



Newby Island Landfill 1601 Dixon Landing Road, Milpitas, CA 95035
o 408.586.2263 c 510.298.7892 republicservices.com

TV Tracking #: 567

1. RECEIVED IN ENFORCEMENT: 08/31/2022

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

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

Subject: Combined NESHAP Semi-Annual Report, Report, 8-34 Semi-Annual Report, Title V Semi-Annual Monitoring Report and SSM Plan 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 National Emission Standards for Hazardous Air Pollutants (NESHAP) Semi-Annual Report, 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 (USEPA) Region IX for the Newby Island Landfill (Newby). The NESHAP report, Title V Semi-Annual Monitoring Report, the BAAQMD Rule 8-34 Semi-Annual Report, and the SSM Plan Report covers the period from February 1, 2022 through July 31, 2022.

The Title V reports meet the requirements specified in the Title V Permit, BAAQMD guidance on Title V report submittals, and BAAQMD Regulation 2, Rule 6. The BAAQMD 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 Code Federal of Regulations [CFR] Part 60, Subpart WWW), including 40 CFR 60.757(f). This report also satisfies the reporting requirements under NESHAP AAAAA. The Semi-Annual SSM Plan Report satisfies the requirements under the NESHAP 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. Please note, the updated NESHAP rule went into effect on September 27, 2021, removing SSM Plan requirements. As there are still SSM Plan references in Newby's Title V Permit, Newby will comply with the SSM reporting requirements.

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: Josh Mills, IDCC
Kevin Divincenzo, IDCC
Maria Bowen, SCS Engineers

Pat Sullivan, SCS Engineers
Anne Liu, SCS Engineers

NESHAP/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 7 | August 2022

4683 Chabot Drive, Suite 200
Pleasanton, CA 94588
562-426-9544

This submittal consisting of the National Emission Standards for Hazardous Air Pollutants (NESHAP)/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 2022, was prepared and reviewed by the following:



Anne Liu
Staff Professional
SCS ENGINEERS



Maria Bowen
Project Manager
SCS ENGINEERS



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

Table of Contents

Section	Page
SECTION I. NESHAP/NSPS/BAAQMD Rule 8-34 Semi-Annual Report.....	1
1.0 Introduction	1
2.0 Site Background Information.....	2
2.1 Existing Air Permits.....	2
2.2 Existing Landfill Gas Collection and Control System	3
3.0 Monitoring and Records	3
3.1 Continuously Monitored Parameters	4
3.1.1 Gas Extraction System Downtime	4
3.1.2 Emission Control System Downtime	5
3.1.3 Individual Well Downtime.....	5
3.1.4 Flow Meter and Temperature Gauge Downtime	6
3.1.5 Flare Combustion Zone Temperature	6
3.2 Component Leak Quarterly Monitoring.....	6
3.2.1 First Quarter 2022 Monitoring	7
3.2.2 Second Quarter 2022 Monitoring	7
3.3 Control Efficiency.....	7
3.4 Landfill Surface Emissions Monitoring.....	7
3.4.1 First Quarter 2022 Monitoring	7
3.4.1 Second Quarter 2022 Monitoring	8
3.5 Wellhead Monthly Monitoring.....	8
3.5.1 Pressure.....	8
3.5.2 Oxygen.....	9
3.5.3 Temperature	9
3.5.4 Corrective Action Analysis	10
3.5.5 Enhanced Monitoring.....	10
3.6 Cover Integrity Monitoring.....	10
3.7 Gas Generation Estimate and Monthly Landfill Gas Flow Rates.....	11
3.8 Annual Waste Acceptance Rate and Refuse In Place	11
3.8.1 Non-Degradable Waste Areas.....	11
SECTION II. SSM Plan Report	12
SECTION III. Title V Semi-Annual Report.....	13

Tables

Table 1a – GCCS Downtime

Table 1b – Flare A-2 Downtime

Table 1c – Flare A-3 Downtime

Table 2 – Individual Well Startups, Shutdowns and Decommissions

Table 3 – Wells with Positive Pressure

Table 4 – Wells with Oxygen Exceedances

Table 5 – Wells with Temperature Exceedances

Appendices

Appendix A – Responsible Official Certification Form

Appendix B – Existing GCCS Layout

Appendix C – Surface Emission and GCCS Component Leak Monitoring Results

Appendix D – Flare Source Test Excerpt (Issued March 25, 2022)

Appendix E – Well Exceedance Documentation

Appendix F – Title V Semi-Annual Report

SECTION I. NESHAP/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 Semi-Annual National Emission Standards for Hazardous Air Pollutants (NESHAP) Report, New Source Performance Standard (NSPS), 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW)/Bay Area Air Quality Management District (BAAQMD or District) Rule 8-34 Semi-Annual Report and Semi-Annual Start-up, Shutdown, and Malfunction (SSM) Plan Report for the period of February 1, 2022 through July 31, 2022 to the BAAQMD for the Newby Island Sanitary Landfill and Recyclery (Newby).

