TV Tracking #: 294

1. ☐ RECEIVED IN ENFORCEMENT: 09/28/2021

Revised NSPS/BAAQMD Rule 8-34 Semi-Annual Report, SSM Plan Semi-Annual Report, and Title V Semi-Annual Report
Newby Island Landfill
Milpitas, California (Facility No. 9013)

Prepared for:

International Disposal Corporation of California
1601 Dixon Landing Road
Milpitas, CA 95035

For Submittal to:

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

SCS ENGINEERS

01205162.04 Task 1 | September 2021

3843 Brickway Boulevard, Suite 208
Santa Rosa, CA 95403
707-546-9461

This submittal consisting of the Revised 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 Newby Island Landfill in Milpitas, California, dated September 2021, was prepared and reviewed by the following:

Anne Liu
Staff Professional
SCS ENGINEERS

Ray Huff
Vice President
SCS ENGINEERS

Patrick S. Sullivan, REA, CPP, BCES
Senior Vice President
SCS ENGINEERS

Table of Contents

Section Page

Tables

Appendices

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

1.0 INTRODUCTION

On behalf of the International Disposal Corporation of California (IDCC), SCS Engineers (SCS) hereby submits this New Source Performance Standard (NSPS), 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW), and Bay Area Air Quality Management District (BAAQMD or District) Rule 8-34 Semi-Annual Report and Semi-Annual Start-up, Shutdown, and Malfunction (SSM) Plan Report for the period of February 1, 2021 through July 31, 2021 to the BAAQMD for the Newby Island Sanitary Landfill and Recyclery (Newby).

This Semi-Annual report also meets the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for MSW landfills, 40 CFR 63, Subpart AAAA and complies with the requirements specified in Newby's Title V permit. In addition, Newby is not yet subject the new NESHAP, which goes into effect September 27, 2021, but will comply with the current version of the NESHAP until that time. 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.

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

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 of 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

Newby is a municipal solid waste (MSW) landfill located in Milpitas, California and is owned and operated by International Disposal Corporation of California (IDCC). The municipal refuse disposal site is located in Santa Clara County on the western terminus of Dixon Landing Road. The 342-acre landfill began accepting waste circa 1930 and is currently in operation.

Newby is subject to NSPS Subpart XXX since it commenced construction, reconstruction, or modification after July 17, 2014. Pursuant to NSPS Subpart XXX, Newby was required to initiate gas collection and control system (GCCS) operations, including associated monitoring, recordkeeping, and reporting, on September 4, 2019 (30 months after the submittal of the NMOC Emissions Rate Report). For ease of recordkeeping, Newby elected to begin reporting effective September 1, 2019. However, due to potentially overlapping requirement, Newby is continuing to report semi-annually under NSPS Subpart WWW and Rule 8-34. A separate NSPS XXX Annual Report is also prepared.

2.1 EXISTING AIR PERMITS

Newby maintains a BAAQMD Permit to Operate (PTO) (Plant No. 9013), which includes conditions for the wellfield, collection system, and A-2 and A-3 flare stations (Condition No. 10423). This condition incorporates all applicable requirements from NSPS Subpart WWW and from BAAQMD Rule 8-34, which are addressed in this report. Newby also maintains a Title V Permit (Facility No. A9013), which expired on December 20, 2017. On June 20, 2017, a Title V Renewal Application was submitted to the BAAQMD. The site currently operates under an application shield.

A GCCS Design Plan was prepared for the site to review and determine the adequacy of the existing LFG system. The current design of the system was determined to be adequate to comply with both NSPS and BAAQMD Rule 8-34 requirements. The system design is based on the density of wells calculated to sufficiently extract the maximum flow of LFG generated, according to the United States (U.S.) Environmental Protection Agency (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 Newby 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. All landfill gas is controlled by one of more of the following means: The A-2 and A-3 Flares or the IC engine power generators operated by the San Jose/Santa Clara Water Pollution Control Plant (Facility #A778).

A diagram of the GCCS displaying system component locations is shown in the site plan(s) 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 devices, 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 several occasions for a total of 31.53 hours. Shutdowns involved pre-programmed or manual system shutdowns prior to non-compliant operation or equipment failure, and involved 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 exemption of 12 events. These 12 events occurred on March 10, 12, 27 and 28; May 5, 30, and 31; July 10, 15, and 22, 2021, and were due to air blower low-flow alarms, site-wide power outages due to unforeseen utility outage events, a tripped power supply, maintenance conducted on Condensate Sump 18, and flame failure conditions.

Reportable Compliance Activity (RCA) forms were submitted to the BAAQMD on March 11, 12, 28, and 29; May 5, 30, and 31; July 12, 16, and 22, 2021, respectively, to request breakdown relief and to report the parametric excursions.

BAAQMD issued RCA IDs 07Y71 and 07Y72 for the breakdown and excursion, respectively, for the March 10, 2021 event; RCA IDs 07Y73 and 07Y74, for the March 12, 2021 event; RCA IDs 07Y89 and 07Y90 for the March 27, 2021 event; RCA IDs 07Y92 and 07Y93 for the March 28, 2021 event; RCA IDs 07Z38 and 07Z39 for the May 5, 2021 event; RCA IDs 07Z82 and 07Z86 for the May 30, 2021 event; RCA IDs 07Z83 and 07Z87, 07Z84 and 07Z88, 07Z85 and 07Z89 for the May 31, 2021 events; RCA IDs 08A51 and 08A52 for the July 10, 2021 event; RCA IDs 08A58 and 08A59 for the July 15, 2021 event; and RCA IDs 08A73 and 08A74 for the July 22, 2021 event.

On March 20, April 6, May 14, June 10 and 11, July 21, 26, 30, 2021, Newby submitted the Combined 10/30-Day Title V Reports and Notifications for the respective RCA IDs to the BAAQMD.

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.

3.1.2 Emission Control System Downtime

During the reporting period, the A-2 and A-3 Flares were off-line on several occasions. Summaries of the A-2 and A-3 flare downtime are provided in **Table 1b and 1c**, including the date, reason for the downtime, and the total elapsed time for each event. During the reporting period, downtime for the

A-2 Flare occurred over a cumulative period of approximately 65.12 hours and for the A-3 Flare over a cumulative period of approximately 42.35 hours. Emission control system downtime records are available for review at the site.

3.1.3 Individual Well Downtime

In some instances, the entire GCCS may not go off-line, but individual extraction wells may be taken off-line for inspection, maintenance, and/or repair, and active filling in the vicinity of the well, as well as for other unforeseen circumstances. These are generally planned events, although such events can occur without notice. During the reporting period, several wells were temporarily taken offline or were taken offline during a previous reporting period and remained offline for a portion of the reporting period due to active filling and construction activities occurring in their vicinity.

On February 19, 2021 and May 25, 2021, IDCC submitted Requests for Limited Exemption from the requirements of BAAQMD Regulation 8-34 117.1 through 117.6 and 118 Construction Plan (118 Plan) for construction activities to the BAAQMD. These wells were taken off-line in accordance with the requirements of Rule 8-34.

Four (4) wells, (NIHC17-2, NIHC17-3, NILEW741, NILMW015), remained offline at the end of the reporting period and will be reported as a startup once the filling operations around each well cease and the wells are brought back online.

Two (2) horizontal collectors and ten (10) vertical wells were abandoned during the reporting period due to poor gas production.

Pursuant to permit condition No. 10423, Part 6, the owner/operator must notify the District of expected installation or decommissioning dates. A combined Well Decommissioning and Startup Notification Letter was submitted to the BAAQMD for the well actions noted above.

Details of individual well shutdown and well startups occurring during the reporting period are provided in Table 2. Please see the Semi-Annual Startup, Shutdown, and Malfunction (SSM) Report included in this submittal for additional details.

3.1.4 Flow Meter and Temperature Gauge Downtime

The continuous operation of the GCCS is measured through the continuous measurement of LFG flow to each flare and flare combustion temperature. As required by Rule 8-34, each flare at Newby is 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

Newby is required by permit condition No. 10423, Part 9 to operate the A-2 and A-3 Flares in such a manner that the combustion zone temperature of the flares does not drop below the permitted limit of 1,400 and 1,501 degrees Fahrenheit (°F), respectively, (averaged over a 3-hour period) or a higher or lower temperature based on the most recent source test.

During the reporting period, the minimum temperature at which the A-2 flare was required to operate was 1,452°F (1,502 °F minus 50 °F), based on the February 23, 2021 source test performed by Blue Sky Environmental, Inc. (final report issued on April 1, 2021). During the reporting period, the minimum temperature at which the A-3 flare was required to operate was 1,454°F (1,504 °F minus 82 °F), based on the February 23, 2021 source test performed by Blue Sky Environmental, Inc. (final report issued on April 1, 2021).

During the reporting period, the A-2 and A-3 flares operated above the minimum established 3-hour average temperature limit at all times, except during periods of SSM.

Flare temperature records are available for review at the site.

3.2 COMPONENT LEAK QUARTERLY MONITORING

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

3.2.1 First Quarter 2021 Monitoring

SCS Field Services (SCSFS) conducted the component leak testing of the wellfield and flare station on March 27, 2021. No component leaks above 1,000 ppmv were detected in the wellfield or at the flare station during the first quarter 2021 monitoring event.

3.2.2 Second Quarter 2021 Monitoring

SCSFS conducted the component leak testing of the flare station and wellfield on April 9, 2021. No component leaks above 1,000 ppmv were detected in the wellfield or at the flare station during the second quarter 2021 monitoring event.

3.3 CONTROL EFFICIENCY

LFG flares A-2 and A-3 was also tested on February 23, 2021 to demonstrate compliance with the control efficiency standard of 98 percent NMOC destruction efficiency or outlet concentration of 30 ppmv of NMOC as methane (for flares) as required by BAAQMD Rules 8-34-301.3, 8-34-412, 8-34-501.4, and Condition # 10423, Part 11. The NMOC destruction efficiency for the A-2 Flare during the February 2021 source test was measured to be >99.56 percent by weight, and the NMOC as methane concentration in the flare outlet was <2.5 ppmv. The NMOC destruction efficiency for the A-3 Flare during the February 2021 source test was measured to be >99.57 percent by weight, and the NMOC as methane concentration in the flare outlet was <2.5 ppmv. As such, flares A-2 and A-3 is in compliance with the aforementioned rules and permit condition by meeting the ppmv limit.

Excerpts from the February 2021 source test report dated April 1, 2021, summarizing the test results, are provided in **Appendix C** of this report.

3.4 LANDFILL SURFACE EMISSIONS MONITORING

Surface emissions monitoring (SEM) was conducted at Newby 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.** Records of SEM are available for review at the site.

3.4.1 First Quarter 2021 Monitoring

SCSFS field technicians monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv above background on March 12, 15, 16, 17, 19, 22, 23, 26, 27, and 29, 2021. Surface emissions in excess of 500 ppmv were detected at eighteen (18) locations during the first quarter 2021 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the first quarter 2021 SEM report (**Appendix D**).

SCSFS field technicians performed appropriate corrective actions, including flow increases to the surrounding extraction wells, cover repairs, and installation of borehole emission control systems. SCSFS completed the 10-day re-monitoring events for these locations on March 19 and 29, 2021. All the locations were under the 500 ppmv threshold and thus back in compliance. SCSFS performed the 1-month re-monitoring event, as required by NSPS, on April 9, 2021, and all locations remained in compliance.

3.4.1 Second Quarter 2021 Monitoring

SCSFS monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv above background on April 8, 9, 12, and 13, 2021. Surface emissions in excess of 500 ppmv were detected at twenty-seven (27) locations during the second quarter 2021 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the second quarter 2021 SEM report (**Appendix D**).

SCSFS field technicians performed appropriate corrective actions, including flow increases to the surrounding extraction wells and borehole repairs. SCSFS completed the 10-day re-monitoring event for these locations on April 22, 2021 and performed the 1-month re-monitoring event, as required by NSPS, on May 11, 2021, and twenty-one (21) locations remained in compliance. In accordance with NSPS requirements for expansion and remediation, the exceedance locations need to be remediated and returned to compliance in accordance with the rule (expansion of the collection system or an alternative compliance option if approved by the BAAQMD) within 120 days of the detected initial instantaneous exceedance, which will be due by August 11, 2021. On August 2, 2021, a new shallow slope collector was started up to fulfill the 120-day requirement.

3.5 WELLHEAD MONTHLY MONITORING

Monthly wellhead monitoring for pressure, temperature, and oxygen content was conducted by SCSFS to comply with BAAQMD Rule 8-34-305 and 9-34-414. The results of this monitoring are summarized below. Wellhead exceedances are provided in **Table 3, 4, and 5.**

Please note that during the reporting period, all active wells were monitored.

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 that 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.

Wells NIHC17-2, NIHC17-3, NILEW066, NILEW451, NILEW464, NILEW465, NILEW496, NILEW497, NILEW626, NILEW664, NILEW665, NILEW707, NILEW726, NILEW733, NILEW742, NISS17-3, and NISS17-4 demonstrated a positive pressure reading at the end of the reporting period. These wells will be returned under negative pressure by the applicable compliance dates, as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report.

As of the end of the previous reporting period, no wells were operating under positive pressure.

3.5.2 Oxygen

Newby has elected to use oxygen as its compliance standard under Rule 8-34-305, rather than nitrogen. Per Newby's PTO Condition No. 10423, Part 6(c), the oxygen concentration limit does not apply to the wells listed below, provided that the oxygen concentration in the LFG at the main header does not exceed five percent oxygen by volume (dry basis) and the methane concentration in the LFG at the main header is greater than 35 percent by volume (dry basis). The oxygen Higher Operating Value (HOV) of 15% is approved for wells: 30RR, EW-13, I0IR, HC- 201. The oxygen HOV of 20% is approved for wells: HC-231, HC- 232, HC- 235, HC-237, HC- 241.

The majority of the wells were operating within the regulatory limit of five (5) percent oxygen or their respective oxygen HOVs 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 the 5 percent limit or their respective oxygen HOVs except for wells NI3EW40R, NILEW217, NILEW431, NILEW463, NILEW514, NILEW677, NILEW685, NILEW698, NILEW704, NILEW720, NILEW723, NILEW747, NILEW748, NILEW753, NILEW760, NILEW769, NILLEW16, NILMW002, NILMW020, NILMW034, NILW573A, NILW574A, and NLCRST05. The wells will be returned to below the 5 percent limit as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report.

As of the end of the previous reporting period, wells NILEW723, NILLEW16, and NILW475A were operating with an oxygen concentration above the 5 percent limit. The wells were back in compliance within the timeline specified in 8-34-414.

3.5.3 Temperature

BAAQMD Rule 8-34-305 requires the landfill gas temperature in each wellhead to measure less than 55 degrees Celsius (°C) or 131°F. However, Condition No. 10423, Part 6(d) in Newby's BAAQMD

PTO allows Newby to operate wells EW-39R, EW-40R, EW-14, EW-37, EW-005, EW-00A, EW-00D, EW-00E, EW-019, EW-025, EW-106, EW-218, EW-224, EW-243, EW-51R, EW-54R, NI3EW07R, NI3EW31, NILEW106, NILEW464, NILEW466, NILEW479, NILEW481, NILEW482, NILEW488, NILEW489, NILEW497, NILEW511, NILEW568, NILEW570, NILEW599, NILEW601, NILEW604, NILEW617, NILEW621, NILEW622, NILEW623, NILEW626, NILEW628, NILEW663, NILEW664, NILEW665, NILEW666, and NILEW667 at an alternative temperature of 145°F and well EW-07R at an alternative temperature of 150°F.

The majority of wells were operating within their respective limits of 131°F, 145°F, and 150°F during the monitoring events conducted during the reporting period. The dates when wells were operating above their respective temperature limits, and the well identification number, correction actions, and re-monitoring results for these wells are provided in **Table 5.**

As of the end of the reporting period, wells NILEW690, NILEW701, and NILEW752 were operating with a temperature higher than 131 °F. The wells will be returned to below the 131°F limit as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report.

As of the end of the previous reporting period, wells NILEW690 and NILEW703 were operating with a temperature higher than 131 °F. These wells returned to compliance within the timelines specified in 8-34-414.

An HOV application to request an increase of the allowable wellhead temperature limit from 131°F to 145°F for wells NILEW690, NILEW691, NILEW701, and NILEW703 was submitted to the USEPA and BAAQMD on February 6, 2020. Addendums requesting an increase of the allowable wellhead temperature limit from 131°F to 145°F for wells NILEW476, NILEW642, NILEW703, NILEW707, and NILEW752 were submitted in April 2020 and August 2021. The BAAQMD has provided approval of these HOV limits pending approval from the USEPA. IDCC has followed up with the USEPA regarding the application in August 2020, September 2020, October 2020, April 2021, and August 2021 but no response has been received. IDCC is currently awaiting a response to the HOV requests.

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 February 25, March 21, April 20, May 31, June 29, July 29, 2021 using procedures specified in the GCCS Design Plan. The observations during these monitoring events indicated the landfill surface was in good condition. In the event visual evidence suggested otherwise, the surface will be promptly repaired. Records of cover integrity monitoring are available for review upon request.

3.7 GAS GENERATION ESTIMATE AND MONTHLY LANDFILL GAS FLOW RATES

The Newby 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

Newby is an active landfill that continues to accept refuse for disposal. From February 1, 2021 through July 31, 2021, the site accepted 634,864.35 tons of decomposable waste and cover material, resulting in a cumulative waste-in-place total of 36,559,475.68 tons as of July 31, 2021.

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.

SECTION II. SSM PLAN REPORT

As mentioned previously, Newby is subject to 40 CFR Part 63, Subpart AAAA, the NESHAPS for MSW Landfills. Newby maintains a SSM Plan which documents 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 February 1, 2021 through July 31, 2021 are documented in this section.

During the reporting period, there were forty-nine (49) SSM events involving shutdown of the entire GCCS. Thirty-five (35) of these events were planned startups/shutdowns and fourteen (14) of these startup/shutdown events were associated with a malfunction of the GCCS.

During the reporting period, there were sixty four (64) SSM events involving the wellfield. Additional wells were offline from previous reporting periods and remained offline for all or a portion of the reporting period. These events involved planned shutdowns of several wells on various dates due to active landfilling in the vicinity of these wells. All wells except for NIHC17-2, NIHC17-3, NILEW741, and NILMW015 remained offline as of the end of the reporting period and will be reported as startups once the landfilling activities in the vicinity of these wells cease and the wells are brought back online. There were no malfunctions of any of the wellfield components during the reporting period.

During the reporting period, there were no planned startups/shutdowns or known malfunctions of LFG monitoring equipment (e.g. flow measuring/recording device, temperature measuring/recording device).

In each case described above, the SSM Plan was successfully implemented. Specific information regarding these SSMs are included in **Tables 1a (entire GCCS), 1b (flares), and 2 (wells).**

No revisions were made to the SSM Plan during this reporting period. A copy of the SSM Plan and all revisions/addenda are kept on file at the facility for at least five (5) years and are available to appropriate regulatory agency personnel for inspection.

SECTION III. TITLE V SEMI-ANNUAL REPORT

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

This report has been prepared based on Table 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
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime	BAAQMD Exemption	Corrective Actions Taken
2/1/2021 8:50	2/1/2021 10:42	1.87	Flare inspections (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/9/2021 8:24	2/9/2021 8:34	0.17	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/9/2021 10:10	2/9/2021 10:56	0.77	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/9/2021 11:24	2/9/2021 11:36	0.20	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/15/2021 9:22	2/15/2021 9:28	0.10	Zink Preventative maintenance (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/15/2021 10:44	2/15/2021 10:52	0.13	Zink Preventative maintenance (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/18/2021 13:10	2/18/2021 13:18	0.13	Blower Swap (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/19/2021 11:06	2/19/2021 11:14	0.13	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/22/2021 11:20	2/22/2021 11:26	0.10	Air filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/23/2021 14:54	2/23/2021 15:00	0.10	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/10/2021 13:26	**3/10/2021 13:32**	**0.10**	**Utility outage (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Y71 and 07Y72)**	**O&M personnel completed inspection then restarted the flares.**
3/12/2021 9:20	**3/12/2021 9:56**	**0.60**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Y73 and 07Y74)**	**O&M personnel completed inspection then restarted the flares.**
3/12/2021 12:54	3/12/2021 13:00	0.10	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/17/2021 11:24	3/17/2021 11:30	0.10	Gas Blower inspection (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/27/2021 15:04	**3/27/2021 15:10**	**0.10**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Y89 and 07Y90)**	**O&M personnel completed inspection then restarted the flares.**
3/28/2021 12:42	**3/28/2021 12:48**	**0.10**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event IDs (RCA IDs 07Y92 and 07Y93)**	**O&M personnel completed inspection then restarted the flares.**
3/31/2021 8:34	3/31/2021 13:04	4.50	Condensate Knock out Pot Demistier pad Installation (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 13:54	3/31/2021 14:02	0.13	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 14:56	3/31/2021 15:02	0.10	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 15:22	3/31/2021 15:30	0.13	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 15:58	3/31/2021 16:24	0.43	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/15/2021 17:02	4/15/2021 17:08	0.10	Flame arrestor servicing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/15/2021 17:12	4/15/2021 17:14	0.03	Flame arrestor servicing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/15/2021 17:20	4/15/2021 18:12	0.87	Flame arrestor servicing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/23/2021 13:48	4/23/2021 13:56	0.13	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.

Table 1a. GCCS Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime	BAAQMD Exemption	Corrective Actions Taken
4/23/2021 14:08	4/23/2021 14:32	0.40	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/4/2021 13:14	5/4/2021 13:54	0.67	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/5/2021 13:18	**5/5/2021 13:50**	**0.53**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Z38 and 07Z39)**	**O&M personnel completed inspection then restarted the flares.**
5/6/2021 10:58	5/6/2021 11:04	0.10	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/6/2021 11:08	5/6/2021 12:32	1.40	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/24/2021 14:20	5/24/2021 14:28	0.13	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/26/2021 7:52	5/26/2021 8:00	0.13	Burner tip cleaning event (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/30/2021 14:40	**5/30/2021 14:45**	**0.08**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Z82 and 07Z86)**	**O&M personnel completed inspection then restarted the flares.**
5/31/2021 10:45	**5/31/2021 10:51**	**0.10**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Z83 and 07Z87)**	**O&M personnel completed inspection then restarted the flares.**
5/31/2021 14:17	**5/31/2021 15:30**	**1.22**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Z84 and 07Z88)**	**O&M personnel completed inspection then restarted the flares.**
5/31/2021 16:43	**5/31/2021 17:11**	**0.47**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event (RCA IDs 07Z85 and 07Z89)**	**O&M personnel completed inspection then restarted the flares.**
6/16/2021 9:36	6/16/2021 9:58	0.37	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/16/2021 10:52	6/16/2021 11:06	0.23	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/16/2021 14:18	6/16/2021 14:36	0.30	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/22/2021 14:28	6/22/2021 14:36	0.13	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/10/2021 20:24	**7/11/2021 8:00**	**11.60**	**Utility outage (RCA Submitted)**	**RCA Submitted for this event (RCA IDs 08A51 and 08A52)**	**O&M personnel completed inspection then restarted the flares.**
7/11/2021 11:56	7/11/2021 12:06	0.17	John Zink Flow Meter Installation (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/15/2021 13:44	**7/15/2021 13:52**	**0.13**	**Condensate Sump 18 Maintenance (RCA submitted)**	**RCA Submitted for this event (RCA IDs 08A58 and 08A59)**	**O&M personnel completed inspection then restarted the flares.**
7/16/2021 8:08	7/16/2021 8:14	0.10	Air Combustion Blower Filter Cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/22/2021 1:16	**7/22/2021 1:24**	**0.13**	**Flame Failure (RCA submitted)**	**RCA Submitted for this event (RCA IDs 08A73 and 08A74)**	**O&M personnel completed inspection then restarted the flares.**
7/22/2021 11:14	7/22/2021 11:20	0.10	Gas Blower Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/28/2021 13:52	7/28/2021 13:58	0.10	Low Gas Flow Due to Construction Activities (118)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/28/2021 14:08	7/28/2021 15:50	1.70	Low Gas Flow Due to Construction Activities (118)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
	Total:	**31.53**			

Notes:
Events in bold type denotes Malfunction Events
Downtimes listed represent periods when all landfill gas combustion devices were offline concurrently (no gas flow from the collection system).
All events listed involved GCCS inspection and/or maintenance activities prior to start up (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 March 10, 12, 27, and 28, May 5, 30, and 31, and July 10, 15, and 22, 2021 , which involved utility outages and air blower low flow shutdowns. These events were considered reportable compliance activities (RCA) and breakdown relief was requested.

Table 1b. Flare (A-2) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
2/1/21 8:50	2/1/21 11:20	2.50	Flare inspections (113)
2/9/21 8:24	2/9/21 8:34	0.17	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 8:38	2/9/21 8:48	0.17	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 8:50	2/9/21 9:40	0.83	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 10:10	2/9/21 10:56	0.77	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 11:24	2/9/21 11:50	0.43	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 12:08	2/9/21 14:30	2.37	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 14:42	2/9/21 15:00	0.30	Thermocouple troubleshooting/ Flare pre source test (113)
2/15/21 9:22	2/15/21 10:12	0.83	Zink preventative maintenance (113)
2/15/21 10:44	2/15/21 11:30	0.77	Zink preventative maintenance (113)
2/15/21 12:00	2/15/21 12:38	0.63	Zink preventative maintenance (113)
2/18/21 13:10	2/18/21 13:28	0.30	Blower swap (113)
2/19/21 11:06	2/19/21 11:34	0.47	Air blower troubleshooting (113)
2/19/21 11:46	2/19/21 11:52	0.10	Air blower troubleshooting (113)
2/19/21 11:56	2/19/21 12:00	0.07	Air blower troubleshooting (113)
2/19/21 12:02	2/19/21 12:08	0.10	Air blower troubleshooting (113)
2/22/21 11:20	2/22/21 11:26	0.10	Air blower troubleshooting (113)
2/22/21 11:30	2/22/21 11:36	0.10	Air blower troubleshooting (113)
2/22/21 11:52	2/22/21 11:58	0.10	Air blower troubleshooting (113)
2/22/21 13:24	2/22/21 15:36	2.20	Air filter cleaning (113)
2/23/21 14:52	2/23/21 15:00	0.13	Flare source testing (113)
3/10/21 13:26	**3/10/21 13:32**	**0.10**	**Utility outage (RCA submitted, RCA IDs 07Y71 and 07Y72)**
3/12/21 9:18	**3/12/21 9:56**	**0.63**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Y73 and 07Y74)**
3/12/21 12:52	3/12/21 14:18	1.43	Air Blower maintenance and troubleshooting (113)
3/17/21 11:22	3/17/21 11:44	0.37	Gas blower inspection (113)
3/27/21 15:04	**3/27/21 16:26**	**1.37**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Y89 and 07Y90)**
3/28/21 12:42	**3/28/21 14:39**	**1.95**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Y92 and 07Y93)**
3/31/21 8:34	3/31/21 13:06	4.53	Condensate Knock out Pot Demistier Pad Installation (113)
3/31/21 13:54	3/31/21 14:32	0.63	Air Blower maintenance and troubleshooting (113)
3/31/21 14:54	3/31/21 15:08	0.23	Air Blower maintenance and troubleshooting (113)
3/31/21 15:22	3/31/21 15:42	0.33	Air Blower maintenance and troubleshooting (113)
3/31/21 15:44	3/31/21 16:24	0.67	Air Blower maintenance and troubleshooting (113)
4/15/21 17:00	4/15/21 18:16	1.27	Flame arrestor servicing (113)
4/23/21 13:48	4/23/21 14:34	0.77	Air Combustion blower filter cleaning (113)
5/4/21 13:12	5/4/21 13:58	0.77	Air Blower maintenance and troubleshooting (113)

Table 1b. Flare (A-2) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
5/5/21 13:22	**5/5/21 13:54**	**0.53**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z38 and 07Z39)**
5/6/21 10:58	5/6/21 12:32	1.57	Air Blower maintenance and troubleshooting (113)
5/24/21 14:20	5/24/21 14:40	0.33	Air Blower maintenance and troubleshooting (113)
5/26/21 7:52	5/26/21 16:04	8.20	Burner tip cleaning event (113)
5/30/21 14:46	**5/30/21 18:32**	**3.77**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z82 and 07Z86)**
5/31/21 10:50	**5/31/21 12:30**	**1.67**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z83 and 07Z87)**
5/31/21 14:22	**5/31/21 15:40**	**1.30**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z84 and 07Z88)**
5/31/21 16:48	**5/31/21 17:28**	**0.67**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z85 and 07Z89)**
6/4/21 12:18	6/4/21 12:30	0.20	Air Blower low flow shut down
6/8/21 7:26	6/8/21 8:20	0.90	Air blower filter cleaning (113)
6/14/21 7:56	6/14/21 8:02	0.10	Air Blower low flow shut down
6/16/21 9:36	6/16/21 10:48	1.20	Air blower troubleshooting (113)
6/16/21 10:52	6/16/21 11:14	0.37	Air blower troubleshooting (113)
6/16/21 11:48	6/16/21 12:06	0.30	Air blower troubleshooting (113)
6/16/21 12:40	6/16/21 12:52	0.20	Air blower troubleshooting (113)
6/16/21 14:18	6/16/21 14:38	0.33	Air blower troubleshooting (113)
6/22/21 14:28	6/22/21 15:26	0.97	Air Combustion blower filter cleaning (113)
7/10/21 20:24	**7/11/21 8:00**	**11.60**	**Utility outage (RCA submitted, RCA IDs 08A51 and 08A52)**
7/11/21 11:56	7/11/21 12:06	0.17	High Gas Flow
7/15/21 13:44	**7/15/21 13:52**	**0.13**	**Condensate Sump 18 Maintenance (RCA submitted, RCA IDs 08A58 and 08A59)**
7/16/21 8:08	7/16/21 8:14	0.10	Air Combustion Blower Filter Cleaning (113)
7/22/21 1:16	**7/22/21 1:24**	**0.13**	**Flame Failure (RCA submitted, RCA IDs 08A73 and 08A74)**
7/22/21 11:14	7/22/21 11:20	0.10	Gas Blower Maintenance and Troubleshooting (113)
7/28/21 13:52	7/28/21 13:58	0.10	Low Gas Flow Due to Construction Activities (118)
7/28/21 14:08	7/28/21 15:50	1.70	Low Gas Flow Due to Construction Activities (118)
Total		**65.12**	

Notes:

Events in bold type denotes Malfunction Events

All events listed involved GCCS inspection and/or maintenance activities prior to start up (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 March 10, 12, 27, and 28, May 5, 30, and 31, and July 10, 15, and 22, 2021 , which involved utility outages and air blower low flow shutdowns. These events were considered reportable compliance activities (RCA) and breakdown relief was requested.

Table 1c. Flare (A-3) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
2/1/2021 8:50	2/1/2021 10:42	1.87	Flare inspections (113)
2/9/2021 8:24	2/9/2021 8:38	0.23	Flare source testing (113)
2/9/2021 10:10	2/9/2021 11:36	1.43	Flare source testing (113)
2/15/2021 9:22	2/15/2021 9:28	0.10	Zink preventative maintenance (113)
2/15/2021 10:44	2/15/2021 10:52	0.13	Zink preventative maintenance (113)
2/18/2021 13:10	2/18/2021 13:18	0.13	Blower swap (113)
2/19/2021 11:06	2/19/2021 11:14	0.13	Air blower troubleshooting (113)
2/22/2021 11:20	2/22/2021 11:26	0.10	Air filter cleaning (113)
2/23/2021 14:54	2/23/2021 15:00	0.10	Flare source testing (113)
3/10/2021 13:26	**3/10/2021 15:20**	**1.90**	**Utility outage (RCA submitted, RCA IDs 07Y71 and 07Y72)**
3/12/2021 9:20	**3/12/2021 10:30**	**1.17**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Y73 and 07Y74)**
3/12/2021 12:54	3/12/2021 13:00	0.10	Air Blower maintenance and troubleshooting (113)
3/17/2021 11:24	3/17/2021 11:30	0.10	Gas blower inspection (113)
3/27/2021 15:04	**3/27/2021 15:10**	**0.10**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Y89 and 07Y90)**
3/28/2021 12:42	**3/28/2021 12:49**	**0.12**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Y92 and 07Y93)**
3/31/2021 8:34	3/31/2021 13:04	4.50	Condensate Knock out Pot Demistier Pad Installation (113)
3/31/2021 13:54	3/31/2021 14:02	0.13	Air Blower maintenance and troubleshooting (113)
3/31/2021 14:56	3/31/2021 15:02	0.10	Air Blower maintenance and troubleshooting (113)
3/31/2021 15:22	3/31/2021 15:30	0.13	Air Blower maintenance and troubleshooting (113)
3/31/2021 15:58	3/31/2021 16:26	0.47	Air Blower maintenance and troubleshooting (113)
4/15/2021 17:02	4/15/2021 17:08	0.10	Flame arrestor servicing (113)
4/15/2021 17:12	4/15/2021 17:14	0.03	Flame arrestor servicing (113)
4/15/2021 17:20	4/15/2021 18:12	0.87	Flame arrestor servicing (113)
4/23/2021 13:48	4/23/2021 13:56	0.13	Air Combustion blower filter cleaning (113)
4/23/2021 14:08	4/23/2021 14:32	0.40	Air Combustion blower filter cleaning (113)
5/4/2021 13:14	5/4/2021 13:54	0.67	Air Blower maintenance and troubleshooting (113)
5/5/2021 13:24	**5/5/2021 13:30**	**0.10**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z38 and 07Z39)**
5/5/2021 13:42	**5/5/2021 13:58**	**0.27**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z38 and 07Z39)**
5/6/2021 10:58	5/6/2021 11:04	0.10	Air Blower maintenance and troubleshooting (113)
5/6/2021 11:08	5/6/2021 12:32	1.40	Air Blower maintenance and troubleshooting (113)
5/24/2021 14:20	5/24/2021 14:28	0.13	Air Combustion blower filter cleaning (113)
5/26/2021 7:52	5/26/2021 8:00	0.13	Burner tip cleaning event (113)
5/30/2021 14:46	**5/30/2021 14:54**	**0.13**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z82 and 07Z86)**
5/31/2021 10:52	**5/31/2021 10:58**	**0.10**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z83 and 07Z87)**
5/31/2021 14:22	**5/31/2021 15:36**	**1.23**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z84 and 07Z88)**
5/31/2021 16:50	**5/31/2021 17:18**	**0.47**	**Air Blower low flow shut down (RCA submitted, RCA IDs 07Z85 and 07Z89)**

Table 1c. Flare (A-3) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
6/16/2021 9:36	6/16/2021 9:58	0.37	Air blower troubleshooting (113)
6/16/2021 10:52	6/16/2021 11:06	0.23	Air blower troubleshooting (113)
6/16/2021 14:18	6/16/2021 14:36	0.30	Air blower troubleshooting (113)
6/22/2021 14:28	6/22/2021 14:36	0.13	Air Combustion blower filter cleaning (113)
7/10/2021 20:24	**7/11/2021 13:14**	**16.83**	**Utility outage (RCA submitted, RCA IDs 08A51 and 08A52)**
7/15/2021 13:44	**7/15/2021 13:56**	**0.20**	**Condensate Sump 18 Maintenance (RCA submitted, RCA IDs 08A58 and 08A59)**
7/16/2021 8:06	7/16/2021 10:40	2.57	Air Combustion Blower Filter Cleaning (113)
7/22/2021 1:16	**7/22/2021 1:28**	**0.20**	**Flame Failure (RCA submitted, RCA IDs 08A73 and 08A74)**
7/22/2021 11:14	7/22/2021 11:22	0.13	Air Blower maintenance and troubleshooting (113)
7/28/2021 13:50	7/28/2021 14:02	0.20	Low Gas Flow Due to Construction Activities (118)
7/28/2021 14:06	7/28/2021 15:58	1.87	Low Gas Flow Due to Construction Activities (118)
Total		**42.35**	

Notes:

Events in bold type denotes Malfunction Events

All events listed involved GCCS inspection and/or maintenance activities prior to start up (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 March 10, 12, 27, and 28, May 5, 30, and 31, and July 10, 15, and 22, 2021 , which involved utility outages and air blower low flow shutdowns. These events were considered reportable compliance activities (RCA) and breakdown relief was requested.

Table 2. Individual Well Startups, Shutdowns and Decommissions
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Shutdown	Start-up	Days Offline	Reason for Shutdown/Startup
NILW558A	8/13/20 11:33	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW662	9/15/20 12:43	N/A		Well Permanently Decommissioned Due to GCCS Construction
NILEW455	11/18/20 7:00	N/A		Well Permanently Decommissioned Due to GCCS Construction
NILEW059	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW060	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW063	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW67R	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW730	3/12/21 11:02	6/4/21 0:00	83.54	Well Temporarily Offline Construction 118-Plan
NILEW733	3/12/21 11:07	4/28/21 12:22	47.05	Well Temporarily Offline Construction 118-Plan
NILEW066	3/12/21 11:37	7/14/21 11:11	123.98	Well Temporarily Offline Construction 118-Plan
NILEW465	3/12/21 11:45	4/28/21 12:24	47.03	Well Temporarily Offline Construction 118-Plan
NILEW707	4/14/21 13:29	4/19/21 8:47	4.80	Well Temporarily Offline to Remediate Subsurface Oxidation (SSO) Event
NILEW496	4/14/21 13:33	4/19/21 8:44	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW664	4/14/21 13:36	4/19/21 8:42	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW711	4/14/21 13:39	4/19/21 8:39	4.79	Well Temporarily Offline to Remediate SSO Event
NILEW464	4/14/21 13:45	4/19/21 9:34	4.83	Well Temporarily Offline to Remediate SSO Event
NILEW626	4/14/21 13:52	4/19/21 9:29	4.82	Well Temporarily Offline to Remediate SSO Event
NILEW744	4/14/21 13:55	4/19/21 9:31	4.82	Well Temporarily Offline to Remediate SSO Event
NILEW497	4/14/21 13:58	4/19/21 9:27	4.81	Well Temporarily Offline to Remediate SSO Event
NILEW451	4/14/21 14:02	4/19/21 9:23	4.81	Well Temporarily Offline to Remediate SSO Event
NILEW745	4/14/21 14:07	4/19/21 9:20	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW692	4/14/21 14:09	4/19/21 9:19	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW463	4/14/21 14:13	4/19/21 9:16	4.79	Well Temporarily Offline to Remediate SSO Event
NILEW693	4/14/21 14:17	4/19/21 9:12	4.79	Well Temporarily Offline to Remediate SSO Event
NILEW706	4/14/21 14:21	4/19/21 9:10	4.78	Well Temporarily Offline to Remediate SSO Event
NILEW596	4/14/21 14:25	4/19/21 9:07	4.78	Well Temporarily Offline to Remediate SSO Event
NILHC201	4/14/21 14:29	4/19/21 9:03	4.77	Well Temporarily Offline to Remediate SSO Event
NILEW748	4/14/21 14:32	4/19/21 9:01	4.77	Well Temporarily Offline to Remediate SSO Event
NILEW615	4/14/21 14:37	4/19/21 8:55	4.76	Well Temporarily Offline to Remediate SSO Event
NILEW663	4/14/21 14:40	4/19/21 8:51	4.76	Well Temporarily Offline to Remediate SSO Event
NILW475A	5/27/21 10:05	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW730	6/4/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW686	6/9/21 11:51	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW676	6/9/21 12:02	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NISS17-3	6/11/21 14:55	7/8/21 0:00	26.38	Well Temporarily Offline Due to Filling
NILEW529	6/29/21 10:01	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NISS17-3	7/8/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NIHC17-2*	7/14/21 15:33		17.35	Well Temporarily Offline Due to Filling
NIHC17-3*	7/14/21 15:34		17.35	Well Temporarily Offline Due to Filling
NILEW741*	7/14/21 16:10		17.33	Well Temporarily Offline Due to Filling
NISS17-5	7/22/21 10:28	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW660	7/22/21 13:43	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILMW015*	7/27/21 11:11		4.53	Well Temporarily Offline Construction 118-Plan

Newby Island contracted with a new operations and maintenance (O&M) provider, SCS Field Services (SCSFS), starting on February 1, 2021. Upon further inspection, it was discovered that the wells noted in italics had previously been decommissioned. These wells are noted in this report for recordkeeping purposes.

*Well was offline at the end of the reporting period. For reporting purposes, the startup time is calculated as of August 1, 2021 at 0:00.

Note: All well downtime events listed are consistent with applicable Rule 8-34 provisions and BAAQMD permit conditions.

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NIHC17-2	6/29/2021 9:48	4.87	4.88	Adjusted Valve
NIHC17-2	6/29/2021 9:48	4.85	4.86	Second Reading (Well was temporarily taken offline)
NIHC17-3	6/29/2021 9:45	3.62	3.61	Adjusted Valve
NIHC17-3	6/29/2021 9:46	3.53	3.55	Second Reading (Well was temporarily taken offline)
NILEW066	7/14/2021 11:11	0.63	0.64	Adjusted Valve
NILEW066	7/14/2021 11:12	0.68	0.68	Second Reading
NILEW066	7/29/2021 15:10	0.24	0.24	Adjusted Valve
NILEW066	7/29/2021 15:11	0.18	0.17	Second Reading
NILEW451	4/15/2021 9:44	3.15	3.14	Adjusted Valve
NILEW451	4/15/2021 9:46	2.88	2.89	Second Reading
NILEW451	4/16/2021 15:15	6.88	6.9	Adjusted Valve
NILEW451	4/17/2021 19:40	7.87	8.11	Adjusted Valve
NILEW451	4/17/2021 19:43	4.22	0.07	Second Reading
NILEW451	4/18/2021 17:59	11.15	11.14	Adjusted Valve
NILEW451	4/18/2021 18:01	9.02	9.02	Second Reading
NILEW451	4/19/2021 9:23	7.6	7.32	Adjusted Valve
NILEW451	4/21/2021 13:00	-5.71	-5.7	In Compliance
NILEW451	7/30/2021 9:56	1.37	1.37	Adjusted Valve
NILEW451	7/30/2021 9:57	1.38	1.39	Second Reading
NILEW463	4/15/2021 9:26	10.6	10.6	Adjusted Valve
NILEW463	4/15/2021 9:26	10.6	10.6	Second Reading
NILEW463	4/15/2021 9:28	10.64	10.64	Third Reading
NILEW463	4/16/2021 15:34	5.78	15.01	Adjusted Valve
NILEW463	4/17/2021 19:18	15.5	15.53	Adjusted Valve
NILEW463	4/17/2021 19:20	14.02	13.93	Second Reading
NILEW463	4/18/2021 17:35	16.49	16.49	Adjusted Valve
NILEW463	4/18/2021 17:38	14.54	14.54	Second Reading
NILEW463	4/19/2021 9:16	13.57	12.16	Adjusted Valve
NILEW463	4/20/2021 12:24	3.61	-0.18	Adjusted Valve, In Compliance
NILEW464	4/15/2021 9:59	1.15	1.15	Adjusted Valve
NILEW464	4/15/2021 10:00	1.12	1.13	Second Reading
NILEW464	4/16/2021 14:53	2.69	2.7	Adjusted Valve
NILEW464	4/18/2021 18:36	2.57	2.57	Adjusted Valve
NILEW464	4/18/2021 18:39	1.01	1.01	Second Reading
NILEW464	4/19/2021 9:34	2.1	2.1	Adjusted Valve
NILEW464	4/20/2021 11:47	1.94	1.3	Adjusted Valve
NILEW464	4/21/2021 12:15	-0.5	-1.05	In Compliance

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW464	7/13/2021 13:21	0.85	0.85	Adjusted Valve
NILEW464	7/13/2021 13:22	0.83	0.83	Second Reading
NILEW464	7/23/2021 11:34	-2.67	-2.75	In Compliance
NILEW464	7/30/2021 13:19	0.03	0.05	Adjusted Valve
NILEW464	7/30/2021 13:20	0.05	0.07	Second Reading
NILEW465	5/25/2021 11:18	1.39	1.39	Adjusted Valve
NILEW465	5/25/2021 11:19	1.42	1.42	Second Reading
NILEW465	6/4/2021 9:22	-0.11	-0.11	In Compliance
NILEW465	7/14/2021 11:08	2.36	2.36	Adjusted Valve
NILEW465	7/14/2021 11:09	2.01	2.01	Second Reading
NILEW465	7/29/2021 15:06	2.15	2.18	Adjusted Valve
NILEW465	7/29/2021 15:07	2.11	2.12	Second Reading
NILEW476	2/5/2021 11:30	0.19	-0.86	Adjusted Valve, In Compliance
NILEW483	4/29/2021 9:44	0.78	-5.52	Adjusted Valve, In Compliance
NILEW496	4/16/2021 14:33	0.08	0.52	Adjusted Valve
NILEW496	4/17/2021 18:23	0.3	-4.68	Adjusted Valve, In Compliance
NILEW496	4/19/2021 8:44	1.19	1.19	Adjusted Valve
NILEW496	4/20/2021 11:55	-2.11	-4.9	In Compliance
NILEW496	7/2/2021 10:35	0.1	0.13	Adjusted Valve
NILEW496	7/2/2021 10:37	0.14	0.15	Second Reading
NILEW496	7/14/2021 11:46	8.37	8.36	Adjusted Valve
NILEW496	7/14/2021 11:48	8.69	8.7	Second Reading
NILEW496	7/30/2021 13:29	12	12.01	Adjusted Valve
NILEW496	7/30/2021 13:30	12.09	12.09	Second Reading
NILEW497	4/16/2021 15:08	13.03	13.03	Adjusted Valve
NILEW497	4/17/2021 17:48	14.43	14.46	Adjusted Valve
NILEW497	4/17/2021 17:53	3.38	2.09	Second Reading
NILEW497	4/18/2021 18:48	15.09	15.09	Adjusted Valve
NILEW497	4/18/2021 18:50	5.41	5.4	Second Reading
NILEW497	4/19/2021 9:27	14.56	12.29	Adjusted Valve
NILEW497	4/20/2021 12:35	1.91	-0.61	In Compliance
NILEW497	7/30/2021 13:22	9.93	9.93	Adjusted Valve
NILEW497	7/30/2021 13:22	9.91	9.92	Second Reading

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW500	3/19/2021 10:19	3.03	-0.34	Adjusted Valve, In Compliance
NILEW510	4/20/2021 12:32	2.72	-0.54	Adjusted Valve, In Compliance
NILEW596	4/15/2021 9:14	5.88	5.88	Adjusted Valve
NILEW596	4/15/2021 9:16	5.9	5.9	Second Reading
NILEW596	4/16/2021 13:53	5.96	5.96	Adjusted Valve
NILEW596	4/17/2021 16:02	6.05	6.06	Adjusted Valve
NILEW596	4/17/2021 16:06	0.06	-0.04	Adjusted Valve, In Compliance
NILEW596	4/18/2021 16:56	5.54	5.55	Adjusted Valve
NILEW596	4/18/2021 17:00	-0.86	-0.87	In Compliance
NILEW596	4/19/2021 9:07	5.15	2.74	Adjusted Valve
NILEW596	4/20/2021 12:16	1.37	-0.26	Adjusted Valve, In Compliance
NILEW601	3/19/2021 12:13	8.24	-0.96	Adjusted Valve, In Compliance
NILEW604	3/4/2021 10:25	0.15	0.13	Adjusted Valve
NILEW604	3/4/2021 10:26	0.13	0.13	Second Reading
NILEW604	3/5/2021 9:26	-1.74	-1.74	In Compliance
NILEW615	4/15/2021 9:02	93.62	93.62	Adjusted Valve
NILEW615	4/15/2021 9:04	93.52	93.53	Second Reading
NILEW615	4/16/2021 14:18	92.06	0.07	Adjusted Valve
NILEW615	4/17/2021 15:21	0.09	0	Adjusted Valve
NILEW615	4/17/2021 15:27	93.22	92.8	Second Reading
NILEW615	4/18/2021 15:25	100.37	100.37	Adjusted Valve
NILEW615	4/19/2021 8:55	33.25	85.61	Adjusted Valve
NILEW615	4/20/2021 12:06	-3.29	-2.77	In Compliance
NILEW626	4/15/2021 9:51	1.86	1.86	Adjusted Valve
NILEW626	4/15/2021 9:53	1.9	1.89	Second Reading
NILEW626	4/16/2021 15:01	3.15	3.17	Adjusted Valve
NILEW626	4/18/2021 18:09	3.19	3.19	Adjusted Valve
NILEW626	4/18/2021 18:11	1.86	1.86	Second Reading
NILEW626	4/19/2021 9:29	2.45	2.37	Adjusted Valve
NILEW626	4/20/2021 11:44	0.79	0.56	Adjusted Valve
NILEW626	4/21/2021 12:13	-1.74	-1.74	In Compliance
NILEW626	7/30/2021 10:03	0.16	0.17	Adjusted Valve
NILEW626	7/30/2021 10:03	0.13	0.13	Second Reading
NILEW637	7/26/2021 10:52	12.93	-38.69	Adjusted Valve, In Compliance

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW663	4/15/2021 8:59	100.37	100.37	Adjusted Valve
NILEW663	4/15/2021 9:00	100.37	100.37	Second Reading
NILEW663	4/17/2021 14:33	100.37	100.37	Adjusted Valve
NILEW663	4/17/2021 14:37	100.37	100.37	Second Reading
NILEW663	4/19/2021 8:51	45.23	20.32	Adjusted Valve
NILEW663	4/20/2021 12:04	12.4	-0.29	Adjusted Valve, In Compliance
NILEW664	4/15/2021 8:47	8.96	8.96	Adjusted Valve
NILEW664	4/15/2021 8:48	8.94	8.94	Second Reading
NILEW664	4/16/2021 14:41	11.4	11.41	Adjusted Valve
NILEW664	4/17/2021 17:57	12.37	12.39	Adjusted Valve
NILEW664	4/17/2021 18:01	-0.41	-1.36	In Compliance
NILEW664	4/18/2021 16:15	12.51	12.51	Adjusted Valve
NILEW664	4/18/2021 16:18	4.61	4.17	Second Reading
NILEW664	4/19/2021 8:42	12.12	10.57	Adjusted Valve
NILEW664	4/20/2021 11:52	-2.43	-2.42	In Compliance
NILEW664	7/2/2021 10:56	6.35	6.35	Adjusted Valve
NILEW664	7/2/2021 10:59	6.35	6.35	Second Reading
NILEW664	7/14/2021 11:49	7.85	7.85	Adjusted Valve
NILEW664	7/14/2021 11:50	7.89	7.89	Second Reading
NILEW664	7/30/2021 13:25	15.31	15.31	Adjusted Valve
NILEW664	7/30/2021 13:25	15.4	15.41	In Compliance
NILEW665	7/14/2021 10:50	0.35	0.35	Adjusted Valve
NILEW665	7/14/2021 10:51	0.43	0.43	Second Reading
NILEW665	7/29/2021 14:54	0.75	0.78	Adjusted Valve
NILEW665	7/29/2021 14:54	0.75	0.78	Second Reading
NILEW665	7/29/2021 14:55	0.88	0.87	Third Reading
NILEW692	4/15/2021 9:30	12.6	12.6	Adjusted Valve
NILEW692	4/15/2021 9:32	12.56	12.57	Second Reading
NILEW692	4/16/2021 15:28	16.4	17.74	Adjusted Valve
NILEW692	4/17/2021 19:11	18.64	18.65	Adjusted Valve
NILEW692	4/17/2021 19:14	14.93	13.67	Second Reading
NILEW692	4/18/2021 17:41	16.69	19.09	Adjusted Valve
NILEW692	4/18/2021 17:44	14.97	14.97	Second Reading
NILEW692	4/19/2021 9:19	16.33	15.59	Adjusted Valve
NILEW692	4/20/2021 12:27	5.15	-0.58	Adjusted Valve, In Compliance
NILEW693	4/15/2021 9:22	3.24	3.25	Adjusted Valve
NILEW693	4/15/2021 9:24	3.29	3.29	Second Reading
NILEW693	4/16/2021 15:46	4.88	4.9	Adjusted Valve
NILEW693	4/17/2021 19:56	4.74	4.77	Adjusted Valve

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW693	4/17/2021 19:58	1.52	1.46	Second Reading
NILEW693	4/18/2021 17:18	5.16	5.18	Adjusted Valve
NILEW693	4/18/2021 17:20	3.25	3.26	Second Reading
NILEW693	4/19/2021 9:12	4.21	3.06	Adjusted Valve
NILEW693	4/20/2021 12:21	0.79	-0.25	Adjusted Valve, In Compliance
NILEW706	4/15/2021 9:18	14.67	14.67	Adjusted Valve
NILEW706	4/15/2021 9:19	14.66	14.66	Second Reading
NILEW706	4/16/2021 16:08	17.71	17.71	Adjusted Valve
NILEW706	4/17/2021 16:18	18.8	18.82	Adjusted Valve
NILEW706	4/17/2021 16:24	5.21	5.02	Second Reading
NILEW706	4/18/2021 17:07	17.29	17.29	Adjusted Valve
NILEW706	4/18/2021 17:09	4.87	4.87	Second Reading
NILEW706	4/19/2021 9:10	16.45	14.58	Adjusted Valve
NILEW706	4/20/2021 12:18	0.73	-0.57	Adjusted Valve, In Compliance
NILEW706	7/13/2021 11:20	0.77	0.76	Adjusted Valve
NILEW706	7/13/2021 11:22	0.48	0.46	Second Reading
NILEW706	7/23/2021 11:04	-43.92	-43.89	In Compliance
NILEW707	4/15/2021 8:54	13.04	13.05	Adjusted Valve
NILEW707	4/15/2021 8:56	13.1	13.1	Second Reading
NILEW707	4/16/2021 14:27	13.3	13.3	Adjusted Valve
NILEW707	4/17/2021 17:13	13.53	13.57	Adjusted Valve
NILEW707	4/17/2021 17:16	0.28	-0.27	Adjusted Valve, In Compliance
NILEW707	4/18/2021 15:33	10.92	10.93	Adjusted Valve
NILEW707	4/18/2021 15:36	-0.18	-0.18	In Compliance
NILEW707	4/19/2021 8:47	12.39	10.9	Adjusted Valve
NILEW707	4/20/2021 11:58	-3.33	-3.33	In Compliance
NILEW707	7/2/2021 10:31	4.43	4.43	Adjusted Valve
NILEW707	7/2/2021 10:32	4.5	4.49	Second Reading
NILEW707	7/14/2021 11:31	7.43	7.43	Adjusted Valve
NILEW707	7/14/2021 11:31	7.52	7.52	Second Reading
NILEW707	7/29/2021 16:02	8.5	8.5	Adjusted Valve
NILEW707	7/29/2021 16:05	9.11	9.16	Second Reading
NILEW711	4/15/2021 8:43	0.04	0.04	Adjusted Valve
NILEW711	4/15/2021 8:44	0.03	0.03	Second Reading
NILEW711	4/16/2021 14:47	0.45	0.44	Adjusted Valve
NILEW711	4/17/2021 17:34	0.55	0.59	Adjusted Valve
NILEW711	4/17/2021 17:36	-1.67	-1.63	In Compliance

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW711	4/18/2021 16:30	0.45	0.45	Adjusted Valve
NILEW711	4/18/2021 16:32	-0.13	-0.14	In Compliance
NILEW711	4/19/2021 8:39	0.12	0.12	Adjusted Valve
NILEW711	4/20/2021 11:49	0.3	0.18	Adjusted Valve
NILEW711	4/21/2021 12:18	-0.22	-0.2	In Compliance
NILEW717	3/4/2021 10:20	1.37	1.37	Adjusted Valve
NILEW717	3/4/2021 10:21	1.26	1.25	Second Reading
NILEW717	3/5/2021 9:12	-5.3	-6.63	In Compliance
NILEW726	7/14/2021 10:00	0.53	0.53	Adjusted Valve
NILEW726	7/14/2021 10:01	0.44	0.45	Second Reading
NILEW726	7/22/2021 9:04	0.89	0.89	Adjusted Valve
NILEW726	7/22/2021 9:05	0.84	0.85	Second Reading
NILEW733	5/25/2021 11:15	1.63	1.64	Adjusted Valve
NILEW733	5/25/2021 11:16	1.67	1.67	Second Reading
NILEW733	6/4/2021 9:24	-0.83	-0.84	In Compliance
NILEW733	7/14/2021 11:02	1.74	1.73	Adjusted Valve
NILEW733	7/14/2021 11:04	1.6	1.61	Second Reading
NILEW733	7/29/2021 15:29	2.3	2.31	Adjusted Valve
NILEW733	7/29/2021 15:30	2.34	2.34	Second Reading
NILEW742	7/14/2021 10:35	6.65	6.66	Adjusted Valve
NILEW742	7/14/2021 10:37	6.85	6.85	Second Reading
NILEW742	7/29/2021 14:35	18.22	18.27	Adjusted Valve
NILEW742	7/29/2021 14:35	14.95	18.83	Second Reading
NILEW744	4/15/2021 9:55	1.1	1.11	Adjusted Valve
NILEW744	4/15/2021 9:57	1.17	1.16	Second Reading
NILEW744	4/18/2021 18:17	1.78	1.8	Adjusted Valve
NILEW744	4/18/2021 18:21	0.31	0.3	Second Reading
NILEW744	4/19/2021 9:31	1.48	1.49	Adjusted Valve
NILEW744	4/20/2021 11:41	1.46	0.92	Adjusted Valve
NILEW744	4/21/2021 12:11	-0.33	-0.34	In Compliance
NILEW745	4/15/2021 9:40	12.27	12.33	Adjusted Valve
NILEW745	4/15/2021 9:42	12.3	12.3	Second Reading
NILEW745	4/16/2021 15:23	18.27	18.27	Adjusted Valve
NILEW745	4/17/2021 19:27	19.33	19.35	Adjusted Valve
NILEW745	4/17/2021 19:27	19.33	19.35	Second Reading
NILEW745	4/17/2021 19:30	5.97	5.47	Third Reading
NILEW745	4/18/2021 17:50	20.22	20.22	Adjusted Valve

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW745	4/18/2021 17:53	10.88	10.87	Second Reading
NILEW745	4/19/2021 9:20	-4.3	-3.75	In Compliance
NILEW748	4/15/2021 9:06	83.45	83.46	Adjusted Valve
NILEW748	4/15/2021 9:08	83.48	83.48	Second Reading
NILEW748	4/16/2021 14:08	99.98	99.98	Adjusted Valve
NILEW748	4/17/2021 14:54	100.37	100.37	Adjusted Valve
NILEW748	4/17/2021 14:58	99	98.49	Second Reading
NILEW748	4/18/2021 14:39	96.59	96.59	Adjusted Valve
NILEW748	4/18/2021 14:42	93.58	93.56	Second Reading
NILEW748	4/19/2021 9:01	57.12	39.98	Adjusted Valve
NILEW748	4/20/2021 12:09	1.06	-0.36	Adjusted Valve, In Compliance
NILEW752	6/18/2021 12:31	-5.37	1.21	Adjusted Valve
NILEW752	6/18/2021 12:34	2.1	2.17	Second Reading
NILEW752	6/18/2021 12:36	-0.76	-0.87	In Compliance
NILHC201	4/16/2021 14:01	0.09	0.08	Adjusted Valve
NILHC201	4/17/2021 15:41	-4.47	-4.8	In Compliance
NILMW020	7/9/2021 10:39	0.03	-2.42	Adjusted Valve, In Compliance
NILMW023	4/29/2021 12:02	0.98	-9.7	Adjusted Valve, In Compliance
NILW632A	5/12/2021 8:15	30.38	-1.21	Adjusted Valve, In Compliance
NISS17-3	3/10/2021 9:32	2.22	2.21	Adjusted Valve
NISS17-3	3/10/2021 9:33	2.22	2.22	Second Reading
NISS17-3	3/24/2021 11:02	1.55	2.16	Adjusted Valve
NISS17-3	4/8/2021 9:42	5.36	4.2	Adjusted Valve
NISS17-3	4/29/2021 9:28	4.51	4.51	Adjusted Valve
NISS17-3	5/27/2021 12:30	7.88	8.28	Well Permanently Decommissioned Due to Poor Gas Quality
NISS17-4	6/29/2021 9:54	0.34	0.4	Adjusted Valve
NISS17-4	6/29/2021 9:55	0.41	0.42	Second Reading
NISS17-4	6/29/2021 9:55	0.28	0.29	Third Reading
NISS17-4	7/14/2021 10:19	3.97	3.98	Adjusted Valve
NISS17-4	7/14/2021 10:20	3.86	3.87	Second Reading
NISS17-4	7/22/2021 10:47	3.82	3.83	Adjusted Valve
NISS17-4	7/22/2021 10:48	3.95	3.97	Second Reading
NISS17-5	3/24/2021 10:22	8.03	8.06	Adjusted Valve
NISS17-5	3/24/2021 10:24	7.67	7.7	Second Reading
NISS17-5	4/8/2021 9:04	23.35	23.35	Adjusted Valve

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NISS17-5	4/8/2021 9:05	23.57	23.57	Second Reading
NISS17-5	4/30/2021 11:15	26.37	26.38	Adjusted Valve
NISS17-5	4/30/2021 11:16	26.29	26.3	Second Reading
NISS17-5	5/14/2021 10:03	26.87	26.88	Adjusted Valve
NISS17-5	5/14/2021 10:05	26.93	26.93	Second Reading
NISS17-5	5/27/2021 12:29	13.43	14.36	Adjusted Valve
NISS17-5	6/11/2021 8:27	29.34	29.34	Adjusted Valve
NISS17-5	6/11/2021 8:29	27.71	29.35	Second Reading
NISS17-5	6/29/2021 8:53	30.65	30.65	Adjusted Valve
NISS17-5	6/29/2021 8:53	30.66	30.66	Second Reading
NISS17-5	7/14/2021 9:41	32.32	32.32	Adjusted Valve
NISS17-5	7/14/2021 9:42	32.25	32.26	Second Reading
NISS17-5	7/22/2021 10:27	32.72	32.69	Adjusted Valve
NISS17-5	7/22/2021 10:28	31.41	32.07	Well Permanently Decommissioned due to Poor Gas Quality

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

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NI3EW40R	5/13/2021 12:26	18.5	Adjusted Valve
NI3EW40R	5/13/2021 12:27	18.9	Second Reading
NI3EW40R	5/27/2021 9:15	0.7	In Compliance
NI3EW40R	6/10/2021 10:06	11.8	Adjusted Valve
NI3EW40R	6/10/2021 10:07	11.6	Second Reading
NI3EW40R	6/23/2021 9:23	10.4	Adjusted Valve
NI3EW40R	6/23/2021 9:24	9.9	Second Reading
NI3EW40R	7/12/2021 10:46	0	In Compliance
NI3EW40R	7/23/2021 9:59	17.4	Adjusted Valve
NI3EW40R	7/23/2021 10:00	17.8	Second Reading
NIHC17-1	3/24/2021 10:06	6.5	Adjusted Valve
NIHC17-1	3/24/2021 10:08	6.8	Second Reading
NIHC17-1	4/8/2021 9:15	0	In Compliance
NIHC17-5	2/24/2021 9:44	6.7	Adjusted Valve
NIHC17-5	2/24/2021 9:46	6.8	Second Reading
NIHC17-5	3/10/2021 9:29	0	In Compliance
NIHC17-5	5/14/2021 10:38	9.2	Adjusted Valve
NIHC17-5	5/14/2021 10:39	9	Second Reading
NIHC17-5	5/28/2021 12:40	0	In Compliance
NIHC17-5	6/29/2021 9:42	12.6	Adjusted Valve
NIHC17-5	6/29/2021 9:42	11.9	Second Reading
NIHC17-5	7/12/2021 14:31	19.5	Adjusted Valve
NIHC17-5	7/12/2021 14:34	20.4	Second Reading
NIHC17-5	7/22/2021 13:40	2.5	In Compliance
NIHC17-7	3/24/2021 11:15	11.9	Adjusted Valve
NIHC17-7	3/24/2021 11:16	7.2	Second Reading
NIHC17-7	4/7/2021 8:54	4.1	In Compliance
NIHC17-7	4/27/2021 8:51	18	Adjusted Valve
NIHC17-7	4/27/2021 8:54	5.7	Second Reading
NIHC17-7	5/12/2021 9:30	16.4	Adjusted Valve
NIHC17-7	5/12/2021 9:32	16.1	Second Reading
NIHC17-7	5/20/2021 8:45	17.3	Adjusted Valve
NIHC17-7	5/20/2021 8:46	20.1	Second Reading
NIHC17-7	6/9/2021 9:05	19.5	Adjusted Valve
NIHC17-7	6/9/2021 9:08	19.9	Second Reading
NIHC17-7	6/16/2021 8:36	20	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NIHC17-7	6/16/2021 8:37	20.6	Second Reading
NIHC17-7	7/13/2021 9:48	7.5	Adjusted Valve
NIHC17-7	7/13/2021 9:49	8.5	Second Reading
NIHC17-7	7/30/2021 11:03	3.1	In Compliance
NILCW001	3/2/2021 9:52	19.4	Adjusted Valve
NILCW001	3/2/2021 9:57	7.2	Second Reading
NILCW001	3/17/2021 9:18	17	Adjusted Valve
NILCW001	3/17/2021 9:19	17.5	Second Reading
NILCW001	4/7/2021 9:14	0	In Compliance
NILCW004	2/19/2021 9:50	6.9	Adjusted Valve
NILCW004	2/19/2021 9:51	6.9	Second Reading
NILCW004	3/2/2021 10:13	6.6	Adjusted Valve
NILCW004	3/2/2021 10:15	6.7	Second Reading
NILCW004	3/17/2021 9:29	0.2	In Compliance
NILEW035	2/4/2021 9:37	6.8	Adjusted Valve
NILEW035	2/4/2021 9:40	3.5	In Compliance
NILEW035	5/12/2021 10:38	5.5	Adjusted Valve
NILEW035	5/12/2021 10:39	5.4	Second Reading
NILEW035	5/25/2021 9:39	1.6	In Compliance
NILEW217	7/21/2021 11:32	19	Adjusted Valve
NILEW217	7/21/2021 11:34	20.9	Second Reading
NILEW232	2/4/2021 10:41	20.3	Adjusted Valve
NILEW232	2/4/2021 10:43	0.6	In Compliance
NILEW430	4/28/2021 10:21	18.4	Adjusted Valve
NILEW430	4/28/2021 10:22	16.4	Second Reading
NILEW430	5/12/2021 8:02	0.9	In Compliance
NILEW431	7/26/2021 11:03	11.1	Adjusted Valve
NILEW431	7/26/2021 11:06	11.8	Second Reading
NILEW463	2/5/2021 10:04	13.5	Adjusted Valve
NILEW463	2/5/2021 10:05	15.7	Second Reading
NILEW463	2/17/2021 12:53	11.5	Adjusted Valve
NILEW463	2/17/2021 12:55	11.4	Second Reading
NILEW463	3/9/2021 10:12	11.1	Adjusted Valve
NILEW463	3/9/2021 10:14	1.6	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW463	4/14/2021 14:12	8.3	Adjusted Valve
NILEW463	4/14/2021 14:13	8.4	Second Reading
NILEW463	4/15/2021 9:26	0	In Compliance
NILEW463	6/4/2021 8:54	6.4	Adjusted Valve
NILEW463	6/4/2021 8:56	2.2	In Compliance
NILEW463	7/30/2021 13:34	21.2	Adjusted Valve
NILEW463	7/30/2021 13:35	21.4	Second Reading
NILEW496	4/15/2021 8:51	20	Adjusted Valve
NILEW496	4/15/2021 8:52	20.2	Second Reading
NILEW496	4/16/2021 14:33	13.6	Adjusted Valve
NILEW496	4/17/2021 18:23	13	Adjusted Valve
NILEW496	4/18/2021 15:48	0	In Compliance
NILEW496	4/19/2021 8:44	9	Adjusted Valve
NILEW496	4/20/2021 11:55	4.9	In Compliance
NILEW500	3/8/2021 11:09	5.9	Adjusted Valve
NILEW500	3/8/2021 11:11	5.9	Second Reading
NILEW500	3/19/2021 10:19	0	In Compliance
NILEW500	4/23/2021 9:14	5.7	Adjusted Valve
NILEW500	4/23/2021 9:17	6.1	Second Reading
NILEW500	5/3/2021 11:30	6	Adjusted Valve
NILEW500	5/3/2021 11:39	6	Second Reading
NILEW500	5/27/2021 9:47	7.4	Adjusted Valve
NILEW500	5/27/2021 9:49	7.5	Second Reading
NILEW500	6/10/2021 12:29	0.5	In Compliance
NILEW500	7/12/2021 12:08	7.2	Adjusted Valve
NILEW500	7/12/2021 12:09	7.3	Second Reading
NILEW500	7/21/2021 13:39	0	In Compliance
NILEW514	3/16/2021 9:35	11.7	Adjusted Valve
NILEW514	3/16/2021 9:36	13.4	Second Reading
NILEW514	4/1/2021 12:27	2.6	In Compliance
NILEW514	7/27/2021 14:53	6.6	Adjusted Valve
NILEW514	7/27/2021 14:55	6.9	Second Reading
NILEW529	4/29/2021 9:40	19.6	Adjusted Valve
NILEW529	4/29/2021 9:40	19.6	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW529	4/29/2021 9:43	20.2	Third Reading
NILEW529	5/14/2021 10:34	18.5	Adjusted Valve
NILEW529	5/14/2021 10:35	20.4	Second Reading
NILEW529	5/27/2021 12:43	19.3	Adjusted Valve
NILEW529	5/27/2021 12:44	20.1	Second Reading
NILEW529	6/11/2021 9:21	21.2	Adjusted Valve
NILEW529	6/11/2021 9:22	21.1	Second Reading
NILEW529	6/29/2021 10:00	10.9	Adjusted Valve
NILEW529	6/29/2021 10:01	10.7	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW601	5/21/2021 8:39	7.2	Adjusted Valve
NILEW601	5/21/2021 8:40	8.8	Second Reading
NILEW601	6/2/2021 10:29	13.4	Adjusted Valve
NILEW601	6/24/2021 11:55	2.7	In Compliance
NILEW604	2/5/2021 10:03	13.4	Adjusted Valve
NILEW604	2/5/2021 10:05	2.4	In Compliance
NILEW604	2/18/2021 10:36	21	Adjusted Valve
NILEW604	2/18/2021 10:37	21	Second Reading
NILEW604	3/4/2021 10:25	17.8	Adjusted Valve
NILEW604	3/4/2021 10:26	18.1	Second Reading
NILEW604	3/5/2021 9:26	21.3	Adjusted Valve
NILEW604	3/5/2021 9:28	21.4	Second Reading
NILEW604	3/25/2021 9:57	17.6	Adjusted Valve
NILEW604	3/25/2021 9:58	17.6	Second Reading
NILEW604	4/9/2021 10:17	3.4	In Compliance
NILEW604	5/19/2021 9:45	17.3	Adjusted Valve
NILEW604	5/19/2021 9:46	16.9	Second Reading
NILEW604	6/3/2021 9:42	17.6	Adjusted Valve
NILEW604	6/3/2021 9:42	16.8	Second Reading
NILEW604	6/18/2021 10:39	0	In Compliance
NILEW640	2/10/2021 10:51	5.2	Adjusted Valve
NILEW640	2/10/2021 10:52	4.6	In Compliance
NILEW640	3/2/2021 10:56	8.4	Adjusted Valve
NILEW640	3/2/2021 10:58	6.9	Second Reading
NILEW640	3/17/2021 10:06	10	Adjusted Valve
NILEW640	3/17/2021 10:07	9.6	Second Reading
NILEW640	4/7/2021 10:01	0	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW647	4/5/2021 10:29	10.6	Adjusted Valve
NILEW647	4/5/2021 10:30	11.2	Second Reading
NILEW647	4/20/2021 13:08	0	In Compliance
NILEW648	2/5/2021 10:22	7.8	Adjusted Valve
NILEW648	2/5/2021 10:25	6.9	Second Reading
NILEW648	2/17/2021 13:33	4.8	In Compliance
NILEW648	5/13/2021 9:53	5.9	Adjusted Valve
NILEW648	5/13/2021 9:55	13	Second Reading
NILEW648	5/19/2021 9:43	2.9	In Compliance
NILEW648	6/18/2021 10:32	7.6	Adjusted Valve
NILEW648	6/18/2021 10:34	4.9	In Compliance
NILEW650	4/9/2021 10:34	13.6	Adjusted Valve
NILEW650	4/9/2021 10:35	13.8	Second Reading
NILEW650	4/20/2021 13:12	0	In Compliance
NILEW653	5/19/2021 9:16	5.4	Adjusted Valve
NILEW653	5/19/2021 9:17	1.5	In Compliance
NILEW653	7/7/2021 9:36	17.8	Adjusted Valve
NILEW653	7/7/2021 9:38	1	In Compliance
NILEW656	6/23/2021 8:46	20	Adjusted Valve
NILEW656	6/23/2021 8:46	20.1	Second Reading
NILEW656	7/8/2021 12:26	18.6	Adjusted Valve
NILEW656	7/8/2021 12:27	18.7	Second Reading
NILEW656	7/23/2021 9:11	0.4	In Compliance
NILEW660	2/11/2021 8:54	17.1	Adjusted Valve
NILEW660	2/11/2021 8:55	12.4	Second Reading
NILEW660	2/24/2021 9:10	7.9	Adjusted Valve
NILEW660	2/24/2021 9:10	7.9	Second Reading
NILEW660	2/24/2021 9:14	5.6	Third Reading
NILEW660	3/10/2021 9:36	4.5	In Compliance
NILEW660	3/24/2021 10:48	9.9	Adjusted Valve
NILEW660	3/24/2021 10:50	10.4	Second Reading
NILEW660	4/8/2021 9:48	11.6	Adjusted Valve
NILEW660	4/8/2021 9:49	9.4	Second Reading
NILEW660	4/29/2021 9:47	15.4	Adjusted Valve
NILEW660	4/29/2021 9:48	15.2	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW660	5/14/2021 10:28	14	Adjusted Valve
NILEW660	5/14/2021 10:29	14	Second Reading
NILEW660	5/21/2021 10:22	14.2	Adjusted Valve
NILEW660	5/21/2021 10:23	14	Second Reading
NILEW660	6/11/2021 9:17	10.6	Adjusted Valve
NILEW660	6/11/2021 9:18	10.6	Second Reading
NILEW660	6/29/2021 9:35	7.8	Adjusted Valve
NILEW660	6/29/2021 9:36	7.8	Second Reading
NILEW660	7/12/2021 14:48	11.9	Adjusted Valve
NILEW660	7/12/2021 14:49	12.1	Second Reading
NILEW660	7/22/2021 13:41	15	Adjusted Valve
NILEW660	7/22/2021 13:43	15.6	Well Permanently Decommissioned due to Poor Gas Quality
NILEW666	3/19/2021 12:13	9.9	Adjusted Valve
NILEW666	3/19/2021 12:13	9.9	Second Reading
NILEW666	3/19/2021 12:14	15	Third Reading
NILEW666	4/1/2021 12:06	0	In Compliance
NILEW666	7/29/2021 14:58	9.1	Adjusted Valve
NILEW666	7/29/2021 15:03	4.9	In Compliance
NILEW676	2/11/2021 10:49	16.9	Adjusted Valve
NILEW676	2/11/2021 10:50	16.7	Second Reading
NILEW676	2/24/2021 11:41	21.4	Adjusted Valve
NILEW676	2/24/2021 11:42	21.4	Second Reading
NILEW676	3/10/2021 10:27	21.8	Adjusted Valve
NILEW676	3/10/2021 10:28	21.9	Second Reading
NILEW676	3/24/2021 12:12	18.2	Adjusted Valve
NILEW676	3/24/2021 12:12	19.8	Second Reading
NILEW676	4/8/2021 11:16	17	Adjusted Valve
NILEW676	4/29/2021 10:45	15.2	Adjusted Valve
NILEW676	4/29/2021 10:45	15.1	Second Reading
NILEW676	5/13/2021 12:39	15.2	Adjusted Valve
NILEW676	5/13/2021 12:40	14	Second Reading
NILEW676	5/27/2021 9:27	16.5	Adjusted Valve
NILEW676	6/9/2021 12:01	14.1	Adjusted Valve
NILEW676	6/9/2021 12:02	13.9	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW677	2/18/2021 9:55	6.3	Adjusted Valve
NILEW677	2/18/2021 9:56	6.2	Second Reading
NILEW677	3/4/2021 10:06	4.4	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW677	5/19/2021 9:02	16.3	Adjusted Valve
NILEW677	5/19/2021 9:03	17.6	Second Reading
NILEW677	6/3/2021 9:06	16.5	Adjusted Valve
NILEW677	6/3/2021 9:07	20.6	Second Reading
NILEW677	6/18/2021 9:20	17	Adjusted Valve
NILEW677	6/18/2021 9:22	17.7	Second Reading
NILEW677	7/7/2021 9:05	18.6	Adjusted Valve
NILEW677	7/7/2021 9:07	19.4	Second Reading
NILEW677	7/20/2021 8:48	11.9	Adjusted Valve
NILEW677	7/20/2021 8:49	12.2	Second Reading
NILEW681	2/11/2021 9:41	9.1	Adjusted Valve
NILEW681	2/11/2021 9:43	0.4	In Compliance
NILEW683	2/5/2021 11:32	5.1	Adjusted Valve
NILEW683	2/5/2021 11:35	6	Second Reading
NILEW683	2/17/2021 13:26	3.6	In Compliance
NILEW683	3/5/2021 9:59	12.1	Adjusted Valve
NILEW683	3/5/2021 10:04	15.8	Second Reading
NILEW683	3/17/2021 10:30	8	Adjusted Valve
NILEW683	3/17/2021 10:31	7.1	Second Reading
NILEW683	3/25/2021 10:28	2.4	In Compliance
NILEW683	4/27/2021 12:04	5.3	Adjusted Valve
NILEW683	4/27/2021 12:06	4.9	In Compliance
NILEW683	7/7/2021 10:37	14.5	Adjusted Valve
NILEW683	7/7/2021 10:39	4.9	In Compliance
NILEW685	7/30/2021 9:42	20.1	Adjusted Valve
NILEW685	7/30/2021 9:42	20.4	Second Reading
NILEW686	2/10/2021 13:11	20.8	Adjusted Valve
NILEW686	2/10/2021 13:12	20.8	Second Reading
NILEW686	2/24/2021 11:34	20.7	Adjusted Valve
NILEW686	2/24/2021 11:35	20.7	Second Reading
NILEW686	3/10/2021 10:19	13.2	Adjusted Valve
NILEW686	3/10/2021 10:19	13.2	Second Reading
NILEW686	3/10/2021 10:25	13.1	Third Reading
NILEW686	3/24/2021 12:07	9.6	Adjusted Valve
NILEW686	3/24/2021 12:08	9.6	Second Reading
NILEW686	4/8/2021 11:07	6.8	Adjusted Valve
NILEW686	4/8/2021 11:08	6.8	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW686	4/29/2021 10:39	15	Adjusted Valve
NILEW686	4/29/2021 10:40	15	Second Reading
NILEW686	5/13/2021 12:34	14.5	Adjusted Valve
NILEW686	5/13/2021 12:35	15.1	Second Reading
NILEW686	5/27/2021 9:23	11.9	Adjusted Valve
NILEW686	5/27/2021 9:24	12.2	Second Reading
NILEW686	6/9/2021 11:49	7.7	Adjusted Valve
NILEW686	6/9/2021 11:51	7.5	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW694	5/27/2021 8:55	11.1	Adjusted Valve
NILEW694	5/27/2021 8:56	10.8	Second Reading
NILEW694	6/10/2021 9:22	4.9	In Compliance
NILEW695	2/10/2021 13:47	18.1	Adjusted Valve
NILEW695	2/10/2021 13:49	18	Second Reading
NILEW695	2/24/2021 10:27	2.2	In Compliance
NILEW696	7/8/2021 15:16	18.9	Adjusted Valve
NILEW696	7/8/2021 15:18	0	In Compliance
NILEW697	6/29/2021 9:58	19.3	Adjusted Valve
NILEW697	6/29/2021 9:58	19.3	Second Reading
NILEW697	7/12/2021 14:43	0	In Compliance
NILEW698	2/24/2021 8:36	7	Adjusted Valve
NILEW698	2/24/2021 8:36	7.2	Second Reading
NILEW698	3/2/2021 9:19	7.2	Adjusted Valve
NILEW698	3/2/2021 9:21	6.9	Second Reading
NILEW698	3/24/2021 10:41	6.3	Adjusted Valve
NILEW698	3/24/2021 10:42	6.5	Second Reading
NILEW698	4/8/2021 9:40	0.2	In Compliance
NILEW698	5/27/2021 8:32	6.8	Adjusted Valve
NILEW698	5/27/2021 8:33	4.9	In Compliance
NILEW698	6/29/2021 9:30	17.6	Adjusted Valve
NILEW698	6/29/2021 9:30	18.8	Second Reading
NILEW698	7/12/2021 14:52	19.8	Adjusted Valve
NILEW698	7/12/2021 14:53	20	Second Reading
NILEW698	7/22/2021 13:47	19.9	Adjusted Valve
NILEW698	7/22/2021 13:48	20.4	Second Reading
NILEW699	4/8/2021 10:24	11	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW699	4/8/2021 10:26	4.8	In Compliance
NILEW700	2/10/2021 9:15	10.4	Adjusted Valve
NILEW700	2/10/2021 9:17	8.5	Second Reading
NILEW700	2/19/2021 9:15	8.7	Adjusted Valve
NILEW700	2/19/2021 9:15	8.9	Second Reading
NILEW700	3/2/2021 9:15	10.9	Adjusted Valve
NILEW700	3/2/2021 9:16	10	Second Reading
NILEW700	3/24/2021 10:01	2.9	In Compliance
NILEW704	3/19/2021 9:02	17.6	Adjusted Valve
NILEW704	3/19/2021 9:03	20.3	Second Reading
NILEW704	4/1/2021 11:58	2.1	In Compliance
NILEW704	5/12/2021 10:19	11.8	Adjusted Valve
NILEW704	5/12/2021 10:20	12.2	Second Reading
NILEW704	5/25/2021 9:25	11.7	Adjusted Valve
NILEW704	5/25/2021 9:33	11.6	Second Reading
NILEW704	6/8/2021 9:33	3.4	In Compliance
NILEW704	7/21/2021 8:52	5.7	Adjusted Valve
NILEW704	7/21/2021 8:55	10.4	Second Reading
NILEW711	2/5/2021 13:00	10.9	Adjusted Valve
NILEW711	2/5/2021 13:02	11.3	Second Reading
NILEW711	2/17/2021 12:41	9.1	Adjusted Valve
NILEW711	2/17/2021 12:42	9.2	Second Reading
NILEW711	3/9/2021 9:00	9.3	Adjusted Valve
NILEW711	3/9/2021 9:02	9.5	Second Reading
NILEW711	3/19/2021 11:32	7.7	Adjusted Valve
NILEW711	3/19/2021 11:37	7.4	Second Reading
NILEW711	4/12/2021 10:33	2.5	In Compliance
NILEW711	4/14/2021 13:39	10.9	Adjusted Valve
NILEW711	4/14/2021 13:41	15.5	Second Reading
NILEW711	4/15/2021 8:43	0	In Compliance
NILEW711	5/7/2021 11:20	5.3	Adjusted Valve
NILEW711	5/7/2021 11:50	5.2	Second Reading
NILEW711	5/12/2021 10:19	5.6	Adjusted Valve
NILEW711	5/13/2021 13:49	0.7	In Compliance
NILEW714	3/19/2021 12:25	5.5	Adjusted Valve
NILEW714	3/19/2021 12:27	4.9	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW714	7/9/2021 11:39	5.4	Adjusted Valve
NILEW714	7/9/2021 11:41	6.5	Second Reading
NILEW714	7/21/2021 11:26	0.9	In Compliance
NILEW717	2/18/2021 10:25	15.2	Adjusted Valve
NILEW717	2/18/2021 10:26	15.5	Second Reading
NILEW717	3/4/2021 10:20	0.4	In Compliance
NILEW717	6/18/2021 10:03	16	Adjusted Valve
NILEW717	6/18/2021 10:05	17.5	Second Reading
NILEW717	7/1/2021 14:06	0.1	In Compliance
NILEW719	4/9/2021 9:25	13.4	Adjusted Valve
NILEW719	4/9/2021 9:28	14.4	Second Reading
NILEW719	4/20/2021 13:05	0	In Compliance
NILEW720	7/20/2021 8:54	10.5	Adjusted Valve
NILEW720	7/20/2021 8:55	10.6	Second Reading
NILEW723	2/5/2021 11:01	15.4	(Initial Exceedance was on 12/16/20) Adjusted Valve
NILEW723	2/5/2021 11:02	15.4	Second Reading
NILEW723	2/5/2021 11:03	15.1	Third Reading
NILEW723	2/18/2021 10:53	0.1	In Compliance
NILEW723	3/5/2021 9:42	6.9	Adjusted Valve
NILEW723	3/5/2021 9:43	6.9	Second Reading
NILEW723	3/17/2021 10:43	10.1	Adjusted Valve
NILEW723	3/17/2021 10:44	10.8	Second Reading
NILEW723	3/25/2021 10:12	14.1	Adjusted Valve
NILEW723	3/25/2021 10:12	14.2	Second Reading
NILEW723	4/9/2021 10:38	4.9	In Compliance
NILEW723	7/7/2021 10:24	10	Adjusted Valve
NILEW723	7/7/2021 10:26	11.1	Second Reading
NILEW723	7/20/2021 9:36	14	Adjusted Valve
NILEW723	7/20/2021 9:36	14.2	Second Reading
NILEW726	3/24/2021 11:32	5.4	Adjusted Valve
NILEW726	3/24/2021 11:33	5.4	Second Reading
NILEW726	4/8/2021 11:38	0	In Compliance
NILEW728	4/30/2021 9:20	13.3	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW728	4/30/2021 9:21	13.2	Second Reading
NILEW728	5/12/2021 9:57	4.8	In Compliance
NILEW728	5/18/2021 8:27	7.3	Adjusted Valve
NILEW728	5/18/2021 8:30	6.1	Second Reading
NILEW728	6/2/2021 8:11	3.8	In Compliance
NILEW728	6/17/2021 8:28	6.4	Adjusted Valve
NILEW728	6/17/2021 8:32	6.6	Second Reading
NILEW728	7/1/2021 14:13	14.5	Adjusted Valve
NILEW728	7/1/2021 14:17	15.2	Second Reading
NILEW728	7/29/2021 13:50	6.5	Adjusted Valve
NILEW728	7/29/2021 13:50	6.5	Second Reading
NILEW728	7/29/2021 13:51	4.9	In Compliance
NILEW730	2/4/2021 11:39	15.2	Adjusted Valve
NILEW730	2/4/2021 11:41	15.4	Second Reading
NILEW730	2/17/2021 12:25	15.1	Adjusted Valve
NILEW730	2/17/2021 12:26	15.2	Second Reading
NILEW730	7/14/2021 11:16	0	In Compliance
NILEW744	2/4/2021 11:56	14.5	Adjusted Valve
NILEW744	2/4/2021 11:56	14.5	Second Reading
NILEW744	2/4/2021 11:57	14.3	Third Reading
NILEW744	2/17/2021 12:30	7.7	Adjusted Valve
NILEW744	2/17/2021 12:32	7.3	Second Reading
NILEW744	3/9/2021 10:44	7.6	Adjusted Valve
NILEW744	3/9/2021 10:46	1.6	In Compliance
NILEW744	5/7/2021 7:19	8.7	Adjusted Valve
NILEW744	5/7/2021 7:20	9.6	Second Reading
NILEW744	5/12/2021 10:10	7.1	Adjusted Valve
NILEW744	5/12/2021 10:11	8.2	Second Reading
NILEW744	5/21/2021 9:35	4.8	In Compliance
NILEW747	7/21/2021 10:33	9.4	Adjusted Valve
NILEW747	7/21/2021 10:34	9.8	Second Reading
NILEW748	4/19/2021 9:01	17.2	Adjusted Valve
NILEW748	4/20/2021 12:09	0	In Compliance
NILEW748	5/21/2021 8:33	14.6	Adjusted Valve
NILEW748	5/21/2021 8:35	11.2	Second Reading
NILEW748	6/2/2021 10:32	2.1	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW748	6/24/2021 11:51	8.6	Adjusted Valve
NILEW748	6/24/2021 11:52	4.4	In Compliance
NILEW748	7/29/2021 12:31	12	Adjusted Valve
NILEW750	6/4/2021 8:16	6.3	Adjusted Valve
NILEW750	6/4/2021 8:18	6.3	Second Reading
NILEW750	6/18/2021 8:33	0.1	In Compliance
NILEW753	4/29/2021 9:06	6.9	Adjusted Valve
NILEW753	4/29/2021 9:09	7.3	Second Reading
NILEW753	5/12/2021 10:37	9	Adjusted Valve
NILEW753	5/12/2021 10:56	9	Second Reading
NILEW753	5/25/2021 9:09	7.7	Adjusted Valve
NILEW753	5/25/2021 9:10	11.7	Second Reading
NILEW753	6/8/2021 9:20	4.9	In Compliance
NILEW753	7/8/2021 9:26	5	Adjusted Valve
NILEW753	7/8/2021 9:29	4.9	In Compliance
NILEW753	7/21/2021 9:29	8.1	Adjusted Valve
NILEW753	7/21/2021 9:30	8.6	Second Reading
NILEW760	2/18/2021 9:44	6.1	Adjusted Valve
NILEW760	2/18/2021 9:45	5.9	Second Reading
NILEW760	3/4/2021 10:00	0	In Compliance
NILEW760	3/25/2021 8:59	6.5	Adjusted Valve
NILEW760	3/25/2021 9:00	6.8	Second Reading
NILEW760	4/8/2021 11:48	0	In Compliance
NILEW760	4/27/2021 10:30	8.1	Adjusted Valve
NILEW760	4/27/2021 10:32	8.7	Second Reading
NILEW760	5/12/2021 9:41	0.9	In Compliance
NILEW760	6/3/2021 8:58	9.2	Adjusted Valve
NILEW760	6/3/2021 8:59	10.9	Second Reading
NILEW760	6/18/2021 9:06	10	Adjusted Valve
NILEW760	6/18/2021 9:08	13.8	Second Reading
NILEW760	7/7/2021 8:55	0	In Compliance
NILEW760	7/20/2021 8:40	8	Adjusted Valve
NILEW760	7/20/2021 8:43	7.4	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW761	4/27/2021 10:23	7.3	Adjusted Valve
NILEW761	4/27/2021 10:24	7.6	Second Reading
NILEW761	5/12/2021 9:44	0.1	In Compliance
NILEW761	6/3/2021 8:51	10.4	Adjusted Valve
NILEW761	6/3/2021 8:53	10.4	Second Reading
NILEW761	6/18/2021 8:56	5.8	Adjusted Valve
NILEW761	6/18/2021 8:58	6.5	Second Reading
NILEW761	7/7/2021 8:48	0	In Compliance
NILEW762	4/27/2021 12:15	7	Adjusted Valve
NILEW762	4/27/2021 12:16	7.5	Second Reading
NILEW762	5/12/2021 9:47	7.4	Adjusted Valve
NILEW762	5/12/2021 9:49	7.6	Second Reading
NILEW762	5/19/2021 10:18	7.7	Adjusted Valve
NILEW762	5/19/2021 10:19	7.3	Second Reading
NILEW762	6/3/2021 10:11	0	In Compliance
NILEW762	6/18/2021 8:51	8.5	Adjusted Valve
NILEW762	6/18/2021 8:53	10.9	Second Reading
NILEW762	7/1/2021 14:32	6	Adjusted Valve
NILEW762	7/1/2021 14:38	6.7	Second Reading
NILEW762	7/20/2021 8:30	0	In Compliance
NILEW763	2/5/2021 12:59	7.4	Adjusted Valve
NILEW763	2/5/2021 13:01	10.5	Second Reading
NILEW763	2/17/2021 10:53	4.9	In Compliance
NILEW763	3/3/2021 8:38	15.6	Adjusted Valve
NILEW763	3/3/2021 8:39	16.5	Second Reading
NILEW763	3/16/2021 9:30	7	Adjusted Valve
NILEW763	3/16/2021 9:30	7	Second Reading
NILEW763	3/16/2021 9:31	7.9	Third Reading
NILEW763	4/5/2021 8:35	14.2	Adjusted Valve
NILEW763	4/5/2021 8:36	14.8	Second Reading
NILEW763	4/28/2021 9:01	0.4	In Compliance
NILEW764	2/17/2021 8:47	11.7	Adjusted Valve
NILEW764	2/17/2021 8:50	14	Second Reading
NILEW764	3/3/2021 8:46	1.3	In Compliance
NILEW769	3/25/2021 11:24	10.7	Adjusted Valve
NILEW769	3/25/2021 11:26	2.5	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW769	4/12/2021 10:17	11.3	Adjusted Valve
NILEW769	4/12/2021 10:18	12.8	Second Reading
NILEW769	4/20/2021 12:52	1.3	In Compliance
NILEW769	7/21/2021 14:11	13.5	Adjusted Valve
NILEW769	7/21/2021 14:12	14.4	Second Reading
NILEW769	7/21/2021 14:17	14.2	Third Reading
NILLEW16	2/11/2021 14:06	17.9	(Initial Exceedance was on 12/11/20) Adjusted Valve
NILLEW16	2/11/2021 14:06	17.9	Second Reading
NILLEW16	2/11/2021 14:07	17.6	Third Reading
NILLEW16	2/25/2021 10:27	19.6	Adjusted Valve
NILLEW16	2/25/2021 10:30	19.6	Second Reading
NILLEW16	3/8/2021 9:15	1.7	In Compliance
NILLEW16	7/13/2021 12:28	9.6	Adjusted Valve
NILLEW16	7/13/2021 12:29	7	Second Reading
NILLEW16	7/27/2021 13:42	8.9	Adjusted Valve
NILLEW16	7/27/2021 13:45	9.6	Second Reading
NILMW002	6/24/2021 11:10	18.6	Adjusted Valve
NILMW002	6/24/2021 11:12	18.9	Second Reading
NILMW002	7/8/2021 12:47	17.8	Adjusted Valve
NILMW002	7/8/2021 12:48	17.9	Second Reading
NILMW002	7/28/2021 12:03	8.4	Adjusted Valve
NILMW002	7/28/2021 12:05	8.4	Second Reading
NILMW016	4/30/2021 8:54	5.2	Adjusted Valve
NILMW016	4/30/2021 8:55	6.5	Second Reading
NILMW016	5/13/2021 13:26	0	In Compliance
NILMW019	2/4/2021 11:04	17.2	Adjusted Valve
NILMW019	2/4/2021 11:06	20.1	Second Reading
NILMW019	2/17/2021 12:21	3.1	In Compliance
NILMW019	5/25/2021 11:00	9.6	Adjusted Valve
NILMW019	5/25/2021 11:01	9.5	Second Reading
NILMW019	6/8/2021 10:55	6.5	Adjusted Valve
NILMW019	6/22/2021 10:37	6.1	Adjusted Valve
NILMW019	6/22/2021 10:38	7.5	Second Reading
NILMW019	7/9/2021 11:56	1.6	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILMW020	5/25/2021 10:52	6.6	Adjusted Valve
NILMW020	5/25/2021 10:53	6.6	Second Reading
NILMW020	6/8/2021 10:49	0	In Compliance
NILMW020	6/22/2021 10:28	7.9	Adjusted Valve
NILMW020	6/22/2021 10:29	3.4	In Compliance
NILMW020	7/21/2021 10:45	7.4	Adjusted Valve
NILMW020	7/21/2021 10:47	7.2	Second Reading
NILMW030	2/4/2021 9:31	20.2	Adjusted Valve
NILMW030	2/4/2021 9:33	15	Second Reading
NILMW030	2/17/2021 12:13	3.5	In Compliance
NILMW030	5/12/2021 10:52	5.5	Adjusted Valve
NILMW030	5/12/2021 10:53	5.5	Second Reading
NILMW030	5/25/2021 9:42	4.6	In Compliance
NILMW031	3/19/2021 9:25	10	Adjusted Valve
NILMW031	3/19/2021 9:26	9.9	Second Reading
NILMW031	4/1/2021 11:48	3.9	In Compliance
NILMW031	4/29/2021 11:08	6.6	Adjusted Valve
NILMW031	4/29/2021 11:12	10.2	Second Reading
NILMW031	5/12/2021 11:06	4.8	In Compliance
NILMW031	6/8/2021 10:09	8	Adjusted Valve
NILMW031	6/8/2021 10:10	8.6	Second Reading
NILMW031	6/22/2021 9:30	2.5	In Compliance
NILMW032	2/25/2021 9:37	8.7	Adjusted Valve
NILMW032	2/25/2021 9:39	7.4	Second Reading
NILMW032	3/8/2021 9:59	2	In Compliance
NILMW034	2/25/2021 9:30	7.9	Adjusted Valve
NILMW034	2/25/2021 9:31	8	Second Reading
NILMW034	3/8/2021 9:51	6.1	Adjusted Valve
NILMW034	3/8/2021 9:52	6	Second Reading
NILMW034	3/19/2021 9:19	4.1	In Compliance
NILMW034	7/8/2021 13:22	5.9	Adjusted Valve
NILMW034	7/8/2021 13:24	5.9	Second Reading
NILMW034	7/20/2021 14:37	6.8	Adjusted Valve
NILMW034	7/20/2021 14:42	18.1	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILW475A	2/5/2021 11:19	10.5	(Initial Exceedance was on 1/27/21) Adjusted Valve
NILW475A	2/5/2021 11:21	18.1	Second Reading
NILW475A	2/18/2021 11:04	13.2	Adjusted Valve
NILW475A	3/5/2021 9:55	13.7	Adjusted Valve
NILW475A	3/5/2021 9:55	13.1	Second Reading
NILW475A	3/25/2021 10:23	8.7	Adjusted Valve
NILW475A	3/25/2021 10:24	8.5	Second Reading
NILW475A	4/9/2021 10:51	10.8	Adjusted Valve
NILW475A	4/9/2021 10:52	10.8	Second Reading
NILW475A	4/27/2021 11:56	8.7	Adjusted Valve
NILW475A	5/13/2021 7:48	12.6	Adjusted Valve
NILW475A	5/13/2021 8:48	15.4	Second Reading
NILW475A	5/19/2021 10:06	8.4	Adjusted Valve
NILW475A	5/19/2021 10:07	8.7	Second Reading
NILW475A	5/27/2021 10:05	9.8	Well Permanently Decommissioned Due to Poor Gas Quality
NILW573A	6/10/2021 9:57	19.6	Adjusted Valve
NILW573A	6/10/2021 9:57	20.1	Second Reading
NILW573A	6/23/2021 9:17	20.7	Adjusted Valve
NILW573A	6/23/2021 9:17	21	Second Reading
NILW573A	7/12/2021 11:31	18.2	Adjusted Valve
NILW573A	7/12/2021 11:32	19.8	Second Reading
NILW573A	7/23/2021 10:12	21.5	Adjusted Valve
NILW573A	7/23/2021 10:14	21.7	Second Reading
NILW574A	3/24/2021 12:01	19.5	Adjusted Valve
NILW574A	3/24/2021 12:01	19.9	Second Reading
NILW574A	4/8/2021 11:00	4.9	In Compliance
NILW574A	6/10/2021 10:02	9.7	Adjusted Valve
NILW574A	6/10/2021 10:03	7.2	Second Reading
NILW574A	6/23/2021 9:20	1.9	In Compliance
NILW574A	7/23/2021 10:07	5.7	Adjusted Valve
NILW574A	7/23/2021 10:09	5.7	Second Reading
NILW632A	4/28/2021 9:18	7.8	Adjusted Valve
NILW632A	4/28/2021 9:20	5.7	Second Reading
NILW632A	5/12/2021 8:15	0	In Compliance
NISS17-1	4/7/2021 9:00	17.2	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NISS17-1	4/7/2021 9:01	17.8	Second Reading
NISS17-1	4/20/2021 12:59	0	In Compliance
NISS17-4	3/10/2021 9:20	14.9	Adjusted Valve
NISS17-4	3/10/2021 9:21	14.9	Second Reading
NISS17-4	3/24/2021 11:06	16.3	Adjusted Valve
NISS17-4	3/24/2021 11:07	16.7	Second Reading
NISS17-4	4/8/2021 10:07	2.6	In Compliance
NISS17-4	4/29/2021 9:14	7.4	Adjusted Valve
NISS17-4	4/29/2021 9:15	9.5	Second Reading
NISS17-4	5/12/2021 8:51	4.8	In Compliance
NISS17-4	5/27/2021 12:32	8.3	Adjusted Valve
NISS17-4	5/27/2021 12:33	7.9	Second Reading
NISS17-4	6/11/2021 9:09	7.7	Adjusted Valve
NISS17-4	6/11/2021 9:10	11.5	Second Reading
NISS17-4	6/29/2021 9:54	1.2	In Compliance
NISS17-4	6/29/2021 9:55	10.5	Adjusted Valve
NISS17-4	6/29/2021 9:55	10.5	Second Reading
NISS17-4	7/14/2021 10:19	5.1	Adjusted Valve
NISS17-4	7/14/2021 10:20	4.7	In Compliance
NLCR1112	2/12/2021 8:42	19.9	Adjusted Valve
NLCR1112	2/12/2021 8:43	19.9	Second Reading
NLCR1112	2/17/2021 9:22	1.8	In Compliance
NLCRST05	7/29/2021 14:19	11.2	Adjusted Valve
NLCRST05	7/29/2021 14:23	15.5	Second Reading

