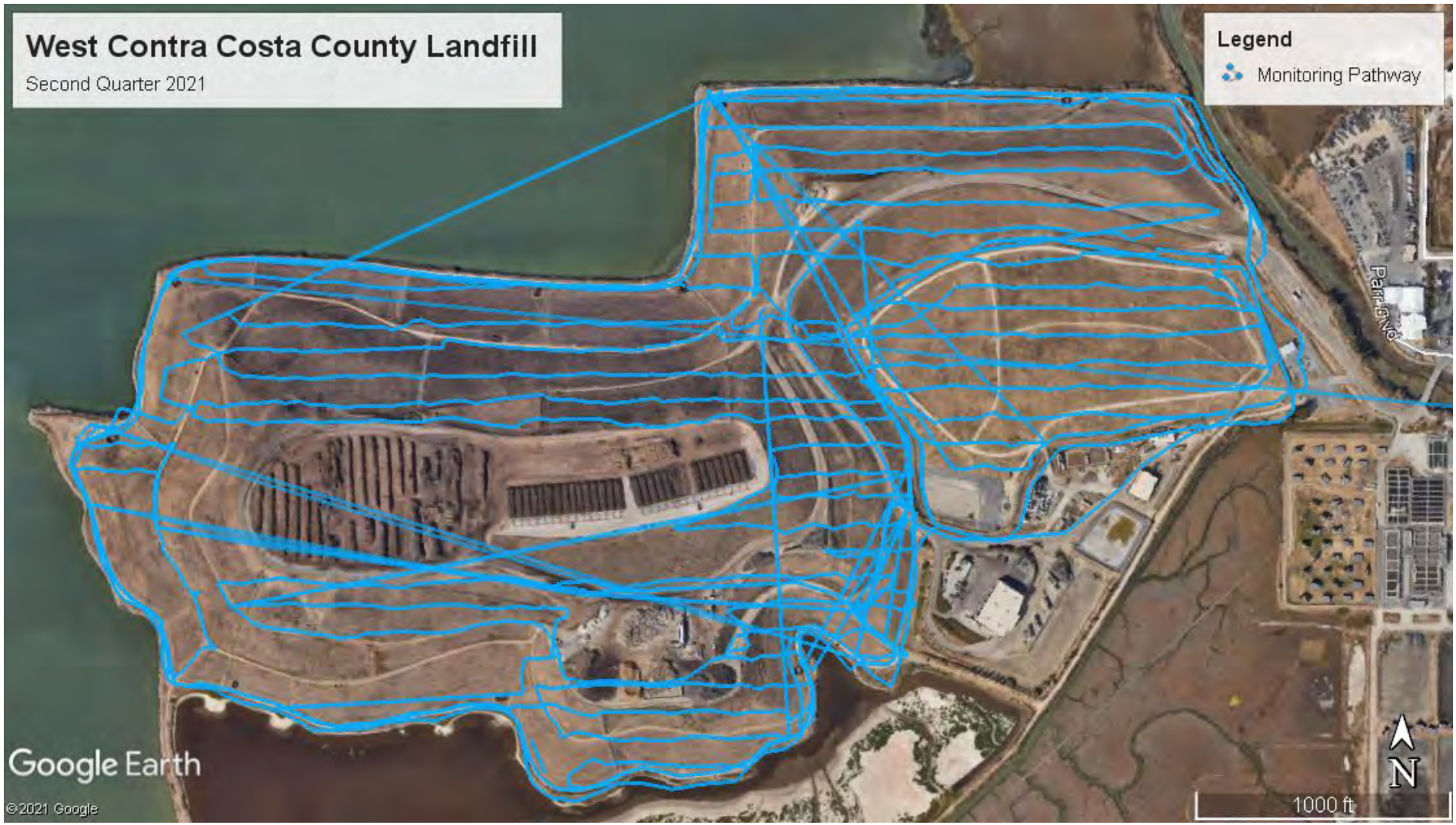
Upwind Location Description: entrance Reading: 1.1 ppm

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.

Attachment B

SEM Route Map



Second Quarter 2021

Surface Emissions Monitoring Pathway

West Contra Costa County Landfill, Contra Costa County, California

October 14, 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 Third Quarter 2021.

Dear Mr. Baquerizo:

SCS Field Services (SCS-FS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Closed West Contra Costa Sanitary Landfill (Site) during the third quarter 2021. This report includes the results of surface scan, component emissions and blower/flare station emissions monitoring for the Site for this monitoring period.

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

Sincerely,

Whitney M. Stackhouse
Project Manager
SCS Field Services

Michael Flanagan
Project Manager
SCS Field Services

WS

cc: Enclosure Sean Bass, SCS Field Services

Art Jones, SCS Field Services

West Contra Costa County Landfill

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

Third Quarter 2021

Presented to:

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

SCS FIELD SERVICES

File No. 07219040.00 | October 14, 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 Third Quarter 2021

INTRODUCTION

This letter provides results of the July 9, 16 and 23, 2021 and August 13, 2021, LMR and NSPS landfill surface emissions monitoring (SEM) performed by SCS Field Services (SCS) at the closed West Contra Costa County Landfill. All work was performed in accordance with our approved Work Scope dated September 13, 2018, and the LMR requirements.

SUMMARY AND CONCLUSIONS

On July 9, 16 and 23, 2021 and August 13, 2021, instantaneous and integrated surface emissions monitoring was performed over the surface of the site. Testing results indicated no uncorrectable exceedances of the LMR and NSPS instantaneous threshold limit of 500 parts per million by volume (ppmv), or the integrated average of 25 ppmv as required by the LMR, above background. Based on these monitoring results no further follow up testing was required.

On July 9, 16 and 23, 2021 and August 13, 2021, SCS performed third quarter 2021 surface emissions monitoring testing as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that four (4) 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. Therefore, in accordance with the rule, the site may return to annual LMR monitoring on a 100-foot spacing beginning with the 2021 calendar year. However, based on previous instantaneous monitoring results, the site is required to perform NSPS surface emissions monitoring on a 100-ft spacing on a quarterly basis.

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

BACKGROUND

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

SURFACE EMISSIONS MONITORING

On July 9, 16 and 23, 2021 and August 13, 2021, 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 100-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 100-foot pathway in accordance with the rule as required under the LMR and NSPS. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the LMR or NSPS threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring (LMR).