This Semi-Annual report also meets the requirements of the NESHAP for MSW landfills, 40 CFR 63, Subpart AAAA and complies with the requirements specified in Newby's Title V permit.

Due to the site's permitted design capacity being over the 2.5 million Megagram/2.5 million cubic meter limits and having an uncontrolled non-methane organic compound (NMOC) content exceeding 50 Megagrams per year, the major compliance provisions of Subparts XXX and WWW were replaced as of September 27, 2021 by the NESHAP 40 CFR 63, Subpart AAAA requirements, which essentially implement and enhance provisions of 40 CFR 60, Subpart XXX (which were updated NSPS for Municipal Solid Waste (MSW) landfills promulgated in 2016) as well as removing the SSM Plan requirements. However, because the Title V Permit references Subpart WWW and SSM requirements, this semi-annual report will continue to include Subpart WWW and an SSM Plan report. A separate annual Subpart XXX report will also be submitted. References to Subpart WWW and SSM will be removed from all reports after a new Title V Permit is issued removing references to Subpart WWW and updating applicable regulations, or we otherwise obtain approval from the BAAQMD to only comply with the new requirements.

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 MSW landfill located in Milpitas, California and is owned and operated by 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 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 the existing Title V which includes NSPS Subpart WWW requirements and Rule 8-34.

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. On November 30, 2021, Mr. Dennis Jang with the BAAQMD informed IDCC that the renewal application (A/N 28723) is open and in process and another renewal application will not be needed.

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 (USEPA) 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

This NSPS Semi-Annual Report for Newby is being submitted to the BAAQMD and USEPA in compliance with 40 CFR Subpart WWW (“NSPS”), including 40 CFR 60.757(f), which describe the items to be submitted in an annual report for landfills seeking to comply with NSPS using an active collection system. In compliance with 40 CFR 63, Subpart AAAA (NESHAP for MSW Landfills), this report is submitted semi-annually.

Please note, the Newby is subject to the 40 CFR Subpart XXX (New NSPS) by commencing construction on its approved expansion. The references in this report notes Subpart WWW and Subpart XXX.

Newby is also subject to the new 40 CFR Subpart AAAA (NESHAPs), which went into effect on September 27, 2021, at which time the SSM reporting requirements no longer apply. However, as the SSM requirements are still noted in the Title V Permit, the SSM report has not been closed out as of the submittal of this report.

This section of the report represents the Semi-Annual Monitoring Report and covers the items required to be reported in the applicable rules under 40 CFR Part 60, Subpart WWW, 40 CFR Part 60, Subpart XXX, and 40 CFR Part 63, Subpart AAAA. The reporting period is from February 1, 2022 through July 31, 2022. The table below summarizes the corresponding sections for the regulatory references addressed in this report:

Corresponding Regulatory References

Section	Emission Guideline Subpart Cc (NSPS Subpart WWW)	NSPS Subpart XXX	Updated NESHAP Subpart AAAA
Pressure Requirements	40 CFR 60.753(b)	40 CFR 60.763(b)	40 CFR 63.1958(b)
Temperature and Oxygen Requirements	40 CFR 60.753(c)	40 CFR 60.763(c)	40 CFR 63.1958(c)
Corrective Action Analysis	--	40 CFR 60.767(g)(7)	40 CFR 63.1981(h)(7)
Enhanced Monitoring	--	--	40 CFR 63.1981(h)(8)