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

Table 5. Wells with Temperature Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
NILEW476	7/8/2021 16:11	133.4	133.5	Adjusted Valve
NILEW476	7/8/2021 16:11	133.4	133.5	Second Reading
NILEW476	7/21/2021 13:29	129.8	130.2	In Compliance
NILEW688	5/13/2021 12:51	131	131	Adjusted Valve
NILEW688	5/13/2021 12:53	131.1	131.1	Second Reading
NILEW688	5/27/2021 9:57	129.2	129.1	In Compliance
NILEW690	2/5/2021 11:07	134.8	132.1	(Initial Exceedance was on 11/5/20) Adjusted Valve
NILEW690	2/5/2021 11:12	134.6	131.5	Second Reading
NILEW690	2/24/2021 13:01	134	134.1	Adjusted Valve
NILEW690	2/24/2021 13:03	134.3	134.2	Second Reading
NILEW690	3/2/2021 13:54	133.6	131.6	Adjusted Valve
NILEW690	3/2/2021 13:56	128.8	128.8	In Compliance
NILEW690	3/19/2021 10:01	134.3	134.3	Adjusted Valve
NILEW690	3/19/2021 10:07	134.2	134.2	Second Reading
NILEW690	4/1/2021 12:22	135	135	Adjusted Valve
NILEW690	4/12/2021 9:57	133.7	133.8	Second Reading
NILEW690	4/23/2021 10:05	134.2	134.1	Adjusted Valve
NILEW690	4/23/2021 10:07	133.6	133.3	Second Reading
NILEW690	5/12/2021 11:21	130.5	130.6	In Compliance
NILEW690	5/27/2021 12:20	133.5	133.5	Adjusted Valve
NILEW690	5/27/2021 12:21	133.7	133.7	Second Reading
NILEW690	6/10/2021 13:32	133.4	133.5	Adjusted Valve
NILEW690	6/10/2021 13:40	133.4	133.4	Second Reading
NILEW690	6/24/2021 8:48	132.4	132.5	Adjusted Valve
NILEW690	6/24/2021 8:49	132.6	132.6	Second Reading
NILEW690	7/8/2021 16:00	135.3	135.3	Adjusted Valve
NILEW690	7/8/2021 16:00	135.3	135.3	Second Reading
NILEW690	7/22/2021 14:10	133.4	133.4	Adjusted Valve
NILEW690	7/22/2021 14:11	133.2	133.4	Second Reading
NILEW701	2/5/2021 12:09	136.8	136.5	Adjusted Valve
NILEW701	2/5/2021 12:12	136.8	136.7	Second Reading
NILEW701	2/17/2021 13:17	133	133.1	Adjusted Valve
NILEW701	3/8/2021 11:36	135.7	136.2	Adjusted Valve
NILEW701	3/8/2021 11:37	136.9	137	Second Reading
NILEW701	3/19/2021 9:48	137.9	137.9	Adjusted Valve
NILEW701	3/19/2021 9:49	137.9	137.9	Second Reading
NILEW701	4/12/2021 8:51	136.2	135.6	Adjusted Valve
NILEW701	4/12/2021 8:52	134.1	134	Second Reading
NILEW701	4/29/2021 11:14	134.6	134.6	Adjusted Valve
NILEW701	4/29/2021 11:15	134.6	134.6	Second Reading
NILEW701	5/13/2021 14:18	134.3	134.4	Adjusted Valve
NILEW701	5/13/2021 14:20	134.2	134.3	Second Reading
NILEW701	5/21/2021 10:03	129.9	129.9	In Compliance
NILEW701	6/10/2021 12:59	135	135	Adjusted Valve

Table 5. Wells with Temperature Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
NILEW701	6/10/2021 13:01	134.9	134.8	Second Reading
NILEW701	6/24/2021 9:09	134.3	134.4	Adjusted Valve
NILEW701	6/24/2021 9:10	133.9	133.9	Second Reading
NILEW701	7/8/2021 14:59	137.2	137.9	Adjusted Valve
NILEW701	7/8/2021 14:59	137.2	137.9	Second Reading
NILEW701	7/8/2021 15:01	136.4	137.6	Third Reading
NILEW701	7/21/2021 14:48	136.1	136.9	Adjusted Valve
NILEW701	7/21/2021 14:50	137.1	137.1	Second Reading
NILEW703	2/5/2021 11:51	132.3	132.3	(Initial Exceedance was on 12/21/20) Adjusted Valve
NILEW703	2/5/2021 11:54	132.2	132.2	Second Reading
NILEW703	2/25/2021 10:21	130.5	130.5	In Compliance
NILEW703	7/8/2021 14:54	132.4	132.5	Adjusted Valve
NILEW703	7/14/2021 14:16	129.7	129.7	In Compliance
NILEW707	3/19/2021 11:50	132.6	132.6	Adjusted Valve
NILEW707	3/19/2021 11:52	132.4	132.5	Second Reading
NILEW707	4/1/2021 12:13	133	132.6	Adjusted Valve
NILEW707	4/1/2021 12:14	133.1	133.1	Second Reading
NILEW707	4/12/2021 10:45	131.8	131.7	Adjusted Valve
NILEW707	4/12/2021 10:47	131.6	131.7	Second Reading
NILEW707	4/14/2021 13:29	134.2	134.3	Adjusted Valve
NILEW707	4/15/2021 8:54	67.5	67.6	In Compliance
NILEW707	4/18/2021 15:36	137.3	137.4	Adjusted Valve
NILEW707	4/19/2021 8:47	59.8	65	In Compliance
NILEW707	4/20/2021 11:58	136	136	Adjusted Valve
NILEW707	4/20/2021 12:00	136.2	136.3	Second Reading
NILEW707	4/21/2021 12:26	135	135	Adjusted Valve
NILEW707	4/22/2021 10:19	133.4	133.4	Adjusted Valve
NILEW707	4/23/2021 10:26	133.7	133.6	Adjusted Valve
NILEW707	4/23/2021 10:30	133.8	133.9	Second Reading
NILEW707	4/26/2021 9:54	131.6	131.7	Adjusted Valve
NILEW707	5/3/2021 11:12	131	130.9	Adjusted Valve, In Compliance
NILEW707	5/10/2021 9:11	134.2	136.2	Adjusted Valve
NILEW707	5/10/2021 9:13	136	135.8	Second Reading
NILEW707	5/14/2021 14:01	132.7	132.8	Adjusted Valve
NILEW707	5/14/2021 14:02	132.5	132.5	Second Reading
NILEW707	5/17/2021 9:35	130.7	130.7	In Compliance
NILEW707	5/24/2021 9:55	131.7	130	Adjusted Valve, In Compliance
NILEW707	6/1/2021 11:21	132.2	132.2	Adjusted Valve
NILEW707	6/1/2021 11:22	132.3	132.4	Second Reading
NILEW707	6/15/2021 13:38	132.9	133	Adjusted Valve
NILEW707	6/15/2021 13:40	132.9	133	Second Reading
NILEW707	6/24/2021 11:41	131.3	131.3	Adjusted Valve

Table 5. Wells with Temperature Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
NILEW707	6/24/2021 11:43	131.3	131.3	Second Reading
NILEW707	7/2/2021 10:31	95.6	95.5	In Compliance
NILEW750	6/4/2021 8:16	131.2	131.8	Adjusted Valve
NILEW750	6/4/2021 8:18	132	131.9	Second Reading
NILEW750	6/18/2021 8:33	125.6	125.8	In Compliance
NILEW752	2/5/2021 11:38	140.5	140.5	Adjusted Valve
NILEW752	2/5/2021 11:43	140.5	140.5	Second Reading
NILEW752	2/17/2021 13:09	138.7	138.7	Adjusted Valve
NILEW752	2/24/2021 13:07	139.1	139.1	Adjusted Valve
NILEW752	2/24/2021 13:08	139.2	139.3	Second Reading
NILEW752	3/8/2021 10:51	138.7	138.9	Adjusted Valve
NILEW752	3/8/2021 10:53	138.9	138.9	Second Reading
NILEW752	3/12/2021 11:27	139.2	139.2	Adjusted Valve
NILEW752	3/12/2021 11:29	139.3	139.3	Second Reading
NILEW752	3/19/2021 10:44	140.8	140.7	Adjusted Valve
NILEW752	3/19/2021 10:46	140.8	140.8	Second Reading
NILEW752	4/12/2021 10:00	138.1	135.9	Adjusted Valve
NILEW752	4/12/2021 10:02	137.3	137.4	Second Reading
NILEW752	4/23/2021 9:49	140.8	140.7	Adjusted Valve
NILEW752	4/23/2021 9:53	140.9	140.9	Second Reading
NILEW752	5/7/2021 12:03	140.6	140.6	Adjusted Valve
NILEW752	5/7/2021 12:11	140.5	140.4	Second Reading
NILEW752	5/21/2021 10:11	130.3	130.3	In Compliance
NILEW752	6/10/2021 12:17	139	139	Adjusted Valve
NILEW752	6/10/2021 12:19	139	139	Second Reading
NILEW752	6/18/2021 12:31	139.8	139.2	Adjusted Valve
NILEW752	6/18/2021 12:34	139.5	139.5	Second Reading
NILEW752	6/18/2021 12:36	140	140	Third Reading
NILEW752	7/8/2021 16:07	141.2	141.5	Adjusted Valve
NILEW752	7/8/2021 16:07	141.2	141.5	Second Reading
NILEW752	7/8/2021 16:09	141.2	141.4	Third Reading
NILEW752	7/21/2021 13:19	138.7	138.7	Adjusted Valve
NILEW752	7/21/2021 13:22	138.7	138.7	Second Reading

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

Appendix A – Responsible Official Certification Form

Certification of Truth and Accuracy and Completeness:

I certify the following:

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

08/31/21

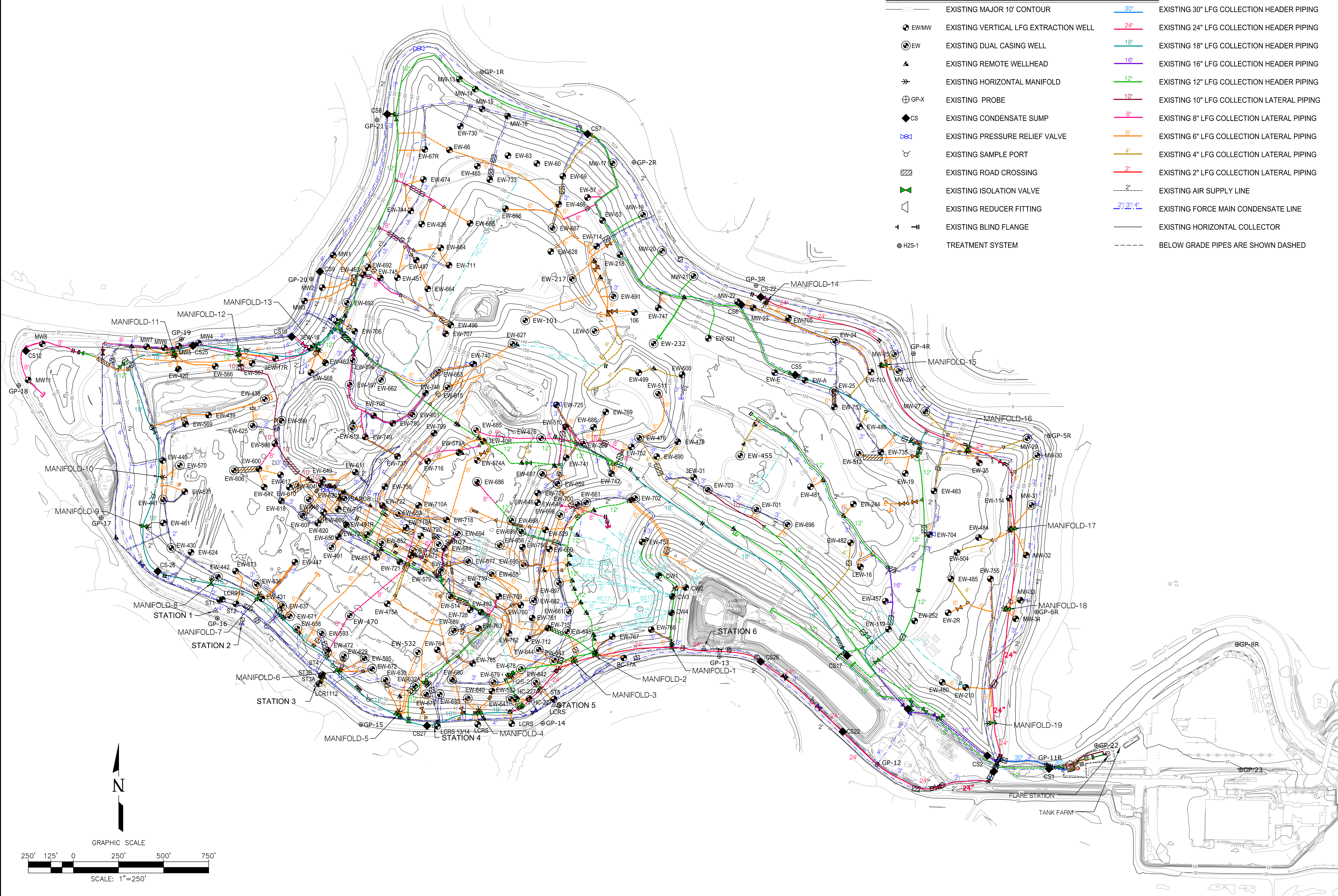
Signature of Responsible Official

Date

Daniel North

Name of Responsible Official

Appendix B – Existing GCCS Layout



LEGEND

EXISTING MAJOR 10' CONTOUR	EXISTING 30" LFG COLLECTION HEADER PIPING
EXISTING VERTICAL LFG EXTRACTION WELL	EXISTING 24" LFG COLLECTION HEADER PIPING
EXISTING DUAL CASING WELL	EXISTING 18" LFG COLLECTION HEADER PIPING
EXISTING REMOTE WELLHEAD	EXISTING 16" LFG COLLECTION HEADER PIPING
EXISTING HORIZONTAL MANIFOLD	EXISTING 12" LFG COLLECTION HEADER PIPING
EXISTING PROBE	EXISTING 10" LFG COLLECTION LATERAL PIPING
EXISTING CONDENSATE SUMP	EXISTING 8" LFG COLLECTION LATERAL PIPING
EXISTING PRESSURE RELIEF VALVE	EXISTING 6" LFG COLLECTION LATERAL PIPING
EXISTING SAMPLE PORT	EXISTING 4" LFG COLLECTION LATERAL PIPING
EXISTING ROAD CROSSING	EXISTING 2" LFG COLLECTION LATERAL PIPING
EXISTING ISOLATION VALVE	EXISTING AIR SUPPLY LINE
EXISTING REDUCER FITTING	EXISTING FORCE MAIN CONDENSATE LINE
EXISTING BLIND FLANGE	EXISTING HORIZONTAL COLLECTOR
TREATMENT SYSTEM	BELOW GRADE PIPES ARE SHOWN DASHED

DATE
REVISION
NO.

SHEET TITLE: OVERALL 2021 AS-BUILT PLAN

PROJECT TITLE: NEWBY ISLAND LANDFILL MILPITAS, CALIFORNIA

CLIENT:

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX. (562) 427-0805

PROJ. NO. 01221039.01 T2 | DWN. BY: AAS | ACAD FILE: K:/ENGINEERS
DSN. BY: AAS | CHK. BY: MD | APP. BY: MD

DATE: 062221

SCALE: AS SHOWN

SHEET: 1

Appendix C – Excerpts from 2021 Source Test Results (report dated April 1, 2021)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 Beale Street, Suite 600
San Francisco, California 94105
(415) 771-6000

Contractor Source Test Supplemental Form

Site name: Newby Island Landfill
NST number: 6294
Testing company: Blue Sky Environmental, Inc.

Test purpose:

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

Preliminary test results:

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

International Disposal Corporation of California

BAAQMD Plant No: 9013

Compliance Emissions Test Report #21059

Flare (A-2) FL-150
Flare (A-3) FL-100

Located at:
Newby Island Landfill
1601 Dixon Landing Road
Milpitas, CA 95035

Prepared for:
Republic Services
1601 Dixon Landing Road
Milpitas, CA 95035

Attn: Rachelle Huber
RHuber2@republicservices.com

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

Attn: Marco Hernandez & Gloria Espena
mhernandez@baaqmd.gov & gespena@baaaqmd.gov

Testing Performed on:
February 23rd, 2021

Final Report Submitted on:
April 1st, 2021

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

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

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

April 1st, 2021

Attn.: Rachelle Huber
Republic Services
1601 Dixon Landing Road
Milpitas, CA 95035

Subject: Source test emission report for Flares A-2 and A-3, located at the Newby Island Landfill, 1601 Dixon Landing Road, Milpitas, CA 95035. Bay Area Air Quality Management District (BAAQMD) Facility #9013, Condition 10423.

Test Date(s): Testing was conducted on February 23rd, 2021.

Sampling Location: Sampling was conducted at the exhaust stack of each flare through ports that were accessible using a 40-foot boom lift. Sampling ports were available that met the minimum criteria of 2 stack diameters downstream from the nearest disturbance and 0.5 stack diameters upstream from the nearest disturbance or exhaust. The 96-inch exhaust stack for Flare A-2 had only one sampling port that could be opened. The stack was traversed for all test runs due to stratification. The 144-inch ID exhaust stack for Flare A-3 had fully functional sampling ports that were also traversed for all test runs.

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

Observing Personnel: The BAAQMD was notified of the scheduled source test in a plan submitted on January 11th, 2021 (NST #6294); however, no agency observers were present during testing. Max Polkabla of Tetra Tech was on site to operate the flares and provide operating records of fuel flow and combustion temperature.

Process Description: Newby Island Landfill is a multi-material landfill with gas collection system operated by International Disposal Corp of California. The system is abated by two John Zink landfill gas flares (A-2 and A-3)

Test Program: The test program objective was to determine compliance of Flares A-2 and A-3 with their associated BAAQMD operating permit limits.

Three consecutive 30-minute tests were performed for nitrogen oxides (NO_X), carbon monoxide (CO), carbon dioxide (CO_2) and oxygen (O_2) at each exhaust stack. The sampling system was checked for leaks before the start of the testing, by plugging the sample probe and observing the sample rotameter flow drop to zero. Analyzer external calibrations were performed before and after each test run using EPA Protocol #1 calibration gases.

Concurrent with the exhaust sampling, Blue Sky Environmental collected a total of six LFG samples (three samples from each flare) for $\%CH_4$, C_1-C_2^+, TNMOC-C_2^+, fixed gases, BTU, F-factor, and sulfur compounds using methods ASTM D-1945, D-3588, and D-5504. One sample from each flare was also analyzed for volatile organic compounds by EPA Method TO-15.

The samples were collected in 6-liter Silco Canisters using EPA Method 25C and shipped immediately to Atmospheric Analysis & Consulting, Inc. located in Ventura, CA for testing.

BAAQMD Source #	Test Parameters/Limits
Flare A-2 Compliance Test	Exhaust: THC, CH_4, NMOC, NO_X, CO, CO_2, O_2 NO_X ≤12 ppm @ 15% O_2 or ≤0.05 lbs/MMBtu CO ≤81 ppm @ 15% O_2 or ≤0.20 lbs/MMBtu NMOC 98% DE or ≤30 ppm @ 3%O_2, CH_4 DE >99%, Landfill gas NMOC, CH_4, Fixed Gases, VOC species & TRS as H_2S

BAAQMD Source #	Test Parameters/Limits
Flare A-3 Compliance Test	Exhaust: THC, CH_4, NMOC, NO_X, CO, CO_2, O_2 NO_X ≤6 ppm @ 15% O_2 or ≤0.025 lbs/MMBtu CO ≤24 ppm @ 15% O_2 or ≤0.06 Lbs/MMBtu NMOC 98% DE or ≤30 ppm @ 3%O_2, CH_4 DE >99% Landfill gas NMOC, CH_4, Fixed Gases, VOC species & TRS as H_2S

<u>Sampling and Analysis Methods</u>: The following U.S. Environmental Protection Agency (EPA) and ASTM International sampling and analytical methods were used:

EPA Method 3A	O_2, CO_2
EPA Method 7E	NO_X
EPA Method 10	CO
EPA Method 4-16.4	Moisture content
EPA 25A/ALT-097	NMOC, CH_4
EPA Method 19	Flare exhaust flow rate by calculation, DSCFM
EPA Method 25C	NMHC in landfill gas
EPA Method TO-15	Volatile organic compounds by GCMS
ASTM D-5504	Sulfur Species in fuels
ASTM D-1945/3588	Fuel analysis for BTU and F-Factor

The sampling and analytical methods are outlined below:

EPA Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas.

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

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

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

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

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

System Performance Criteria

Instrument Linearity	≤ 2% Full Scale
25A Instrument Linearity	≤ 5% Cal Gas Value
Instrument Bias	≤ 5% Full Scale
NO_X Converter Efficiency *(EPA Method 7E)*	≥ 90%
System Response Time	≤± 2 minutes
Instrument Zero/Span Drift	≤± 3% Full Scale

EPA Method 25A/ALT-097 – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer
This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.
The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to

incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test.

EPA Method 4-16.4 – Determination of Moisture Content in Stack Gas
This is an acceptable alternative to EPA Method 4 for the determination of moisture using F-factors. The mole fraction of moisture in the ambient air is calculated using equations in EPA Method 4-16.4 from 1) the measured ambient relative humidity, ambient temperature, and barometric pressure, 2) the mole fraction of free water in the fuel, calculated from the moisture % in the fuel, which is determined by the analytical lab to be the balance after all the major gaseous components have been summed, and 3) the mole fraction of hydrogen in the fuel. To determine the moisture in the fuel, the raw fuel analysis before normalization to 100% is referenced.

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

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

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

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

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

ASTM Method 5504: Sampling for H_2S and Sulfur species in fuels. Sampling consisted of collecting biogas for sulfur analysis in pre-evacuated 5-Liter SILCO SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SILCO canisters have a silanized (glass) lining that permits longer holding times (up to 72 hours) for reactive sulfur compounds. The flow controller, valve and canister are designed so that no sample contacts stainless steel components that can remove hydrogen sulfide. The flow controllers consisted of capillary orifice tubing designed to sample for pre-set durations such as 1-hr, 2-hrs and 4-hrs. The samples were analyzed for 20 sulfur compounds by ASTM Method D-5504 GC/SCD (gas chromatography/sulfur chemiluminescent detector).

Instrumentation: The following continuous emissions analyzers were used:

Instrument	Analyte	Principle
Servomex 1440	O_2	Paramagnetic
Servomex 1440	CO_2	IR
TECO Model 42C	NO_X	Chemiluminescence
TECO Model 48C	CO	GFC/IR
TECO Model 55C	THC/CH_4/VOC	FID

Test Results: Emission results derived from the source test complied with permit conditions and are summarized below. Detailed results for individual test runs are provided in Tables 1 through 4.

Emission Parameter	Average Results Flare A-2	Permit Limits	Average Results Flare A-3	Permit Limits
NO_X ppm @ 15% O_2	9.0	12	3.1	6
NO_X, lbs/MMBtu	0.037	0.05	0.012	0.025
CO ppm @ 15% O_2	8.6	81	6.1	24
CO, lbs/MMBtu	0.021	0.20	0.015	0.060
NMOC ppm @ 3% O_2 as CH_4	<2.5	30 or >98%	<2.5	30 or >98%
NMOC Destruction Efficiency %	>99.56		>99.57	
CH_4 Destruction Efficiency %	>99.97	>99%	>99.70	>99%
TRS, ppm in LFG	624	1,300	573	1,300

The appendices are organized as follows:

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

Laboratory Reports
All laboratory reports and chain of custody.

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

Process Data
Facility records of temperature and fuel flow data.

Calibration Gas Certifications
Certifications for the calibration gas standards.

Stack Diagram
Sketch or photograph of the stack.

Sample System Diagram
Schematic of the sampling system configuration.

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

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

Comments: This source test was performed in accordance with the protocol submitted to the BAAQMD. No deviations from the protocol or anomalies were observed during testing. This source test indicates that the emissions comply with permitted limits.

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

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

If there are any questions concerning this report, please contact Jeramie Richardson at 810 923 3181, Chuck Arrivas at 925 388 4875 or Guy Worthington at 510 508 3469.

Prepared by,

Anne Richardson

Reviewed by,

Julie Wose-Jennings

TABLE #1

Newby Island Landfill
Flare A-2 (FL-150)
1,676°F

RUN	1	2	3	AVERAGE	LIMITS
Test Date	02/23/21	02/23/21	02/23/21		
Test Time	0833-0908	0932-1007	1031-1106		
Standard Temperature, °F	70	70	70	70	
Flare Temperature °F (Mid TC)	1,503	1,503	1,501	1,502	
Fuel Heat Input, MMBtu/hr	33.7	34.0	34.6	34.1	
Fuel Flow Rate, SCFM	1,203	1,209	1,230	1,214	
Exhaust Flow Rate, DSCFM *(EPA M19)*	14,792	13,827	15,376	14,665	
Oxygen, O_2, %	13.2	12.6	13.3	13.1	
Carbon Dioxide, CO_2, %	6.8	7.4	6.6	6.9	
Water Vapor, H_2O, % *(EPA M4.16)*	7.6	8.2	7.6	7.8	
NOx, ppm	11.8	12.7	11.4	12.0	
NOx, ppm @ 15% O_2	**9.1**	**9.0**	**8.9**	**9.0**	**12**
NOx, lbs/hr	1.25	1.25	1.25	1.25	**or**
NOx, lbs/day	30.01	30.01	30.08	30.03	
NOx, lbs/MMBtu	**0.037**	**0.037**	**0.036**	**0.037**	**0.05**
CO, ppm	13.3	7.5	13.3	11.3	
CO, ppm @ 15% O_2	**10.2**	**5.3**	**10.4**	**8.6**	**81**
CO, lbs/hr	0.85	0.45	0.89	0.73	**or**
CO, lbs/day	20.5	10.7	21.3	17.5	
CO, lbs/MMBtu	**0.025**	**0.013**	**0.026**	**0.021**	**0.20**
THC, ppm (wet)	<11.0	<11.0	<11.3	<11.1	
THC, ppm (dry)	<11.9	<12.0	<12.2	<12.0	
THC, lbs/hr as CH_4	<0.44	<0.41	<0.47	<0.44	
CH_4, ppm (wet) *(EPA M25A)*	<10.0	<10.0	10.3	10.1	
CH_4, ppm (dry)	<10.8	<10.9	11.1	10.9	
NMOC, ppm as CH_4 (wet) *(EPA M25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppm as CH_4 (dry)	<1.1	<1.1	<1.1	<1.1	
NMOC, lbs/hr as CH_4	<0.04	<0.04	<0.04	<0.04	
NMOC, ppm @ 3% O2 as CH_4	**<2.5**	**<2.4**	**<2.6**	**<2.5**	**30**
INLET NMOC ppm as CH_4 *(EPA M25C)*	2,828	3,101	3,084	3,004	**or**
INLET NMOC lbs/hr as CH_4	8.4	9.3	9.4	9.1	
NMOC Destruction Efficiency, %	**>99.53%**	**>99.60%**	**>99.56%**	**>99.56%**	**>98**
INLET CH_4, ppm *(ASTM 1945/EPA M18 & 3C)*	476,000	478,000	478,000	477,333	
INLET CH_4 lbs/hr	1,421	1,435	1,459	1,438	
CH_4 Destruction Efficiency, %	**>99.97%**	**>99.97%**	**>99.97%**	**>99.97%**	**>99**
INLET THC (TOC) ppm as CH_4	478,828	481,101	481,084	480,338	
INLET THC (TOC) lbs/hr as CH_4	1,430	1,444	1,468	1,447	
THC (TOC) Destruction Efficiency, %	**99.97%**	**99.97%**	**99.97%**	**99.97%**	**>98**
Hydrogen Sulfide (H_2S)	614	602	620	612	
TRS as H_2S, ppm in Fuel, %	**626**	**614**	**632**	**624**	**1,300**
SO_2, ppm stack emissions (calculated)	50.9	53.7	50.5	51.6	
SO_2, ppm @ 15% O_2	39.2	38.2	39.4	38.9	
SO_2, lbs/hr	**7.49**	**7.38**	**7.73**	**7.53**	

WHERE,

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

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R
Lbs/day = Lbs/hr * 24
Removal Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr
<VALUE = 2% of Analyzer Range
lbs/MMBtu = Fd * MW * ppm * 2.59E-9 * 20.9/(20.9 - %O_2)

TABLE #2

Newby Island Landfill

Flare A-2 (FL-150)

Landfill Gas Characterization

RUN			**2**	**LIMITS**
Test Date			2/23/21	
Test Time			0932-1007	
Acrylonitrile		ppb	<153	
Benzene		ppb	1,470	
Carbon Disulfide		ppb	5,200	
Carbon Tetrachloride		ppb	<38.3	
Chlorobenzene		ppb	<38.3	
Chlorodifluoromethane		ppb	<38.3	
Chloroethane		ppb	119	
Chloroform		ppb	<38.3	
1,1 Dichloroethane		ppb	<38.3	
1,1 Dichloroethene		ppb	<38.3	
1,2 Dichloroethane		ppb	176	
1,4 Dichlorobenzene		ppb	712	
Dichlorodifluoromethane		ppb	71.3	
Dichlorofluoromethane		ppb	<38.3	
Ethylbenzene		ppb	2,700	
Ethlyene Dibromide	1,2 Dibromoethane	ppb	<38.3	
Fluorotrichloromethane	Trichlorofluormethane	ppb	<38.3	
Hexane		ppb	318	
Hydrogen Sulfide		ppm	602	
2-Propanol (IPA)		ppb	13,000	
2-Butanone (MEK)		ppb	24,700	
Methylene Chloride		ppb	164	
Perchloroethylene (PCE)	Tetrachloroethylene	ppb	110	
Toluene		ppb	4,690	
1,1,1 Trichlororethane		ppb	<38.3	
1,1,2,2 Tetrachloroethane		ppb	<38.3	
Trichloroethylene	Trichloroethene (TCE)	ppb	72.8	
Vinyl Chloride		ppb	62.8	
m+p xylenes, o xylenes		ppb	6,050	

TABLE #3

Newby Island Landfill
Flare A-3 (FL-100)
1,504°F

RUN	1	2	3	AVERAGE	LIMITS
Test Date	02/23/21	02/23/21	02/23/21		
Test Time	1200-1241	1306-1349	1409-1447		
Standard Temperature, °F	70	70	70	70	
Flare Temperature °F (Mid TC)	1,504	1,505	1,504	1,504	
Fuel Heat Input, MMBtu/hr	92.7	95.2	95.8	94.6	
Fuel Flow Rate, SCFM	3,294	3,338	3,396	3,343	
Exhaust Flow Rate, DSCFM *(EPA M19)*	42,328	42,795	40,196	41,773	
Oxygen, O_2, %	13.5	13.4	12.9	13.3	
Carbon Dioxide, CO_2, %	6.3	5.9	6.7	6.3	
Water Vapor, H_2O, % *(EPA M4.16)*	7.2	7.2	7.6	7.3	
NOx, ppm	3.7	3.9	4.2	3.9	
NOx, ppm @ 15% O_2	**3.0**	**3.1**	**3.1**	**3.1**	**6**
NOx, lbs/hr	1.13	1.18	1.21	1.18	
NOx, lbs/day	27.08	28.43	29.15	28.22	**or**
NOx, lbs/MMBtu	**0.012**	**0.012**	**0.012**	**0.012**	**0.025**
CO, ppm	6.4	11.5	5.3	7.8	
CO, ppm @ 15% O_2	**5.2**	**9.1**	**3.9**	**6.1**	**24**
CO, lbs/hr	1.2	2.1	0.9	1.4	
CO, lbs/day	28.4	51.5	22.1	34.0	**or**
CO, lbs/MMBtu	**0.013**	**0.022**	**0.009**	**0.015**	**0.060**
THC, ppm (wet)	<11.0	<11.0	<11.0	<11.0	
THC, ppm (dry)	<11.9	<11.9	<11.9	<11.9	
THC, lbs/hr as CH_4	<1.25	<1.26	<1.19	<1.23	
CH_4, ppm (wet) *(EPA M25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppm (dry)	<10.8	<10.8	<10.8	<10.8	
CH_4, lbs/hr	1.13	1.14	1.08	1.1	
NMOC, ppm as CH_4 (wet) *(EPA M25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppm as CH_4 (dry)	<1.1	<1.1	<1.1	<1.1	
NMOC, lbs/hr as CH_4	<0.11	<0.11	<0.11	<0.11	
NMOC, ppm @ 3% O2 as CH_4	**<2.6**	**<2.6**	**<2.4**	**<2.5**	**30**
INLET NMOC ppm as CH_4 *(EPA M25C)*	3,087	3,196	3,023	3,102	
INLET NMOC lbs/hr as CH_4	25.2	26.5	25.5	25.7	**or**
NMOC Destruction Efficiency, %	**>99.55%**	**>99.57%**	**>99.58%**	**>99.57%**	**>98**
INLET CH_4, ppm *(ASTM 1945/EPA M18 & 3C)*	478,000	484,000	479,000	480,333	
INLET CH_4 lbs/hr	3,908.9	4,010.8	4,037.5	3,986	
CH_4 Destruction Efficiency, %	**>99.70%**	**>99.70%**	**>99.71%**	**>99.70%**	**>99**
INLET THC (TOC) ppm as CH_4	481,087	487,196	482,023	483,435	
INLET THC (TOC) lbs/hr as CH_4	3,934	4,037	4,063	4,011	
THC (TOC) Destruction Efficiency, %	**99.97%**	**99.97%**	**99.97%**	**99.97%**	**>98**
Hydrogen Sulfide (H_2S)	597	504	585	562	
TRS as H_2S, ppm in Fuel	**607**	**515**	**597**	**573**	**1,300**
SO_2, ppm stack emissions, calculated	47.2	40.2	50.4	45.9	
SO_2, ppm @ 15% O_2	37.8	31.7	37.2	35.5	
SO_2, lbs/hr	**19.89**	**17.10**	**20.16**	**19.05**	

WHERE,

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

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R
Lbs/day = Lbs/hr * 24
Removal Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr
<VALUE = 2% Value of Analyzer Range
lbs/MMBtu = Fd * MW * ppm * 2.59E-9 * 20.9/(20.9 - %O_2)

TABLE #4

Newby Island Landfill

Flare A-3 (FL-100)

Landfill Gas Characterization

RUN			**2**	**LIMITS**
Test Date			2/23/21	
Test Time			1306-1349	
Acrylonitrile		ppb	<162	
Benzene		ppb	1,510	
Carbon Disulfide		ppmv	5,810	
Carbon Tetrachloride		ppb	<40.5	
Chlorobenzene		ppb	115	
Chlorodifluoromethane		ppb	<40.5	
Chloroethane		ppb	105	
Chloroform		ppb	<40.5	
1,1 Dichloroethane		ppb	<40.5	
1,1 Dichloroethene		ppb	<40.5	
1,2 Dichloroethane		ppb	175	
1,4 Dichlorobenzene		ppb	784	
Dichlorodifluoromethane		ppb	70.5	
Dichlorofluoromethane		ppb	<40.5	
Ethylbenzene		ppb	2,900	
Ethlyene Dibromide	1,2 Dibromoethane	ppb	<40.5	
Fluorotrichloromethane	Trichlorofluormethane	ppb	<40.5	
Hexane		ppb	336	
Hydrogen Sulfide		ppmv	504	
2-Propanol (IPA)		ppb	16,100	
2-Butanone (MEK)		ppb	25,800	
Methylene Chloride		ppb	165	
Perchloroethylene (PCE)	Tetrachloroethylene	ppb	115	
Toluene		ppb	4,820	
1,1,1 Trichlororethane		ppb	<40.5	
1,1,2,2 Tetrachloroethane		ppb	<40.5	
Trichloroethylene	Trichloroethene (TCE)	ppb	72.1	
Vinyl Chloride		ppb	68.9	
m+p xylenes, o xylenes		ppb	6,280	

Appendix D – Surface Emission and GCCS Component Leak Monitoring Results

June 5, 2021
File No. 07221077.00

Ms. Rachelle Huber
Republic Services – Newby Island Landfill
1601 Dixon Landing Road
Milpitas, California 95035

Subject: Newby Island Landfill - Milpitas, California

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring for First Quarter 2021.

Dear Ms. Huber:

SCS Field Services (SCS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Newby Island Landfill (Site) during the First 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 appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Michael Flanagan at (510) 363-7796 or Whitney Stackhouse at (209) 338-7990 if you have any questions or comments.

Sincerely,

Whitney Stackhouse
Project Manager
SCS Field Services

Michael Flanagan
Project Manager
SCS Field Services

Encl.

Sean Bass, SCS Field Services
Art Jones, SCS Field Services

Newby Island Landfill

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

First Quarter 2021

Presented to:

Ms. Rachelle Huber
Republic Services – Newby Island
1601 Dixon Landing Road
Milpitas, California 95035

SCS FIELD SERVICES

File No. 07221077.00 Task 01 | June 5, 2021

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

Newby Island Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring First Quarter 2021

INTRODUCTION

This letter provides results of the March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 2021, LMR and NSPS landfill surface emissions monitoring (SEM) performed by SCS Field Services (SCS) at the subject site. All work was performed in accordance with our approved Work Scope dated December 23, 2020, and the LMR requirements.

SUMMARY AND CONCLUSIONS

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, based on the previous monitoring events, in which exceedances were observed, the monitoring at the Newby Island Landfill was performed on 25-foot pathways in accordance with the LMR.

On, March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 2021, SCS performed first quarter 2021 SEM as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that eighteen (18) locations exceeded the 500 ppmv maximum concentration during the initial monitoring event (Table 1 in Attachment 3). The required first and second 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring indicated that all areas had returned to below regulatory compliance limits following system adjustments and remediation (well field adjustments and installation of new bentonite plugs) by site personnel. Based on these monitoring results no additional follow up testing was required.

Also, during the instantaneous monitoring event, SCS performed concurrent integrated monitoring of the landfill surface. As required by the LMR, the landfill was divided into 50,000 square foot areas. The Newby Island Landfill surface area was therefore divided into 233 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 landfilling activities, unsafe conditions, or there was no waste in place prior to the monitoring event.

During the monitoring event, there were five (5) grid areas observed to exceed the 25 ppmv LMR integrated average threshold (Table 2 in Attachment 4). The required first and second 10-day LMR follow-up monitoring indicated that three (3) areas had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results, and in accordance with the LMR, the site is required to perform a system expansion within 120-days of the third detected exceedance. 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 piping and components indicated that all test locations were in compliance with the 500 ppmv requirement.

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. During this reporting period, no locations were observed to exceed the 200 ppmv, reporting threshold. When these readings are observed, the locations are reported to site personnel for tracking and/or remediation and will be reported in the next submittal of the annual LMR report.

Finally, to help prevent potential future exceedances, SCS recommends that the landfill surface be routinely inspected and any observed surface erosion be routinely repaired.

BACKGROUND

The Newby Island Landfill is an active 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 gas, 40 to 50 percent carbon dioxide, and trace amount of various other gases, some of which are odorous. The Newby Island property contains a system to control the combustible gases generated in the landfill.

SURFACE EMISSIONS MONITORING

On March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 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 monitoring on a 25-foot pathway in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

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

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

- 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 -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 6. Wind speed averages were observed to remain below the alternative threshold of 10 miles per hour, and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within 72 hours of the monitoring events. Therefore, site meteorological conditions were within the alternatives of the LMR requirements on the above mentioned dates.

TESTING RESULTS

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

On March 12, 15, 16, 17, 22, 23, 26, 27, and 29, 2021, SCS performed first quarter 2021 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that eighteen (18) locations exceeded the 500 ppmv maximum concentration. The required first and second 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring performed on March 19, 29 and April 9, 2021, respectively, indicated that all areas had returned to compliance following system adjustments and remediation (wellfield adjustment and borehole repairs using bentonite and soil) performed by SCS and site personnel. Based on these monitoring results no additional follow up testing was required. Results of the monitoring are shown in Attachments 2 and 3 (Table 1).

Additionally, calculated integrated grid monitoring indicated five (5) integrated exceedances of the 25-ppmv requirement on March 17, 2021. The required first and second 10-day LMR follow-up monitoring performed on March 27 and April 6, 2021, indicated that three (3) areas had returned to compliance following system adjustments and remediation by site personnel. The remaining two (2) areas, Grids Nos. 171, and 172 did not return to compliance levels, as required. In accordance with requirements for expansion and remediation, the two (2) grid areas need to be remediated and returned to compliance in accordance with the rule (expansion of the collection system or an alternative compliance option if approved by the BAAQMD) within 120 days after the detected third integrated exceedance, which will be due by August 4, 2021. Results of the initial and follow up monitoring are shown in Attachment 4 (Table 2). Calibration logs for the monitoring equipment are provided in Attachment 5.

During this monitoring event, several grids were not monitored, in accordance with the LMR, due to active landfilling activities, unsafe conditions or no waste in place. SCS will continue to monitor all accessible locations during the second quarter 2021.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On March 27, 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 10 ppmv, was well below the maximum threshold (see Table 1 for component results). Therefore, all pressurized piping and components located at the LFG BFS were in compliance at the time of our testing.

PROJECT SCHEDULE

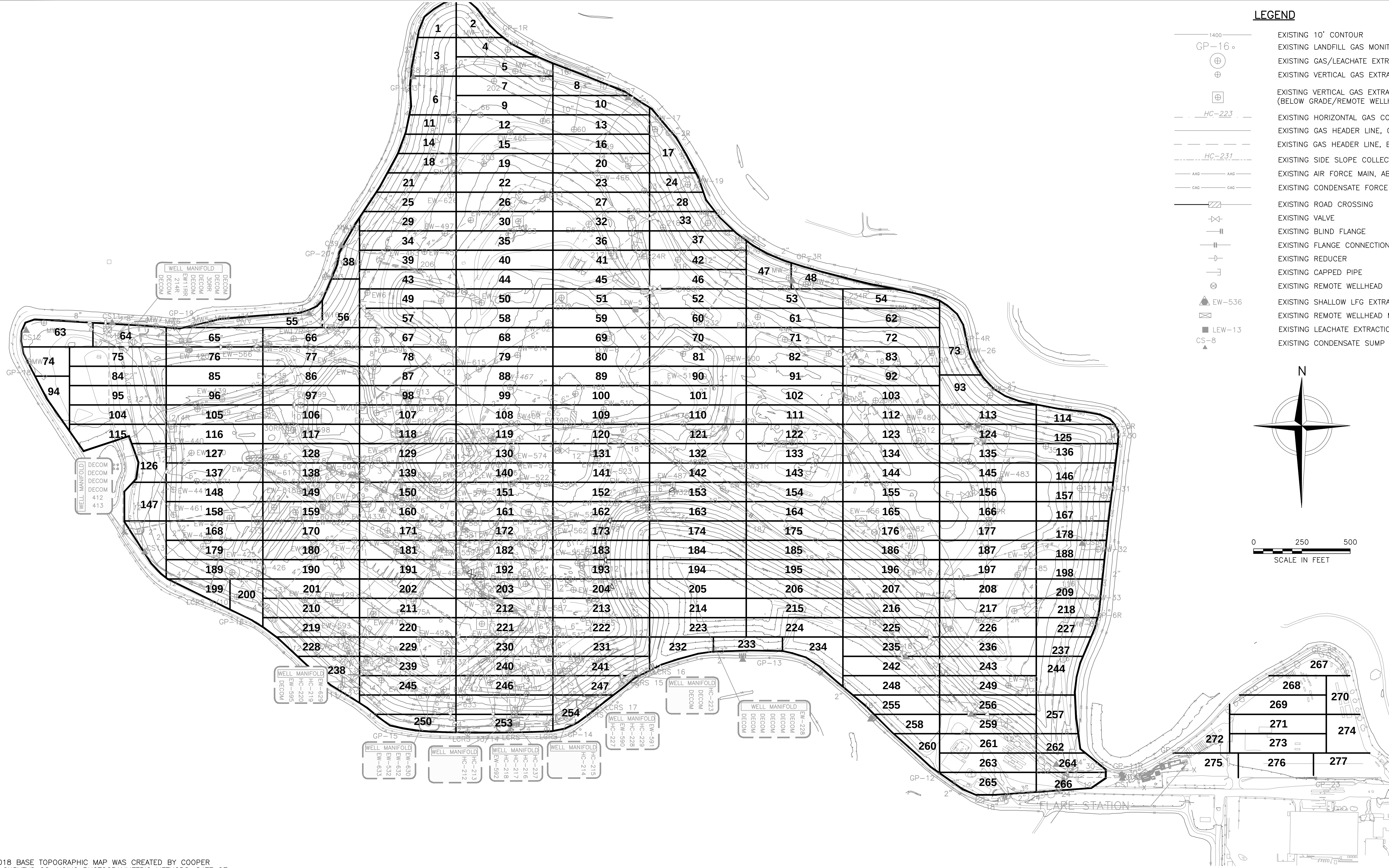
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the second quarter 2021 (April through June) surface emissions testing event is scheduled to be performed by the end of May 2021 in accordance with the Republic SOP unless an alternative timeline is requested by site personnel.

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 10' CONTOUR
- EXISTING LANDFILL GAS MONITORING PROBE
- EXISTING GAS/LEACHATE EXTRACTION WELL
- EXISTING VERTICAL GAS EXTRACTION WELL (ABOVE GRADE)
- EXISTING VERTICAL GAS EXTRACTION WELL (BELOW GRADE/REMOTE WELLHEAD)
- EXISTING HORIZONTAL GAS COLLECTOR
- EXISTING GAS HEADER LINE, ON GRADE, SIZE VARIES
- EXISTING GAS HEADER LINE, BELOW GRADE, SIZE VARIES
- EXISTING SIDE SLOPE COLLECTOR
- EXISTING AIR FORCE MAIN, ABOVE GRADE
- EXISTING CONDENSATE FORCE MAIN, ABOVE GRADE
- EXISTING ROAD CROSSING
- EXISTING VALVE
- EXISTING BLIND FLANGE
- EXISTING FLANGE CONNECTION
- EXISTING REDUCER
- EXISTING CAPPED PIPE
- EXISTING REMOTE WELLHEAD
- EXISTING SHALLOW LFG EXTRACTION WELL
- EXISTING REMOTE WELLHEAD MANIFOLD
- EXISTING LEACHATE EXTRACTION WELL
- EXISTING CONDENSATE SUMP

N

0 250 500
SCALE IN FEET

NOTES:

1. THE 2018 BASE TOPOGRAPHIC MAP WAS CREATED BY COOPER AERIAL SURVEYS CO. USING PHOTOGRAMMETRIC METHODS. DATE OF PHOTOGRAPHY: APRIL 17, 2018. HORIZONTAL DATUM: NAD27, ZONE 3, VERTICAL DATUM: LOCAL LANDFILL DATUM.
2. THE 2010 BASE AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY REPUBLIC. WELLS EW-487 THROUGH EW-489 ARE PER DESIGN LOCATIONS, NO SURVEY WAS RECEIVED FOR THESE WELLS. AS-BUILT LOCATIONS FOR HC-223 AND LCRS-17 ARE APPROXIMATE, NO SURVEY WAS RECEIVED FOR THESE WELLS.
3. THE 2017 GCCS AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY RUGGERI, JENSEN, AZAR AND ASSOCIATES, DATES OF SURVEY: JANUARY 11, 20, AND FEBRUARY 24, 2017.
4. THE 2018 GCCS IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: MARCH 14, 2018.
5. THE 2018 GCCS PHASE II IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: AUGUST 6, 2018.

DRAFT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 9/6/18 | DRAWN BY RAW | DESIGNED BY DK | CHECKED BY AMN | APPROVED BY MED

cornerstone
A TETRA TECH COMPANY

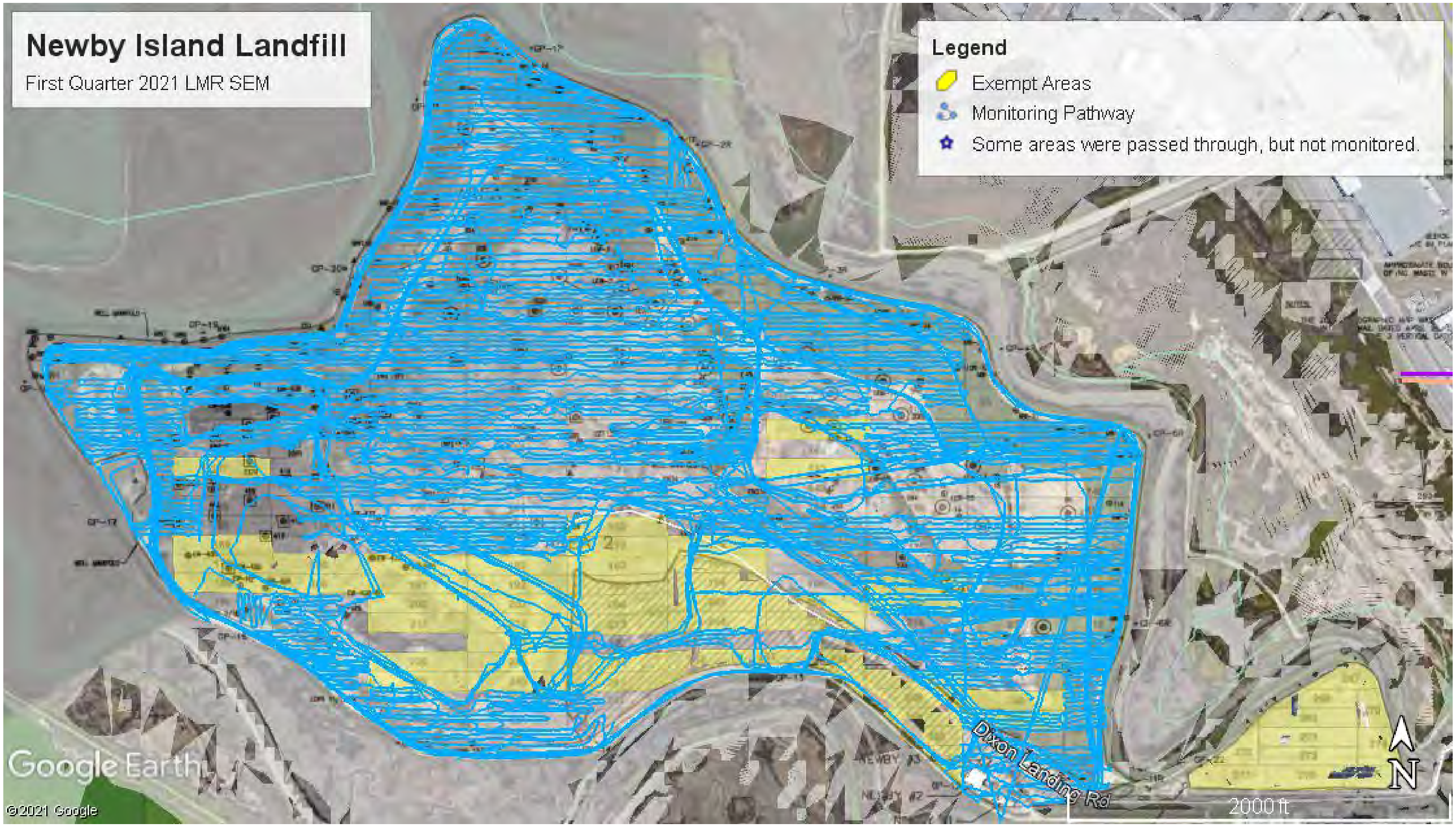
NEWBY ISLAND LANDFILL
SANTA CLARA COUNTY, CALIFORNIA

GCCS AS-BUILT SEM SITE PLAN

SHEET NO.
1
PROJECT NO.

Attachment 2

Surface Pathway



First Quarter 2021
LMR Surface Emissions Monitoring Pathway
Newby Island Landfill, Milpitas, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

First Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Instantaneous Data Report for March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 2021

Location Well ID or Grid Number	Initial Monitoring (ppmv) March 12, 2021	10-Day Follow Up Monitoring (ppmv) March 19, 2021	20-Day Follow Up Monitoring (ppmv) March 29, 2021	30-Day Follow Up Monitoring (ppmv) April 9, 2021
NILEW500	854	25	NA	10.3
36" T (main header downhill from 641/ HC227A)	8,219	3,500	350	<500
CS08	1,358	125	NA	9.5
CS26	1,000	1,000	8	9.7
HC227A (this is the wellhead location by 641)	1,135	1,000	350	<500
LEW05	1,500	2,500	100	32.0
MW013	600	25	NA	4.2
MW018	900	150	NA	3.3
MW020	600	200	NA	25.0
NILEW 461	2,496	2,496	170	9.7
NILEW 510	37,000	75	NA	154.0

First Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

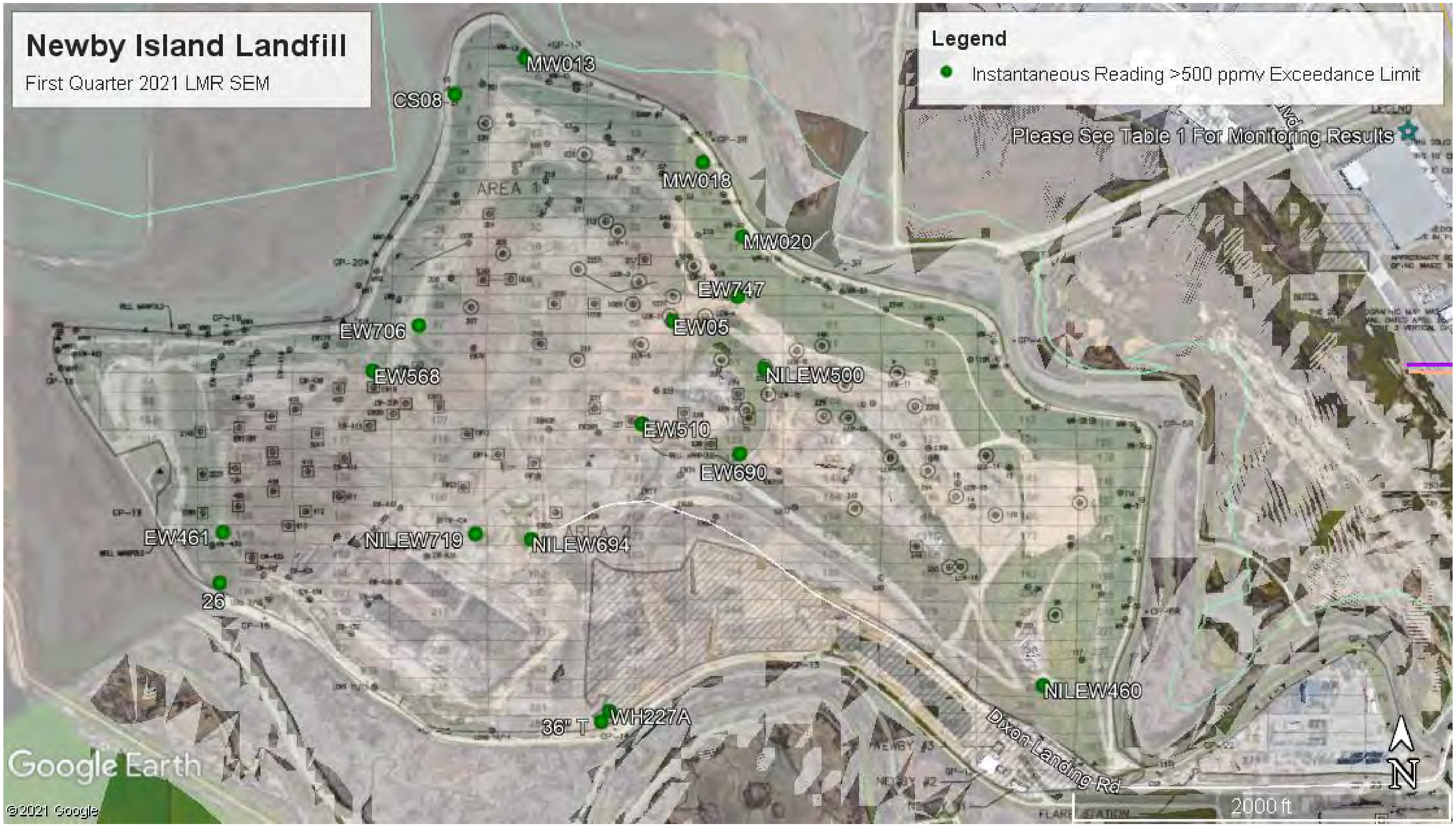
Newby Island Sanitary Landfill, Milpitas, California

Location Well ID or Grid Number	Initial Monitoring (ppmv) March 12, 2021	10-Day Follow Up Monitoring (ppmv) March 19, 2021	20-Day Follow Up Monitoring (ppmv) March 29, 2021	30-Day Follow Up Monitoring (ppmv) April 9, 2021
NILEW 568	1,088	50	NA	51.8
NILEW 690	605	200	NA	13.9
NILEW 706	1,588	200	NA	3.3
NILEW 747	30,000	2,500	6	25.1
NILEW 460	3,880	5	NA	<500
NILEW 694	1750+	750	200	38.0
NILEW 719	1,500	20,000	250	36.6

Pressurized Pipe

Route	Date	Highest Concentration (ppmv)
Flare Station	3/27/2021	10

No other exceedances of the 500 ppm threshold observed during the LMR/NSPS monitoring performed during the first quarter 2021.



First Quarter 2021
Initial Emissions Monitoring Locations Greater Than 500 ppmv
Keller Canyon Landfill, Pittsburg, California

Attachment 4

Integrated Monitoring Results

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-001	3/15/2021	1.72	
NIL-002	3/15/2021	2.11	
NIL-003	3/15/2021	2.06	
NIL-004	3/15/2021	3.07	
NIL-005	3/15/2021	4.87	
NIL-006	3/15/2021	2.88	
NIL-007	3/15/2021	3.15	
NIL-008	3/15/2021	3.68	
NIL-009	3/15/2021	4.50	
NIL-010	3/15/2021	4.51	
NIL-011	3/15/2021	6.14	
NIL-012	3/15/2021	7.20	
NIL-013	3/15/2021	10.15	
NIL-014	3/15/2021	3.00	
NIL-015	3/15/2021	3.31	
NIL-016	3/15/2021	3.81	
NIL-017	3/17/2021	7.44	
NIL-018	3/17/2021	3.46	
NIL-019	3/17/2021	5.96	
NIL-020	3/15/2021	4.40	
NIL-021	3/15/2021	2.06	
NIL-022	3/15/2021	2.97	
NIL-023	3/15/2021	5.20	
NIL-024	3/15/2021	3.91	
NIL-025	3/15/2021	2.31	
NIL-026	3/15/2021	2.38	
NIL-027	3/15/2021	4.62	
NIL-028	3/15/2021	3.76	
NIL-029	3/16/2021	5.98	
NIL-030	3/16/2021	4.85	
NIL-031	--	--	Grid is not on the Grid Map
NIL-032	3/16/2021	2.58	
NIL-033	3/16/2021	2.05	
NIL-034	3/15/2021	1.83	
NIL-035	3/15/2021	2.13	
NIL-036	3/15/2021	2.21	
NIL-037	3/15/2021	2.10	
NIL-038	3/12/2021	13.40	
NIL-039	3/16/2021	5.65	
NIL-040	3/16/2021	5.03	
NIL-041	3/16/2021	4.46	
NIL-042	3/16/2021	3.16	
NIL-043	3/16/2021	4.82	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-044	3/16/2021	7.48	
NIL-045	3/16/2021	4.22	
NIL-046	3/16/2021	3.01	
NIL-047	3/23/2021	1.29	
NIL-048	3/23/2021	1.20	
NIL-049	3/23/2021	2.26	
NIL-050	3/23/2021	2.17	
NIL-051	3/23/2021	3.15	
NIL-052	3/23/2021	4.77	
NIL-053	3/23/2021	1.97	
NIL-054	3/23/2021	1.68	
NIL-055	3/12/2021	3.20	
NIL-056	3/16/2021	6.02	
NIL-057	3/16/2021	5.19	
NIL-058	3/16/2021	9.62	
NIL-059	3/16/2021	10.42	
NIL-060	3/16/2021	3.66	
NIL-061	3/16/2021	2.46	
NIL-062	3/16/2021	3.19	
NIL-063	3/15/2021	4.07	
NIL-064	3/15/2021	4.74	
NIL-065	3/15/2021	6.11	
NIL-066	3/15/2021	6.14	
NIL-067	3/15/2021	10.03	
NIL-068	3/16/2021	20.40	
NIL-069	3/16/2021	15.86	
NIL-070	3/15/2021	5.54	
NIL-071	3/15/2021	2.75	
NIL-072	3/16/2021	2.29	
NIL-073	3/23/2021	1.26	
NIL-074	3/16/2021	1.54	
NIL-075	3/16/2021	2.31	
NIL-076	3/16/2021	2.32	
NIL-077	3/16/2021	3.98	
NIL-078	3/16/2021	6.30	
NIL-079	3/16/2021	11.66	
NIL-080	3/16/2021	14.46	
NIL-081	3/16/2021	4.36	
NIL-082	3/16/2021	2.69	
NIL-083	3/16/2021	2.41	
NIL-084	3/16/2021	2.61	
NIL-085	3/16/2021	3.66	
NIL-086	3/16/2021	3.02	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-087	3/16/2021	6.26	
NIL-088	3/16/2021	11.72	
NIL-089	3/16/2021	15.71	
NIL-090	3/16/2021	5.61	
NIL-091	3/16/2021	3.17	
NIL-092	3/16/2021	3.68	
NIL-093	3/16/2021	1.75	
NIL-094	3/16/2021	2.36	
NIL-095	3/16/2021	3.63	
NIL-096	3/16/2021	3.34	
NIL-097	3/16/2021	7.57	
NIL-098	3/16/2021	8.70	
NIL-099	3/16/2021	13.23	
NIL-100	3/16/2021	13.00	
NIL-101	3/16/2021	6.77	
NIL-102	3/16/2021	3.41	
NIL-103	3/16/2021	2.86	
NIL-104	3/23/2021	2.31	
NIL-105	3/23/2021	2.26	
NIL-106	3/23/2021	2.77	
NIL-107	3/23/2021	6.46	
NIL-108	3/23/2021	14.47	
NIL-109	3/17/2021	15.79	
NIL-110	3/17/2021	5.83	
NIL-111	--	--	Active
NIL-112	3/17/2021	4.45	
NIL-113	3/17/2021	3.22	
NIL-114	3/17/2021	5.09	
NIL-115	3/22/2021	2.63	
NIL-116	3/22/2021	3.13	
NIL-117	3/22/2021	3.27	
NIL-118	3/22/2021	2.04	
NIL-119	3/22/2021	11.51	
NIL-120	3/17/2021	24.49	
NIL-121	3/17/2021	26.86	Initial Monitoring
NIL-121	3/27/2021	4.55	First 10-Day Follow Up Monitoring
NIL-122	3/17/2021	6.92	
NIL-123	3/17/2021	4.74	
NIL-124	3/17/2021	5.23	
NIL-125	3/17/2021	4.85	
NIL-126	3/23/2021	2.67	
NIL-127	--	--	Active
NIL-128	3/17/2021	15.14	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-129 NIL-129	3/17/2021 3/27/2021	26.48 16.59	Initial Monitoring First 10-Day Follow Up Monitoring
NIL-130	3/17/2021	22.95	
NIL-131	3/17/2021	16.56	
NIL-132	3/17/2021	11.15	
NIL-133	--	--	Active
NIL-134	3/17/2021	2.38	
NIL-135	3/17/2021	1.93	
NIL-136	3/17/2021	2.00	
NIL-137	3/22/2021	2.19	
NIL-138	3/23/2021	1.76	
NIL-139	3/27/2021	20.36	
NIL-140	3/27/2021	17.77	
NIL-141	3/22/2021	15.25	
NIL-142	3/16/2021	16.42	
NIL-143	3/16/2021	10.64	
NIL-144	3/16/2021	1.70	
NIL-145	3/16/2021	1.46	
NIL-146	3/16/2021	2.13	
NIL-147	3/23/2021	3.13	
NIL-148	3/23/2021	2.56	
NIL-149	3/23/2021	6.90	
NIL-150	3/17/2021	19.95	
NIL-151	3/17/2021	24.45	
NIL-152	3/17/2021	14.96	
NIL-153 NIL-153	3/17/2021 3/27/2021	34.32 11.86	Initial Monitoring First 10-Day Follow Up Monitoring
NIL-154	3/17/2021	11.50	
NIL-155	3/17/2021	4.01	
NIL-156	3/17/2021	2.56	
NIL-157	3/17/2021	1.99	
NIL-158	3/23/2021	1.85	
NIL-159	3/17/2021	17.75	
NIL-160	3/17/2021	19.24	
NIL-161	3/17/2021	17.50	
NIL-162	--	--	Active
NIL-163	3/17/2021	18.18	
NIL-164	3/17/2021	6.53	
NIL-165	3/17/2021	3.91	
NIL-166	3/17/2021	1.66	
NIL-167	3/17/2021	1.93	
NIL-168	3/23/2021	2.16	
NIL-169	--	--	Active

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

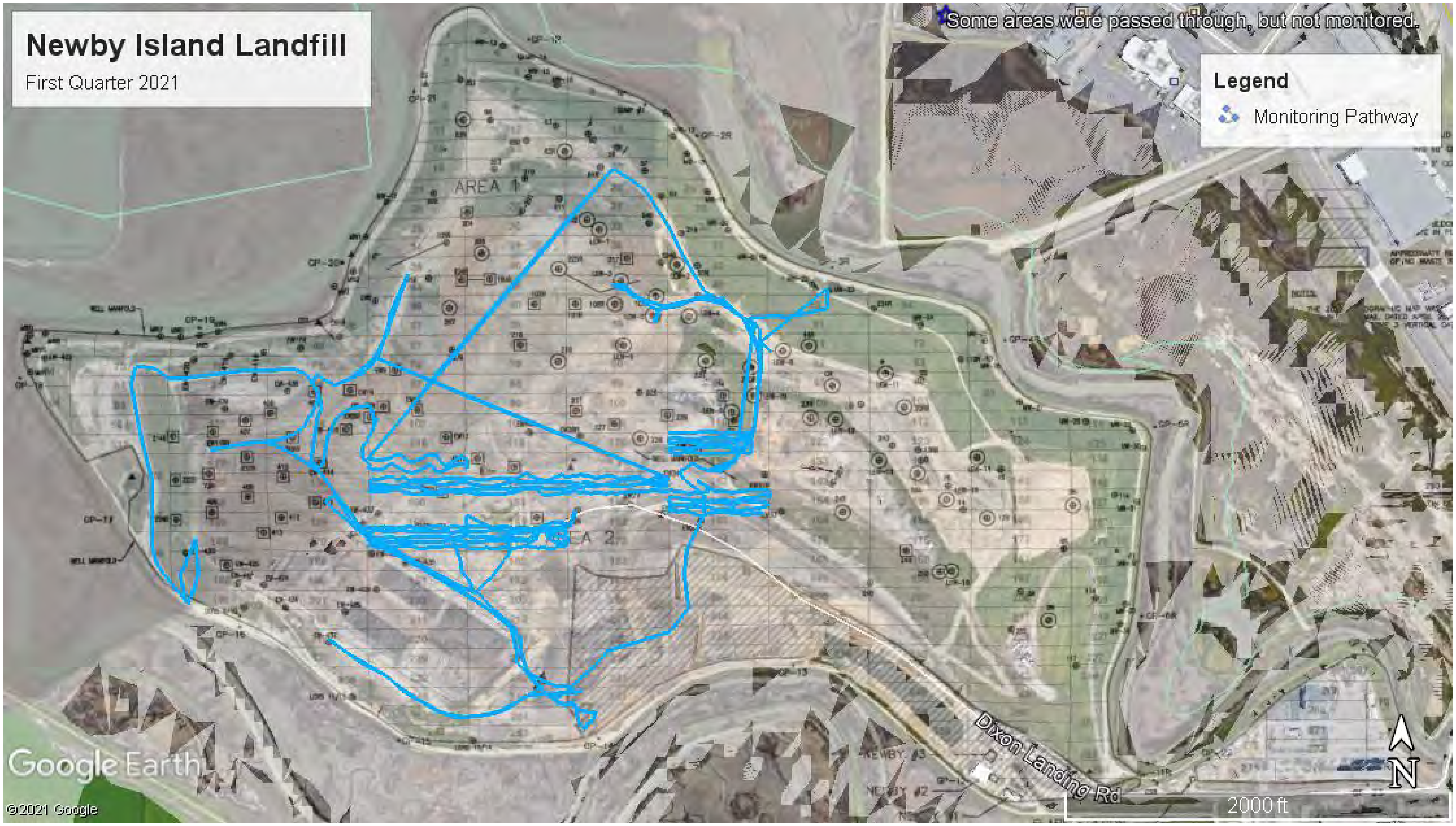
Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-170	3/17/2021	15.15	
NIL-171	3/17/2021	27.74	Initial Monitoring
NIL-171	3/27/2021	47.38	First 10-Day Follow Up Monitoring
NIL-171	4/6/2021	49.53	Second 10-Day Follow Up Monitoring
NIL-172	3/17/2021	27.08	Initial Monitoring
NIL-172	3/27/2021	52.37	First 10-Day Follow Up Monitoring
NIL-172	4/6/2021	48.54	Second 10-Day Follow Up Monitoring
NIL-173	3/27/2021	--	Active
NIL-174	3/27/2021	--	Active
NIL-175	3/17/2021	7.27	
NIL-176	3/17/2021	3.78	
NIL-177	3/17/2021	2.96	
NIL-178	3/17/2021	3.17	
NIL-179	--	--	Active
NIL-180	--	--	Active
NIL-181	--	--	Active
NIL-182	--	--	Active
NIL-183	--	--	Active
NIL-184	--	--	Active
NIL-185	3/22/2021	10.06	
NIL-186	--	--	Active
NIL-187	3/29/2021	3.31	
NIL-188	3/29/2021	3.32	
NIL-189	--	--	Active
NIL-190	--	--	Active
NIL-191	--	--	Active
NIL-192	--	--	Active
NIL-193	--	--	Active
NIL-194	--	--	Active
NIL-195	3/22/2021	9.42	
NIL-196	3/22/2021	4.07	
NIL-197	3/22/2021	1.76	
NIL-198	3/22/2021	1.70	
NIL-199	3/22/2021	3.00	
NIL-200	3/26/2021	3.34	
NIL-201	3/26/2021	15.98	
NIL-202	--	--	Active or Native
NIL-203	--	--	Active or Native
NIL-204	--	--	Active or Native
NIL-205	--	--	Active or Native
NIL-206	--	--	Active or Native
NIL-207	--	--	Active or Native
NIL-208	3/26/2021	5.81	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-209	3/26/2021	4.38	
NIL-210	3/26/2021	6.50	
NIL-211	--	--	Active or Native
NIL-212	--	--	Active or Native
NIL-213	--	--	Active or Native
NIL-214	--	--	Active or Native
NIL-215	--	--	Active or Native
NIL-216	3/22/2021	5.92	
NIL-217	3/22/2021	5.06	
NIL-218	3/22/2021	6.09	
NIL-219	3/22/2021	5.63	
NIL-220	3/22/2021	15.94	
NIL-221	--	--	Active or Native
NIL-222	3/22/2021	8.22	
NIL-223	3/22/2021	9.27	
NIL-224	3/22/2021	8.12	
NIL-225	3/22/2021	2.84	
NIL-226	3/22/2021	2.50	
NIL-227	3/22/2021	2.09	
NIL-228	3/26/2021	11.01	
NIL-229	--	--	Active or Native
NIL-230	--	--	Active or Native
NIL-231	--	--	Active or Native
NIL-232	--	--	Active or Native
NIL-233	--	--	Active or Native
NIL-234	--	--	Active or Native
NIL-235	3/22/2021	6.62	
NIL-236	3/22/2021	4.03	
NIL-237	3/22/2021	4.27	
NIL-238	3/23/2021	7.42	
NIL-239	--	--	Active
NIL-240	--	--	Active
NIL-241	--	--	Active
NIL-242	--	--	Active
NIL-243	3/22/2021	2.99	
NIL-244	3/22/2021	4.81	
NIL-245	3/29/2021	15.35	
NIL-246	3/23/2021	13.75	
NIL-247	3/23/2021	10.86	
NIL-248	--	--	Active or Native
NIL-249	--	--	Active or Native
NIL-250	3/23/2021	9.82	
NIL-251	3/23/2021	12.59	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