On July 9 and 13, 2021, SCS performed third quarter 2021 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that four (4) locations exceeded the 500 ppmv maximum concentration. The required 10 and 30-day NSPS and LMR follow-up monitoring (performed on July 23, 2021 and August 13, 2021) indicated that the locations 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 2022 monitoring event.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On July 16, 2021, 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 432 ppmv, was below the maximum threshold (see Table 1 for component results). Therefore, all pressurized pipe and components located at the LFG BFS were in compliance at the time of our testing.

PROJECT SCHEDULE

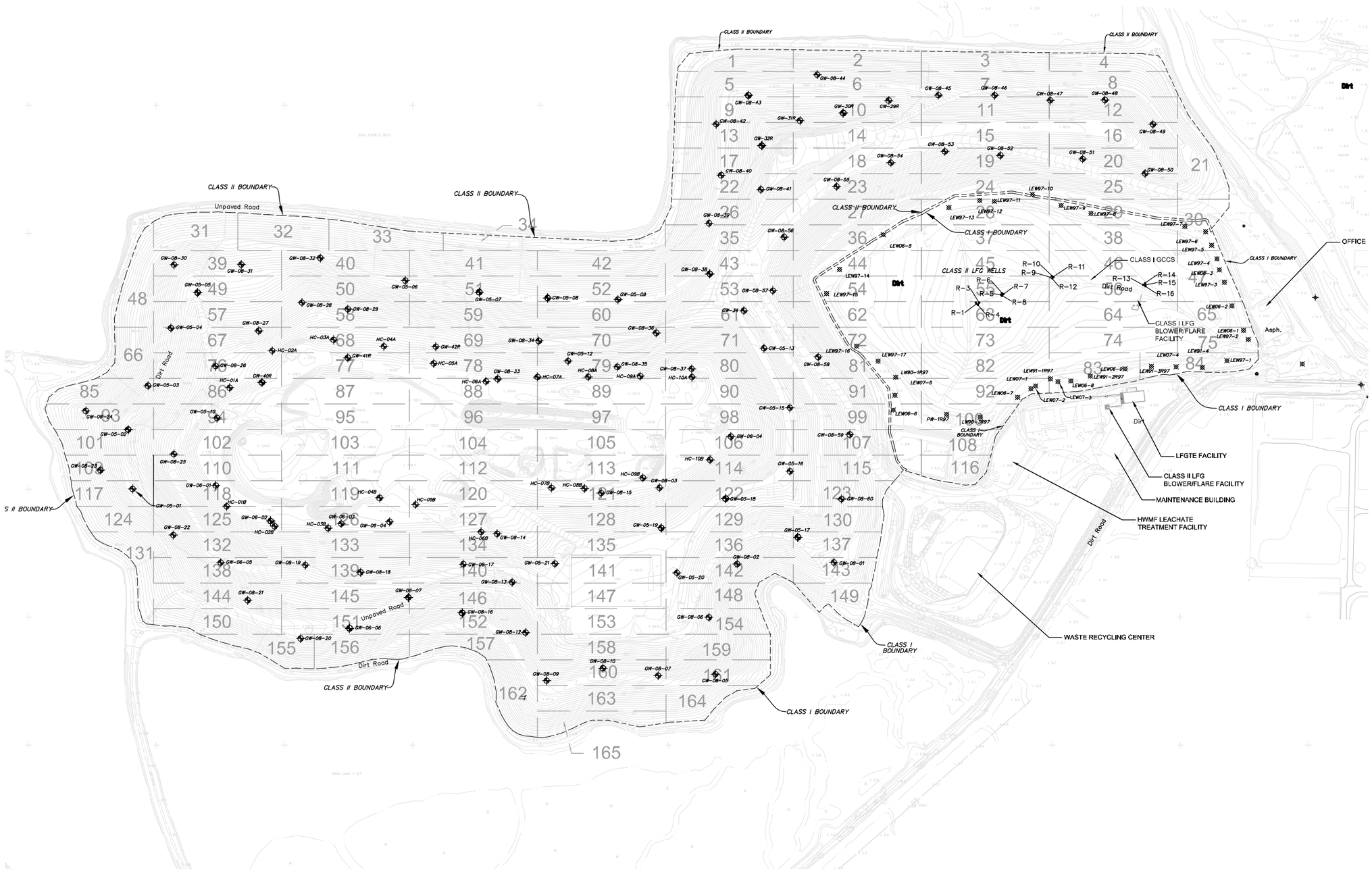
In accordance with our approved Work Scope, the next quarterly NSPS event is scheduled to be performed by the end of December 2021, and the annual LMR event is scheduled to be performed by the end of calendar year 2022.