Section	Emission Guideline Subpart Cc (NSPS Subpart WWW)	NSPS Subpart XXX	Updated NESHAP Subpart AAAA
Surface Emissions Monitoring	40 CFR 60.753(d)	40 CFR 60.763(d)	40 CFR 63.1958(d)
Venting to Control System	40 CFR 60.753(e)	40 CFR 60.763(e)	40 CFR 63.1958(e)
Cover Integrity	40 CFR 60.755(c)(5)	40 CFR 60.765(c)(5)	40 CFR 63.1960(c)(5)
Enclosed Flare	40 CFR 60.756(b)	40 CFR 60.766(b)	40 CFR 63.1961(b)
Open Flare	40 CFR 60.756(c)	40 CFR 60.766(c)	40 CFR 63.1961(c)
Other Control Device	40 CFR 60.756(d)	40 CFR 60.766(d)	40 CFR 63.1961(d)
Exceedances	40 CFR 60.757(f)(1)	40 CFR 60.767(g)(1)	40 CFR 63.1981(h)(1)
Gas Stream Diverted	40 CFR 60.757(f)(2)	40 CFR 60.767(g)(2)	40 CFR 63.1981(h)(2)
Control Device Downtime	40 CFR 60.757(f)(3)	40 CFR 60.767(g)(3)	40 CFR 63.1981(h)(3)
Collection System Downtime	40 CFR 60.757(f)(4)	40 CFR 60.767(g)(4)	40 CFR 63.1981(h)(4)
3-Hour Temperature	40 CFR 60.758(c)(1)(i)	40 CFR 60.768(c)(1)(i)	40 CFR 63.1983(c)(1)(i)
Additional Surface Emissions Monitoring	40 CFR 60.757(f)(5)	40 CFR 60.767(g)(5)	40 CFR 63.1981(h)(5)
Well Expansion	40 CFR 60.757(f)(6)	40 CFR 60.767(g)(6)	40 CFR 63.1981(h)(6)
Source Test	--	--	--
Liquids Reporting	--	40 CFR 60.767(k)	--
24-Hour High Temperature	--	--	40 CFR 63.1981(k)

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

All collected gases were conveyed to the flare station control system. The flare station is equipped with an automatic shutdown and alarm system that powers down the specific blower whenever a flare shuts down to ensure that no collected LFG is vented to the atmosphere untreated.

During the reporting period, the LFG extraction system was off-line on several occasions for a total of 53.37 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 exception of nine events. These events occurred on the following dates:

- February 10, 2022 (IDs 08F38 and 08F39 – low temperature);
- February 22, 2022 (IDs 08F64 and 08F65 – pump work);
- March 21, 2022 (IDs 08G42 and 08G43 – sump maintenance);
- April 6, 2022 (IDs 08G88 and 08G89 – routine quarterly sump jetting maintenance);

- May 1, 2022 (IDs 08H21 and 08H22 – utility outage);
- May 4, 2022 (IDs 08H34 and 08H35 - programmable logic controller [PLC] malfunction);
- May 18, 2022 (IDs 08H81 and 08H82 - main blower variable Frequency Drive [VFD] malfunction);
- June 15, 2022 (IDs 08J42 and 08J43 – Pacific Gas and Energy [PG&E] power outage); and
- July 27, 2022 (IDs 08K52 and 08K53 – flame failure).

Reportable Compliance Activity (RCA) forms and combined 10/30-Day Title V Reports and Notifications for the respective RCA IDs were submitted to the BAAQMD within the required time frames.

On July 14, 2022, Ms. Aleah Zapf issued Notice of Violation (NOV) A61610 for an alleged failure to operate the GCCS continuously during RCA event Breakdown ID 08J42 and Excess Excursion ID 08J43, which was due to an unplanned utility power outage from PG&E. For additional information, including corrective actions taken, please refer to the July 22, 2022 10-Day Deviation Letter and NOV Response Letter.

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 Flares 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 100.80 hours and for the A-3 Flare over a cumulative period of approximately 91.60 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 14, 2022, IDCC submitted a Request 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.

NILEW741, NILEW465, NILEW674, NILEW733, NILEW744, NILEW745, NILEW066, NILEW499, NILEW501, NILEW511, NILEW667, NILEW688, NILEW691, NILMW017, NILMW019, NILMW020, NILMW021, NILEW476, NILEW786, NILEW725, NIL3EW31, NILEW479, NILEW690, NILEW787, NILEW752, NILEW483, NILEW110, NILEW00E, NILMW023, and NILMW024 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. These wells were taken off-line in accordance with the requirements of Rule 8-34. Details of the well SSMs can be found in **Table 2**.

Pursuant to Permit Condition No. 10423, Part 6, the owner/operator must notify the District of expected installation or decommissioning dates. During the reporting period, a combined Well Decommissioning and Startup Notification Letter was submitted to the BAAQMD on April 5, 2022. A subsequent notification will be submitted for construction events in 2022.