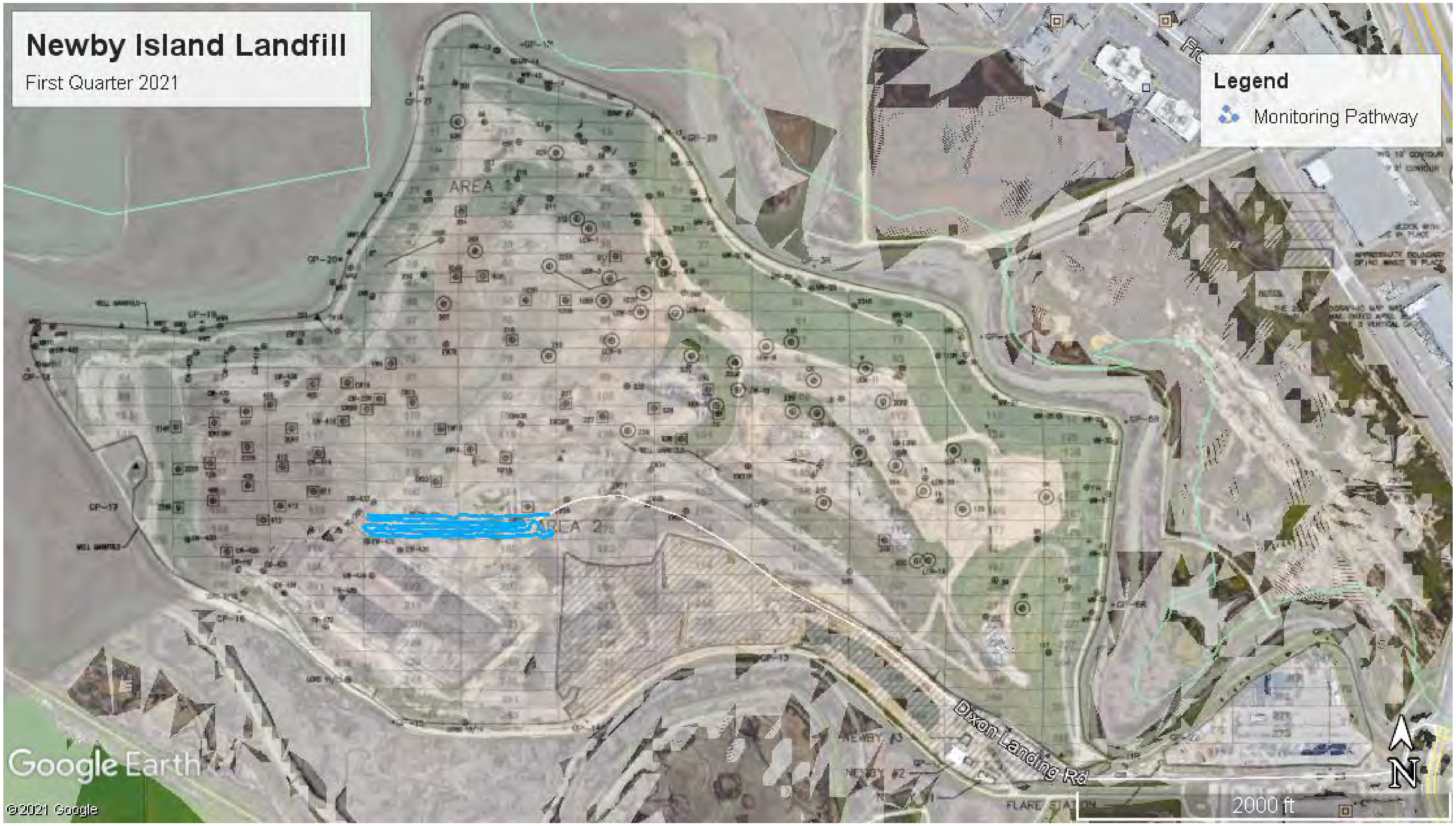
Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-252	3/23/2021	10.77	
NIL-253	3/23/2021	18.18	
NIL-254	3/23/2021	12.01	
NIL-255	--	--	Active or Native
NIL-256	--	--	Active or Native
NIL-257	3/22/2021	4.69	
NIL-258	--	--	Active or Native
NIL-259	3/22/2021	5.70	
NIL-260	--	--	Active or Native
NIL-261	3/22/2021	1.91	
NIL-262	3/22/2021	1.88	
NIL-263	3/22/2021	3.95	
NIL-264	3/22/2021	4.60	
NIL-265	3/22/2021	2.31	
NIL-266	3/22/2021	2.15	
NIL-267	--	--	Active or Native
NIL-268	--	--	Active or Native
NIL-269	--	--	Active or Native
NIL-270	--	--	Active or Native
NIL-271	--	--	Active or Native
NIL-272	--	--	Active or Native
NIL-273	--	--	Active or Native
NIL-274	--	--	Active or Native
NIL-275	--	--	Active or Native
NIL-276	--	--	Active or Native
NIL-277	--	--	Active or Native



First Quarter 2021

LMR Surface Emissions Monitoring First 10-Day Pathway

Newby Island Landfill, Milpitas, California



First Quarter 2021

LMR Surface Emissions Monitoring Second 10-Day Pathway

Newby Island Landfill, Milpitas, California

Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/15/2 Site Name: Newby

Inspector(s): Hunter Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	5
2	.1	499	1	3
3	.0	501	1	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= 123348
Counters Observed for the Zero= 3872

Trial 2:
Counts Observed for the Span= 123681
Counters Observed for the Zero= 3894

Trial 3:
Counts Observed for the Span= 123947
Counters Observed for the Zero= 39

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Hunter Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 53 °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	.2	503	3	3
2	.1	501	1	3
3	.2	501	1	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 123075 Counters Observed for the Zero= 3904	**Trial 3:** Counts Observed for the Span= 123307 Counters Observed for the Zero= 3954
Trial 2: Counts Observed for the Span= 123146 Counters Observed for the Zero= 3929	

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 169 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: 3/15/21 Site Name: Newby

Inspector(s): Brant Wade Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	~~472~~ 0	502	2	3
2	.1	498	2	4
3	.0	499	1	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 148148
Counters Observed for the Zero= 4729

Trial 2:
Counts Observed for the Span= 148361
Counters Observed for the Zero= 4771

Trial 3:
Counts Observed for the Span= 148647
Counters Observed for the Zero= 4820

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.5 ppm

Downwind Location Description: Grid 162 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-15-21 Site Name: newby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 53 °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	.7	501	1	3
2	.1	499	1	3
3	.1	498	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 147829
Counters Observed for the Zero= 4792

Trial 2:
Counts Observed for the Span= 147936
Counters Observed for the Zero= 4809

Trial 3:
Counts Observed for the Span= 148134
Counters Observed for the Zero= 4821

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: grid 169 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: 3/15/21 Site Name: Nawby

Inspector(s): Cody Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	502	2	4
2	0	501	1	5
3	1	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144060
Counters Observed for the Zero= 3786

Trial 2:
Counts Observed for the Span= 144283
Counters Observed for the Zero= 3809

Trial 3:
Counts Observed for the Span= 144537
Counters Observed for the Zero= 3841

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Cody Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 73 °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: 5121 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	5
2	.3	498	2	3
3	.1	499	1	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 143726
Counters Observed for the Zero= 3829

Trial 2:
Counts Observed for the Span= 143852
Counters Observed for the Zero= 3847

Trial 3:
Counts Observed for the Span= 143975
Counters Observed for the Zero= 3865

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3/15/21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	5
2	.8	499	1	3
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 99.7 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 162670
Counters Observed for the Zero= 3624

Trial 2:
Counts Observed for the Span= 162931
Counters Observed for the Zero= 3658

Trial 3:
Counts Observed for the Span= 163241
Counters Observed for the Zero= 3689

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 16a Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-15-21 Site Name: newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 53 °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: 1820 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	500	0	3
2	.2	498	2	5
3	.1	499	1	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= 162572
Counters Observed for the Zero= 3652

Trial 2:
Counts Observed for the Span= 162824
Counters Observed for the Zero= 3681

Trial 3:
Counts Observed for the Span= 162963
Counters Observed for the Zero= 3694

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3/15/21 Site Name: Newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	0	501	1	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= 131828
Counters Observed for the Zero= 3126

Trial 2:
Counts Observed for the Span= 132247
Counters Observed for the Zero= 3162

Trial 3:
Counts Observed for the Span= 132531
Counters Observed for the Zero= 3188

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 53 °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	.2	498	2	4
2	.1	499	1	3
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131651
Counters Observed for the Zero= 3147

Trial 2:
Counts Observed for the Span= 131813
Counters Observed for the Zero= 3162

Trial 3:
Counts Observed for the Span= 131974
Counters Observed for the Zero= 3191

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 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: 3/15/21 Site Name: Newby

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.3	501	1	4
2	.1	499	1	3
3	.2	498	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= 144672
Counters Observed for the Zero= 3970

Trial 2:
Counts Observed for the Span= 144925
Counters Observed for the Zero= 4003

Trial 3:
Counts Observed for the Span= 145213
Counters Observed for the Zero= 4049

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: n Barometric Pressure: 30 "Hg

Air Temperature: 53 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	5.2	498	2	4
2	.1	501	1	3
3	2	502	2	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144372
Counters Observed for the Zero= 4017

Trial 2:
Counts Observed for the Span= 144561
Counters Observed for the Zero= 4045

Trial 3:
Counts Observed for the Span= 144734
Counters Observed for the Zero= 4073

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 169 Reading: 14 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: 3/15/21 Site Name: Newby

Inspector(s): Ryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	0	501	1	4
3	0	500	0	5

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%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 110888
Counters Observed for the Zero= 3428

Trial 2:
Counts Observed for the Span= 111253
Counters Observed for the Zero= 3971

Trial 3:
Counts Observed for the Span= 111342
Counters Observed for the Zero= 3983

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 53 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	4
2	.1	499	1	3
3	.1	501	1	3

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 110772
Counters Observed for the Zero= 3964

Trial 2:
Counts Observed for the Span= 110689
Counters Observed for the Zero= 3980

Trial 3:
Counts Observed for the Span= 110823
Counters Observed for the Zero= 3994

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 169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21 Site Name: Newby

Inspector(s): Hunter Ott Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: S Barometric Pressure: 28.9 "Hg

Air Temperature: 45 °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	.1	500	0	1
2	.1	500	0	2
3	.2	501	1	2

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.9 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 114320
Counters Observed for the Zero= 3322

Trial 2:
Counts Observed for the Span= 114600
Counters Observed for the Zero= ~~114903~~ 3335

Trial 3:
Counts Observed for the Span= 114903
Counters Observed for the Zero= 3347

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 8-16-21　　　　Site Name: newby

Inspector(s): Don G　　　　Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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: 3220　　　　Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	498	2	4
2	0	499	1	3
3	1	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= 157326 Counters Observed for the Zero= 5625	**Trial 3:** Counts Observed for the Span= 157981 Counters Observed for the Zero= 3698
Trial 2: Counts Observed for the Span= 157675 Counters Observed for the Zero= 3662	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance　　Reading: 1.4 ppm

Downwind Location Description: Grid 169　　Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-16-21 Site Name: newby

Inspector(s): Ryan Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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	502	2	3
2	.0	499	1	4
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 107351
Counters Observed for the Zero= 3841

Trial 2:
Counts Observed for the Span= 107625
Counters Observed for the Zero= 3820

Trial 3:
Counts Observed for the Span= 107841
Counters Observed for the Zero= 3869

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-16-21 Site Name: newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: 3 Barometric Pressure: 30 "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: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	3
2	.2	498	2	3
3	.1	499	1	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 121583
Counters Observed for the Zero= 2920

Trial 2:
Counts Observed for the Span= 121862
Counters Observed for the Zero= 2943

Trial 3:
Counts Observed for the Span= 122362
Counters Observed for the Zero= 2983

Post Monitoring Calibration Check

Zero Air Reading: 10 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-16-21 Site Name: newby

Inspector(s): Paldo R Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: ⟩ Barometric Pressure: 30 "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: 54121 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	5
2	.2	499	1	4
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 133462
Counters Observed for the Zero= 3721

Trial 2:
Counts Observed for the Span= 133724
Counters Observed for the Zero= 3756

Trial 3:
Counts Observed for the Span= 133996
Counters Observed for the Zero= 3784

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 Reading: 1.2 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21 Site Name: Newby

Inspector(s): Liam Mcginn Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.1	497	3	3
2	0.1	497	3	2
3	0.2	499	1	2

Average Difference: 6.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 6.3 /500 x 100%

= 98.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 161036
Counters Observed for the Zero= 3769

Trial 2:
Counts Observed for the Span= 161499
Counters Observed for the Zero= 3780

Trial 3:
Counts Observed for the Span= 161607
Counters Observed for the Zero= 3797

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3/16/21 Site Name: Newby

Inspector(s): Brant Wade Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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	.1	501	1	2
2	.2	501	1	3
3	.1	502	2	3

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 150708
Counters Observed for the Zero= 4729

Trial 2:
Counts Observed for the Span= 150998
Counters Observed for the Zero= 4780

Trial 3:
Counts Observed for the Span= 160209
Counters Observed for the Zero= 4767

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-16-21 Site Name: Nashy

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	2
2	0.1	501	1	3
3	0.2	500	0	1

Average Difference: φ

*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= 158644
Counters Observed for the Zero= 3547

Trial 2:
Counts Observed for the Span= 158986
Counters Observed for the Zero= 3560

Trial 3:
Counts Observed for the Span= 159219
Counters Observed for the Zero= 3578

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid169 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: 3-16-21 Site Name: Newby

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: S Barometric Pressure: 24.9 "Hg

Air Temperature: 45 °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	0	498	2	3
2	.2	501	1	1
3	1.1	500	0	2

Average Difference: 3.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 3.3 /500 x 100%

= 99.34 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 108832
Counters Observed for the Zero= 3876

Trial 2:
Counts Observed for the Span= 109133
Counters Observed for the Zero= 3894

Trial 3:
Counts Observed for the Span= 109204
Counters Observed for the Zero= 3915

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: GW. d169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21 Site Name: Newby

Inspector(s): Byon Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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	499	1	3
2	.2	501	1	2
3	.1	502	2	1

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 122219
Counters Observed for the Zero= 2909

Trial 2:
Counts Observed for the Span= 122340
Counters Observed for the Zero= 2930

Trial 3:
Counts Observed for the Span= 122740
Counters Observed for the Zero= 2947

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	498	2	1
2	.2	499	1	2
3	.2	502	2	3

Average Difference: 3.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 3.6 /500 x 100%

= 99.2 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134144
Counters Observed for the Zero= 3740

Trial 2:
Counts Observed for the Span= 134444
Counters Observed for the Zero= 3757

Trial 3:
Counts Observed for the Span= 134507
Counters Observed for the Zero= 3767

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.6 ppm

Downwind Location Description: Grid 169 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: 3-17-21　　　Site Name: Newby

Inspector(s): Brant Wade　　　Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F　　　General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415　　　Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	503	3	3
2	.0	501	1	4
3	1	499	1	2

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 145220
Counters Observed for the Zero= 4684

Trial 2:
Counts Observed for the Span= 145538
Counters Observed for the Zero= 4710

Trial 3:
Counts Observed for the Span= 145829
Counters Observed for the Zero= 47 49

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance　　　Reading: 13 ppm

Downwind Location Description: Grid 169　　　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: 3-17-21 Site Name: ncnby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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	0	502	2	4
2	.1	499	1	3
3	.1	498	2	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144927
Counters Observed for the Zero= 4736

Trial 2:
Counts Observed for the Span= 145108
Counters Observed for the Zero= 4751

Trial 3:
Counts Observed for the Span= 145239
Counters Observed for the Zero= 4775

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: ncwby

Inspector(s): Bryan D Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °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	503	3	5
2	.1	501	1	4
3	0	499	1	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134896
Counters Observed for the Zero= 3062

Trial 2:
Counts Observed for the Span= 113741
Counters Observed for the Zero= 3108

Trial 3:
Counts Observed for the Span= 113945
Counters Observed for the Zero= 3147

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 169 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: 3-17-21 Site Name: newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	3
2	.1	499	1	5
3	.2	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 113375

Counters Observed for the Zero= 3112

Trial 2:

Counts Observed for the Span= 113564

Counters Observed for the Zero= 3137

Trial 3:

Counts Observed for the Span= 113782

Counters Observed for the Zero= 3158

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.5 ppm

Downwind Location Description: Cr. & 164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21　　Site Name: newby

Inspector(s): Pablo Rivera　　Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °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: 5419　　Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	4
2	1	501	1	3
3	0	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 171036 Counters Observed for the Zero= 4850	**Trial 3:** Counts Observed for the Span= 171586 Counters Observed for the Zero= 4921
Trial 2: Counts Observed for the Span= 171273 Counters Observed for the Zero= 4884	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance　　Reading: 1.4 ppm

Downwind Location Description: Grid 164　　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: 3-17-21 Site Name: newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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: 5119 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	0	499	1	3
3	.1	502	2	5

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= 170637
Counters Observed for the Zero= 4916

Trial 2:
Counts Observed for the Span= 170708
Counters Observed for the Zero= 4932

Trial 3:
Counts Observed for the Span= 170925
Counters Observed for the Zero= 4951

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.6 ppm

Downwind Location Description: Grid 164 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: 3-17-2021 Site Name: Newby

Inspector(s): Glenn Megimn Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	502	2	5
2	.1	501	1	4
3	0	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 182152
Counters Observed for the Zero= 3953

Trial 2:
Counts Observed for the Span= 182471
Counters Observed for the Zero= 3494

Trial 3:
Counts Observed for the Span= 182748
Counters Observed for the Zero= 4037

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 164 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.

rost

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: newby

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °F General Weather Conditions: clody

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-1	501	1	3
2	-1	499	1	3
3	2	502	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 182176
Counters Observed for the Zero=

Trial 2:
Counts Observed for the Span= 182354
Counters Observed for the Zero=

Trial 3:
Counts Observed for the Span= 182581
Counters Observed for the Zero=

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	4
2	1	501	1	
3	0	499	1	

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 165992
Counters Observed for the Zero= 3685

Trial 2:
Counts Observed for the Span= 166247
Counters Observed for the Zero= 3712

Trial 3:
Counts Observed for the Span= 166581
Counters Observed for the Zero= 3748

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrace Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: ne Barometric Pressure: 30 "Hg

Air Temperature: 51 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	501	1	3
3	.1	502	2	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 165783
Counters Observed for the Zero= 3706

Trial 2:
Counts Observed for the Span= 165972
Counters Observed for the Zero= 3721

Trial 3:
Counts Observed for the Span= 166083
Counters Observed for the Zero= 3757

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 164 Reading: 1.2 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: Newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	504	4	4
2	0	501	1	3
3	.1	500	0	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:		Trial 3:	
Counts Observed for the Span=	129512	Counts Observed for the Span=	130251
Counters Observed for the Zero=	3720	Counters Observed for the Zero=	3786
Trial 2:			
Counts Observed for the Span=	129843		
Counters Observed for the Zero=	3749		

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-17-21 Site Name: newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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: 5120 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	502	2	3
2	.0	499	1	3
3	.0	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129374
Counters Observed for the Zero= 3752

Trial 2:
Counts Observed for the Span= 129592
Counters Observed for the Zero= 3769

Trial 3:
Counts Observed for the Span= 129851
Counters Observed for the Zero= 3783

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 164 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: 3-17-2021 Site Name: newby

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	498	2	
2		501	1	
3		500	0	

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%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 117228
Counters Observed for the Zero= 3916

Trial 2:
Counts Observed for the Span= 117561
Counters Observed for the Zero= 3949

Trial 3:
Counts Observed for the Span= 114847
Counters Observed for the Zero= 3979

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.4	500	0	4
2	.2	498	2	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= 113927
Counters Observed for the Zero= 3953

Trial 2:
Counts Observed for the Span= 114135
Counters Observed for the Zero= 3972

Trial 3:
Counts Observed for the Span= 114274
Counters Observed for the Zero= 3993

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: NewLX

Inspector(s): Cody Crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	5
2	1	500	0	4
3	0	499	1	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= 141023
Counters Observed for the Zero= 3948

Trial 2:
Counts Observed for the Span= 141285
Counters Observed for the Zero= 3979

Trial 3:
Counts Observed for the Span= 141467
Counters Observed for the Zero= 4013

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 164 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: 3-17-21 Site Name: newby

Inspector(s): Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	4
2	.1	498	2	5
3	.1	499	1	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140872
Counters Observed for the Zero= 4005

Trial 2:
Counts Observed for the Span= 140965
Counters Observed for the Zero= 4027

Trial 3:
Counts Observed for the Span= 141079
Counters Observed for the Zero= 4041

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: Newby

Inspector(s): 3421 Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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~~ 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	501	1	4
2	.1	501	1	5
3	.2	499	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= 143988
Counters Observed for the Zero= 4008

Trial 2:
Counts Observed for the Span= 144273
Counters Observed for the Zero= 4034

Trial 3:
Counts Observed for the Span= 144589
Counters Observed for the Zero= 4083

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 164 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: 3-23-21 Site Name: newby

Inspector(s): 5421 Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	498	2	5
2	.0	501	1	3
3	.0	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 142974

Counters Observed for the Zero= 4026

Trial 2:

Counts Observed for the Span= 143259

Counters Observed for the Zero= 4069

Trial 3:

Counts Observed for the Span= 143561

Counters Observed for the Zero= 4105

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °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	.1	503	3	3
2	.2	498	2	4
3	.1	501	1	4

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

= 100%- 2 /500 x 100%

=99.6%

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 166586

Counters Observed for the Zero= 4909

Trial 2:

Counts Observed for the Span= 166837

Counters Observed for the Zero= 4938

Trial 3:

Counts Observed for the Span= 167342

Counters Observed for the Zero= 4965

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 3-23-21 Site Name: newby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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	502	2	4
2	1	501	1	5
3	1	499	1	5

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= 169740
Counters Observed for the Zero= 4886

Trial 2:
Counts Observed for the Span= 170141
Counters Observed for the Zero= 4913

Trial 3:
Counts Observed for the Span= 170372
Counters Observed for the Zero= 4940

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-23-21 | Site Name: newby

Inspector(s): Hunter O | Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH | Wind Direction: N | Barometric Pressure: 30 "Hg

Air Temperature: 66 °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	.2	502	2	2
2	.0	498	2	3
3	.1	500	0	5

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%

= 1.3 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 145735
Counters Observed for the Zero= 4619

Trial 2:
Counts Observed for the Span= 145959
Counters Observed for the Zero= 4650

Trial 3:
Counts Observed for the Span= 146176
Counters Observed for the Zero= 4682

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance | Reading: 1.4 ppm

Downwind Location Description: Grid 169 | Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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	498	2	5
2	2	501	1	4
3	.0	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

=99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 146448
Counters Observed for the Zero= 41587

Trial 2:
Counts Observed for the Span= 146841
Counters Observed for the Zero= 4612

Trial 3:
Counts Observed for the Span= 147108
Counters Observed for the Zero= 41679

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	499	1	5
2	0	498	2	4
3	1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129847
Counters Observed for the Zero= 2997

Trial 2:
Counts Observed for the Span= 129 985
Counters Observed for the Zero= 3022

Trial 3:
Counts Observed for the Span= 130106
Counters Observed for the Zero= 3053

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 169 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: 3-23-21 Site Name: newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	501	1	5
2	.1	498	2	5
3	.1	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 99.7 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 129608

Counters Observed for the Zero= 2958

Trial 2:

Counts Observed for the Span= 129835

Counters Observed for the Zero= 2972

Trial 3:

Counts Observed for the Span= 130161

Counters Observed for the Zero= 2998

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 169 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.

8re

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-2021 Site Name: newby

Inspector(s): Don Ct Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	2	497	3	5
2	1	500	0	4
3	1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 16648
Counters Observed for the Zero= 3652

Trial 2:
Counts Observed for the Span= 16901
Counters Observed for the Zero= 3681

Trial 3:
Counts Observed for the Span= 16253
Counters Observed for the Zero= 3694

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: grid 169 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: 3-23-21 Site Name: Newby

Inspector(s): Don C1 Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	5
2	.1	499	1	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= 160873
Counters Observed for the Zero= 3671

Trial 2:
Counts Observed for the Span= 161247
Counters Observed for the Zero= 3692

Trial 3:
Counts Observed for the Span= 161486
Counters Observed for the Zero= 3720

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: nearby

Inspector(s): Crown M Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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	.1	499	1	5
2	.1	499	1	4
3	.0	502	2	5

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= 126728
Counters Observed for the Zero= 3485

Trial 2:
Counts Observed for the Span= 126959
Counters Observed for the Zero= 3523

Trial 3:
Counts Observed for the Span= 127185
Counters Observed for the Zero= 3564

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 164 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: 3-23-21 Site Name: newby

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °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	.2	498	2	4
2	.1	501	1	3
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 125863
Counters Observed for the Zero= 3537

Trial 2:
Counts Observed for the Span= 126084
Counters Observed for the Zero= 3572

Trial 3:
Counts Observed for the Span= 126281
Counters Observed for the Zero= 3594

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: Cwid 1b9 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: 3-27-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 68 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- ~~99.7~~ 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 164128
Counters Observed for the Zero= 3602

Trial 2:
Counts Observed for the Span= 163017
Counters Observed for the Zero= 3631

Trial 3:
Counts Observed for the Span= 165721
Counters Observed for the Zero= 3612

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 69 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

pre

Date: 3-27-21 Site Name: Newby

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131839
Counters Observed for the Zero= 3604

Trial 2:
Counts Observed for the Span= 131528
Counters Observed for the Zero= 3621

Trial 3:
Counts Observed for the Span= 130283
Counters Observed for the Zero= 3648

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 169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 3-27-21 Site Name: NEWBY

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 70 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	2	501	1	1
2	1	503	3	2
3	2	499	1	1

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 165872
Counters Observed for the Zero= 3618

Trial 2:
Counts Observed for the Span= 164724
Counters Observed for the Zero= 3612

Trial 3:
Counts Observed for the Span= 164931
Counters Observed for the Zero= 3648

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 169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 3-27-21 | Site Name: Neidby
Inspector(s): Ryan Haslam | Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH | Wind Direction: WNW | Barometric Pressure: 30 "Hg

Air Temperature: 70 °F | General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 | Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129382
Counters Observed for the Zero= 3683

Trial 2:
Counts Observed for the Span= 129212
Counters Observed for the Zero= 3654

Trial 3:
Counts Observed for the Span= 130922
Counters Observed for the Zero= 3653

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 109 | Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-6-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 167823
Counters Observed for the Zero= 3628

Trial 2:
Counts Observed for the Span= 167712
Counters Observed for the Zero= 3631

Trial 3:
Counts Observed for the Span= 168453
Counters Observed for the Zero= 3712

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 171 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-6-21 Site Name: Nearby

Inspector(s): Don Gabson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: ______ °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 168922
Counters Observed for the Zero= 3731

Trial 2:
Counts Observed for the Span= 168712
Counters Observed for the Zero= 3712

Trial 3:
Counts Observed for the Span= 167384
Counters Observed for the Zero= 3648

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 171 Reading: 1.3 ppm

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

Attachment 6

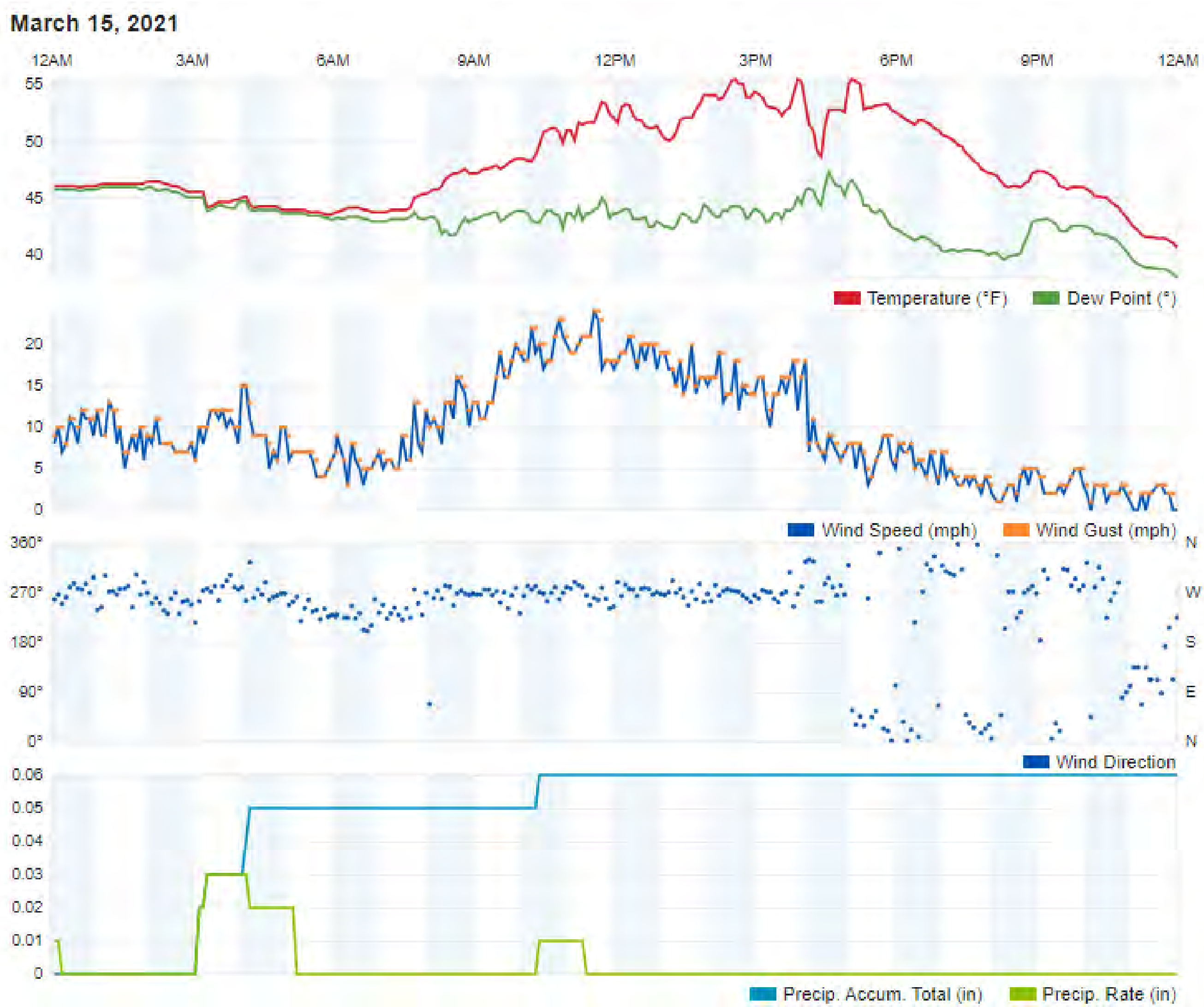
Weather Data

First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

March 12, 2021

Newby Island Landfill, Milpitas, California

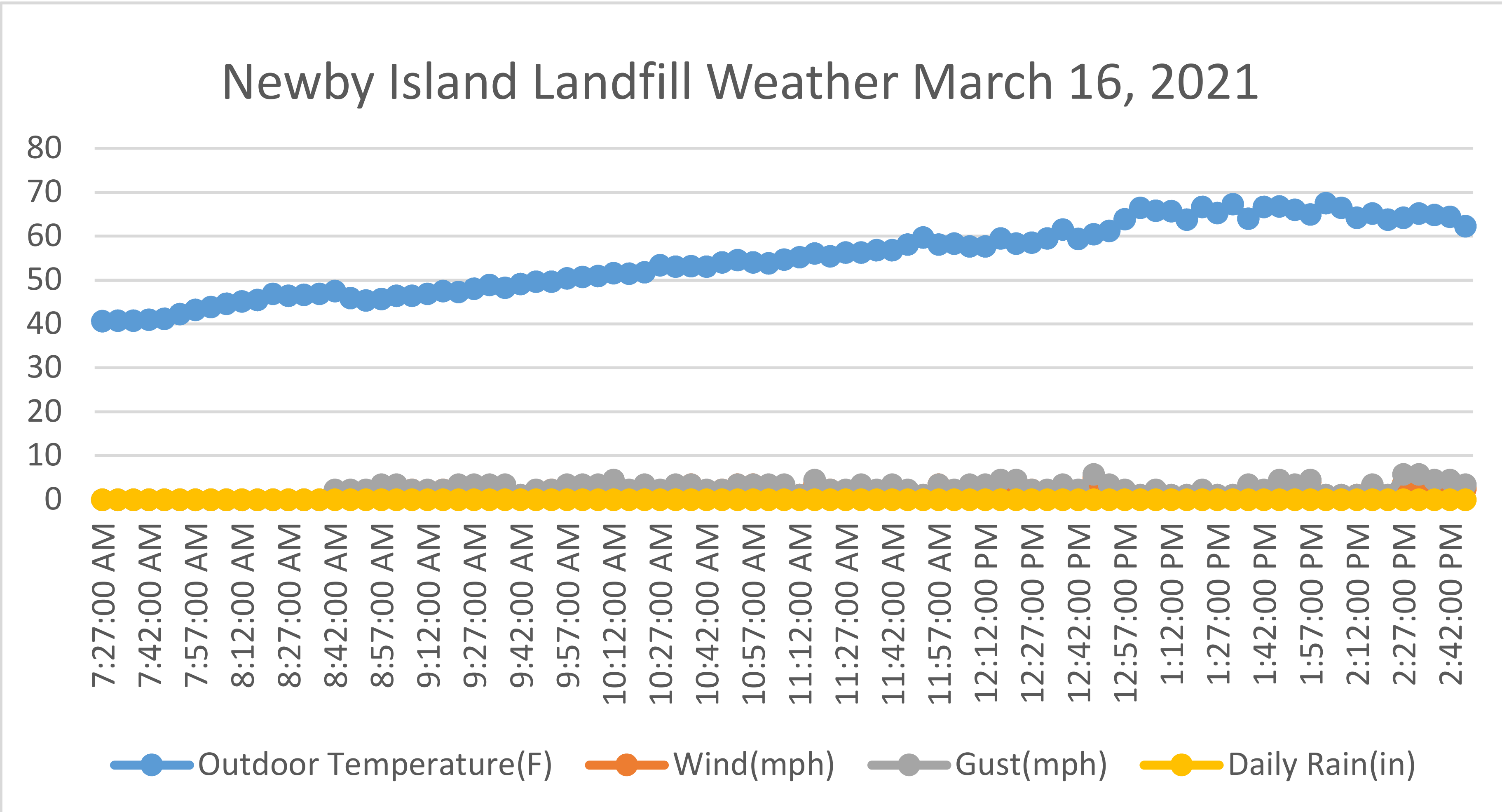


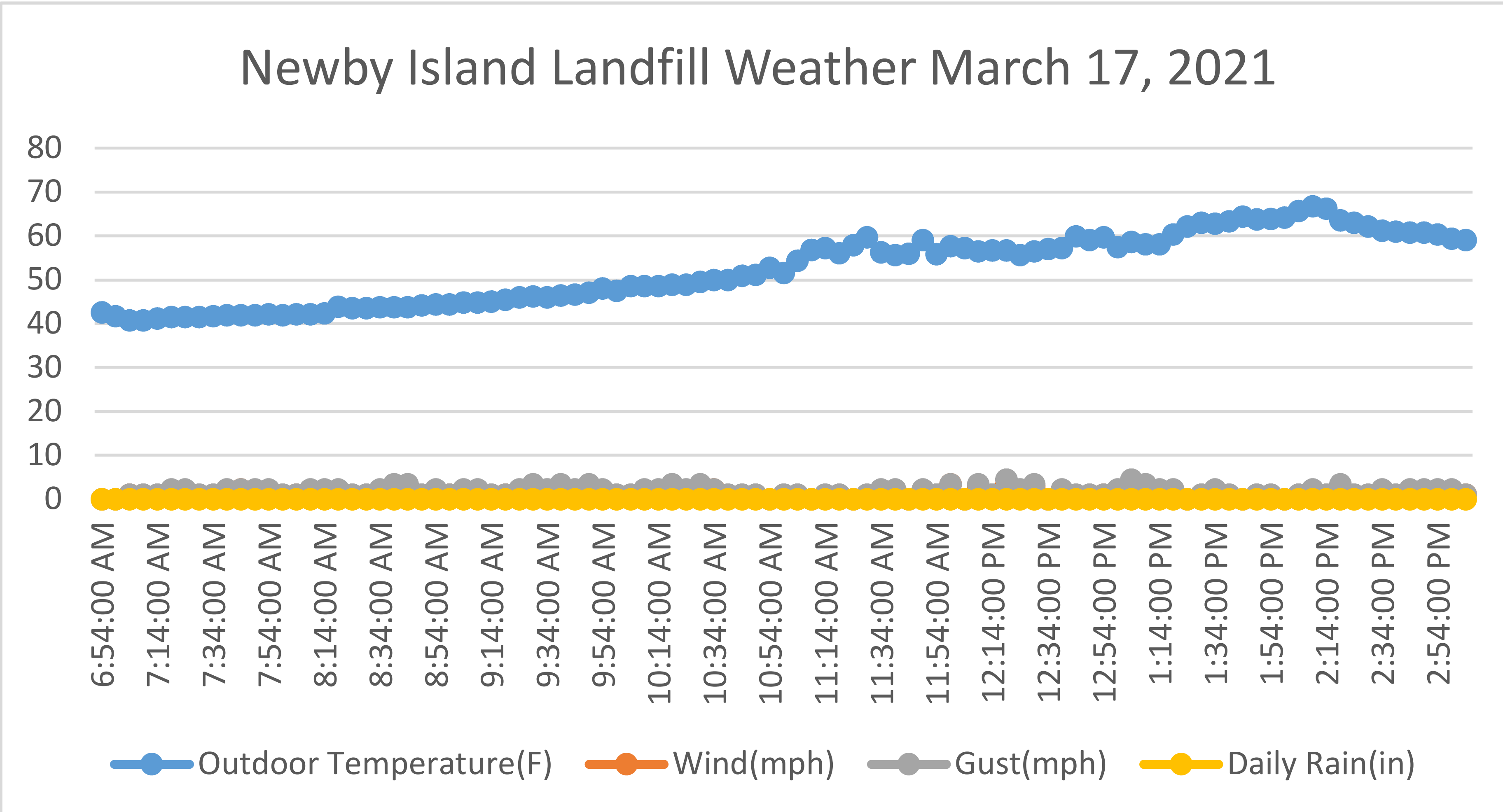
First Quarter 2021

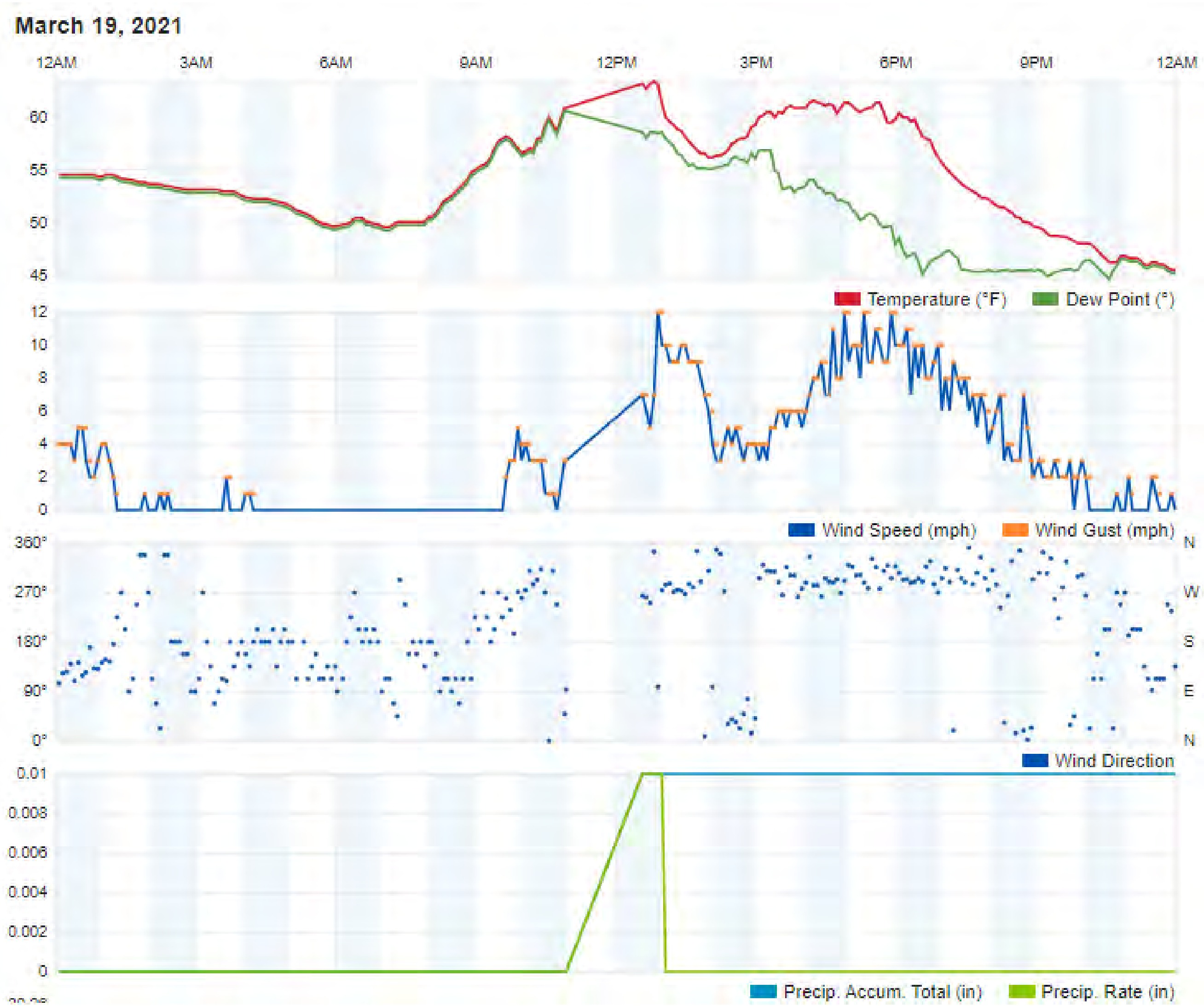
LMR Surface Emissions Monitoring Weather Data

March 15, 2021

Newby Island Landfill, Milpitas, California


Newby Island Landfill Weather March 16, 2021
80
70
60
50
40
30
20
10
0
7:27:00 AM
7:42:00 AM
7:57:00 AM
8:12:00 AM
8:27:00 AM
8:42:00 AM
8:57:00 AM
9:12:00 AM
9:27:00 AM
9:42:00 AM
9:57:00 AM
10:12:00 AM
10:27:00 AM
10:42:00 AM
10:57:00 AM
11:12:00 AM
11:27:00 AM
11:42:00 AM
11:57:00 AM
12:12:00 PM
12:27:00 PM
12:42:00 PM
12:57:00 PM
1:12:00 PM
1:27:00 PM
1:42:00 PM
1:57:00 PM
2:12:00 PM
2:27:00 PM
2:42:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)


Newby Island Landfill Weather March 17, 2021
80
70
60
50
40
30
20
10
0
6:54:00 AM
7:14:00 AM
7:34:00 AM
7:54:00 AM
8:14:00 AM
8:34:00 AM
8:54:00 AM
9:14:00 AM
9:34:00 AM
9:54:00 AM
10:14:00 AM
10:34:00 AM
10:54:00 AM
11:14:00 AM
11:34:00 AM
11:54:00 AM
12:14:00 PM
12:34:00 PM
12:54:00 PM
1:14:00 PM
1:34:00 PM
1:54:00 PM
2:14:00 PM
2:34:00 PM
2:54:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)

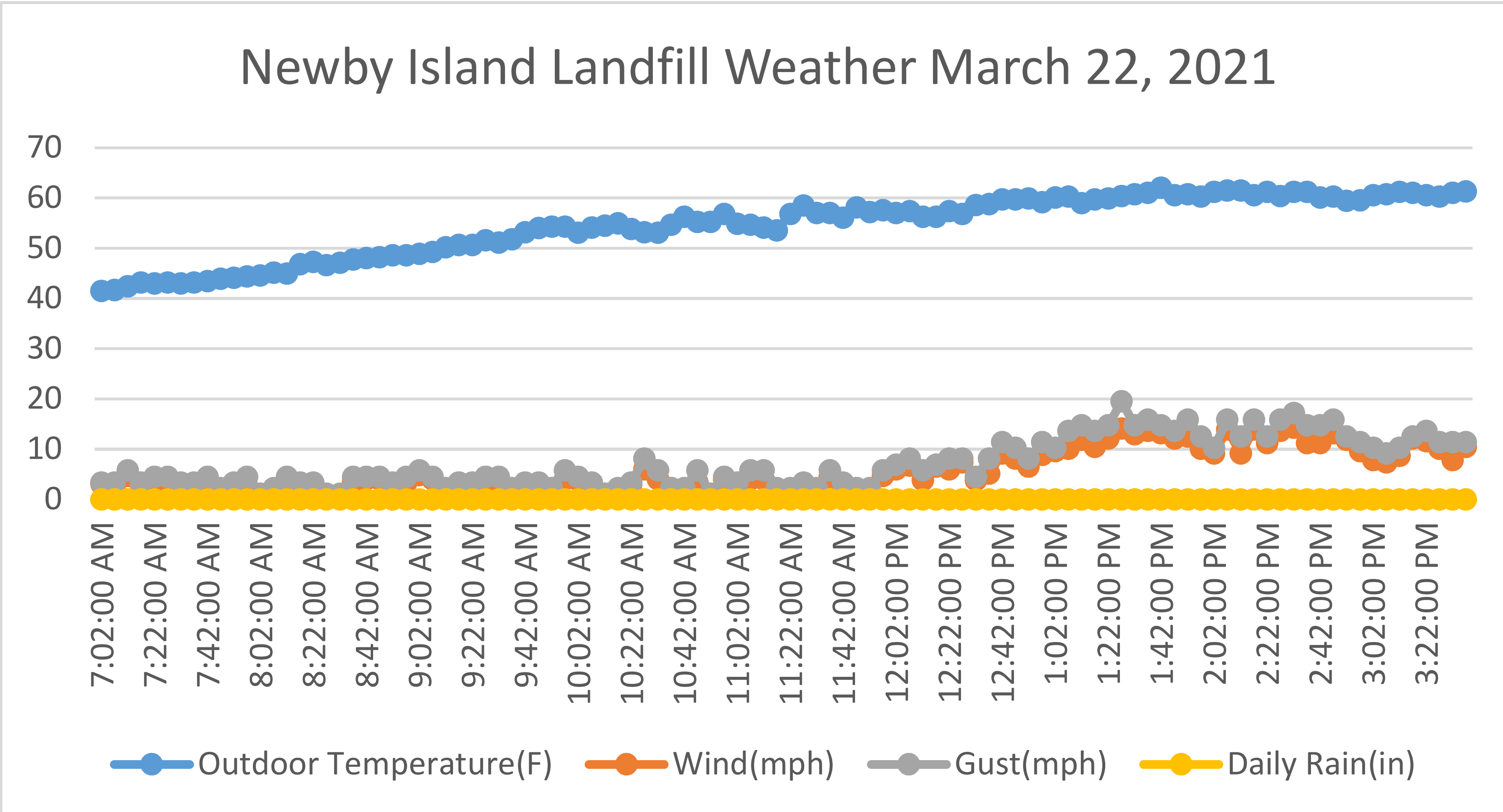


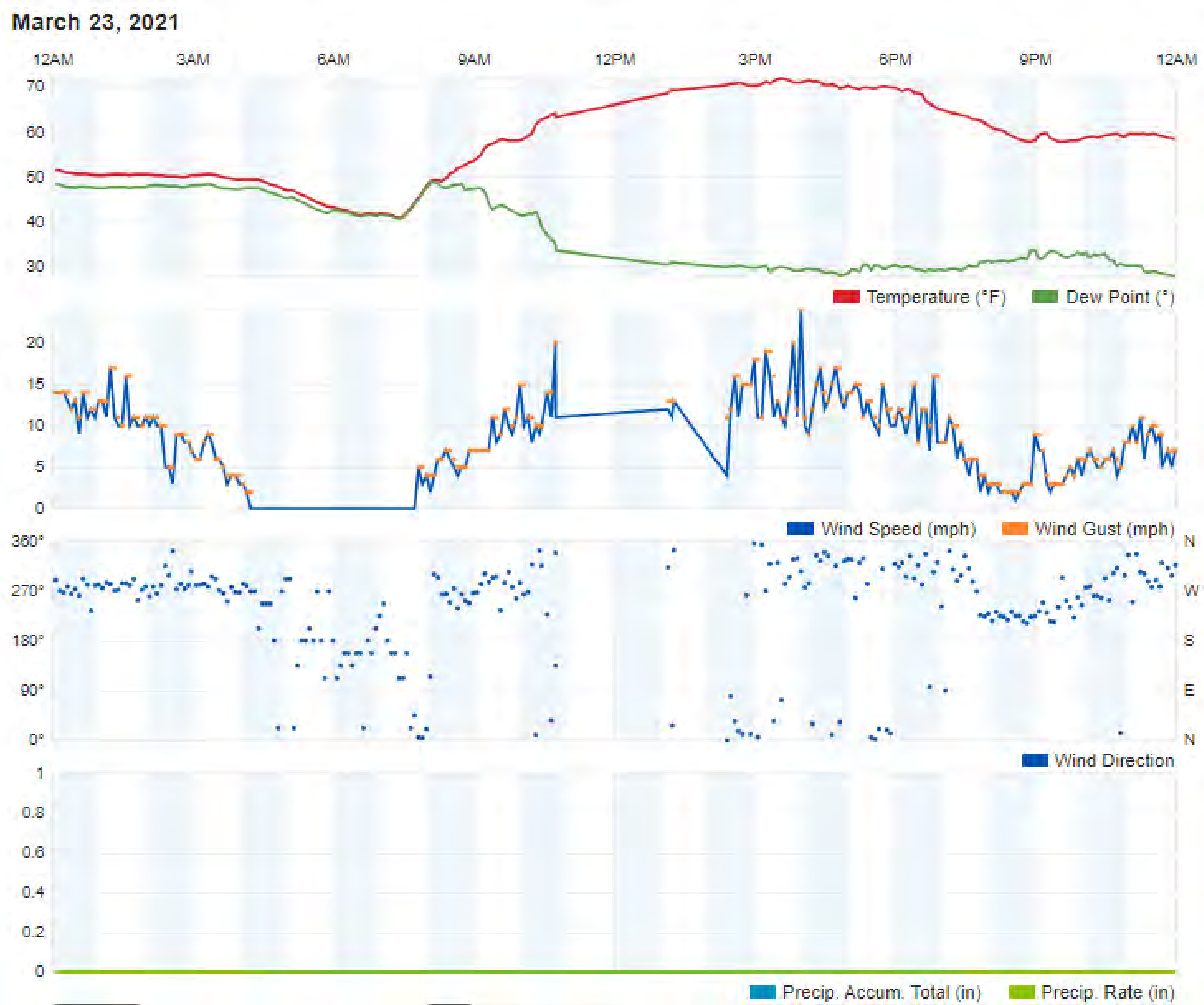
First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

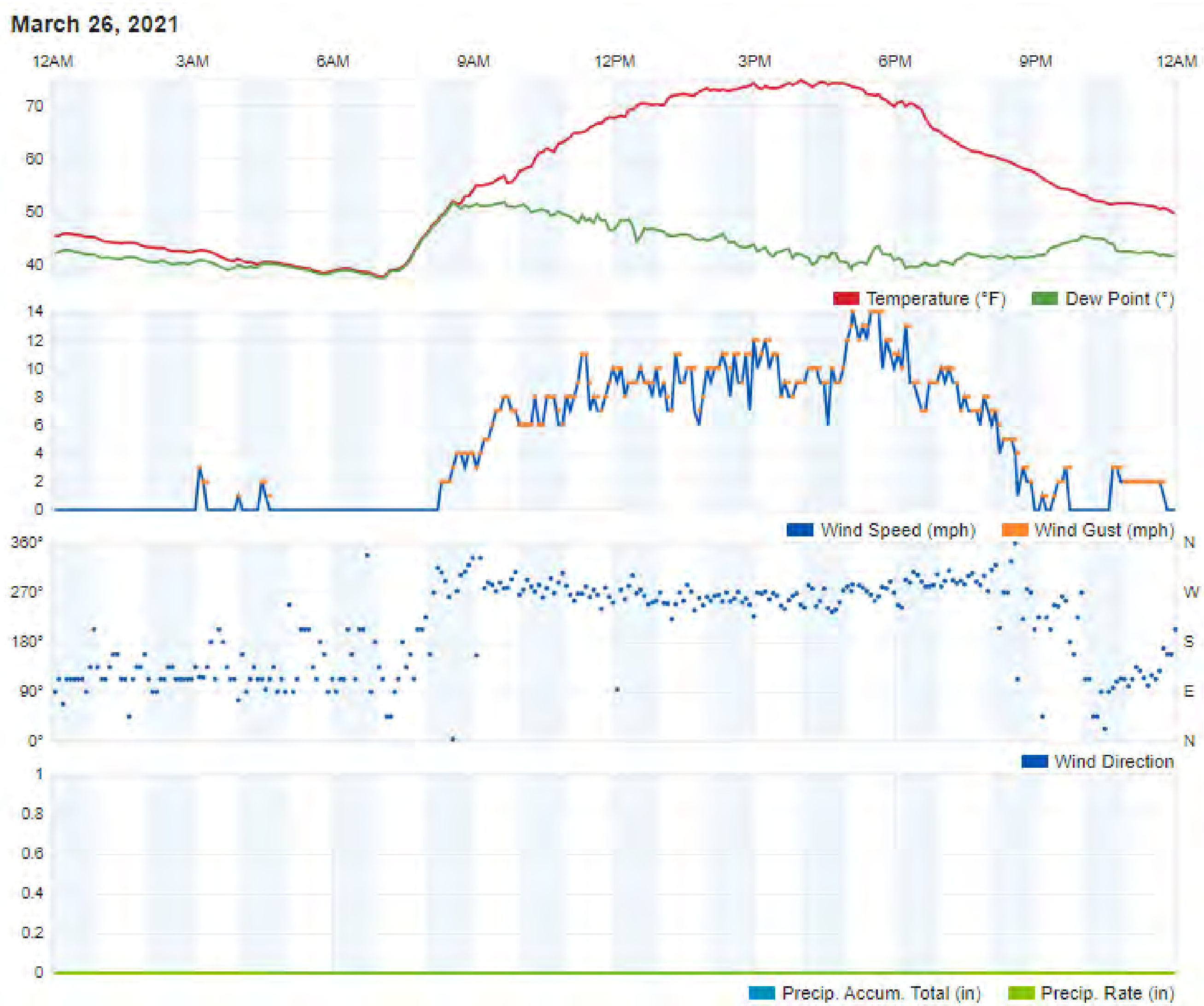
March 19, 2021

Newby Island Landfill, Milpitas, California


Newby Island Landfill Weather March 22, 2021
70
60
50
40
30
20
10
0
7:02:00 AM
7:22:00 AM
7:42:00 AM
8:02:00 AM
8:22:00 AM
8:42:00 AM
9:02:00 AM
9:22:00 AM
9:42:00 AM
10:02:00 AM
10:22:00 AM
10:42:00 AM
11:02:00 AM
11:22:00 AM
11:42:00 AM
12:02:00 PM
12:22:00 PM
12:42:00 PM
1:02:00 PM
1:22:00 PM
1:42:00 PM
2:02:00 PM
2:22:00 PM
2:42:00 PM
3:02:00 PM
3:22:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)



First Quarter 2021
LMR Surface Emissions Monitoring Weather Data
March 23, 2021
Newby Island Landfill, Milpitas, California

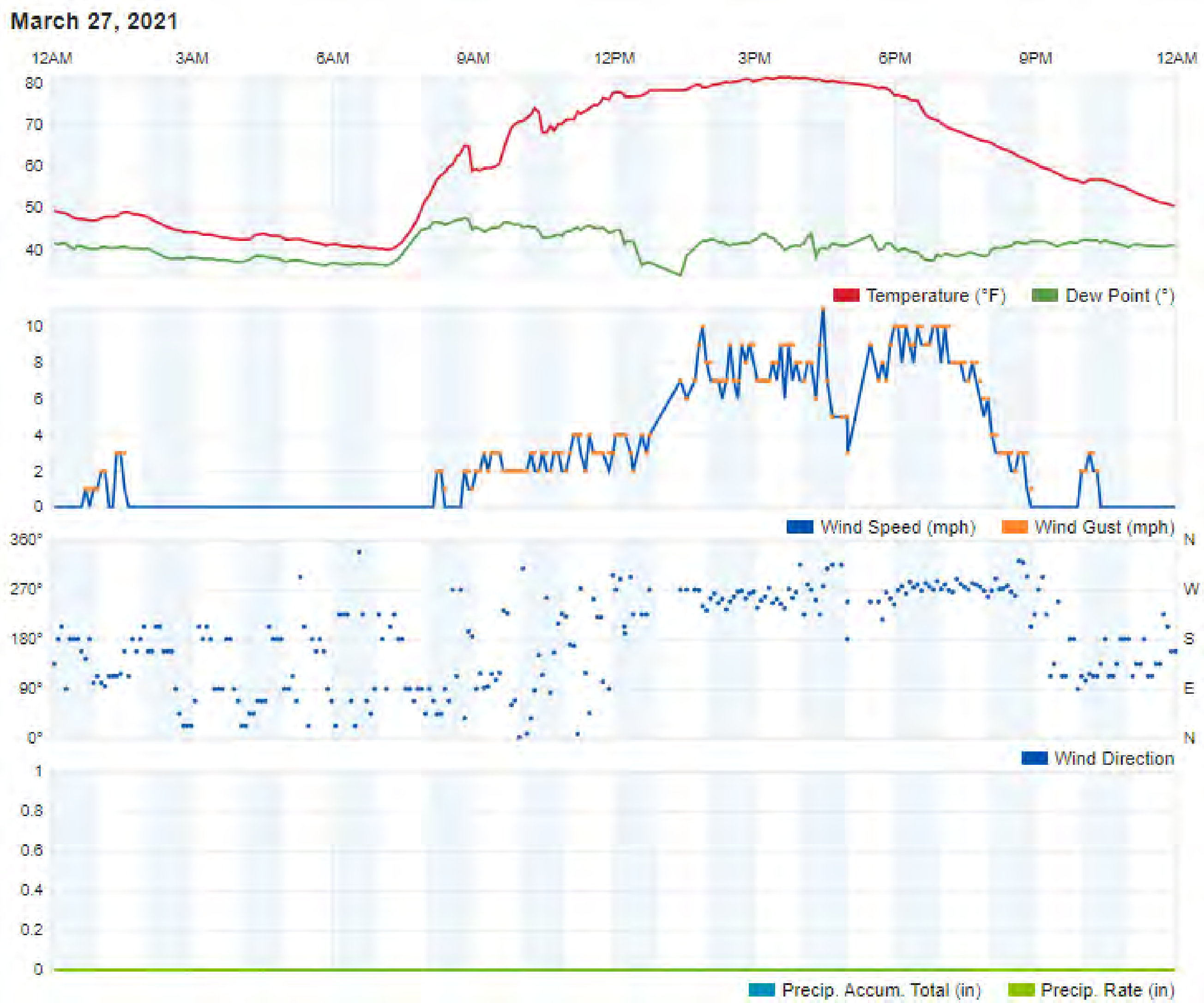


First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

March 26, 2021

Newby Island Landfill, Milpitas, California

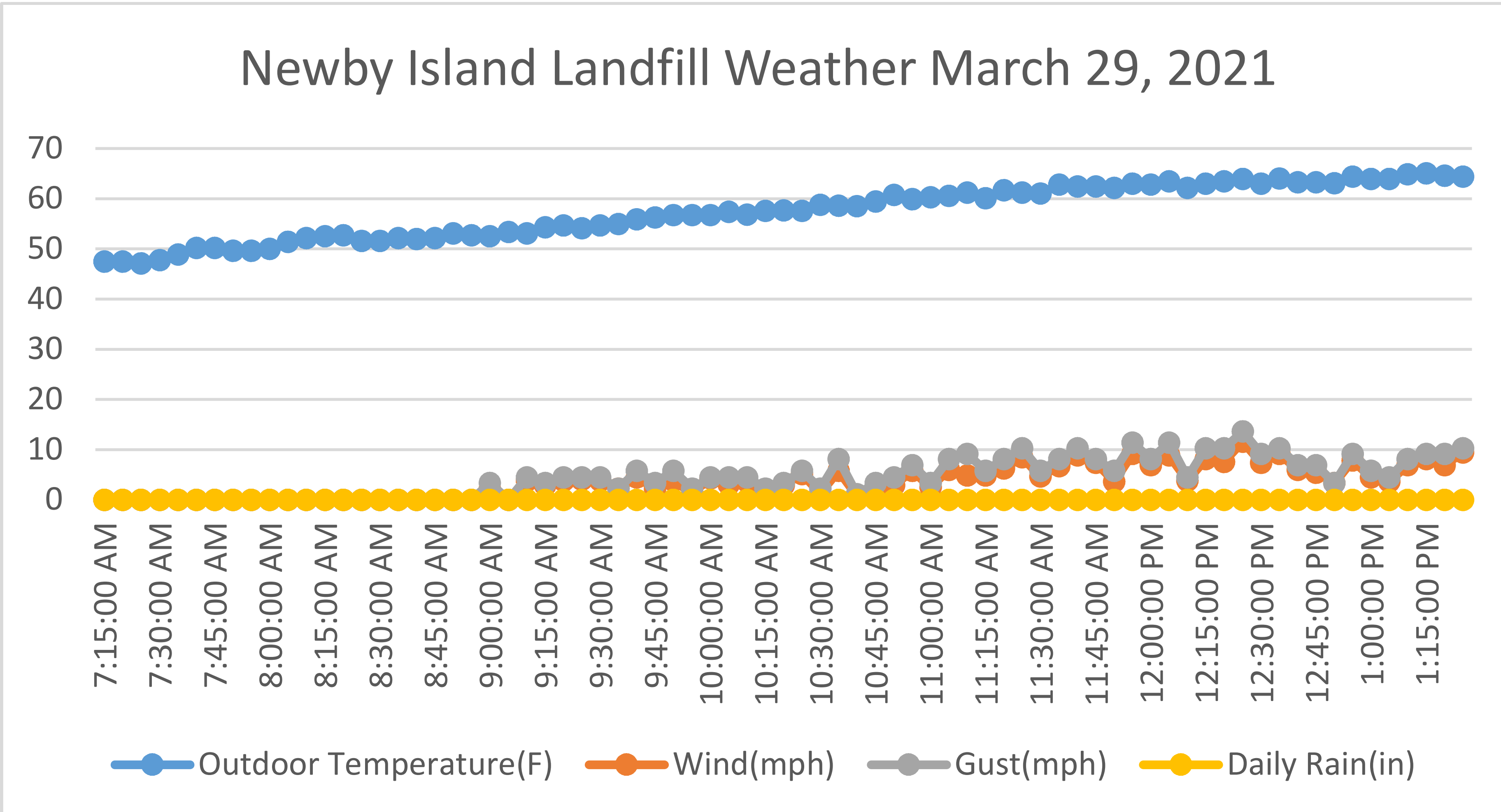


First Quarter 2021

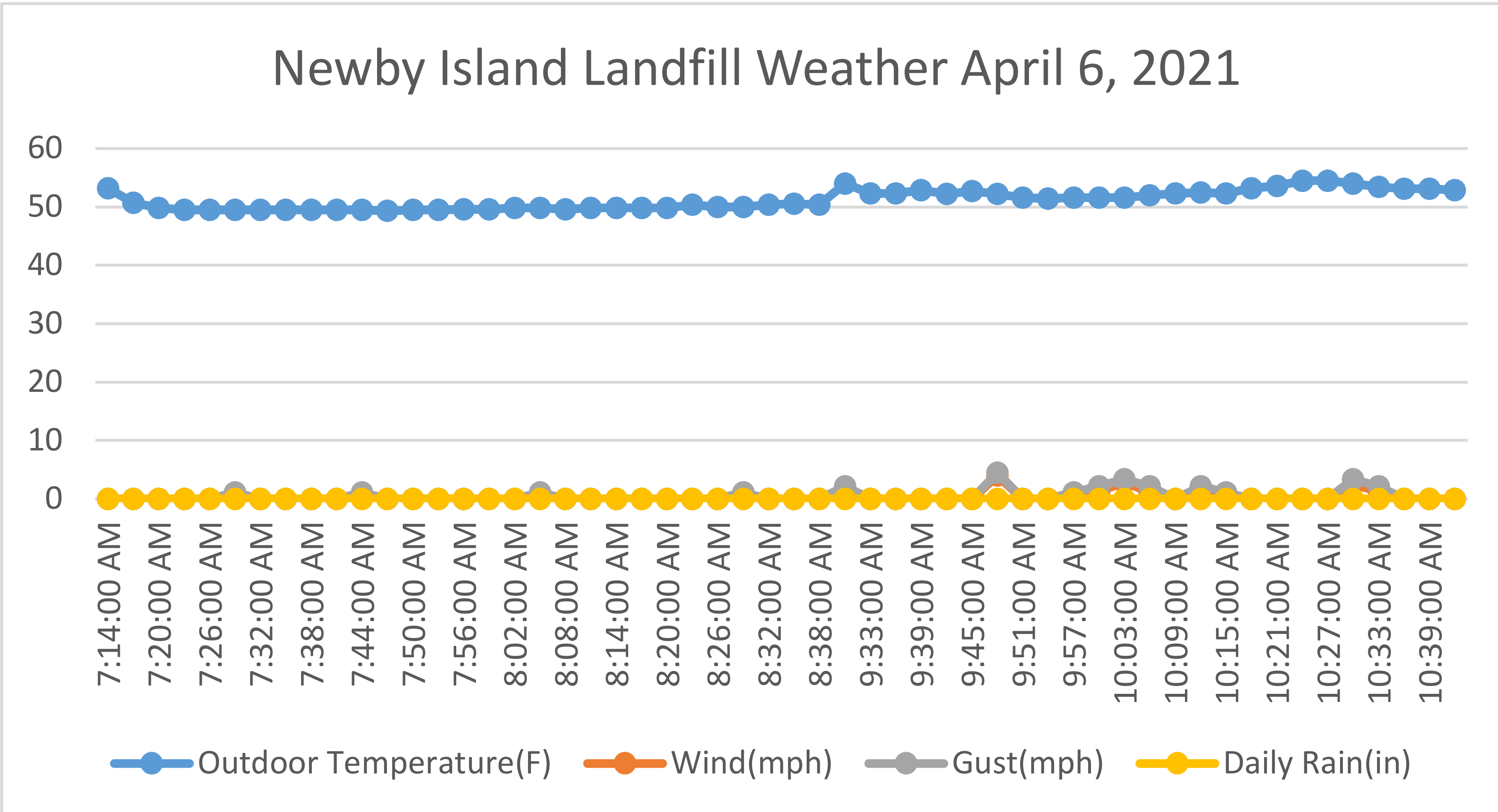
LMR Surface Emissions Monitoring Weather Data

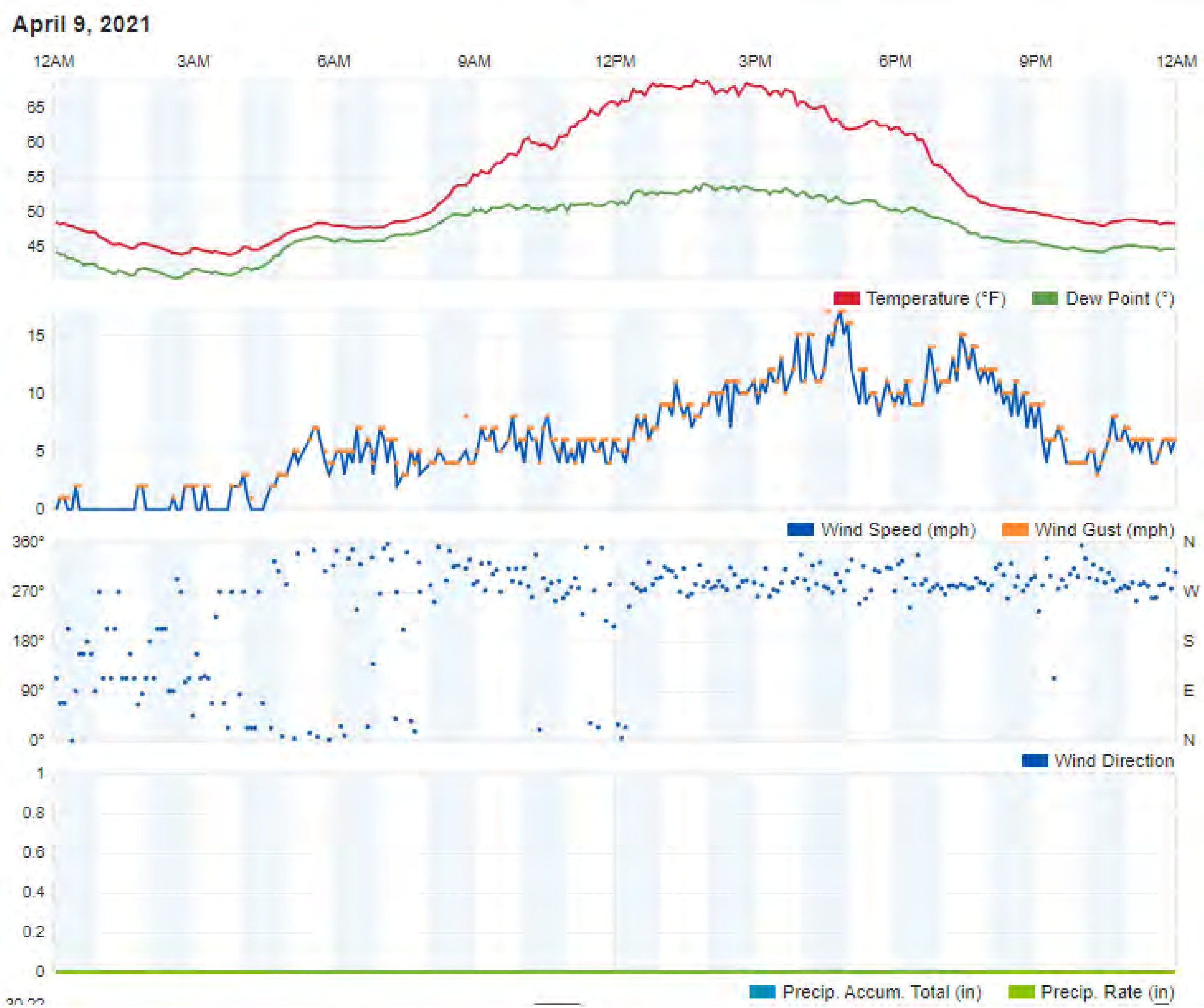
March 27, 2021

Newby Island Landfill, Milpitas, California



Newby Island Landfill Weather March 29, 2021
70
60
50
40
30
20
10
0
7:15:00 AM
7:30:00 AM
7:45:00 AM
8:00:00 AM
8:15:00 AM
8:30:00 AM
8:45:00 AM
9:00:00 AM
9:15:00 AM
9:30:00 AM
9:45:00 AM
10:00:00 AM
10:15:00 AM
10:30:00 AM
10:45:00 AM
11:00:00 AM
11:15:00 AM
11:30:00 AM
11:45:00 AM
12:00:00 PM
12:15:00 PM
12:30:00 PM
12:45:00 PM
1:00:00 PM
1:15:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)


Newby Island Landfill Weather April 6, 2021
60
50
40
30
20
10
0
7:14:00 AM
7:20:00 AM
7:26:00 AM
7:32:00 AM
7:38:00 AM
7:44:00 AM
7:50:00 AM
7:56:00 AM
8:02:00 AM
8:08:00 AM
8:14:00 AM
8:20:00 AM
8:26:00 AM
8:32:00 AM
8:38:00 AM
9:33:00 AM
9:39:00 AM
9:45:00 AM
9:51:00 AM
9:57:00 AM
10:03:00 AM
10:09:00 AM
10:15:00 AM
10:21:00 AM
10:27:00 AM
10:33:00 AM
10:39:00 AM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)



First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

April 9, 2021

Newby Island Landfill, Milpitas, California

August 5, 2021
File No. 07221077.00

Ms. Rachelle Huber
Republic Services – Newby Island Landfill
1601 Dixon Landing Road
Milpitas, California 95035

Subject: Newby Island Landfill - Milpitas, California

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring for Second Quarter 2021.

Dear Ms. Huber:

SCS Field Services (SCS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Newby Island Landfill (Site) during the Second 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 appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Michael Flanagan at (510) 363-7796 or Whitney Stackhouse at (209) 338-7990 if you have any questions or comments.

Sincerely,

Whitney Stackhouse
Project Manager
SCS Field Services

Michael Flanagan
Project Manager
SCS Field Services

Encl.

Sean Bass, SCS Field Services
Art Jones, SCS Field Services

Newby Island Landfill

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

Second Quarter 2021

Presented to:

Ms. Rachelle Huber
Republic Services – Newby Island
1601 Dixon Landing Road
Milpitas, California 95035

SCS FIELD SERVICES

File No. 07221077.00 Task 01 | August 5, 2021

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

Newby Island Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring Second Quarter 2021

INTRODUCTION

This letter provides results of the April 8, 9, 12, 13, 22, and May 11, 2021, LMR and NSPS landfill surface emissions monitoring (SEM) performed by SCS Field Services (SCS) at the subject site. All work was performed in accordance with our approved Work Scope dated December 23, 2020, and the LMR requirements.

SUMMARY AND CONCLUSIONS

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, based on the previous monitoring events, in which exceedances were observed, the monitoring at the Newby Island Landfill was performed on 25-foot pathways in accordance with the LMR.

On, April 8, 9, 12, 13, 22, and May 11, 2021, SCS performed second quarter 2021 SEM as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that twenty-seven (27) locations exceeded the 500 ppmv maximum concentration during the initial monitoring event (Table 1 in Attachment 3). The required 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring indicated that all areas did not returned to below regulatory compliance limits following system adjustments and remediation (well field adjustments and installation of new bentonite plugs) by site personnel. Based on these monitoring results, and in accordance with the NSPS, the site is required to perform a system expansion within 120-days of the initial detected exceedance. These results are discussed in a subsequent section of this report.

Also, during the instantaneous monitoring event, SCS performed concurrent integrated monitoring of the landfill surface. As required by the LMR, the landfill was divided into 50,000 square foot areas. The Newby Island Landfill surface area was therefore divided into 233 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 landfilling activities, unsafe conditions, or there was no waste in place prior to the monitoring event.

During the monitoring event, there were six (6) grid areas observed to exceed the 25 ppmv LMR integrated average threshold (Table 2 in Attachment 4). The required first and second 10-day LMR follow-up monitoring indicated that all areas had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results no additional follow up testing was required.

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 piping and components indicated that all test locations were in compliance with the 500 ppmv requirement.

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. During this reporting period, four (4) locations were observed to exceed the 200 ppmv, reporting threshold. When these readings are observed, the locations are reported to site personnel for tracking and/or remediation and will be reported in the next submittal of the annual LMR report.

Finally, to help prevent potential future exceedances, SCS recommends that the landfill surface be routinely inspected and any observed surface erosion be routinely repaired.

BACKGROUND

The Newby Island Landfill is an active 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 gas, 40 to 50 percent carbon dioxide, and trace amount of various other gases, some of which are odorous. The Newby Island property contains a system to control the combustible gases generated in the landfill.

SURFACE EMISSIONS MONITORING

On April 8, 9, 12, 13, 22, and May 11, 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 monitoring on a 25-foot pathway in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

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

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

- 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 -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 6. Wind speed averages were observed to remain below the alternative threshold of 10 miles per hour, and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within 72 hours of the monitoring events. Therefore, site meteorological conditions were within the alternatives of the LMR requirements on the above mentioned dates.

TESTING RESULTS

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

On April 8, 9, 12 and 13, 2021, SCS performed second quarter 2021 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that twenty-seven (27) locations exceeded the 500 ppmv maximum concentration. The required 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring performed on April 13 and May 11, 2021, respectively, indicated that twenty-one (21) locations did not remain below compliance limits as required, following system adjustments and remediation (wellfield adjustment and borehole repairs using bentonite and soil) performed by SCS and site personnel. In accordance with NSPS requirements for expansion and remediation, the exceedance locations need to be remediated and returned to compliance in accordance with the rule (expansion of the collection system or an alternative compliance option if approved by the BAAQMD) within 120 days of the detected initial instantaneous exceedance, which will be due by August 11, 2021. Results of the initial and follow up monitoring are shown in Attachments 2 and 3 (Table 1).

Additionally, calculated integrated grid monitoring indicated six (6) integrated exceedances of the 25-ppmv requirement on April 8, 9 and 12, 2021. The required 10-day LMR follow-up monitoring performed on April 13 and 22, 2021, indicated that all areas had returned to compliance following system adjustments and remediation by site personnel. Based on these monitoring results no additional follow up testing was required. Results of the initial and follow up monitoring are shown in Attachment 4 (Table 2). Calibration logs for the monitoring equipment are provided in Attachment 5.

During this monitoring event, several grids were not monitored, in accordance with the LMR, due to active landfilling activities, unsafe conditions or no waste in place. SCS will continue to monitor all accessible locations during the third quarter 2021.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On April 9, 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 470 ppmv, was below the maximum threshold (see Table 1 for component results). Therefore, all pressurized piping and components located at the LFG BFS were in compliance at the time of our testing.

PROJECT SCHEDULE

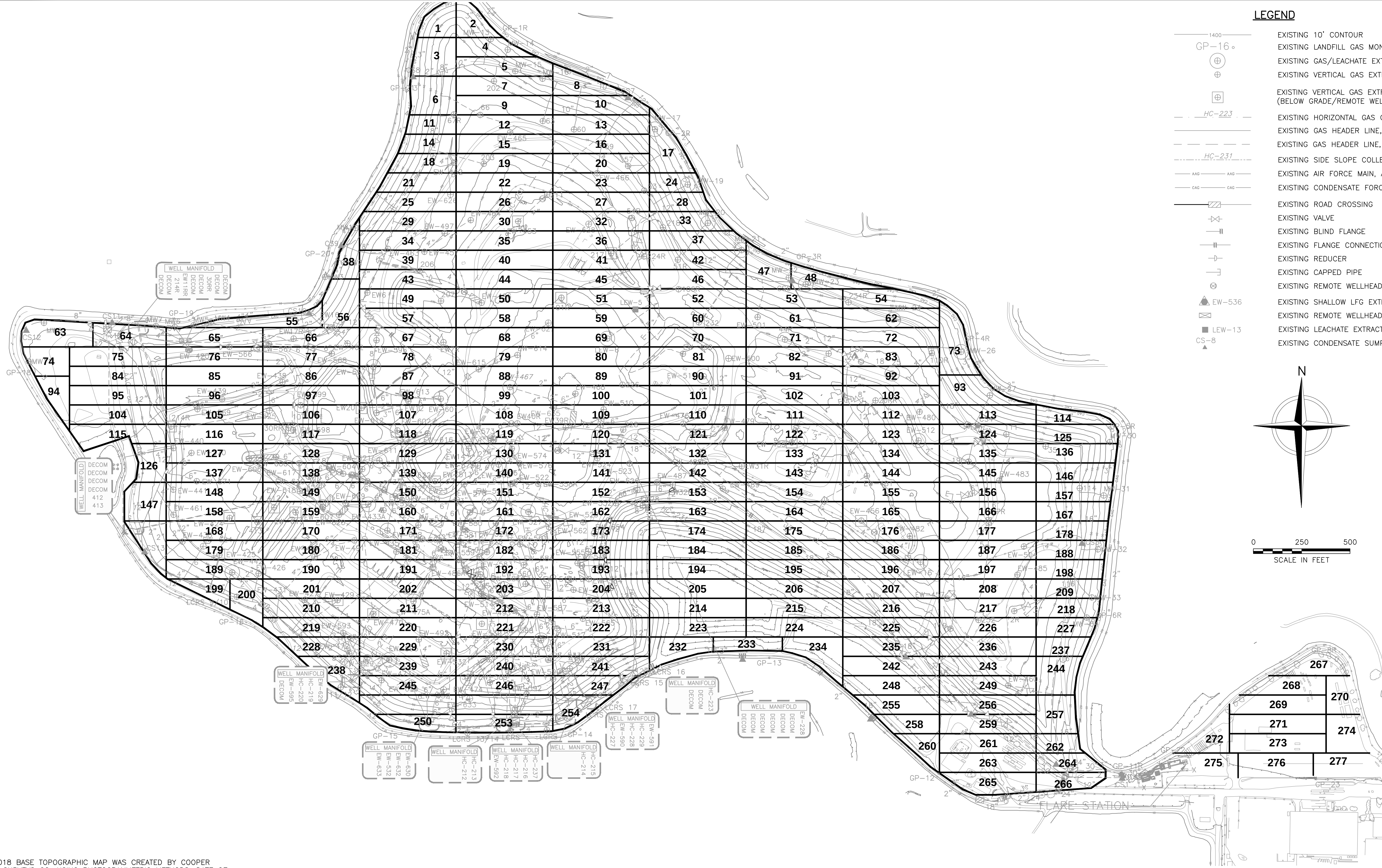
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the third quarter 2021 (July through September) surface emissions testing event is scheduled to be performed by the end of August 2021 in accordance with the Republic SOP unless an alternative timeline is requested by site personnel.

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

1400	EXISTING 10' CONTOUR
GP-16	EXISTING LANDFILL GAS MONITORING PROBE
	EXISTING GAS/LEACHATE EXTRACTION WELL
	EXISTING VERTICAL GAS EXTRACTION WELL (ABOVE GRADE)
	EXISTING VERTICAL GAS EXTRACTION WELL (BELOW GRADE/REMOTE WELLHEAD)
HC-223	EXISTING HORIZONTAL GAS COLLECTOR
	EXISTING GAS HEADER LINE, ON GRADE, SIZE VARIES
	EXISTING GAS HEADER LINE, BELOW GRADE, SIZE VARIES
HC-231	EXISTING SIDE SLOPE COLLECTOR
AAG	EXISTING AIR FORCE MAIN, ABOVE GRADE
CAG	EXISTING CONDENSATE FORCE MAIN, ABOVE GRADE
	EXISTING ROAD CROSSING
	EXISTING VALVE
	EXISTING BLIND FLANGE
	EXISTING FLANGE CONNECTION
	EXISTING REDUCER
	EXISTING CAPPED PIPE
	EXISTING REMOTE WELLHEAD
EW-536	EXISTING SHALLOW LFG EXTRACTION WELL
	EXISTING REMOTE WELLHEAD MANIFOLD
LEW-13	EXISTING LEACHATE EXTRACTION WELL
CS-8	EXISTING CONDENSATE SUMP

N

0 250 500
SCALE IN FEET

NOTES:
1. THE 2018 BASE TOPOGRAPHIC MAP WAS CREATED BY COOPER AERIAL SURVEYS CO. USING PHOTOGRAMMETRIC METHODS. DATE OF PHOTOGRAPHY: APRIL 17, 2018. HORIZONTAL DATUM: NAD27, ZONE 3, VERTICAL DATUM: LOCAL LANDFILL DATUM.
2. THE 2010 BASE AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY REPUBLIC. WELLS EW-487 THROUGH EW-489 ARE PER DESIGN LOCATIONS, NO SURVEY WAS RECEIVED FOR THESE WELLS. AS-BUILT LOCATIONS FOR HC-223 AND LCRS-17 ARE APPROXIMATE, NO SURVEY WAS RECEIVED FOR THESE WELLS.
3. THE 2017 GCCS AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY RUGGERI, JENSEN, AZAR AND ASSOCIATES, DATES OF SURVEY: JANUARY 11, 20, AND FEBRUARY 24, 2017.
4. THE 2018 GCCS IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: MARCH 14, 2018.
5. THE 2018 GCCS PHASE II IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: AUGUST 6, 2018.