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**

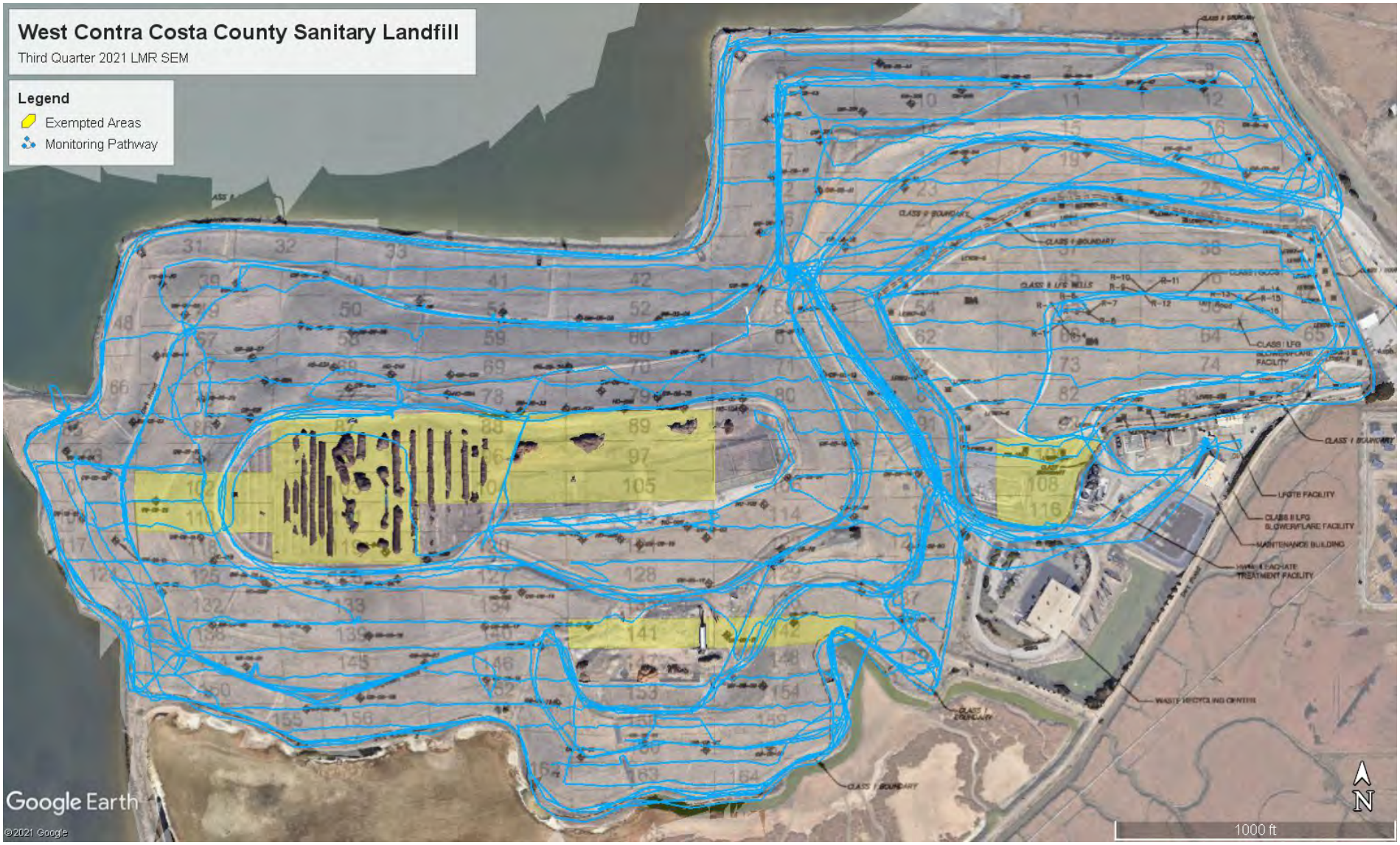
PROJECT NO. 110218

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: Jonathon.wise May 11, 2011 - 2:56pm

Attachment 2

Surface Pathway



Third Quarter 2021
LMR Surface Emissions Monitoring Pathway
West Contra Costa County Sanitary Landfill, Contra Costa County, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

Third Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

West Contra Costa County Landfill, Contra Costa County, California

Instantaneous Data Report for July 9, 16, and 23, 2021 and August 13, 2021

Location	Latitude	Longitude	Initial Concentration (ppmv) July 16, 2021	First 10-Day Concentration (ppmv) July 23, 2021	30-Day Concentration (ppmv) August 13, 2021
PZ11R	37.968977°	-122.386257°	10,000	235	<500
QR12R	37.968926°	-122.386610°	20,000	8	305
QR30S	37.965444°	-122.385956°	631	4	350
QR45S	37.968350°	-122.386197°	1,000	29	3

Pressurized Pipe and Component Results

Route	Date	Concentration (ppmv)
Flare	7/16/2021	432

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.

Third Quarter 2021

Initial and Follow-Up Emissions Monitoring Results Greater Than 500 ppmv

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

Attachment 4

Integrated Monitoring Results

Third Quarter 2021
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	7/16/2021	1.13	
W.CoCo 002	7/16/2021	1.20	
W.CoCo 003	7/16/2021	1.29	
W.CoCo 004	7/16/2021	1.00	
W.CoCo 005	7/16/2021	2.67	
W.CoCo 006	7/16/2021	2.79	
W.CoCo 007	7/16/2021	2.55	
W.CoCo 008	7/16/2021	2.76	
W.CoCo 009	7/16/2021	2.41	
W.CoCo 010	7/16/2021	2.65	
W.CoCo 011	7/16/2021	2.38	
W.CoCo 012	7/16/2021	2.24	
W.CoCo 013	7/16/2021	2.68	
W.CoCo 014	7/16/2021	2.98	
W.CoCo 015	7/16/2021	2.65	
W.CoCo 016	7/16/2021	2.67	
W.CoCo 017	7/16/2021	1.22	
W.CoCo 018	7/16/2021	1.17	
W.CoCo 019	7/16/2021	3.42	
W.CoCo 020	7/16/2021	1.02	
W.CoCo 021	7/16/2021	1.02	
W.CoCo 022	7/16/2021	2.96	
W.CoCo 023	7/16/2021	4.44	
W.CoCo 024	7/16/2021	2.57	
W.CoCo 025	7/16/2021	2.58	
W.CoCo 026	7/16/2021	2.80	
W.CoCo 027	7/16/2021	2.36	
W.CoCo 028	7/9/2021	1.75	
W.CoCo 029	7/9/2021	1.85	
W.CoCo 030	7/9/2021	1.63	
W.CoCo 031	7/16/2021	1.94	
W.CoCo 032	7/16/2021	1.95	
W.CoCo 033	7/16/2021	3.07	
W.CoCo 034	7/16/2021	3.99	
W.CoCo 035	7/16/2021	2.55	
W.CoCo 036	7/9/2021	2.10	
W.CoCo 037	7/9/2021	2.05	
W.CoCo 038	7/9/2021	2.22	
W.CoCo 039	7/16/2021	2.16	
W.CoCo 040	7/16/2021	2.38	
W.CoCo 041	7/16/2021	2.60	
W.CoCo 042	7/16/2021	2.46	
W.CoCo 043	7/16/2021	2.59	

Third Quarter 2021
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	7/9/2021	1.71	
W.CoCo 045	7/9/2021	1.74	
W.CoCo 046	7/9/2021	2.00	
W.CoCo 047	7/9/2021	2.25	
W.CoCo 048	7/16/2021	1.16	
W.CoCo 049	7/16/2021	1.13	
W.CoCo 050	7/16/2021	0.71	
W.CoCo 051	7/16/2021	1.06	
W.CoCo 052	7/16/2021	0.97	
W.CoCo 053	7/16/2021	1.47	
W.CoCo 054	7/9/2021	2.12	
W.CoCo 055	7/9/2021	2.07	
W.CoCo 056	7/9/2021	2.03	
W.CoCo 057	7/16/2021	1.87	
W.CoCo 058	7/16/2021	2.15	
W.CoCo 059	7/16/2021	2.22	
W.CoCo 060	7/16/2021	2.53	
W.CoCo 061	7/16/2021	2.34	
W.CoCo 062	7/9/2021	1.70	
W.CoCo 063	7/9/2021	1.67	
W.CoCo 064	7/9/2021	2.30	
W.CoCo 065	7/9/2021	1.61	
W.CoCo 066	7/16/2021	2.03	
W.CoCo 067	7/16/2021	2.05	
W.CoCo 068	7/16/2021	2.30	
W.CoCo 069	7/16/2021	2.13	
W.CoCo 070	7/16/2021	2.68	
W.CoCo 071	7/16/2021	2.08	
W.CoCo 072	7/9/2021	2.22	
W.CoCo 073	7/9/2021	2.17	
W.CoCo 074	7/9/2021	2.11	
W.CoCo 075	7/9/2021	2.35	
W.CoCo 076	7/16/2021	2.08	
W.CoCo 077	7/16/2021	2.14	
W.CoCo 078	7/16/2021	2.02	
W.CoCo 079	7/16/2021	2.31	
W.CoCo 080	7/16/2021	2.25	
W.CoCo 081	7/9/2021	1.68	
W.CoCo 082	7/9/2021	1.64	
W.CoCo 083	7/9/2021	2.56	
W.CoCo 084	7/9/2021	1.57	
W.CoCo 085	7/16/2021	1.41	
W.CoCo 086	7/16/2021	2.05	