Details of individual well shutdown and well startups occurring during the reporting period are provided in **Table 2**. Compliance with or exemption from Rule 8-34 was met during each of these events. Please see the 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 1,454°F (1,504 °F minus 50 °F), based on the February 9, 2022 source test performed by Blue Sky Environmental, Inc. (final report issued on March 25, 2022). During the reporting period, the minimum temperature at which the A-3 flare was required to operate was 1,459°F (1,509 °F minus 82 °F), based on the February 9, 2022 source test performed by Blue Sky Environmental, Inc. (final report issued on March 25, 2022). Please note that under the updated NESHAP rules, the requirement is the source test temperature minus 82°F, but as BAAQMD Rule 8-34 and NSPS WWW are still in Newby's permit, we will continue to comply with the source test temperature minus 50°F temperature limit.

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

a flame ionization detector (FID) which was calibrated on the same day as the testing. Monitoring results and calibration records are provided in **Appendix C** and are available for review at the site.

3.2.1 First Quarter 2022 Monitoring

SCS Field Services (SCSFS) conducted the component leak testing of the wellfield and flare station on January 20, 2022. No component leaks above 1,000 ppmv were detected in the wellfield or at the flare station during the First Quarter 2022 monitoring event.

3.2.2 Second Quarter 2022 Monitoring

SCSFS conducted the component leak testing of the flare station and wellfield on May 23, 2022. No component leaks above 1,000 ppmv were detected in the wellfield or at the flare station during the Second Quarter 2022 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 2022 source test was measured to be >98.76 percent by weight, and the NMOC as methane concentration in the flare outlet was <5.1 ppmv. The NMOC destruction efficiency for the A-3 Flare during the February 2022 source test was measured to be >98.59 percent by weight, and the NMOC as methane concentration in the flare outlet was <4.9 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 2022 source test report dated March 25, 2022, summarizing the test results, are provided in **Appendix D**.

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 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 C**. Records of SEM are available for review at the site.

3.4.1 First Quarter 2022 Monitoring

SCSFS field technicians monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv above background on January 17, 18, 19, 26, 27, and 28, February 2 and 16, 2022. Surface emissions in excess of 500 ppmv were detected at twenty-two (22) locations during the first quarter 2022 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the First Quarter 2022 SEM report (**Appendix C**).

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 January 27 and 28, 2022 and the 30-day re-monitoring event on February 16, 2022. Not all the locations were under the 500 ppmv threshold. As such, an expansion of the collection system was required within 120 days, by May 17, 2022. In March 2022, 20 new wells were started up, fulfilling the 120-day requirement.

3.4.1 Second Quarter 2022 Monitoring

SCSFS monitored the landfill surface for leaks with a methane concentration of greater than 500 ppmv above background on May 23, 24, 25, and 26, 2022. Surface emissions in excess of 500 ppmv were detected at sixteen (16) locations during the second quarter 2022 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the second quarter 2022 SEM report (**Appendix C**).

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 events for these locations on June 2 and 10, 2022 and performed the 1-month re-monitoring event, as required by NSPS, on June 22, 2022. All the locations were under the 500 ppmv threshold. Based on these monitoring results no additional follow up testing was required at this time.

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 NILEW644 and NILEW787 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, wells NILEW066, NILEW451, NILEW464, NILEW465, NILEW496, NILEW497, NILEW626, NILEW628, NILEW664, NILEW665, NILEW674, NILEW699, NILEW707, NILEW711, NILEW726, NILEW733, NILEW744, NILEW745, NILHC246, NILHC247, NILHC248, NILHC249, and NILHC250 were operating under positive pressure. These wells were returned under negative pressure, taken offline, or decommissioned by the applicable compliance dates.

Per 40 CFR 63.1960(a)(3)(i), a “root cause analysis” (RCA) is required if pressure exceedances cannot be corrected in 15 days. An additional “corrective action analysis” (CAA) and notification is required for corrective actions that require more than 60 days to complete. See Section 3.5.4 for

discussion of those additional corrective action requirements and **Appendix E** for RCA forms, CAA forms, and 75-day notifications.

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: 3ORR, EW-13, IOIR, HC- 201. The oxygen HOV of 20% is approved for wells: HC-231, HC- 232, HC- 235, HC-237, and 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: NILEW461, NILEW566, NILEW687, NILEW802, NILEW805, NILMW011, NILW728A, NLCR0910, 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 NIHC227A, NILEW035, NILEW228, NILEW491, NILEW604, NILEW620, NILEW668, NILEW672, NILEW677, NILEW684, NILEW695, NILEW704, NILEW723, NILEW763, NILEW769, NILMW005, NILMW008, NILMW011, NILMW020, NILMW031, NILMW034, and NILW728A were operating with an oxygen concentration above the 5 percent limit. The wells were back in compliance, taken offline, or decommissioned within the timeline specified in 8-34-414.