File: K:\PROJECTS\NEWBY ISLAND\180563 - PHASE II GCCS IMPROVEMENTS CQA_Project Drawings\NEWBY SITE AS-BUILTS.dwg Layout: SEM User: gavin.cossen Oct 16, 2018 - 3:43pm

DRAFT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 9/6/18 — DRAWN BY RAW — DESIGNED BY DK — CHECKED BY AMN — APPROVED BY MED

cornerstone
A TETRA TECH COMPANY

NEWBY ISLAND LANDFILL
SANTA CLARA COUNTY, CALIFORNIA

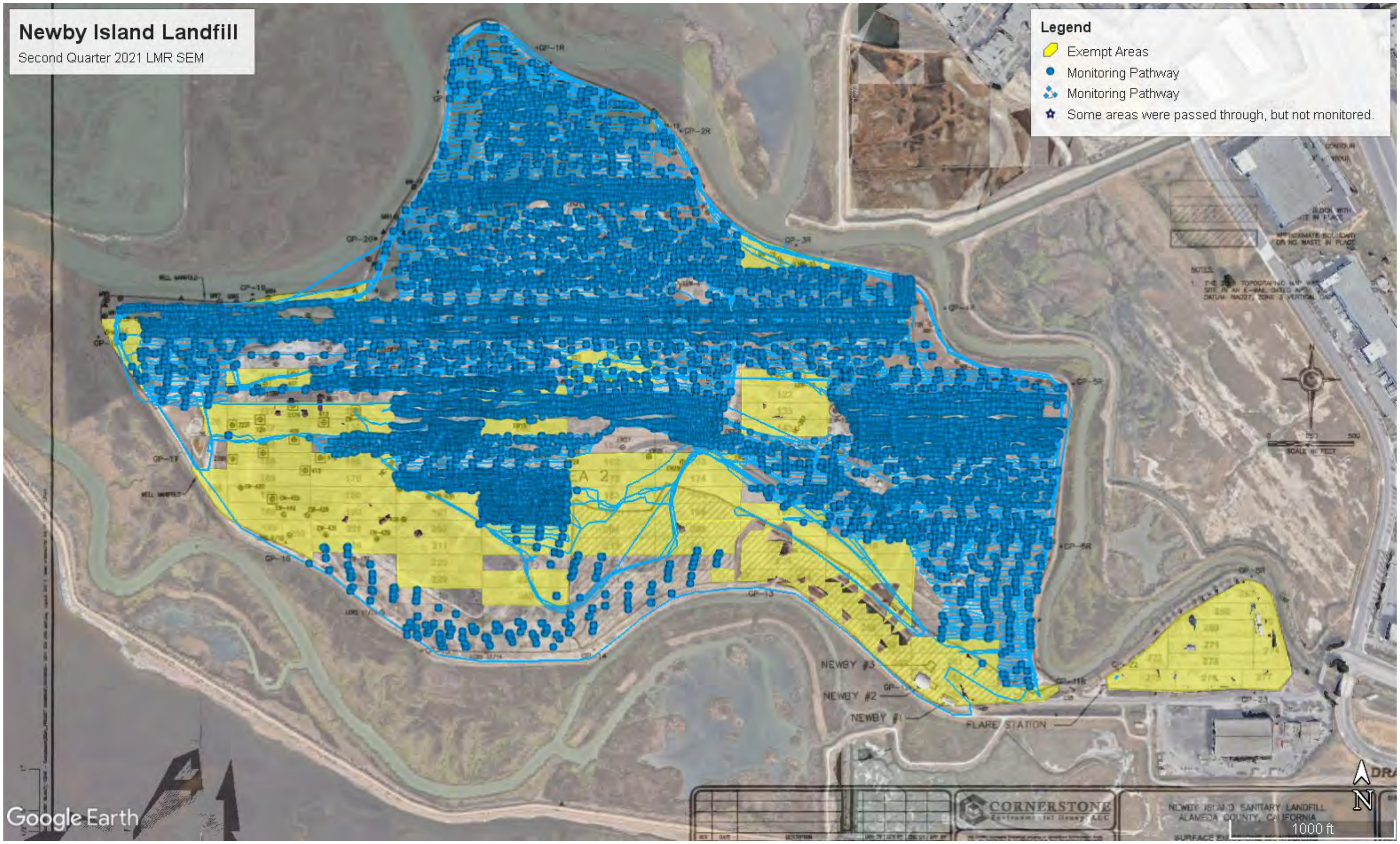
GCCS AS-BUILT SEM SITE PLAN

SHEET NO. 1

PROJECT NO. ------

Attachment 2

Surface Pathway



Second Quarter 2021
LMR Surface Emissions Monitoring Pathway
Newby Island Landfill, Milpitas, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

Second Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Instantaneous Data Report for April 8, 9, 12, 13, 22, and May 11, 2021

Location Well ID or Grid Number	Initial Monitoring (ppmv) April 13, 2021	10-Day Follow Up Monitoring (ppmv) April 22, 2021	20-Day Follow Up Monitoring (ppmv) NA	30-Day Follow Up Monitoring (ppmv) May 11, 2021
NILEW106	700	40	NA	41
NILEW510	930	100	NA	210
NILEW601	6,483	70	NA	2,975
NILEW615	36,700	150	NA	1,665
NILEW618	10,000	30	NA	200
NILEW620	10,000	200	NA	1,663
NILEW638	10,000	70	NA	2,490
NILEW663	1,000	100	NA	700
NILEW675	10,000	200	NA	245
NILEW676	10,000	100	NA	4,128
NILEW677	2,496	200	NA	2,489
NILEW682	20,000	200	NA	1,423
NILEW694	535	100	NA	778
NILEW720	1,187	100	NA	1,455
NILEW723	1,201	90	NA	1,900

Second Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Location Well ID or Grid Number	Initial Monitoring (ppmv) April 13, 2021	10-Day Follow Up Monitoring (ppmv) April 22, 2021	20-Day Follow Up Monitoring (ppmv) NA	30-Day Follow Up Monitoring (ppmv) May 11, 2021
NILEW747	1,500	75	NA	753
NILEW749	1,315	20	NA	1,300
NILEW757	40,000	60	NA	7,401
NILEW763	8,474	12	NA	1,190
CS07	20,000	70	NA	2,796
CS08	900	50	NA	1,158
CS10B	2,784	90	NA	2,465
HC17-4	8,000	250	NA	2,897
MW014	4,500	60	NA	200
MW018	4,000	80	NA	496
MW020	1,000	90	NA	1,051
LEW05	2,000	150	NA	1,158
MW019	250	NA	NA	NA
NILEW460	328	NA	NA	NA
NILEW637	348	NA	NA	NA
NILEW629	438	NA	NA	NA

Second Quarter 2021

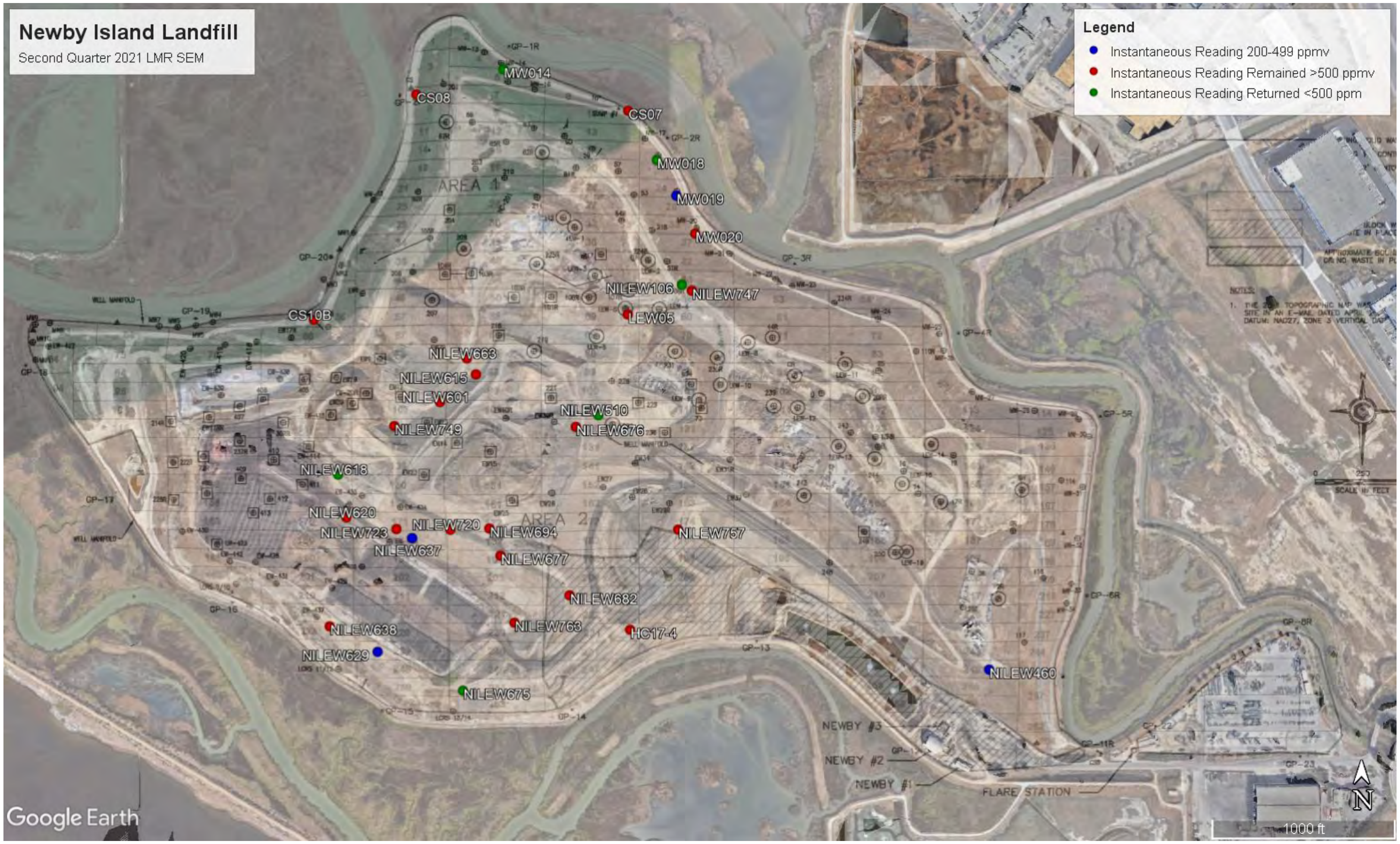
Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Pressurized Pipe

Location	Date	Highest Concentration (ppmv)
Flare Station	4/9/2021	470

No other exceedances of the 500 ppm threshold observed during the LMR/NSPS monitoring performed during the second quarter 2021.



Second Quarter 2021

Initial Emissions Monitoring Locations Greater Than 500 ppmv

Newby Island Landfill Milpitas, California

Attachment 4

Integrated Monitoring Results

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-001	4/8/2021	1.76	
NIL-002	4/8/2021	2.18	
NIL-003	4/8/2021	3.24	
NIL-004	4/8/2021	4.28	
NIL-005	4/8/2021	5.62	
NIL-006	4/8/2021	3.97	
NIL-007	4/8/2021	5.13	
NIL-008	4/8/2021	5.78	
NIL-009	4/12/2021	7.22	
NIL-010	4/12/2021	5.87	
NIL-011	4/12/2021	1.64	
NIL-012	4/12/2021	4.67	
NIL-013	4/12/2021	3.02	
NIL-014	4/12/2021	2.45	
NIL-015	4/12/2021	4.51	
NIL-016	4/12/2021	3.05	
NIL-017	4/12/2021	2.21	
NIL-018	4/12/2021	1.90	
NIL-019	4/12/2021	3.57	
NIL-020	4/12/2021	2.48	
NIL-021	4/12/2021	1.59	
NIL-022	4/12/2021	5.78	
NIL-023	4/12/2021	7.51	
NIL-024	4/12/2021	4.87	
NIL-025	4/9/2021	1.71	
NIL-026	4/9/2021	2.33	
NIL-027	4/9/2021	5.22	
NIL-028	4/9/2021	3.50	
NIL-029	4/12/2021	3.26	
NIL-030	4/12/2021	4.35	
NIL-031	--	--	Grid Is Not On The Grid Map
NIL-032	4/12/2021	4.64	
NIL-033	4/12/2021	3.87	
NIL-034	4/12/2021	2.65	
NIL-035	4/12/2021	3.04	
NIL-036	4/12/2021	3.57	
NIL-037	4/12/2021	4.57	
NIL-038	4/9/2021	2.26	
NIL-039	4/12/2021	3.28	
NIL-040	4/12/2021	3.86	
NIL-041	4/12/2021	4.29	
NIL-042	4/12/2021	4.66	
NIL-043	4/12/2021	2.15	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-044	4/12/2021	2.14	
NIL-045	4/12/2021	2.56	
NIL-046	4/12/2021	3.74	
NIL-047	--	--	Native
NIL-048	--	--	Native
NIL-049	4/12/2021	2.50	
NIL-050	4/12/2021	2.86	
NIL-051	4/12/2021	8.27	
NIL-052	4/12/2021	5.19	
NIL-053	4/12/2021	4.19	
NIL-054	4/12/2021	5.65	
NIL-055	--	--	Native
NIL-056	4/9/2021	2.00	
NIL-057	4/12/2021	1.78	
NIL-058	4/12/2021	2.75	
NIL-059	4/12/2021	6.99	
NIL-060	4/12/2021	7.34	
NIL-061	4/12/2021	1.91	
NIL-062	4/12/2021	3.28	
NIL-063	4/8/2021	1.94	
NIL-064	4/8/2021	4.82	
NIL-065	4/8/2021	2.68	
NIL-066	4/8/2021	5.34	
NIL-067	4/8/2021	2.28	
NIL-068	4/8/2021	4.24	
NIL-069	4/8/2021	7.46	
NIL-070	4/8/2021	4.57	
NIL-071	4/8/2021	1.79	
NIL-072	4/8/2021	2.24	
NIL-073	4/9/2021	1.78	
NIL-074	--	--	Native
NIL-075	4/9/2021	2.01	
NIL-076	4/9/2021	1.41	
NIL-077	4/9/2021	4.11	
NIL-078	4/9/2021	3.37	
NIL-079	4/9/2021	6.95	
NIL-080	4/9/2021	11.51	
NIL-081	4/9/2021	2.84	
NIL-082	4/9/2021	1.36	
NIL-083	4/9/2021	1.36	
NIL-084	4/8/2021	3.91	
NIL-085	4/8/2021	3.44	
NIL-086	4/8/2021	4.08	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-087	4/8/2021	4.36	
NIL-088	4/8/2021	14.01	
NIL-089	4/8/2021	8.96	
NIL-090	4/8/2021	7.04	
NIL-091	4/8/2021	3.43	
NIL-092	4/8/2021	3.14	
NIL-093	4/8/2021	1.61	
NIL-094	--	--	Native
NIL-095	4/8/2021	4.66	
NIL-096	4/8/2021	2.19	
NIL-097	4/8/2021	7.54	
NIL-098	4/8/2021	5.26	
NIL-099	4/8/2021	18.74	
NIL-100	--	--	Active
NIL-101	4/8/2021	2.83	
NIL-102	4/8/2021	2.31	
NIL-103	4/8/2021	1.72	
NIL-104	4/8/2021	4.40	
NIL-105	--	--	Leachate Pond
NIL-106	4/9/2021	7.18	
NIL-107	4/9/2021	10.15	
NIL-108	4/9/2021	30.59	
NIL-108	4/13/2021	19.29	
NIL-109	--	--	Active
NIL-110	4/8/2021	4.06	
NIL-111	--	--	Pallet Yard
NIL-112	4/8/2021	2.34	
NIL-113	4/8/2021	2.48	
NIL-114	4/8/2021	2.76	
NIL-115	4/8/2021	4.93	
NIL-116	4/8/2021	6.02	
NIL-117	4/8/2021	5.57	
NIL-118	4/8/2021	9.29	
NIL-119	--	--	Active
NIL-120	4/8/2021	25.39	Misread
NIL-120	4/13/2021	19.69	
NIL-121	4/8/2021	3.23	
NIL-122	--	--	Pallet Yard
NIL-123	4/8/2021	1.45	
NIL-124	4/8/2021	1.51	
NIL-125	4/8/2021	1.71	
NIL-126	--	--	Mulch Area
NIL-127	--	--	Mulch Area

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-128	--	--	Mulch Area
NIL-129	4/9/2021	15.71	
NIL-130	4/9/2021	22.20	
NIL-131	4/9/2021	24.63	
NIL-132	4/9/2021	3.68	
NIL-133	--	--	Pallet Yard
NIL-134	4/9/2021	2.41	
NIL-135	4/9/2021	2.39	
NIL-136	4/9/2021	2.49	
NIL-137	--	--	Compost Operations
NIL-138	--	--	Compost Operations
NIL-139	4/9/2021	22.25	
NIL-140	--	--	Active
NIL-141	4/9/2021	14.49	
NIL-142	4/9/2021	2.93	
NIL-143	--	--	Pallet Yard
NIL-144	4/9/2021	3.12	
NIL-145	4/9/2021	2.45	
NIL-146	4/9/2021	2.50	
NIL-147	4/9/2021	3.69	
NIL-148	--	--	Active
NIL-149	4/9/2021	6.36	
NIL-150	4/9/2021	17.30	
NIL-151	4/9/2021	9.81	
NIL-152	4/9/2021	23.99	
NIL-153	4/9/2021	5.03	
NIL-154	4/9/2021	4.53	
NIL-155	4/9/2021	3.36	
NIL-156	4/9/2021	1.75	
NIL-157	4/9/2021	1.94	
NIL-158	--	--	Active
NIL-159	--	--	Active
NIL-160	4/9/2021	15.70	
NIL-161	4/9/2021	14.38	
NIL-162	--	--	Active
NIL-163	--	--	Active
NIL-164	4/9/2021	4.19	
NIL-165	4/9/2021	3.95	
NIL-166	4/9/2021	2.02	
NIL-167	4/9/2021	2.07	
NIL-168	--	--	Active
NIL-169	--	--	Active
NIL-170	--	--	Active

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

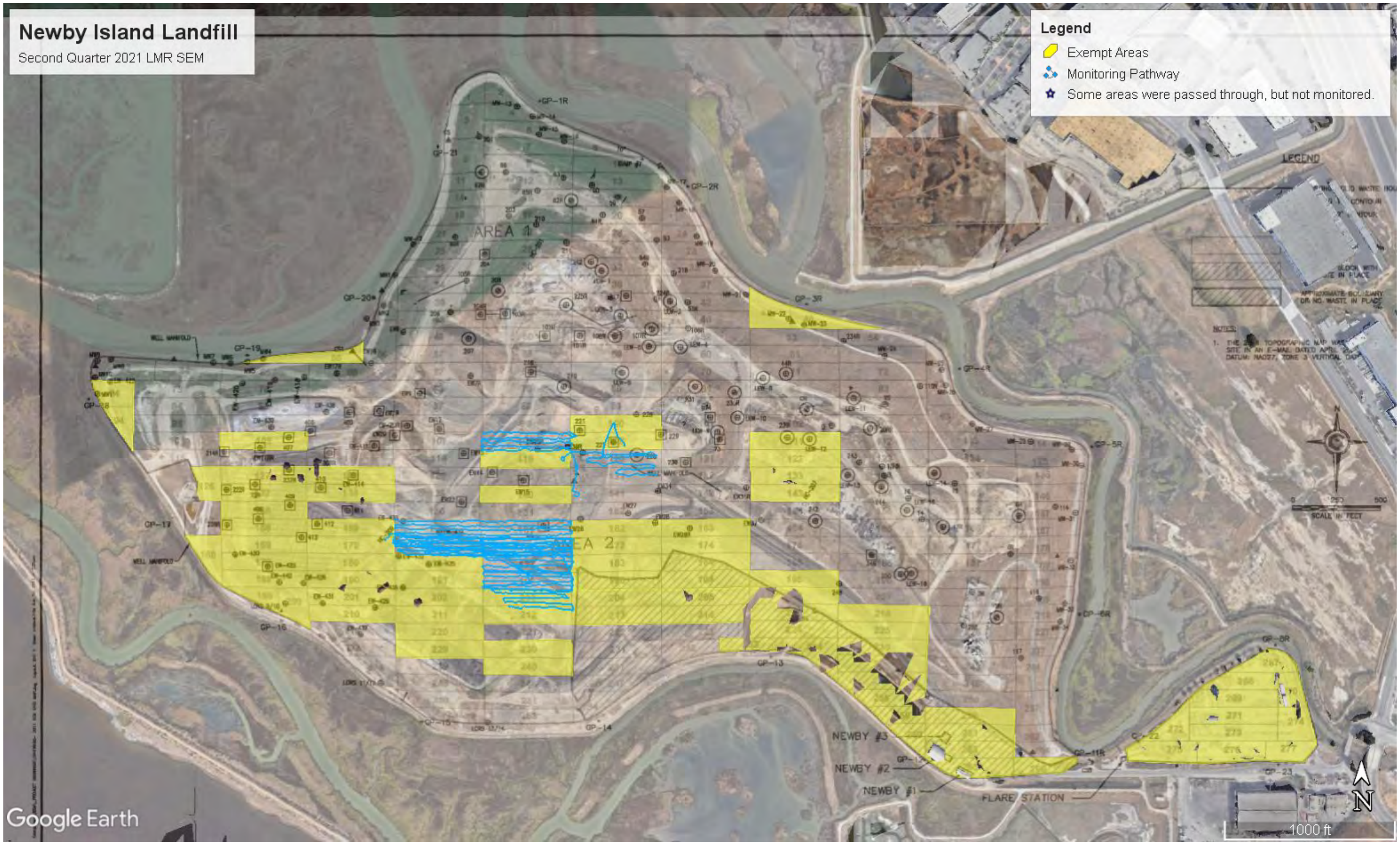
Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-171	4/12/2021	45.48	
NIL-171	4/22/2021	15.68	
NIL-172	4/12/2021	69.23	
NIL-172	4/22/2021	14.53	
NIL-173	--	--	Active
NIL-174	--	--	Active
NIL-175	4/12/2021	3.05	
NIL-176	4/12/2021	2.47	
NIL-177	4/12/2021	1.92	
NIL-178	4/12/2021	1.98	
NIL-179	--	--	Compost Operations
NIL-180	--	--	Compost Operations
NIL-181	--	--	Compost Operations
NIL-182	4/12/2021	54.42	
NIL-182	4/22/2021	15.09	
NIL-183	--	--	Active
NIL-184	--	--	Active
NIL-185	4/12/2021	9.51	
NIL-186	4/12/2021	3.40	
NIL-187	4/12/2021	1.49	
NIL-188	4/12/2021	2.04	
NIL-189	--	--	Compost Operations
NIL-190	--	--	Compost Operations
NIL-191	--	--	Compost Operations
NIL-192	4/12/2021	41.19	
NIL-192	4/22/2021	18.00	
NIL-193	--	--	Active
NIL-194	--	--	Active
NIL-195	--	--	Active
NIL-196	4/12/2021	2.55	
NIL-197	4/12/2021	2.16	
NIL-198	4/12/2021	2.28	
NIL-199	--	--	Compost Operations
NIL-200	--	--	Compost Operations
NIL-201	--	--	Compost Operations
NIL-202	--	--	Compost Operations
NIL-203	--	--	Compost Operations
NIL-204	--	--	Active
NIL-205	--	--	Active
NIL-206	--	--	Active
NIL-207	4/12/2021	4.24	
NIL-208	4/12/2021	3.00	
NIL-209	4/12/2021	2.63	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-210	--	--	Compost Operations
NIL-211	--	--	Compost Operations
NIL-212	--	--	Active
NIL-213	--	--	Active
NIL-214	--	--	Active
NIL-215	--	--	Active
NIL-216	--	--	Active
NIL-217	4/12/2021	1.55	
NIL-218	4/12/2021	1.46	
NIL-219	4/12/2021	16.65	
NIL-220	--	--	Active
NIL-221	4/12/2021	21.00	
NIL-222	4/12/2021	20.88	
NIL-223	4/12/2021	18.92	
NIL-224	--	--	Leachate Pond
NIL-225	--	--	Active
NIL-226	4/12/2021	1.46	
NIL-227	4/12/2021	1.72	
NIL-228	4/12/2021	10.43	
NIL-229	--	--	Leachate Pond
NIL-230	--	--	Active
NIL-231	4/12/2021	7.52	
NIL-232	4/12/2021	21.72	
NIL-233	--	--	Native
NIL-234	--	--	Leachate Pond
NIL-235	--	--	Active
NIL-236	4/12/2021	4.76	
NIL-237	4/12/2021	4.01	
NIL-238	4/12/2021	7.66	
NIL-239	4/12/2021	8.84	
NIL-240	--	--	Active
NIL-241	4/12/2021	18.01	
NIL-242	--	--	Leachate Pond
NIL-243	4/12/2021	2.45	
NIL-244	4/12/2021	2.43	
NIL-245	4/12/2021	8.19	
NIL-246	4/12/2021	7.69	
NIL-247	4/12/2021	6.48	
NIL-248	--	--	Leachate Pond
NIL-249	4/12/2021	3.09	
NIL-250	4/12/2021	8.92	
NIL-251	4/12/2021	7.90	
NIL-252	4/12/2021	8.70	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-253	4/12/2021	15.43	
NIL-254	4/12/2021	6.93	
NIL-255	--	--	Leachate Pond
NIL-256	4/12/2021	2.70	
NIL-257	4/12/2021	3.03	
NIL-258	--	--	Leachate Pond
NIL-259	--	--	Paved
NIL-260	--	--	Paved
NIL-261	--	--	Paved
NIL-262	4/12/2021	2.90	
NIL-263	--	--	Paved
NIL-264	4/12/2021	2.95	
NIL-265	--	--	Paved
NIL-266	--	--	Paved
NIL-267	--	--	Paved
NIL-268	--	--	Paved
NIL-269	--	--	Paved
NIL-270	--	--	Paved
NIL-271	--	--	Paved
NIL-272	--	--	Paved
NIL-273	--	--	Paved
NIL-274	--	--	Paved
NIL-275	--	--	Paved
NIL-276	--	--	Paved
NIL-277	--	--	Paved



Second Quarter 2021
LMR Surface Emissions Monitoring First 10-Day Pathway
Newby Island Landfill, Milpitas, California

Attachment 5

Calibration Logs

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.9	502	2	4
2	.1	500	0	3
3	.1	501	1	4

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= 126768
Counters Observed for the Zero= 4998

Trial 2:
Counts Observed for the Span= 126260
Counters Observed for the Zero= 4812

Trial 3:
Counts Observed for the Span= 126560
Counters Observed for the Zero= 4832

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: Grid 1 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 11-8-2021 Site Name: Newby

Inspector(s): Cody Crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 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	4
2	.1	501	1	3
3	.1	500	0	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 156296

Counters Observed for the Zero= 5172

Trial 2:

Counts Observed for the Span= 156288

Counters Observed for the Zero= 4964

Trial 3:

Counts Observed for the Span= 156329

Counters Observed for the Zero= 4988

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.8 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	499	1	4
2	.1	501	1	4
3	.1	498	2	3

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 125348
Counters Observed for the Zero= 4093

Trial 2:
Counts Observed for the Span= 121480
Counters Observed for the Zero= 3856

Trial 3:
Counts Observed for the Span= 121697
Counters Observed for the Zero= 3860

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 0 ppm

Downwind Location Description: Grid 1 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021   Site Name: Newby

Inspector(s): Bryan O   Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °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	.2	500	0	4
2	.1	502	2	4
3	.1	502	2	5

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= 113000
Counters Observed for the Zero= 3285

Trial 2:
Counts Observed for the Span= 112268
Counters Observed for the Zero= 3104

Trial 3:
Counts Observed for the Span= 112475
Counters Observed for the Zero= 3127

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare   Reading: 1.4 ppm

Downwind Location Description: oyridl   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: 11-8-2021 Site Name: Newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	.2	502	2	5
3	.1	502	2	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span 169842
Counters Observed for the Zero= 3921

Trial 2:
Counts Observed for the Span 170183
Counters Observed for the Zero= 3958

Trial 3:
Counts Observed for the Span= 170409
Counters Observed for the Zero= 3978

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.3 ppm

Downwind Location Description: Flare 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: 4-8-2021 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	498	2	3
2	.1	501	1	5
3				

Average Difference:

*Perform recalibration if average difference is greater than 10

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

= 100%-______/500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144204
Counters Observed for the Zero= 3901

Trial 2:
Counts Observed for the Span= 146496
Counters Observed for the Zero= 3795

Trial 3:
Counts Observed for the Span= 144893
Counters Observed for the Zero= 3861

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.4 ppm

Downwind Location Description: Flare Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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	2 →	← 498	2
2	.2	0 →	← 500	4
3	.1	3 →	← 503	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%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 126508
Counters Observed for the Zero= 4820

Trial 2:
Counts Observed for the Span= 126809
Counters Observed for the Zero= 4837

Trial 3:
Counts Observed for the Span= 127056
Counters Observed for the Zero= 4847

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.1 ppm

Downwind Location Description: Flare Reading: 1.2 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4- 8- 2021 Site Name: Newby

Inspector(s): Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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	500	0	4
2	.0	498	2	4
3	.1	501	1	4

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= 156038
Counters Observed for the Zero= 4957

Trial 2:
Counts Observed for the Span= 156132
Counters Observed for the Zero= 4963

Trial 3:
Counts Observed for the Span= 156288
Counters Observed for the Zero= 4973

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: Grid 1 Reading: 1.4 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Hunter O. Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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	.1	500	0	4
2	.1	499	1	2
3	.0	503	3	4

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

= 100%- 2 /500 x 100%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 121298
Counters Observed for the Zero= 3845

Trial 2:
Counts Observed for the Span= 120980
Counters Observed for the Zero= 3856

Trial 3:
Counts Observed for the Span= 120998
Counters Observed for the Zero= 3885

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.1 ppm

Downwind Location Description: Flare Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2024 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	3
2	.1	499	1	5
3	.1	498	2	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 143275
Counters Observed for the Zero= 3847

Trial 2:
Counts Observed for the Span= 143871
Counters Observed for the Zero= 3863

Trial 3:
Counts Observed for the Span= 143574
Counters Observed for the Zero= 3891

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Cridl Reading: 1.4 ppm

Downwind Location Description: Flare Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	499	1	5
2	.1	500	0	4
3	.1	501	1	5

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= 112389
Counters Observed for the Zero= 3106

Trial 2:
Counts Observed for the Span= 112 671
Counters Observed for the Zero= 3123

Trial 3:
Counts Observed for the Span= 112 512
Counters Observed for the Zero= 3159

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.4 ppm

Downwind Location Description: Flare 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: 4-8-2021 Site Name: Newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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: 5421 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	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= 169392
Counters Observed for the Zero= 3872

Trial 2:
Counts Observed for the Span= 170847
Counters Observed for the Zero= 3896

Trial 3:
Counts Observed for the Span= 169817
Counters Observed for the Zero= 4029

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Cnid 1 Reading: 1.3 ppm

Downwind Location Description: Flare 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

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	0	500	0	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= 168309
Counters Observed for the Zero= 3912

Trial 2:
Counts Observed for the Span= 168314
Counters Observed for the Zero= 3897

Trial 3:
Counts Observed for the Span= 168306
Counters Observed for the Zero= 3905

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	500	0	4
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= 169446
Counters Observed for the Zero= 3789

Trial 2:
Counts Observed for the Span= 169433
Counters Observed for the Zero= 3792

Trial 3:
Counts Observed for the Span= 169450
Counters Observed for the Zero= 3780

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare 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

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 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	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= 139317
Counters Observed for the Zero= 4661

Trial 2:
Counts Observed for the Span= 139323
Counters Observed for the Zero= 4658

Trial 3:
Counts Observed for the Span= 139330
Counters Observed for the Zero= 4669

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 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	3
3	0	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= 140365
Counters Observed for the Zero= 4411

Trial 2:
Counts Observed for the Span= 140352
Counters Observed for the Zero= 4418

Trial 3:
Counts Observed for the Span= 140367
Counters Observed for the Zero= 4421

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Bryan ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	4
2	0	500	0	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= 138144
Counters Observed for the Zero= 3379

Trial 2:
Counts Observed for the Span= 138178
Counters Observed for the Zero= 3380

Trial 3:
Counts Observed for the Span= 138188
Counters Observed for the Zero= 3392

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.4 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Bryan ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	3
2	0	501	1	3
3	0	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= 141226
Counters Observed for the Zero= 3188

Trial 2:
Counts Observed for the Span= 141237
Counters Observed for the Zero= 3174

Trial 3:
Counts Observed for the Span= 141245
Counters Observed for the Zero= 3192

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Hunter OTT Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 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	500	0	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= 163788
Counters Observed for the Zero= 4344

Trial 2:
Counts Observed for the Span= 163801
Counters Observed for the Zero= 4328

Trial 3:
Counts Observed for the Span= 163796
Counters Observed for the Zero= 4319

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Hunter ott Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 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	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= 165199
Counters Observed for the Zero= 4271

Trial 2:
Counts Observed for the Span= 165204
Counters Observed for the Zero= 4305

Trial 3:
Counts Observed for the Span= 165186
Counters Observed for the Zero= 4284

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 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	1	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= 178220
Counters Observed for the Zero= 3867

Trial 2:
Counts Observed for the Span= 178256
Counters Observed for the Zero= 3871

Trial 3:
Counts Observed for the Span= 178241
Counters Observed for the Zero= 3866

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare 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: 4-9-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 180441
Counters Observed for the Zero= 3712

Trial 2:
Counts Observed for the Span= 180460
Counters Observed for the Zero= 3724

Trial 3:
Counts Observed for the Span= 180455
Counters Observed for the Zero= 3723

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

pre

Date: 4-9-21

Site Name: Newby

Inspector(s): cody crocker

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH

Wind Direction: E

Barometric Pressure: 29.9 "Hg

Air Temperature: 58 °F

General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364

Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	3
2	1	500	0	3
3	0	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= 177889
Counters Observed for the Zero= 3768

Trial 2:
Counts Observed for the Span= 177905
Counters Observed for the Zero= 3774

Trial 3:
Counts Observed for the Span= 177893
Counters Observed for the Zero= 3755

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1

Reading: 1.2 ppm

Downwind Location Description: Flare

Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21

Site Name: Newby

Inspector(s): Cody crocker

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH

Wind Direction: E

Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F

General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364

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	1	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= 178012

Counters Observed for the Zero= 3577

Trial 2:

Counts Observed for the Span= 178034

Counters Observed for the Zero= 3570

Trial 3:

Counts Observed for the Span= 178056

Counters Observed for the Zero= 3584

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1

Reading: 1.2 ppm

Downwind Location Description: Flare

Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 4-12-21 Site Name: Newby

Inspector(s): Hunter Ott Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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: 2364 Cal Gas Concentration: 500ppm

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

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 171839
Counters Observed for the Zero= 4432

Trial 2:
Counts Observed for the Span= 172817
Counters Observed for the Zero= 4447

Trial 3:
Counts Observed for the Span= 172934
Counters Observed for the Zero= 4451

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Hunter Ott Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 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	.2	501	1	5
3	.0	501	1	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= 172036
Counters Observed for the Zero= 4421

Trial 2:
Counts Observed for the Span= 172184
Counters Observed for the Zero= 4451

Trial 3:
Counts Observed for the Span= 172307
Counters Observed for the Zero= 4489

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.4 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: 4-12-21 Site Name: Newby

Inspector(s): Cody Crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: W Barometric Pressure: 30 "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: 5419 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 174837
Counters Observed for the Zero= 5213

Trial 2:
Counts Observed for the Span= 174526
Counters Observed for the Zero= 5224

Trial 3:
Counts Observed for the Span= 175417
Counters Observed for the Zero= 5246

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Cody crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	5
2	.1	501	1	3
3	.1	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 175260 Counters Observed for the Zero= 5166	**Trial 3:** Counts Observed for the Span= 175409 Counters Observed for the Zero= 5124
Trial 2: Counts Observed for the Span= 175384 Counters Observed for the Zero= 5193	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid1 Reading: 1.6 ppm

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

post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 147928
Counters Observed for the Zero= 3912

Trial 2:
Counts Observed for the Span= 147681
Counters Observed for the Zero= 3924

Trial 3:
Counts Observed for the Span= 148562
Counters Observed for the Zero= 3943

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 148276
Counters Observed for the Zero= 3920

Trial 2:
Counts Observed for the Span= 148492
Counters Observed for the Zero= 3953

Trial 3:
Counts Observed for the Span= 148356
Counters Observed for the Zero= 3986

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Cwidl 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: 4-12-21 Site Name: Newby

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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	7
2	2	501	1	2
3	2	502	2	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144839
Counters Observed for the Zero= 4723

Trial 2:
Counts Observed for the Span= 144615
Counters Observed for the Zero= 4732

Trial 3:
Counts Observed for the Span= 143214
Counters Observed for the Zero= 4758

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Cian McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	498	2	
2	.1	499	1	
3	.1	501	1	

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 143940
Counters Observed for the Zero= 4711

Trial 2:
Counts Observed for the Span= 143754
Counters Observed for the Zero= 4732

Trial 3:
Counts Observed for the Span= 143905
Counters Observed for the Zero= 4765

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrace Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

P034

Date: 4-12-21

Site Name: Neeby

Inspector(s): Don Gibson

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH

Wind Direction: W

Barometric Pressure: 30 "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: 1220

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	501	1	3
3	1	502	2	2

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 167813

Counters Observed for the Zero= 3818

Trial 2:

Counts Observed for the Span= 167923

Counters Observed for the Zero= 3834

Trial 3:

Counts Observed for the Span= 168041

Counters Observed for the Zero= 3841

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance

Reading: 1.2 ppm

Downwind Location Description: Grid 1

Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	5
2	.0	499	1	3
3	.2	498	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 168640
Counters Observed for the Zero= 3824

Trial 2:
Counts Observed for the Span= 168572
Counters Observed for the Zero= 3851

Trial 3:
Counts Observed for the Span= 168794
Counters Observed for the Zero= 3874

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 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

D037

Date: 4-12-21 Site Name: Nealy

Inspector(s): Bryam Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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: 1215 Cal Gas Concentration: 500ppm

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

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131413
Counters Observed for the Zero= 3122

Trial 2:
Counts Observed for the Span= 132814
Counters Observed for the Zero= 3120

Trial 3:
Counts Observed for the Span= 131839
Counters Observed for the Zero= 3115

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	499	1	5
3	.1	498	2	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 132516
Counters Observed for the Zero= 3053

Trial 2:
Counts Observed for the Span= 132117
Counters Observed for the Zero= 3072

Trial 3:
Counts Observed for the Span= 132843
Counters Observed for the Zero= 3006

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.5 ppm

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

post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-21 Site Name: Crazy

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °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	3
2	2	501	1	2
3	1	502	2	2

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131876
Counters Observed for the Zero= 3042

Trial 2:
Counts Observed for the Span= 132726
Counters Observed for the Zero= 3128

Trial 3:
Counts Observed for the Span= 132974
Counters Observed for the Zero= 3145

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	.1	499	1	4
3	.0	499	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= 130640
Counters Observed for the Zero= 3026

Trial 2:
Counts Observed for the Span= 132680
Counters Observed for the Zero= 3217

Trial 3:
Counts Observed for the Span= 131575
Counters Observed for the Zero= 3108

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.5 ppm

Downwind Location Description: Grid 1 Reading: 1.1 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: 4-13-21 Site Name: Nearby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 166814
Counters Observed for the Zero= 3783

Trial 2:
Counts Observed for the Span= 165148
Counters Observed for the Zero= 3754

Trial 3:
Counts Observed for the Span= 166726
Counters Observed for the Zero= 3736

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	501	1	5
3	.1	499	1	3

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 166772
Counters Observed for the Zero= 3765

Trial 2:
Counts Observed for the Span= 165704
Counters Observed for the Zero= 3736

Trial 3:
Counts Observed for the Span= 165039
Counters Observed for the Zero= 3751

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-18-2021 Site Name: Newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °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: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 147472
Counters Observed for the Zero= 3978

Trial 2:
Counts Observed for the Span= 150808
Counters Observed for the Zero= 3946

Trial 3:
Counts Observed for the Span= 152103
Counters Observed for the Zero= 3979

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 06-13-2021 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °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: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 3.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 3.3 /500 x 100%

= 99.3 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 151963
Counters Observed for the Zero= 3976

Trial 2:
Counts Observed for the Span= 151454
Counters Observed for the Zero= 3950

Trial 3:
Counts Observed for the Span= 150903
Counters Observed for the Zero= 3890

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Coby Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °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	0.1	501	1	3
2	.1	501	1	2
3	0.1	501	1	4

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= 174524

Counters Observed for the Zero= 4940

Trial 2:

Counts Observed for the Span= 175820

Counters Observed for the Zero= 4903

Trial 3:

Counts Observed for the Span= 176390

Counters Observed for the Zero= 4953

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.8 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-13-2021 Site Name: Newby

Inspector(s): Cody Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °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	.1	500	0	
2	.1	499	2	
3	.1	498	2	

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 175 880
Counters Observed for the Zero= 49 33

Trial 2:
Counts Observed for the Span= 175 260
Counters Observed for the Zero= 49 11

Trial 3:
Counts Observed for the Span= 174 728
Counters Observed for the Zero= 49 94

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °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	.0	500	0	4
3	.1	501	1	3

Average Difference: .3

*Perform recalibration if average difference is greater than 10

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

= 100%- .3 /500 x 100%

= 99.9 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140980
Counters Observed for the Zero= 4839

Trial 2:
Counts Observed for the Span= 142708
Counters Observed for the Zero= 4766

Trial 3:
Counts Observed for the Span= 143280
Counters Observed for the Zero= 4679

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.4 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-13-2021 Site Name: Newby

Inspector(s): Hunter Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °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	501	1	3
2	.1	502	2	4
3	.2	500	0	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140205
Counters Observed for the Zero= 4968

Trial 2:
Counts Observed for the Span= 139998
Counters Observed for the Zero= 4823

Trial 3:
Counts Observed for the Span= 140100
Counters Observed for the Zero= 4799

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-22-21 Site Name: Newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3.8 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: 58 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 0.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 0.3 /500 x 100%

= 99.9%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 192856
Counters Observed for the Zero= 4560

Trial 2:
Counts Observed for the Span= 193200
Counters Observed for the Zero= 4554

Trial 3:
Counts Observed for the Span= 193690
Counters Observed for the Zero= 4698

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 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-22-21 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 68 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1815 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	502	2	3
3	1	501	1	2

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 128763
Counters Observed for the Zero= 2846

Trial 2:
Counts Observed for the Span= 131472
Counters Observed for the Zero= 2892

Trial 3:
Counts Observed for the Span= 129872
Counters Observed for the Zero= 2911

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 1 Reading: 1.4 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-22-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3.9 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: 58 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	499	1	4
2	.1	501	1	4
3	.1	498	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 152600
Counters Observed for the Zero= 4830

Trial 2:
Counts Observed for the Span= 152986
Counters Observed for the Zero= 4877

Trial 3:
Counts Observed for the Span= 154780
Counters Observed for the Zero= 4990

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 1 Reading: 1.4 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-22-21 Site Name: Newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 68 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	500	0	5
3	.1	501	1	5

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%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 151387
Counters Observed for the Zero= 4811

Trial 2:
Counts Observed for the Span= 151592
Counters Observed for the Zero= 4839

Trial 3:
Counts Observed for the Span= 151876
Counters Observed for the Zero= 4862

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: Caridi 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Newby

Inspector(s): Hunter Ott Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 70 °F General Weather Conditions: sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	500	0	5
2	0	501	1	3
3	0	501	1	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= 132986
Counters Observed for the Zero= 3699

Trial 2:
Counts Observed for the Span= 133049
Counters Observed for the Zero= 3710

Trial 3:
Counts Observed for the Span= 133111
Counters Observed for the Zero= 3726

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.4 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 6-11-21 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 70 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	.0	500	0	5
3	.2	502	2	3

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134592
Counters Observed for the Zero= 4742

Trial 2:
Counts Observed for the Span= 135746
Counters Observed for the Zero= 4781

Trial 3:
Counts Observed for the Span= 135249
Counters Observed for the Zero= 4819

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: G1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.4 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 70 °F General Weather Conditions: sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	500	0	4
2	.2	502	2	4
3	.1	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= 121984
Counters Observed for the Zero= 2899

Trial 2:
Counts Observed for the Span= 122046
Counters Observed for the Zero= 2940

Trial 3:
Counts Observed for the Span= 122286
Counters Observed for the Zero= 2959

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: C71 Reading: 1.2 ppm

Downwind Location Description: Flare 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: 5-11-21 Site Name: Healey

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 61 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 133872

Counters Observed for the Zero= 5094

Trial 2:

Counts Observed for the Span= 134420

Counters Observed for the Zero= 4840

Trial 3:

Counts Observed for the Span= 135628

Counters Observed for the Zero= 4693

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 1 Reading: 1.2 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 61 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

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

Average Difference: 100

*Perform recalibration if average difference is greater than 10

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

= 100%- 100 /500 x 100%

= 100 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 123180
Counters Observed for the Zero= 2987

Trial 2:
Counts Observed for the Span= 121932
Counters Observed for the Zero= 2957

Trial 3:
Counts Observed for the Span= 122484
Counters Observed for the Zero= 2924

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 1 Reading: 1.2 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Necley

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 61 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	498	2	
2	0	499	1	
3	1	499	1	

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134732
Counters Observed for the Zero= 3783

Trial 2:
Counts Observed for the Span= 132612
Counters Observed for the Zero= 3748

Trial 3:
Counts Observed for the Span= 133280
Counters Observed for the Zero= 3717

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

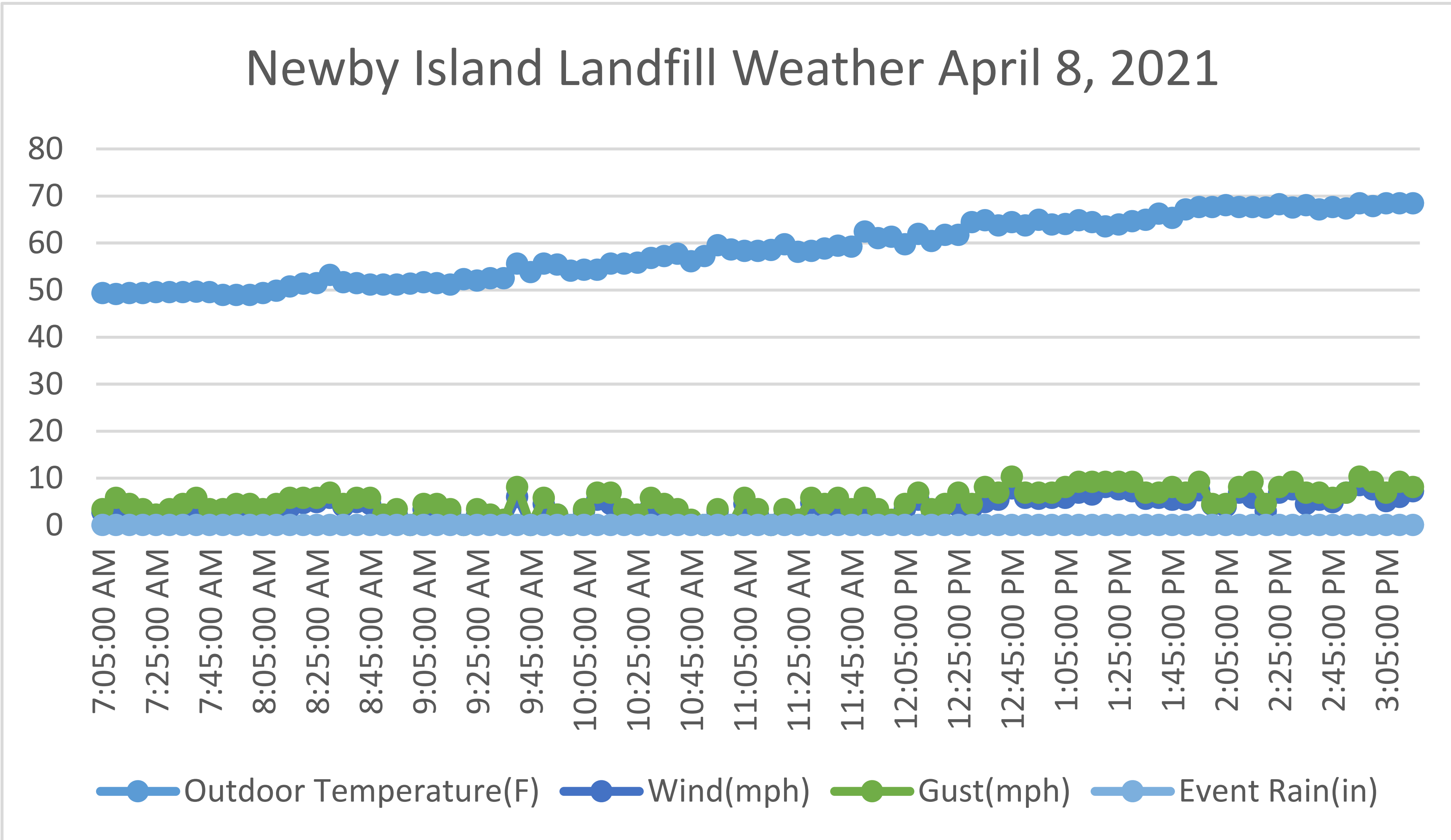
Upwind Location Description: Flare Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.2 ppm

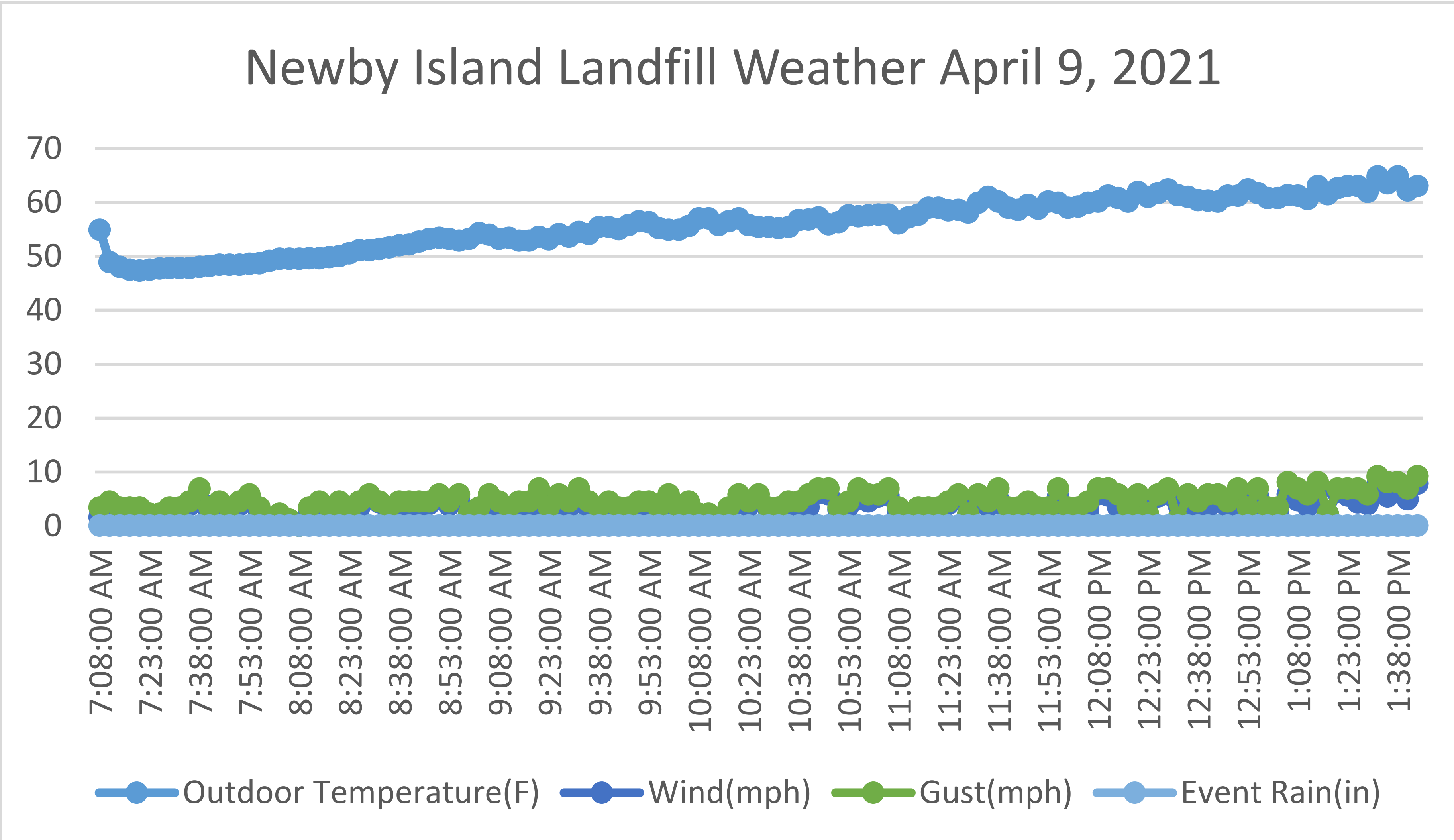
Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested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

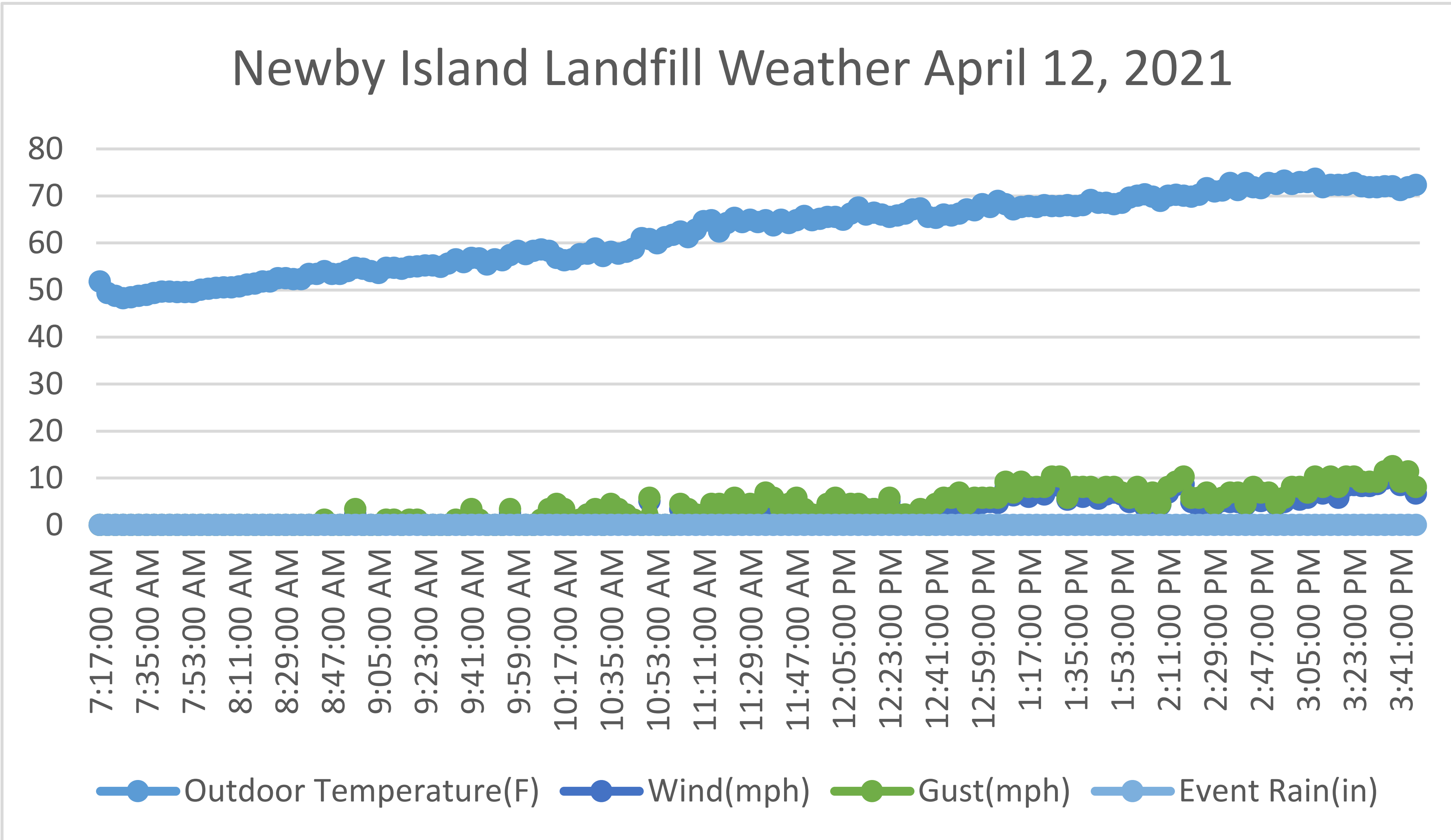
Attachment 6

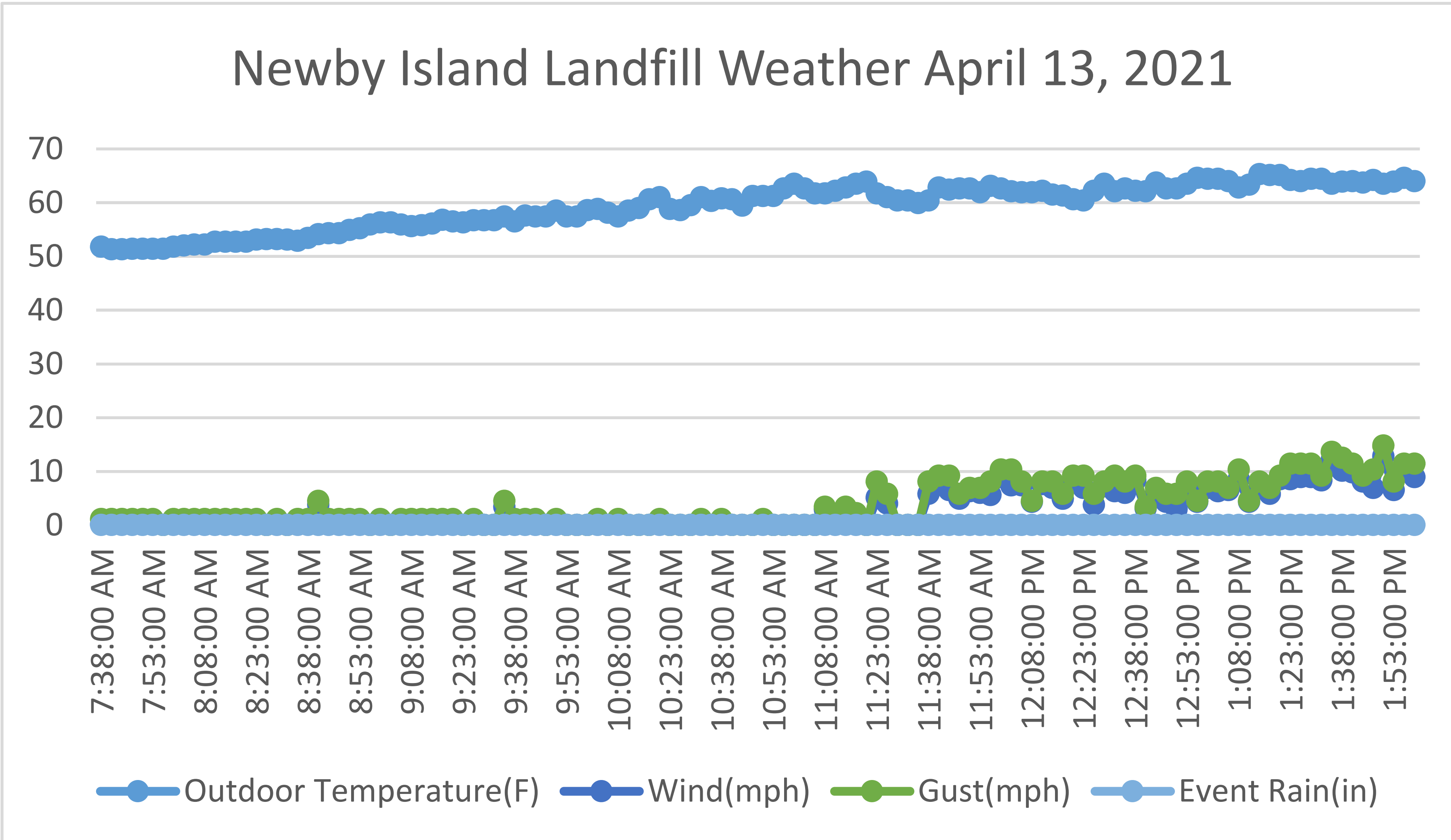
Weather Data



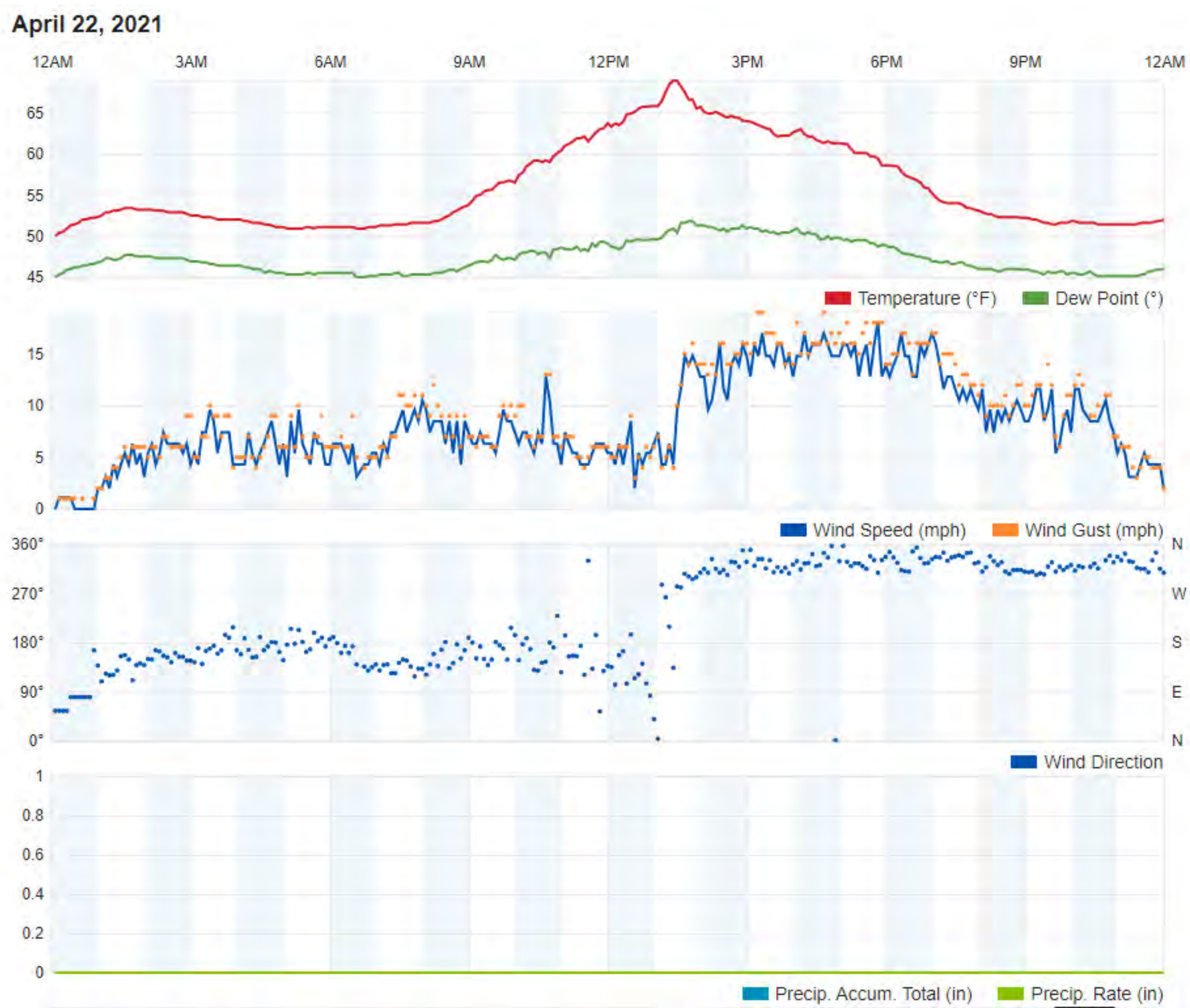
Newby Island Landfill Weather April 8, 2021
80
70
60
50
40
30
20
10
0
7:05:00 AM
7:25:00 AM
7:45:00 AM
8:05:00 AM
8:25:00 AM
8:45:00 AM
9:05:00 AM
9:25:00 AM
9:45:00 AM
10:05:00 AM
10:25:00 AM
10:45:00 AM
11:05:00 AM
11:25:00 AM
11:45:00 AM
12:05:00 PM
12:25:00 PM
12:45:00 PM
1:05:00 PM
1:25:00 PM
1:45:00 PM
2:05:00 PM
2:25:00 PM
2:45:00 PM
3:05:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)


Newby Island Landfill Weather April 9, 2021
70
60
50
40
30
20
10
0
7:08:00 AM
7:23:00 AM
7:38:00 AM
7:53:00 AM
8:08:00 AM
8:23:00 AM
8:38:00 AM
8:53:00 AM
9:08:00 AM
9:23:00 AM
9:38:00 AM
9:53:00 AM
10:08:00 AM
10:23:00 AM
10:38:00 AM
10:53:00 AM
11:08:00 AM
11:23:00 AM
11:38:00 AM
11:53:00 AM
12:08:00 PM
12:23:00 PM
12:38:00 PM
12:53:00 PM
1:08:00 PM
1:23:00 PM
1:38:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)


Newby Island Landfill Weather April 12, 2021
80
70
60
50
40
30
20
10
0
7:17:00 AM
7:35:00 AM
7:53:00 AM
8:11:00 AM
8:29:00 AM
8:47:00 AM
9:05:00 AM
9:23:00 AM
9:41:00 AM
9:59:00 AM
10:17:00 AM
10:35:00 AM
10:53:00 AM
11:11:00 AM
11:29:00 AM
11:47:00 AM
12:05:00 PM
12:23:00 PM
12:41:00 PM
12:59:00 PM
1:17:00 PM
1:35:00 PM
1:53:00 PM
2:11:00 PM
2:29:00 PM
2:47:00 PM
3:05:00 PM
3:23:00 PM
3:41:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)



Newby Island Landfill Weather April 13, 2021
70
60
50
40
30
20
10
0
7:38:00 AM
7:53:00 AM
8:08:00 AM
8:23:00 AM
8:38:00 AM
8:53:00 AM
9:08:00 AM
9:23:00 AM
9:38:00 AM
9:53:00 AM
10:08:00 AM
10:23:00 AM
10:38:00 AM
10:53:00 AM
11:08:00 AM
11:23:00 AM
11:38:00 AM
11:53:00 AM
12:08:00 PM
12:23:00 PM
12:38:00 PM
12:53:00 PM
1:08:00 PM
1:23:00 PM
1:38:00 PM
1:53:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)

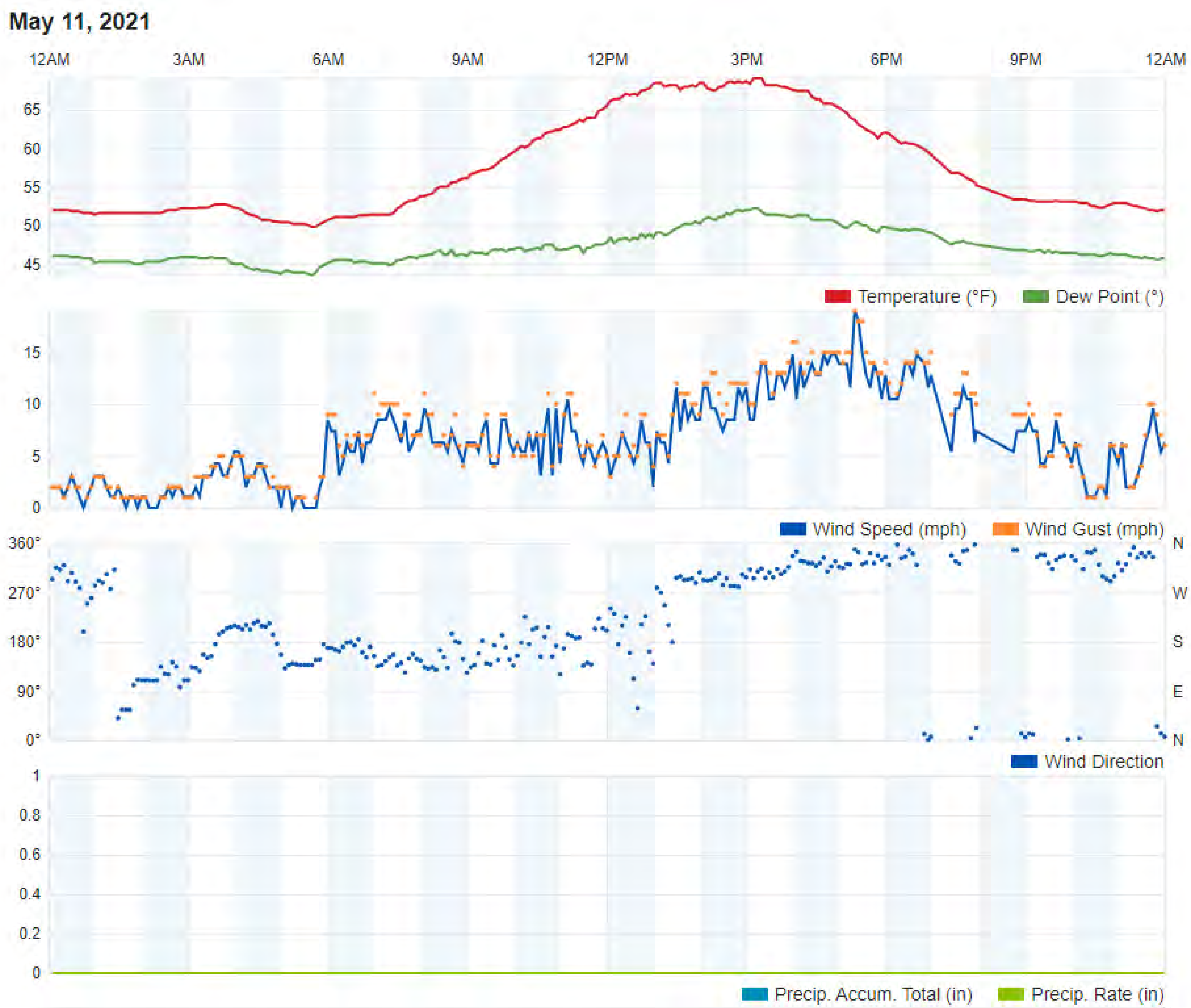


Second Quarter 2021

LMR Surface Emissions Monitoring Weather Data

April 22, 2021

Newby Island Landfill, Milpitas, California



Second Quarter 2021

LMR Surface Emissions Monitoring Weather Data

May 11, 2021

Newby Island Landfill, Milpitas, California

Appendix E – Title V Semi-Annual Report

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: NEWBY ISLAND LANDFILL	**FACILITY ID#:** A9013
REPORTING PERIOD: *from* 02/01/2021 *through* 07/31/2021	

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:

08/31/21

Signature of Responsible Official　　　Date

Daniel North

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

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: NEWBY ISLAND LANDFILL	FACILITY ID#: A9013
REPORTING PERIOD: *from* 02/01/2021 *through* 07/31/2021	

List of Permitted Sources and Abatement Device

Permit Unit Number	Equipment Description
S-#	**Description**
S-2	Newby Island Sanitary Landfill – Waste Decomposition Process; Equipped with Landfill Gas Collection System
S-5	Newby Island Sanitary Landfill – Waste and Cover Material Dumping
S-6	Newby Island Sanitary Landfill – Excavating, Bulldozing and Compacting Activities
S-3	Composting Operation; A-3 Water Truck
S-4	Non-retail Gasoline Dispensing Facility
S-8 and S-9	Horizontal Grinder/Operations, Trommel Screen/Operations
A-2	Landfill Gas Flare
A-3	Landfill Gas Flare

Newby also maintains a Title V Permit (Facility No. A9013), which expired on December 20, 2017. On June 20, 2017, a Title V Renewal Application was submitted to the Bay Area Air Quality Management District (BAAQMD). The site currently operates under an application shield.

The conditions listed below are incorporated in the BAAQMD Permit to Operate (PTO) that expired August 1, 2021, but has not yet been incorporated into the Title V permit. All conditions have been reviewed for compliance, and the site is in compliance.

- Condition #24887 – applies to S#4
- Condition #26046 – applies to S#7, 8, 9, 10
- Condition #26606 – applies to S#1008
- Condition #26607 – applies to S#1040
- Condition #26608 – applies to S#1009
- Condition #26609 – applies to S#1042
- Condition #26610 – applies to S#1043
- Condition #26611 – applies to S#1038

Newby also maintains an Authority to Construct (ATC) Application Number (A/N) 28472 for the S-1003 Covered Aerated Static Pile (CASP) Composting Operation and the S-15 Mixed Waste Stockpiles. The ATCs for the S-1003 CASP Composting Operation and S-15 Mixed Waste Stockpiles were issued on November 21, 2017, were extended via approval email from the Bay

Area Air Quality District (BAAQMD) on November 21, 2019, and will expire on November 21, 2021. All conditions have been reviewed for compliance and there was one deviation of the ATC this reporting period.

- On May 27, 2021, Notice of Violation (NOV) Number A59433 was issued by BAAQMD Inspector, Mr. Jay Patel, to Newby Island for an alleged violation of CASP ATC Condition No. 26632, Part 9. Per the NOV, IDCC allegedly failed to comply with CASP ATC Condition No. 26632 Part 9 requirements to immediately initiate corrective actions and maintain records for temperatures that exceeded 180 degrees Fahrenheit (^{o}F) for over six consecutive hours. The NOV was based on records from September 2019 through December 2020. For additional information, including corrective actions taken, please refer to the June 4, 2021 10-day Response Letter.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	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 # 10423, Part 13b, 13c, 13f, 13g	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 # 10423, Part 13b, 13c, 13f, 13g	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

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
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	Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	Intermittent	On March 10, 2021, a utility outage occurred at the site causing the A-2 and A-3 Flares to automatically shut down. For additional information, including corrective actions taken, please refer to the March 20, 2021 30-day Breakdown Report for RCA IDs 07Y71 and 07Y72.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
						Intermittent	On June 14, 2021, the BAAQMD inspector, Jay Patel, issued NOV A55722 for failure to operate the gas collection and control system (GCCS) continuously during Reportable Compliance Activity (RCA) events 07Y73 and 07Y74; 07Y89 and 07Y90; 07Y92 and 07Y93; 07Z38 and 07Z39; 07Z82 and 07Z86; 07Z83 and 07Z87; 07Z84 and 07Z88; 07Z85 and 07Z89. For additional information, including corrective actions taken, please refer to the June 24, 2021 10-day Response Letter and the respective 30-day Breakdown Reports.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
						Intermittent	On July 10, 2021, the power supply at the site was tripped, causing the GCCS to shut down. For additional information, including corrective actions taken, please refer to the July 20, 2021 30-day Breakdown Report for RCA IDs 08A51 and 08A52.
						Intermittent	On July 15, 2021, low flow alarms were triggered during planned maintenance on Condensate Sump 18. For additional information, including corrective actions taken, please refer to the July 23, 2021 30-day Breakdown Report for RCA IDs 08A58 and 08A59.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
						Intermittent	On July 22, 2021, a flame failure condition occurred at the A-2 and A-3 Flares, brought about by surging in the header, leading to an automatic shutdown of GCCS. For additional information, including corrective actions taken, please refer to the July 30, 2021 30-day Breakdown Report for RCA IDs 08A73 and 08A74.
Gas Flow	BAAQMD Condition # 10423, Parts 13f-h	Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Components	Periodic / Daily	BAAQMD Condition # 10423, Parts 5 and 6	Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Collection and Control Systems Shutdown Time	BAAQMD 8-34-501.1	Operating Records	Periodic / Daily	BAAQMD 8-34-113.2	240 hours per year and 5 consecutive days	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 per incident and ≤ 30 calendar days per 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
Wellhead Pressure	BAAQMD 8-34-414, 501.9 and 505.1	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305.1	< 0 psig (applies to all wells or collectors that are connected to the vacuum system)	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 (< 131 ^{o}F), except for components identified in Condition # 818, Part 3b(i)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Temperature of Gas at Wellheads	BAAQMD 8-34-414, 501.9, 505.2, and BAAQMD Condition 10423, part 6d(ii)	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305 and BAAQMD Condition 10423, part 6d(i)	<63 C (<145 F) (Alternative wellhead temperature limit that applies only to wells specified in BAAQMD Condition # 10423, Part 6d(i))	Continuous	N/A
Gas Concentration at Wellhead	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305.3 or 305.4	N_2 < 20% (by volume, dry basis) **OR** O_2 < 5% (Applies to all wells or collectors that are connected to the vacuum system, except wells specified in BAAQMD Condition # 10423, Part 6c(i))	Continuous	N/A
Gas Concentrations at Header	BAAQMD 8-34-414, 501.9, and 505.3 or 505.4, and BAAQMD Condition 10423 part 6c(ii)	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305 and BAAQMD Condition # 10423, Part 6c(i)	O2 < 15% (Alternative wellhead oxygen concentration limit that applies only to wells specified in BAAQMD Condition # 10423, Part 6c(i))	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Well Shutdown Limits	BAAQMD 8-34-116.5 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-116.2	No more than 5 wells at a time or 10% of total collection system, whichever is less	Continuous	N/A
Well Shutdown Limits	BAAQMD 8-34-116.5 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-116.3	< 24 hours per well	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 or <5 days per well for component replacement	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 portable analyzer and Records	Periodic / Quarterly	BAAQMD 8-34-301.2	Component Leak Limit: < 1000 ppmv as methane	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
TOC	BAAQMD 8-34-415, 416, 501.6, 506 and 510	Monthly Visual Inspection of Cover, Quarterly Inspection of Surface with portable analyzer, Various Reinspection Times for Leaking Areas, and Records	Periodic / Monthly, Quarterly, and on an Event Basis	BAAQMD 8-34-303	Surface Leak Limit: < 500 ppmv as methane at 2 inches above surface	Continuous	N/A
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 10423, Part 11b	Annual Source Tests and Records	Periodic / Annual	BAAQMD 8-34-301.3	> 98% removal by weight OR < 30 ppmv, dry basis @ 3% O_2, expressed as methane (applies to flares only)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Temperature of Combustion Zone (CT)	BAAQMD 8-34-501.3 and 507, SIP 8-34-501.3 and BAAQMD Condition # 10423, Parts 11	Temperature Sensor and Recorder (continuous)	Continuous	BAAQMD Condition # 10423, Part 9	CT > 1525 ºF, averaged over any 3-hour period (applies to A-1/A-3 only) CT > 1400 ºF, averaged over any 3-hour period (applies to A-2 only)	Continuous	N/A
Total Carbon	BAAQMD Condition # 10423, Part 3	Records	Periodic / Daily	BAAQMD 8-2-301	< 15 pounds/day or < 300 ppm, dry basis (applies only to aeration of or use as cover soil of soil containing < 50 ppmw of volatile organic compounds)	TBD	At the time of the submittal of this report, VOC soil records are with SCS Engineers (SCS) for review. SCS will submit a Title V semi-annual report amendment to confirm compliance once all records have been reviewed.
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD Condition # 10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-116.1 and BAAQMD Condition # 10423, Parts 2 and 3	< 1 cubic yard per project	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.2 and BAAQMD Condition # 10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-116.2 and BAAQMD Condition #10423, Parts 2 and 3	< 8 cubic yards per project, provided organic content < 500 ppmw and limited to 1 exempt project per 3 month period	Continuous	N/A
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD Condition # 10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-301 and BAAQMD Condition #10423, Parts 2 and 3	Prohibited for Soil with Organic Content >50 ppmw unless exempt per BAAQMD 8-40-116, 117, or 118	Continuous	N/A
Amount of Accidental Spillage	None	N/A	None	BAAQMD 8-40-117 and BAAQMD Condition # 10423, Parts 2 and 3	Soil Contaminated by Accidental Spillage of < 5 Gallons of Liquid Organic Compounds	Continuous	N/A
Total Aeration Project Emissions	BAAQMD Condition #10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-118 and BAAQMD Condition # 10423, Parts 2 and 3	< 150 pounds VOC per project and toxic air contaminant emissions per year < BAAQMD Table 2-1-316 limits	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	BAAQMD Condition # 10423, Part 13e	Records of all site watering and road cleaning events	Periodic / On event basis, Monthly	BAAQMD 6-1-301 and SIP 6-301	Ringelmann No. 1 for ≤ 3 minutes/hr (applies to S-1)	Continuous	N/A
Opacity	None	N/A	None	BAAQMD 6-1-301 and SIP 6-301	Ringelmann No. 1 for < 3 minutes/hr (applies to flares)	Continuous	N/A
TSP	None	N/A	None	BAAQMD 6-1-310.1 and SIP 6-310	< 0.15 grains/dscf (applies to flares only)	Continuous	N/A
SO_2	None	N/A	None	BAAQMD 9-1-301	Property Line Ground Level Limits: < 0.5 ppm for 3 minutes and < 0.25 ppm for 60 min. and <0.05 ppm for 24 hours (applies to flares only)	Continuous	N/A
SO_2	BAAQMD Condition # 10423, Parts 10 and 13j	Sulfur analysis of landfill gas and Records	Periodic / Quarterly	BAAQMD Regulation 9-1-302	Exhaust Gas from Flare: < 300 ppm (dry basis) (applies to flares only)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 10423, Parts 10a and 13j	Sulfur analysis of landfill gas	Periodic / Quarterly	BAAQMD Condition # 10423, Part 10a	< 1300 ppmv instantaneous concentration (expressed as H2S)	Continuous	N/A
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 10423, Parts 10a and 13j	Sulfur analysis of landfill gas and Records	Periodic / Quarterly	BAAQMD Condition # 10423, Part 10a	< 300 ppmv annual average (expressed as H2S)	Intermittent	On March 31, 2021, during the 1Q 2021 monitoring event, an exceedance of the annual integrated average of 300 parts per million by volume (ppmv) for total reduced sulfur compounds (TRS) in the collected landfill gas (LFG) at Newby Island was discovered. For additional information, including corrective actions taken, please see the April 8, 2021 30-Day Response Letter. As of June 30, 2021, the site is in compliance with the annual integrated average of 300 ppmv.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
NOx	BAAQMD Condition 10423, Part 11d	Annual Source Test & Records	Periodic / Annual	BAAQMD Condition # 10423, Part 10b	Applies to Exhaust Gas from Flares: < 60 ppm corrected to 15% oxygen, dry basis (< 0.05 pounds NOx per million BTU LFG)	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
Amount of Waste Accepted	BAAQMD Condition # 10423, Part 13a	Records	Periodic / Daily	BAAQMD Condition # 10423, Part 1	4,000 tons/day and < 39,000,000 tons (predicted cumulative amount of all wastes) and < 50,800,000 yd3 (cumulative amount of all wastes and cover materials)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Heat Input A-1/A-3	BAAQMD Condition # 10423, Parts 8 and 13h	Records	Periodic / Daily	BAAQMD Condition # 10423, Part 8	< 2,006 MM BTU per day and < 732,095 MM BTU per year	Continuous	N/A
Heat Input, A-2	BAAQMD Condition # 10423, Parts 8 and 13h	Records	Periodic / Daily	BAAQMD Condition # 10423, Part 8	< 1,800 MM BTU per day and < 657,000 MM BTU per year	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site:	Newby Island Landfill	**Facility ID#:**	A9013
Permitted Unit:	S-3 COMPOSTING OPERATION; A-3 WATER TRUCK	**Reporting Period:**	*from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	BAAQMD Condition # 8178, Parts 3 and 4	Observation of Operations and Records	Periodic / On Event Basis	BAAQMD Regulation 6-1-301 and SIP 6-301	< Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	BAAQMD Condition # 8178, Parts 3 and 4	Observation of Operations and Records	Periodic / On Event Basis	BAAQMD Condition # 8178, Part 3	< Ringelmann 1.0	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-4 Non-Retail Gasoline Dispensing Facility	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Gasoline Throughput	BAAQMD 8-7-503.1	Records	Periodic / Annual	BAAQMD Condition # 14098	940,000 gallons per 12-month period	Continuous	N/A
Throughput (exempt from Phase I)	BAAQMD 8-7-501 and 8-7-503.2	Records	Periodic / On event basis	BAAQMD 8-7-114	1000 gallons per facility for tank integrity leak checking	Continuous	N/A
Organic Compounds	None	N/A	None	SIP 8-5-303.2	Tank Pressure Vacuum Valve Shall Be: Gas Tight or < 500 ppmv (expressed as methane) above background for PRVs (as defined in SIP 8-5-206)	Continuous	N/A
Organic Compounds	None	Equipment must be precertified by CARB	None	BAAQMD 8-7-301.2	All Phase I Systems Shall Meet the Emission Limitations of the Applicable CARB Certification	Continuous	N/A
Organic Compounds	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	BAAQMD 8-7-301.6	All Phase I Equipment (except components with allowable leak rates) shall be leak free (<3 drops/minute) and vapor tight	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-4 Non-Retail Gasoline Dispensing Facility	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Organic Compounds	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	BAAQMD 8-7-302.5	All Phase II Equipment (except components with allowable leak rates or at the nozzle/fill-pipe interface) Shall Be: leak free (<3 drops/minute) and vapor tight	Continuous	N/A
Organic Compounds	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	CARB EO G-70-148-A paragraph 10	Any Emergency Vent or Manway Shall Be: leak free	Continuous	N/A
Defective Component Repair/ Replacement Time Limit	BAAQMD 8-7-503.2	Records	Periodic / On Event Basis	BAAQMD 8-7-302.4	< 7 days	Continuous	N/A
Liquid Removal Rate	CARB EO G-70-52-AM	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-302.8	> 5 ml per gallon dispensed, when dispensing rate > 5 gallons/minute	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-4 NON-RETAIL GASOLINE DISPENSING FACILITY	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Liquid Retain from Nozzles	CARB EO G-70-52-AM	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-302.12	< 100 ml per 1000 gallons dispensed	Continuous	N/A
Nozzle Spitting	CARB EO G-70-52-AM	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-302.13	< 1.0 ml per nozzle per test	Continuous	N/A
Pressure-Vacuum Valve Settings	CARB EO G-70-148-A	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-316 and CARB EO G-70-148-A, paragraph 14	Pressure Setting: > 2.5 inches of water, gauge	Continuous	N/A
Pressure-Vacuum Valve Settings	None	N/A	None	SIP 8-5-303.1	Pressure Setting: > 10% of maximum working pressure or > 0.5 psig	Continuous	N/A
Disconnection Liquid Leaks	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	CARB EO G-70-148-A paragraph 12	10 ml per disconnect, averaged over 3 disconnect operations	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-8 HORIZONTAL GRINDER OPERATIONS/ S-9 TROMMEL SCREEN/OPERATIONS	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	None	N/A	None	BAAQMD 6-1-301 and SIP 6-301	Ringelmann 1.0 for <3 minutes in any hour	Continuous	N/A
Particulate Matter (PM)	None	N/A	None	BAAQMD 6-1-311 And SIP 6-311	$E = 0.026(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P >57,320 lb/hr (or P > 28.66 tons/hr)	Continuous	N/A

REPUBLIC SERVICES

Newby Island Landfill 1601 Dixon Landing Road, Milpitas, CA 95035
o 408.586.2263 c 510.298.7892 republicservices.com

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

TV Tracking #: 294

1. ☐ RECEIVED IN ENFORCEMENT: 08/31/2021

Subject: Combined 8-34 Semi-Annual Report, 40 CFR Subpart AAA Semi-Annual Report, and Title V Semi-Annual Monitoring Report
Newby Island Landfill, Milpitas, California (Title V Facility No. A9013)

Dear Sir or Madam:

International Disposal Corp of CA (IDCC) 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 the Newby Island Landfill (Newby). The Title V Semi-Annual Monitoring Report, the BAAQMD Rule 8-34 Semi-Annual Report and the SSM Plan Report cover the period from February 1, 2021 through July 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), including 40 CFR 60.757(f). The Semi-Annual SSM Plan Report satisfies the requirements under the Maximum Achievable Control Technology (MACT) rule for semi-annual reporting of SSM Plan implementation including 40 CFR 63.10(d)(S). The Title V reports and the SSM Plan report each includes a certification by the responsible official for Newby Island.

If you have any questions regarding this submittal, please do not hesitate to call me at (408) 586-2263 or email me at RHuber2@republicservices.com.

Sincerely,

Rachelle Huber
Environmental Manager
Newby Island Landfill

cc: Michael O'Connor, SCS Engineers
Ray Huff, SCS Engineers

NSPS/BAAQMD Rule 8-34 Semi-Annual Report, SSM Plan Semi-Annual Report, and Title V Semi-Annual Report
Newby Island Landfill
Milpitas, California (Facility No. 9013)

Prepared for:

REPUBLIC SERVICES

International Disposal Corporation of California
1601 Dixon Landing Road
Milpitas, CA 95035

For Submittal to:

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

SCS ENGINEERS

01205162.04 Task 1 | August 2021

3843 Brickway Boulevard, Suite 208
Santa Rosa, CA 95403
707-546-9461

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 Newby Island Landfill in Milpitas, California, dated August 2021, was prepared and reviewed by the following:

Anne Liu
Staff Professional
SCS ENGINEERS

Ray Huff
Vice President
SCS ENGINEERS

Patrick S. Sullivan, REA, CPP, BCES
Senior Vice President
SCS ENGINEERS

Table of Contents

Tables

Appendices

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

1.0 INTRODUCTION

On behalf of the International Disposal Corporation of California (IDCC), SCS Engineers (SCS) hereby submits this New Source Performance Standard (NSPS), 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW), and Bay Area Air Quality Management District (BAAQMD or District) Rule 8-34 Semi-Annual Report and Semi-Annual Start-up, Shutdown, and Malfunction (SSM) Plan Report for the period of February 1, 2021 through July 31, 2021 to the BAAQMD for the Newby Island Sanitary Landfill and Recyclery (Newby).

This Semi-Annual report also meets the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for MSW landfills, 40 CFR 63, Subpart AAAA and complies with the requirements specified in Newby's Title V permit. In addition, Newby is not yet subject the new NESHAP, which goes into effect September 27, 2021, but will comply with the current version of the NESHAP until that time. 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.