Third Quarter 2021
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 087	--	--	Green waste
W.CoCo 088	--	--	Green waste
W.CoCo 089	--	--	Green waste
W.CoCo 090	7/16/2021	2.07	
W.CoCo 091	7/9/2021	1.61	
W.CoCo 092	7/9/2021	2.12	
W.CoCo 093	7/16/2021	1.10	
W.CoCo 094	7/16/2021	1.08	
W.CoCo 095	--	--	Green waste
W.CoCo 096	--	--	Green waste
W.CoCo 097	--	--	Green waste
W.CoCo 098	7/16/2021	0.73	
W.CoCo 099	7/16/2021	0.68	
W.CoCo 100	--	--	Leachate Pond
W.CoCo 101	7/16/2021	1.66	
W.CoCo 102	--	--	Green waste
W.CoCo 103	--	--	Green waste
W.CoCo 104	--	--	Green waste
W.CoCo 105	--	--	Green waste
W.CoCo 106	7/16/2021	1.48	
W.CoCo 107	7/16/2021	1.43	
W.CoCo 108	--	--	Leachate Pond
W.CoCo 109	7/16/2021	1.70	
W.CoCo 110	--	--	Green waste
W.CoCo 111	--	--	Green waste
W.CoCo 112	7/16/2021	1.85	
W.CoCo 113	7/16/2021	1.77	
W.CoCo 114	7/16/2021	1.85	
W.CoCo 115	7/16/2021	1.85	
W.CoCo 116	--	--	Leachate Pond
W.CoCo 117	7/16/2021	1.60	
W.CoCo 118	7/16/2021	1.64	
W.CoCo 119	--	--	Green waste
W.CoCo 120	7/16/2021	1.72	
W.CoCo 121	7/16/2021	1.68	
W.CoCo 122	7/16/2021	1.70	
W.CoCo 123	7/16/2021	1.74	
W.CoCo 124	7/16/2021	1.79	
W.CoCo 125	7/16/2021	1.88	
W.CoCo 126	7/16/2021	2.04	
W.CoCo 127	7/16/2021	1.91	
W.CoCo 128	7/16/2021	1.87	
W.CoCo 129	7/16/2021	2.00	

Third Quarter 2021
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 130	7/16/2021	2.00	
W.CoCo 131	7/16/2021	1.01	
W.CoCo 132	7/16/2021	1.00	
W.CoCo 133	7/16/2021	1.08	
W.CoCo 134	7/16/2021	1.05	
W.CoCo 135	7/16/2021	1.01	
W.CoCo 136	7/16/2021	1.00	
W.CoCo 137	7/16/2021	1.01	
W.CoCo 138	7/16/2021	1.55	
W.CoCo 139	7/16/2021	1.51	
W.CoCo 140	7/16/2021	1.42	
W.CoCo 141	--	--	Active
W.CoCo 142	--	--	Active
W.CoCo 143	7/16/2021	1.46	
W.CoCo 144	7/16/2021	1.61	
W.CoCo 145	7/16/2021	1.59	
W.CoCo 146	7/16/2021	1.59	
W.CoCo 147	7/16/2021	1.59	
W.CoCo 148	7/16/2021	1.63	
W.CoCo 149	7/16/2021	1.17	
W.CoCo 150	7/16/2021	1.56	
W.CoCo 151	7/16/2021	1.56	
W.CoCo 152	7/16/2021	1.50	
W.CoCo 153	7/16/2021	1.50	
W.CoCo 154	7/16/2021	1.49	
W.CoCo 155	7/16/2021	1.70	
W.CoCo 156	7/16/2021	1.68	
W.CoCo 157	7/16/2021	1.68	
W.CoCo 158	7/16/2021	1.61	
W.CoCo 159	7/16/2021	1.63	
W.CoCo 160	7/16/2021	0.90	
W.CoCo 161	7/16/2021	0.98	
W.CoCo 162	7/16/2021	1.23	
W.CoCo 163	7/16/2021	1.25	
W.CoCo 164	7/16/2021	1.27	
W.CoCo 165	7/16/2021	1.87	

Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 7-9-21 Site Name: WCC

Inspector(s): Hunter off Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: W Barometric Pressure: 29.9 "Hg

Air Temperature: 79 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	3
2	0	499	1	3
3	1	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= 119358
Counters Observed for the Zero= 4012

Trial 2:
Counts Observed for the Span= 119375
Counters Observed for the Zero= 4009

Trial 3:
Counts Observed for the Span= 119388
Counters Observed for the Zero= 4000

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 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: 7-9-21 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: W Barometric Pressure: 29.9 "Hg

Air Temperature: 79 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	0	501	1	4
3	0	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= 127461
Counters Observed for the Zero= 1997

Trial 2:
Counts Observed for the Span= 127483
Counters Observed for the Zero= 2076

Trial 3:
Counts Observed for the Span= 127361
Counters Observed for the Zero= 2044

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 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: 7-9-21 Site Name: WCC

Inspector(s): LaM Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: W Barometric Pressure: 29.9 "Hg

Air Temperature: 70 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	501	1	3
2	0	502	2	3
3	0	500	0	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= 125517
Counters Observed for the Zero= 2193

Trial 2:
Counts Observed for the Span= 118652
Counters Observed for the Zero= 2239

Trial 3:
Counts Observed for the Span= 116508
Counters Observed for the Zero= 2173

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 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: 7-9-21 Site Name: WCC

Inspector(s): Hunter Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: W Barometric Pressure: 29.9 "Hg

Air Temperature: 70 °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: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	500	0	3
2	.1	502	2	3
3	.0	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= 117300
Counters Observed for the Zero= 4143