Please note, the oxygen limit has been removed from Subparts XXX and AAAA; however, Newby complied with the oxygen limit during the reporting period per Rule 8-34 and its Title V permit.

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. Please note, Subpart AAAA allows wells to be operated in compliance up to 145 °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 previous reporting period, wells NILEW690 and NILEW752 were operating with a temperature higher than 131 °F. These wells returned to compliance within the timelines specified in 8-34-414.

As of the end of this reporting period, wells NILEW511, NILEW664, NILEW665, and NILEW701 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.

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.

Per 40 CFR 63.1960(a)(4)(i), an RCA is required if temperature exceedances cannot be corrected in 15 days. An additional CAA and notification is required for corrective actions that require more than 60 days to complete. See Section 3.5.4 for discussion of those additional corrective action requirements and **Appendix E** for RCA forms, CAA forms, and 75-day notifications.

3.5.4 Corrective Action Analysis

RCAs were conducted for wells with temperature and pressure exceedances past 15 days. CAAs were performed for wells not corrected within 60 days. Moreover, 75-day notifications were submitted for any wells that could not be corrected within 60 days. The RCA and CAA forms and 75-day notifications are included in **Appendix E**.

3.5.5 Enhanced Monitoring

Per §63.1961(a)(5), enhanced monitoring is required at each well with a measurement of landfill gas temperature greater than 145 °F. During the reporting period, enhanced monitoring was not required at any wells pursuant to Subpart AAAAA.

There were no wells greater than 170 °F during the reporting period.

3.6 COVER INTEGRITY MONITORING

Under BAAQMD Rule 8-34-510 and the NSPS, the landfill surface must be monitored at least monthly for evidence of cracks or other surface integrity issues, which could allow for surface emissions. During the reporting period, cover integrity monitoring was conducted by SCSFS

personnel in conjunction with the wellhead monitoring on February 25, March 30, April 29, May 30, June 29, July 30, 2022 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, 2022 through July 31, 2022, the site accepted 702,939.25 tons of decomposable waste and cover material, resulting in a cumulative waste-in-place total of 37,974,164.73 tons as of July 31, 2022.

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 AAAAA, 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, 2022 through July 31, 2022 are documented in this section. SSM requirements per the updated NESHAP ended on September 27, 2021. However, because SSM reporting requirements are still in the Title V permit, we will continue to report until the conditions are removed.

During the reporting period, there were forty-three (43) SSM events involving shutdown of the entire GCCS. Twenty (20) of these events were planned startups/shutdowns and twenty-three (23) of these startup/shutdown events were associated with a malfunction of the GCCS.

During the reporting period, there were one hundred (100) 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 or construction activities. Wells NILEW741, NILEW465, NILEW674, NILEW733, NILEW744, NILEW745, NILEW066, NILEW499, NILEW501, NILEW511, NILEW667, NILEW688, NILEW691, NILMW017, NILMW019, NILMW020, NILMW021, NILEW476, NILEW786, NILEW725, NIL3EW31, NILEW479, NILEW690, NILEW787, NILEW752, NILEW483, NILEW110, NILEW00E, NILMW023, and NILMW024 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 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, 2022 through July 31, 2022 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 F**.