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

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 of 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

Newby is a municipal solid waste (MSW) landfill located in Milpitas, California and is owned and operated by International Disposal Corporation of California (IDCC). The municipal refuse disposal site is located in Santa Clara County on the western terminus of Dixon Landing Road. The 342-acre landfill began accepting waste circa 1930 and is currently in operation.

Newby is subject to NSPS Subpart XXX since it commenced construction, reconstruction, or modification after July 17, 2014. Pursuant to NSPS Subpart XXX, Newby was required to initiate gas collection and control system (GCCS) operations, including associated monitoring, recordkeeping, and reporting, on September 4, 2019 (30 months after the submittal of the NMOC Emissions Rate Report). For ease of recordkeeping, Newby elected to begin reporting effective September 1, 2019. However, due to potentially overlapping requirement, Newby is continuing to report semi-annually under NSPS Subpart WWW and Rule 8-34. A separate NSPS XXX Annual Report is also prepared.

2.1 EXISTING AIR PERMITS

Newby maintains a BAAQMD Permit to Operate (PTO) (Plant No. 9013), which includes conditions for the wellfield, collection system, and A-2 and A-3 flare stations (Condition No. 10423). This condition incorporates all applicable requirements from NSPS Subpart WWW and from BAAQMD Rule 8-34, which are addressed in this report. Newby also maintains a Title V Permit (Facility No. A9013), which expired on December 20, 2017. On June 20, 2017, a Title V Renewal Application was submitted to the BAAQMD. The site currently operates under an application shield.

A GCCS Design Plan was prepared for the site to review and determine the adequacy of the existing LFG system. The current design of the system was determined to be adequate to comply with both NSPS and BAAQMD Rule 8-34 requirements. The system design is based on the density of wells calculated to sufficiently extract the maximum flow of LFG generated, according to the United States (U.S.) Environmental Protection Agency (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 Newby 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. All landfill gas is controlled by one of more of the following means: The A-2 and A-3 Flares or the IC engine power generators operated by the San Jose/Santa Clara Water Pollution Control Plant (Facility #A778).

A diagram of the GCCS displaying system component locations is shown in the site plan(s) 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 devices, 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 several occasions for a total of 33.22 hours. Shutdowns involved pre-programmed or manual system shutdowns prior to non-compliant operation or equipment failure, and involved 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 exemption of 12 events. These 12 events occurred on March 10, 12, 27 and 28; May 5, 30, and 31; July 10, 15, and 22, 2021, and were due to air blower low-flow alarms, site-wide power outages due to unforeseen utility outage events, a tripped power supply, maintenance conducted on Condensate Sump 18, and flame failure conditions.

Reportable Compliance Activity (RCA) forms were submitted to the BAAQMD on March 11, 12, 28, and 29; May 5, 30, and 31; July 12, 16, and 22, 2021, respectively, to request breakdown relief and to report the parametric excursions.

BAAQMD issued RCA IDs 07Y71 and 07Y72 for the breakdown and excursion, respectively, for the March 10, 2021 event; RCA IDs 07Y73 and 07Y74, for the March 12, 2021 event; RCA IDs 07Y89 and 07Y90 for the March 27, 2021 event; RCA IDs 07Y92 and 07Y93 for the March 28, 2021 event; RCA IDs 07Z38 and 07Z39 for the May 5, 2021 event; RCA IDs 07Z82 and 07Z86 for the May 30, 2021 event; RCA IDs 07Z83 and 07Z87, 07Z84 and 07Z88, 07Z85 and 07Z89 for the May 31, 2021 events; RCA IDs 08A51 and 08A52 for the July 10, 2021 event; RCA IDs 08A58 and 08A59 for the July 15, 2021 event; and RCA IDs 08A73 and 08A74 for the July 22, 2021 event.

On March 20, April 6, May 14, June 10 and 11, July 21, 26, 30, 2021, Newby submitted the Combined 10/30-Day Title V Reports and Notifications for the respective RCA IDs to the BAAQMD.

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.

3.1.2 Emission Control System Downtime

During the reporting period, the A-2 and A-3 Flares were off-line on several occasions. Summaries of the A-2 and A-3 flare downtime are provided in **Table 1b and 1c**, including the date, reason for the downtime, and the total elapsed time for each event. During the reporting period, downtime for the

A-2 Flare occurred over a cumulative period of approximately 65.12 hours and for the A-3 Flare over a cumulative period of approximately 42.35 hours. Emission control system downtime records are available for review at the site.

3.1.3 Individual Well Downtime

In some instances, the entire GCCS may not go off-line, but individual extraction wells may be taken off-line for inspection, maintenance, and/or repair, and active filling in the vicinity of the well, as well as for other unforeseen circumstances. These are generally planned events, although such events can occur without notice. During the reporting period, several wells were temporarily taken offline or were taken offline during a previous reporting period and remained offline for a portion of the reporting period due to active filling and construction activities occurring in their vicinity.

On February 19, 2021 and May 25, 2021, IDCC submitted Requests for Limited Exemption from the requirements of BAAQMD Regulation 8-34 117.1 through 117.6 and 118 Construction Plan (118 Plan) for construction activities to the BAAQMD. These wells were taken off-line in accordance with the requirements of Rule 8-34.

Four (4) wells, (NIHC17-2, NIHC17-3, NILEW741, NILMW015), remained offline at the end of the reporting period and will be reported as a startup once the filling operations around each well cease and the wells are brought back online.

Two (2) horizontal collectors and ten (10) vertical wells were abandoned during the reporting period due to poor gas production.

Pursuant to permit condition No. 10423, Part 6, the owner/operator must notify the District of expected installation or decommissioning dates. A combined Well Decommissioning and Startup Notification Letter was submitted to the BAAQMD for the well actions noted above.

Details of individual well shutdown and well startups occurring during the reporting period are provided in Table 2. Please see the Semi-Annual Startup, Shutdown, and Malfunction (SSM) Report included in this submittal for additional details.

3.1.4 Flow Meter and Temperature Gauge Downtime

The continuous operation of the GCCS is measured through the continuous measurement of LFG flow to each flare and flare combustion temperature. As required by Rule 8-34, each flare at Newby is 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

Newby is required by permit condition No. 10423, Part 9 to operate the A-2 and A-3 Flares in such a manner that the combustion zone temperature of the flares does not drop below the permitted limit of 1,400 and 1,501 degrees Fahrenheit (°F), respectively, (averaged over a 3-hour period) or a higher or lower temperature based on the most recent source test.

During the reporting period, the minimum temperature at which the A-2 flare was required to operate was 1,452°F (1,502 °F minus 50 °F), based on the February 23, 2021 source test performed by Blue Sky Environmental, Inc. (final report issued on April 1, 2021). During the reporting period, the minimum temperature at which the A-3 flare was required to operate was 1,454°F (1,504 °F minus 82 °F), based on the February 23, 2021 source test performed by Blue Sky Environmental, Inc. (final report issued on April 1, 2021).

During the reporting period, the A-2 and A-3 flares operated above the minimum established 3-hour average temperature limit at all times, except during periods of SSM.

Flare temperature records are available for review at the site.

3.2 COMPONENT LEAK QUARTERLY MONITORING

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

3.2.1 First Quarter 2021 Monitoring

SCS Field Services (SCSFS) conducted the component leak testing of the wellfield and flare station on March 27, 2021. No component leaks above 1,000 ppmv were detected in the wellfield or at the flare station during the first quarter 2021 monitoring event.

3.2.2 Second Quarter 2021 Monitoring

SCSFS conducted the component leak testing of the flare station and wellfield on April 9, 2021. No component leaks above 1,000 ppmv were detected in the wellfield or at the flare station during the second quarter 2021 monitoring event.

3.3 CONTROL EFFICIENCY

LFG flares A-2 and A-3 was also tested on February 23, 2021 to demonstrate compliance with the control efficiency standard of 98 percent NMOC destruction efficiency or outlet concentration of 30 ppmv of NMOC as methane (for flares) as required by BAAQMD Rules 8-34-301.3, 8-34-412, 8-34-501.4, and Condition # 10423, Part 11. The NMOC destruction efficiency for the A-2 Flare during the February 2021 source test was measured to be >99.56 percent by weight, and the NMOC as methane concentration in the flare outlet was <2.5 ppmv. The NMOC destruction efficiency for the A-3 Flare during the February 2021 source test was measured to be >99.57 percent by weight, and the NMOC as methane concentration in the flare outlet was <2.5 ppmv. As such, flares A-2 and A-3 is in compliance with the aforementioned rules and permit condition by meeting the ppmv limit.

Excerpts from the February 2021 source test report dated April 1, 2021, summarizing the test results, are provided in **Appendix C** of this report.

3.4 LANDFILL SURFACE EMISSIONS MONITORING

Surface emissions monitoring (SEM) was conducted at Newby 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.** Records of SEM are available for review at the site.

3.4.1 First Quarter 2021 Monitoring

SCSFS field technicians monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv above background on March 12, 15, 16, 17, 19, 22, 23, 26, 27, and 29, 2021. Surface emissions in excess of 500 ppmv were detected at eighteen (18) locations during the first quarter 2021 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the first quarter 2021 SEM report (**Appendix D**).

SCSFS field technicians performed appropriate corrective actions, including flow increases to the surrounding extraction wells, cover repairs, and installation of borehole emission control systems. SCSFS completed the 10-day re-monitoring events for these locations on March 19 and 29, 2021. All the locations were under the 500 ppmv threshold and thus back in compliance. SCSFS performed the 1-month re-monitoring event, as required by NSPS, on April 9, 2021, and all locations remained in compliance.

3.4.1 Second Quarter 2021 Monitoring

SCSFS monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv above background on April 8, 9, 12, and 13, 2021. Surface emissions in excess of 500 ppmv were detected at twenty-seven (27) locations during the second quarter 2021 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the second quarter 2021 SEM report (**Appendix D**).

SCSFS field technicians performed appropriate corrective actions, including flow increases to the surrounding extraction wells and borehole repairs. SCSFS completed the 10-day re-monitoring event for these locations on April 22, 2021 and performed the 1-month re-monitoring event, as required by NSPS, on May 11, 2021, and twenty-one (21) locations remained in compliance. In accordance with NSPS requirements for expansion and remediation, the exceedance locations need to be remediated and returned to compliance in accordance with the rule (expansion of the collection system or an alternative compliance option if approved by the BAAQMD) within 120 days of the detected initial instantaneous exceedance, which will be due by August 11, 2021. On August 2, 2021, a new shallow slope collector was started up to fulfill the 120-day requirement.

3.5 WELLHEAD MONTHLY MONITORING

Monthly wellhead monitoring for pressure, temperature, and oxygen content was conducted by SCSFS to comply with BAAQMD Rule 8-34-305 and 9-34-414. The results of this monitoring are summarized below. Wellhead exceedances are provided in **Table 3, 4, and 5.**

Please note that during the reporting period, all active wells were monitored.

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 that 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.

Wells NIHC17-2, NIHC17-3, NILEW066, NILEW451, NILEW464, NILEW465, NILEW496, NILEW497, NILEW626, NILEW664, NILEW665, NILEW707, NILEW726, NILEW733, NILEW742, NISS17-3, and NISS17-4 demonstrated a positive pressure reading at the end of the reporting period. These wells will be returned under negative pressure by the applicable compliance dates, as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report.

As of the end of the previous reporting period, no wells were operating under positive pressure.

3.5.2 Oxygen

Newby has elected to use oxygen as its compliance standard under Rule 8-34-305, rather than nitrogen. Per Newby's PTO Condition No. 10423, Part 6(c), the oxygen concentration limit does not apply to the wells listed below, provided that the oxygen concentration in the LFG at the main header does not exceed five percent oxygen by volume (dry basis) and the methane concentration in the LFG at the main header is greater than 35 percent by volume (dry basis). The oxygen Higher Operating Value (HOV) of 15% is approved for wells: 30RR, EW-13, I0IR, HC- 201. The oxygen HOV of 20% is approved for wells: HC-231, HC- 232, HC- 235, HC-237, HC- 241.

The majority of the wells were operating within the regulatory limit of five (5) percent oxygen or their respective oxygen HOVs 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 the 5 percent limit or their respective oxygen HOVs except for wells NI3EW40R, NILEW217, NILEW431, NILEW463, NILEW514, NILEW677, NILEW685, NILEW698, NILEW704, NILEW720, NILEW723, NILEW747, NILEW748, NILEW753, NILEW760, NILEW769, NILLEW16, NILMW002, NILMW020, NILMW034, NILW573A, NILW574A, and NLCRST05. The wells will be returned to below the 5 percent limit as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report.

As of the end of the previous reporting period, wells NILEW723, NILLEW16, and NILW475A were operating with an oxygen concentration above the 5 percent limit. The wells were back in compliance within the timeline specified in 8-34-414.

3.5.3 Temperature

BAAQMD Rule 8-34-305 requires the landfill gas temperature in each wellhead to measure less than 55 degrees Celsius (°C) or 131°F. However, Condition No. 10423, Part 6(d) in Newby's BAAQMD

PTO allows Newby to operate wells EW-39R, EW-40R, EW-14, EW-37, EW-005, EW-00A, EW-00D, EW-00E, EW-019, EW-025, EW-106, EW-218, EW-224, EW-243, EW-51R, EW-54R, NI3EW07R, NI3EW31, NILEW106, NILEW464, NILEW466, NILEW479, NILEW481, NILEW482, NILEW488, NILEW489, NILEW497, NILEW511, NILEW568, NILEW570, NILEW599, NILEW601, NILEW604, NILEW617, NILEW621, NILEW622, NILEW623, NILEW626, NILEW628, NILEW663, NILEW664, NILEW665, NILEW666, and NILEW667 at an alternative temperature of 145°F and well EW-07R at an alternative temperature of 150°F.

The majority of wells were operating within their respective limits of 131°F, 145°F, and 150°F during the monitoring events conducted during the reporting period. The dates when wells were operating above their respective temperature limits, and the well identification number, correction actions, and re-monitoring results for these wells are provided in **Table 5.**

As of the end of the reporting period, wells NILEW690, NILEW701, and NILEW752 were operating with a temperature higher than 131 °F. The wells will be returned to below the 131°F limit as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report.

As of the end of the previous reporting period, wells NILEW690 and NILEW703 were operating with a temperature higher than 131 °F. These wells returned to compliance within the timelines specified in 8-34-414.

An HOV application to request an increase of the allowable wellhead temperature limit from 131°F to 145°F for wells NILEW690, NILEW691, NILEW701, and NILEW703 was submitted to the USEPA and BAAQMD on February 6, 2020. Addendums requesting an increase of the allowable wellhead temperature limit from 131°F to 145°F for wells NILEW476, NILEW642, NILEW703, NILEW707, and NILEW752 were submitted in April 2020 and August 2021. The BAAQMD has provided approval of these HOV limits pending approval from the USEPA. IDCC has followed up with the USEPA regarding the application in August 2020, September 2020, October 2020, April 2021, and August 2021 but no response has been received. IDCC is currently awaiting a response to the HOV requests.

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 February 25, March 21, April 20, May 31, June 29, July 29, 2021 using procedures specified in the GCCS Design Plan. The observations during these monitoring events indicated the landfill surface was in good condition. In the event visual evidence suggested otherwise, the surface will be promptly repaired. Records of cover integrity monitoring are available for review upon request.

3.7 GAS GENERATION ESTIMATE AND MONTHLY LANDFILL GAS FLOW RATES

The Newby 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

Newby is an active landfill that continues to accept refuse for disposal. From February 1, 2021 through July 31, 2021, the site accepted 634,864.35 tons of decomposable waste and cover material, resulting in a cumulative waste-in-place total of 36,559,475.68 tons as of July 31, 2021.

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.

SECTION II. SSM PLAN REPORT

As mentioned previously, Newby is subject to 40 CFR Part 63, Subpart AAAA, the NESHAPS for MSW Landfills. Newby maintains a SSM Plan which documents 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 February 1, 2021 through July 31, 2021 are documented in this section.

During the reporting period, there were forty-nine (49) SSM events involving shutdown of the entire GCCS. Thirty-five (35) of these events were planned startups/shutdowns and fourteen (14) of these startup/shutdown events were associated with a malfunction of the GCCS.

During the reporting period, there were sixty four (64) SSM events involving the wellfield. Additional wells were offline from previous reporting periods and remained offline for all or a portion of the reporting period. These events involved planned shutdowns of several wells on various dates due to active landfilling in the vicinity of these wells. All wells except for NIHC17-2, NIHC17-3, NILEW741, and NILMW015 remained offline as of the end of the reporting period and will be reported as startups once the landfilling activities in the vicinity of these wells cease and the wells are brought back online. There were no malfunctions of any of the wellfield components during the reporting period.

During the reporting period, there were no planned startups/shutdowns or known malfunctions of LFG monitoring equipment (e.g. flow measuring/recording device, temperature measuring/recording device).

In each case described above, the SSM Plan was successfully implemented. Specific information regarding these SSMs are included in **Tables 1a (entire GCCS), 1b (flares), and 2 (wells).**

No revisions were made to the SSM Plan during this reporting period. A copy of the SSM Plan and all revisions/addenda are kept on file at the facility for at least five (5) years and are available to appropriate regulatory agency personnel for inspection.

SECTION III. TITLE V SEMI-ANNUAL REPORT

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

This report has been prepared based on Table 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
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime	BAAQMD Exemption	Corrective Actions Taken
2/1/2021 8:50	2/1/2021 10:42	1.87	Flare inspections (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/9/2021 8:24	2/9/2021 8:34	0.17	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/9/2021 10:10	2/9/2021 10:56	0.77	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/9/2021 11:24	2/9/2021 11:36	0.20	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/15/2021 9:22	2/15/2021 9:28	0.10	Zink Preventative maintenance (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/15/2021 10:44	2/15/2021 10:52	0.13	Zink Preventative maintenance (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/18/2021 13:10	2/18/2021 13:18	0.13	Blower Swap (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/19/2021 11:06	2/19/2021 11:14	0.13	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/22/2021 11:20	2/22/2021 11:26	0.10	Air filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
2/23/2021 14:54	2/23/2021 15:00	0.10	Flare source testing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/10/2021 13:26	**3/10/2021 13:32**	**0.10**	**Utility outage (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
3/12/2021 9:20	**3/12/2021 9:56**	**0.60**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
3/12/2021 12:54	3/12/2021 13:00	0.10	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/17/2021 11:24	3/17/2021 11:30	0.10	Gas Blower inspection (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/27/2021 15:04	**3/27/2021 15:10**	**0.10**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
3/28/2021 12:42	**3/28/2021 14:39**	**1.95**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
3/31/2021 8:34	3/31/2021 13:04	4.50	Condensate Knock out Pot Demistier pad Installation (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 13:54	3/31/2021 14:02	0.13	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 14:56	3/31/2021 15:02	0.10	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 15:22	3/31/2021 15:30	0.13	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/31/2021 15:58	3/31/2021 16:24	0.43	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/15/2021 17:02	4/15/2021 17:08	0.10	Flame arrestor servicing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/15/2021 17:12	4/15/2021 17:14	0.03	Flame arrestor servicing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/15/2021 17:20	4/15/2021 18:12	0.87	Flame arrestor servicing (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/23/2021 13:48	4/23/2021 13:56	0.13	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.

Table 1a. GCCS Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime	BAAQMD Exemption	Corrective Actions Taken
4/23/2021 14:08	4/23/2021 14:32	0.40	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/4/2021 13:14	5/4/2021 13:54	0.67	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/5/2021 13:24	**5/5/2021 13:30**	**0.10**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
5/5/2021 13:42	**5/5/2021 13:54**	**0.20**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
5/6/2021 10:58	5/6/2021 11:04	0.10	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/6/2021 11:08	5/6/2021 12:32	1.40	Air Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/24/2021 14:20	5/24/2021 14:28	0.13	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/26/2021 7:52	5/26/2021 8:00	0.13	Burner tip cleaning event (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/30/2021 14:46	**5/30/2021 14:54**	**0.13**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
5/31/2021 10:52	**5/31/2021 10:58**	**0.10**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
5/31/2021 14:22	**5/31/2021 15:36**	**1.23**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
5/31/2021 16:50	**5/31/2021 17:18**	**0.47**	**Air Blower low flow shut down (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
6/16/2021 9:36	6/16/2021 9:58	0.37	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/16/2021 10:52	6/16/2021 11:06	0.23	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/16/2021 14:18	6/16/2021 14:36	0.30	Air blower troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/22/2021 14:28	6/22/2021 14:36	0.13	Air Combustion blower filter cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/10/2021 20:24	**7/11/2021 8:00**	**11.60**	**Utility outage (RCA Submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
7/11/2021 11:56	**7/11/2021 12:06**	**0.17**	**Utility outage (RCA Submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
7/15/2021 13:44	**7/15/2021 13:52**	**0.13**	**Flame Failure (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
7/16/2021 8:08	7/16/2021 8:14	0.10	Air Combustion Blower Filter Cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/22/2021 1:16	**7/22/2021 1:24**	**0.13**	**Low Gas Flow Shutdown (RCA submitted)**	**RCA Submitted for this event**	**O&M personnel completed inspection then restarted the flares.**
7/22/2021 11:14	7/22/2021 11:20	0.10	Gas Blower Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/28/2021 13:52	7/28/2021 13:58	0.10	Low Gas Flow (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/28/2021 14:08	7/28/2021 15:50	1.70	Low Gas Flow (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
	Total:	**33.22**			

Notes:
Events in bold type denotes Malfunction Events
Downtimes listed represent periods when all landfill gas combustion devices were offline concurrently (no gas flow from the collection system).

All events listed involved GCCS inspection and/or maintenance activities prior to start up (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 March 10, 12, 27, and 28, May 5, 30, and 31, and July 10, 15, and 22, 2021 , which involved utility outages and air blower low flow shutdowns. These events were considered reportable compliance activities (RCA) and breakdown relief was requested.

Table 1b. Flare (A-2) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
2/1/21 8:50	2/1/21 11:20	2.50	Flare inspections (113)
2/9/21 8:24	2/9/21 8:34	0.17	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 8:38	2/9/21 8:48	0.17	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 8:50	2/9/21 9:40	0.83	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 10:10	2/9/21 10:56	0.77	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 11:24	2/9/21 11:50	0.43	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 12:08	2/9/21 14:30	2.37	Thermocouple troubleshooting/ Flare pre source test (113)
2/9/21 14:42	2/9/21 15:00	0.30	Thermocouple troubleshooting/ Flare pre source test (113)
2/15/21 9:22	2/15/21 10:12	0.83	Zink preventative maintenance (113)
2/15/21 10:44	2/15/21 11:30	0.77	Zink preventative maintenance (113)
2/15/21 12:00	2/15/21 12:38	0.63	Zink preventative maintenance (113)
2/18/21 13:10	2/18/21 13:28	0.30	Blower swap (113)
2/19/21 11:06	2/19/21 11:34	0.47	Air blower troubleshooting (113)
2/19/21 11:46	2/19/21 11:52	0.10	Air blower troubleshooting (113)
2/19/21 11:56	2/19/21 12:00	0.07	Air blower troubleshooting (113)
2/19/21 12:02	2/19/21 12:08	0.10	Air blower troubleshooting (113)
2/22/21 11:20	2/22/21 11:26	0.10	Air blower troubleshooting (113)
2/22/21 11:30	2/22/21 11:36	0.10	Air blower troubleshooting (113)
2/22/21 11:52	2/22/21 11:58	0.10	Air blower troubleshooting (113)
2/22/21 13:24	2/22/21 15:36	2.20	Air filter cleaning (113)
2/23/21 14:52	2/23/21 15:00	0.13	Flare source testing
3/10/21 13:26	3/10/21 13:32	0.10	Utility outage (RCA submitted)
3/12/21 9:18	3/12/21 9:56	0.63	Air Blower low flow shut down (RCA submitted)
3/12/21 12:52	3/12/21 14:18	1.43	Air Blower maintenance and troubleshooting (113)
3/17/21 11:22	3/17/21 11:44	0.37	Gas blower inspection (113)
3/27/21 15:04	3/27/21 16:26	1.37	Air Blower low flow shut down (RCA submitted)
3/28/21 12:42	3/28/21 14:39	1.95	Air Blower low flow shut down (RCA submitted)
3/31/21 8:34	3/31/21 13:06	4.53	Condensate Knock out Pot Demistier Pad Installation (113)
3/31/21 13:54	3/31/21 14:32	0.63	Air Blower maintenance and troubleshooting (113)
3/31/21 14:54	3/31/21 15:08	0.23	Air Blower maintenance and troubleshooting (113)
3/31/21 15:22	3/31/21 15:42	0.33	Air Blower maintenance and troubleshooting (113)
3/31/21 15:44	3/31/21 16:24	0.67	Air Blower maintenance and troubleshooting (113)
4/15/21 17:00	4/15/21 18:16	1.27	Flame arrestor servicing (113)
4/23/21 13:48	4/23/21 14:34	0.77	Air Combustion blower filter cleaning (113)
5/4/21 13:12	5/4/21 13:58	0.77	Air Blower maintenance and troubleshooting (113)

Table 1b. Flare (A-2) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
5/5/21 13:22	5/5/21 13:54	0.53	Air Blower low flow shut down (RCA submitted)
5/6/21 10:58	5/6/21 12:32	1.57	Air Blower maintenance and troubleshooting (113)
5/24/21 14:20	5/24/21 14:40	0.33	Air Blower maintenance and troubleshooting (113)
5/26/21 7:52	5/26/21 16:04	8.20	Burner tip cleaning event (113)
5/30/21 14:46	5/30/21 18:32	3.77	Air Blower low flow shut down (RCA submitted)
5/31/21 10:50	5/31/21 12:30	1.67	Air Blower low flow shut down (RCA submitted)
5/31/21 14:22	5/31/21 15:40	1.30	Air Blower low flow shut down (RCA submitted)
5/31/21 16:48	5/31/21 17:28	0.67	Air Blower low flow shut down (RCA submitted)
6/4/21 12:18	6/4/21 12:30	0.20	Air Blower low flow shut down
6/8/21 7:26	6/8/21 8:20	0.90	Air blower filter cleaning (113)
6/14/21 7:56	6/14/21 8:02	0.10	Air Blower low flow shut down
6/16/21 9:36	6/16/21 10:48	1.20	Air blower troubleshooting (113)
6/16/21 10:52	6/16/21 11:14	0.37	Air blower troubleshooting (113)
6/16/21 11:48	6/16/21 12:06	0.30	Air blower troubleshooting (113)
6/16/21 12:40	6/16/21 12:52	0.20	Air blower troubleshooting (113)
6/16/21 14:18	6/16/21 14:38	0.33	Air blower troubleshooting (113)
6/22/21 14:28	6/22/21 15:26	0.97	Air Combustion blower filter cleaning (113)
7/10/21 20:24	7/11/21 8:00	11.60	Utility outage (RCA submitted)
7/11/21 11:56	7/11/21 12:06	0.17	High Gas Flow
7/15/21 13:44	7/15/21 13:52	0.13	Flame Failure (RCA submitted)
7/16/21 8:08	7/16/21 8:14	0.10	Air Combustion Blower Filter Cleaning (113)
7/22/21 1:16	7/22/21 1:24	0.13	Gas Blower Maintenance and Troubleshooting (113)
7/22/21 11:14	7/22/21 11:20	0.10	Gas Blower Maintenance and Troubleshooting (113)
7/28/21 13:52	7/28/21 13:58	0.10	Low Gas Flow
7/28/21 14:08	7/28/21 15:50	1.70	Low Gas Flow
Total		**65.12**	

Notes:

Events in bold type denotes Malfunction Events

All events listed involved GCCS inspection and/or maintenance activities prior to start up (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 March 10, 12, 27, and 28, May 5, 30, and 31, and July 10, 15, and 22, 2021 , which involved utility outages and air blower low flow shutdowns. These events were considered reportable compliance activities (RCA) and breakdown relief was requested.

Table 1c. Flare (A-3) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
2/1/2021 8:50	2/1/2021 10:42	1.87	Flare inspections (113)
2/9/2021 8:24	2/9/2021 8:38	0.23	Flare source testing (113)
2/9/2021 10:10	2/9/2021 11:36	1.43	Flare source testing
2/15/2021 9:22	2/15/2021 9:28	0.10	Zink preventative maintenance (113)
2/15/2021 10:44	2/15/2021 10:52	0.13	Zink preventative maintenance (113)
2/18/2021 13:10	2/18/2021 13:18	0.13	Blower swap (113)
2/19/2021 11:06	2/19/2021 11:14	0.13	Air blower troubleshooting (113)
2/22/2021 11:20	2/22/2021 11:26	0.10	Air filter cleaning (113)
2/23/2021 14:54	2/23/2021 15:00	0.10	Flare source testing
3/10/2021 13:26	3/10/2021 15:20	1.90	Utility outage (RCA submitted)
3/12/2021 9:20	3/12/2021 10:30	1.17	Air Blower low flow shut down (RCA submitted)
3/12/2021 12:54	3/12/2021 13:00	0.10	Air Blower maintenance and troubleshooting (113)
3/17/2021 11:24	3/17/2021 11:30	0.10	Gas blower inspection (113)
3/27/2021 15:04	3/27/2021 15:10	0.10	Air Blower low flow shut down (RCA submitted)
3/28/2021 12:42	3/28/2021 12:49	0.12	Air Blower low flow shut down (RCA submitted)
3/31/2021 8:34	3/31/2021 13:04	4.50	Condensate Knock out Pot Demistier Pad Installation (113)
3/31/2021 13:54	3/31/2021 14:02	0.13	Air Blower maintenance and troubleshooting (113)
3/31/2021 14:56	3/31/2021 15:02	0.10	Air Blower maintenance and troubleshooting (113)
3/31/2021 15:22	3/31/2021 15:30	0.13	Air Blower maintenance and troubleshooting (113)
3/31/2021 15:58	3/31/2021 16:26	0.47	Air Blower maintenance and troubleshooting (113)
4/15/2021 17:02	4/15/2021 17:08	0.10	Flame arrestor servicing (113)
4/15/2021 17:12	4/15/2021 17:14	0.03	Flame arrestor servicing (113)
4/15/2021 17:20	4/15/2021 18:12	0.87	Flame arrestor servicing (113)
4/23/2021 13:48	4/23/2021 13:56	0.13	Air Combustion blower filter cleaning (113)
4/23/2021 14:08	4/23/2021 14:32	0.40	Air Combustion blower filter cleaning (113)
5/4/2021 13:14	5/4/2021 13:54	0.67	Air Blower maintenance and troubleshooting (113)
5/5/2021 13:24	5/5/2021 13:30	0.10	Air Blower low flow shut down (RCA submitted)
5/5/2021 13:42	5/5/2021 13:58	0.27	Air Blower low flow shut down (RCA submitted)
5/6/2021 10:58	5/6/2021 11:04	0.10	Air Blower maintenance and troubleshooting (113)
5/6/2021 11:08	5/6/2021 12:32	1.40	Air Blower maintenance and troubleshooting (113)
5/24/2021 14:20	5/24/2021 14:28	0.13	Air Combustion blower filter cleaning (113)
5/26/2021 7:52	5/26/2021 8:00	0.13	Burner tip cleaning event (113)
5/30/2021 14:46	5/30/2021 14:54	0.13	Air Blower low flow shut down (RCA submitted)
5/31/2021 10:52	5/31/2021 10:58	0.10	Air Blower low flow shut down (RCA submitted)
5/31/2021 14:22	5/31/2021 15:36	1.23	Air Blower low flow shut down (RCA submitted)
5/31/2021 16:50	5/31/2021 17:18	0.47	Air Blower low flow shut down (RCA submitted)

Table 1c. Flare (A-3) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Shutdown	Startup	Downtime Hours	Reason for Downtime
6/16/2021 9:36	6/16/2021 9:58	0.37	Air blower troubleshooting (113)
6/16/2021 10:52	6/16/2021 11:06	0.23	Air blower troubleshooting (113)
6/16/2021 14:18	6/16/2021 14:36	0.30	Air blower troubleshooting (113)
6/22/2021 14:28	6/22/2021 14:36	0.13	Air Combustion blower filter cleaning (113)
7/10/2021 20:24	7/11/2021 13:14	16.83	Utility outage (RCA submitted)
7/15/2021 13:44	7/15/2021 13:56	0.20	Air Blower Low Flow Shutdown (RCA submitted)
7/16/2021 8:06	7/16/2021 10:40	2.57	Air Combustion Blower Filter Cleaning (113)
7/22/2021 1:16	7/22/2021 1:28	0.20	Low Gas Flow Shutdown (RCA submitted)
7/22/2021 11:14	7/22/2021 11:22	0.13	Air Blower maintenance and troubleshooting (113)
7/28/2021 13:50	7/28/2021 14:02	0.20	Low Gas Flow
7/28/2021 14:06	7/28/2021 15:58	1.87	Low Gas Flow
Total		**42.35**	

Notes:

Events in bold type denotes Malfunction Events

All events listed involved GCCS inspection and/or maintenance activities prior to start up (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 March 10, 12, 27, and 28, May 5, 30, and 31, and July 10, 15, and 22, 2021 , which involved utility outages and air blower low flow shutdowns. These events were considered reportable compliance activities (RCA) and breakdown relief was requested.

Table 2. Individual Well Startups, Shutdowns and Decommissions
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Shutdown	Start-up	Days Offline	Reason for Shutdown/Startup
NILW558A	8/13/20 11:33	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW662	9/15/20 12:43	N/A		Well Permanently Decommissioned Due to GCCS Construction
NILEW455	11/18/20 7:00	N/A		Well Permanently Decommissioned Due to GCCS Construction
NILEW059	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW060	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW063	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW67R	2/18/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW730	3/12/21 11:02	6/4/21 0:00	83.54	Well Temporarily Offline Construction 118-Plan
NILEW733	3/12/21 11:07	4/28/21 12:22	47.05	Well Temporarily Offline Construction 118-Plan
NILEW066	3/12/21 11:37	7/14/21 11:11	123.98	Well Temporarily Offline Construction 118-Plan
NILEW465	3/12/21 11:45	4/28/21 12:24	47.03	Well Temporarily Offline Construction 118-Plan
NILEW707	4/14/21 13:29	4/19/21 8:47	4.80	Well Temporarily Offline to Remediate Subsurface Oxidation (SSO) Event
NILEW496	4/14/21 13:33	4/19/21 8:44	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW664	4/14/21 13:36	4/19/21 8:42	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW711	4/14/21 13:39	4/19/21 8:39	4.79	Well Temporarily Offline to Remediate SSO Event
NILEW464	4/14/21 13:45	4/19/21 9:34	4.83	Well Temporarily Offline to Remediate SSO Event
NILEW626	4/14/21 13:52	4/19/21 9:29	4.82	Well Temporarily Offline to Remediate SSO Event
NILEW744	4/14/21 13:55	4/19/21 9:31	4.82	Well Temporarily Offline to Remediate SSO Event
NILEW497	4/14/21 13:58	4/19/21 9:27	4.81	Well Temporarily Offline to Remediate SSO Event
NILEW451	4/14/21 14:02	4/19/21 9:23	4.81	Well Temporarily Offline to Remediate SSO Event
NILEW745	4/14/21 14:07	4/19/21 9:20	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW692	4/14/21 14:09	4/19/21 9:19	4.80	Well Temporarily Offline to Remediate SSO Event
NILEW463	4/14/21 14:13	4/19/21 9:16	4.79	Well Temporarily Offline to Remediate SSO Event
NILEW693	4/14/21 14:17	4/19/21 9:12	4.79	Well Temporarily Offline to Remediate SSO Event
NILEW706	4/14/21 14:21	4/19/21 9:10	4.78	Well Temporarily Offline to Remediate SSO Event
NILEW596	4/14/21 14:25	4/19/21 9:07	4.78	Well Temporarily Offline to Remediate SSO Event
NILHC201	4/14/21 14:29	4/19/21 9:03	4.77	Well Temporarily Offline to Remediate SSO Event
NILEW748	4/14/21 14:32	4/19/21 9:01	4.77	Well Temporarily Offline to Remediate SSO Event
NILEW615	4/14/21 14:37	4/19/21 8:55	4.76	Well Temporarily Offline to Remediate SSO Event
NILEW663	4/14/21 14:40	4/19/21 8:51	4.76	Well Temporarily Offline to Remediate SSO Event
NILW475A	5/27/21 10:05	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW730	6/4/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW686	6/9/21 11:51	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW676	6/9/21 12:02	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NISS17-3	6/11/21 14:55	7/8/21 0:00	26.38	Well Temporarily Offline Due to Filling
NILEW529	6/29/21 10:01	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NISS17-3	7/8/21 0:00	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NIHC17-2*	7/14/21 15:33		17.35	Well Temporarily Offline Due to Filling
NIHC17-3*	7/14/21 15:34		17.35	Well Temporarily Offline Due to Filling
NILEW741*	7/14/21 16:10		17.33	Well Temporarily Offline Due to Filling
NISS17-5	7/22/21 10:28	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILEW660	7/22/21 13:43	N/A		Well Permanently Decommissioned Due to Poor Gas Quality
NILMW015*	7/27/21 11:11		4.53	Well Temporarily Offline Construction 118-Plan

Newby Island contracted with a new operations and maintenance (O&M) provider, SCS Field Services (SCSFS), starting on February 1, 2021. Upon further inspection, it was discovered that the wells noted in italics had previously been decommissioned. These wells are noted in this report for recordkeeping purposes.

*Well was offline at the end of the reporting period. For reporting purposes, the startup time is calculated as of August 1, 2021 at 0:00.

Note: All well downtime events listed are consistent with applicable Rule 8-34 provisions and BAAQMD permit conditions.

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NIHC17-2	6/29/2021 9:48	4.87	4.88	Adjusted Valve
NIHC17-2	6/29/2021 9:48	4.85	4.86	Second Reading (Well was temporarily taken offline)
NIHC17-3	6/29/2021 9:45	3.62	3.61	Adjusted Valve
NIHC17-3	6/29/2021 9:46	3.53	3.55	Second Reading (Well was temporarily taken offline)
NILEW066	7/14/2021 11:11	0.63	0.64	Adjusted Valve
NILEW066	7/14/2021 11:12	0.68	0.68	Second Reading
NILEW066	7/29/2021 15:10	0.24	0.24	Adjusted Valve
NILEW066	7/29/2021 15:11	0.18	0.17	Second Reading
NILEW451	4/15/2021 9:44	3.15	3.14	Adjusted Valve
NILEW451	4/15/2021 9:46	2.88	2.89	Second Reading
NILEW451	4/16/2021 15:15	6.88	6.9	Adjusted Valve
NILEW451	4/17/2021 19:40	7.87	8.11	Adjusted Valve
NILEW451	4/17/2021 19:43	4.22	0.07	Second Reading
NILEW451	4/18/2021 17:59	11.15	11.14	Adjusted Valve
NILEW451	4/18/2021 18:01	9.02	9.02	Second Reading
NILEW451	4/19/2021 9:23	7.6	7.32	Adjusted Valve
NILEW451	4/21/2021 13:00	-5.71	-5.7	In Compliance
NILEW451	7/30/2021 9:56	1.37	1.37	Adjusted Valve
NILEW451	7/30/2021 9:57	1.38	1.39	Second Reading
NILEW463	4/15/2021 9:26	10.6	10.6	Adjusted Valve
NILEW463	4/15/2021 9:26	10.6	10.6	Second Reading
NILEW463	4/15/2021 9:28	10.64	10.64	Third Reading
NILEW463	4/16/2021 15:34	5.78	15.01	Adjusted Valve
NILEW463	4/17/2021 19:18	15.5	15.53	Adjusted Valve
NILEW463	4/17/2021 19:20	14.02	13.93	Second Reading
NILEW463	4/18/2021 17:35	16.49	16.49	Adjusted Valve
NILEW463	4/18/2021 17:38	14.54	14.54	Second Reading
NILEW463	4/19/2021 9:16	13.57	12.16	Adjusted Valve
NILEW463	4/20/2021 12:24	3.61	-0.18	Adjusted Valve, In Compliance
NILEW464	4/15/2021 9:59	1.15	1.15	Adjusted Valve
NILEW464	4/15/2021 10:00	1.12	1.13	Second Reading
NILEW464	4/16/2021 14:53	2.69	2.7	Adjusted Valve
NILEW464	4/18/2021 18:36	2.57	2.57	Adjusted Valve
NILEW464	4/18/2021 18:39	1.01	1.01	Second Reading
NILEW464	4/19/2021 9:34	2.1	2.1	Adjusted Valve
NILEW464	4/20/2021 11:47	1.94	1.3	Adjusted Valve
NILEW464	4/21/2021 12:15	-0.5	-1.05	In Compliance

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW464	7/13/2021 13:21	0.85	0.85	Adjusted Valve
NILEW464	7/13/2021 13:22	0.83	0.83	Second Reading
NILEW464	7/23/2021 11:34	-2.67	-2.75	In Compliance
NILEW464	7/30/2021 13:19	0.03	0.05	Adjusted Valve
NILEW464	7/30/2021 13:20	0.05	0.07	Second Reading
NILEW465	5/25/2021 11:18	1.39	1.39	Adjusted Valve
NILEW465	5/25/2021 11:19	1.42	1.42	Second Reading
NILEW465	6/4/2021 9:22	-0.11	-0.11	In Compliance
NILEW465	7/14/2021 11:08	2.36	2.36	Adjusted Valve
NILEW465	7/14/2021 11:09	2.01	2.01	Second Reading
NILEW465	7/29/2021 15:06	2.15	2.18	Adjusted Valve
NILEW465	7/29/2021 15:07	2.11	2.12	Second Reading
NILEW476	2/5/2021 11:30	0.19	-0.86	Adjusted Valve, In Compliance
NILEW483	4/29/2021 9:44	0.78	-5.52	Adjusted Valve, In Compliance
NILEW496	4/16/2021 14:33	0.08	0.52	Adjusted Valve
NILEW496	4/17/2021 18:23	0.3	-4.68	Adjusted Valve, In Compliance
NILEW496	4/19/2021 8:44	1.19	1.19	Adjusted Valve
NILEW496	4/20/2021 11:55	-2.11	-4.9	In Compliance
NILEW496	7/2/2021 10:35	0.1	0.13	Adjusted Valve
NILEW496	7/2/2021 10:37	0.14	0.15	Second Reading
NILEW496	7/14/2021 11:46	8.37	8.36	Adjusted Valve
NILEW496	7/14/2021 11:48	8.69	8.7	Second Reading
NILEW496	7/30/2021 13:29	12	12.01	Adjusted Valve
NILEW496	7/30/2021 13:30	12.09	12.09	Second Reading
NILEW497	4/16/2021 15:08	13.03	13.03	Adjusted Valve
NILEW497	4/17/2021 17:48	14.43	14.46	Adjusted Valve
NILEW497	4/17/2021 17:53	3.38	2.09	Second Reading
NILEW497	4/18/2021 18:48	15.09	15.09	Adjusted Valve
NILEW497	4/18/2021 18:50	5.41	5.4	Second Reading
NILEW497	4/19/2021 9:27	14.56	12.29	Adjusted Valve
NILEW497	4/20/2021 12:35	1.91	-0.61	In Compliance
NILEW497	7/30/2021 13:22	9.93	9.93	Adjusted Valve
NILEW497	7/30/2021 13:22	9.91	9.92	Second Reading

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW500	3/19/2021 10:19	3.03	-0.34	Adjusted Valve, In Compliance
NILEW510	4/20/2021 12:32	2.72	-0.54	Adjusted Valve, In Compliance
NILEW596	4/15/2021 9:14	5.88	5.88	Adjusted Valve
NILEW596	4/15/2021 9:16	5.9	5.9	Second Reading
NILEW596	4/16/2021 13:53	5.96	5.96	Adjusted Valve
NILEW596	4/17/2021 16:02	6.05	6.06	Adjusted Valve
NILEW596	4/17/2021 16:06	0.06	-0.04	Adjusted Valve, In Compliance
NILEW596	4/18/2021 16:56	5.54	5.55	Adjusted Valve
NILEW596	4/18/2021 17:00	-0.86	-0.87	In Compliance
NILEW596	4/19/2021 9:07	5.15	2.74	Adjusted Valve
NILEW596	4/20/2021 12:16	1.37	-0.26	Adjusted Valve, In Compliance
NILEW601	3/19/2021 12:13	8.24	-0.96	Adjusted Valve, In Compliance
NILEW604	3/4/2021 10:25	0.15	0.13	Adjusted Valve
NILEW604	3/4/2021 10:26	0.13	0.13	Second Reading
NILEW604	3/5/2021 9:26	-1.74	-1.74	In Compliance
NILEW615	4/15/2021 9:02	93.62	93.62	Adjusted Valve
NILEW615	4/15/2021 9:04	93.52	93.53	Second Reading
NILEW615	4/16/2021 14:18	92.06	0.07	Adjusted Valve
NILEW615	4/17/2021 15:21	0.09	0	Adjusted Valve
NILEW615	4/17/2021 15:27	93.22	92.8	Second Reading
NILEW615	4/18/2021 15:25	100.37	100.37	Adjusted Valve
NILEW615	4/19/2021 8:55	33.25	85.61	Adjusted Valve
NILEW615	4/20/2021 12:06	-3.29	-2.77	In Compliance
NILEW626	4/15/2021 9:51	1.86	1.86	Adjusted Valve
NILEW626	4/15/2021 9:53	1.9	1.89	Second Reading
NILEW626	4/16/2021 15:01	3.15	3.17	Adjusted Valve
NILEW626	4/18/2021 18:09	3.19	3.19	Adjusted Valve
NILEW626	4/18/2021 18:11	1.86	1.86	Second Reading
NILEW626	4/19/2021 9:29	2.45	2.37	Adjusted Valve
NILEW626	4/20/2021 11:44	0.79	0.56	Adjusted Valve
NILEW626	4/21/2021 12:13	-1.74	-1.74	In Compliance
NILEW626	7/30/2021 10:03	0.16	0.17	Adjusted Valve
NILEW626	7/30/2021 10:03	0.13	0.13	Second Reading
NILEW637	7/26/2021 10:52	12.93	-38.69	Adjusted Valve, In Compliance

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW663	4/15/2021 8:59	100.37	100.37	Adjusted Valve
NILEW663	4/15/2021 9:00	100.37	100.37	Second Reading
NILEW663	4/17/2021 14:33	100.37	100.37	Adjusted Valve
NILEW663	4/17/2021 14:37	100.37	100.37	Second Reading
NILEW663	4/19/2021 8:51	45.23	20.32	Adjusted Valve
NILEW663	4/20/2021 12:04	12.4	-0.29	Adjusted Valve, In Compliance
NILEW664	4/15/2021 8:47	8.96	8.96	Adjusted Valve
NILEW664	4/15/2021 8:48	8.94	8.94	Second Reading
NILEW664	4/16/2021 14:41	11.4	11.41	Adjusted Valve
NILEW664	4/17/2021 17:57	12.37	12.39	Adjusted Valve
NILEW664	4/17/2021 18:01	-0.41	-1.36	In Compliance
NILEW664	4/18/2021 16:15	12.51	12.51	Adjusted Valve
NILEW664	4/18/2021 16:18	4.61	4.17	Second Reading
NILEW664	4/19/2021 8:42	12.12	10.57	Adjusted Valve
NILEW664	4/20/2021 11:52	-2.43	-2.42	In Compliance
NILEW664	7/2/2021 10:56	6.35	6.35	Adjusted Valve
NILEW664	7/2/2021 10:59	6.35	6.35	Second Reading
NILEW664	7/14/2021 11:49	7.85	7.85	Adjusted Valve
NILEW664	7/14/2021 11:50	7.89	7.89	Second Reading
NILEW664	7/30/2021 13:25	15.31	15.31	Adjusted Valve
NILEW664	7/30/2021 13:25	15.4	15.41	In Compliance
NILEW665	7/14/2021 10:50	0.35	0.35	Adjusted Valve
NILEW665	7/14/2021 10:51	0.43	0.43	Second Reading
NILEW665	7/29/2021 14:54	0.75	0.78	Adjusted Valve
NILEW665	7/29/2021 14:54	0.75	0.78	Second Reading
NILEW665	7/29/2021 14:55	0.88	0.87	Third Reading
NILEW692	4/15/2021 9:30	12.6	12.6	Adjusted Valve
NILEW692	4/15/2021 9:32	12.56	12.57	Second Reading
NILEW692	4/16/2021 15:28	16.4	17.74	Adjusted Valve
NILEW692	4/17/2021 19:11	18.64	18.65	Adjusted Valve
NILEW692	4/17/2021 19:14	14.93	13.67	Second Reading
NILEW692	4/18/2021 17:41	16.69	19.09	Adjusted Valve
NILEW692	4/18/2021 17:44	14.97	14.97	Second Reading
NILEW692	4/19/2021 9:19	16.33	15.59	Adjusted Valve
NILEW692	4/20/2021 12:27	5.15	-0.58	Adjusted Valve, In Compliance
NILEW693	4/15/2021 9:22	3.24	3.25	Adjusted Valve
NILEW693	4/15/2021 9:24	3.29	3.29	Second Reading
NILEW693	4/16/2021 15:46	4.88	4.9	Adjusted Valve
NILEW693	4/17/2021 19:56	4.74	4.77	Adjusted Valve

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW693	4/17/2021 19:58	1.52	1.46	Second Reading
NILEW693	4/18/2021 17:18	5.16	5.18	Adjusted Valve
NILEW693	4/18/2021 17:20	3.25	3.26	Second Reading
NILEW693	4/19/2021 9:12	4.21	3.06	Adjusted Valve
NILEW693	4/20/2021 12:21	0.79	-0.25	Adjusted Valve, In Compliance
NILEW706	4/15/2021 9:18	14.67	14.67	Adjusted Valve
NILEW706	4/15/2021 9:19	14.66	14.66	Second Reading
NILEW706	4/16/2021 16:08	17.71	17.71	Adjusted Valve
NILEW706	4/17/2021 16:18	18.8	18.82	Adjusted Valve
NILEW706	4/17/2021 16:24	5.21	5.02	Second Reading
NILEW706	4/18/2021 17:07	17.29	17.29	Adjusted Valve
NILEW706	4/18/2021 17:09	4.87	4.87	Second Reading
NILEW706	4/19/2021 9:10	16.45	14.58	Adjusted Valve
NILEW706	4/20/2021 12:18	0.73	-0.57	Adjusted Valve, In Compliance
NILEW706	7/13/2021 11:20	0.77	0.76	Adjusted Valve
NILEW706	7/13/2021 11:22	0.48	0.46	Second Reading
NILEW706	7/23/2021 11:04	-43.92	-43.89	In Compliance
NILEW707	4/15/2021 8:54	13.04	13.05	Adjusted Valve
NILEW707	4/15/2021 8:56	13.1	13.1	Second Reading
NILEW707	4/16/2021 14:27	13.3	13.3	Adjusted Valve
NILEW707	4/17/2021 17:13	13.53	13.57	Adjusted Valve
NILEW707	4/17/2021 17:16	0.28	-0.27	Adjusted Valve, In Compliance
NILEW707	4/18/2021 15:33	10.92	10.93	Adjusted Valve
NILEW707	4/18/2021 15:36	-0.18	-0.18	In Compliance
NILEW707	4/19/2021 8:47	12.39	10.9	Adjusted Valve
NILEW707	4/20/2021 11:58	-3.33	-3.33	In Compliance
NILEW707	7/2/2021 10:31	4.43	4.43	Adjusted Valve
NILEW707	7/2/2021 10:32	4.5	4.49	Second Reading
NILEW707	7/14/2021 11:31	7.43	7.43	Adjusted Valve
NILEW707	7/14/2021 11:31	7.52	7.52	Second Reading
NILEW707	7/29/2021 16:02	8.5	8.5	Adjusted Valve
NILEW707	7/29/2021 16:05	9.11	9.16	Second Reading
NILEW711	4/15/2021 8:43	0.04	0.04	Adjusted Valve
NILEW711	4/15/2021 8:44	0.03	0.03	Second Reading
NILEW711	4/16/2021 14:47	0.45	0.44	Adjusted Valve
NILEW711	4/17/2021 17:34	0.55	0.59	Adjusted Valve
NILEW711	4/17/2021 17:36	-1.67	-1.63	In Compliance

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW711	4/18/2021 16:30	0.45	0.45	Adjusted Valve
NILEW711	4/18/2021 16:32	-0.13	-0.14	In Compliance
NILEW711	4/19/2021 8:39	0.12	0.12	Adjusted Valve
NILEW711	4/20/2021 11:49	0.3	0.18	Adjusted Valve
NILEW711	4/21/2021 12:18	-0.22	-0.2	In Compliance
NILEW717	3/4/2021 10:20	1.37	1.37	Adjusted Valve
NILEW717	3/4/2021 10:21	1.26	1.25	Second Reading
NILEW717	3/5/2021 9:12	-5.3	-6.63	In Compliance
NILEW726	7/14/2021 10:00	0.53	0.53	Adjusted Valve
NILEW726	7/14/2021 10:01	0.44	0.45	Second Reading
NILEW726	7/22/2021 9:04	0.89	0.89	Adjusted Valve
NILEW726	7/22/2021 9:05	0.84	0.85	Second Reading
NILEW733	5/25/2021 11:15	1.63	1.64	Adjusted Valve
NILEW733	5/25/2021 11:16	1.67	1.67	Second Reading
NILEW733	6/4/2021 9:24	-0.83	-0.84	In Compliance
NILEW733	7/14/2021 11:02	1.74	1.73	Adjusted Valve
NILEW733	7/14/2021 11:04	1.6	1.61	Second Reading
NILEW733	7/29/2021 15:29	2.3	2.31	Adjusted Valve
NILEW733	7/29/2021 15:30	2.34	2.34	Second Reading
NILEW742	7/14/2021 10:35	6.65	6.66	Adjusted Valve
NILEW742	7/14/2021 10:37	6.85	6.85	Second Reading
NILEW742	7/29/2021 14:35	18.22	18.27	Adjusted Valve
NILEW742	7/29/2021 14:35	14.95	18.83	Second Reading
NILEW744	4/15/2021 9:55	1.1	1.11	Adjusted Valve
NILEW744	4/15/2021 9:57	1.17	1.16	Second Reading
NILEW744	4/18/2021 18:17	1.78	1.8	Adjusted Valve
NILEW744	4/18/2021 18:21	0.31	0.3	Second Reading
NILEW744	4/19/2021 9:31	1.48	1.49	Adjusted Valve
NILEW744	4/20/2021 11:41	1.46	0.92	Adjusted Valve
NILEW744	4/21/2021 12:11	-0.33	-0.34	In Compliance
NILEW745	4/15/2021 9:40	12.27	12.33	Adjusted Valve
NILEW745	4/15/2021 9:42	12.3	12.3	Second Reading
NILEW745	4/16/2021 15:23	18.27	18.27	Adjusted Valve
NILEW745	4/17/2021 19:27	19.33	19.35	Adjusted Valve
NILEW745	4/17/2021 19:27	19.33	19.35	Second Reading
NILEW745	4/17/2021 19:30	5.97	5.47	Third Reading
NILEW745	4/18/2021 17:50	20.22	20.22	Adjusted Valve

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NILEW745	4/18/2021 17:53	10.88	10.87	Second Reading
NILEW745	4/19/2021 9:20	-4.3	-3.75	In Compliance
NILEW748	4/15/2021 9:06	83.45	83.46	Adjusted Valve
NILEW748	4/15/2021 9:08	83.48	83.48	Second Reading
NILEW748	4/16/2021 14:08	99.98	99.98	Adjusted Valve
NILEW748	4/17/2021 14:54	100.37	100.37	Adjusted Valve
NILEW748	4/17/2021 14:58	99	98.49	Second Reading
NILEW748	4/18/2021 14:39	96.59	96.59	Adjusted Valve
NILEW748	4/18/2021 14:42	93.58	93.56	Second Reading
NILEW748	4/19/2021 9:01	57.12	39.98	Adjusted Valve
NILEW748	4/20/2021 12:09	1.06	-0.36	Adjusted Valve, In Compliance
NILEW752	6/18/2021 12:31	-5.37	1.21	Adjusted Valve
NILEW752	6/18/2021 12:34	2.1	2.17	Second Reading
NILEW752	6/18/2021 12:36	-0.76	-0.87	In Compliance
NILHC201	4/16/2021 14:01	0.09	0.08	Adjusted Valve
NILHC201	4/17/2021 15:41	-4.47	-4.8	In Compliance
NILMW020	7/9/2021 10:39	0.03	-2.42	Adjusted Valve, In Compliance
NILMW023	4/29/2021 12:02	0.98	-9.7	Adjusted Valve, In Compliance
NILW632A	5/12/2021 8:15	30.38	-1.21	Adjusted Valve, In Compliance
NISS17-3	3/10/2021 9:32	2.22	2.21	Adjusted Valve
NISS17-3	3/10/2021 9:33	2.22	2.22	Second Reading
NISS17-3	3/24/2021 11:02	1.55	2.16	Adjusted Valve
NISS17-3	4/8/2021 9:42	5.36	4.2	Adjusted Valve
NISS17-3	4/29/2021 9:28	4.51	4.51	Adjusted Valve
NISS17-3	5/27/2021 12:30	7.88	8.28	Well Permanently Decommissioned Due to Poor Gas Quality
NISS17-4	6/29/2021 9:54	0.34	0.4	Adjusted Valve
NISS17-4	6/29/2021 9:55	0.41	0.42	Second Reading
NISS17-4	6/29/2021 9:55	0.28	0.29	Third Reading
NISS17-4	7/14/2021 10:19	3.97	3.98	Adjusted Valve
NISS17-4	7/14/2021 10:20	3.86	3.87	Second Reading
NISS17-4	7/22/2021 10:47	3.82	3.83	Adjusted Valve
NISS17-4	7/22/2021 10:48	3.95	3.97	Second Reading
NISS17-5	3/24/2021 10:22	8.03	8.06	Adjusted Valve
NISS17-5	3/24/2021 10:24	7.67	7.7	Second Reading
NISS17-5	4/8/2021 9:04	23.35	23.35	Adjusted Valve

Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	Comments
NISS17-5	4/8/2021 9:05	23.57	23.57	Second Reading
NISS17-5	4/30/2021 11:15	26.37	26.38	Adjusted Valve
NISS17-5	4/30/2021 11:16	26.29	26.3	Second Reading
NISS17-5	5/14/2021 10:03	26.87	26.88	Adjusted Valve
NISS17-5	5/14/2021 10:05	26.93	26.93	Second Reading
NISS17-5	5/27/2021 12:29	13.43	14.36	Adjusted Valve
NISS17-5	6/11/2021 8:27	29.34	29.34	Adjusted Valve
NISS17-5	6/11/2021 8:29	27.71	29.35	Second Reading
NISS17-5	6/29/2021 8:53	30.65	30.65	Adjusted Valve
NISS17-5	6/29/2021 8:53	30.66	30.66	Second Reading
NISS17-5	7/14/2021 9:41	32.32	32.32	Adjusted Valve
NISS17-5	7/14/2021 9:42	32.25	32.26	Second Reading
NISS17-5	7/22/2021 10:27	32.72	32.69	Adjusted Valve
NISS17-5	7/22/2021 10:28	31.41	32.07	Well Permanently Decommissioned due to Poor Gas Quality

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

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NI3EW40R	5/13/2021 12:26	18.5	Adjusted Valve
NI3EW40R	5/13/2021 12:27	18.9	Second Reading
NI3EW40R	5/27/2021 9:15	0.7	In Compliance
NI3EW40R	6/10/2021 10:06	11.8	Adjusted Valve
NI3EW40R	6/10/2021 10:07	11.6	Second Reading
NI3EW40R	6/23/2021 9:23	10.4	Adjusted Valve
NI3EW40R	6/23/2021 9:24	9.9	Second Reading
NI3EW40R	7/12/2021 10:46	0	In Compliance
NI3EW40R	7/23/2021 9:59	17.4	Adjusted Valve
NI3EW40R	7/23/2021 10:00	17.8	Second Reading
NIHC17-1	3/24/2021 10:06	6.5	Adjusted Valve
NIHC17-1	3/24/2021 10:08	6.8	Second Reading
NIHC17-1	4/8/2021 9:15	0	In Compliance
NIHC17-5	2/24/2021 9:44	6.7	Adjusted Valve
NIHC17-5	2/24/2021 9:46	6.8	Second Reading
NIHC17-5	3/10/2021 9:29	0	In Compliance
NIHC17-5	5/14/2021 10:38	9.2	Adjusted Valve
NIHC17-5	5/14/2021 10:39	9	Second Reading
NIHC17-5	5/28/2021 12:40	0	In Compliance
NIHC17-5	6/29/2021 9:42	12.6	Adjusted Valve
NIHC17-5	6/29/2021 9:42	11.9	Second Reading
NIHC17-5	7/12/2021 14:31	19.5	Adjusted Valve
NIHC17-5	7/12/2021 14:34	20.4	Second Reading
NIHC17-5	7/22/2021 13:40	2.5	In Compliance
NIHC17-7	3/24/2021 11:15	11.9	Adjusted Valve
NIHC17-7	3/24/2021 11:16	7.2	Second Reading
NIHC17-7	4/7/2021 8:54	4.1	In Compliance
NIHC17-7	4/27/2021 8:51	18	Adjusted Valve
NIHC17-7	4/27/2021 8:54	5.7	Second Reading
NIHC17-7	5/12/2021 9:30	16.4	Adjusted Valve
NIHC17-7	5/12/2021 9:32	16.1	Second Reading
NIHC17-7	5/20/2021 8:45	17.3	Adjusted Valve
NIHC17-7	5/20/2021 8:46	20.1	Second Reading
NIHC17-7	6/9/2021 9:05	19.5	Adjusted Valve
NIHC17-7	6/9/2021 9:08	19.9	Second Reading
NIHC17-7	6/16/2021 8:36	20	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NIHC17-7	6/16/2021 8:37	20.6	Second Reading
NIHC17-7	7/13/2021 9:48	7.5	Adjusted Valve
NIHC17-7	7/13/2021 9:49	8.5	Second Reading
NIHC17-7	7/30/2021 11:03	3.1	In Compliance
NILCW001	3/2/2021 9:52	19.4	Adjusted Valve
NILCW001	3/2/2021 9:57	7.2	Second Reading
NILCW001	3/17/2021 9:18	17	Adjusted Valve
NILCW001	3/17/2021 9:19	17.5	Second Reading
NILCW001	4/7/2021 9:14	0	In Compliance
NILCW004	2/19/2021 9:50	6.9	Adjusted Valve
NILCW004	2/19/2021 9:51	6.9	Second Reading
NILCW004	3/2/2021 10:13	6.6	Adjusted Valve
NILCW004	3/2/2021 10:15	6.7	Second Reading
NILCW004	3/17/2021 9:29	0.2	In Compliance
NILEW035	2/4/2021 9:37	6.8	Adjusted Valve
NILEW035	2/4/2021 9:40	3.5	In Compliance
NILEW035	5/12/2021 10:38	5.5	Adjusted Valve
NILEW035	5/12/2021 10:39	5.4	Second Reading
NILEW035	5/25/2021 9:39	1.6	In Compliance
NILEW217	7/21/2021 11:32	19	Adjusted Valve
NILEW217	7/21/2021 11:34	20.9	Second Reading
NILEW232	2/4/2021 10:41	20.3	Adjusted Valve
NILEW232	2/4/2021 10:43	0.6	In Compliance
NILEW430	4/28/2021 10:21	18.4	Adjusted Valve
NILEW430	4/28/2021 10:22	16.4	Second Reading
NILEW430	5/12/2021 8:02	0.9	In Compliance
NILEW431	7/26/2021 11:03	11.1	Adjusted Valve
NILEW431	7/26/2021 11:06	11.8	Second Reading
NILEW463	2/5/2021 10:04	13.5	Adjusted Valve
NILEW463	2/5/2021 10:05	15.7	Second Reading
NILEW463	2/17/2021 12:53	11.5	Adjusted Valve
NILEW463	2/17/2021 12:55	11.4	Second Reading
NILEW463	3/9/2021 10:12	11.1	Adjusted Valve
NILEW463	3/9/2021 10:14	1.6	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW463	4/14/2021 14:12	8.3	Adjusted Valve
NILEW463	4/14/2021 14:13	8.4	Second Reading
NILEW463	4/15/2021 9:26	0	In Compliance
NILEW463	6/4/2021 8:54	6.4	Adjusted Valve
NILEW463	6/4/2021 8:56	2.2	In Compliance
NILEW463	7/30/2021 13:34	21.2	Adjusted Valve
NILEW463	7/30/2021 13:35	21.4	Second Reading
NILEW496	4/15/2021 8:51	20	Adjusted Valve
NILEW496	4/15/2021 8:52	20.2	Second Reading
NILEW496	4/16/2021 14:33	13.6	Adjusted Valve
NILEW496	4/17/2021 18:23	13	Adjusted Valve
NILEW496	4/18/2021 15:48	0	In Compliance
NILEW496	4/19/2021 8:44	9	Adjusted Valve
NILEW496	4/20/2021 11:55	4.9	In Compliance
NILEW500	3/8/2021 11:09	5.9	Adjusted Valve
NILEW500	3/8/2021 11:11	5.9	Second Reading
NILEW500	3/19/2021 10:19	0	In Compliance
NILEW500	4/23/2021 9:14	5.7	Adjusted Valve
NILEW500	4/23/2021 9:17	6.1	Second Reading
NILEW500	5/3/2021 11:30	6	Adjusted Valve
NILEW500	5/3/2021 11:39	6	Second Reading
NILEW500	5/27/2021 9:47	7.4	Adjusted Valve
NILEW500	5/27/2021 9:49	7.5	Second Reading
NILEW500	6/10/2021 12:29	0.5	In Compliance
NILEW500	7/12/2021 12:08	7.2	Adjusted Valve
NILEW500	7/12/2021 12:09	7.3	Second Reading
NILEW500	7/21/2021 13:39	0	In Compliance
NILEW514	3/16/2021 9:35	11.7	Adjusted Valve
NILEW514	3/16/2021 9:36	13.4	Second Reading
NILEW514	4/1/2021 12:27	2.6	In Compliance
NILEW514	7/27/2021 14:53	6.6	Adjusted Valve
NILEW514	7/27/2021 14:55	6.9	Second Reading
NILEW529	4/29/2021 9:40	19.6	Adjusted Valve
NILEW529	4/29/2021 9:40	19.6	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW529	4/29/2021 9:43	20.2	Third Reading
NILEW529	5/14/2021 10:34	18.5	Adjusted Valve
NILEW529	5/14/2021 10:35	20.4	Second Reading
NILEW529	5/27/2021 12:43	19.3	Adjusted Valve
NILEW529	5/27/2021 12:44	20.1	Second Reading
NILEW529	6/11/2021 9:21	21.2	Adjusted Valve
NILEW529	6/11/2021 9:22	21.1	Second Reading
NILEW529	6/29/2021 10:00	10.9	Adjusted Valve
NILEW529	6/29/2021 10:01	10.7	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW601	5/21/2021 8:39	7.2	Adjusted Valve
NILEW601	5/21/2021 8:40	8.8	Second Reading
NILEW601	6/2/2021 10:29	13.4	Adjusted Valve
NILEW601	6/24/2021 11:55	2.7	In Compliance
NILEW604	2/5/2021 10:03	13.4	Adjusted Valve
NILEW604	2/5/2021 10:05	2.4	In Compliance
NILEW604	2/18/2021 10:36	21	Adjusted Valve
NILEW604	2/18/2021 10:37	21	Second Reading
NILEW604	3/4/2021 10:25	17.8	Adjusted Valve
NILEW604	3/4/2021 10:26	18.1	Second Reading
NILEW604	3/5/2021 9:26	21.3	Adjusted Valve
NILEW604	3/5/2021 9:28	21.4	Second Reading
NILEW604	3/25/2021 9:57	17.6	Adjusted Valve
NILEW604	3/25/2021 9:58	17.6	Second Reading
NILEW604	4/9/2021 10:17	3.4	In Compliance
NILEW604	5/19/2021 9:45	17.3	Adjusted Valve
NILEW604	5/19/2021 9:46	16.9	Second Reading
NILEW604	6/3/2021 9:42	17.6	Adjusted Valve
NILEW604	6/3/2021 9:42	16.8	Second Reading
NILEW604	6/18/2021 10:39	0	In Compliance
NILEW640	2/10/2021 10:51	5.2	Adjusted Valve
NILEW640	2/10/2021 10:52	4.6	In Compliance
NILEW640	3/2/2021 10:56	8.4	Adjusted Valve
NILEW640	3/2/2021 10:58	6.9	Second Reading
NILEW640	3/17/2021 10:06	10	Adjusted Valve
NILEW640	3/17/2021 10:07	9.6	Second Reading
NILEW640	4/7/2021 10:01	0	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW647	4/5/2021 10:29	10.6	Adjusted Valve
NILEW647	4/5/2021 10:30	11.2	Second Reading
NILEW647	4/20/2021 13:08	0	In Compliance
NILEW648	2/5/2021 10:22	7.8	Adjusted Valve
NILEW648	2/5/2021 10:25	6.9	Second Reading
NILEW648	2/17/2021 13:33	4.8	In Compliance
NILEW648	5/13/2021 9:53	5.9	Adjusted Valve
NILEW648	5/13/2021 9:55	13	Second Reading
NILEW648	5/19/2021 9:43	2.9	In Compliance
NILEW648	6/18/2021 10:32	7.6	Adjusted Valve
NILEW648	6/18/2021 10:34	4.9	In Compliance
NILEW650	4/9/2021 10:34	13.6	Adjusted Valve
NILEW650	4/9/2021 10:35	13.8	Second Reading
NILEW650	4/20/2021 13:12	0	In Compliance
NILEW653	5/19/2021 9:16	5.4	Adjusted Valve
NILEW653	5/19/2021 9:17	1.5	In Compliance
NILEW653	7/7/2021 9:36	17.8	Adjusted Valve
NILEW653	7/7/2021 9:38	1	In Compliance
NILEW656	6/23/2021 8:46	20	Adjusted Valve
NILEW656	6/23/2021 8:46	20.1	Second Reading
NILEW656	7/8/2021 12:26	18.6	Adjusted Valve
NILEW656	7/8/2021 12:27	18.7	Second Reading
NILEW656	7/23/2021 9:11	0.4	In Compliance
NILEW660	2/11/2021 8:54	17.1	Adjusted Valve
NILEW660	2/11/2021 8:55	12.4	Second Reading
NILEW660	2/24/2021 9:10	7.9	Adjusted Valve
NILEW660	2/24/2021 9:10	7.9	Second Reading
NILEW660	2/24/2021 9:14	5.6	Third Reading
NILEW660	3/10/2021 9:36	4.5	In Compliance
NILEW660	3/24/2021 10:48	9.9	Adjusted Valve
NILEW660	3/24/2021 10:50	10.4	Second Reading
NILEW660	4/8/2021 9:48	11.6	Adjusted Valve
NILEW660	4/8/2021 9:49	9.4	Second Reading
NILEW660	4/29/2021 9:47	15.4	Adjusted Valve
NILEW660	4/29/2021 9:48	15.2	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW660	5/14/2021 10:28	14	Adjusted Valve
NILEW660	5/14/2021 10:29	14	Second Reading
NILEW660	5/21/2021 10:22	14.2	Adjusted Valve
NILEW660	5/21/2021 10:23	14	Second Reading
NILEW660	6/11/2021 9:17	10.6	Adjusted Valve
NILEW660	6/11/2021 9:18	10.6	Second Reading
NILEW660	6/29/2021 9:35	7.8	Adjusted Valve
NILEW660	6/29/2021 9:36	7.8	Second Reading
NILEW660	7/12/2021 14:48	11.9	Adjusted Valve
NILEW660	7/12/2021 14:49	12.1	Second Reading
NILEW660	7/22/2021 13:41	15	Adjusted Valve
NILEW660	7/22/2021 13:43	15.6	Well Permanently Decommissioned due to Poor Gas Quality
NILEW666	3/19/2021 12:13	9.9	Adjusted Valve
NILEW666	3/19/2021 12:13	9.9	Second Reading
NILEW666	3/19/2021 12:14	15	Third Reading
NILEW666	4/1/2021 12:06	0	In Compliance
NILEW666	7/29/2021 14:58	9.1	Adjusted Valve
NILEW666	7/29/2021 15:03	4.9	In Compliance
NILEW676	2/11/2021 10:49	16.9	Adjusted Valve
NILEW676	2/11/2021 10:50	16.7	Second Reading
NILEW676	2/24/2021 11:41	21.4	Adjusted Valve
NILEW676	2/24/2021 11:42	21.4	Second Reading
NILEW676	3/10/2021 10:27	21.8	Adjusted Valve
NILEW676	3/10/2021 10:28	21.9	Second Reading
NILEW676	3/24/2021 12:12	18.2	Adjusted Valve
NILEW676	3/24/2021 12:12	19.8	Second Reading
NILEW676	4/8/2021 11:16	17	Adjusted Valve
NILEW676	4/29/2021 10:45	15.2	Adjusted Valve
NILEW676	4/29/2021 10:45	15.1	Second Reading
NILEW676	5/13/2021 12:39	15.2	Adjusted Valve
NILEW676	5/13/2021 12:40	14	Second Reading
NILEW676	5/27/2021 9:27	16.5	Adjusted Valve
NILEW676	6/9/2021 12:01	14.1	Adjusted Valve
NILEW676	6/9/2021 12:02	13.9	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW677	2/18/2021 9:55	6.3	Adjusted Valve
NILEW677	2/18/2021 9:56	6.2	Second Reading
NILEW677	3/4/2021 10:06	4.4	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW677	5/19/2021 9:02	16.3	Adjusted Valve
NILEW677	5/19/2021 9:03	17.6	Second Reading
NILEW677	6/3/2021 9:06	16.5	Adjusted Valve
NILEW677	6/3/2021 9:07	20.6	Second Reading
NILEW677	6/18/2021 9:20	17	Adjusted Valve
NILEW677	6/18/2021 9:22	17.7	Second Reading
NILEW677	7/7/2021 9:05	18.6	Adjusted Valve
NILEW677	7/7/2021 9:07	19.4	Second Reading
NILEW677	7/20/2021 8:48	11.9	Adjusted Valve
NILEW677	7/20/2021 8:49	12.2	Second Reading
NILEW681	2/11/2021 9:41	9.1	Adjusted Valve
NILEW681	2/11/2021 9:43	0.4	In Compliance
NILEW683	2/5/2021 11:32	5.1	Adjusted Valve
NILEW683	2/5/2021 11:35	6	Second Reading
NILEW683	2/17/2021 13:26	3.6	In Compliance
NILEW683	3/5/2021 9:59	12.1	Adjusted Valve
NILEW683	3/5/2021 10:04	15.8	Second Reading
NILEW683	3/17/2021 10:30	8	Adjusted Valve
NILEW683	3/17/2021 10:31	7.1	Second Reading
NILEW683	3/25/2021 10:28	2.4	In Compliance
NILEW683	4/27/2021 12:04	5.3	Adjusted Valve
NILEW683	4/27/2021 12:06	4.9	In Compliance
NILEW683	7/7/2021 10:37	14.5	Adjusted Valve
NILEW683	7/7/2021 10:39	4.9	In Compliance
NILEW685	7/30/2021 9:42	20.1	Adjusted Valve
NILEW685	7/30/2021 9:42	20.4	Second Reading
NILEW686	2/10/2021 13:11	20.8	Adjusted Valve
NILEW686	2/10/2021 13:12	20.8	Second Reading
NILEW686	2/24/2021 11:34	20.7	Adjusted Valve
NILEW686	2/24/2021 11:35	20.7	Second Reading
NILEW686	3/10/2021 10:19	13.2	Adjusted Valve
NILEW686	3/10/2021 10:19	13.2	Second Reading
NILEW686	3/10/2021 10:25	13.1	Third Reading
NILEW686	3/24/2021 12:07	9.6	Adjusted Valve
NILEW686	3/24/2021 12:08	9.6	Second Reading
NILEW686	4/8/2021 11:07	6.8	Adjusted Valve
NILEW686	4/8/2021 11:08	6.8	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW686	4/29/2021 10:39	15	Adjusted Valve
NILEW686	4/29/2021 10:40	15	Second Reading
NILEW686	5/13/2021 12:34	14.5	Adjusted Valve
NILEW686	5/13/2021 12:35	15.1	Second Reading
NILEW686	5/27/2021 9:23	11.9	Adjusted Valve
NILEW686	5/27/2021 9:24	12.2	Second Reading
NILEW686	6/9/2021 11:49	7.7	Adjusted Valve
NILEW686	6/9/2021 11:51	7.5	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW694	5/27/2021 8:55	11.1	Adjusted Valve
NILEW694	5/27/2021 8:56	10.8	Second Reading
NILEW694	6/10/2021 9:22	4.9	In Compliance
NILEW695	2/10/2021 13:47	18.1	Adjusted Valve
NILEW695	2/10/2021 13:49	18	Second Reading
NILEW695	2/24/2021 10:27	2.2	In Compliance
NILEW696	7/8/2021 15:16	18.9	Adjusted Valve
NILEW696	7/8/2021 15:18	0	In Compliance
NILEW697	6/29/2021 9:58	19.3	Adjusted Valve
NILEW697	6/29/2021 9:58	19.3	Second Reading
NILEW697	7/12/2021 14:43	0	In Compliance
NILEW698	2/24/2021 8:36	7	Adjusted Valve
NILEW698	2/24/2021 8:36	7.2	Second Reading
NILEW698	3/2/2021 9:19	7.2	Adjusted Valve
NILEW698	3/2/2021 9:21	6.9	Second Reading
NILEW698	3/24/2021 10:41	6.3	Adjusted Valve
NILEW698	3/24/2021 10:42	6.5	Second Reading
NILEW698	4/8/2021 9:40	0.2	In Compliance
NILEW698	5/27/2021 8:32	6.8	Adjusted Valve
NILEW698	5/27/2021 8:33	4.9	In Compliance
NILEW698	6/29/2021 9:30	17.6	Adjusted Valve
NILEW698	6/29/2021 9:30	18.8	Second Reading
NILEW698	7/12/2021 14:52	19.8	Adjusted Valve
NILEW698	7/12/2021 14:53	20	Second Reading
NILEW698	7/22/2021 13:47	19.9	Adjusted Valve
NILEW698	7/22/2021 13:48	20.4	Second Reading
NILEW699	4/8/2021 10:24	11	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW699	4/8/2021 10:26	4.8	In Compliance
NILEW700	2/10/2021 9:15	10.4	Adjusted Valve
NILEW700	2/10/2021 9:17	8.5	Second Reading
NILEW700	2/19/2021 9:15	8.7	Adjusted Valve
NILEW700	2/19/2021 9:15	8.9	Second Reading
NILEW700	3/2/2021 9:15	10.9	Adjusted Valve
NILEW700	3/2/2021 9:16	10	Second Reading
NILEW700	3/24/2021 10:01	2.9	In Compliance
NILEW704	3/19/2021 9:02	17.6	Adjusted Valve
NILEW704	3/19/2021 9:03	20.3	Second Reading
NILEW704	4/1/2021 11:58	2.1	In Compliance
NILEW704	5/12/2021 10:19	11.8	Adjusted Valve
NILEW704	5/12/2021 10:20	12.2	Second Reading
NILEW704	5/25/2021 9:25	11.7	Adjusted Valve
NILEW704	5/25/2021 9:33	11.6	Second Reading
NILEW704	6/8/2021 9:33	3.4	In Compliance
NILEW704	7/21/2021 8:52	5.7	Adjusted Valve
NILEW704	7/21/2021 8:55	10.4	Second Reading
NILEW711	2/5/2021 13:00	10.9	Adjusted Valve
NILEW711	2/5/2021 13:02	11.3	Second Reading
NILEW711	2/17/2021 12:41	9.1	Adjusted Valve
NILEW711	2/17/2021 12:42	9.2	Second Reading
NILEW711	3/9/2021 9:00	9.3	Adjusted Valve
NILEW711	3/9/2021 9:02	9.5	Second Reading
NILEW711	3/19/2021 11:32	7.7	Adjusted Valve
NILEW711	3/19/2021 11:37	7.4	Second Reading
NILEW711	4/12/2021 10:33	2.5	In Compliance
NILEW711	4/14/2021 13:39	10.9	Adjusted Valve
NILEW711	4/14/2021 13:41	15.5	Second Reading
NILEW711	4/15/2021 8:43	0	In Compliance
NILEW711	5/7/2021 11:20	5.3	Adjusted Valve
NILEW711	5/7/2021 11:50	5.2	Second Reading
NILEW711	5/12/2021 10:19	5.6	Adjusted Valve
NILEW711	5/13/2021 13:49	0.7	In Compliance
NILEW714	3/19/2021 12:25	5.5	Adjusted Valve
NILEW714	3/19/2021 12:27	4.9	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW714	7/9/2021 11:39	5.4	Adjusted Valve
NILEW714	7/9/2021 11:41	6.5	Second Reading
NILEW714	7/21/2021 11:26	0.9	In Compliance
NILEW717	2/18/2021 10:25	15.2	Adjusted Valve
NILEW717	2/18/2021 10:26	15.5	Second Reading
NILEW717	3/4/2021 10:20	0.4	In Compliance
NILEW717	6/18/2021 10:03	16	Adjusted Valve
NILEW717	6/18/2021 10:05	17.5	Second Reading
NILEW717	7/1/2021 14:06	0.1	In Compliance
NILEW719	4/9/2021 9:25	13.4	Adjusted Valve
NILEW719	4/9/2021 9:28	14.4	Second Reading
NILEW719	4/20/2021 13:05	0	In Compliance
NILEW720	7/20/2021 8:54	10.5	Adjusted Valve
NILEW720	7/20/2021 8:55	10.6	Second Reading
NILEW723	2/5/2021 11:01	15.4	(Initial Exceedance was on 12/16/20) Adjusted Valve
NILEW723	2/5/2021 11:02	15.4	Second Reading
NILEW723	2/5/2021 11:03	15.1	Third Reading
NILEW723	2/18/2021 10:53	0.1	In Compliance
NILEW723	3/5/2021 9:42	6.9	Adjusted Valve
NILEW723	3/5/2021 9:43	6.9	Second Reading
NILEW723	3/17/2021 10:43	10.1	Adjusted Valve
NILEW723	3/17/2021 10:44	10.8	Second Reading
NILEW723	3/25/2021 10:12	14.1	Adjusted Valve
NILEW723	3/25/2021 10:12	14.2	Second Reading
NILEW723	4/9/2021 10:38	4.9	In Compliance
NILEW723	7/7/2021 10:24	10	Adjusted Valve
NILEW723	7/7/2021 10:26	11.1	Second Reading
NILEW723	7/20/2021 9:36	14	Adjusted Valve
NILEW723	7/20/2021 9:36	14.2	Second Reading
NILEW726	3/24/2021 11:32	5.4	Adjusted Valve
NILEW726	3/24/2021 11:33	5.4	Second Reading
NILEW726	4/8/2021 11:38	0	In Compliance
NILEW728	4/30/2021 9:20	13.3	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW728	4/30/2021 9:21	13.2	Second Reading
NILEW728	5/12/2021 9:57	4.8	In Compliance
NILEW728	5/18/2021 8:27	7.3	Adjusted Valve
NILEW728	5/18/2021 8:30	6.1	Second Reading
NILEW728	6/2/2021 8:11	3.8	In Compliance
NILEW728	6/17/2021 8:28	6.4	Adjusted Valve
NILEW728	6/17/2021 8:32	6.6	Second Reading
NILEW728	7/1/2021 14:13	14.5	Adjusted Valve
NILEW728	7/1/2021 14:17	15.2	Second Reading
NILEW728	7/29/2021 13:50	6.5	Adjusted Valve
NILEW728	7/29/2021 13:50	6.5	Second Reading
NILEW728	7/29/2021 13:51	4.9	In Compliance
NILEW730	2/4/2021 11:39	15.2	Adjusted Valve
NILEW730	2/4/2021 11:41	15.4	Second Reading
NILEW730	2/17/2021 12:25	15.1	Adjusted Valve
NILEW730	2/17/2021 12:26	15.2	Second Reading
NILEW730	7/14/2021 11:16	0	In Compliance
NILEW744	2/4/2021 11:56	14.5	Adjusted Valve
NILEW744	2/4/2021 11:56	14.5	Second Reading
NILEW744	2/4/2021 11:57	14.3	Third Reading
NILEW744	2/17/2021 12:30	7.7	Adjusted Valve
NILEW744	2/17/2021 12:32	7.3	Second Reading
NILEW744	3/9/2021 10:44	7.6	Adjusted Valve
NILEW744	3/9/2021 10:46	1.6	In Compliance
NILEW744	5/7/2021 7:19	8.7	Adjusted Valve
NILEW744	5/7/2021 7:20	9.6	Second Reading
NILEW744	5/12/2021 10:10	7.1	Adjusted Valve
NILEW744	5/12/2021 10:11	8.2	Second Reading
NILEW744	5/21/2021 9:35	4.8	In Compliance
NILEW747	7/21/2021 10:33	9.4	Adjusted Valve
NILEW747	7/21/2021 10:34	9.8	Second Reading
NILEW748	4/19/2021 9:01	17.2	Adjusted Valve
NILEW748	4/20/2021 12:09	0	In Compliance
NILEW748	5/21/2021 8:33	14.6	Adjusted Valve
NILEW748	5/21/2021 8:35	11.2	Second Reading
NILEW748	6/2/2021 10:32	2.1	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW748	6/24/2021 11:51	8.6	Adjusted Valve
NILEW748	6/24/2021 11:52	4.4	In Compliance
NILEW748	7/29/2021 12:31	12	Adjusted Valve
NILEW750	6/4/2021 8:16	6.3	Adjusted Valve
NILEW750	6/4/2021 8:18	6.3	Second Reading
NILEW750	6/18/2021 8:33	0.1	In Compliance
NILEW753	4/29/2021 9:06	6.9	Adjusted Valve
NILEW753	4/29/2021 9:09	7.3	Second Reading
NILEW753	5/12/2021 10:37	9	Adjusted Valve
NILEW753	5/12/2021 10:56	9	Second Reading
NILEW753	5/25/2021 9:09	7.7	Adjusted Valve
NILEW753	5/25/2021 9:10	11.7	Second Reading
NILEW753	6/8/2021 9:20	4.9	In Compliance
NILEW753	7/8/2021 9:26	5	Adjusted Valve
NILEW753	7/8/2021 9:29	4.9	In Compliance
NILEW753	7/21/2021 9:29	8.1	Adjusted Valve
NILEW753	7/21/2021 9:30	8.6	Second Reading
NILEW760	2/18/2021 9:44	6.1	Adjusted Valve
NILEW760	2/18/2021 9:45	5.9	Second Reading
NILEW760	3/4/2021 10:00	0	In Compliance
NILEW760	3/25/2021 8:59	6.5	Adjusted Valve
NILEW760	3/25/2021 9:00	6.8	Second Reading
NILEW760	4/8/2021 11:48	0	In Compliance
NILEW760	4/27/2021 10:30	8.1	Adjusted Valve
NILEW760	4/27/2021 10:32	8.7	Second Reading
NILEW760	5/12/2021 9:41	0.9	In Compliance
NILEW760	6/3/2021 8:58	9.2	Adjusted Valve
NILEW760	6/3/2021 8:59	10.9	Second Reading
NILEW760	6/18/2021 9:06	10	Adjusted Valve
NILEW760	6/18/2021 9:08	13.8	Second Reading
NILEW760	7/7/2021 8:55	0	In Compliance
NILEW760	7/20/2021 8:40	8	Adjusted Valve
NILEW760	7/20/2021 8:43	7.4	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW761	4/27/2021 10:23	7.3	Adjusted Valve
NILEW761	4/27/2021 10:24	7.6	Second Reading
NILEW761	5/12/2021 9:44	0.1	In Compliance
NILEW761	6/3/2021 8:51	10.4	Adjusted Valve
NILEW761	6/3/2021 8:53	10.4	Second Reading
NILEW761	6/18/2021 8:56	5.8	Adjusted Valve
NILEW761	6/18/2021 8:58	6.5	Second Reading
NILEW761	7/7/2021 8:48	0	In Compliance
NILEW762	4/27/2021 12:15	7	Adjusted Valve
NILEW762	4/27/2021 12:16	7.5	Second Reading
NILEW762	5/12/2021 9:47	7.4	Adjusted Valve
NILEW762	5/12/2021 9:49	7.6	Second Reading
NILEW762	5/19/2021 10:18	7.7	Adjusted Valve
NILEW762	5/19/2021 10:19	7.3	Second Reading
NILEW762	6/3/2021 10:11	0	In Compliance
NILEW762	6/18/2021 8:51	8.5	Adjusted Valve
NILEW762	6/18/2021 8:53	10.9	Second Reading
NILEW762	7/1/2021 14:32	6	Adjusted Valve
NILEW762	7/1/2021 14:38	6.7	Second Reading
NILEW762	7/20/2021 8:30	0	In Compliance
NILEW763	2/5/2021 12:59	7.4	Adjusted Valve
NILEW763	2/5/2021 13:01	10.5	Second Reading
NILEW763	2/17/2021 10:53	4.9	In Compliance
NILEW763	3/3/2021 8:38	15.6	Adjusted Valve
NILEW763	3/3/2021 8:39	16.5	Second Reading
NILEW763	3/16/2021 9:30	7	Adjusted Valve
NILEW763	3/16/2021 9:30	7	Second Reading
NILEW763	3/16/2021 9:31	7.9	Third Reading
NILEW763	4/5/2021 8:35	14.2	Adjusted Valve
NILEW763	4/5/2021 8:36	14.8	Second Reading
NILEW763	4/28/2021 9:01	0.4	In Compliance
NILEW764	2/17/2021 8:47	11.7	Adjusted Valve
NILEW764	2/17/2021 8:50	14	Second Reading
NILEW764	3/3/2021 8:46	1.3	In Compliance
NILEW769	3/25/2021 11:24	10.7	Adjusted Valve
NILEW769	3/25/2021 11:26	2.5	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILEW769	4/12/2021 10:17	11.3	Adjusted Valve
NILEW769	4/12/2021 10:18	12.8	Second Reading
NILEW769	4/20/2021 12:52	1.3	In Compliance
NILEW769	7/21/2021 14:11	13.5	Adjusted Valve
NILEW769	7/21/2021 14:12	14.4	Second Reading
NILEW769	7/21/2021 14:17	14.2	Third Reading
NILLEW16	2/11/2021 14:06	17.9	(Initial Exceedance was on 12/11/20) Adjusted Valve
NILLEW16	2/11/2021 14:06	17.9	Second Reading
NILLEW16	2/11/2021 14:07	17.6	Third Reading
NILLEW16	2/25/2021 10:27	19.6	Adjusted Valve
NILLEW16	2/25/2021 10:30	19.6	Second Reading
NILLEW16	3/8/2021 9:15	1.7	In Compliance
NILLEW16	7/13/2021 12:28	9.6	Adjusted Valve
NILLEW16	7/13/2021 12:29	7	Second Reading
NILLEW16	7/27/2021 13:42	8.9	Adjusted Valve
NILLEW16	7/27/2021 13:45	9.6	Second Reading
NILMW002	6/24/2021 11:10	18.6	Adjusted Valve
NILMW002	6/24/2021 11:12	18.9	Second Reading
NILMW002	7/8/2021 12:47	17.8	Adjusted Valve
NILMW002	7/8/2021 12:48	17.9	Second Reading
NILMW002	7/28/2021 12:03	8.4	Adjusted Valve
NILMW002	7/28/2021 12:05	8.4	Second Reading
NILMW016	4/30/2021 8:54	5.2	Adjusted Valve
NILMW016	4/30/2021 8:55	6.5	Second Reading
NILMW016	5/13/2021 13:26	0	In Compliance
NILMW019	2/4/2021 11:04	17.2	Adjusted Valve
NILMW019	2/4/2021 11:06	20.1	Second Reading
NILMW019	2/17/2021 12:21	3.1	In Compliance
NILMW019	5/25/2021 11:00	9.6	Adjusted Valve
NILMW019	5/25/2021 11:01	9.5	Second Reading
NILMW019	6/8/2021 10:55	6.5	Adjusted Valve
NILMW019	6/22/2021 10:37	6.1	Adjusted Valve
NILMW019	6/22/2021 10:38	7.5	Second Reading
NILMW019	7/9/2021 11:56	1.6	In Compliance