Trial 2:
Counts Observed for the Span= 116749
Counters Observed for the Zero= 4119

Trial 3:
Counts Observed for the Span= 116480
Counters Observed for the Zero= 4080

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 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 7-16-21 Site Name: WCCC

Inspector(s): Liam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: _____ Barometric Pressure: _____ "Hg

Air Temperature: 54 °F General Weather Conditions: _____

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	499	1	3
2	.2	502	2	5
3	0	500	0	4

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= 127777
Counters Observed for the Zero= 2847

Trial 2:
Counts Observed for the Span= 127946
Counters Observed for the Zero= 2868

Trial 3:
Counts Observed for the Span= 128132
Counters Observed for the Zero= 2890

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Frame Reading: 1.2 ppm

Downwind Location Description: 686 Reading: 16 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 7-16-21 Site Name: WCC

Inspector(s): Liam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: SSW Barometric Pressure: 29.9 "Hg

Air Temperature: 64 °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	501	1	3
2	0	500	0	3
3	.1	500	0	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= 128004
Counters Observed for the Zero= 2844

Trial 2:
Counts Observed for the Span= 127543
Counters Observed for the Zero= 2793

Trial 3:
Counts Observed for the Span= 127212
Counters Observed for the Zero= 2760

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: G36 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.

DRC

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 7-16-21 Site Name: WCC

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: SSW Barometric Pressure: 29.94 "Hg

Air Temperature: 54 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1153 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	499	1	2
2	.1	501	1	4
3	-1	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= 152848
Counters Observed for the Zero= 3219

Trial 2:
Counts Observed for the Span= 152988
Counters Observed for the Zero= 3248

Trial 3:
Counts Observed for the Span= 153129
Counters Observed for the Zero= 3269

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: _____ Reading: 1.2 ppm

Downwind Location Description: _____ 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.

post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 07-16-21 Site Name: WDC

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: SSW Barometric Pressure: 29.9 "Hg

Air Temperature: 64 °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	500	0	3
2	.0	498	2	3
3	.0	501	1	3

Average Difference: 2.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.3 /500 x 100%

= 99.5 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 153130
Counters Observed for the Zero= 3247

Trial 2:
Counts Observed for the Span= 152802
Counters Observed for the Zero= 3243

Trial 3:
Counts Observed for the Span= 152423
Counters Observed for the Zero= 3213

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Front Reading: 1.4 ppm

Downwind Location Description: GB6 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 7-16-21 Site Name: WCC

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: SSW Barometric Pressure: 29.94 "Hg

Air Temperature: 54 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	5
2	.1	502	2	4
3	.0	500	0	3

Average Difference: .6

*Perform recalibration if average difference is greater than 10

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

= 100%- .6 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 135584
Counters Observed for the Zero= 4005

Trial 2:
Counts Observed for the Span= 135806
Counters Observed for the Zero= 4092

Trial 3:
Counts Observed for the Span= 135 937
Counters Observed for the Zero= 4137

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: _____ Reading: 1.2 ppm

Downwind Location Description: _____ 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 07-16-21 Site Name: WCC

Inspector(s): Hunter Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: SSW Barometric Pressure: 29.9 "Hg

Air Temperature: 64 °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: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	498	2	3
2	.1	500	0	3
3	.0	500	0	3

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

= 100%- .6 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 1361209
Counters Observed for the Zero= 4132

Trial 2:
Counts Observed for the Span= 136152
Counters Observed for the Zero= 4098

Trial 3:
Counts Observed for the Span= 135803
Counters Observed for the Zero= 4072

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.3 ppm

Downwind Location Description: GS6 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.

PVE

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 2-16-21 Site Name: WCC

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: SSW Barometric Pressure: 29.94 "Hg

Air Temperature: 54 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

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

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= 105532
Counters Observed for the Zero= 5128

Trial 2:
Counts Observed for the Span= 105849
Counters Observed for the Zero= 5146

Trial 3:
Counts Observed for the Span= 106049
Counters Observed for the Zero= 5185

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Reading: 12 ppm

Downwind Location Description: Reading: 15 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: 7-16-21 Site Name: UCC

Inspector(s): PABLO R Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: SW Barometric Pressure: 29.9 "Hg

Air Temperature: 64 °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: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	500	0	4
2	.1	501	1	4
3	.1	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%

= 99.01 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 106093
Counters Observed for the Zero= 5170

Trial 2:
Counts Observed for the Span= 105972
Counters Observed for the Zero= 5146

Trial 3:
Counts Observed for the Span= 105962
Counters Observed for the Zero= 5143

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Clear Reading: 1.4 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: 7-16-2021 Site Name: WCC

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: SSE Barometric Pressure: 29.9 "Hg

Air Temperature: 94 °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	500	0	4
2	0	499	1	4
3	1	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= 134103
Counters Observed for the Zero= 3578

Trial 2:
Counts Observed for the Span= 134095
Counters Observed for the Zero= 3561

Trial 3:
Counts Observed for the Span= 138843
Counters Observed for the Zero= 3548

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: GB6 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.

PSC

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 7-16-21 Site Name: WCC

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9 MPH Wind Direction: SSW Barometric Pressure: 30 "Hg

Air Temperature: 54 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	498	2	2
2	1	502	2	3
3	1	500	0	4

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= 134008
Counters Observed for the Zero= 3432

Trial 2:
Counts Observed for the Span= 134176
Counters Observed for the Zero= 3556

Trial 3:
Counts Observed for the Span= 134307
Counters Observed for the Zero= 3592

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: _____ Reading: 1.3 ppm

Downwind Location Description: _____ Reading: 1.6 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 8-13-21 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: SW Barometric Pressure: 29.9 "Hg

Air Temperature: 58 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	
2	0	499	1	
3	0	500	0	

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= 123384
Counters Observed for the Zero= 2894

Trial 2:
Counts Observed for the Span= 124172
Counters Observed for the Zero= 2925

Trial 3:
Counts Observed for the Span= 128796
Counters Observed for the Zero= 2857

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: 1.4 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

POST

Date: 8-13-21 Site Name: WCC

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: SW Barometric Pressure: 29.9 "Hg

Air Temperature: ~~57~~ LM 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: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	0	499	1	3
3	.1	500	0	

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= 126732
Counters Observed for the Zero= 2880

Trial 2:
Counts Observed for the Span= 127388
Counters Observed for the Zero= 2920

Trial 3:
Counts Observed for the Span= 126664
Counters Observed for the Zero= 2905