Tables

**Table 1a. GCCS Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Shutdown	Startup	Downtime Hours	Reason for Downtime	BAAQMD Exemption	Corrective Actions Taken
2/7/2022 13:26	2/7/2022 14:10	0.73	Air Combustion Blower Filter Cleaning (113)	8-34-113, Inspection & Maintenance	Operations & Maintenance (O&M) personnel completed inspection then restarted the flares.
2/10/2022 2:34	2/10/2022 2:42	0.13	Low temperature shutdown (RCA submitted)	RCA Submitted for this event (IDs 08F38 and 08F39)	O&M personnel completed inspection then restarted the flares.
2/22/2022 14:18	2/22/2022 14:24	0.10	Pump Work (RCA Submitted)	RCA Submitted for this event (IDs 08F64 and 08F65)	O&M personnel completed inspection then restarted the flares. O&M personnel will ensure isolation valves are in place prior to conducting pump work.
3/4/2022 17:26	3/4/2022 17:34	0.13	Low Gas Flow from Construction Activities (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/14/2022 10:02	3/14/2022 10:10	0.13	Air Blower and Gas Blower Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
3/21/2022 11:04	3/21/2022 11:12	0.13	Sump Maintenance (RCA Submitted)	RCA Submitted for this event (IDs 08G42 and 08G43)	O&M personnel completed inspection then restarted the flares. O&M personnel will ensure caps are in place prior to conducting sump maintenance.
3/31/2022 13:30	3/31/2022 13:38	0.13	Gas Blower Maintenance and troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/6/2022 14:58	4/6/2022 15:58	1.00	Routine Quarterly Sump Jetting Maintenance (RCA Submitted)	RCA Submitted for this event (IDs 08G88 and 08G89)	O&M personnel completed inspection then restarted the flares. O&M personnel will ensure caps are in place prior to conducting sump maintenance.
4/7/2022 9:06	4/7/2022 13:48	4.70	Air Combustion Blower Filter Cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/7/2022 15:52	4/7/2022 17:28	1.60	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
4/8/2022 13:12	4/8/2022 13:38	0.43	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/1/2022 0:44	5/2/2022 7:06	30.37	Utility outage (RCA submitted)	RCA Submitted for this event (IDs 08H21 and 08H22)	O&M personnel completed inspection then restarted the flares once power was restored.
5/2/2022 8:42	5/2/2022 8:50	0.13	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/4/2022 10:02	5/4/2022 10:08	0.10	Programmable Logic Controller (PLC) Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 10:30	5/4/2022 10:36	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 10:58	5/4/2022 11:04	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 12:20	5/4/2022 12:28	0.13	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 12:48	5/4/2022 12:54	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 13:06	5/4/2022 13:14	0.13	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 13:28	5/4/2022 13:34	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 13:46	5/4/2022 13:52	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 14:04	5/4/2022 14:12	0.13	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 14:24	5/4/2022 14:30	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 14:44	5/4/2022 14:50	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.

**Table 1a. GCCS Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Shutdown	Startup	Downtime Hours	Reason for Downtime	BAAQMD Exemption	Corrective Actions Taken
5/4/2022 15:04	5/4/2022 15:10	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 15:38	5/4/2022 15:44	0.10	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 17:30	5/4/2022 17:38	0.13	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/4/2022 18:12	5/4/2022 18:32	0.33	PLC Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H34 and 08H35)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/18/2022 12:28	5/18/2022 12:36	0.13	Main Blower Variable Frequency Drive (VFD) Malfunction (RCA Submitted)	RCA Submitted for this event (IDs 08H81 and 08H82)	O&M personnel restarted the PLC and scheduled the manufacturer, John Zink, to inspect the flares.
5/18/2022 13:02	5/18/2022 13:08	0.10	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/18/2022 13:24	5/18/2022 13:30	0.10	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
5/18/2022 13:46	5/18/2022 14:18	0.53	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/8/2022 10:18	6/8/2022 11:18	1.00	Flare Manufacturer Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/14/2022 6:58	6/14/2022 7:40	0.70	Air Combustion Blower Filter Cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/15/2022 3:06	6/15/2022 7:06	4.00	PG&E Power Outage (RCA Submitted)	RCA Submitted for this event (IDs 08J42 and 08J43)	O&M personnel completed inspection then restarted the flares once power was restored.
6/16/2022 14:00	6/16/2022 14:46	0.77	Manual Shutdown for construction activities (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
6/27/2022 0:54	6/27/2022 1:02	0.13	Low Gas Flow Shutdown (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/5/2022 9:14	7/5/2022 9:50	0.60	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/7/2022 10:08	7/7/2022 10:16	0.13	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/21/2022 11:38	7/21/2022 11:44	0.10	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/26/2022 8:50	7/26/2022 10:58	2.13	Air Combustion Blower Filter Cleaning (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
7/27/2022 23:36	7/27/2022 23:50	0.23	Flame Failure (RCA Submitted)	RCA Submitted for this event (IDs 08K52 and 08K53)	O&M personnel completed inspection then restarted the flares.
7/28/2022 8:20	7/28/2022 9:26	1.10	Flare Maintenance and Troubleshooting (113)	8-34-113, Inspection & Maintenance	O&M personnel completed inspection then restarted the flares.
Total:		53.37			