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILMW020	5/25/2021 10:52	6.6	Adjusted Valve
NILMW020	5/25/2021 10:53	6.6	Second Reading
NILMW020	6/8/2021 10:49	0	In Compliance
NILMW020	6/22/2021 10:28	7.9	Adjusted Valve
NILMW020	6/22/2021 10:29	3.4	In Compliance
NILMW020	7/21/2021 10:45	7.4	Adjusted Valve
NILMW020	7/21/2021 10:47	7.2	Second Reading
NILMW030	2/4/2021 9:31	20.2	Adjusted Valve
NILMW030	2/4/2021 9:33	15	Second Reading
NILMW030	2/17/2021 12:13	3.5	In Compliance
NILMW030	5/12/2021 10:52	5.5	Adjusted Valve
NILMW030	5/12/2021 10:53	5.5	Second Reading
NILMW030	5/25/2021 9:42	4.6	In Compliance
NILMW031	3/19/2021 9:25	10	Adjusted Valve
NILMW031	3/19/2021 9:26	9.9	Second Reading
NILMW031	4/1/2021 11:48	3.9	In Compliance
NILMW031	4/29/2021 11:08	6.6	Adjusted Valve
NILMW031	4/29/2021 11:12	10.2	Second Reading
NILMW031	5/12/2021 11:06	4.8	In Compliance
NILMW031	6/8/2021 10:09	8	Adjusted Valve
NILMW031	6/8/2021 10:10	8.6	Second Reading
NILMW031	6/22/2021 9:30	2.5	In Compliance
NILMW032	2/25/2021 9:37	8.7	Adjusted Valve
NILMW032	2/25/2021 9:39	7.4	Second Reading
NILMW032	3/8/2021 9:59	2	In Compliance
NILMW034	2/25/2021 9:30	7.9	Adjusted Valve
NILMW034	2/25/2021 9:31	8	Second Reading
NILMW034	3/8/2021 9:51	6.1	Adjusted Valve
NILMW034	3/8/2021 9:52	6	Second Reading
NILMW034	3/19/2021 9:19	4.1	In Compliance
NILMW034	7/8/2021 13:22	5.9	Adjusted Valve
NILMW034	7/8/2021 13:24	5.9	Second Reading
NILMW034	7/20/2021 14:37	6.8	Adjusted Valve
NILMW034	7/20/2021 14:42	18.1	Second Reading

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NILW475A	2/5/2021 11:19	10.5	(Initial Exceedance was on 1/27/21) Adjusted Valve
NILW475A	2/5/2021 11:21	18.1	Second Reading
NILW475A	2/18/2021 11:04	13.2	Adjusted Valve
NILW475A	3/5/2021 9:55	13.7	Adjusted Valve
NILW475A	3/5/2021 9:55	13.1	Second Reading
NILW475A	3/25/2021 10:23	8.7	Adjusted Valve
NILW475A	3/25/2021 10:24	8.5	Second Reading
NILW475A	4/9/2021 10:51	10.8	Adjusted Valve
NILW475A	4/9/2021 10:52	10.8	Second Reading
NILW475A	4/27/2021 11:56	8.7	Adjusted Valve
NILW475A	5/13/2021 7:48	12.6	Adjusted Valve
NILW475A	5/13/2021 8:48	15.4	Second Reading
NILW475A	5/19/2021 10:06	8.4	Adjusted Valve
NILW475A	5/19/2021 10:07	8.7	Second Reading
NILW475A	5/27/2021 10:05	9.8	Well Permanently Decommissioned Due to Poor Gas Quality
NILW573A	6/10/2021 9:57	19.6	Adjusted Valve
NILW573A	6/10/2021 9:57	20.1	Second Reading
NILW573A	6/23/2021 9:17	20.7	Adjusted Valve
NILW573A	6/23/2021 9:17	21	Second Reading
NILW573A	7/12/2021 11:31	18.2	Adjusted Valve
NILW573A	7/12/2021 11:32	19.8	Second Reading
NILW573A	7/23/2021 10:12	21.5	Adjusted Valve
NILW573A	7/23/2021 10:14	21.7	Second Reading
NILW574A	3/24/2021 12:01	19.5	Adjusted Valve
NILW574A	3/24/2021 12:01	19.9	Second Reading
NILW574A	4/8/2021 11:00	4.9	In Compliance
NILW574A	6/10/2021 10:02	9.7	Adjusted Valve
NILW574A	6/10/2021 10:03	7.2	Second Reading
NILW574A	6/23/2021 9:20	1.9	In Compliance
NILW574A	7/23/2021 10:07	5.7	Adjusted Valve
NILW574A	7/23/2021 10:09	5.7	Second Reading
NILW632A	4/28/2021 9:18	7.8	Adjusted Valve
NILW632A	4/28/2021 9:20	5.7	Second Reading
NILW632A	5/12/2021 8:15	0	In Compliance
NISS17-1	4/7/2021 9:00	17.2	Adjusted Valve

Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Oxygen (%)	Comments
NISS17-1	4/7/2021 9:01	17.8	Second Reading
NISS17-1	4/20/2021 12:59	0	In Compliance
NISS17-4	3/10/2021 9:20	14.9	Adjusted Valve
NISS17-4	3/10/2021 9:21	14.9	Second Reading
NISS17-4	3/24/2021 11:06	16.3	Adjusted Valve
NISS17-4	3/24/2021 11:07	16.7	Second Reading
NISS17-4	4/8/2021 10:07	2.6	In Compliance
NISS17-4	4/29/2021 9:14	7.4	Adjusted Valve
NISS17-4	4/29/2021 9:15	9.5	Second Reading
NISS17-4	5/12/2021 8:51	4.8	In Compliance
NISS17-4	5/27/2021 12:32	8.3	Adjusted Valve
NISS17-4	5/27/2021 12:33	7.9	Second Reading
NISS17-4	6/11/2021 9:09	7.7	Adjusted Valve
NISS17-4	6/11/2021 9:10	11.5	Second Reading
NISS17-4	6/29/2021 9:54	1.2	In Compliance
NISS17-4	6/29/2021 9:55	10.5	Adjusted Valve
NISS17-4	6/29/2021 9:55	10.5	Second Reading
NISS17-4	7/14/2021 10:19	5.1	Adjusted Valve
NISS17-4	7/14/2021 10:20	4.7	In Compliance
NLCR1112	2/12/2021 8:42	19.9	Adjusted Valve
NLCR1112	2/12/2021 8:43	19.9	Second Reading
NLCR1112	2/17/2021 9:22	1.8	In Compliance
NLCRST05	7/29/2021 14:19	11.2	Adjusted Valve
NLCRST05	7/29/2021 14:23	15.5	Second Reading

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

Table 5. Wells with Temperature Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
NILEW476	7/8/2021 16:11	133.4	133.5	Adjusted Valve
NILEW476	7/8/2021 16:11	133.4	133.5	Second Reading
NILEW476	7/21/2021 13:29	129.8	130.2	In Compliance
NILEW688	5/13/2021 12:51	131	131	Adjusted Valve
NILEW688	5/13/2021 12:53	131.1	131.1	Second Reading
NILEW688	5/27/2021 9:57	129.2	129.1	In Compliance
NILEW690	2/5/2021 11:07	134.8	132.1	(Initial Exceedance was on 11/5/20) Adjusted Valve
NILEW690	2/5/2021 11:12	134.6	131.5	Second Reading
NILEW690	2/24/2021 13:01	134	134.1	Adjusted Valve
NILEW690	2/24/2021 13:03	134.3	134.2	Second Reading
NILEW690	3/2/2021 13:54	133.6	131.6	Adjusted Valve
NILEW690	3/2/2021 13:56	128.8	128.8	In Compliance
NILEW690	3/19/2021 10:01	134.3	134.3	Adjusted Valve
NILEW690	3/19/2021 10:07	134.2	134.2	Second Reading
NILEW690	4/1/2021 12:22	135	135	Adjusted Valve
NILEW690	4/12/2021 9:57	133.7	133.8	Second Reading
NILEW690	4/23/2021 10:05	134.2	134.1	Adjusted Valve
NILEW690	4/23/2021 10:07	133.6	133.3	Second Reading
NILEW690	5/12/2021 11:21	130.5	130.6	In Compliance
NILEW690	5/27/2021 12:20	133.5	133.5	Adjusted Valve
NILEW690	5/27/2021 12:21	133.7	133.7	Second Reading
NILEW690	6/10/2021 13:32	133.4	133.5	Adjusted Valve
NILEW690	6/10/2021 13:40	133.4	133.4	Second Reading
NILEW690	6/24/2021 8:48	132.4	132.5	Adjusted Valve
NILEW690	6/24/2021 8:49	132.6	132.6	Second Reading
NILEW690	7/8/2021 16:00	135.3	135.3	Adjusted Valve
NILEW690	7/8/2021 16:00	135.3	135.3	Second Reading
NILEW690	7/22/2021 14:10	133.4	133.4	Adjusted Valve
NILEW690	7/22/2021 14:11	133.2	133.4	Second Reading
NILEW701	2/5/2021 12:09	136.8	136.5	Adjusted Valve
NILEW701	2/5/2021 12:12	136.8	136.7	Second Reading
NILEW701	2/17/2021 13:17	133	133.1	Adjusted Valve
NILEW701	3/8/2021 11:36	135.7	136.2	Adjusted Valve
NILEW701	3/8/2021 11:37	136.9	137	Second Reading
NILEW701	3/19/2021 9:48	137.9	137.9	Adjusted Valve
NILEW701	3/19/2021 9:49	137.9	137.9	Second Reading
NILEW701	4/12/2021 8:51	136.2	135.6	Adjusted Valve
NILEW701	4/12/2021 8:52	134.1	134	Second Reading
NILEW701	4/29/2021 11:14	134.6	134.6	Adjusted Valve
NILEW701	4/29/2021 11:15	134.6	134.6	Second Reading
NILEW701	5/13/2021 14:18	134.3	134.4	Adjusted Valve
NILEW701	5/13/2021 14:20	134.2	134.3	Second Reading
NILEW701	5/21/2021 10:03	129.9	129.9	In Compliance
NILEW701	6/10/2021 12:59	135	135	Adjusted Valve

Table 5. Wells with Temperature Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
NILEW701	6/10/2021 13:01	134.9	134.8	Second Reading
NILEW701	6/24/2021 9:09	134.3	134.4	Adjusted Valve
NILEW701	6/24/2021 9:10	133.9	133.9	Second Reading
NILEW701	7/8/2021 14:59	137.2	137.9	Adjusted Valve
NILEW701	7/8/2021 14:59	137.2	137.9	Second Reading
NILEW701	7/8/2021 15:01	136.4	137.6	Third Reading
NILEW701	7/21/2021 14:48	136.1	136.9	Adjusted Valve
NILEW701	7/21/2021 14:50	137.1	137.1	Second Reading
NILEW703	2/5/2021 11:51	132.3	132.3	(Initial Exceedance was on 12/21/20) Adjusted Valve
NILEW703	2/5/2021 11:54	132.2	132.2	Second Reading
NILEW703	2/25/2021 10:21	130.5	130.5	In Compliance
NILEW703	7/8/2021 14:54	132.4	132.5	Adjusted Valve
NILEW703	7/14/2021 14:16	129.7	129.7	In Compliance
NILEW707	3/19/2021 11:50	132.6	132.6	Adjusted Valve
NILEW707	3/19/2021 11:52	132.4	132.5	Second Reading
NILEW707	4/1/2021 12:13	133	132.6	Adjusted Valve
NILEW707	4/1/2021 12:14	133.1	133.1	Second Reading
NILEW707	4/12/2021 10:45	131.8	131.7	Adjusted Valve
NILEW707	4/12/2021 10:47	131.6	131.7	Second Reading
NILEW707	4/14/2021 13:29	134.2	134.3	Adjusted Valve
NILEW707	4/15/2021 8:54	67.5	67.6	In Compliance
NILEW707	4/18/2021 15:36	137.3	137.4	Adjusted Valve
NILEW707	4/19/2021 8:47	59.8	65	In Compliance
NILEW707	4/20/2021 11:58	136	136	Adjusted Valve
NILEW707	4/20/2021 12:00	136.2	136.3	Second Reading
NILEW707	4/21/2021 12:26	135	135	Adjusted Valve
NILEW707	4/22/2021 10:19	133.4	133.4	Adjusted Valve
NILEW707	4/23/2021 10:26	133.7	133.6	Adjusted Valve
NILEW707	4/23/2021 10:30	133.8	133.9	Second Reading
NILEW707	4/26/2021 9:54	131.6	131.7	Adjusted Valve
NILEW707	5/3/2021 11:12	131	130.9	Adjusted Valve, In Compliance
NILEW707	5/10/2021 9:11	134.2	136.2	Adjusted Valve
NILEW707	5/10/2021 9:13	136	135.8	Second Reading
NILEW707	5/14/2021 14:01	132.7	132.8	Adjusted Valve
NILEW707	5/14/2021 14:02	132.5	132.5	Second Reading
NILEW707	5/17/2021 9:35	130.7	130.7	In Compliance
NILEW707	5/24/2021 9:55	131.7	130	Adjusted Valve, In Compliance
NILEW707	6/1/2021 11:21	132.2	132.2	Adjusted Valve
NILEW707	6/1/2021 11:22	132.3	132.4	Second Reading
NILEW707	6/15/2021 13:38	132.9	133	Adjusted Valve
NILEW707	6/15/2021 13:40	132.9	133	Second Reading
NILEW707	6/24/2021 11:41	131.3	131.3	Adjusted Valve

Table 5. Wells with Temperature Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2021 through July 31, 2021)

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
NILEW707	6/24/2021 11:43	131.3	131.3	Second Reading
NILEW707	7/2/2021 10:31	95.6	95.5	In Compliance
NILEW750	6/4/2021 8:16	131.2	131.8	Adjusted Valve
NILEW750	6/4/2021 8:18	132	131.9	Second Reading
NILEW750	6/18/2021 8:33	125.6	125.8	In Compliance
NILEW752	2/5/2021 11:38	140.5	140.5	Adjusted Valve
NILEW752	2/5/2021 11:43	140.5	140.5	Second Reading
NILEW752	2/17/2021 13:09	138.7	138.7	Adjusted Valve
NILEW752	2/24/2021 13:07	139.1	139.1	Adjusted Valve
NILEW752	2/24/2021 13:08	139.2	139.3	Second Reading
NILEW752	3/8/2021 10:51	138.7	138.9	Adjusted Valve
NILEW752	3/8/2021 10:53	138.9	138.9	Second Reading
NILEW752	3/12/2021 11:27	139.2	139.2	Adjusted Valve
NILEW752	3/12/2021 11:29	139.3	139.3	Second Reading
NILEW752	3/19/2021 10:44	140.8	140.7	Adjusted Valve
NILEW752	3/19/2021 10:46	140.8	140.8	Second Reading
NILEW752	4/12/2021 10:00	138.1	135.9	Adjusted Valve
NILEW752	4/12/2021 10:02	137.3	137.4	Second Reading
NILEW752	4/23/2021 9:49	140.8	140.7	Adjusted Valve
NILEW752	4/23/2021 9:53	140.9	140.9	Second Reading
NILEW752	5/7/2021 12:03	140.6	140.6	Adjusted Valve
NILEW752	5/7/2021 12:11	140.5	140.4	Second Reading
NILEW752	5/21/2021 10:11	130.3	130.3	In Compliance
NILEW752	6/10/2021 12:17	139	139	Adjusted Valve
NILEW752	6/10/2021 12:19	139	139	Second Reading
NILEW752	6/18/2021 12:31	139.8	139.2	Adjusted Valve
NILEW752	6/18/2021 12:34	139.5	139.5	Second Reading
NILEW752	6/18/2021 12:36	140	140	Third Reading
NILEW752	7/8/2021 16:07	141.2	141.5	Adjusted Valve
NILEW752	7/8/2021 16:07	141.2	141.5	Second Reading
NILEW752	7/8/2021 16:09	141.2	141.4	Third Reading
NILEW752	7/21/2021 13:19	138.7	138.7	Adjusted Valve
NILEW752	7/21/2021 13:22	138.7	138.7	Second Reading

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

Appendix A – Responsible Official Certification Form

Certification of Truth and Accuracy and Completeness:

I certify the following:

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

08/31/21

Signature of Responsible Official

Date

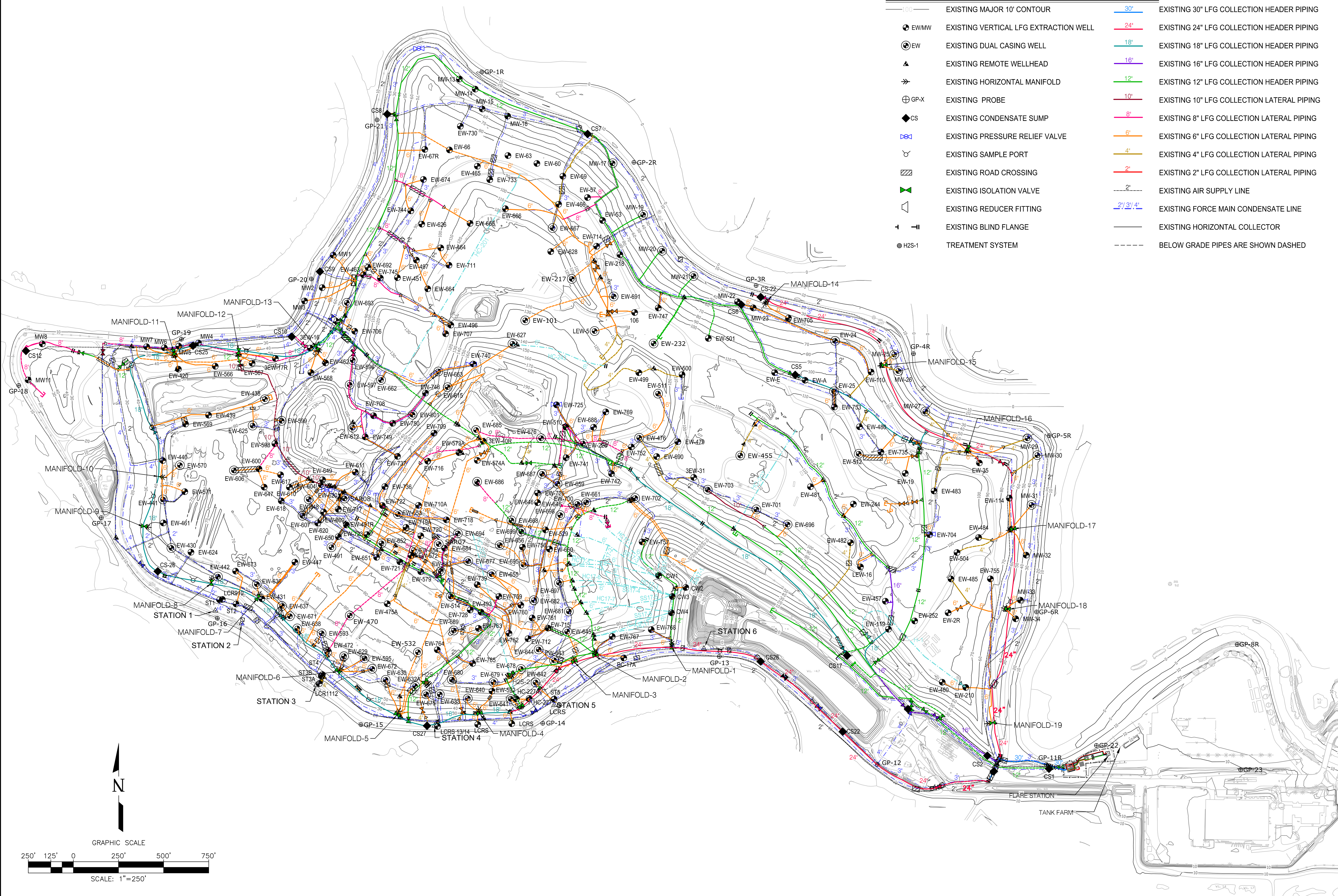
Daniel North

Name of Responsible Official

Appendix B – Existing GCCS Layout

LEGEND

100	EXISTING MAJOR 10' CONTOUR	30"	EXISTING 30" LFG COLLECTION HEADER PIPING
EW/MW	EXISTING VERTICAL LFG EXTRACTION WELL	24"	EXISTING 24" LFG COLLECTION HEADER PIPING
EW	EXISTING DUAL CASING WELL	18"	EXISTING 18" LFG COLLECTION HEADER PIPING
	EXISTING REMOTE WELLHEAD	16"	EXISTING 16" LFG COLLECTION HEADER PIPING
	EXISTING HORIZONTAL MANIFOLD	12"	EXISTING 12" LFG COLLECTION HEADER PIPING
GP-X	EXISTING PROBE	10"	EXISTING 10" LFG COLLECTION LATERAL PIPING
CS	EXISTING CONDENSATE SUMP	8"	EXISTING 8" LFG COLLECTION LATERAL PIPING
	EXISTING PRESSURE RELIEF VALVE	6"	EXISTING 6" LFG COLLECTION LATERAL PIPING
	EXISTING SAMPLE PORT	4"	EXISTING 4" LFG COLLECTION LATERAL PIPING
	EXISTING ROAD CROSSING	2"	EXISTING 2" LFG COLLECTION LATERAL PIPING
	EXISTING ISOLATION VALVE	2"	EXISTING AIR SUPPLY LINE
	EXISTING REDUCER FITTING	2"/3"/4"	EXISTING FORCE MAIN CONDENSATE LINE
	EXISTING BLIND FLANGE		EXISTING HORIZONTAL COLLECTOR
H2S-1	TREATMENT SYSTEM		BELOW GRADE PIPES ARE SHOWN DASHED



SHEET TITLE: OVERALL 2021 AS-BUILT PLAN

PROJECT TITLE: NEWBY ISLAND LANDFILL
MILPITAS, CALIFORNIA

CLIENT:

REVISION | DATE | NO.

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX. (562) 427-0805

PROJ. NO. 01221039.01 T2 | DSN. BY: AAS | DWN. BY: AAS | CHK. BY: MD | APP. BY: MD | ACAD FILE: K:/ENGINEERS

DATE: 062221

SCALE: AS SHOWN

SHEET: 1

C:\Users\4747a_s\Desktop\All Projects\Newby Island LF - Task 2 - As-Built Drawings\NEWBY LF GCCS LAYOUT ASBUILT SITE UPDATE_062221.dwg Jun 29, 2021 - 9:6am By: 4747a_s

Appendix C – Excerpts from 2021 Source Test Results (report dated April 1, 2021)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 Beale Street, Suite 600
San Francisco, California 94105
(415) 771-6000

Contractor Source Test Supplemental Form

Site name: Newby Island Landfill
NST number: 6294
Testing company: Blue Sky Environmental, Inc.

Test purpose:

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

Preliminary test results:

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

International Disposal Corporation of California

BAAQMD Plant No: 9013

Compliance Emissions Test Report #21059

Flare (A-2) FL-150
Flare (A-3) FL-100

Located at:
Newby Island Landfill
1601 Dixon Landing Road
Milpitas, CA 95035

Prepared for:
Republic Services
1601 Dixon Landing Road
Milpitas, CA 95035

Attn: Rachelle Huber
RHuber2@republicservices.com

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

Attn: Marco Hernandez & Gloria Espena
mhernandez@baaqmd.gov & gespena@baaaqmd.gov

Testing Performed on:
February 23rd, 2021

Final Report Submitted on:
April 1st, 2021

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

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

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

April 1st, 2021

Attn.: Rachelle Huber
Republic Services
1601 Dixon Landing Road
Milpitas, CA 95035

Subject: Source test emission report for Flares A-2 and A-3, located at the Newby Island Landfill, 1601 Dixon Landing Road, Milpitas, CA 95035. Bay Area Air Quality Management District (BAAQMD) Facility #9013, Condition 10423.

Test Date(s): Testing was conducted on February 23rd, 2021.

Sampling Location: Sampling was conducted at the exhaust stack of each flare through ports that were accessible using a 40-foot boom lift. Sampling ports were available that met the minimum criteria of 2 stack diameters downstream from the nearest disturbance and 0.5 stack diameters upstream from the nearest disturbance or exhaust. The 96-inch exhaust stack for Flare A-2 had only one sampling port that could be opened. The stack was traversed for all test runs due to stratification. The 144-inch ID exhaust stack for Flare A-3 had fully functional sampling ports that were also traversed for all test runs.

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

Observing Personnel: The BAAQMD was notified of the scheduled source test in a plan submitted on January 11th, 2021 (NST #6294); however, no agency observers were present during testing. Max Polkabla of Tetra Tech was on site to operate the flares and provide operating records of fuel flow and combustion temperature.

Process Description: Newby Island Landfill is a multi-material landfill with gas collection system operated by International Disposal Corp of California. The system is abated by two John Zink landfill gas flares (A-2 and A-3)

Test Program: The test program objective was to determine compliance of Flares A-2 and A-3 with their associated BAAQMD operating permit limits.

Three consecutive 30-minute tests were performed for nitrogen oxides (NO_X), carbon monoxide (CO), carbon dioxide (CO_2) and oxygen (O_2) at each exhaust stack. The sampling system was checked for leaks before the start of the testing, by plugging the sample probe and observing the sample rotameter flow drop to zero. Analyzer external calibrations were performed before and after each test run using EPA Protocol #1 calibration gases.

Concurrent with the exhaust sampling, Blue Sky Environmental collected a total of six LFG samples (three samples from each flare) for %CH_4, C_1-C_2^+, TNMOC-C_2^+, fixed gases, BTU, F-factor, and sulfur compounds using methods ASTM D-1945, D-3588, and D-5504. One sample from each flare was also analyzed for volatile organic compounds by EPA Method TO-15.

The samples were collected in 6-liter Silco Canisters using EPA Method 25C and shipped immediately to Atmospheric Analysis & Consulting, Inc. located in Ventura, CA for testing.

BAAQMD Source #	Test Parameters/Limits
Flare A-2 Compliance Test	Exhaust: THC, CH_4, NMOC, NO_X, CO, CO_2, O_2 NO_X ≤12 ppm @ 15% O_2 or ≤0.05 lbs/MMBtu CO ≤81 ppm @ 15% O_2 or ≤0.20 lbs/MMBtu NMOC 98% DE or ≤30 ppm @ 3%O_2, CH_4 DE >99%, Landfill gas NMOC, CH_4, Fixed Gases, VOC species & TRS as H_2S

BAAQMD Source #	Test Parameters/Limits
Flare A-3 Compliance Test	Exhaust: THC, CH_4, NMOC, NO_X, CO, CO_2, O_2 NO_X ≤6 ppm @ 15% O_2 or ≤0.025 lbs/MMBtu CO ≤24 ppm @ 15% O_2 or ≤0.06 Lbs/MMBtu NMOC 98% DE or ≤30 ppm @ 3%O_2, CH_4 DE >99% Landfill gas NMOC, CH_4, Fixed Gases, VOC species & TRS as H_2S

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

EPA Method 3A	O_2, CO_2
EPA Method 7E	NO_X
EPA Method 10	CO
EPA Method 4-16.4	Moisture content
EPA 25A/ALT-097	NMOC, CH_4
EPA Method 19	Flare exhaust flow rate by calculation, DSCFM
EPA Method 25C	NMHC in landfill gas
EPA Method TO-15	Volatile organic compounds by GCMS
ASTM D-5504	Sulfur Species in fuels
ASTM D-1945/3588	Fuel analysis for BTU and F-Factor

The sampling and analytical methods are outlined below:

EPA Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)

This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas.

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

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

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

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

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

System Performance Criteria

Instrument Linearity	≤ 2% Full Scale
25A Instrument Linearity	≤ 5% Cal Gas Value
Instrument Bias	≤ 5% Full Scale
NO_X Converter Efficiency *(EPA Method 7E)*	≥ 90%
System Response Time	≤± 2 minutes
Instrument Zero/Span Drift	≤± 3% Full Scale

EPA Method 25A/ALT-097 – Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer
This method is used to measure total hydrocarbons, methane, and non-methane hydrocarbons in stationary source emissions using a gas chromatograph with a flame ionization detector (GC/FID). Heated Teflon sample gas transfer lines are used to provide a continuous sample to the heated GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.
The sampling and analytical system is checked for linearity with zero, low (25-35%), mid (45-55%), and high (80-90%) span calibrations. All calibrations during testing are performed externally to

incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test.

EPA Method 4-16.4 – Determination of Moisture Content in Stack Gas

This is an acceptable alternative to EPA Method 4 for the determination of moisture using F-factors. The mole fraction of moisture in the ambient air is calculated using equations in EPA Method 4-16.4 from 1) the measured ambient relative humidity, ambient temperature, and barometric pressure, 2) the mole fraction of free water in the fuel, calculated from the moisture % in the fuel, which is determined by the analytical lab to be the balance after all the major gaseous components have been summed, and 3) the mole fraction of hydrogen in the fuel. To determine the moisture in the fuel, the raw fuel analysis before normalization to 100% is referenced.

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

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

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

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

EPA Method 25C – Determination of Nonmethane Organic Compounds (NMOC) in Landfill Gas

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

ASTM D1945 – Analysis of Natural Gas by Gas Chromatography

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

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

ASTM Method 5504: Sampling for H_2S and Sulfur species in fuels. Sampling consisted of collecting biogas for sulfur analysis in pre-evacuated 5-Liter SILCO SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SILCO canisters have a silanized (glass) lining that permits longer holding times (up to 72 hours) for reactive sulfur compounds. The flow controller, valve and canister are designed so that no sample contacts stainless steel components that can remove hydrogen sulfide. The flow controllers consisted of capillary orifice tubing designed to sample for pre-set durations such as 1-hr, 2-hrs and 4-hrs. The samples were analyzed for 20 sulfur compounds by ASTM Method D-5504 GC/SCD (gas chromatography/sulfur chemiluminescent detector).

<u>Instrumentation</u>: The following continuous emissions analyzers were used:

Instrument	Analyte	Principle
Servomex 1440	O_2	Paramagnetic
Servomex 1440	CO_2	IR
TECO Model 42C	NO_X	Chemiluminescence
TECO Model 48C	CO	GFC/IR
TECO Model 55C	THC/CH_4/VOC	FID

<u>Test Results</u>: Emission results derived from the source test complied with permit conditions and are summarized below. Detailed results for individual test runs are provided in Tables 1 through 4.

Emission Parameter	Average Results Flare A-2	Permit Limits	Average Results Flare A-3	Permit Limits
NO_X ppm @ 15% O_2	9.0	12	3.1	6
NO_X, lbs/MMBtu	0.037	0.05	0.012	0.025
CO ppm @ 15% O_2	8.6	81	6.1	24
CO, lbs/MMBtu	0.021	0.20	0.015	0.060
NMOC ppm @ 3% O_2 as CH_4	<2.5	30 or >98%	<2.5	30 or >98%
NMOC Destruction Efficiency %	>99.56		>99.57	
CH_4 Destruction Efficiency %	>99.97	>99%	>99.70	>99%
TRS, ppm in LFG	624	1,300	573	1,300

The appendices are organized as follows:

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

Laboratory Reports
: All laboratory reports and chain of custody.

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

Process Data
: Facility records of temperature and fuel flow data.

Calibration Gas Certifications
: Certifications for the calibration gas standards.

Stack Diagram
: Sketch or photograph of the stack.

Sample System Diagram
: Schematic of the sampling system configuration.

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

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

Comments: This source test was performed in accordance with the protocol submitted to the BAAQMD. No deviations from the protocol or anomalies were observed during testing. This source test indicates that the emissions comply with permitted limits.

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

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

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

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

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

If there are any questions concerning this report, please contact Jeramie Richardson at 810 923 3181, Chuck Arrivas at 925 388 4875 or Guy Worthington at 510 508 3469.

Prepared by,

Anne Richardson

Reviewed by,

Julie Wose-Jennings

TABLE #1

Newby Island Landfill
Flare A-2 (FL-150)
1,676°F

RUN	1	2	3	AVERAGE	LIMITS
Test Date	02/23/21	02/23/21	02/23/21		
Test Time	0833-0908	0932-1007	1031-1106		
Standard Temperature, °F	70	70	70	70	
Flare Temperature °F (Mid TC)	1,503	1,503	1,501	1,502	
Fuel Heat Input, MMBtu/hr	33.7	34.0	34.6	34.1	
Fuel Flow Rate, SCFM	1,203	1,209	1,230	1,214	
Exhaust Flow Rate, DSCFM *(EPA M19)*	14,792	13,827	15,376	14,665	
Oxygen, O_2, %	13.2	12.6	13.3	13.1	
Carbon Dioxide, CO_2, %	6.8	7.4	6.6	6.9	
Water Vapor, H_2O, % *(EPA M4.16)*	7.6	8.2	7.6	7.8	
NOx, ppm	11.8	12.7	11.4	12.0	
NOx, ppm @ 15% O_2	**9.1**	**9.0**	**8.9**	**9.0**	**12**
NOx, lbs/hr	1.25	1.25	1.25	1.25	**or**
NOx, lbs/day	30.01	30.01	30.08	30.03	
NOx, lbs/MMBtu	**0.037**	**0.037**	**0.036**	**0.037**	**0.05**
CO, ppm	13.3	7.5	13.3	11.3	
CO, ppm @ 15% O_2	**10.2**	**5.3**	**10.4**	**8.6**	**81**
CO, lbs/hr	0.85	0.45	0.89	0.73	**or**
CO, lbs/day	20.5	10.7	21.3	17.5	
CO, lbs/MMBtu	**0.025**	**0.013**	**0.026**	**0.021**	**0.20**
THC, ppm (wet)	<11.0	<11.0	<11.3	<11.1	
THC, ppm (dry)	<11.9	<12.0	<12.2	<12.0	
THC, lbs/hr as CH_4	<0.44	<0.41	<0.47	<0.44	
CH_4, ppm (wet) *(EPA M25A)*	<10.0	<10.0	10.3	10.1	
CH_4, ppm (dry)	<10.8	<10.9	11.1	10.9	
NMOC, ppm as CH_4 (wet) *(EPA M25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppm as CH_4 (dry)	<1.1	<1.1	<1.1	<1.1	
NMOC, lbs/hr as CH_4	<0.04	<0.04	<0.04	<0.04	
NMOC, ppm @ 3% O2 as CH_4	**<2.5**	**<2.4**	**<2.6**	**<2.5**	**30**
INLET NMOC ppm as CH_4 *(EPA M25C)*	2,828	3,101	3,084	3,004	**or**
INLET NMOC lbs/hr as CH_4	8.4	9.3	9.4	9.1	
NMOC Destruction Efficiency, %	**>99.53%**	**>99.60%**	**>99.56%**	**>99.56%**	**>98**
INLET CH_4, ppm *(ASTM 1945/EPA M18 & 3C)*	476,000	478,000	478,000	477,333	
INLET CH_4 lbs/hr	1,421	1,435	1,459	1,438	
CH_4 Destruction Efficiency, %	**>99.97%**	**>99.97%**	**>99.97%**	**>99.97%**	**>99**
INLET THC (TOC) ppm as CH_4	478,828	481,101	481,084	480,338	
INLET THC (TOC) lbs/hr as CH_4	1,430	1,444	1,468	1,447	
THC (TOC) Destruction Efficiency, %	**99.97%**	**99.97%**	**99.97%**	**99.97%**	**>98**
Hydrogen Sulfide (H_2S)	614	602	620	612	
TRS as H_2S, ppm in Fuel, %	**626**	**614**	**632**	**624**	**1,300**
SO_2, ppm stack emissions (calculated)	50.9	53.7	50.5	51.6	
SO_2, ppm @ 15% O_2	39.2	38.2	39.4	38.9	
SO_2, lbs/hr	**7.49**	**7.38**	**7.73**	**7.53**	

WHERE,

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

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R
Lbs/day = Lbs/hr * 24
Removal Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr
<VALUE = 2% of Analyzer Range
lbs/MMBtu = Fd * MW * ppm * 2.59E-9 * 20.9/(20.9 - %O_2)

TABLE #2

Newby Island Landfill

Flare A-2 (FL-150)

Landfill Gas Characterization

RUN			**2**	**LIMITS**
Test Date			2/23/21	
Test Time			0932-1007	
Acrylonitrile		ppb	<153	
Benzene		ppb	1,470	
Carbon Disulfide		ppb	5,200	
Carbon Tetrachloride		ppb	<38.3	
Chlorobenzene		ppb	<38.3	
Chlorodifluoromethane		ppb	<38.3	
Chloroethane		ppb	119	
Chloroform		ppb	<38.3	
1,1 Dichloroethane		ppb	<38.3	
1,1 Dichloroethene		ppb	<38.3	
1,2 Dichloroethane		ppb	176	
1,4 Dichlorobenzene		ppb	712	
Dichlorodifluoromethane		ppb	71.3	
Dichlorofluoromethane		ppb	<38.3	
Ethylbenzene		ppb	2,700	
Ethlyene Dibromide	1,2 Dibromoethane	ppb	<38.3	
Fluorotrichloromethane	Trichlorofluormethane	ppb	<38.3	
Hexane		ppb	318	
Hydrogen Sulfide		ppm	602	
2-Propanol (IPA)		ppb	13,000	
2-Butanone (MEK)		ppb	24,700	
Methylene Chloride		ppb	164	
Perchloroethylene (PCE)	Tetrachloroethylene	ppb	110	
Toluene		ppb	4,690	
1,1,1 Trichlororethane		ppb	<38.3	
1,1,2,2 Tetrachloroethane		ppb	<38.3	
Trichloroethylene	Trichloroethene (TCE)	ppb	72.8	
Vinyl Chloride		ppb	62.8	
m+p xylenes, o xylenes		ppb	6,050	

TABLE #3

Newby Island Landfill
Flare A-3 (FL-100)
1,504°F

RUN	**1**	**2**	**3**	**AVERAGE**	**LIMITS**
Test Date	02/23/21	02/23/21	02/23/21		
Test Time	1200-1241	1306-1349	1409-1447		
Standard Temperature, °F	70	70	70	70	
Flare Temperature °F (Mid TC)	1,504	1,505	1,504	1,504	
Fuel Heat Input, MMBtu/hr	92.7	95.2	95.8	94.6	
Fuel Flow Rate, SCFM	3,294	3,338	3,396	3,343	
Exhaust Flow Rate, DSCFM *(EPA M19)*	42,328	42,795	40,196	41,773	
Oxygen, O_2, %	13.5	13.4	12.9	13.3	
Carbon Dioxide, CO_2, %	6.3	5.9	6.7	6.3	
Water Vapor, H_2O, % *(EPA M4.16)*	7.2	7.2	7.6	7.3	
NOx, ppm	3.7	3.9	4.2	3.9	
NOx, ppm @ 15% O_2	**3.0**	**3.1**	**3.1**	**3.1**	**6**
NOx, lbs/hr	1.13	1.18	1.21	1.18	**or**
NOx, lbs/day	27.08	28.43	29.15	28.22	
NOx, lbs/MMBtu	**0.012**	**0.012**	**0.012**	**0.012**	**0.025**
CO, ppm	6.4	11.5	5.3	7.8	
CO, ppm @ 15% O_2	**5.2**	**9.1**	**3.9**	**6.1**	**24**
CO, lbs/hr	1.2	2.1	0.9	1.4	**or**
CO, lbs/day	28.4	51.5	22.1	34.0	
CO, lbs/MMBtu	**0.013**	**0.022**	**0.009**	**0.015**	**0.060**
THC, ppm (wet)	<11.0	<11.0	<11.0	<11.0	
THC, ppm (dry)	<11.9	<11.9	<11.9	<11.9	
THC, lbs/hr as CH_4	<1.25	<1.26	<1.19	<1.23	
CH_4, ppm (wet) *(EPA M25A)*	<10.0	<10.0	<10.0	<10.0	
CH_4, ppm (dry)	<10.8	<10.8	<10.8	<10.8	
CH_4, lbs/hr	1.13	1.14	1.08	1.1	
NMOC, ppm as CH_4 (wet) *(EPA M25A)*	<1.0	<1.0	<1.0	<1.0	
NMOC, ppm as CH_4 (dry)	<1.1	<1.1	<1.1	<1.1	
NMOC, lbs/hr as CH_4	<0.11	<0.11	<0.11	<0.11	
NMOC, ppm @ 3% O2 as CH_4	**<2.6**	**<2.6**	**<2.4**	**<2.5**	**30**
INLET NMOC ppm as CH_4 *(EPA M25C)*	3,087	3,196	3,023	3,102	**or**
INLET NMOC lbs/hr as CH_4	25.2	26.5	25.5	25.7	
NMOC Destruction Efficiency, %	**>99.55%**	**>99.57%**	**>99.58%**	**>99.57%**	**>98**
INLET CH_4, ppm *(ASTM 1945/EPA M18 & 3C)*	478,000	484,000	479,000	480,333	
INLET CH_4 lbs/hr	3,908.9	4,010.8	4,037.5	3,986	
CH_4 Destruction Efficiency, %	**>99.70%**	**>99.70%**	**>99.71%**	**>99.70%**	**>99**
INLET THC (TOC) ppm as CH_4	481,087	487,196	482,023	483,435	
INLET THC (TOC) lbs/hr as CH_4	3,934	4,037	4,063	4,011	
THC (TOC) Destruction Efficiency, %	**99.97%**	**99.97%**	**99.97%**	**99.97%**	**>98**
Hydrogen Sulfide (H_2S)	597	504	585	562	
TRS as H_2S, ppm in Fuel	**607**	**515**	**597**	**573**	**1,300**
SO_2, ppm stack emissions, calculated	47.2	40.2	50.4	45.9	
SO_2, ppm @ 15% O_2	37.8	31.7	37.2	35.5	
SO_2, lbs/hr	**19.89**	**17.10**	**20.16**	**19.05**	

WHERE,

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

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R
Lbs/day = Lbs/hr * 24
Removal Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr
<VALUE = 2% Value of Analyzer Range
lbs/MMBtu = Fd * MW * ppm * 2.59E-9 * 20.9/(20.9 - %O_2)

TABLE #4

Newby Island Landfill

Flare A-3 (FL-100)

Landfill Gas Characterization

RUN			2	LIMITS
Test Date			2/23/21	
Test Time			1306-1349	
Acrylonitrile		ppb	<162	
Benzene		ppb	1,510	
Carbon Disulfide		ppmv	5,810	
Carbon Tetrachloride		ppb	<40.5	
Chlorobenzene		ppb	115	
Chlorodifluoromethane		ppb	<40.5	
Chloroethane		ppb	105	
Chloroform		ppb	<40.5	
1,1 Dichloroethane		ppb	<40.5	
1,1 Dichloroethene		ppb	<40.5	
1,2 Dichloroethane		ppb	175	
1,4 Dichlorobenzene		ppb	784	
Dichlorodifluoromethane		ppb	70.5	
Dichlorofluoromethane		ppb	<40.5	
Ethylbenzene		ppb	2,900	
Ethlyene Dibromide	1,2 Dibromoethane	ppb	<40.5	
Fluorotrichloromethane	Trichlorofluormethane	ppb	<40.5	
Hexane		ppb	336	
Hydrogen Sulfide		ppmv	504	
2-Propanol (IPA)		ppb	16,100	
2-Butanone (MEK)		ppb	25,800	
Methylene Chloride		ppb	165	
Perchloroethylene (PCE)	Tetrachloroethylene	ppb	115	
Toluene		ppb	4,820	
1,1,1 Trichlororethane		ppb	<40.5	
1,1,2,2 Tetrachloroethane		ppb	<40.5	
Trichloroethylene	Trichloroethene (TCE)	ppb	72.1	
Vinyl Chloride		ppb	68.9	
m+p xylenes, o xylenes		ppb	6,280	

Appendix D – Surface Emission and GCCS Component Leak Monitoring Results

June 5, 2021
File No. 07221077.00

Ms. Rachelle Huber
Republic Services – Newby Island Landfill
1601 Dixon Landing Road
Milpitas, California 95035

Subject: Newby Island Landfill - Milpitas, California

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring for First Quarter 2021.

Dear Ms. Huber:

SCS Field Services (SCS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Newby Island Landfill (Site) during the First 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 appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Michael Flanagan at (510) 363-7796 or Whitney Stackhouse at (209) 338-7990 if you have any questions or comments.

Sincerely,

Whitney Stackhouse
Project Manager
SCS Field Services

Michael Flanagan
Project Manager
SCS Field Services

Encl.

Sean Bass, SCS Field Services
Art Jones, SCS Field Services

Newby Island Landfill

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

First Quarter 2021

Presented to:

Ms. Rachelle Huber
Republic Services – Newby Island
1601 Dixon Landing Road
Milpitas, California 95035

SCS FIELD SERVICES

File No. 07221077.00 Task 01 | June 5, 2021

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

Newby Island Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring First Quarter 2021

INTRODUCTION

This letter provides results of the March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 2021, LMR and NSPS landfill surface emissions monitoring (SEM) performed by SCS Field Services (SCS) at the subject site. All work was performed in accordance with our approved Work Scope dated December 23, 2020, and the LMR requirements.

SUMMARY AND CONCLUSIONS

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, based on the previous monitoring events, in which exceedances were observed, the monitoring at the Newby Island Landfill was performed on 25-foot pathways in accordance with the LMR.

On, March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 2021, SCS performed first quarter 2021 SEM as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that eighteen (18) locations exceeded the 500 ppmv maximum concentration during the initial monitoring event (Table 1 in Attachment 3). The required first and second 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring indicated that all areas had returned to below regulatory compliance limits following system adjustments and remediation (well field adjustments and installation of new bentonite plugs) by site personnel. Based on these monitoring results no additional follow up testing was required.

Also, during the instantaneous monitoring event, SCS performed concurrent integrated monitoring of the landfill surface. As required by the LMR, the landfill was divided into 50,000 square foot areas. The Newby Island Landfill surface area was therefore divided into 233 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 landfilling activities, unsafe conditions, or there was no waste in place prior to the monitoring event.

During the monitoring event, there were five (5) grid areas observed to exceed the 25 ppmv LMR integrated average threshold (Table 2 in Attachment 4). The required first and second 10-day LMR follow-up monitoring indicated that three (3) areas had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results, and in accordance with the LMR, the site is required to perform a system expansion within 120-days of the third detected exceedance. 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 piping and components indicated that all test locations were in compliance with the 500 ppmv requirement.

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. During this reporting period, no locations were observed to exceed the 200 ppmv, reporting threshold. When these readings are observed, the locations are reported to site personnel for tracking and/or remediation and will be reported in the next submittal of the annual LMR report.

Finally, to help prevent potential future exceedances, SCS recommends that the landfill surface be routinely inspected and any observed surface erosion be routinely repaired.

BACKGROUND

The Newby Island Landfill is an active 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 gas, 40 to 50 percent carbon dioxide, and trace amount of various other gases, some of which are odorous. The Newby Island property contains a system to control the combustible gases generated in the landfill.

SURFACE EMISSIONS MONITORING

On March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 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 monitoring on a 25-foot pathway in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

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

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

- 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 -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 6. Wind speed averages were observed to remain below the alternative threshold of 10 miles per hour, and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within 72 hours of the monitoring events. Therefore, site meteorological conditions were within the alternatives of the LMR requirements on the above mentioned dates.

TESTING RESULTS

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

On March 12, 15, 16, 17, 22, 23, 26, 27, and 29, 2021, SCS performed first quarter 2021 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that eighteen (18) locations exceeded the 500 ppmv maximum concentration. The required first and second 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring performed on March 19, 29 and April 9, 2021, respectively, indicated that all areas had returned to compliance following system adjustments and remediation (wellfield adjustment and borehole repairs using bentonite and soil) performed by SCS and site personnel. Based on these monitoring results no additional follow up testing was required. Results of the monitoring are shown in Attachments 2 and 3 (Table 1).

Additionally, calculated integrated grid monitoring indicated five (5) integrated exceedances of the 25-ppmv requirement on March 17, 2021. The required first and second 10-day LMR follow-up monitoring performed on March 27 and April 6, 2021, indicated that three (3) areas had returned to compliance following system adjustments and remediation by site personnel. The remaining two (2) areas, Grids Nos. 171, and 172 did not return to compliance levels, as required. In accordance with requirements for expansion and remediation, the two (2) grid areas need to be remediated and returned to compliance in accordance with the rule (expansion of the collection system or an alternative compliance option if approved by the BAAQMD) within 120 days after the detected third integrated exceedance, which will be due by August 4, 2021. Results of the initial and follow up monitoring are shown in Attachment 4 (Table 2). Calibration logs for the monitoring equipment are provided in Attachment 5.

During this monitoring event, several grids were not monitored, in accordance with the LMR, due to active landfilling activities, unsafe conditions or no waste in place. SCS will continue to monitor all accessible locations during the second quarter 2021.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On March 27, 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 10 ppmv, was well below the maximum threshold (see Table 1 for component results). Therefore, all pressurized piping and components located at the LFG BFS were in compliance at the time of our testing.

PROJECT SCHEDULE

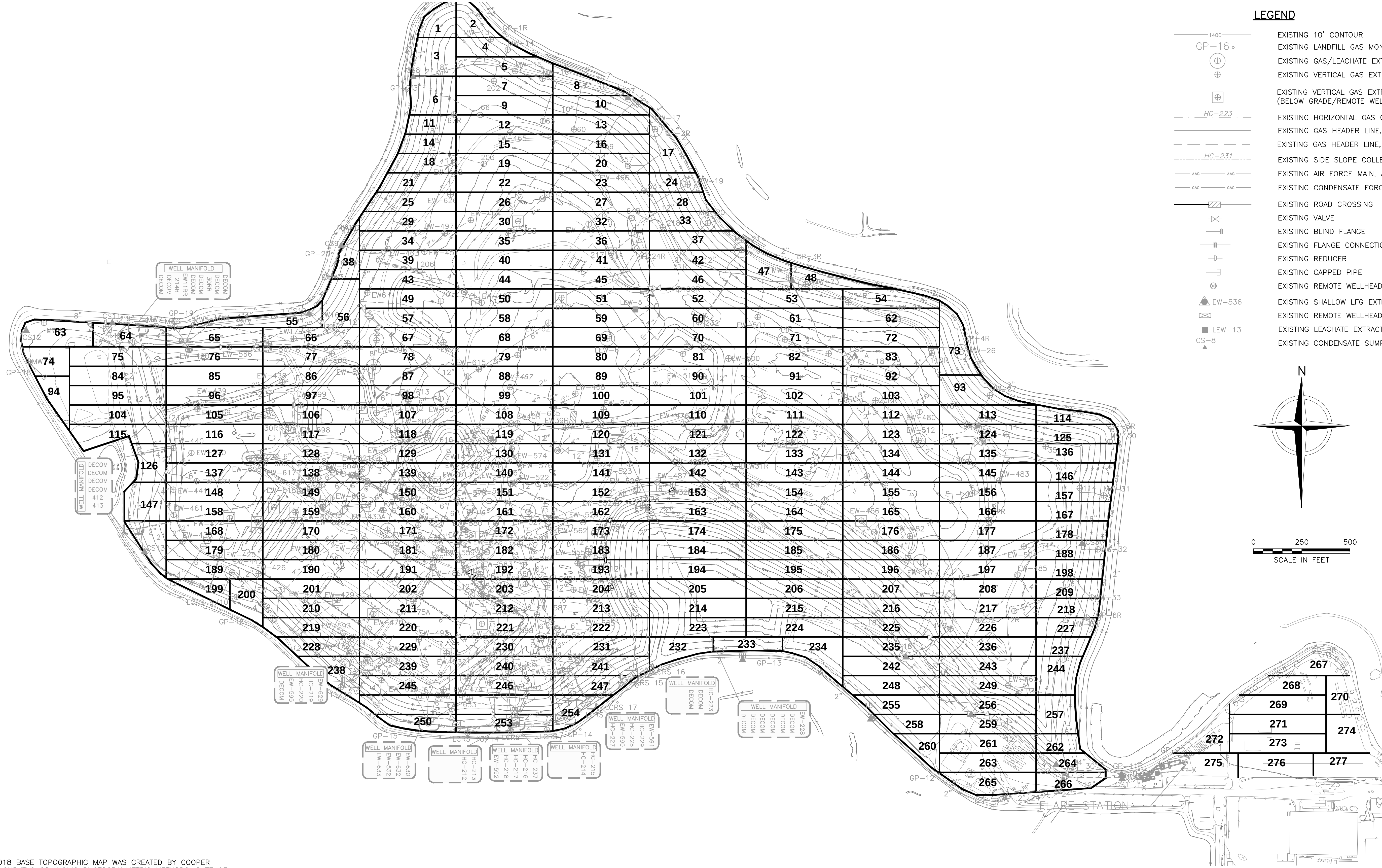
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the second quarter 2021 (April through June) surface emissions testing event is scheduled to be performed by the end of May 2021 in accordance with the Republic SOP unless an alternative timeline is requested by site personnel.

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 10' CONTOUR
- EXISTING LANDFILL GAS MONITORING PROBE
- EXISTING GAS/LEACHATE EXTRACTION WELL
- EXISTING VERTICAL GAS EXTRACTION WELL (ABOVE GRADE)
- EXISTING VERTICAL GAS EXTRACTION WELL (BELOW GRADE/REMOTE WELLHEAD)
- EXISTING HORIZONTAL GAS COLLECTOR
- EXISTING GAS HEADER LINE, ON GRADE, SIZE VARIES
- EXISTING GAS HEADER LINE, BELOW GRADE, SIZE VARIES
- EXISTING SIDE SLOPE COLLECTOR
- EXISTING AIR FORCE MAIN, ABOVE GRADE
- EXISTING CONDENSATE FORCE MAIN, ABOVE GRADE
- EXISTING ROAD CROSSING
- EXISTING VALVE
- EXISTING BLIND FLANGE
- EXISTING FLANGE CONNECTION
- EXISTING REDUCER
- EXISTING CAPPED PIPE
- EXISTING REMOTE WELLHEAD
- EXISTING SHALLOW LFG EXTRACTION WELL
- EXISTING REMOTE WELLHEAD MANIFOLD
- EXISTING LEACHATE EXTRACTION WELL
- EXISTING CONDENSATE SUMP

NOTES:

1. THE 2018 BASE TOPOGRAPHIC MAP WAS CREATED BY COOPER AERIAL SURVEYS CO. USING PHOTOGRAMMETRIC METHODS. DATE OF PHOTOGRAPHY: APRIL 17, 2018. HORIZONTAL DATUM: NAD27, ZONE 3, VERTICAL DATUM: LOCAL LANDFILL DATUM.
2. THE 2010 BASE AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY REPUBLIC. WELLS EW-487 THROUGH EW-489 ARE PER DESIGN LOCATIONS, NO SURVEY WAS RECEIVED FOR THESE WELLS. AS-BUILT LOCATIONS FOR HC-223 AND LCRS-17 ARE APPROXIMATE, NO SURVEY WAS RECEIVED FOR THESE WELLS.
3. THE 2017 GCCS AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY RUGGERI, JENSEN, AZAR AND ASSOCIATES, DATES OF SURVEY: JANUARY 11, 20, AND FEBRUARY 24, 2017.
4. THE 2018 GCCS IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: MARCH 14, 2018.
5. THE 2018 GCCS PHASE II IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: AUGUST 6, 2018.

File: X:\PROJECTS\NEWBY ISLAND\180563 - PHASE II GCCS IMPROVEMENTS CQA_Project Drawings\NEWBY SITE AS-BUILTS.dwg Layout: SEM User: gavin.cosson Oct 16, 2018 - 3:43pm

DRAFT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 9/6/18 DRAWN BY RAW DESIGNED BY DK CHECKED BY AMN APPROVED BY MED

cornerstone
A TETRA TECH COMPANY

NEWBY ISLAND LANDFILL
SANTA CLARA COUNTY, CALIFORNIA

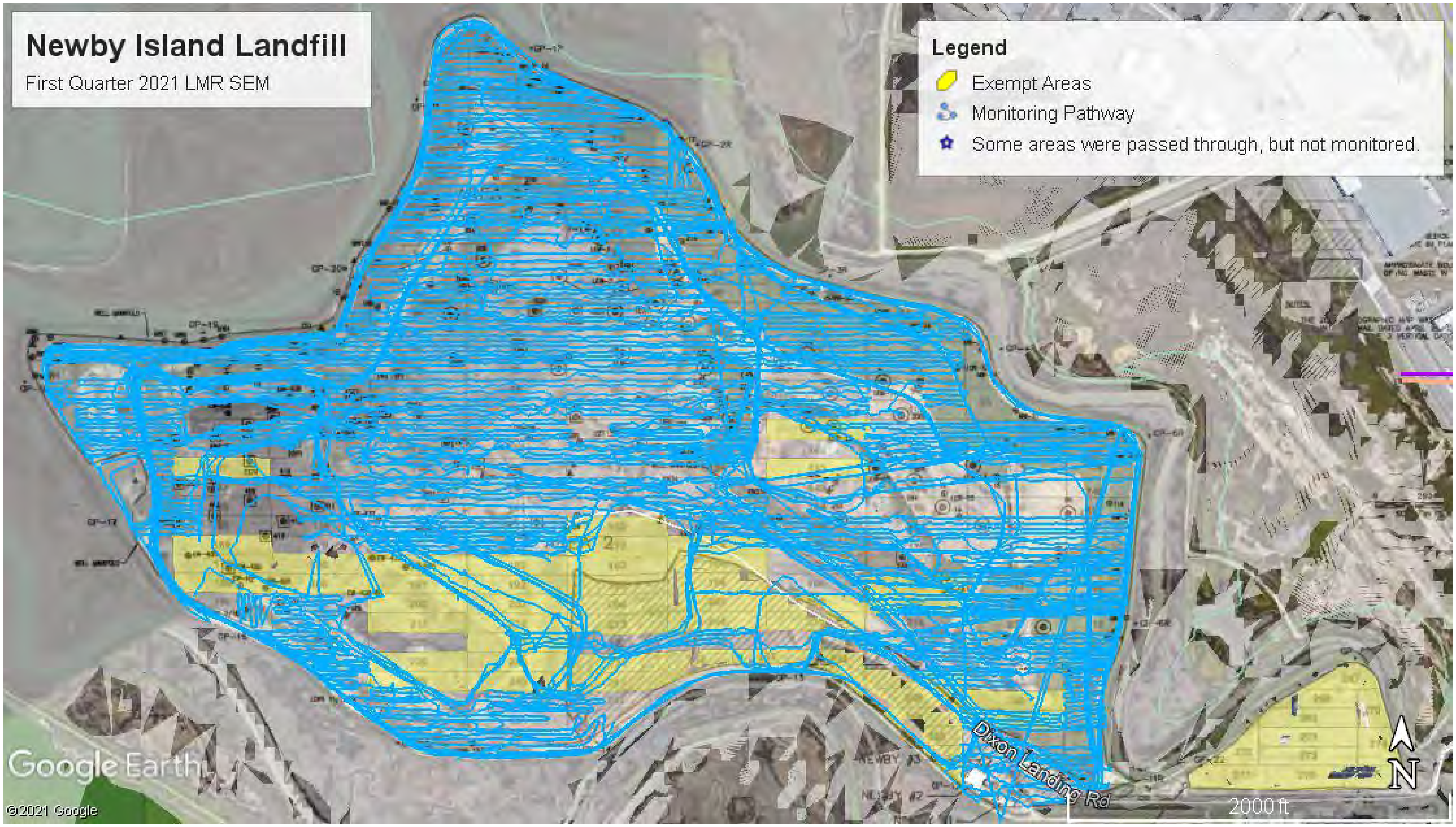
GCCS AS-BUILT SEM SITE PLAN

SHEET NO. 1

PROJECT NO. ------

Attachment 2

Surface Pathway



First Quarter 2021
LMR Surface Emissions Monitoring Pathway
Newby Island Landfill, Milpitas, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

First Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Instantaneous Data Report for March 12, 15, 16, 17, 19, 22, 23, 26, 27, 29 and April 6 and 9, 2021

Location Well ID or Grid Number	Initial Monitoring (ppmv) March 12, 2021	10-Day Follow Up Monitoring (ppmv) March 19, 2021	20-Day Follow Up Monitoring (ppmv) March 29, 2021	30-Day Follow Up Monitoring (ppmv) April 9, 2021
NILEW500	854	25	NA	10.3
36" T (main header downhill from 641/ HC227A)	8,219	3,500	350	<500
CS08	1,358	125	NA	9.5
CS26	1,000	1,000	8	9.7
HC227A (this is the wellhead location by 641)	1,135	1,000	350	<500
LEW05	1,500	2,500	100	32.0
MW013	600	25	NA	4.2
MW018	900	150	NA	3.3
MW020	600	200	NA	25.0
NILEW 461	2,496	2,496	170	9.7
NILEW 510	37,000	75	NA	154.0

First Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

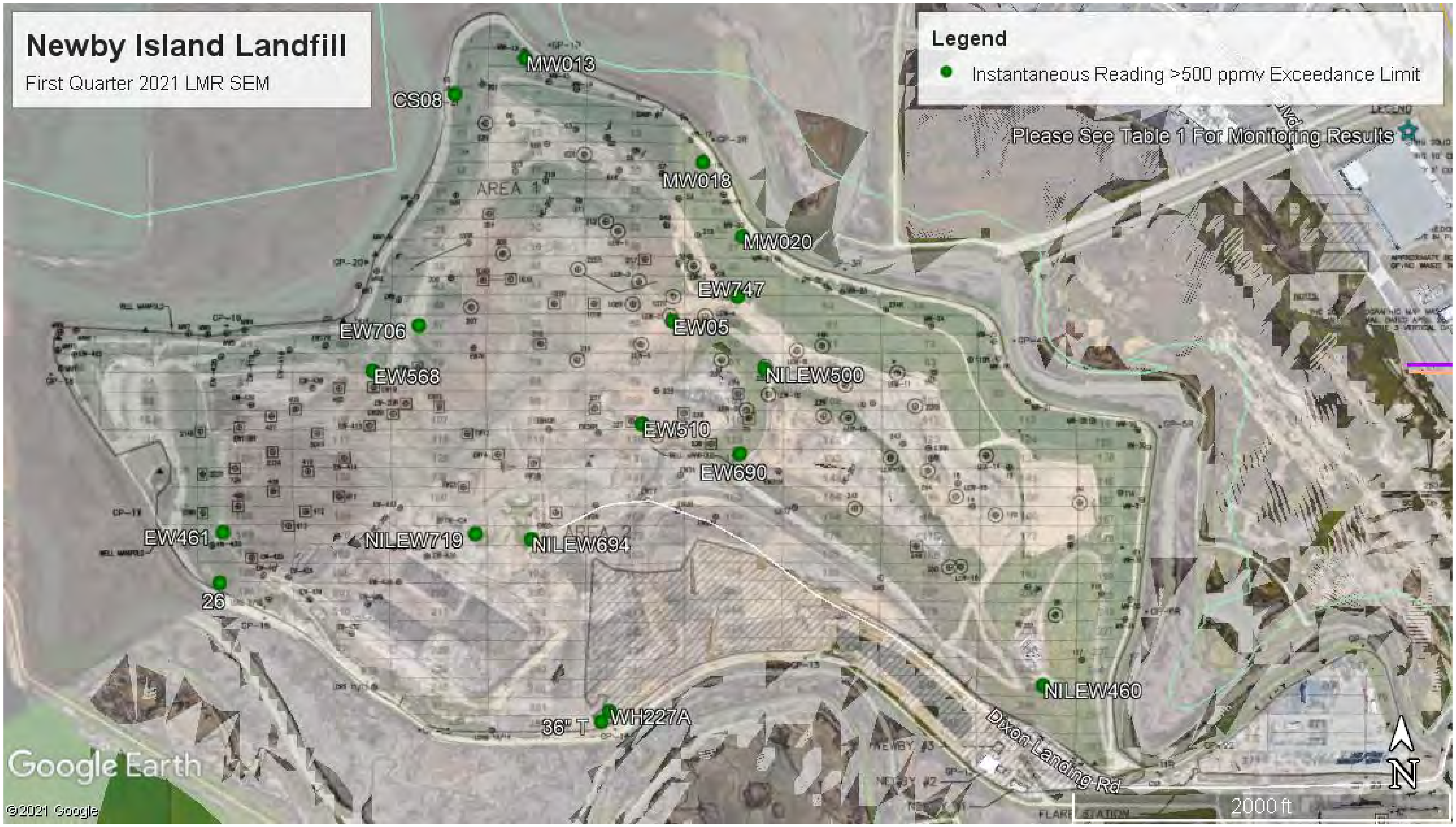
Newby Island Sanitary Landfill, Milpitas, California

Location Well ID or Grid Number	Initial Monitoring (ppmv) March 12, 2021	10-Day Follow Up Monitoring (ppmv) March 19, 2021	20-Day Follow Up Monitoring (ppmv) March 29, 2021	30-Day Follow Up Monitoring (ppmv) April 9, 2021
NILEW 568	1,088	50	NA	51.8
NILEW 690	605	200	NA	13.9
NILEW 706	1,588	200	NA	3.3
NILEW 747	30,000	2,500	6	25.1
NILEW 460	3,880	5	NA	<500
NILEW 694	1750+	750	200	38.0
NILEW 719	1,500	20,000	250	36.6

Pressurized Pipe

Route	Date	Highest Concentration (ppmv)
Flare Station	3/27/2021	10

No other exceedances of the 500 ppm threshold observed during the LMR/NSPS monitoring performed during the first quarter 2021.



First Quarter 2021

Initial Emissions Monitoring Locations Greater Than 500 ppmv

Keller Canyon Landfill, Pittsburg, California

Attachment 4

Integrated Monitoring Results

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-001	3/15/2021	1.72	
NIL-002	3/15/2021	2.11	
NIL-003	3/15/2021	2.06	
NIL-004	3/15/2021	3.07	
NIL-005	3/15/2021	4.87	
NIL-006	3/15/2021	2.88	
NIL-007	3/15/2021	3.15	
NIL-008	3/15/2021	3.68	
NIL-009	3/15/2021	4.50	
NIL-010	3/15/2021	4.51	
NIL-011	3/15/2021	6.14	
NIL-012	3/15/2021	7.20	
NIL-013	3/15/2021	10.15	
NIL-014	3/15/2021	3.00	
NIL-015	3/15/2021	3.31	
NIL-016	3/15/2021	3.81	
NIL-017	3/17/2021	7.44	
NIL-018	3/17/2021	3.46	
NIL-019	3/17/2021	5.96	
NIL-020	3/15/2021	4.40	
NIL-021	3/15/2021	2.06	
NIL-022	3/15/2021	2.97	
NIL-023	3/15/2021	5.20	
NIL-024	3/15/2021	3.91	
NIL-025	3/15/2021	2.31	
NIL-026	3/15/2021	2.38	
NIL-027	3/15/2021	4.62	
NIL-028	3/15/2021	3.76	
NIL-029	3/16/2021	5.98	
NIL-030	3/16/2021	4.85	
NIL-031	--	--	Grid is not on the Grid Map
NIL-032	3/16/2021	2.58	
NIL-033	3/16/2021	2.05	
NIL-034	3/15/2021	1.83	
NIL-035	3/15/2021	2.13	
NIL-036	3/15/2021	2.21	
NIL-037	3/15/2021	2.10	
NIL-038	3/12/2021	13.40	
NIL-039	3/16/2021	5.65	
NIL-040	3/16/2021	5.03	
NIL-041	3/16/2021	4.46	
NIL-042	3/16/2021	3.16	
NIL-043	3/16/2021	4.82	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-044	3/16/2021	7.48	
NIL-045	3/16/2021	4.22	
NIL-046	3/16/2021	3.01	
NIL-047	3/23/2021	1.29	
NIL-048	3/23/2021	1.20	
NIL-049	3/23/2021	2.26	
NIL-050	3/23/2021	2.17	
NIL-051	3/23/2021	3.15	
NIL-052	3/23/2021	4.77	
NIL-053	3/23/2021	1.97	
NIL-054	3/23/2021	1.68	
NIL-055	3/12/2021	3.20	
NIL-056	3/16/2021	6.02	
NIL-057	3/16/2021	5.19	
NIL-058	3/16/2021	9.62	
NIL-059	3/16/2021	10.42	
NIL-060	3/16/2021	3.66	
NIL-061	3/16/2021	2.46	
NIL-062	3/16/2021	3.19	
NIL-063	3/15/2021	4.07	
NIL-064	3/15/2021	4.74	
NIL-065	3/15/2021	6.11	
NIL-066	3/15/2021	6.14	
NIL-067	3/15/2021	10.03	
NIL-068	3/16/2021	20.40	
NIL-069	3/16/2021	15.86	
NIL-070	3/15/2021	5.54	
NIL-071	3/15/2021	2.75	
NIL-072	3/16/2021	2.29	
NIL-073	3/23/2021	1.26	
NIL-074	3/16/2021	1.54	
NIL-075	3/16/2021	2.31	
NIL-076	3/16/2021	2.32	
NIL-077	3/16/2021	3.98	
NIL-078	3/16/2021	6.30	
NIL-079	3/16/2021	11.66	
NIL-080	3/16/2021	14.46	
NIL-081	3/16/2021	4.36	
NIL-082	3/16/2021	2.69	
NIL-083	3/16/2021	2.41	
NIL-084	3/16/2021	2.61	
NIL-085	3/16/2021	3.66	
NIL-086	3/16/2021	3.02	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-087	3/16/2021	6.26	
NIL-088	3/16/2021	11.72	
NIL-089	3/16/2021	15.71	
NIL-090	3/16/2021	5.61	
NIL-091	3/16/2021	3.17	
NIL-092	3/16/2021	3.68	
NIL-093	3/16/2021	1.75	
NIL-094	3/16/2021	2.36	
NIL-095	3/16/2021	3.63	
NIL-096	3/16/2021	3.34	
NIL-097	3/16/2021	7.57	
NIL-098	3/16/2021	8.70	
NIL-099	3/16/2021	13.23	
NIL-100	3/16/2021	13.00	
NIL-101	3/16/2021	6.77	
NIL-102	3/16/2021	3.41	
NIL-103	3/16/2021	2.86	
NIL-104	3/23/2021	2.31	
NIL-105	3/23/2021	2.26	
NIL-106	3/23/2021	2.77	
NIL-107	3/23/2021	6.46	
NIL-108	3/23/2021	14.47	
NIL-109	3/17/2021	15.79	
NIL-110	3/17/2021	5.83	
NIL-111	--	--	Active
NIL-112	3/17/2021	4.45	
NIL-113	3/17/2021	3.22	
NIL-114	3/17/2021	5.09	
NIL-115	3/22/2021	2.63	
NIL-116	3/22/2021	3.13	
NIL-117	3/22/2021	3.27	
NIL-118	3/22/2021	2.04	
NIL-119	3/22/2021	11.51	
NIL-120	3/17/2021	24.49	
NIL-121	3/17/2021	26.86	Initial Monitoring
NIL-121	3/27/2021	4.55	First 10-Day Follow Up Monitoring
NIL-122	3/17/2021	6.92	
NIL-123	3/17/2021	4.74	
NIL-124	3/17/2021	5.23	
NIL-125	3/17/2021	4.85	
NIL-126	3/23/2021	2.67	
NIL-127	--	--	Active
NIL-128	3/17/2021	15.14	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-129	3/17/2021	26.48	Initial Monitoring
NIL-129	3/27/2021	16.59	First 10-Day Follow Up Monitoring
NIL-130	3/17/2021	22.95	
NIL-131	3/17/2021	16.56	
NIL-132	3/17/2021	11.15	
NIL-133	--	--	Active
NIL-134	3/17/2021	2.38	
NIL-135	3/17/2021	1.93	
NIL-136	3/17/2021	2.00	
NIL-137	3/22/2021	2.19	
NIL-138	3/23/2021	1.76	
NIL-139	3/27/2021	20.36	
NIL-140	3/27/2021	17.77	
NIL-141	3/22/2021	15.25	
NIL-142	3/16/2021	16.42	
NIL-143	3/16/2021	10.64	
NIL-144	3/16/2021	1.70	
NIL-145	3/16/2021	1.46	
NIL-146	3/16/2021	2.13	
NIL-147	3/23/2021	3.13	
NIL-148	3/23/2021	2.56	
NIL-149	3/23/2021	6.90	
NIL-150	3/17/2021	19.95	
NIL-151	3/17/2021	24.45	
NIL-152	3/17/2021	14.96	
NIL-153	3/17/2021	34.32	Initial Monitoring
NIL-153	3/27/2021	11.86	First 10-Day Follow Up Monitoring
NIL-154	3/17/2021	11.50	
NIL-155	3/17/2021	4.01	
NIL-156	3/17/2021	2.56	
NIL-157	3/17/2021	1.99	
NIL-158	3/23/2021	1.85	
NIL-159	3/17/2021	17.75	
NIL-160	3/17/2021	19.24	
NIL-161	3/17/2021	17.50	
NIL-162	--	--	Active
NIL-163	3/17/2021	18.18	
NIL-164	3/17/2021	6.53	
NIL-165	3/17/2021	3.91	
NIL-166	3/17/2021	1.66	
NIL-167	3/17/2021	1.93	
NIL-168	3/23/2021	2.16	
NIL-169	--	--	Active

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

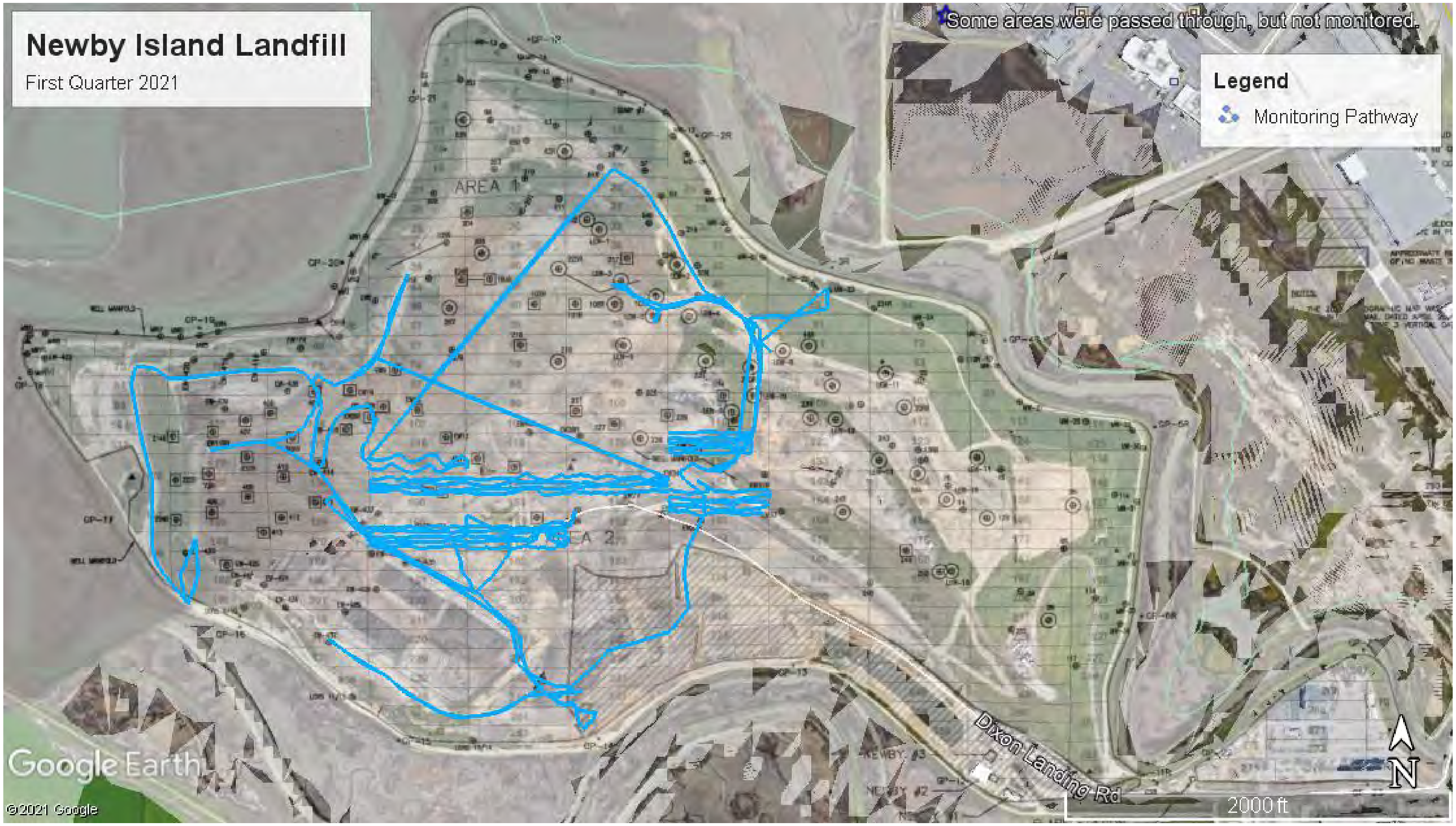
Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-170	3/17/2021	15.15	
NIL-171	3/17/2021	27.74	Initial Monitoring
NIL-171	3/27/2021	47.38	First 10-Day Follow Up Monitoring
NIL-171	4/6/2021	49.53	Second 10-Day Follow Up Monitoring
NIL-172	3/17/2021	27.08	Initial Monitoring
NIL-172	3/27/2021	52.37	First 10-Day Follow Up Monitoring
NIL-172	4/6/2021	48.54	Second 10-Day Follow Up Monitoring
NIL-173	3/27/2021	--	Active
NIL-174	3/27/2021	--	Active
NIL-175	3/17/2021	7.27	
NIL-176	3/17/2021	3.78	
NIL-177	3/17/2021	2.96	
NIL-178	3/17/2021	3.17	
NIL-179	--	--	Active
NIL-180	--	--	Active
NIL-181	--	--	Active
NIL-182	--	--	Active
NIL-183	--	--	Active
NIL-184	--	--	Active
NIL-185	3/22/2021	10.06	
NIL-186	--	--	Active
NIL-187	3/29/2021	3.31	
NIL-188	3/29/2021	3.32	
NIL-189	--	--	Active
NIL-190	--	--	Active
NIL-191	--	--	Active
NIL-192	--	--	Active
NIL-193	--	--	Active
NIL-194	--	--	Active
NIL-195	3/22/2021	9.42	
NIL-196	3/22/2021	4.07	
NIL-197	3/22/2021	1.76	
NIL-198	3/22/2021	1.70	
NIL-199	3/22/2021	3.00	
NIL-200	3/26/2021	3.34	
NIL-201	3/26/2021	15.98	
NIL-202	--	--	Active or Native
NIL-203	--	--	Active or Native
NIL-204	--	--	Active or Native
NIL-205	--	--	Active or Native
NIL-206	--	--	Active or Native
NIL-207	--	--	Active or Native
NIL-208	3/26/2021	5.81	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-209	3/26/2021	4.38	
NIL-210	3/26/2021	6.50	
NIL-211	--	--	Active or Native
NIL-212	--	--	Active or Native
NIL-213	--	--	Active or Native
NIL-214	--	--	Active or Native
NIL-215	--	--	Active or Native
NIL-216	3/22/2021	5.92	
NIL-217	3/22/2021	5.06	
NIL-218	3/22/2021	6.09	
NIL-219	3/22/2021	5.63	
NIL-220	3/22/2021	15.94	
NIL-221	--	--	Active or Native
NIL-222	3/22/2021	8.22	
NIL-223	3/22/2021	9.27	
NIL-224	3/22/2021	8.12	
NIL-225	3/22/2021	2.84	
NIL-226	3/22/2021	2.50	
NIL-227	3/22/2021	2.09	
NIL-228	3/26/2021	11.01	
NIL-229	--	--	Active or Native
NIL-230	--	--	Active or Native
NIL-231	--	--	Active or Native
NIL-232	--	--	Active or Native
NIL-233	--	--	Active or Native
NIL-234	--	--	Active or Native
NIL-235	3/22/2021	6.62	
NIL-236	3/22/2021	4.03	
NIL-237	3/22/2021	4.27	
NIL-238	3/23/2021	7.42	
NIL-239	--	--	Active
NIL-240	--	--	Active
NIL-241	--	--	Active
NIL-242	--	--	Active
NIL-243	3/22/2021	2.99	
NIL-244	3/22/2021	4.81	
NIL-245	3/29/2021	15.35	
NIL-246	3/23/2021	13.75	
NIL-247	3/23/2021	10.86	
NIL-248	--	--	Active or Native
NIL-249	--	--	Active or Native
NIL-250	3/23/2021	9.82	
NIL-251	3/23/2021	12.59	