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

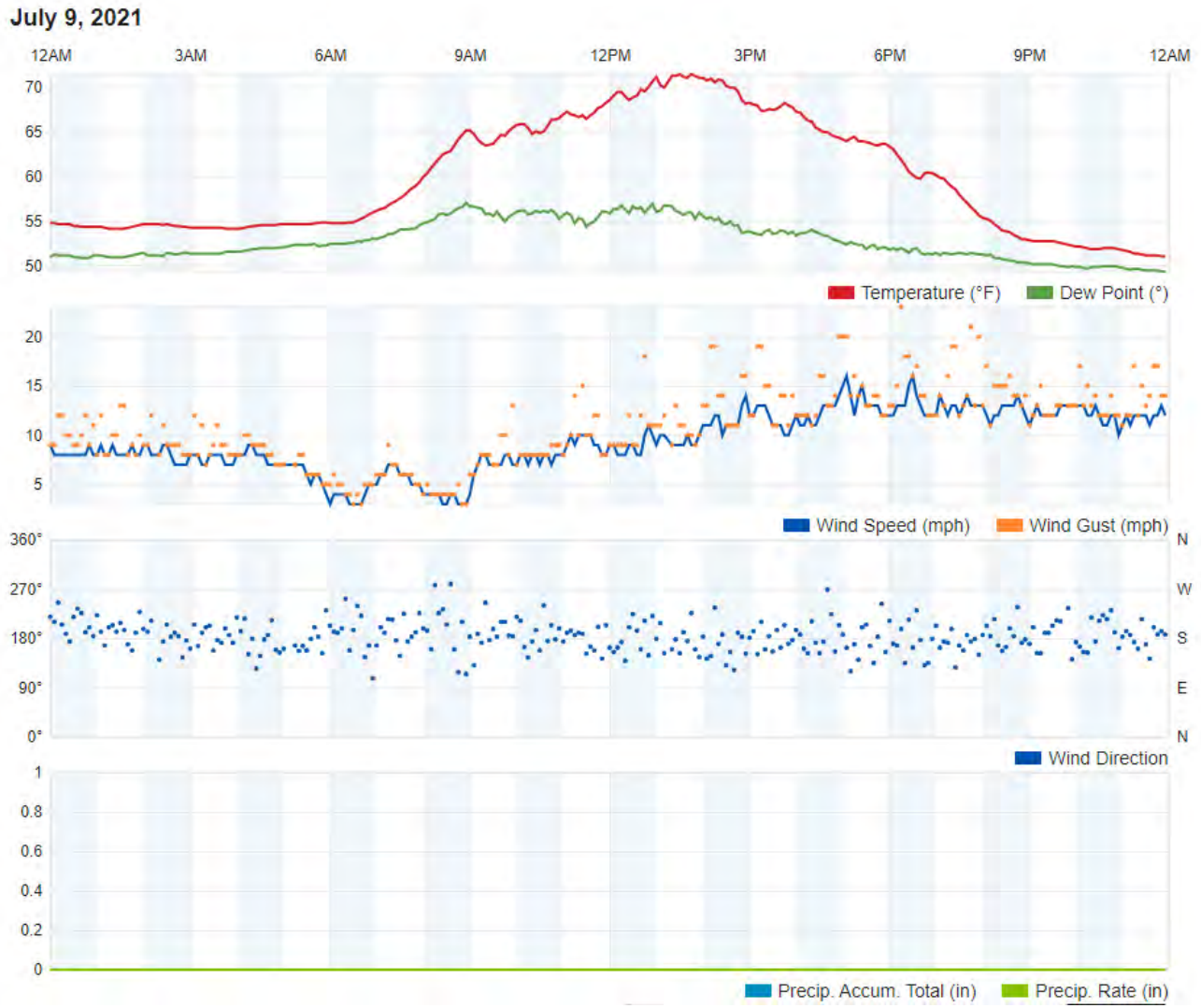
Upwind Location Description: entrance Reading: 1.2 ppm