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 February 10, 22, March 21, April 6, May 1, 4, 18, June 15, July 27, 2022 which involved a low temperature shutdown, sump maintenance, PG&E outages, PLC malfunction, VFD malfunction, flame failure alarm, and high flow alarms. 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, 2022 through July 31, 2022)**

Shutdown	Startup	Downtime Hours	Reason for Downtime and BAAQMD Exemption
2/7/2022 13:26	2/8/2022 8:54	19.47	Thermocouple Replacement (113)
2/10/2022 2:34	2/10/2022 2:42	0.13	Low temperature shutdown (RCA submitted, IDs 08F38 and 08F39)
2/22/2022 14:18	2/22/2022 14:24	0.10	Pump Maintenance at Sump CS02 (RCA Submitted, IDs 08F64 and 08F65)
3/4/2022 17:26	3/4/2022 17:34	0.13	Low Gas Flow from Construction Activities (113)
3/14/2022 10:02	3/14/2022 10:10	0.13	Air Blower and Gas Blower Maintenance and Troubleshooting (113)
3/21/2022 11:04	3/21/2022 11:12	0.13	Sump Maintenance (RCA submitted, IDs 08G42 and 08G43)
3/31/2022 13:30	3/31/2022 13:38	0.13	Gas Blower Maintenance and troubleshooting (113)
4/6/2022 14:58	4/6/2022 16:14	1.27	Routine Quarterly Sump Jetting Maintenance (RCA Submitted, IDs 08G88 and 08G89)
4/7/2022 7:00	4/7/2022 17:28	10.47	Air Combustion Blower Filter Cleaning (113)
4/8/2022 7:02	4/8/2022 9:00	1.97	Flare Maintenance and Troubleshooting (113)
4/8/2022 13:12	4/8/2022 13:38	0.43	Flare Maintenance and Troubleshooting (113)
5/1/2022 0:44	5/2/2022 8:32	31.80	Utility outage (RCA submitted, IDs 08H21 and 08H22)
5/2/2022 8:42	5/2/2022 8:50	0.13	Flare Maintenance and Troubleshooting (113)
5/4/2022 10:02	5/4/2022 10:08	0.10	Programmable Logic Controller (PLC) Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 10:30	5/4/2022 10:36	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 10:58	5/4/2022 11:06	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 12:20	5/4/2022 12:28	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 12:48	5/4/2022 12:56	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 13:06	5/4/2022 13:14	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 13:28	5/4/2022 13:36	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 13:46	5/4/2022 13:52	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 14:04	5/4/2022 14:12	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 14:24	5/4/2022 14:30	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 14:44	5/4/2022 14:50	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 15:04	5/4/2022 15:10	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 15:38	5/4/2022 15:46	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 17:30	5/4/2022 17:38	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 18:12	5/4/2022 18:32	0.33	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/18/2022 12:28	5/18/2022 12:36	0.13	Main Blower Variable Frequency Drive (VFD) Malfunction (RCA Submitted, IDs 08H81 and 08H82)
5/18/2022 13:02	5/18/2022 13:08	0.10	Flare Maintenance and Troubleshooting (113)
5/18/2022 13:24	5/18/2022 13:30	0.10	Flare Maintenance and Troubleshooting (113)
5/18/2022 13:46	5/18/2022 14:48	1.03	Flare Maintenance and Troubleshooting (113)
6/8/2022 10:18	6/8/2022 11:18	1.00	Flare Manufacturer Flare Maintenance and Troubleshooting (113)

**Table 1b. Flare (A-2) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Shutdown	Startup	Downtime Hours	Reason for Downtime and BAAQMD Exemption
6/14/2022 6:58	6/14/2022 7:40	0.70	Air Combustion Blower Filter Cleaning (113)
6/15/2022 3:06	6/15/2022 7:06	4.00	PG&E Power Outage (RCA Submitted, IDs 08J42 and 08J43)
6/16/2022 14:00	6/16/2022 14:46	0.77	Manual Shutdown for construction activities (113)
6/27/2022 0:54	6/27/2022 1:02	0.13	Low Gas Flow Shutdown (113)
7/5/2022 9:14	7/5/2022 9:50	0.60	Flare Maintenance and Troubleshooting (113)
7/7/2022 10:08	7/7/2022 10:16	0.13	Flare Maintenance and Troubleshooting (113)
7/18/2022 8:50	7/18/2022 10:54	2.07	Flow Meter Calibration Event (113)
7/21/2022 11:38	7/21/2022 11:44	0.10	Flare Maintenance and Troubleshooting (113)
7/21/2022 11:58	7/21/2022 12:18	0.33	Flare Maintenance and Troubleshooting (113)
7/26/2022 8:50	7/26/2022 11:00	2.17	Air Combustion Blower Filter Cleaning (113)
7/27/2022 23:36	7/27/2022 23:50	0.23	Flame Failure (RCA Submitted, IDs 08K52 and 08K53)
7/28/2022 8:20	7/28/2022 9:28	1.13	Flare Maintenance and Troubleshooting (113)
7/28/2022 19:42	7/29/2022 13:28	17.77	Flare Maintenance and Troubleshooting (113)
Total		100.80	