First Quarter 2021
Table 2. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

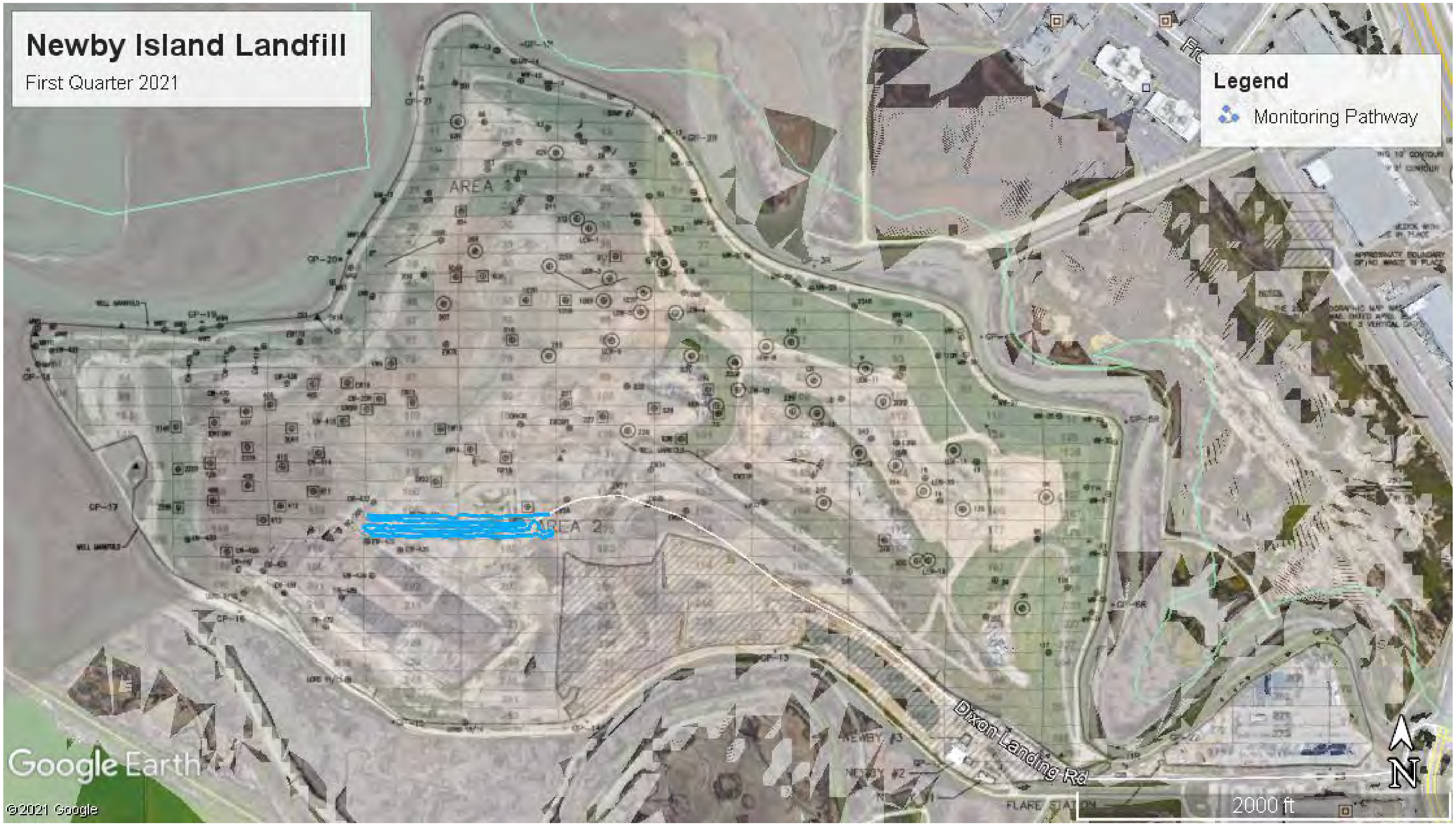
Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-252	3/23/2021	10.77	
NIL-253	3/23/2021	18.18	
NIL-254	3/23/2021	12.01	
NIL-255	--	--	Active or Native
NIL-256	--	--	Active or Native
NIL-257	3/22/2021	4.69	
NIL-258	--	--	Active or Native
NIL-259	3/22/2021	5.70	
NIL-260	--	--	Active or Native
NIL-261	3/22/2021	1.91	
NIL-262	3/22/2021	1.88	
NIL-263	3/22/2021	3.95	
NIL-264	3/22/2021	4.60	
NIL-265	3/22/2021	2.31	
NIL-266	3/22/2021	2.15	
NIL-267	--	--	Active or Native
NIL-268	--	--	Active or Native
NIL-269	--	--	Active or Native
NIL-270	--	--	Active or Native
NIL-271	--	--	Active or Native
NIL-272	--	--	Active or Native
NIL-273	--	--	Active or Native
NIL-274	--	--	Active or Native
NIL-275	--	--	Active or Native
NIL-276	--	--	Active or Native
NIL-277	--	--	Active or Native



First Quarter 2021

LMR Surface Emissions Monitoring First 10-Day Pathway

Newby Island Landfill, Milpitas, California



First Quarter 2021

LMR Surface Emissions Monitoring Second 10-Day Pathway

Newby Island Landfill, Milpitas, California

Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/15/2

Site Name: Newby

Inspector(s): Hunter

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4.8 MPH

Wind Direction: N

Barometric Pressure: 30 "Hg

Air Temperature: 46 °F

General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420

Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	5
2	.1	499	1	3
3	.0	501	1	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= 123348

Counters Observed for the Zero= 3872

Trial 2:

Counts Observed for the Span= 123681

Counters Observed for the Zero= 3894

Trial 3:

Counts Observed for the Span= 123947

Counters Observed for the Zero= 39

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance

Reading: 1.3 ppm

Downwind Location Description: Grid 169

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: 3-15-21 Site Name: newby

Inspector(s): Hunter Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 53 °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	.2	503	3	3
2	.1	501	1	3
3	.2	501	1	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 123075
Counters Observed for the Zero= 3904

Trial 2:
Counts Observed for the Span= 123146
Counters Observed for the Zero= 3929

Trial 3:
Counts Observed for the Span= 123307
Counters Observed for the Zero= 3954

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 169 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: 3/15/21 Site Name: Newby

Inspector(s): Brant Wade Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	~~472~~ 0	502	2	3
2	.1	498	2	4
3	.0	499	1	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:		Trial 3:	
Counts Observed for the Span=	148148	Counts Observed for the Span=	148647
Counters Observed for the Zero=	4729	Counters Observed for the Zero=	4820
Trial 2:			
Counts Observed for the Span=	148361		
Counters Observed for the Zero=	4771		

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.5 ppm

Downwind Location Description: Grid 162 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-15-21 Site Name: newby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 53 °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	.2	501	1	3
2	.1	499	1	3
3	.1	498	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 147829
Counters Observed for the Zero= 4792

Trial 3:
Counts Observed for the Span= 148134
Counters Observed for the Zero= 4821

Trial 2:
Counts Observed for the Span= 147936
Counters Observed for the Zero= 4809

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: grid 169 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: 3/15/21 Site Name: Nawby

Inspector(s): Cody Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	502	2	4
2	0	501	1	5
3	1	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 144060 Counters Observed for the Zero= 3786	**Trial 3:** Counts Observed for the Span= 144537 Counters Observed for the Zero= 3841
Trial 2: Counts Observed for the Span= 144283 Counters Observed for the Zero= 3809	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Cody Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: ^ Barometric Pressure: 30 "Hg

Air Temperature: 73 °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: 5121 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	5
2	.3	498	2	3
3	.1	499	1	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 143726
Counters Observed for the Zero= 3829

Trial 2:
Counts Observed for the Span= 143852
Counters Observed for the Zero= 3847

Trial 3:
Counts Observed for the Span= 143975
Counters Observed for the Zero= 3865

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3/15/21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	5
2	.8	499	1	3
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 99.7 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 162670
Counters Observed for the Zero= 3624

Trial 2:
Counts Observed for the Span= 162931
Counters Observed for the Zero= 3658

Trial 3:
Counts Observed for the Span= 163241
Counters Observed for the Zero= 3689

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 16a Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-15-21   Site Name: newby

Inspector(s): Don G   Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH   Wind Direction: N   Barometric Pressure: 30 "Hg

Air Temperature: 53 °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: 1820   Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	500	0	3
2	.2	498	2	5
3	.1	499	1	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= 162572
Counters Observed for the Zero= 3652

Trial 2:
Counts Observed for the Span= 162824
Counters Observed for the Zero= 3681

Trial 3:
Counts Observed for the Span= 162963
Counters Observed for the Zero= 3694

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance   Reading: 1.4 ppm

Downwind Location Description: Grid 169   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: 3/15/21 Site Name: Newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	0	501	1	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= 131828
Counters Observed for the Zero= 3126

Trial 2:
Counts Observed for the Span= 132247
Counters Observed for the Zero= 3162

Trial 3:
Counts Observed for the Span= 132531
Counters Observed for the Zero= 3188

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 53 °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	.2	498	2	4
2	.1	499	1	3
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131651
Counters Observed for the Zero= 3147

Trial 2:
Counts Observed for the Span= 131813
Counters Observed for the Zero= 3162

Trial 3:
Counts Observed for the Span= 131974
Counters Observed for the Zero= 3191

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 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: 3/15/21 Site Name: Newby

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.3	501	1	4
2	.1	499	1	3
3	.2	498	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= 144672
Counters Observed for the Zero= 3970

Trial 2:
Counts Observed for the Span= 144925
Counters Observed for the Zero= 4003

Trial 3:
Counts Observed for the Span= 145213
Counters Observed for the Zero= 4049

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: n Barometric Pressure: 30 "Hg

Air Temperature: 53 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	502	498	2	4
2	.1	501	1	3
3	0	502	2	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144372
Counters Observed for the Zero= 4017

Trial 2:
Counts Observed for the Span= 144561
Counters Observed for the Zero= 4045

Trial 3:
Counts Observed for the Span= 144734
Counters Observed for the Zero= 4073

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 169 Reading: 14 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: 3/15/21 Site Name: Newby

Inspector(s): Ryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 9.8 MPH Wind Direction: N Barometric Pressure: 30 "Hg

Air Temperature: 46 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	0	501	1	4
3	0	500	0	5

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%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 110888
Counters Observed for the Zero= 3428

Trial 2:
Counts Observed for the Span= 111253
Counters Observed for the Zero= 3971

Trial 3:
Counts Observed for the Span= 111342
Counters Observed for the Zero= 3983

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-15-21 Site Name: newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 53 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	4
2	1	499	1	3
3	.1	501	1	3

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 110772
Counters Observed for the Zero= 3964

Trial 2:
Counts Observed for the Span= 110689
Counters Observed for the Zero= 3980

Trial 3:
Counts Observed for the Span= 110823
Counters Observed for the Zero= 3994

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 169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21　　Site Name: Newby

Inspector(s): Hunter Ott　　Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH　　Wind Direction: S　　Barometric Pressure: 28.9 "Hg

Air Temperature: 45 °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	.1	500	0	1
2	.1	500	0	2
3	.2	501	1	2

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.9 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 114320

Counters Observed for the Zero= 3322

Trial 2:

Counts Observed for the Span= 114600

Counters Observed for the Zero= ~~114903~~ 3335

Trial 3:

Counts Observed for the Span= 114903

Counters Observed for the Zero= 3377

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance　　Reading: 1.4 ppm

Downwind Location Description: Grid 169　　Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 8-16-21 Site Name: newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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: 3220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	498	2	4
2	0	499	1	3
3	1	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= 157326 Counters Observed for the Zero= 5625	**Trial 3:** Counts Observed for the Span= 157981 Counters Observed for the Zero= 3698
Trial 2: Counts Observed for the Span= 157675 Counters Observed for the Zero= 3662	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-16-21 Site Name: newby

Inspector(s): Ryan Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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	502	2	3
2	.0	499	1	4
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 107351
Counters Observed for the Zero= 3841

Trial 2:
Counts Observed for the Span= 107625
Counters Observed for the Zero= 3820

Trial 3:
Counts Observed for the Span= 107841
Counters Observed for the Zero= 3869

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-16-21 Site Name: newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: S Barometric Pressure: 30 "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: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	3
2	0	498	2	3
3	0	499	1	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 121583

Counters Observed for the Zero= 2920

Trial 2:

Counts Observed for the Span= 121862

Counters Observed for the Zero= 2943

Trial 3:

Counts Observed for the Span= 122362

Counters Observed for the Zero= 2983

Post Monitoring Calibration Check

Zero Air Reading: 10 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-16-21 Site Name: newby

Inspector(s): Paldo R Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: S Barometric Pressure: 30 "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: 54121 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	5
2	.2	499	1	4
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 133462

Counters Observed for the Zero= 3721

Trial 2:

Counts Observed for the Span= 133724

Counters Observed for the Zero= 3756

Trial 3:

Counts Observed for the Span= 133996

Counters Observed for the Zero= 3784

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 Reading: 1.2 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21　　　　Site Name: Newby

Inspector(s): Liam Mcginn　　　　Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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: 2364　　　　Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.1	497	3	3
2	0.1	497	3	2
3	0.2	499	1	2

Average Difference: 6.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 6.3 /500 x 100%

= 98.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 161036
Counters Observed for the Zero= 3769

Trial 2:
Counts Observed for the Span= 161499
Counters Observed for the Zero= 3780

Trial 3:
Counts Observed for the Span= 161607
Counters Observed for the Zero= 3797

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance　　Reading: 1.4 ppm

Downwind Location Description: Grid 169　　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: 3/16/21
Site Name: Newby
Inspector(s): Brant Wade
Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH
Wind Direction: S
Barometric Pressure: 29.9 "Hg
Air Temperature: 45 °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	.1	501	1	2
2	.2	501	1	3
3	.1	502	2	3

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 150708
Counters Observed for the Zero= 4729

Trial 2:
Counts Observed for the Span= 150998
Counters Observed for the Zero= 4780

Trial 3:
Counts Observed for the Span= 160209
Counters Observed for the Zero= 4767

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance
Reading: 1.4 ppm
Downwind Location Description: Grid 169
Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-16-21 Site Name: Naufry

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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: 1720 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
2	0.1	501	1	3
3	0.2	500	0	1

Average Difference: 0

*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= 158644
Counters Observed for the Zero= 3547

Trial 2:
Counts Observed for the Span= 158986
Counters Observed for the Zero= 3560

Trial 3:
Counts Observed for the Span= 159219
Counters Observed for the Zero= 3578

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid169 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: 3-16-21 Site Name: Newby

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: S Barometric Pressure: 24.9 "Hg

Air Temperature: 45 °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	0	498	2	3
2	.2	501	1	1
3	1.1	500	0	2

Average Difference: 3.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 3.3 /500 x 100%

= 99.34 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 108832
Counters Observed for the Zero= 3876

Trial 2:
Counts Observed for the Span= 109133
Counters Observed for the Zero= 3894

Trial 3:
Counts Observed for the Span= 109204
Counters Observed for the Zero= 3915

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Gr. d169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21 Site Name: Newby

Inspector(s): Byon Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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	499	1	3
2	.2	501	1	2
3	.1	502	2	1

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 122210
Counters Observed for the Zero= 2909

Trial 2:
Counts Observed for the Span= 122340
Counters Observed for the Zero= 2930

Trial 3:
Counts Observed for the Span= 122740
Counters Observed for the Zero= 2947

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3/16/21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 45 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	498	2	1
2	.2	499	1	2
3	.2	502	2	3

Average Difference: 3.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 3.6 /500 x 100%

= 99.2 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134144
Counters Observed for the Zero= 3740

Trial 2:
Counts Observed for the Span= 134444
Counters Observed for the Zero= 3757

Trial 3:
Counts Observed for the Span= 134507
Counters Observed for the Zero= 3767

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.6 ppm

Downwind Location Description: Grid 169 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: 3-17-21 Site Name: Newby

Inspector(s): Brant Wade Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	503	3	3
2	.0	501	1	4
3	1	499	1	2

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 145220
Counters Observed for the Zero= 4684

Trial 2:
Counts Observed for the Span= 145538
Counters Observed for the Zero= 4710

Trial 3:
Counts Observed for the Span= 145829
Counters Observed for the Zero= 4749

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 13 ppm

Downwind Location Description: Grid 169 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: 3-17-21 Site Name: newby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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	.0	502	2	4
2	.1	499	1	3
3	.1	498	2	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144927
Counters Observed for the Zero= 4736

Trial 3:
Counts Observed for the Span= 145239
Counters Observed for the Zero= 4775

Trial 2:
Counts Observed for the Span= 145108
Counters Observed for the Zero= 4751

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Gvi d164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21   Site Name: newby

Inspector(s): Bryan D   Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °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	503	3	5
2	.1	501	1	4
3	0	499	1	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134896
Counters Observed for the Zero= 3062

Trial 2:
Counts Observed for the Span= 113741
Counters Observed for the Zero= 3108

Trial 3:
Counts Observed for the Span= 113945
Counters Observed for the Zero= 3147

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 169   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: 3-17-21 Site Name: newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	3
2	.1	499	1	5
3	.2	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 113375

Counters Observed for the Zero= 3112

Trial 2:

Counts Observed for the Span= 113564

Counters Observed for the Zero= 3137

Trial 3:

Counts Observed for the Span= 113782

Counters Observed for the Zero= 3158

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.5 ppm

Downwind Location Description: Cr. & 164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: NW Barometric Pressure: 30 "Hg ^

Air Temperature: 39 °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: 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	4
2	1	501	1	3
3	0	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 171036
Counters Observed for the Zero= 4850

Trial 2:
Counts Observed for the Span= 171273
Counters Observed for the Zero= 4884

Trial 3:
Counts Observed for the Span= 171586
Counters Observed for the Zero= 4921

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 164 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: 3-17-21 Site Name: newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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: 5119 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	0	499	1	3
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= 170637

Counters Observed for the Zero= 4916

Trial 2:

Counts Observed for the Span= 170708

Counters Observed for the Zero= 4932

Trial 3:

Counts Observed for the Span= 170925

Counters Observed for the Zero= 4951

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.6 ppm

Downwind Location Description: Grid 164 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: 3-17-2021 Site Name: Newby

Inspector(s): Glenn Megginn Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	502	2	5
2	.1	501	1	4
3	0	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 182152

Counters Observed for the Zero= 3953

Trial 2:

Counts Observed for the Span= 182471

Counters Observed for the Zero= 3494

Trial 3:

Counts Observed for the Span= 182748

Counters Observed for the Zero= 4037

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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.

rost

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: newby

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °F General Weather Conditions: clody

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-1	501	1	3
2	-1	499	1	3
3	2	502	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 182176
Counters Observed for the Zero=

Trial 2:
Counts Observed for the Span= 182354
Counters Observed for the Zero=

Trial 3:
Counts Observed for the Span= 182581
Counters Observed for the Zero=

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	4
2	1	501	1	
3	0	499	1	

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= ~~165992~~
Counters Observed for the Zero= 3685

Trial 2:
Counts Observed for the Span= 166247
Counters Observed for the Zero= 3712

Trial 3:
Counts Observed for the Span= 166581
Counters Observed for the Zero= 3748

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrace Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: ne Barometric Pressure: 30 "Hg

Air Temperature: 51 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	501	1	3
3	.1	502	2	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 165783

Counters Observed for the Zero= 3706

Trial 2:

Counts Observed for the Span= 165972

Counters Observed for the Zero= 3721

Trial 3:

Counts Observed for the Span= 166083

Counters Observed for the Zero= 3757

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 164 Reading: 1.2 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: Newby

Inspector(s): Hunter D Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	504	4	4
2	0	501	1	3
3	.1	500	0	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129512
Counters Observed for the Zero= 3720

Trial 2:
Counts Observed for the Span= 129843
Counters Observed for the Zero= 3749

Trial 3:
Counts Observed for the Span= 130251
Counters Observed for the Zero= 37 86

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 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: 3-17-21 Site Name: newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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	502	2	3
2	.0	499	1	3
3	.0	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129374
Counters Observed for the Zero= 3752

Trial 2:
Counts Observed for the Span= 129592
Counters Observed for the Zero= 3769

Trial 3:
Counts Observed for the Span= 129851
Counters Observed for the Zero= 3783

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 164 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: 3-17-2021 Site Name: newby

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	498	2	
2		501	1	
3		500	0	

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%

= %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 117228	**Trial 3:** Counts Observed for the Span= 114847
Counters Observed for the Zero= 3916	Counters Observed for the Zero= 3979
Trial 2: Counts Observed for the Span= 117561	
Counters Observed for the Zero= 3949	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	500	0	4
2	.2	498	2	5
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= 113927
Counters Observed for the Zero= 3953

Trial 2:
Counts Observed for the Span= 114135
Counters Observed for the Zero= 3972

Trial 3:
Counts Observed for the Span= 114274
Counters Observed for the Zero= 3993

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-17-21 Site Name: NewWY

Inspector(s): Cody Crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 39 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	5
2	1	500	0	4
3	0	499	1	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= 141023
Counters Observed for the Zero= 3948

Trial 2:
Counts Observed for the Span= 141285
Counters Observed for the Zero= 3979

Trial 3:
Counts Observed for the Span= 141467
Counters Observed for the Zero= 4013

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 164 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: 3-17-21 Site Name: newby

Inspector(s): Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 51 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	4
2	.1	498	2	5
3	.1	499	1	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140872
Counters Observed for the Zero= 4005

Trial 2:
Counts Observed for the Span= 140965
Counters Observed for the Zero= 4027

Trial 3:
Counts Observed for the Span= 141079
Counters Observed for the Zero= 4041

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 164 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: Newby

Inspector(s): 3421 Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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~~ 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	501	1	4
2	.1	501	1	5
3	.2	499	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= 143988
Counters Observed for the Zero= 4008

Trial 2:
Counts Observed for the Span= 144273
Counters Observed for the Zero= 4034

Trial 3:
Counts Observed for the Span= 144589
Counters Observed for the Zero= 4083

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 16a 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.

post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): 5421 Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	498	2	3
2	.0	501	1	3
3	.0	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 142974
Counters Observed for the Zero= 4026

Trial 2:
Counts Observed for the Span= 143259
Counters Observed for the Zero= 4069

Trial 3:
Counts Observed for the Span= 143561
Counters Observed for the Zero= 4105

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °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	.1	503	3	5
2	.2	498	2	4
3	.1	501	1	4

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

= 100%- 2 /500 x 100%

=99.6%

Span Sensitivity:

Trial 1: Counts Observed for the Span= 166586	**Trial 3:** Counts Observed for the Span= 167342
Counters Observed for the Zero= 4909	Counters Observed for the Zero= 4965
Trial 2: Counts Observed for the Span= 166837	
Counters Observed for the Zero= 4938	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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: 3-23-21 Site Name: newby

Inspector(s): Brant W Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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	502	2	4
2	1	501	1	5
3	1	499	1	5

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= 169740
Counters Observed for the Zero= 4886

Trial 2:
Counts Observed for the Span= 170141
Counters Observed for the Zero= 4913

Trial 3:
Counts Observed for the Span= 170372
Counters Observed for the Zero= 4940

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 164 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: 3-23-21 Site Name: newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °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	.2	502	2	2
2	.0	498	2	3
3	.1	500	0	5

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%

= 1.3 %

Span Sensitivity:

Trial 1:		Trial 3:	
Counts Observed for the Span=	145735	Counts Observed for the Span=	146176
Counters Observed for the Zero=	4619	Counters Observed for the Zero=	4682
Trial 2:			
Counts Observed for the Span=	145959		
Counters Observed for the Zero=	4650		

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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	498	2	5
2	.2	501	1	4
3	.0	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

=99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 146448
Counters Observed for the Zero= 41587

Trial 2:
Counts Observed for the Span= 146841
Counters Observed for the Zero= 4612

Trial 3:
Counts Observed for the Span= 147108
Counters Observed for the Zero= 41679

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 169 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	499	1	5
2	0	498	2	4
3	1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129847
Counters Observed for the Zero= 2997

Trial 2:
Counts Observed for the Span= 129 985
Counters Observed for the Zero= 3022

Trial 3:
Counts Observed for the Span= 130106
Counters Observed for the Zero= 3053

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 169 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: 3-23-21 Site Name: newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	501	1	5
2	.1	498	2	5
3	.1	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 99.7 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129608
Counters Observed for the Zero= 2958

Trial 2:
Counts Observed for the Span= 129835
Counters Observed for the Zero= 2972

Trial 3:
Counts Observed for the Span= 130161
Counters Observed for the Zero= 2998

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 169 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.

8re

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-2021 Site Name: newby

Inspector(s): Don C7 Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	2	497	3	5
2	1	500	0	4
3	1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 16648
Counters Observed for the Zero= 3652

Trial 2:
Counts Observed for the Span= 16901
Counters Observed for the Zero= 3681

Trial 3:
Counts Observed for the Span= 16253
Counters Observed for the Zero= 3694

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: grid 169 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: 3-23-21 Site Name: Newby

Inspector(s): Don C7 Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	5
2	.1	499	1	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= 160873
Counters Observed for the Zero= 3671

Trial 2:
Counts Observed for the Span= 161247
Counters Observed for the Zero= 3692

Trial 3:
Counts Observed for the Span= 161486
Counters Observed for the Zero= 3720

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.4 ppm

Downwind Location Description: Grid 169 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-23-21 Site Name: newby

Inspector(s): Crown M Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 47 °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	.1	499	1	5
2	.1	499	1	4
3	.0	502	2	5

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= 126728
Counters Observed for the Zero= 3485

Trial 2:
Counts Observed for the Span= 126959
Counters Observed for the Zero= 3523

Trial 3:
Counts Observed for the Span= 127185
Counters Observed for the Zero= 3564

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 164 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: 3-23-21 Site Name: newby

Inspector(s): Liam M Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 66 °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	.2	498	2	4
2	.1	501	1	3
3	.1	501	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 125863
Counters Observed for the Zero= 3537

Trial 2:
Counts Observed for the Span= 126084
Counters Observed for the Zero= 3572

Trial 3:
Counts Observed for the Span= 126281
Counters Observed for the Zero= 3594

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: Cwid 169 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

Pre

Date: 3-27-21

Site Name: Newby

Inspector(s): Don Gibson

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH

Wind Direction: ENE

Barometric Pressure: 30 "Hg

Air Temperature: ~~60~~ 68 °F

General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220

Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- ~~99.7~~ 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 164128

Counters Observed for the Zero= 3602

Trial 2:

Counts Observed for the Span= 163017

Counters Observed for the Zero= 3631

Trial 3:

Counts Observed for the Span= 165721

Counters Observed for the Zero= 3612

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 69

Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

pre

Date: 3-27-21 Site Name: Newby

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131839
Counters Observed for the Zero= 3604

Trial 2:
Counts Observed for the Span= 131528
Counters Observed for the Zero= 3621

Trial 3:
Counts Observed for the Span= 130283
Counters Observed for the Zero= 3648

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: Gnd 169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 3-27-21 Site Name: NEWBY

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 70 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	2	501	1	1
2	1	503	3	2
3	2	499	1	1

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 165872
Counters Observed for the Zero= 3618

Trial 2:
Counts Observed for the Span= 164724
Counters Observed for the Zero= 3612

Trial 3:
Counts Observed for the Span= 164931
Counters Observed for the Zero= 3648

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 169 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 3-27-21 Site Name: Newby

Inspector(s): Ryan Haslam Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 70 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 129382
Counters Observed for the Zero= 3683

Trial 2:
Counts Observed for the Span= 129212
Counters Observed for the Zero= 3654

Trial 3:
Counts Observed for the Span= 130922
Counters Observed for the Zero= 3653

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 109 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-6-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 167823
Counters Observed for the Zero= 3628

Trial 2:
Counts Observed for the Span= 167712
Counters Observed for the Zero= 3631

Trial 3:
Counts Observed for the Span= 168453
Counters Observed for the Zero= 3712

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 171 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-6-21 Site Name: Nearby

Inspector(s): Don Gabson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 8 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: ____ °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 168922
Counters Observed for the Zero= 3731

Trial 2:
Counts Observed for the Span= 168712
Counters Observed for the Zero= 3712

Trial 3:
Counts Observed for the Span= 167384
Counters Observed for the Zero= 3648

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 171 Reading: 1.3 ppm

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

Attachment 6

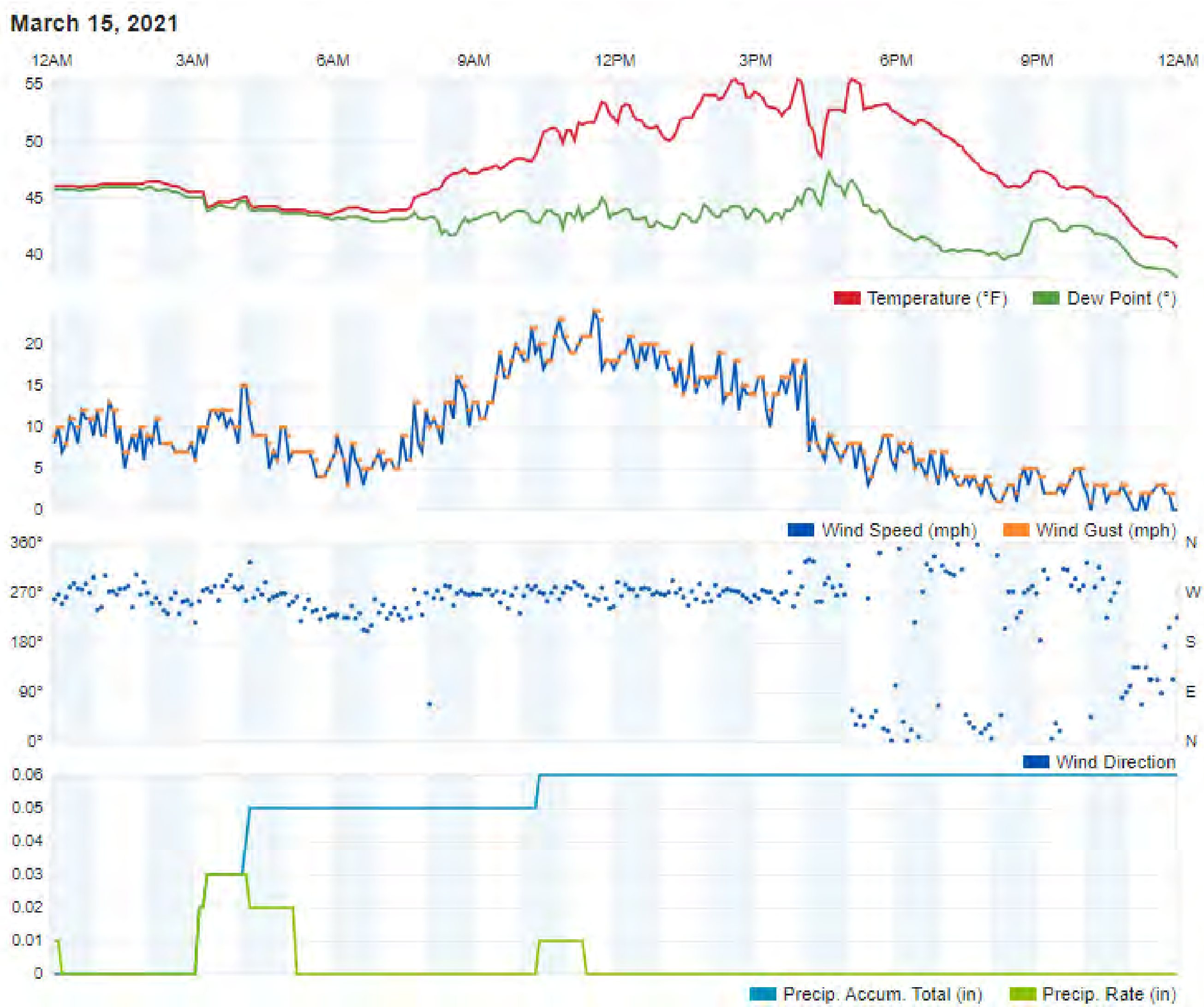
Weather Data

First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

March 12, 2021

Newby Island Landfill, Milpitas, California

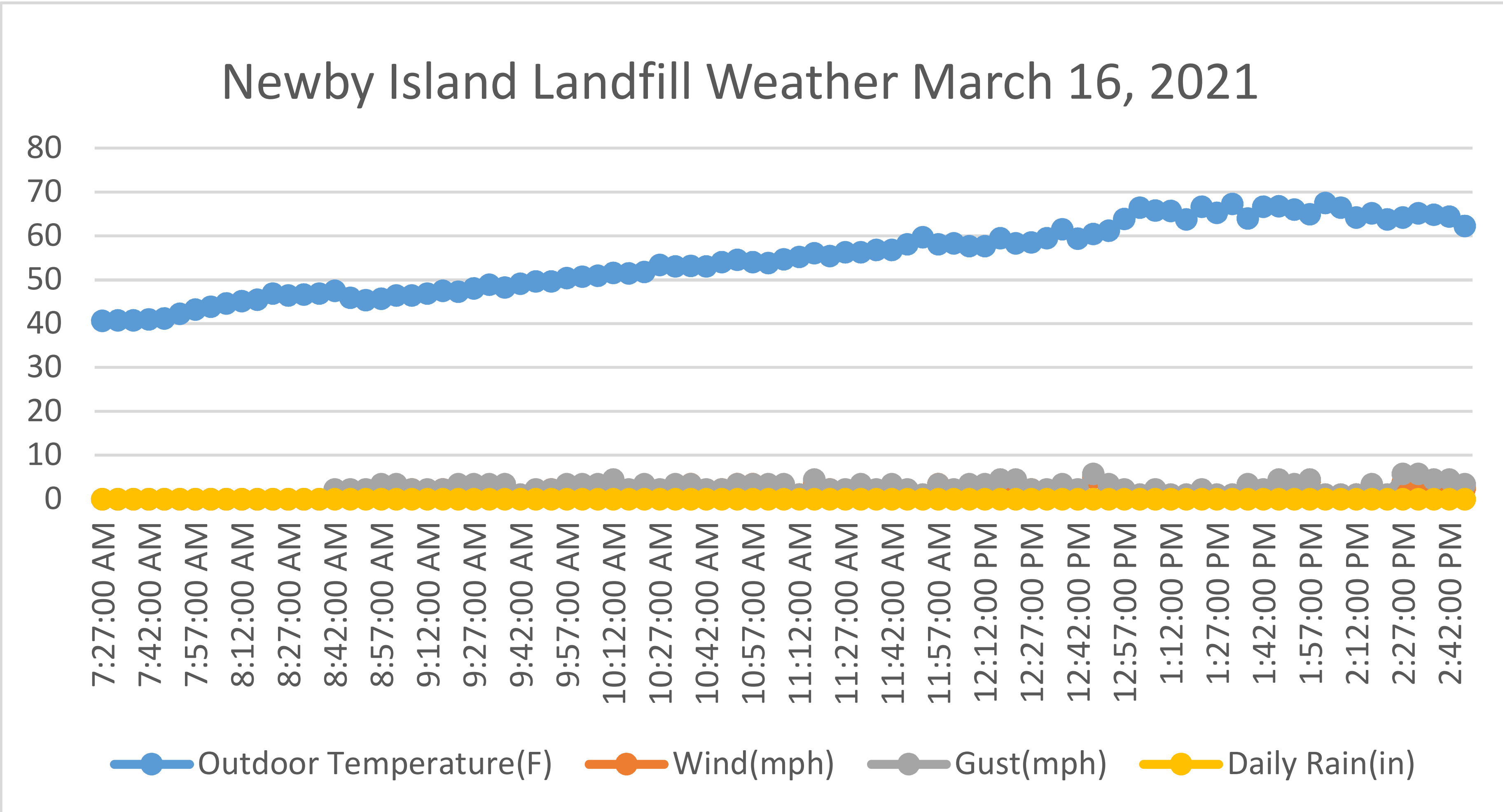


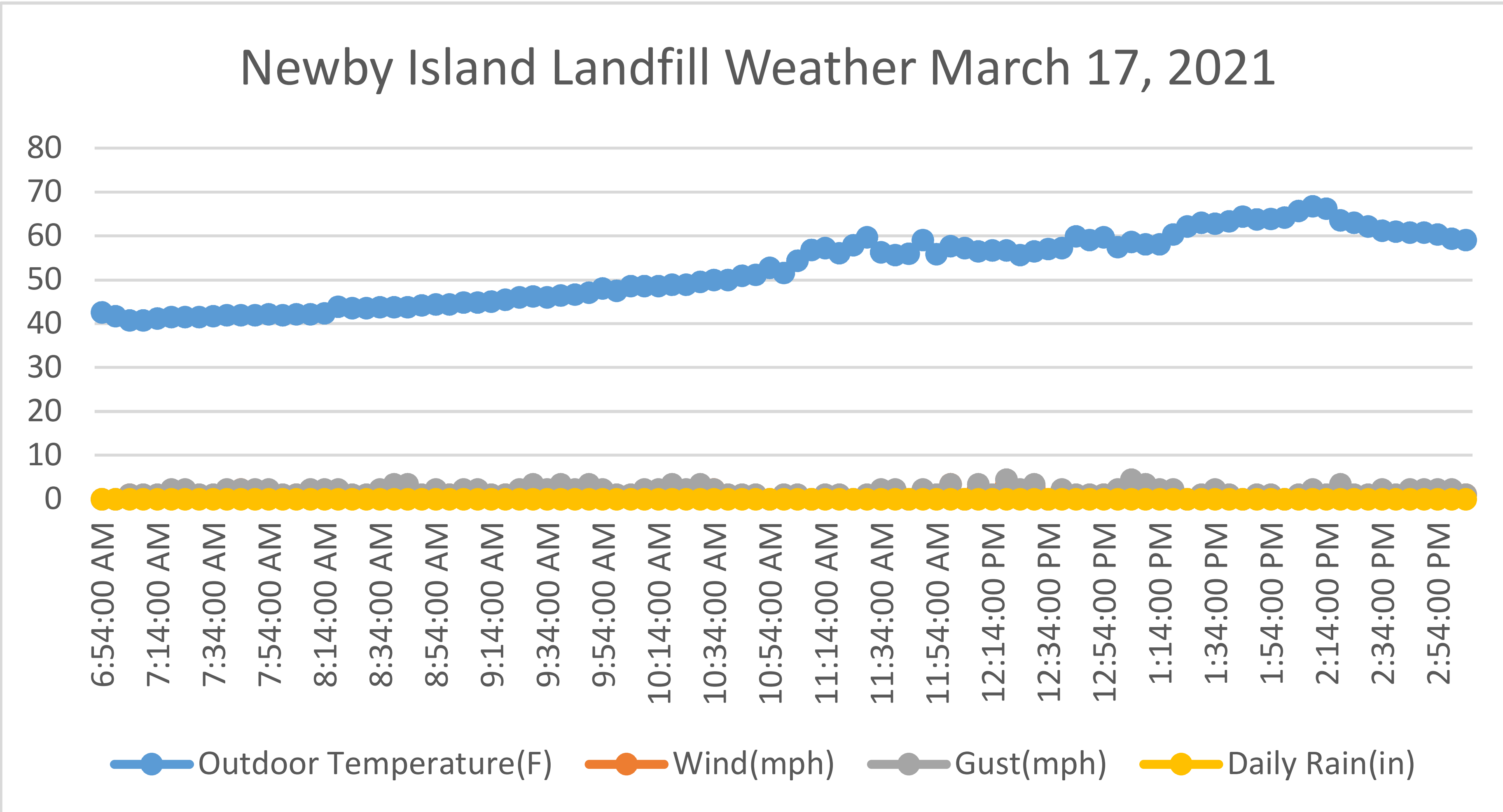
First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

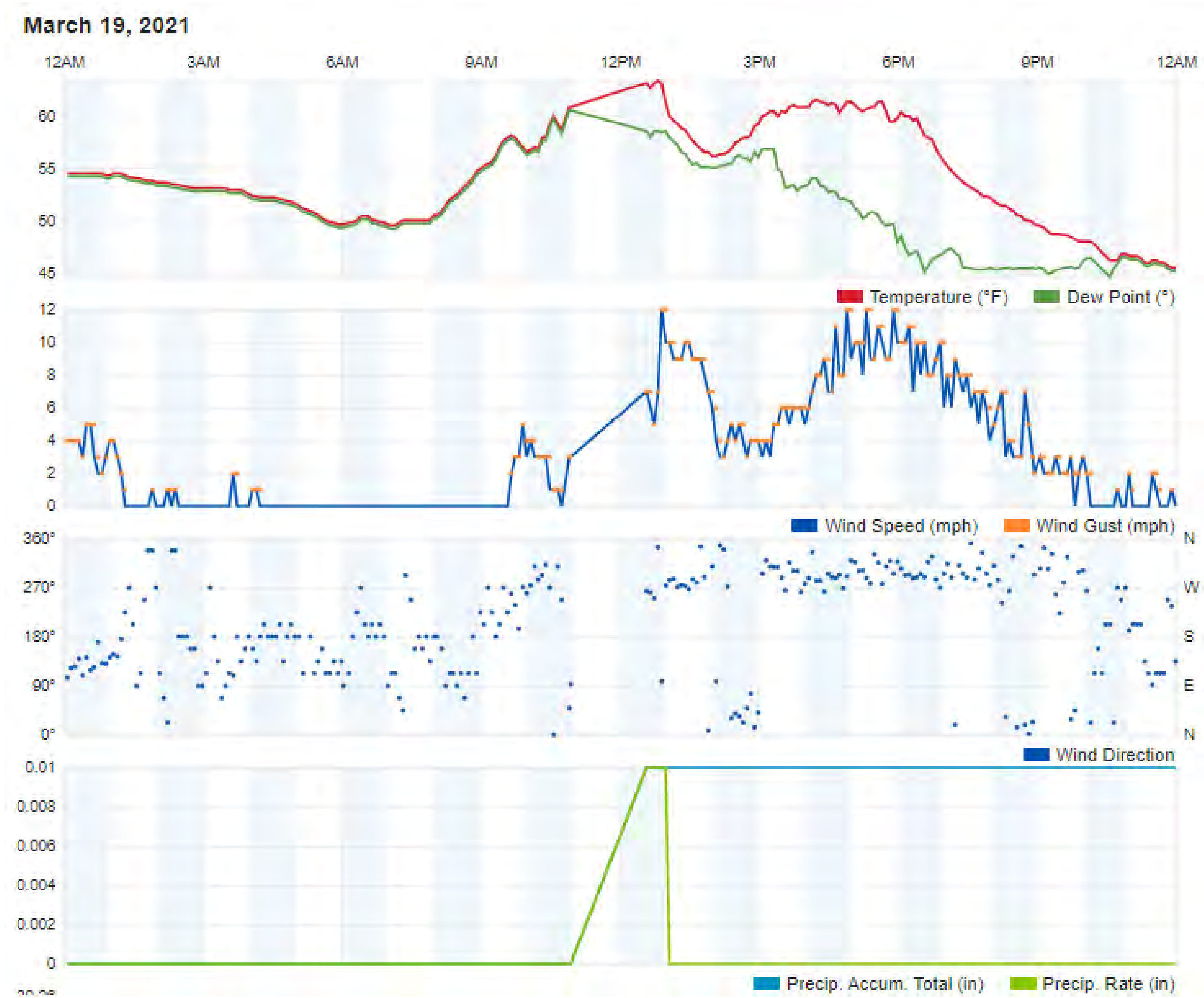
March 15, 2021

Newby Island Landfill, Milpitas, California


Newby Island Landfill Weather March 16, 2021
80
70
60
50
40
30
20
10
0
7:27:00 AM
7:42:00 AM
7:57:00 AM
8:12:00 AM
8:27:00 AM
8:42:00 AM
8:57:00 AM
9:12:00 AM
9:27:00 AM
9:42:00 AM
9:57:00 AM
10:12:00 AM
10:27:00 AM
10:42:00 AM
10:57:00 AM
11:12:00 AM
11:27:00 AM
11:42:00 AM
11:57:00 AM
12:12:00 PM
12:27:00 PM
12:42:00 PM
12:57:00 PM
1:12:00 PM
1:27:00 PM
1:42:00 PM
1:57:00 PM
2:12:00 PM
2:27:00 PM
2:42:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)



Newby Island Landfill Weather March 17, 2021
80
70
60
50
40
30
20
10
0
6:54:00 AM
7:14:00 AM
7:34:00 AM
7:54:00 AM
8:14:00 AM
8:34:00 AM
8:54:00 AM
9:14:00 AM
9:34:00 AM
9:54:00 AM
10:14:00 AM
10:34:00 AM
10:54:00 AM
11:14:00 AM
11:34:00 AM
11:54:00 AM
12:14:00 PM
12:34:00 PM
12:54:00 PM
1:14:00 PM
1:34:00 PM
1:54:00 PM
2:14:00 PM
2:34:00 PM
2:54:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)

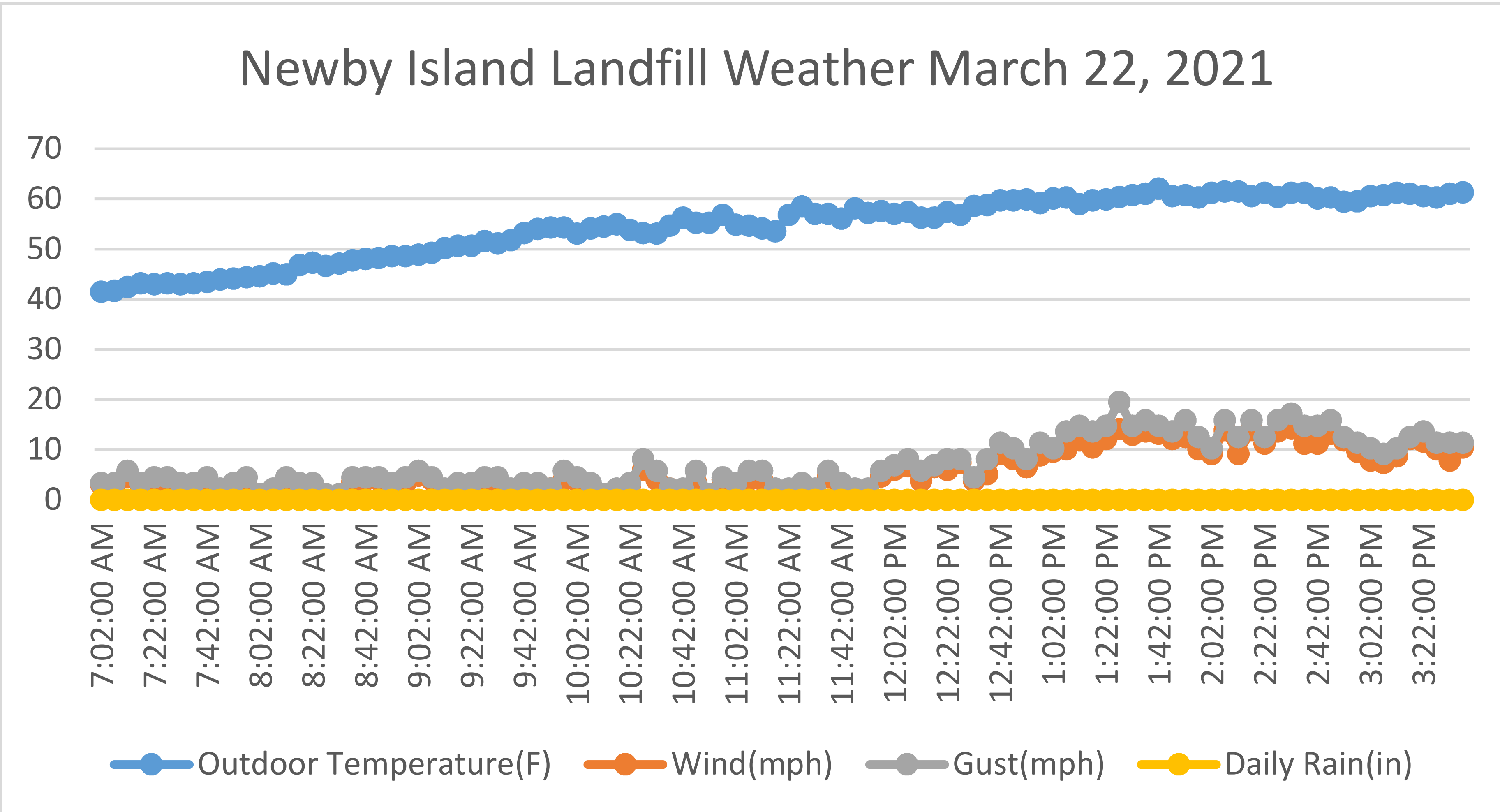


First Quarter 2021

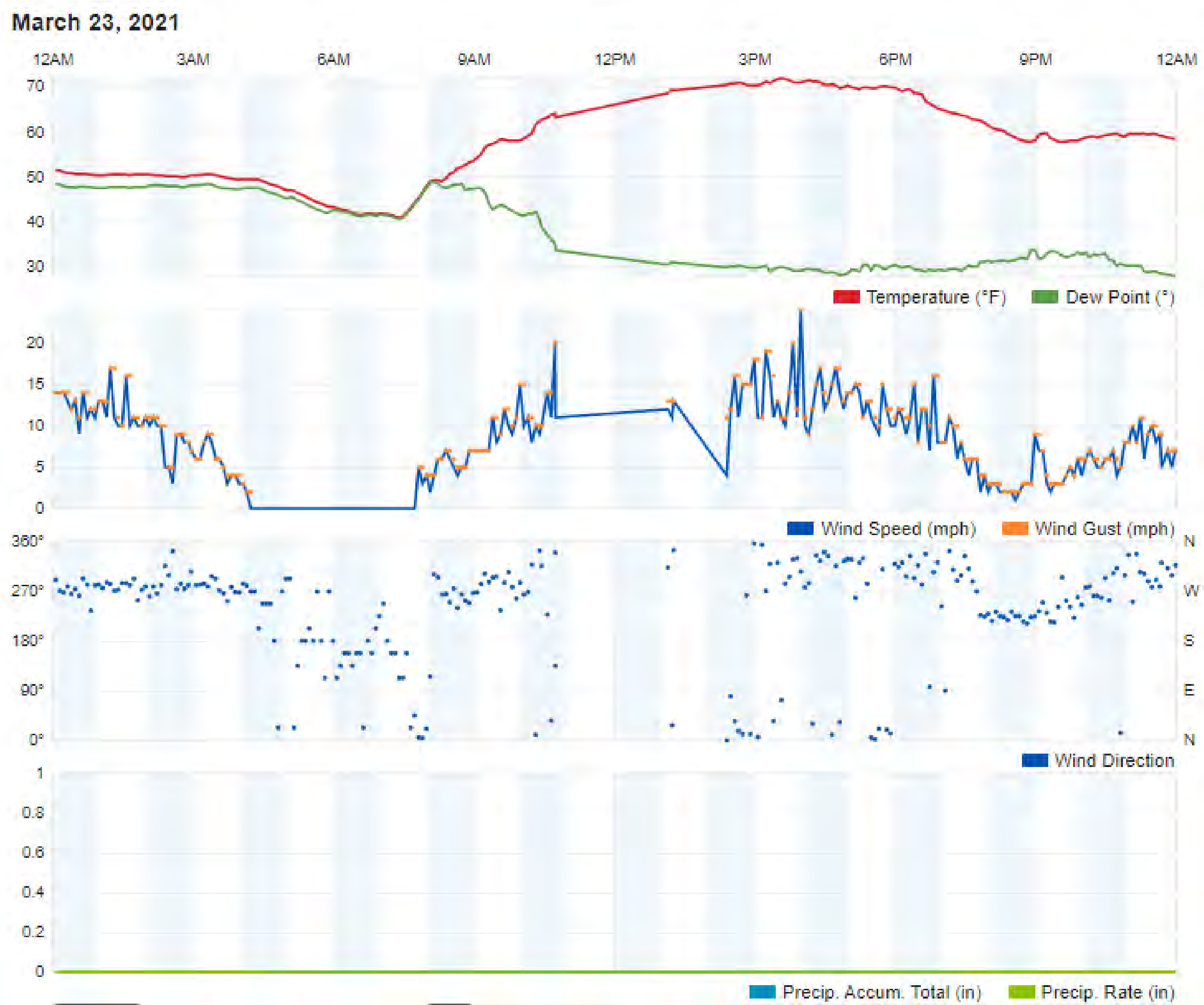
LMR Surface Emissions Monitoring Weather Data

March 19, 2021

Newby Island Landfill, Milpitas, California



Newby Island Landfill Weather March 22, 2021
70
60
50
40
30
20
10
0
7:02:00 AM
7:22:00 AM
7:42:00 AM
8:02:00 AM
8:22:00 AM
8:42:00 AM
9:02:00 AM
9:22:00 AM
9:42:00 AM
10:02:00 AM
10:22:00 AM
10:42:00 AM
11:02:00 AM
11:22:00 AM
11:42:00 AM
12:02:00 PM
12:22:00 PM
12:42:00 PM
1:02:00 PM
1:22:00 PM
1:42:00 PM
2:02:00 PM
2:22:00 PM
2:42:00 PM
3:02:00 PM
3:22:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)

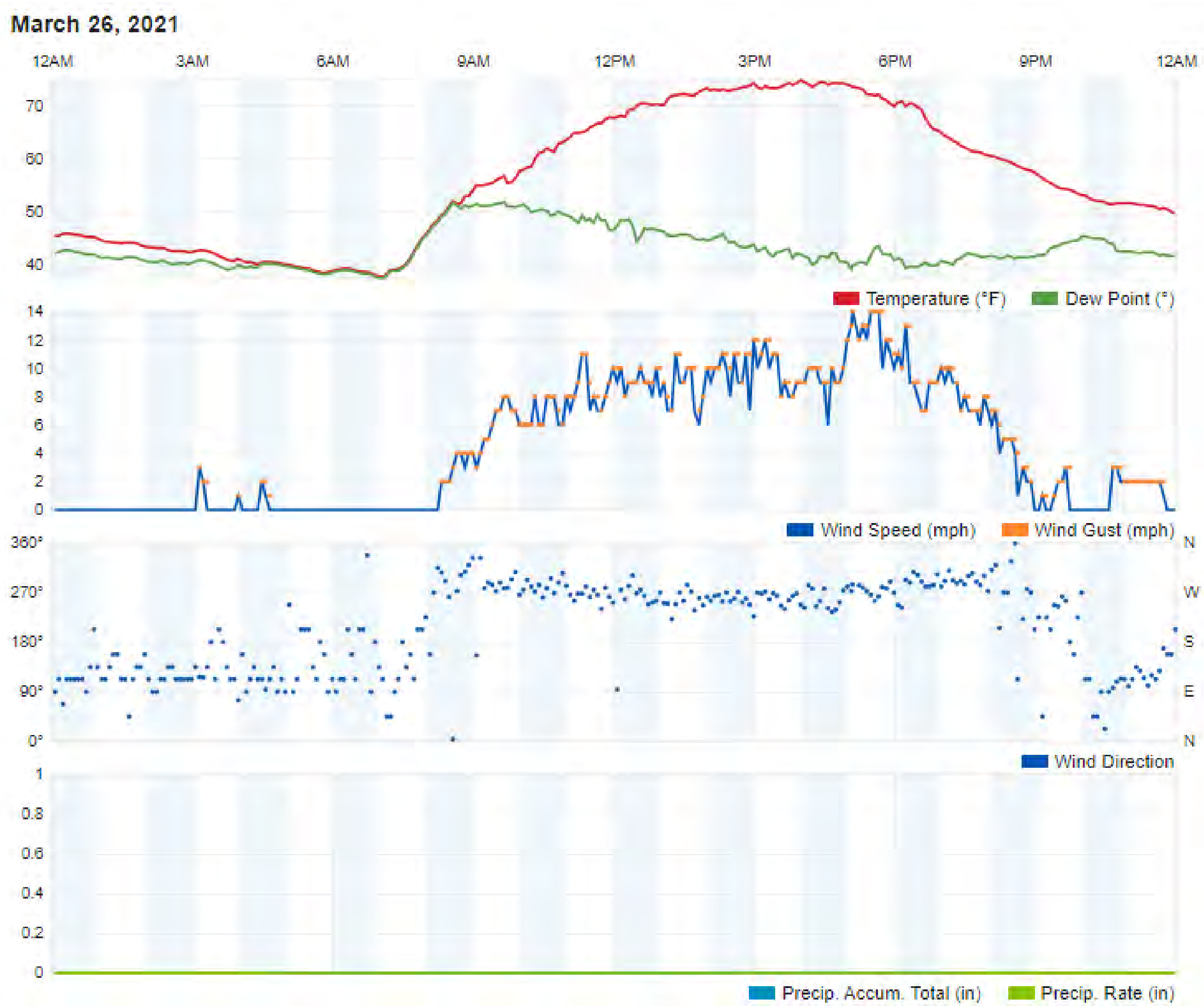


First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

March 23, 2021

Newby Island Landfill, Milpitas, California

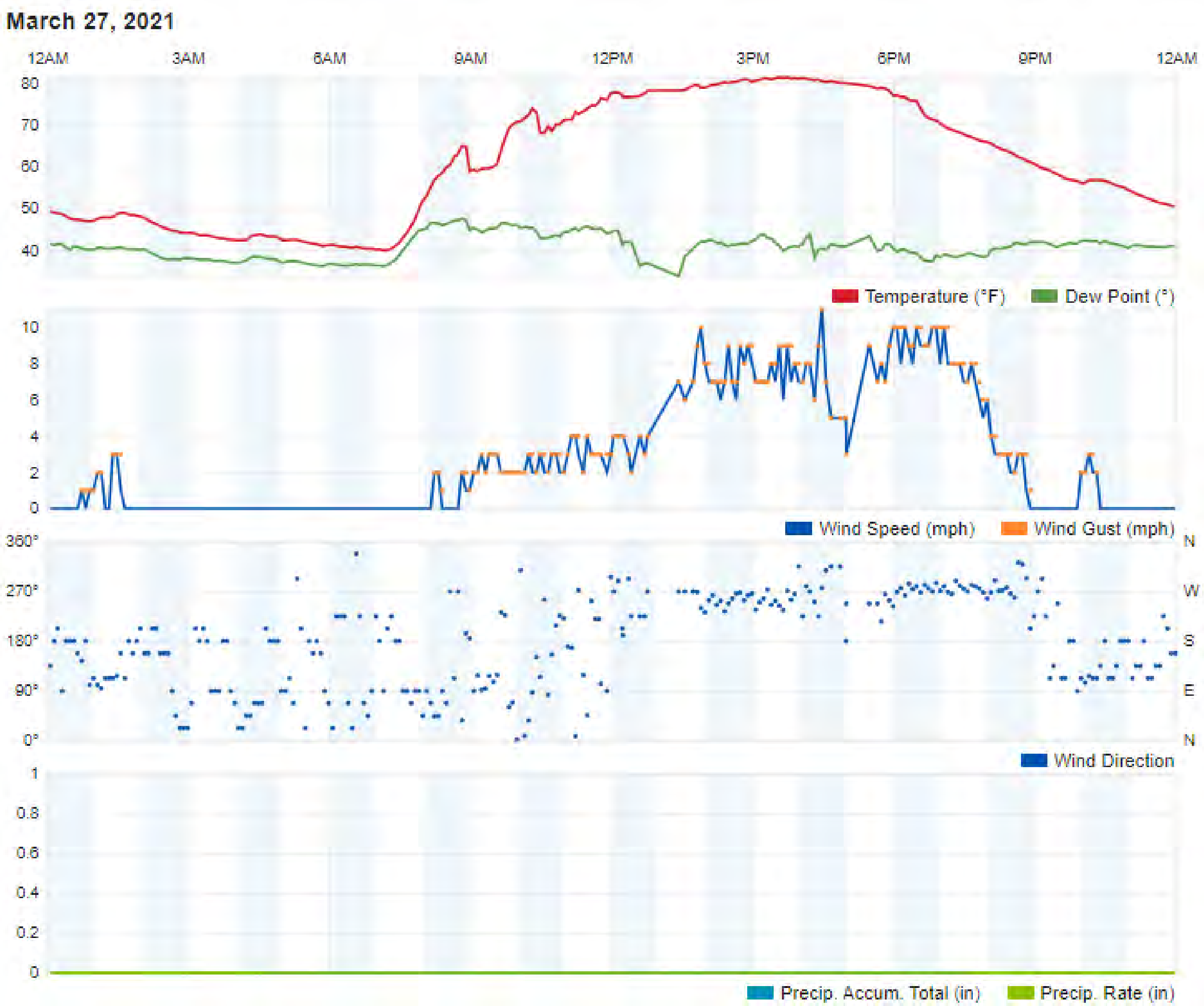


First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

March 26, 2021

Newby Island Landfill, Milpitas, California

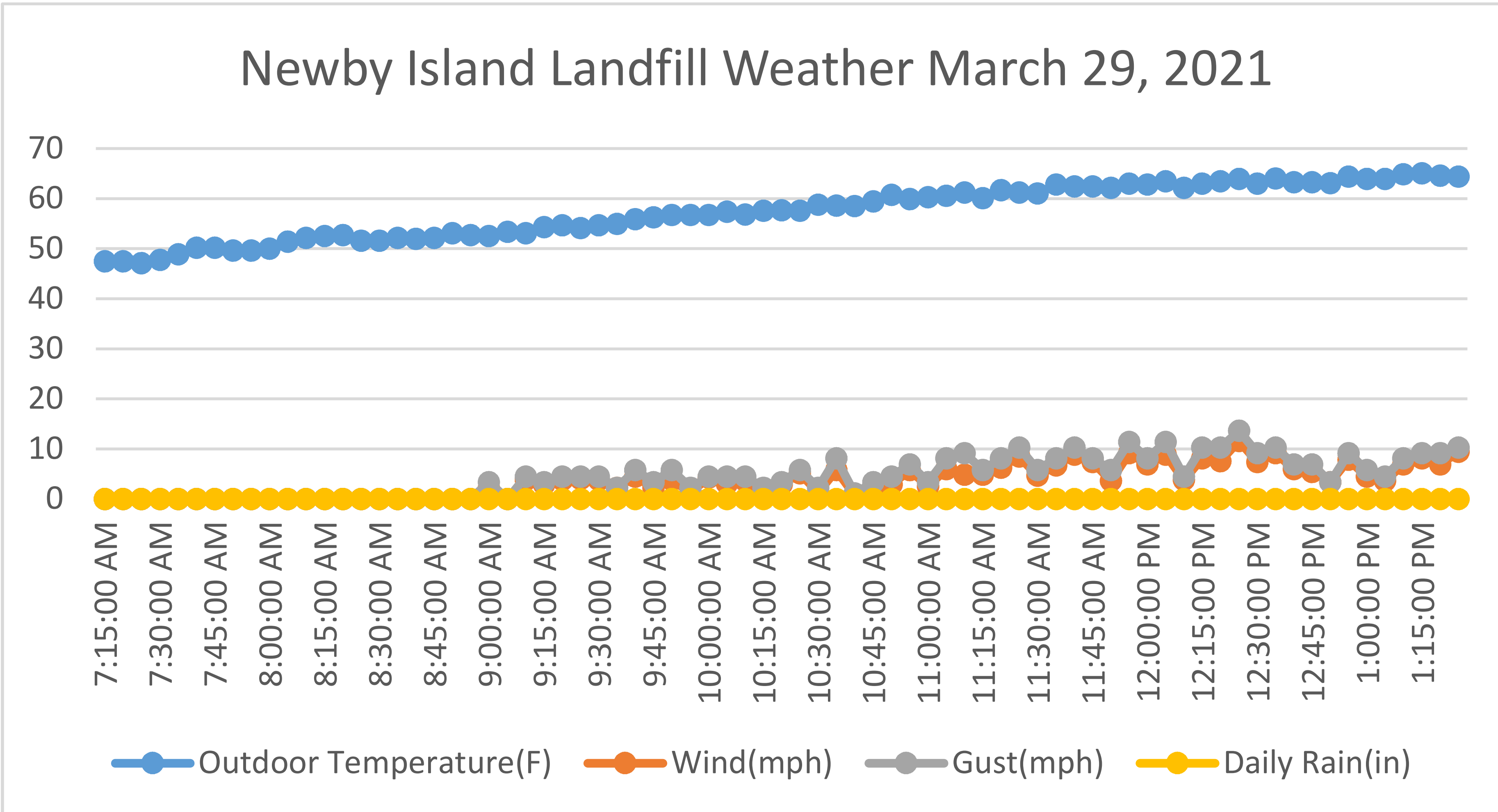


First Quarter 2021

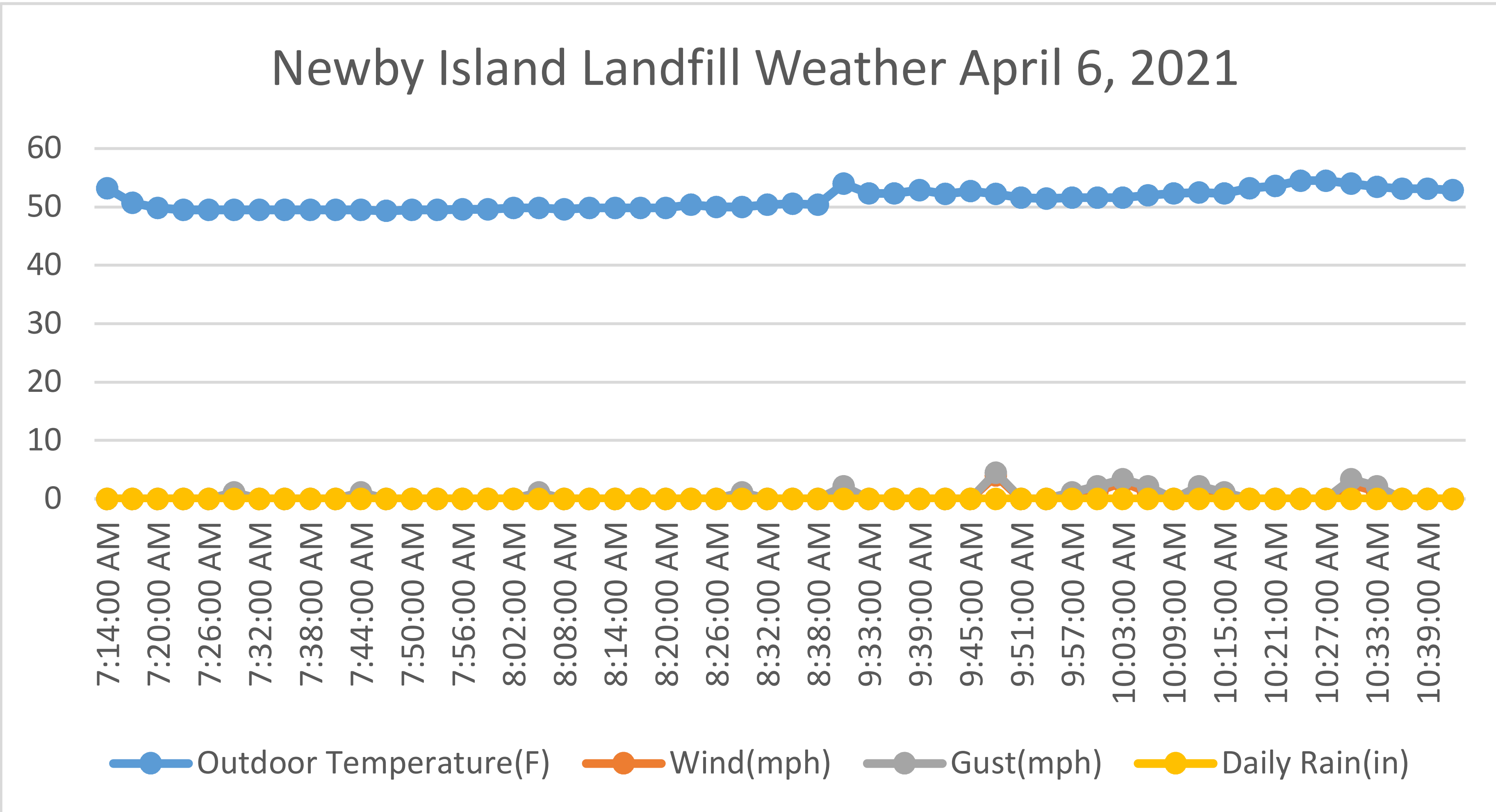
LMR Surface Emissions Monitoring Weather Data

March 27, 2021

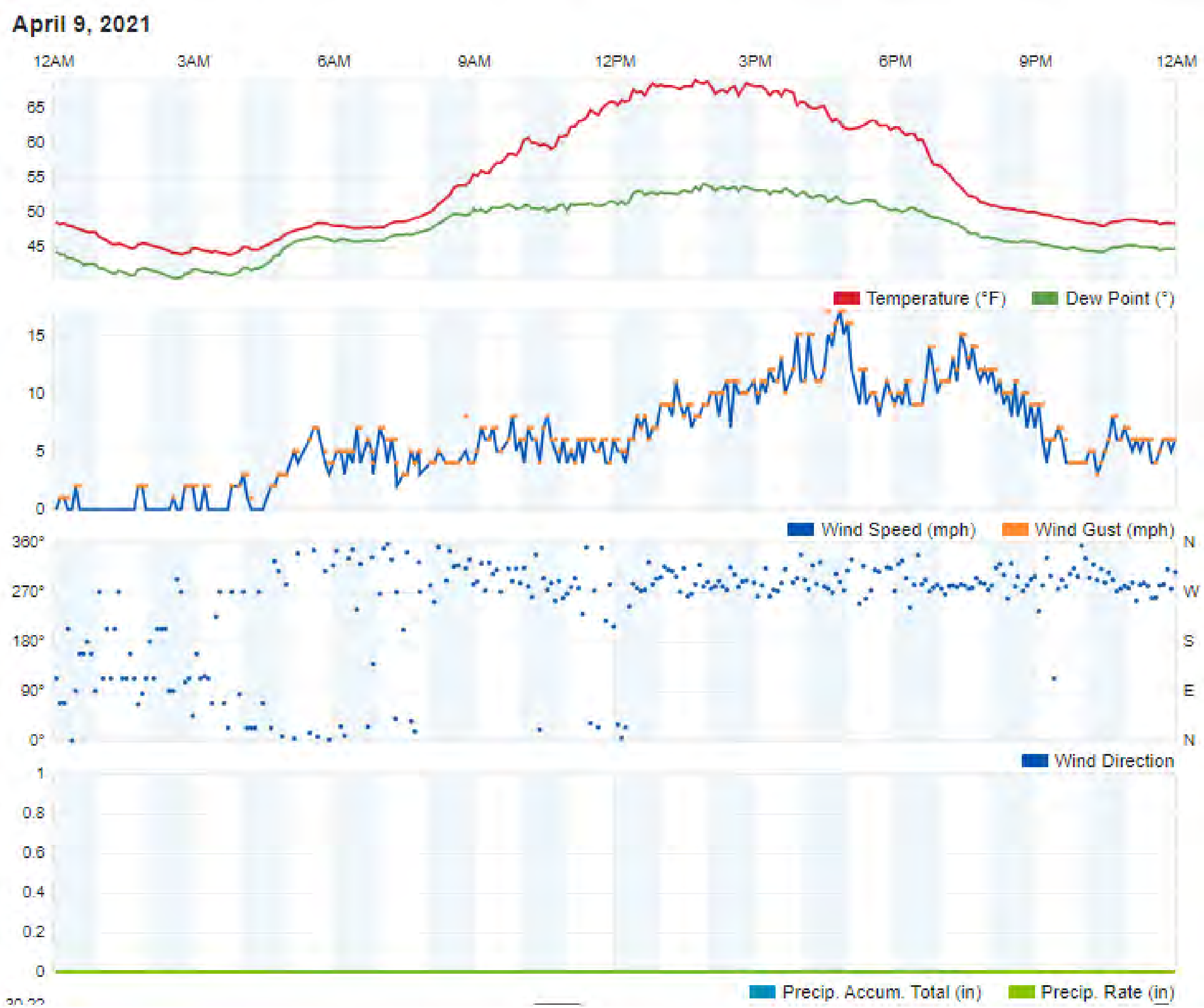
Newby Island Landfill, Milpitas, California



Newby Island Landfill Weather March 29, 2021
70
60
50
40
30
20
10
0
7:15:00 AM
7:30:00 AM
7:45:00 AM
8:00:00 AM
8:15:00 AM
8:30:00 AM
8:45:00 AM
9:00:00 AM
9:15:00 AM
9:30:00 AM
9:45:00 AM
10:00:00 AM
10:15:00 AM
10:30:00 AM
10:45:00 AM
11:00:00 AM
11:15:00 AM
11:30:00 AM
11:45:00 AM
12:00:00 PM
12:15:00 PM
12:30:00 PM
12:45:00 PM
1:00:00 PM
1:15:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)



Newby Island Landfill Weather April 6, 2021
60
50
40
30
20
10
0
7:14:00 AM
7:20:00 AM
7:26:00 AM
7:32:00 AM
7:38:00 AM
7:44:00 AM
7:50:00 AM
7:56:00 AM
8:02:00 AM
8:08:00 AM
8:14:00 AM
8:20:00 AM
8:26:00 AM
8:32:00 AM
8:38:00 AM
9:33:00 AM
9:39:00 AM
9:45:00 AM
9:51:00 AM
9:57:00 AM
10:03:00 AM
10:09:00 AM
10:15:00 AM
10:21:00 AM
10:27:00 AM
10:33:00 AM
10:39:00 AM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Daily Rain(in)



First Quarter 2021

LMR Surface Emissions Monitoring Weather Data

April 9, 2021

Newby Island Landfill, Milpitas, California

SCS FIELD SERVICES

Environmental
Consultants & Contractors

August 5, 2021
File No. 07221077.00

Ms. Rachelle Huber
Republic Services – Newby Island Landfill
1601 Dixon Landing Road
Milpitas, California 95035

Subject: Newby Island Landfill - Milpitas, California

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring for Second Quarter 2021.

Dear Ms. Huber:

SCS Field Services (SCS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Newby Island Landfill (Site) during the Second 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 appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Michael Flanagan at (510) 363-7796 or Whitney Stackhouse at (209) 338-7990 if you have any questions or comments.

Sincerely,

Whitney Stackhouse
Project Manager
SCS Field Services

Michael Flanagan
Project Manager
SCS Field Services

Encl.

Sean Bass, SCS Field Services
Art Jones, SCS Field Services

Newby Island Landfill

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

Second Quarter 2021

Presented to:

Ms. Rachelle Huber
Republic Services – Newby Island
1601 Dixon Landing Road
Milpitas, California 95035

SCS FIELD SERVICES

File No. 07221077.00 Task 01 | August 5, 2021

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

Newby Island Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring Second Quarter 2021

INTRODUCTION

This letter provides results of the April 8, 9, 12, 13, 22, and May 11, 2021, LMR and NSPS landfill surface emissions monitoring (SEM) performed by SCS Field Services (SCS) at the subject site. All work was performed in accordance with our approved Work Scope dated December 23, 2020, and the LMR requirements.

SUMMARY AND CONCLUSIONS

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, based on the previous monitoring events, in which exceedances were observed, the monitoring at the Newby Island Landfill was performed on 25-foot pathways in accordance with the LMR.

On, April 8, 9, 12, 13, 22, and May 11, 2021, SCS performed second quarter 2021 SEM as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that twenty-seven (27) locations exceeded the 500 ppmv maximum concentration during the initial monitoring event (Table 1 in Attachment 3). The required 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring indicated that all areas did not returned to below regulatory compliance limits following system adjustments and remediation (well field adjustments and installation of new bentonite plugs) by site personnel. Based on these monitoring results, and in accordance with the NSPS, the site is required to perform a system expansion within 120-days of the initial detected exceedance. These results are discussed in a subsequent section of this report.

Also, during the instantaneous monitoring event, SCS performed concurrent integrated monitoring of the landfill surface. As required by the LMR, the landfill was divided into 50,000 square foot areas. The Newby Island Landfill surface area was therefore divided into 233 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 landfilling activities, unsafe conditions, or there was no waste in place prior to the monitoring event.

During the monitoring event, there were six (6) grid areas observed to exceed the 25 ppmv LMR integrated average threshold (Table 2 in Attachment 4). The required first and second 10-day LMR follow-up monitoring indicated that all areas had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results no additional follow up testing was required.

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 piping and components indicated that all test locations were in compliance with the 500 ppmv requirement.

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. During this reporting period, four (4) locations were observed to exceed the 200 ppmv, reporting threshold. When these readings are observed, the locations are reported to site personnel for tracking and/or remediation and will be reported in the next submittal of the annual LMR report.

Finally, to help prevent potential future exceedances, SCS recommends that the landfill surface be routinely inspected and any observed surface erosion be routinely repaired.

BACKGROUND

The Newby Island Landfill is an active 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 gas, 40 to 50 percent carbon dioxide, and trace amount of various other gases, some of which are odorous. The Newby Island property contains a system to control the combustible gases generated in the landfill.

SURFACE EMISSIONS MONITORING

On April 8, 9, 12, 13, 22, and May 11, 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 monitoring on a 25-foot pathway in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

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

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

- 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 -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 6. Wind speed averages were observed to remain below the alternative threshold of 10 miles per hour, and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within 72 hours of the monitoring events. Therefore, site meteorological conditions were within the alternatives of the LMR requirements on the above mentioned dates.

TESTING RESULTS

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

On April 8, 9, 12 and 13, 2021, SCS performed second quarter 2021 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that twenty-seven (27) locations exceeded the 500 ppmv maximum concentration. The required 10-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring performed on April 13 and May 11, 2021, respectively, indicated that twenty-one (21) locations did not remain below compliance limits as required, following system adjustments and remediation (wellfield adjustment and borehole repairs using bentonite and soil) performed by SCS and site personnel. In accordance with NSPS requirements for expansion and remediation, the exceedance locations need to be remediated and returned to compliance in accordance with the rule (expansion of the collection system or an alternative compliance option if approved by the BAAQMD) within 120 days of the detected initial instantaneous exceedance, which will be due by August 11, 2021. Results of the initial and follow up monitoring are shown in Attachments 2 and 3 (Table 1).

Additionally, calculated integrated grid monitoring indicated six (6) integrated exceedances of the 25-ppmv requirement on April 8, 9 and 12, 2021. The required 10-day LMR follow-up monitoring performed on April 13 and 22, 2021, indicated that all areas had returned to compliance following system adjustments and remediation by site personnel. Based on these monitoring results no additional follow up testing was required. Results of the initial and follow up monitoring are shown in Attachment 4 (Table 2). Calibration logs for the monitoring equipment are provided in Attachment 5.

During this monitoring event, several grids were not monitored, in accordance with the LMR, due to active landfilling activities, unsafe conditions or no waste in place. SCS will continue to monitor all accessible locations during the third quarter 2021.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On April 9, 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 470 ppmv, was below the maximum threshold (see Table 1 for component results). Therefore, all pressurized piping and components located at the LFG BFS were in compliance at the time of our testing.

PROJECT SCHEDULE

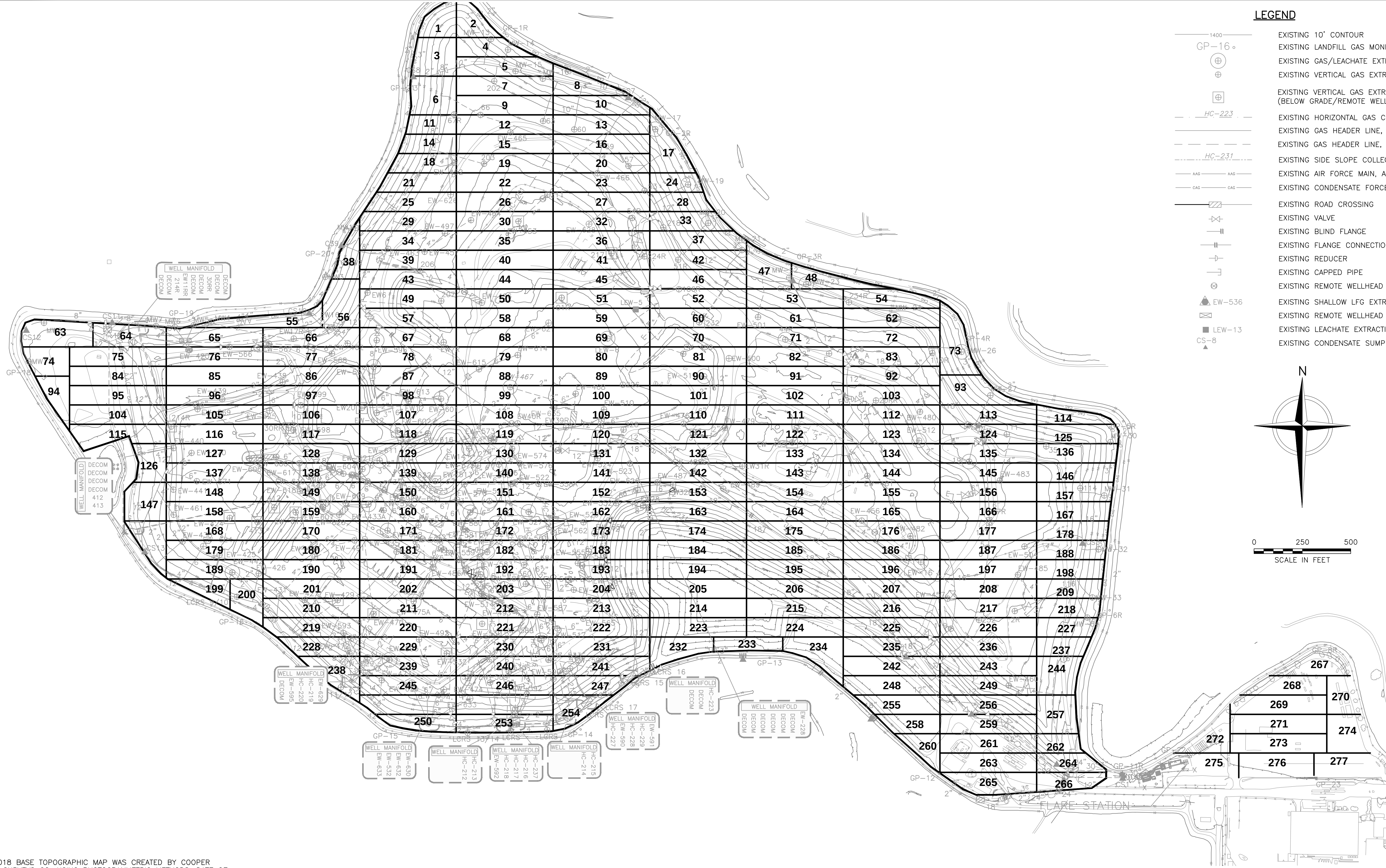
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the third quarter 2021 (July through September) surface emissions testing event is scheduled to be performed by the end of August 2021 in accordance with the Republic SOP unless an alternative timeline is requested by site personnel.

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

1400	EXISTING 10' CONTOUR
GP-16	EXISTING LANDFILL GAS MONITORING PROBE
	EXISTING GAS/LEACHATE EXTRACTION WELL
	EXISTING VERTICAL GAS EXTRACTION WELL (ABOVE GRADE)
	EXISTING VERTICAL GAS EXTRACTION WELL (BELOW GRADE/REMOTE WELLHEAD)
HC-223	EXISTING HORIZONTAL GAS COLLECTOR
	EXISTING GAS HEADER LINE, ON GRADE, SIZE VARIES
	EXISTING GAS HEADER LINE, BELOW GRADE, SIZE VARIES
HC-231	EXISTING SIDE SLOPE COLLECTOR
AAG	EXISTING AIR FORCE MAIN, ABOVE GRADE
CAG	EXISTING CONDENSATE FORCE MAIN, ABOVE GRADE
	EXISTING ROAD CROSSING
	EXISTING VALVE
	EXISTING BLIND FLANGE
	EXISTING FLANGE CONNECTION
	EXISTING REDUCER
	EXISTING CAPPED PIPE
	EXISTING REMOTE WELLHEAD
EW-536	EXISTING SHALLOW LFG EXTRACTION WELL
	EXISTING REMOTE WELLHEAD MANIFOLD
LEW-13	EXISTING LEACHATE EXTRACTION WELL
CS-8	EXISTING CONDENSATE SUMP

NOTES:

1. THE 2018 BASE TOPOGRAPHIC MAP WAS CREATED BY COOPER AERIAL SURVEYS CO. USING PHOTOGRAMMETRIC METHODS. DATE OF PHOTOGRAPHY: APRIL 17, 2018. HORIZONTAL DATUM: NAD27, ZONE 3, VERTICAL DATUM: LOCAL LANDFILL DATUM.
2. THE 2010 BASE AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY REPUBLIC. WELLS EW-487 THROUGH EW-489 ARE PER DESIGN LOCATIONS, NO SURVEY WAS RECEIVED FOR THESE WELLS. AS-BUILT LOCATIONS FOR HC-223 AND LCRS-17 ARE APPROXIMATE, NO SURVEY WAS RECEIVED FOR THESE WELLS.
3. THE 2017 GCCS AS-BUILT WELL AND PIPE LOCATIONS WERE PROVIDED BY RUGGERI, JENSEN, AZAR AND ASSOCIATES, DATES OF SURVEY: JANUARY 11, 20, AND FEBRUARY 24, 2017.
4. THE 2018 GCCS IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: MARCH 14, 2018.
5. THE 2018 GCCS PHASE II IMPROVEMENTS PER SURVEY PREPARED BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES, DATE OF SURVEY: AUGUST 6, 2018.