Downwind Location Description: Grid 36 Reading: 1.9 ppm

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

Attachment 6

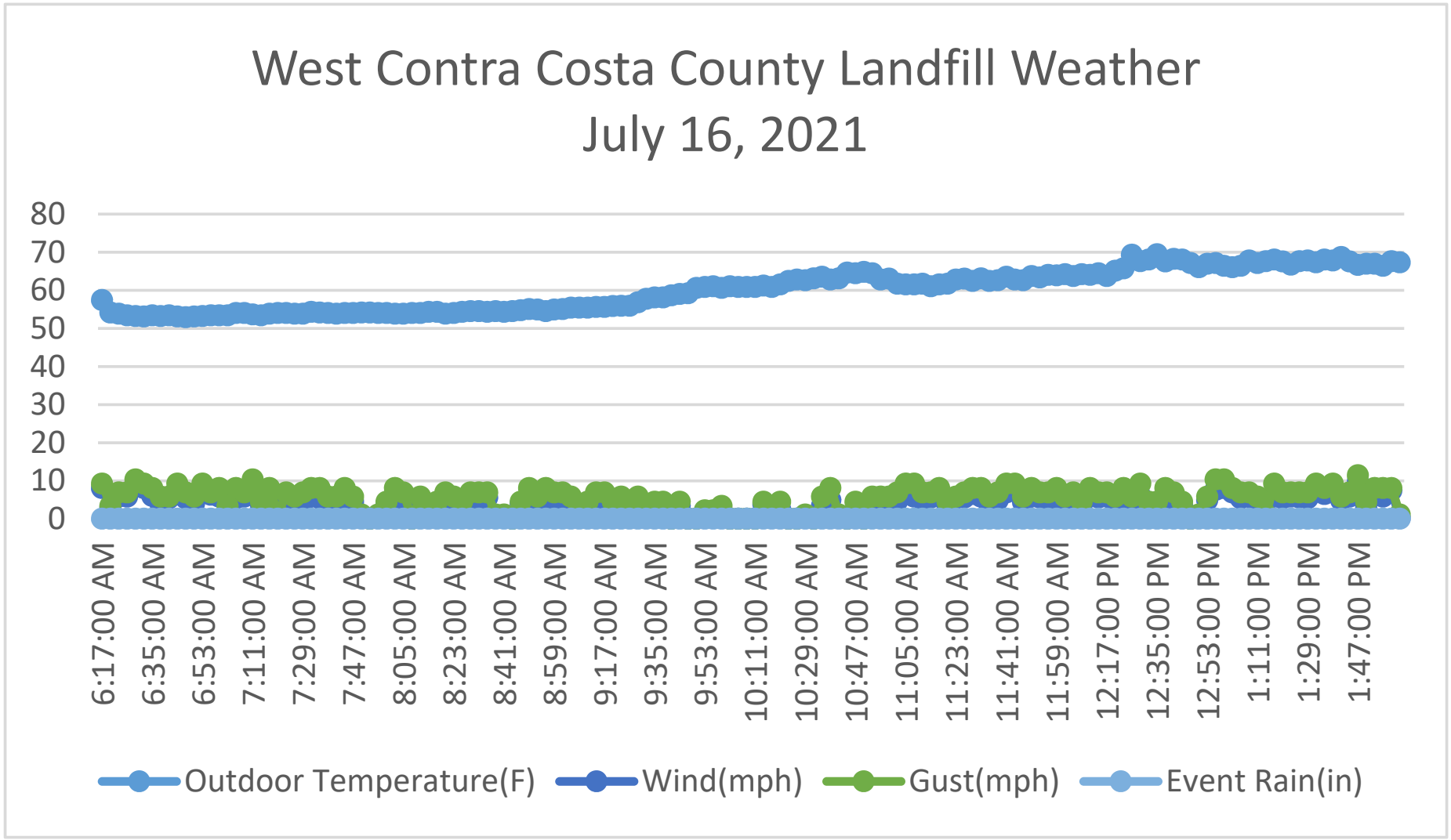
Weather Data

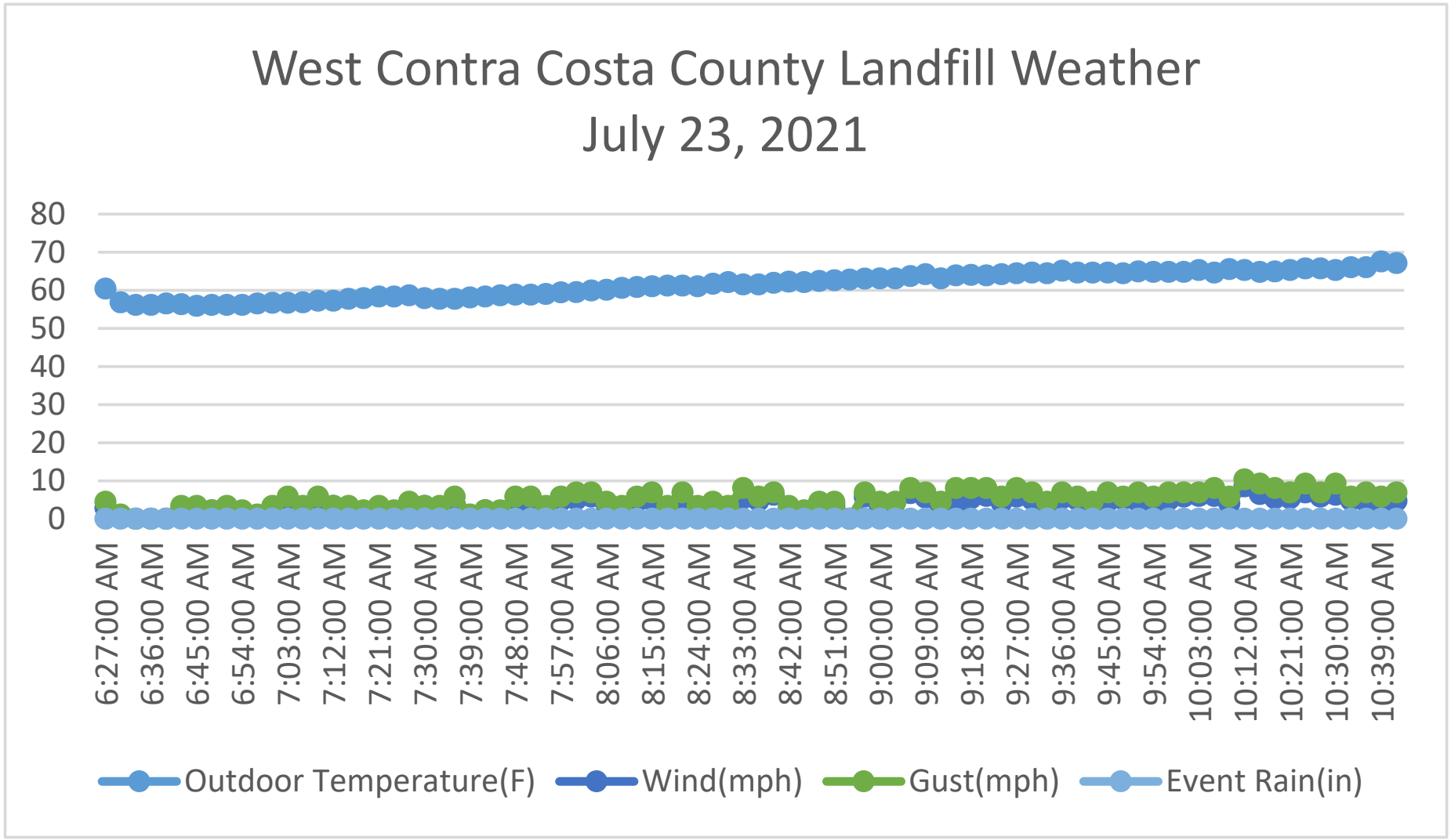


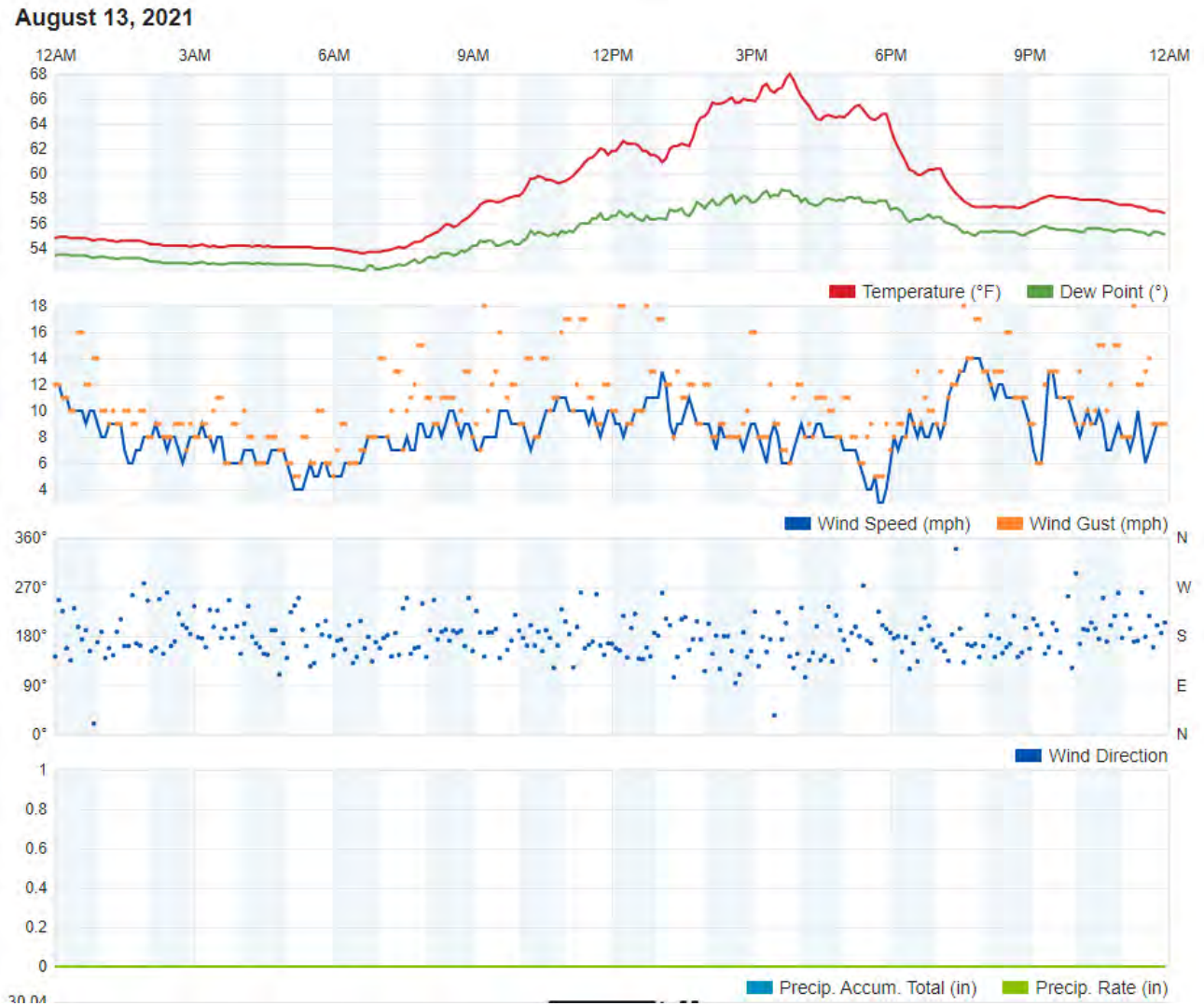
Third Quarter 2021

LMR Weather For July 9, 2021

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


West Contra Costa County Landfill Weather
July 16, 2021
80
70
60
50
40
30
20
10
0
6:17:00 AM
6:35:00 AM
6:53:00 AM
7:11:00 AM
7:29:00 AM
7:47:00 AM
8:05:00 AM
8:23:00 AM
8:41:00 AM
8:59:00 AM
9:17:00 AM
9:35:00 AM
9:53:00 AM
10:11:00 AM
10:29:00 AM
10:47:00 AM
11:05:00 AM
11:23:00 AM
11:41:00 AM
11:59:00 AM
12:17:00 PM
12:35:00 PM
12:53:00 PM
1:11:00 PM
1:29:00 PM
1:47:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)


West Contra Costa County Landfill Weather
July 23, 2021
80
70
60
50
40
30
20
10
0
6:27:00 AM
6:36:00 AM
6:45:00 AM
6:54:00 AM
7:03:00 AM
7:12:00 AM
7:21:00 AM
7:30:00 AM
7:39:00 AM
7:48:00 AM
7:57:00 AM
8:06:00 AM
8:15:00 AM
8:24:00 AM
8:33:00 AM
8:42:00 AM
8:51:00 AM
9:00:00 AM
9:09:00 AM
9:18:00 AM
9:27:00 AM
9:36:00 AM
9:45:00 AM
9:54:00 AM
10:03:00 AM
10:12:00 AM
10:21:00 AM
10:30:00 AM
10:39:00 AM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)



Third Quarter 2021

LMR Weather For August 13, 2021

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

Appendix E – 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* 05/01/2021	*through* 10/31/2021

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

11-24-21
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* 05/01/2021	*through* 10/31/2021

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.

- PTO Condition 27409

- Includes conditions for S-190 trommel screen, S-191 diesel engine powering trommel screen, and S-192 tub grinder. 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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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 six 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 May 5, 2021 from 10:30 to 10:46, May 25, 2021 from 18:56 to 21:04, June 2, 2021 0:42 to

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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
							7:30, June 24, 2021 19:24 to 19:52, October 7, 2021 20:18 to 20:28, and from October 24, 2021 at 9:08 to October 25, 2021 at 8:58. 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

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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 ^{o}C	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 ^{o}C	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* 05/01/2021 *through* 10/31/2021

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)	Intermittent	NOV Number A59550 was issued to WCCSL on August 24, 2021 due to an alleged detection of a component leak exceeding the limit of 1,000 parts per million by volume (ppmv) at one location (WCLF0839) during a BAAQMD inspection on August 17, 2021.