File: X:\PROJECTS\NEWBY ISLAND\180563 - PHASE II GCCS IMPROVEMENTS CQA_Project Drawings\

DRAFT

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 9/6/18
DRAWN BY RAW
DESIGNED BY DK
CHECKED BY AMN
APPROVED BY MED

cornerstone
A TETRA TECH COMPANY

NEWBY ISLAND LANDFILL
SANTA CLARA COUNTY, CALIFORNIA

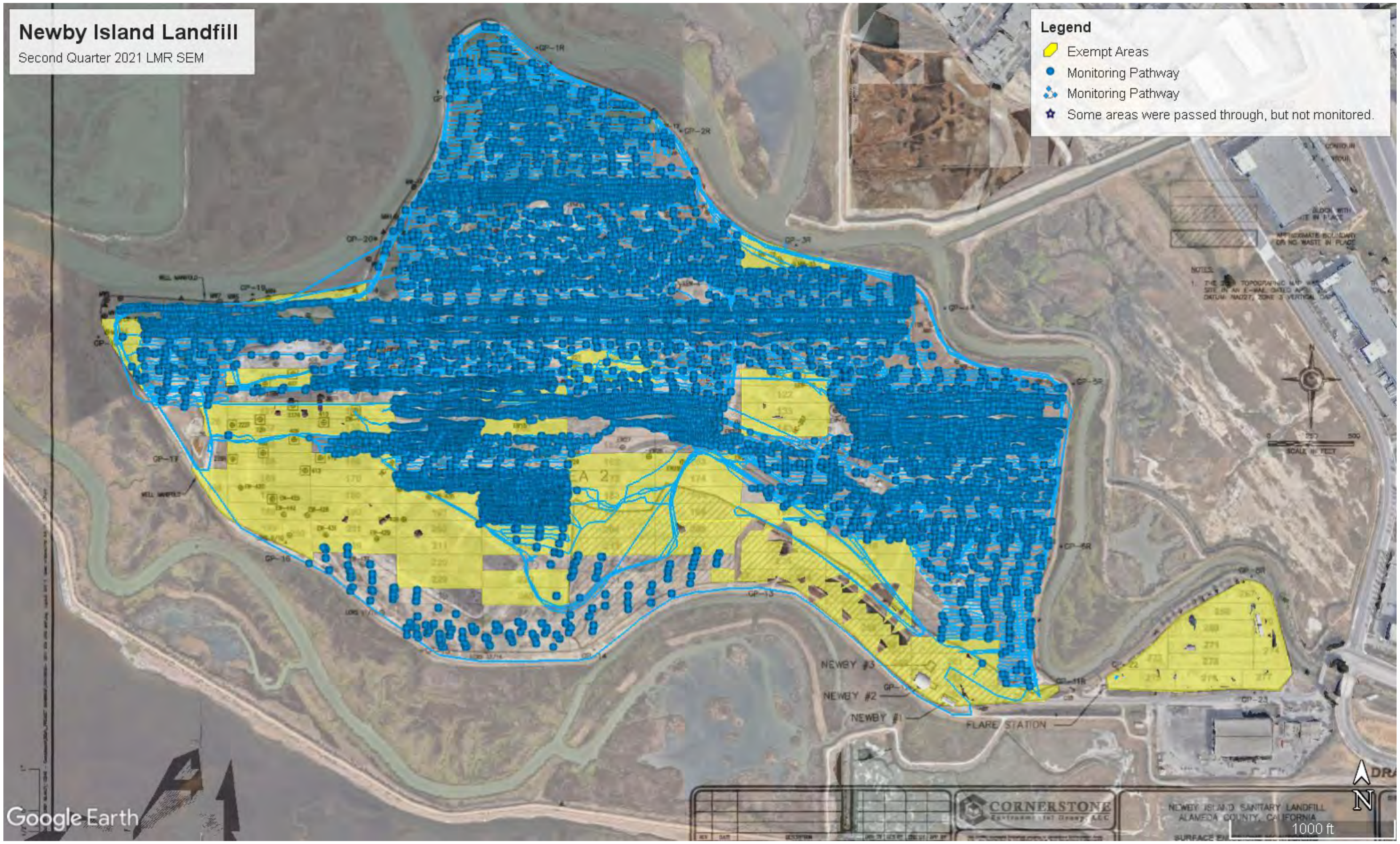
GCCS AS-BUILT SEM SITE PLAN

SHEET NO. 1

PROJECT NO. ------

Attachment 2

Surface Pathway



Second Quarter 2021

LMR Surface Emissions Monitoring Pathway

Newby Island Landfill, Milpitas, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

Second Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Instantaneous Data Report for April 8, 9, 12, 13, 22, and May 11, 2021

Location Well ID or Grid Number	Initial Monitoring (ppmv) April 13, 2021	10-Day Follow Up Monitoring (ppmv) April 22, 2021	20-Day Follow Up Monitoring (ppmv) NA	30-Day Follow Up Monitoring (ppmv) May 11, 2021
NILEW106	700	40	NA	41
NILEW510	930	100	NA	210
NILEW601	6,483	70	NA	2,975
NILEW615	36,700	150	NA	1,665
NILEW618	10,000	30	NA	200
NILEW620	10,000	200	NA	1,663
NILEW638	10,000	70	NA	2,490
NILEW663	1,000	100	NA	700
NILEW675	10,000	200	NA	245
NILEW676	10,000	100	NA	4,128
NILEW677	2,496	200	NA	2,489
NILEW682	20,000	200	NA	1,423
NILEW694	535	100	NA	778
NILEW720	1,187	100	NA	1,455
NILEW723	1,201	90	NA	1,900

Second Quarter 2021

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Location Well ID or Grid Number	Initial Monitoring (ppmv) April 13, 2021	10-Day Follow Up Monitoring (ppmv) April 22, 2021	20-Day Follow Up Monitoring (ppmv) NA	30-Day Follow Up Monitoring (ppmv) May 11, 2021
NILEW747	1,500	75	NA	753
NILEW749	1,315	20	NA	1,300
NILEW757	40,000	60	NA	7,401
NILEW763	8,474	12	NA	1,190
CS07	20,000	70	NA	2,796
CS08	900	50	NA	1,158
CS10B	2,784	90	NA	2,465
HC17-4	8,000	250	NA	2,897
MW014	4,500	60	NA	200
MW018	4,000	80	NA	496
MW020	1,000	90	NA	1,051
LEW05	2,000	150	NA	1,158
MW019	250	NA	NA	NA
NILEW460	328	NA	NA	NA
NILEW637	348	NA	NA	NA
NILEW629	438	NA	NA	NA

Second Quarter 2021

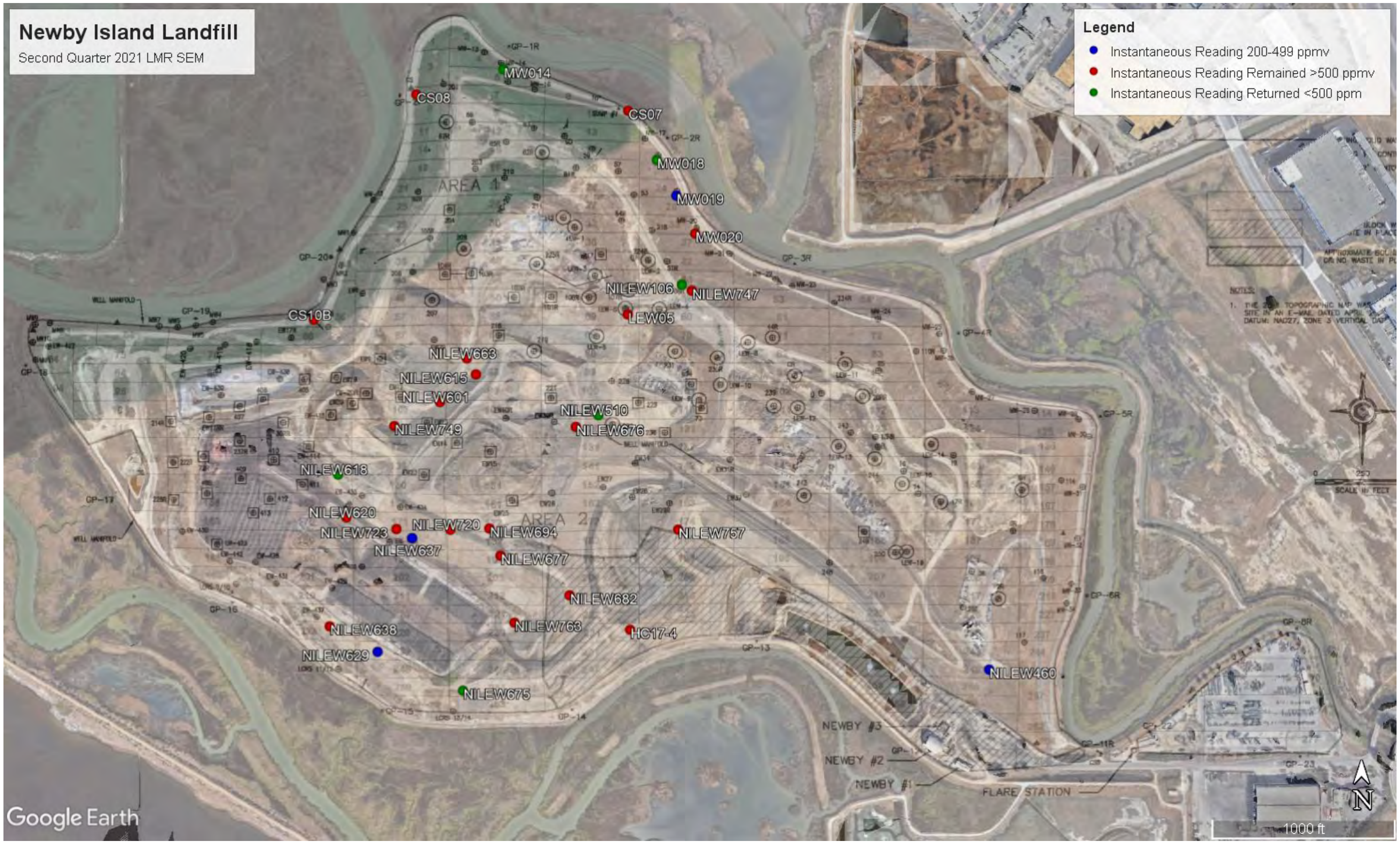
Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Pressurized Pipe

Location	**Date**	**Highest Concentration (ppmv)**
Flare Station	4/9/2021	470

No other exceedances of the 500 ppm threshold observed during the LMR/NSPS monitoring performed during the second quarter 2021.



Second Quarter 2021

Initial Emissions Monitoring Locations Greater Than 500 ppmv

Newby Island Landfill Milpitas, California

Attachment 4

Integrated Monitoring Results

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-001	4/8/2021	1.76	
NIL-002	4/8/2021	2.18	
NIL-003	4/8/2021	3.24	
NIL-004	4/8/2021	4.28	
NIL-005	4/8/2021	5.62	
NIL-006	4/8/2021	3.97	
NIL-007	4/8/2021	5.13	
NIL-008	4/8/2021	5.78	
NIL-009	4/12/2021	7.22	
NIL-010	4/12/2021	5.87	
NIL-011	4/12/2021	1.64	
NIL-012	4/12/2021	4.67	
NIL-013	4/12/2021	3.02	
NIL-014	4/12/2021	2.45	
NIL-015	4/12/2021	4.51	
NIL-016	4/12/2021	3.05	
NIL-017	4/12/2021	2.21	
NIL-018	4/12/2021	1.90	
NIL-019	4/12/2021	3.57	
NIL-020	4/12/2021	2.48	
NIL-021	4/12/2021	1.59	
NIL-022	4/12/2021	5.78	
NIL-023	4/12/2021	7.51	
NIL-024	4/12/2021	4.87	
NIL-025	4/9/2021	1.71	
NIL-026	4/9/2021	2.33	
NIL-027	4/9/2021	5.22	
NIL-028	4/9/2021	3.50	
NIL-029	4/12/2021	3.26	
NIL-030	4/12/2021	4.35	
NIL-031	--	--	Grid Is Not On The Grid Map
NIL-032	4/12/2021	4.64	
NIL-033	4/12/2021	3.87	
NIL-034	4/12/2021	2.65	
NIL-035	4/12/2021	3.04	
NIL-036	4/12/2021	3.57	
NIL-037	4/12/2021	4.57	
NIL-038	4/9/2021	2.26	
NIL-039	4/12/2021	3.28	
NIL-040	4/12/2021	3.86	
NIL-041	4/12/2021	4.29	
NIL-042	4/12/2021	4.66	
NIL-043	4/12/2021	2.15	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-044	4/12/2021	2.14	
NIL-045	4/12/2021	2.56	
NIL-046	4/12/2021	3.74	
NIL-047	--	--	Native
NIL-048	--	--	Native
NIL-049	4/12/2021	2.50	
NIL-050	4/12/2021	2.86	
NIL-051	4/12/2021	8.27	
NIL-052	4/12/2021	5.19	
NIL-053	4/12/2021	4.19	
NIL-054	4/12/2021	5.65	
NIL-055	--	--	Native
NIL-056	4/9/2021	2.00	
NIL-057	4/12/2021	1.78	
NIL-058	4/12/2021	2.75	
NIL-059	4/12/2021	6.99	
NIL-060	4/12/2021	7.34	
NIL-061	4/12/2021	1.91	
NIL-062	4/12/2021	3.28	
NIL-063	4/8/2021	1.94	
NIL-064	4/8/2021	4.82	
NIL-065	4/8/2021	2.68	
NIL-066	4/8/2021	5.34	
NIL-067	4/8/2021	2.28	
NIL-068	4/8/2021	4.24	
NIL-069	4/8/2021	7.46	
NIL-070	4/8/2021	4.57	
NIL-071	4/8/2021	1.79	
NIL-072	4/8/2021	2.24	
NIL-073	4/9/2021	1.78	
NIL-074	--	--	Native
NIL-075	4/9/2021	2.01	
NIL-076	4/9/2021	1.41	
NIL-077	4/9/2021	4.11	
NIL-078	4/9/2021	3.37	
NIL-079	4/9/2021	6.95	
NIL-080	4/9/2021	11.51	
NIL-081	4/9/2021	2.84	
NIL-082	4/9/2021	1.36	
NIL-083	4/9/2021	1.36	
NIL-084	4/8/2021	3.91	
NIL-085	4/8/2021	3.44	
NIL-086	4/8/2021	4.08	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-087	4/8/2021	4.36	
NIL-088	4/8/2021	14.01	
NIL-089	4/8/2021	8.96	
NIL-090	4/8/2021	7.04	
NIL-091	4/8/2021	3.43	
NIL-092	4/8/2021	3.14	
NIL-093	4/8/2021	1.61	
NIL-094	--	--	Native
NIL-095	4/8/2021	4.66	
NIL-096	4/8/2021	2.19	
NIL-097	4/8/2021	7.54	
NIL-098	4/8/2021	5.26	
NIL-099	4/8/2021	18.74	
NIL-100	--	--	Active
NIL-101	4/8/2021	2.83	
NIL-102	4/8/2021	2.31	
NIL-103	4/8/2021	1.72	
NIL-104	4/8/2021	4.40	
NIL-105	--	--	Leachate Pond
NIL-106	4/9/2021	7.18	
NIL-107	4/9/2021	10.15	
NIL-108 NIL-108	4/9/2021 4/13/2021	30.59 19.29	
NIL-109	--	--	Active
NIL-110	4/8/2021	4.06	
NIL-111	--	--	Pallet Yard
NIL-112	4/8/2021	2.34	
NIL-113	4/8/2021	2.48	
NIL-114	4/8/2021	2.76	
NIL-115	4/8/2021	4.93	
NIL-116	4/8/2021	6.02	
NIL-117	4/8/2021	5.57	
NIL-118	4/8/2021	9.29	
NIL-119	--	--	Active
NIL-120 NIL-120	4/8/2021 4/13/2021	25.39 19.69	Misread
NIL-121	4/8/2021	3.23	
NIL-122	--	--	Pallet Yard
NIL-123	4/8/2021	1.45	
NIL-124	4/8/2021	1.51	
NIL-125	4/8/2021	1.71	
NIL-126	--	--	Mulch Area
NIL-127	--	--	Mulch Area

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-128	--	--	Mulch Area
NIL-129	4/9/2021	15.71	
NIL-130	4/9/2021	22.20	
NIL-131	4/9/2021	24.63	
NIL-132	4/9/2021	3.68	
NIL-133	--	--	Pallet Yard
NIL-134	4/9/2021	2.41	
NIL-135	4/9/2021	2.39	
NIL-136	4/9/2021	2.49	
NIL-137	--	--	Compost Operations
NIL-138	--	--	Compost Operations
NIL-139	4/9/2021	22.25	
NIL-140	--	--	Active
NIL-141	4/9/2021	14.49	
NIL-142	4/9/2021	2.93	
NIL-143	--	--	Pallet Yard
NIL-144	4/9/2021	3.12	
NIL-145	4/9/2021	2.45	
NIL-146	4/9/2021	2.50	
NIL-147	4/9/2021	3.69	
NIL-148	--	--	Active
NIL-149	4/9/2021	6.36	
NIL-150	4/9/2021	17.30	
NIL-151	4/9/2021	9.81	
NIL-152	4/9/2021	23.99	
NIL-153	4/9/2021	5.03	
NIL-154	4/9/2021	4.53	
NIL-155	4/9/2021	3.36	
NIL-156	4/9/2021	1.75	
NIL-157	4/9/2021	1.94	
NIL-158	--	--	Active
NIL-159	--	--	Active
NIL-160	4/9/2021	15.70	
NIL-161	4/9/2021	14.38	
NIL-162	--	--	Active
NIL-163	--	--	Active
NIL-164	4/9/2021	4.19	
NIL-165	4/9/2021	3.95	
NIL-166	4/9/2021	2.02	
NIL-167	4/9/2021	2.07	
NIL-168	--	--	Active
NIL-169	--	--	Active
NIL-170	--	--	Active

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

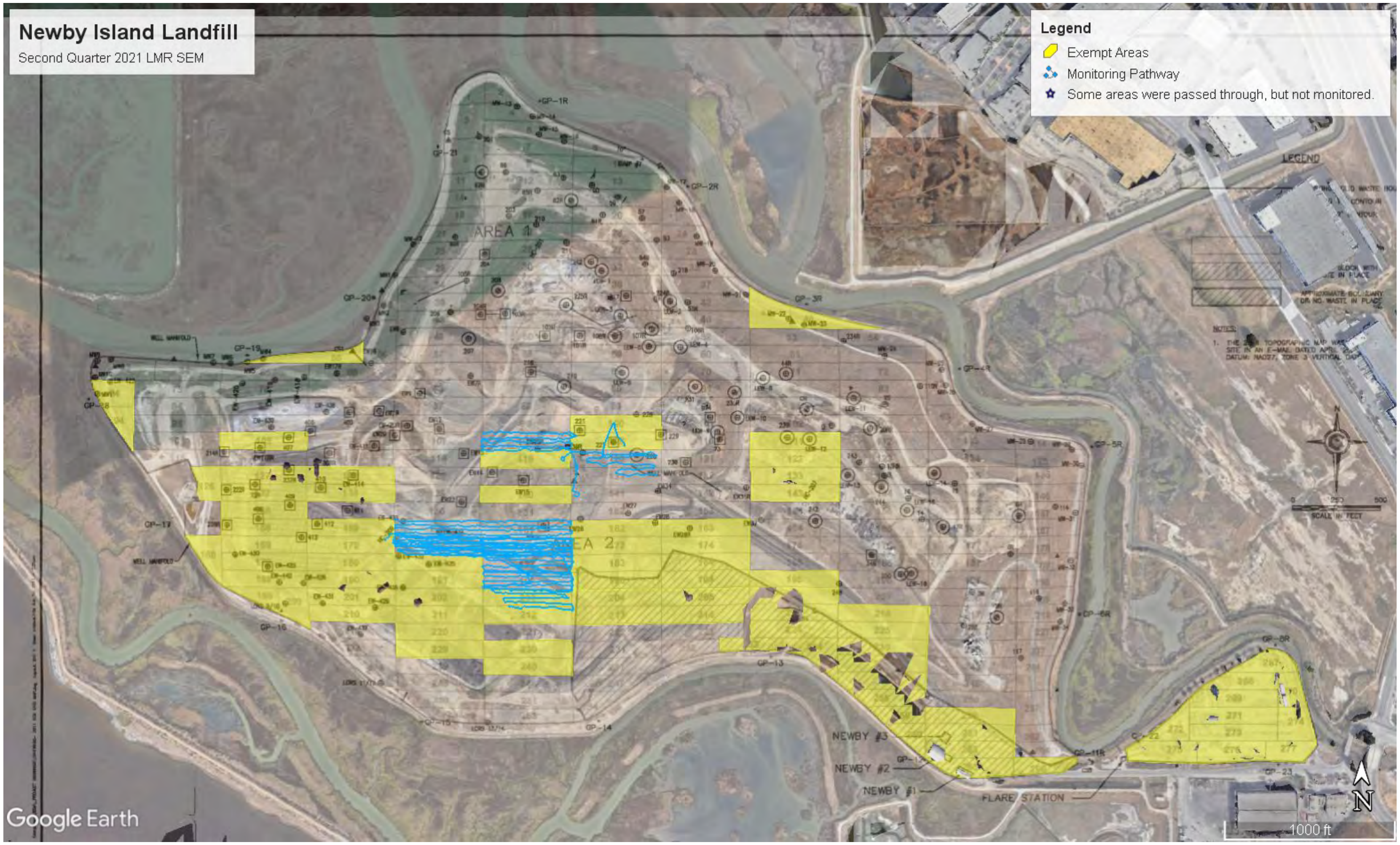
Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-171	4/12/2021	45.48	
NIL-171	4/22/2021	15.68	
NIL-172	4/12/2021	69.23	
NIL-172	4/22/2021	14.53	
NIL-173	--	--	Active
NIL-174	--	--	Active
NIL-175	4/12/2021	3.05	
NIL-176	4/12/2021	2.47	
NIL-177	4/12/2021	1.92	
NIL-178	4/12/2021	1.98	
NIL-179	--	--	Compost Operations
NIL-180	--	--	Compost Operations
NIL-181	--	--	Compost Operations
NIL-182	4/12/2021	54.42	
NIL-182	4/22/2021	15.09	
NIL-183	--	--	Active
NIL-184	--	--	Active
NIL-185	4/12/2021	9.51	
NIL-186	4/12/2021	3.40	
NIL-187	4/12/2021	1.49	
NIL-188	4/12/2021	2.04	
NIL-189	--	--	Compost Operations
NIL-190	--	--	Compost Operations
NIL-191	--	--	Compost Operations
NIL-192	4/12/2021	41.19	
NIL-192	4/22/2021	18.00	
NIL-193	--	--	Active
NIL-194	--	--	Active
NIL-195	--	--	Active
NIL-196	4/12/2021	2.55	
NIL-197	4/12/2021	2.16	
NIL-198	4/12/2021	2.28	
NIL-199	--	--	Compost Operations
NIL-200	--	--	Compost Operations
NIL-201	--	--	Compost Operations
NIL-202	--	--	Compost Operations
NIL-203	--	--	Compost Operations
NIL-204	--	--	Active
NIL-205	--	--	Active
NIL-206	--	--	Active
NIL-207	4/12/2021	4.24	
NIL-208	4/12/2021	3.00	
NIL-209	4/12/2021	2.63	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-210	--	--	Compost Operations
NIL-211	--	--	Compost Operations
NIL-212	--	--	Active
NIL-213	--	--	Active
NIL-214	--	--	Active
NIL-215	--	--	Active
NIL-216	--	--	Active
NIL-217	4/12/2021	1.55	
NIL-218	4/12/2021	1.46	
NIL-219	4/12/2021	16.65	
NIL-220	--	--	Active
NIL-221	4/12/2021	21.00	
NIL-222	4/12/2021	20.88	
NIL-223	4/12/2021	18.92	
NIL-224	--	--	Leachate Pond
NIL-225	--	--	Active
NIL-226	4/12/2021	1.46	
NIL-227	4/12/2021	1.72	
NIL-228	4/12/2021	10.43	
NIL-229	--	--	Leachate Pond
NIL-230	--	--	Active
NIL-231	4/12/2021	7.52	
NIL-232	4/12/2021	21.72	
NIL-233	--	--	Native
NIL-234	--	--	Leachate Pond
NIL-235	--	--	Active
NIL-236	4/12/2021	4.76	
NIL-237	4/12/2021	4.01	
NIL-238	4/12/2021	7.66	
NIL-239	4/12/2021	8.84	
NIL-240	--	--	Active
NIL-241	4/12/2021	18.01	
NIL-242	--	--	Leachate Pond
NIL-243	4/12/2021	2.45	
NIL-244	4/12/2021	2.43	
NIL-245	4/12/2021	8.19	
NIL-246	4/12/2021	7.69	
NIL-247	4/12/2021	6.48	
NIL-248	--	--	Leachate Pond
NIL-249	4/12/2021	3.09	
NIL-250	4/12/2021	8.92	
NIL-251	4/12/2021	7.90	
NIL-252	4/12/2021	8.70	

Secomd Quarter 2021
Table 2. Integrate Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-253	4/12/2021	15.43	
NIL-254	4/12/2021	6.93	
NIL-255	--	--	Leachate Pond
NIL-256	4/12/2021	2.70	
NIL-257	4/12/2021	3.03	
NIL-258	--	--	Leachate Pond
NIL-259	--	--	Paved
NIL-260	--	--	Paved
NIL-261	--	--	Paved
NIL-262	4/12/2021	2.90	
NIL-263	--	--	Paved
NIL-264	4/12/2021	2.95	
NIL-265	--	--	Paved
NIL-266	--	--	Paved
NIL-267	--	--	Paved
NIL-268	--	--	Paved
NIL-269	--	--	Paved
NIL-270	--	--	Paved
NIL-271	--	--	Paved
NIL-272	--	--	Paved
NIL-273	--	--	Paved
NIL-274	--	--	Paved
NIL-275	--	--	Paved
NIL-276	--	--	Paved
NIL-277	--	--	Paved



Second Quarter 2021

LMR Surface Emissions Monitoring First 10-Day Pathway

Newby Island Landfill, Milpitas, California

Attachment 5

Calibration Logs

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.9	502	2	4
2	.1	500	0	3
3	.1	501	1	4

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= 126768
Counters Observed for the Zero= 4998

Trial 2:
Counts Observed for the Span= 126260
Counters Observed for the Zero= 4812

Trial 3:
Counts Observed for the Span= 126560
Counters Observed for the Zero= 4832

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: Grid 1 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Cody Crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 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	4
2	.1	501	1	3
3	.1	500	0	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 156296
Counters Observed for the Zero= 5172

Trial 2:
Counts Observed for the Span= 156288
Counters Observed for the Zero= 4964

Trial 3:
Counts Observed for the Span= 156329
Counters Observed for the Zero= 4988

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.8 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 52 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	499	1	4
2	.1	501	1	4
3	.1	498	2	3

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 125348 Counters Observed for the Zero= 4093	**Trial 3:** Counts Observed for the Span= 121697 Counters Observed for the Zero= 3860
Trial 2: Counts Observed for the Span= 121480 Counters Observed for the Zero= 3856	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 0 ppm

Downwind Location Description: Grid 1 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °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	.2	500	0	4
2	.1	502	2	4
3	.1	502	2	5

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= 113000
Counters Observed for the Zero= 3285

Trial 2:
Counts Observed for the Span= 112268
Counters Observed for the Zero= 3104

Trial 3:
Counts Observed for the Span= 112475
Counters Observed for the Zero= 3127

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.4 ppm

Downwind Location Description: oyridl 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: 11-8-2021 Site Name: Newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	.2	502	2	5
3	.1	502	2	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span 169842
Counters Observed for the Zero= 3921

Trial 2:
Counts Observed for the Span 170183
Counters Observed for the Zero= 3958

Trial 3:
Counts Observed for the Span= 170409
Counters Observed for the Zero= 3978

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.3 ppm

Downwind Location Description: Flare 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: 4-8-2021 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 48 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	498	2	3
2	.1	501	1	5
3				

Average Difference:

*Perform recalibration if average difference is greater than 10

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

= 100%- ________ /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144204
Counters Observed for the Zero= 3901

Trial 2:
Counts Observed for the Span= 146496
Counters Observed for the Zero= 3795

Trial 3:
Counts Observed for the Span= 144893
Counters Observed for the Zero= 3861

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.4 ppm

Downwind Location Description: Flare Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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	2 →	← 498	2
2	.2	0 →	← 500	4
3	.1	3 →	← 503	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%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 126508
Counters Observed for the Zero= 4820

Trial 2:
Counts Observed for the Span= 126809
Counters Observed for the Zero= 4837

Trial 3:
Counts Observed for the Span= 127056
Counters Observed for the Zero= 4847

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.1 ppm

Downwind Location Description: Flare Reading: 1.2 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4- 8- 2021 Site Name: Newby

Inspector(s): Cody C Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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	500	0	4
2	.0	498	2	4
3	.1	501	1	4

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= 156038
Counters Observed for the Zero= 4957

Trial 2:
Counts Observed for the Span= 156132
Counters Observed for the Zero= 4963

Trial 3:
Counts Observed for the Span= 156288
Counters Observed for the Zero= 4923

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: Grid 1 Reading: 1.4 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Hunter O. Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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	.1	500	0	4
2	.1	499	1	2
3	.0	503	3	4

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

= 100%- 2 /500 x 100%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 121298
Counters Observed for the Zero= 3845

Trial 2:
Counts Observed for the Span= 120980
Counters Observed for the Zero= 3856

Trial 3:
Counts Observed for the Span= 120998
Counters Observed for the Zero= 3885

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid1 Reading: 1.1 ppm

Downwind Location Description: Flare Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2024 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	3
2	.1	499	1	5
3	.1	498	2	4

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 143275
Counters Observed for the Zero= 3847

Trial 2:
Counts Observed for the Span= 143871
Counters Observed for the Zero= 3863

Trial 3:
Counts Observed for the Span= 143574
Counters Observed for the Zero= 3891

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Gridl Reading: 1.4 ppm

Downwind Location Description: Flare Reading: 1.6 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-8-2021 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	499	1	5
2	.1	500	0	4
3	.1	501	1	5

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= 112389
Counters Observed for the Zero= 3106

Trial 2:
Counts Observed for the Span= 112 671
Counters Observed for the Zero= 3123

Trial 3:
Counts Observed for the Span= 112 512
Counters Observed for the Zero= 3159

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.4 ppm

Downwind Location Description: Flare 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: 4-8-2021 Site Name: Newby

Inspector(s): Ryan H Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 14 MPH Wind Direction: NW Barometric Pressure: 30 "Hg

Air Temperature: 65 °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: 5421 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	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= 169392
Counters Observed for the Zero= 3872

Trial 2:
Counts Observed for the Span= 170847
Counters Observed for the Zero= 3896

Trial 3:
Counts Observed for the Span= 169817
Counters Observed for the Zero= 4029

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Cell 1 Reading: 1.3 ppm

Downwind Location Description: Flare 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

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	0	500	0	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= 168309
Counters Observed for the Zero= 3912

Trial 2:
Counts Observed for the Span= 168314
Counters Observed for the Zero= 3897

Trial 3:
Counts Observed for the Span= 168306
Counters Observed for the Zero= 3905

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21

Site Name: Newby

Inspector(s): Don Gibson

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH

Wind Direction: E

Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F

General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220

Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	500	0	4
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= 169446

Counters Observed for the Zero= 3789

Trial 2:

Counts Observed for the Span= 169433

Counters Observed for the Zero= 3792

Trial 3:

Counts Observed for the Span= 169450

Counters Observed for the Zero= 3780

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1

Reading: 1.2 ppm

Downwind Location Description: Flare

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

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 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	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= 139317
Counters Observed for the Zero= 4661

Trial 2:
Counts Observed for the Span= 139323
Counters Observed for the Zero= 4658

Trial 3:
Counts Observed for the Span= 139330
Counters Observed for the Zero= 4669

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21　　Site Name: Newby

Inspector(s): Liam McGinn　　Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH　　Wind Direction: E　　Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F　　General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415　　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	3
3	0	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= 140365
Counters Observed for the Zero= 4411

Trial 2:
Counts Observed for the Span= 140352
Counters Observed for the Zero= 4418

Trial 3:
Counts Observed for the Span= 140367
Counters Observed for the Zero= 4421

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid　　Reading: 1.2 ppm

Downwind Location Description: Flare　　Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Pre

Date: 4-9-21 Site Name: New by

Inspector(s): Bryan ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	4
2	0	500	0	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= 138144
Counters Observed for the Zero= 3379

Trial 2:
Counts Observed for the Span= 138178
Counters Observed for the Zero= 3380

Trial 3:
Counts Observed for the Span= 138188
Counters Observed for the Zero= 3392

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.4 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Bryan ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	3
2	0	501	1	3
3	0	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= 141226
Counters Observed for the Zero= 3188

Trial 2:
Counts Observed for the Span= 141237
Counters Observed for the Zero= 3174

Trial 3:
Counts Observed for the Span= 141245
Counters Observed for the Zero= 3192

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Pre

Date: 4-9-21

Site Name: Newby

Inspector(s): Hunter OTT

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH

Wind Direction: E

Barometric Pressure: 29.9 "Hg

Air Temperature: 58 °F

General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420

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	500	0	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= 163788

Counters Observed for the Zero= 4344

Trial 2:

Counts Observed for the Span= 163801

Counters Observed for the Zero= 4328

Trial 3:

Counts Observed for the Span= 163796

Counters Observed for the Zero= 4319

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1

Reading: 1.2 ppm

Downwind Location Description: Flare

Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Hunter ott Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 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	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= 165199
Counters Observed for the Zero= 4271

Trial 2:
Counts Observed for the Span= 165204
Counters Observed for the Zero= 4305

Trial 3:
Counts Observed for the Span= 165186
Counters Observed for the Zero= 4284

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Pre

Date: 4-9-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 58 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 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	1	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= 178220
Counters Observed for the Zero= 3867

Trial 2:
Counts Observed for the Span= 178256
Counters Observed for the Zero= 3871

Trial 3:
Counts Observed for the Span= 178241
Counters Observed for the Zero= 3866

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 180441
Counters Observed for the Zero= 3712

Trial 2:
Counts Observed for the Span= 180460
Counters Observed for the Zero= 3724

Trial 3:
Counts Observed for the Span= 180455
Counters Observed for the Zero= 3723

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

pre

Date: 4-9-21 | Site Name: Newby

Inspector(s): cody crocker | Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH | Wind Direction: E | Barometric Pressure: 29.9 "Hg

Air Temperature: 58 °F | General Weather Conditions: Partly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 | Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	3
2	1	500	0	3
3	0	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= 177889
Counters Observed for the Zero= 3768

Trial 2:
Counts Observed for the Span= 177905
Counters Observed for the Zero= 3774

Trial 3:
Counts Observed for the Span= 177893
Counters Observed for the Zero= 3755

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 | Reading: 1.2 ppm

Downwind Location Description: Flare | Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Post

Date: 4-9-21 Site Name: Newby

Inspector(s): Cody crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: E Barometric Pressure: 29.9 "Hg

Air Temperature: 63 °F General Weather Conditions: Partly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 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	1	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= 178012
Counters Observed for the Zero= 3577

Trial 2:
Counts Observed for the Span= 178034
Counters Observed for the Zero= 3570

Trial 3:
Counts Observed for the Span= 178056
Counters Observed for the Zero= 3584

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 4-12-21 Site Name: Newby

Inspector(s): Hunter Ott Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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: 2364 Cal Gas Concentration: 500ppm

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

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:		Trial 3:	
Counts Observed for the Span=	171839	Counts Observed for the Span=	172934
Counters Observed for the Zero=	4432	Counters Observed for the Zero=	4451
Trial 2:			
Counts Observed for the Span=	172817		
Counters Observed for the Zero=	4447		

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Hunter Ott Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2364 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	.2	501	1	5
3	.0	501	1	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= 172036
Counters Observed for the Zero= 4421

Trial 3:
Counts Observed for the Span= 172307
Counters Observed for the Zero= 4489

Trial 2:
Counts Observed for the Span= 172184
Counters Observed for the Zero= 4451

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.4 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.

post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Cody Crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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: 5419 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 174837

Counters Observed for the Zero= 5213

Trial 2:

Counts Observed for the Span= 174526

Counters Observed for the Zero= 5224

Trial 3:

Counts Observed for the Span= 175417

Counters Observed for the Zero= 5246

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Cody Crocker Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	502	2	5
2	.1	501	1	3
3	.1	499	1	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

=99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 175260
Counters Observed for the Zero= 5166

Trial 2:
Counts Observed for the Span= 175384
Counters Observed for the Zero= 5193

Trial 3:
Counts Observed for the Span= 175409
Counters Observed for the Zero= 5124

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.6 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 4-12-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 147928
Counters Observed for the Zero= 3912

Trial 2:
Counts Observed for the Span= 147681
Counters Observed for the Zero= 3924

Trial 3:
Counts Observed for the Span= 148562
Counters Observed for the Zero= 3943

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 148276
Counters Observed for the Zero= 3920

Trial 2:
Counts Observed for the Span= 148492
Counters Observed for the Zero= 3953

Trial 3:
Counts Observed for the Span= 148356
Counters Observed for the Zero= 3986

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Gridl 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.

post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Nealby

Inspector(s): Liam McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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	7
2	2	501	1	2
3	2	502	2	5

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 144839
Counters Observed for the Zero= 4723

Trial 2:
Counts Observed for the Span= 144615
Counters Observed for the Zero= 4732

Trial 3:
Counts Observed for the Span= 143214
Counters Observed for the Zero= 4758

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Cian McGinn Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.2	498	2	
2	.1	499	1	
3	.1	501	1	

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 143940
Counters Observed for the Zero= 4711

Trial 2:
Counts Observed for the Span= 143754
Counters Observed for the Zero= 4732

Trial 3:
Counts Observed for the Span= 143905
Counters Observed for the Zero= 4765

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrace Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

P084

Date: 4-12-21 Site Name: Neeby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: W Barometric Pressure: 30 "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: 1220 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	501	1	3
3	1	502	2	2

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 167813
Counters Observed for the Zero= 3818

Trial 2:
Counts Observed for the Span= 167923
Counters Observed for the Zero= 3834

Trial 3:
Counts Observed for the Span= 168041
Counters Observed for the Zero= 3841

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-12-21 Site Name: Newby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	5
2	.0	499	1	3
3	.2	498	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 168640
Counters Observed for the Zero= 3824

Trial 2:
Counts Observed for the Span= 168572
Counters Observed for the Zero= 3851

Trial 3:
Counts Observed for the Span= 168794
Counters Observed for the Zero= 3874

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 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

D087

Date: 4-12-21 Site Name: Nearby

Inspector(s): Bryam Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 30 "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: 1215 Cal Gas Concentration: 500ppm

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

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131413
Counters Observed for the Zero= 3122

Trial 2:
Counts Observed for the Span= 132814
Counters Observed for the Zero= 3120

Trial 3:
Counts Observed for the Span= 131839
Counters Observed for the Zero= 3115

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-22-21 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 54 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	499	1	5
3	.1	498	2	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 132516
Counters Observed for the Zero= 3053

Trial 2:
Counts Observed for the Span= 132117
Counters Observed for the Zero= 3072

Trial 3:
Counts Observed for the Span= 132843
Counters Observed for the Zero= 3006

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

post

Date: 4-13-21 Site Name: Ocraby

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °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	3
2	2	501	1	2
3	1	502	2	2

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.6 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131876
Counters Observed for the Zero= 3042

Trial 2:
Counts Observed for the Span= 132726
Counters Observed for the Zero= 3128

Trial 3:
Counts Observed for the Span= 152974
Counters Observed for the Zero= 3145

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	.1	499	1	4
3	.0	499	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= 130640
Counters Observed for the Zero= 3026

Trial 2:
Counts Observed for the Span= 132680
Counters Observed for the Zero= 3217

Trial 3:
Counts Observed for the Span= 131575
Counters Observed for the Zero= 3108

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.5 ppm

Downwind Location Description: Grid1 Reading: 1.7 ppm

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

post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-21 Site Name: Nearby

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 166814
Counters Observed for the Zero= 3783

Trial 2:
Counts Observed for the Span= 165148
Counters Observed for the Zero= 3754

Trial 3:
Counts Observed for the Span= 166726
Counters Observed for the Zero= 3736

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	501	1	5
3	.1	499	1	3

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 166772
Counters Observed for the Zero= 3765

Trial 2:
Counts Observed for the Span= 165704
Counters Observed for the Zero= 3736

Trial 3:
Counts Observed for the Span= 165039
Counters Observed for the Zero= 3751

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 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.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-18-2021 Site Name: Newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 50 °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: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 147472 Counters Observed for the Zero= 3978	**Trial 3:** Counts Observed for the Span= 152103 Counters Observed for the Zero= 3979
Trial 2: Counts Observed for the Span= 150808 Counters Observed for the Zero= 3946	

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

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

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 06-13-2021 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 62 °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: 5421 Cal Gas Concentration: 500ppm

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

Average Difference: 3.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 3.3 /500 x 100%

= 99.3 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 151963
Counters Observed for the Zero= 3976

Trial 2:
Counts Observed for the Span= 151454
Counters Observed for the Zero= 3950

Trial 3:
Counts Observed for the Span= 150803
Counters Observed for the Zero= 3890

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.3 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Coby Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 50 °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	.1	501	1	3
2	.1	501	1	2
3	.1	501	1	4

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= 174524

Counters Observed for the Zero= 4940

Trial 2:

Counts Observed for the Span= 175820

Counters Observed for the Zero= 4903

Trial 3:

Counts Observed for the Span= 176390

Counters Observed for the Zero= 4953

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.8 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-23-2021 Site Name: Newby

Inspector(s): Cody Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: WNW Barometric Pressure: 30 "Hg

Air Temperature: 62 °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	.1	500	0	
2	.1	499	2	
3	.1	498	2	

Average Difference: 2.6

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 2.6 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 175 880
Counters Observed for the Zero= 49 33

Trial 2:
Counts Observed for the Span= 175 260
Counters Observed for the Zero= 49 11

Trial 3:
Counts Observed for the Span= 174 728
Counters Observed for the Zero= 49 94

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-13-2021 Site Name: Newby

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: SSE Barometric Pressure: 30 "Hg

Air Temperature: 50 °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	.0	500	0	4
3	.1	501	1	3

Average Difference: .3

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- .3 /500 x 100%

= 99.9 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140980
Counters Observed for the Zero= 4839

Trial 2:
Counts Observed for the Span= 142108
Counters Observed for the Zero= 4766

Trial 3:
Counts Observed for the Span= 143280
Counters Observed for the Zero= 4679

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.2 ppm

Downwind Location Description: Grid 1 Reading: 1.4 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-13-2021 Site Name: Newby

Inspector(s): Hunter Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: WNW Barometric Pressure: 30 "Hg

Air Temperature: 62 °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	501	1	3
2	.1	502	2	4
3	.2	500	0	3

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 1.6 /500 x 100%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140205
Counters Observed for the Zero= 4968

Trial 2:
Counts Observed for the Span= 139998
Counters Observed for the Zero= 4823

Trial 3:
Counts Observed for the Span= 140100
Counters Observed for the Zero= 4799

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-22-21 Site Name: Newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3.8 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: 58 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	500	0	3
2	.1	499	1	3
3	.1	500	0	3

Average Difference: 0.3

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 0.3 /500 x 100%

= 99.9%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 192856
Counters Observed for the Zero= 4560

Trial 2:
Counts Observed for the Span= 193200
Counters Observed for the Zero= 4554

Trial 3:
Counts Observed for the Span= 193690
Counters Observed for the Zero= 4698

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 Reading: 1.3 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-22-21 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: 68 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1815 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	.6	502	2	3
3	1	501	1	2

Average Difference: 1

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1: Counts Observed for the Span= 128763	**Trial 3:** Counts Observed for the Span= 129872
Counters Observed for the Zero= 2846	Counters Observed for the Zero= 2911
Trial 2: Counts Observed for the Span= 131472	
Counters Observed for the Zero= 2892	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 62 ppm

Downwind Location Description: Grid 1 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 04-22-21 Site Name: Newby

Inspector(s): Pablo Rivera Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3.9 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: 58 °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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	499	1	4
2	.1	501	1	4
3	.1	498	2	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 152600
Counters Observed for the Zero= 4830

Trial 2:
Counts Observed for the Span= 152986
Counters Observed for the Zero= 4877

Trial 3:
Counts Observed for the Span= 154780
Counters Observed for the Zero= 4990

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 1 Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 4-22-21 Site Name: Newby

Inspector(s): Pablo R Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: W Barometric Pressure: 30 "Hg

Air Temperature: 68 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	502	2	4
2	.0	500	0	5
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%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 151387
Counters Observed for the Zero= 4811

Trial 2:
Counts Observed for the Span= 151592
Counters Observed for the Zero= 4839

Trial 3:
Counts Observed for the Span= 151876
Counters Observed for the Zero= 4862

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: Cavidi 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.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Newby

Inspector(s): Hunter Ott Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 70 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	500	0	5
2	0	501	1	3
3	0	501	1	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= 132986
Counters Observed for the Zero= 3699

Trial 2:
Counts Observed for the Span= 133049
Counters Observed for the Zero= 3710

Trial 3:
Counts Observed for the Span= 133111
Counters Observed for the Zero= 3726

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid1 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 6-11-21 Site Name: Newby

Inspector(s): Don G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 70 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.1	501	1	4
2	.0	500	0	5
3	.2	502	2	3

Average Difference: 1

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 1 /500 x 100%

= 99.8%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134592
Counters Observed for the Zero= 4742

Trial 2:
Counts Observed for the Span= 135746
Counters Observed for the Zero= 4781

Trial 3:
Counts Observed for the Span= 135249
Counters Observed for the Zero= 4819

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: C11 Reading: 1.2 ppm

Downwind Location Description: Flare Reading: 1.4 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Post

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Newby

Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: S Barometric Pressure: 30 "Hg

Air Temperature: 10 °F General Weather Conditions: sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	500	0	4
2	.2	502	2	4
3	.1	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= 121984

Counters Observed for the Zero= 2899

Trial 2:

Counts Observed for the Span= 122046

Counters Observed for the Zero= 2940

Trial 3:

Counts Observed for the Span= 122286

Counters Observed for the Zero= 2959

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: C71 Reading: 1.2 ppm

Downwind Location Description: Flare 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: 5-11-21 Site Name: Healy

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 61 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 5415 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0	502	2	3
2	1	501	1	2
3	1	499	1	2

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 138872

Counters Observed for the Zero= 5094

Trial 2:

Counts Observed for the Span= 134420

Counters Observed for the Zero= 4840

Trial 3:

Counts Observed for the Span= 135628

Counters Observed for the Zero= 4693

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 1 Reading: 1.2 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Newby

Inspector(s): Bryan Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 61 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.0	500	0	5
2	.1	500	0	5
3	0	500	0	5

Average Difference: 100

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 100 /500 x 100%

= 100 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 123180
Counters Observed for the Zero= 2987

Trial 2:
Counts Observed for the Span= 121932
Counters Observed for the Zero= 2957

Trial 3:
Counts Observed for the Span= 122484
Counters Observed for the Zero= 2924

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 1 Reading: 1.2 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Pre

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 5-11-21 Site Name: Weekley

Inspector(s): Hunter O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 61 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 10% of the calibration gas value.

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	1	498	2	
2	0	499	1	
3	1	499	1	

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

Calibration Precision= Average Difference/Cal Gas Conc. X 100%

= 100%- 1.3 /500 x 100%

= 99.7 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 134732
Counters Observed for the Zero= 3783

Trial 2:
Counts Observed for the Span= 132617
Counters Observed for the Zero= 3748

Trial 3:
Counts Observed for the Span= 133280
Counters Observed for the Zero= 3717

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

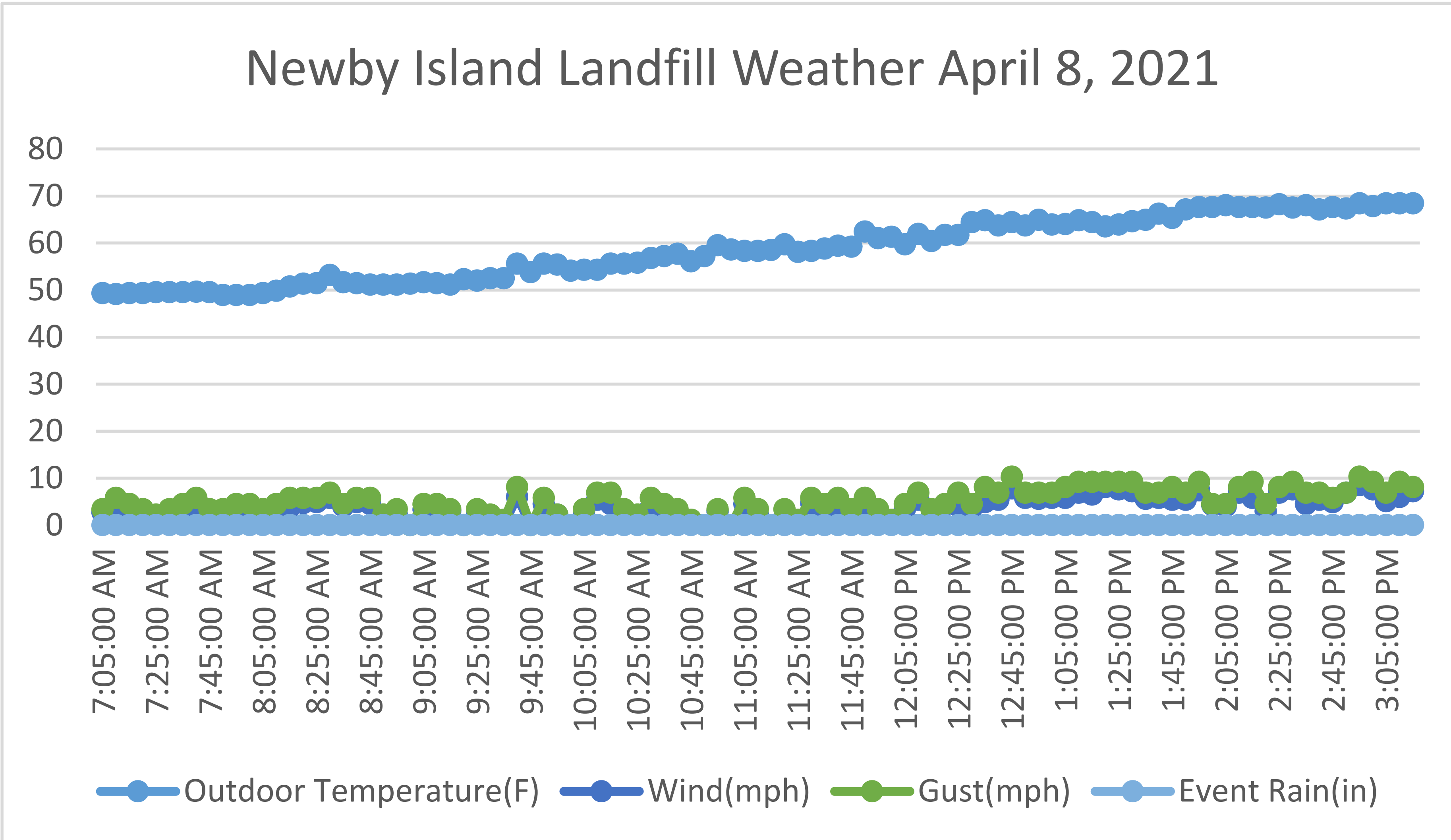
Upwind Location Description: Flare Reading: 1.2 ppm

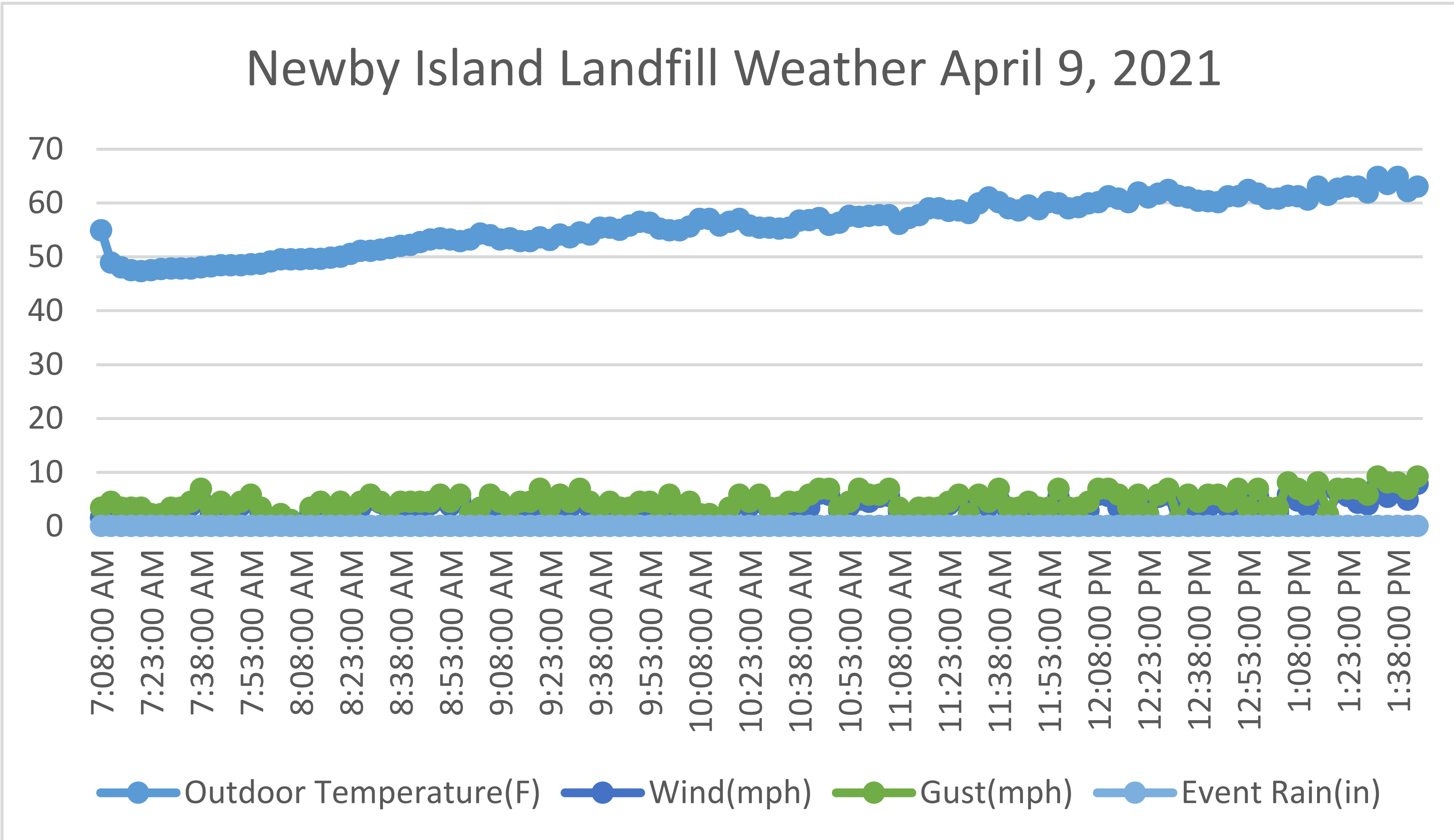
Downwind Location Description: Grid 1 Reading: 1.2 ppm

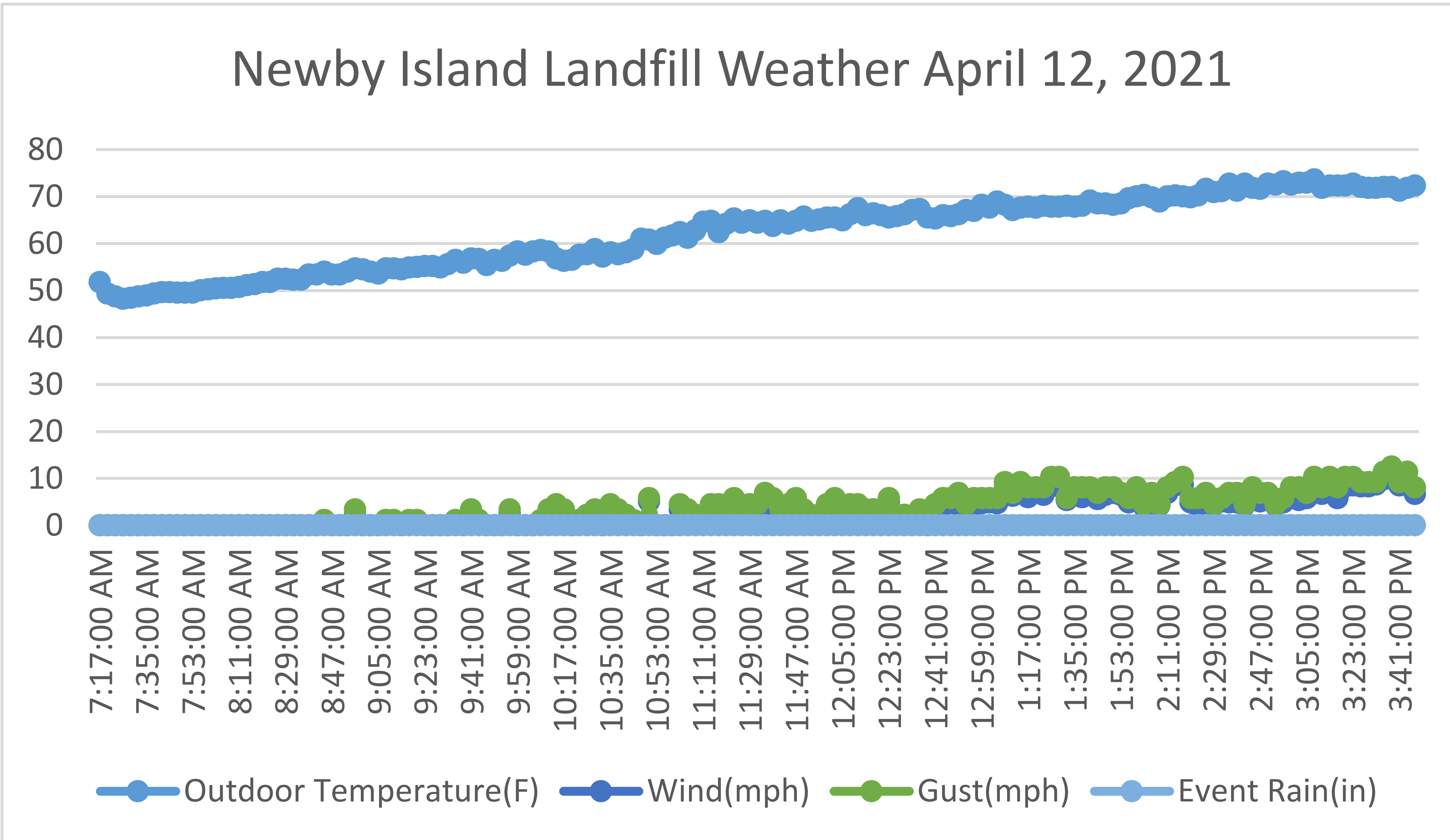
Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested alternatives of the LMR requirements on the above mentioned date.

Attachment 6

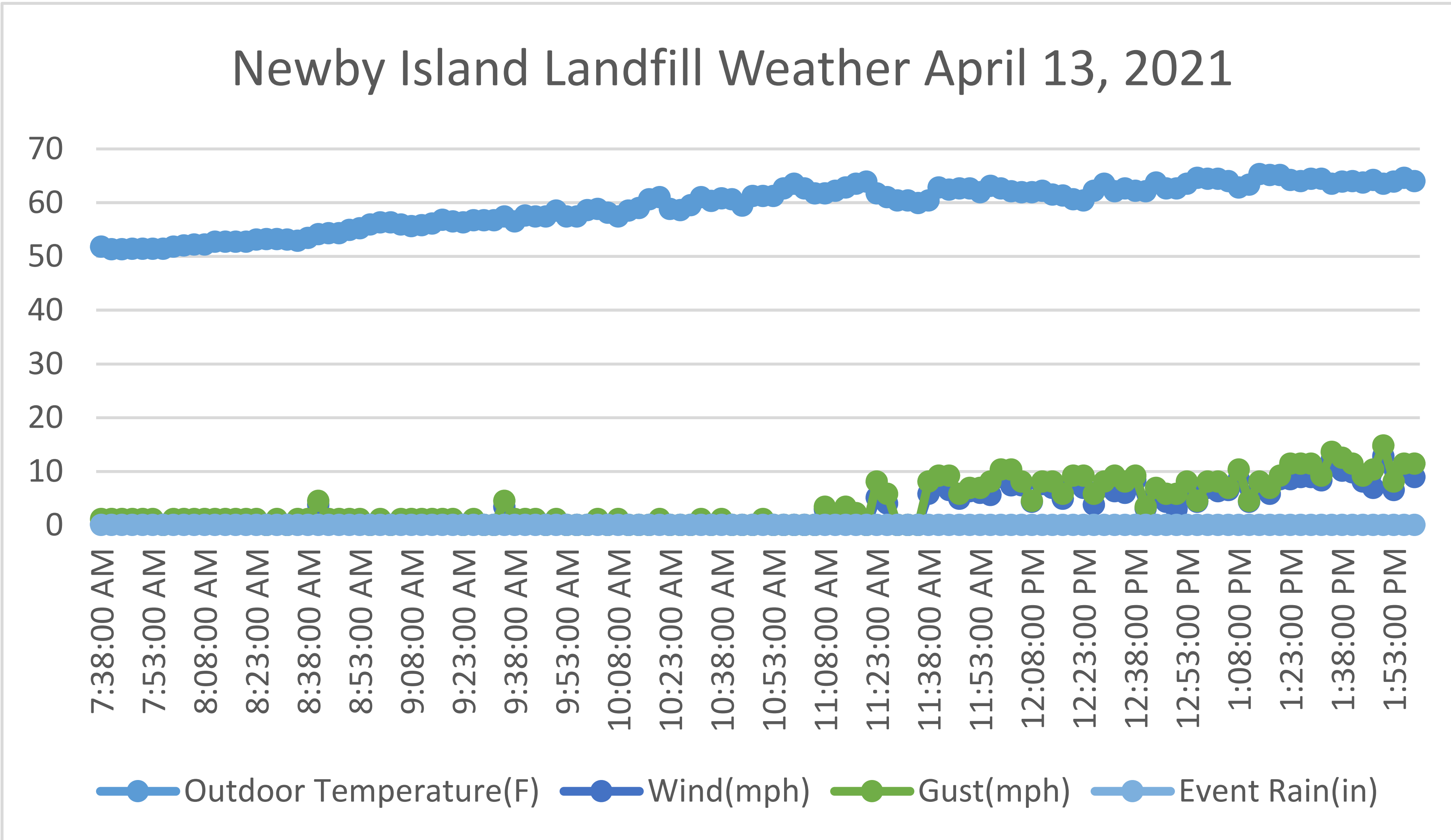
Weather Data


Newby Island Landfill Weather April 8, 2021
80
70
60
50
40
30
20
10
0
7:05:00 AM
7:25:00 AM
7:45:00 AM
8:05:00 AM
8:25:00 AM
8:45:00 AM
9:05:00 AM
9:25:00 AM
9:45:00 AM
10:05:00 AM
10:25:00 AM
10:45:00 AM
11:05:00 AM
11:25:00 AM
11:45:00 AM
12:05:00 PM
12:25:00 PM
12:45:00 PM
1:05:00 PM
1:25:00 PM
1:45:00 PM
2:05:00 PM
2:25:00 PM
2:45:00 PM
3:05:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)

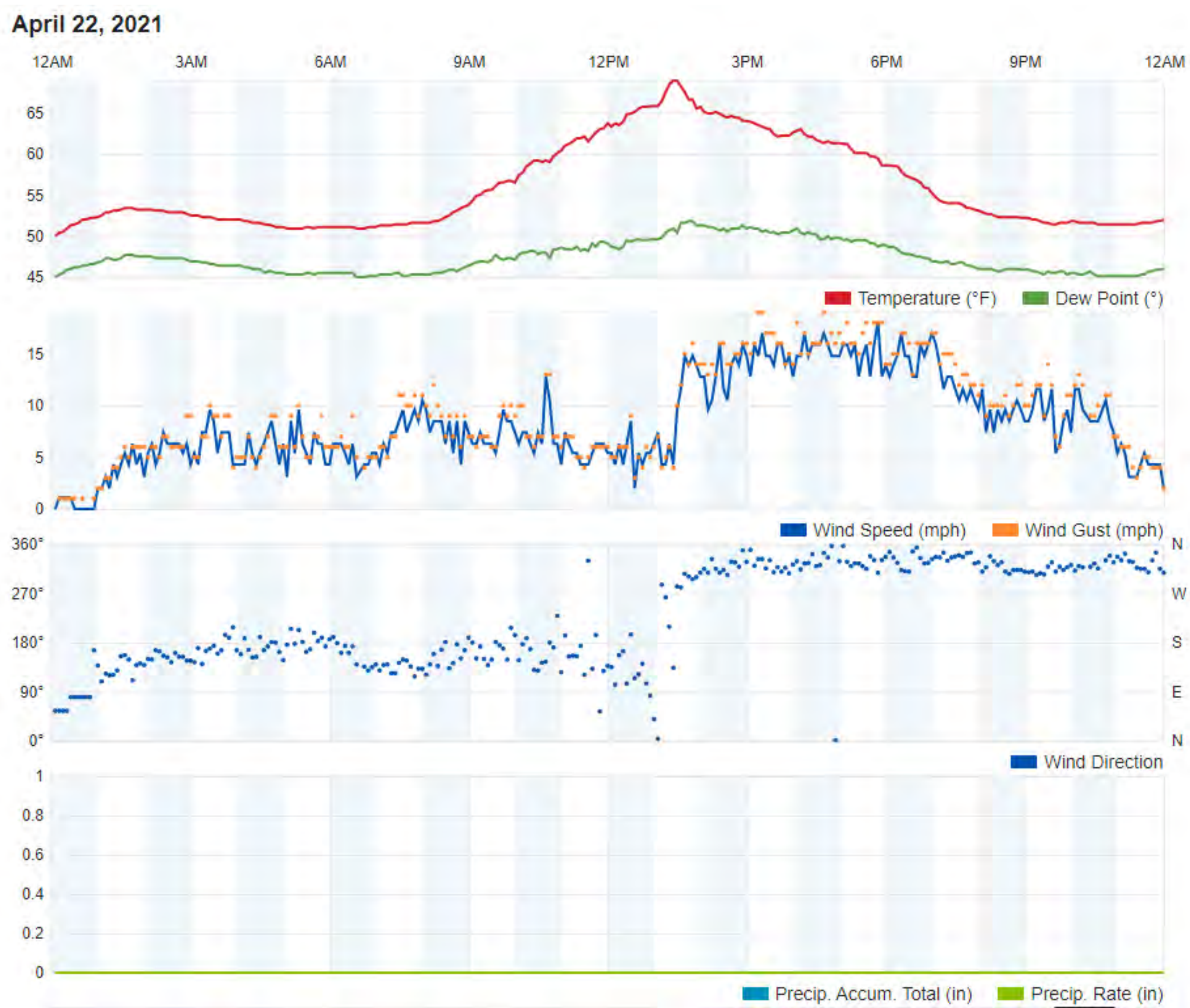

Newby Island Landfill Weather April 9, 2021
70
60
50
40
30
20
10
0
7:08:00 AM
7:23:00 AM
7:38:00 AM
7:53:00 AM
8:08:00 AM
8:23:00 AM
8:38:00 AM
8:53:00 AM
9:08:00 AM
9:23:00 AM
9:38:00 AM
9:53:00 AM
10:08:00 AM
10:23:00 AM
10:38:00 AM
10:53:00 AM
11:08:00 AM
11:23:00 AM
11:38:00 AM
11:53:00 AM
12:08:00 PM
12:23:00 PM
12:38:00 PM
12:53:00 PM
1:08:00 PM
1:23:00 PM
1:38:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)



Newby Island Landfill Weather April 12, 2021
80
70
60
50
40
30
20
10
0
7:17:00 AM
7:35:00 AM
7:53:00 AM
8:11:00 AM
8:29:00 AM
8:47:00 AM
9:05:00 AM
9:23:00 AM
9:41:00 AM
9:59:00 AM
10:17:00 AM
10:35:00 AM
10:53:00 AM
11:11:00 AM
11:29:00 AM
11:47:00 AM
12:05:00 PM
12:23:00 PM
12:41:00 PM
12:59:00 PM
1:17:00 PM
1:35:00 PM
1:53:00 PM
2:11:00 PM
2:29:00 PM
2:47:00 PM
3:05:00 PM
3:23:00 PM
3:41:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)



Newby Island Landfill Weather April 13, 2021
70
60
50
40
30
20
10
0
7:38:00 AM
7:53:00 AM
8:08:00 AM
8:23:00 AM
8:38:00 AM
8:53:00 AM
9:08:00 AM
9:23:00 AM
9:38:00 AM
9:53:00 AM
10:08:00 AM
10:23:00 AM
10:38:00 AM
10:53:00 AM
11:08:00 AM
11:23:00 AM
11:38:00 AM
11:53:00 AM
12:08:00 PM
12:23:00 PM
12:38:00 PM
12:53:00 PM
1:08:00 PM
1:23:00 PM
1:38:00 PM
1:53:00 PM
Outdoor Temperature(F)
Wind(mph)
Gust(mph)
Event Rain(in)

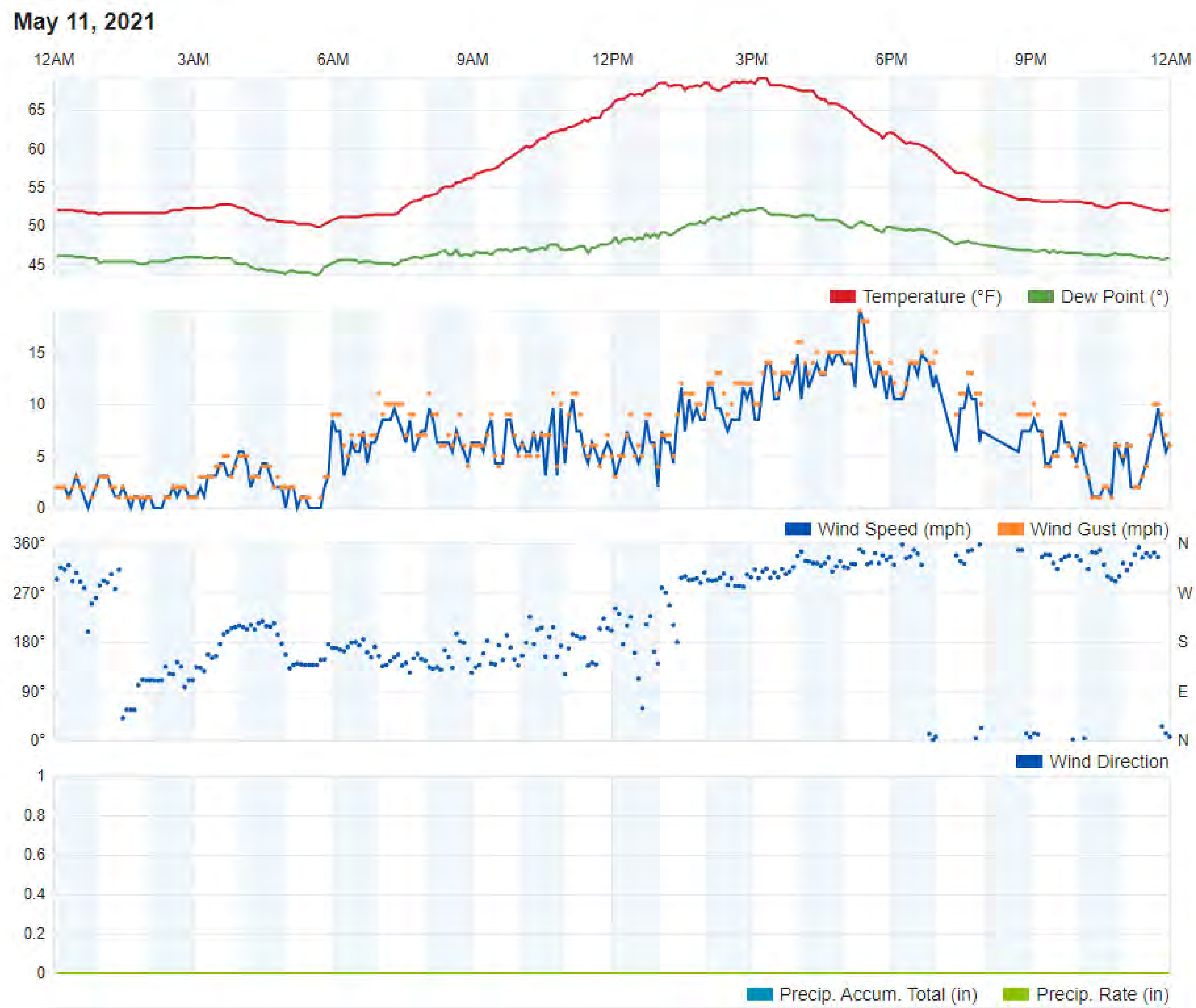


Second Quarter 2021

LMR Surface Emissions Monitoring Weather Data

April 22, 2021

Newby Island Landfill, Milpitas, California



Second Quarter 2021

LMR Surface Emissions Monitoring Weather Data

May 11, 2021

Newby Island Landfill, Milpitas, California

Appendix E – Title V Semi-Annual Report

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: NEWBY ISLAND LANDFILL	**FACILITY ID#:** A9013
REPORTING PERIOD: *from* 02/01/2021 *through* 07/31/2021	

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:

08/31/21

Signature of Responsible Official   Date

Daniel North

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

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: NEWBY ISLAND LANDFILL	**FACILITY ID#:** A9013
REPORTING PERIOD: *from* 02/01/2021 *through* 07/31/2021	

List of Permitted Sources and Abatement Device

Permit Unit Number	Equipment Description
S-#	**Description**
S-2	Newby Island Sanitary Landfill – Waste Decomposition Process; Equipped with Landfill Gas Collection System
S-5	Newby Island Sanitary Landfill – Waste and Cover Material Dumping
S-6	Newby Island Sanitary Landfill – Excavating, Bulldozing and Compacting Activities
S-3	Composting Operation; A-3 Water Truck
S-4	Non-retail Gasoline Dispensing Facility
S-8 and S-9	Horizontal Grinder/Operations, Trommel Screen/Operations
A-2	Landfill Gas Flare
A-3	Landfill Gas Flare

Newby also maintains a Title V Permit (Facility No. A9013), which expired on December 20, 2017. On June 20, 2017, a Title V Renewal Application was submitted to the Bay Area Air Quality Management District (BAAQMD). The site currently operates under an application shield.

The conditions listed below are incorporated in the BAAQMD Permit to Operate (PTO) that expired August 1, 2021, but has not yet been incorporated into the Title V permit. All conditions have been reviewed for compliance, and the site is in compliance.

- Condition #24887 – applies to S#4
- Condition #26046 – applies to S#7, 8, 9, 10
- Condition #26606 – applies to S#1008
- Condition #26607 – applies to S#1040
- Condition #26608 – applies to S#1009
- Condition #26609 – applies to S#1042
- Condition #26610 – applies to S#1043
- Condition #26611 – applies to S#1038

Newby also maintains an Authority to Construct (ATC) Application Number (A/N) 28472 for the S-1003 Covered Aerated Static Pile (CASP) Composting Operation and the S-15 Mixed Waste Stockpiles. The ATCs for the S-1003 CASP Composting Operation and S-15 Mixed Waste Stockpiles were issued on November 21, 2017, were extended via approval email from the Bay

Area Air Quality District (BAAQMD) on November 21, 2019, and will expire on November 21, 2021. All conditions have been reviewed for compliance and there was one deviation of the ATC this reporting period.

- On May 27, 2021, Notice of Violation (NOV) Number A59433 was issued by BAAQMD Inspector, Mr. Jay Patel, to Newby Island for an alleged violation of CASP ATC Condition No. 26632, Part 9. Per the NOV, IDCC allegedly failed to comply with CASP ATC Condition No. 26632 Part 9 requirements to immediately initiate corrective actions and maintain records for temperatures that exceeded 180 degrees Fahrenheit (^{o}F) for over six consecutive hours. The NOV was based on records from September 2019 through December 2020. For additional information, including corrective actions taken, please refer to the June 4, 2021 10-day Response Letter.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	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 # 10423, Part 13b, 13c, 13f, 13g	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 # 10423, Part 13b, 13c, 13f, 13g	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

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
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	Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	Intermittent	On March 10, 2021, a utility outage occurred at the site causing the A-2 and A-3 Flares to automatically shut down. For additional information, including corrective actions taken, please refer to the March 20, 2021 30-day Breakdown Report for RCA IDs 07Y71 and 07Y72.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
						Intermittent	On June 14, 2021, the BAAQMD inspector, Jay Patel, issued NOV A55722 for failure to operate the gas collection and control system (GCCS) continuously during Reportable Compliance Activity (RCA) events 07Y73 and 07Y74; 07Y89 and 07Y90; 07Y92 and 07Y93; 07Z38 and 07Z39; 07Z82 and 07Z86; 07Z83 and 07Z87; 07Z84 and 07Z88; 07Z85 and 07Z89. For additional information, including corrective actions taken, please refer to the June 24, 2021 10-day Response Letter and the respective 30-day Breakdown Reports.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
						Intermittent	On July 10, 2021, the power supply at the site was tripped, causing the GCCS to shut down. For additional information, including corrective actions taken, please refer to the July 20, 2021 30-day Breakdown Report for RCA IDs 08A51 and 08A52.
						Intermittent	On July 15, 2021, low flow alarms were triggered during planned maintenance on Condensate Sump 18. For additional information, including corrective actions taken, please refer to the July 23, 2021 30-day Breakdown Report for RCA IDs 08A58 and 08A59.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
						Intermittent	On July 22, 2021, a flame failure condition occurred at the A-2 and A-3 Flares, brought about by surging in the header, leading to an automatic shutdown of GCCS. For additional information, including corrective actions taken, please refer to the July 30, 2021 30-day Breakdown Report for RCA IDs 08A73 and 08A74.
Gas Flow	BAAQMD Condition # 10423, Parts 13f-h	Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Components	Periodic / Daily	BAAQMD Condition # 10423, Parts 5 and 6	Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Collection and Control Systems Shutdown Time	BAAQMD 8-34-501.1	Operating Records	Periodic / Daily	BAAQMD 8-34-113.2	240 hours per year and 5 consecutive days	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	$\leq$ 15 consecutive days per incident and $\leq$ 30 calendar days per 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
Wellhead Pressure	BAAQMD 8-34-414, 501.9 and 505.1	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305.1	< 0 psig (applies to all wells or collectors that are connected to the vacuum system)	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 (< 131 ^{o}F), except for components identified in Condition # 818, Part 3b(i)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Temperature of Gas at Wellheads	BAAQMD 8-34-414, 501.9, 505.2, and BAAQMD Condition 10423, part 6d(ii)	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305 and BAAQMD Condition 10423, part 6d(i)	<63 C (<145 F) (Alternative wellhead temperature limit that applies only to wells specified in BAAQMD Condition # 10423, Part 6d(i))	Continuous	N/A
Gas Concentration at Wellhead	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305.3 or 305.4	N_2 < 20% (by volume, dry basis) **OR** O_2 < 5% (Applies to all wells or collectors that are connected to the vacuum system, except wells specified in BAAQMD Condition # 10423, Part 6c(i))	Continuous	N/A
Gas Concentrations at Header	BAAQMD 8-34-414, 501.9, and 505.3 or 505.4, and BAAQMD Condition 10423 part 6c(ii)	Monthly Inspection and Records	Periodic / Monthly	BAAQMD 8-34-305 and BAAQMD Condition # 10423, Part 6c(i)	O2 < 15% (Alternative wellhead oxygen concentration limit that applies only to wells specified in BAAQMD Condition # 10423, Part 6c(i))	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Well Shutdown Limits	BAAQMD 8-34-116.5 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-116.2	No more than 5 wells at a time or 10% of total collection system, whichever is less	Continuous	N/A
Well Shutdown Limits	BAAQMD 8-34-116.5 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-116.3	< 24 hours per well	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 or <5 days per well for component replacement	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 portable analyzer and Records	Periodic / Quarterly	BAAQMD 8-34-301.2	Component Leak Limit: < 1000 ppmv as methane	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
TOC	BAAQMD 8-34-415, 416, 501.6, 506 and 510	Monthly Visual Inspection of Cover, Quarterly Inspection of Surface with portable analyzer, Various Reinspection Times for Leaking Areas, and Records	Periodic / Monthly, Quarterly, and on an Event Basis	BAAQMD 8-34-303	Surface Leak Limit: < 500 ppmv as methane at 2 inches above surface	Continuous	N/A
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 10423, Part 11b	Annual Source Tests and Records	Periodic / Annual	BAAQMD 8-34-301.3	> 98% removal by weight OR < 30 ppmv, dry basis @ 3% O_2, expressed as methane (applies to flares only)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Temperature of Combustion Zone (CT)	BAAQMD 8-34-501.3 and 507, SIP 8-34-501.3 and BAAQMD Condition # 10423, Parts 11	Temperature Sensor and Recorder (continuous)	Continuous	BAAQMD Condition # 10423, Part 9	CT > 1525 ºF, averaged over any 3-hour period (applies to A-1/A-3 only) CT > 1400 ºF, averaged over any 3-hour period (applies to A-2 only)	Continuous	N/A
Total Carbon	BAAQMD Condition # 10423, Part 3	Records	Periodic / Daily	BAAQMD 8-2-301	< 15 pounds/day or < 300 ppm, dry basis (applies only to aeration of or use as cover soil of soil containing < 50 ppmw of volatile organic compounds)	TBD	At the time of the submittal of this report, VOC soil records were not available to SCS Engineers (SCS) for review. SCS will submit a Title V semi-annual report amendment to confirm compliance once records are available for review.
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD Condition # 10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-116.1 and BAAQMD Condition # 10423, Parts 2 and 3	< 1 cubic yard per project	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.2 and BAAQMD Condition # 10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-116.2 and BAAQMD Condition #10423, Parts 2 and 3	< 8 cubic yards per project, provided organic content < 500 ppmw and limited to 1 exempt project per 3 month period	Continuous	N/A
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD Condition # 10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-301 and BAAQMD Condition #10423, Parts 2 and 3	Prohibited for Soil with Organic Content >50 ppmw unless exempt per BAAQMD 8-40-116, 117, or 118	Continuous	N/A
Amount of Accidental Spillage	None	N/A	None	BAAQMD 8-40-117 and BAAQMD Condition # 10423, Parts 2 and 3	Soil Contaminated by Accidental Spillage of < 5 Gallons of Liquid Organic Compounds	Continuous	N/A
Total Aeration Project Emissions	BAAQMD Condition #10423, Part 2m	Records	Periodic / On Event Basis	BAAQMD 8-40-118 and BAAQMD Condition # 10423, Parts 2 and 3	< 150 pounds VOC per project and toxic air contaminant emissions per year < BAAQMD Table 2-1-316 limits	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM, A-2 AND A-3 LANDFILL GAS FLARE; S-5 WASTE AND COVER MATERIAL DUMPING; S-6 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	BAAQMD Condition # 10423, Part 13e	Records of all site watering and road cleaning events	Periodic / On event basis, Monthly	BAAQMD 6-1-301 and SIP 6-301	Ringelmann No. 1 for ≤ 3 minutes/hr (applies to S-1)	Continuous	N/A
Opacity	None	N/A	None	BAAQMD 6-1-301 and SIP 6-301	Ringelmann No. 1 for < 3 minutes/hr (applies to flares)	Continuous	N/A
TSP	None	N/A	None	BAAQMD 6-1-310.1 and SIP 6-310	< 0.15 grains/dscf (applies to flares only)	Continuous	N/A
SO_2	None	N/A	None	BAAQMD 9-1-301	Property Line Ground Level Limits: < 0.5 ppm for 3 minutes and < 0.25 ppm for 60 min. and <0.05 ppm for 24 hours (applies to flares only)	Continuous	N/A
SO_2	BAAQMD Condition # 10423, Parts 10 and 13j	Sulfur analysis of landfill gas and Records	Periodic / Quarterly	BAAQMD Regulation 9-1-302	Exhaust Gas from Flare: < 300 ppm (dry basis) (applies to flares only)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 10423, Parts 10a and 13j	Sulfur analysis of landfill gas	Periodic / Quarterly	BAAQMD Condition # 10423, Part 10a	< 1300 ppmv instantaneous concentration (expressed as H2S)	Continuous	N/A
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 10423, Parts 10a and 13j	Sulfur analysis of landfill gas and Records	Periodic / Quarterly	BAAQMD Condition # 10423, Part 10a	< 300 ppmv annual average (expressed as H2S)	Intermittent	On March 31, 2021, during the 1Q 2021 monitoring event, an exceedance of the annual integrated average of 300 parts per million by volume (ppmv) for total reduced sulfur compounds (TRS) in the collected landfill gas (LFG) at Newby Island was discovered. For additional information, including corrective actions taken, please see the April 8, 2021 30-Day Response Letter. As of June 30, 2021, the site is in compliance with the annual integrated average of 300 ppmv.

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
NOx	BAAQMD Condition 10423, Part 11d	Annual Source Test & Records	Periodic / Annual	BAAQMD Condition # 10423, Part 10b	Applies to Exhaust Gas from Flares: < 60 ppm corrected to 15% oxygen, dry basis (< 0.05 pounds NOx per million BTU LFG)	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
Amount of Waste Accepted	BAAQMD Condition # 10423, Part 13a	Records	Periodic / Daily	BAAQMD Condition # 10423, Part 1	4,000 tons/day and < 39,000,000 tons (predicted cumulative amount of all wastes) and < 50,800,000 yd3 (cumulative amount of all wastes and cover materials)	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-2 Waste Decomposition Process with Gas Collection System, A-2 and A-3 landfill gas flare; S-5 Waste and Cover Material Dumping; S-6 Excavating, Bulldozing, and Compacting Activities	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Heat Input A-1/A-3	BAAQMD Condition # 10423, Parts 8 and 13h	Records	Periodic / Daily	BAAQMD Condition # 10423, Part 8	< 2,006 MM BTU per day and < 732,095 MM BTU per year	Continuous	N/A
Heat Input, A-2	BAAQMD Condition # 10423, Parts 8 and 13h	Records	Periodic / Daily	BAAQMD Condition # 10423, Part 8	< 1,800 MM BTU per day and < 657,000 MM BTU per year	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-3 COMPOSTING OPERATION; A-3 WATER TRUCK	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	BAAQMD Condition # 8178, Parts 3 and 4	Observation of Operations and Records	Periodic / On Event Basis	BAAQMD Regulation 6-1-301 and SIP 6-301	< Ringelmann 1.0 for 3 minutes in any hour	Continuous	N/A
Opacity	BAAQMD Condition # 8178, Parts 3 and 4	Observation of Operations and Records	Periodic / On Event Basis	BAAQMD Condition # 8178, Part 3	< Ringelmann 1.0	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-4 NON-RETAIL GASOLINE DISPENSING FACILITY	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Gasoline Throughput	BAAQMD 8-7-503.1	Records	Periodic / Annual	BAAQMD Condition # 14098	940,000 gallons per 12-month period	Continuous	N/A
Throughput (exempt from Phase I)	BAAQMD 8-7-501 and 8-7-503.2	Records	Periodic / On event basis	BAAQMD 8-7-114	1000 gallons per facility for tank integrity leak checking	Continuous	N/A
Organic Compounds	None	N/A	None	SIP 8-5-303.2	Tank Pressure Vacuum Valve Shall Be: Gas Tight or < 500 ppmv (expressed as methane) above background for PRVs (as defined in SIP 8-5-206)	Continuous	N/A
Organic Compounds	None	Equipment must be precertified by CARB	None	BAAQMD 8-7-301.2	All Phase I Systems Shall Meet the Emission Limitations of the Applicable CARB Certification	Continuous	N/A
Organic Compounds	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	BAAQMD 8-7-301.6	All Phase I Equipment (except components with allowable leak rates) shall be leak free (<3 drops/minute) and vapor tight	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-4 NON-RETAIL GASOLINE DISPENSING FACILITY	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Organic Compounds	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	BAAQMD 8-7-302.5	All Phase II Equipment (except components with allowable leak rates or at the nozzle/fill-pipe interface) Shall Be: leak free (<3 drops/minute) and vapor tight	Continuous	N/A
Organic Compounds	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	CARB EO G-70-148-A paragraph 10	Any Emergency Vent or Manway Shall Be: leak free	Continuous	N/A
Defective Component Repair/ Replacement Time Limit	BAAQMD 8-7-503.2	Records	Periodic / On Event Basis	BAAQMD 8-7-302.4	< 7 days	Continuous	N/A
Liquid Removal Rate	CARB EO G-70-52-AM	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-302.8	> 5 ml per gallon dispensed, when dispensing rate > 5 gallons/minute	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-4 NON-RETAIL GASOLINE DISPENSING FACILITY	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Liquid Retain from Nozzles	CARB EO G-70-52-AM	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-302.12	< 100 ml per 1000 gallons dispensed	Continuous	N/A
Nozzle Spitting	CARB EO G-70-52-AM	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-302.13	< 1.0 ml per nozzle per test	Continuous	N/A
Pressure-Vacuum Valve Settings	CARB EO G-70-148-A	CARB Certification Procedures	Periodic / On Event Basis	BAAQMD 8-7-316 and CARB EO G-70-148-A, paragraph 14	Pressure Setting: > 2.5 inches of water, gauge	Continuous	N/A
Pressure-Vacuum Valve Settings	None	N/A	None	SIP 8-5-303.1	Pressure Setting: > 10% of maximum working pressure or > 0.5 psig	Continuous	N/A
Disconnection Liquid Leaks	CARB EO G-70-148-A paragraph 21	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System	Periodic / Annual	CARB EO G-70-148-A paragraph 12	10 ml per disconnect, averaged over 3 disconnect operations	Continuous	N/A

NEWBY ISLAND LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Newby Island Landfill	**Facility ID#:** A9013
Permitted Unit: S-8 HORIZONTAL GRINDER OPERATIONS/ S-9 TROMMEL SCREEN/OPERATIONS	**Reporting Period:** *from* 02/01/2021 *through* 07/31/2021

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	None	N/A	None	BAAQMD 6-1-301 and SIP 6-301	Ringelmann 1.0 for <3 minutes in any hour	Continuous	N/A
Particulate Matter (PM)	None	N/A	None	BAAQMD 6-1-311 And SIP 6-311	$E = 0.026(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P >57,320 lb/hr (or P > 28.66 tons/hr)	Continuous	N/A