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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
							Corrective actions were immediately initiated by SCS Field Services (SCSFS), upon identifying the component leak, with the inspector present, which included tightening the loose well fitting. The area of the component leak was re-tested by SCSFS and the BAAQMD inspectors shortly after and the well was determined to be in compliance. The 10-day Response Letter was submitted on September 3, 2021.
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,	Periodic / Monthly, Quarterly, and on event basis	BAAQMD 8-34-303	500 ppmv as methane at 2 inches above 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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
		and Records					
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
Non- Methane Organic Compounds	BAAQMD 8-34-412 and 8-34-501.4 and	Initial and Annual Source Tests and	Periodic / Annually	BAAQMD 8-34-301.3	98% removal by weight OR < 30 ppmv, dry basis	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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
(NMOC)	BAAQMD Condition #25293, Parts 4, 11	Records			@ 3% O2, expressed as methane (applies to A-120 and A-8 Flares only)		
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
CT	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	Temperature Sensor and Recorder (measured every 15 minutes and averaged	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	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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
		over 3 hours)			complying performance test (applies to A-120 Flare only)		
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-120 Flares)	Continuous	N/A
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

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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
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
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

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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
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
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

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* 05/01/2021 *through* 10/31/2021

Type of Limit	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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

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* 05/01/2021 *through* 10/31/2021

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

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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* 05/01/2021 *through* 10/31/2021

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