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 February 10, 22, March 21, April 6, May 1, 4, 18, June 15, July 27, 2022 which involved a low temperature shutdown, sump maintenance, PG&E outages, PLC malfunction, VFD malfunction, flame failure alarm, and high flow alarms. 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, 2022 through July 31, 2022)**

Shutdown	Startup	Downtime Hours	Reason for Downtime and BAAQMD Exemption
2/7/2022 13:24	2/7/2022 14:10	0.77	Air Combustion Blower Filter Cleaning (113)
2/10/2022 2:34	2/10/2022 6:02	3.47	Low temperature shutdown (RCA submitted, IDs 08F38 and 08F39)
2/21/2022 13:56	2/21/2022 14:08	0.20	Air Combustion Blower Filter Cleaning (113)
2/21/2022 15:36	2/21/2022 16:14	0.63	Air Combustion Blower Filter Cleaning (113)
2/22/2022 14:16	2/22/2022 14:28	0.20	Pump Maintenance at Sump CS02 (RCA Submitted, IDs 08F64 and 08F65)
3/4/2022 17:26	3/4/2022 17:38	0.20	Low Gas Flow from Construction Activities (113)
3/9/2022 16:10	3/9/2022 16:20	0.17	Low Gas Flow from Construction Activities (113)
3/11/2022 17:00	3/11/2022 17:12	0.20	Low Gas Flow from Construction Activities (113)
3/14/2022 10:02	3/14/2022 11:44	1.70	Air Combustion Blower Filter Cleaning (113)
3/14/2022 13:18	3/14/2022 13:36	0.30	Air Blower and Gas Blower Maintenance and Troubleshooting (113)
3/21/2022 11:04	3/21/2022 11:16	0.20	Sump Maintenance (RCA submitted, IDs 08G42 and 08G43)
3/31/2022 13:30	3/31/2022 13:40	0.17	Gas Blower Maintenance and troubleshooting (113)
4/6/2022 14:58	4/6/2022 15:58	1.00	Routine Quarterly Sump Jetting Maintenance (RCA Submitted, IDs 08G88 and 08G89)
4/6/2022 16:40	4/6/2022 16:46	0.10	Low Gas Flow from Construction Activities (113)
4/6/2022 17:06	4/6/2022 17:12	0.10	Low Gas Flow from Construction Activities (113)
4/7/2022 9:06	4/7/2022 13:48	4.70	Air Combustion Blower Filter Cleaning (113)
4/7/2022 15:52	4/7/2022 17:32	1.67	Flare Maintenance and Troubleshooting (113)
4/8/2022 13:12	4/8/2022 13:42	0.50	Flare Maintenance and Troubleshooting (113)
4/13/2022 19:18	4/13/2022 19:30	0.20	Low Gas Flow from Construction Activities (113)
4/13/2022 20:10	4/13/2022 20:16	0.10	Low Gas Flow from Construction Activities (113)
4/19/2022 14:20	4/19/2022 14:40	0.33	Low Gas Flow from Construction Activities (113)
5/1/2022 0:44	5/2/2022 7:06	30.37	Utility outage (RCA submitted, IDs 08H21 and 08H22)
5/2/2022 8:42	5/2/2022 8:54	0.20	Flare Maintenance and Troubleshooting (113)
5/4/2022 10:02	5/4/2022 10:12	0.17	Programmable Logic Controller (PLC) Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 10:30	5/4/2022 10:36	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 10:58	5/4/2022 11:04	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 12:20	5/4/2022 12:32	0.20	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 12:48	5/4/2022 12:54	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 13:06	5/4/2022 13:14	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 13:28	5/4/2022 13:34	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 13:46	5/4/2022 13:52	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 14:04	5/4/2022 14:12	0.13	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 14:24	5/4/2022 14:30	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 14:44	5/4/2022 14:50	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 15:04	5/4/2022 15:10	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 15:38	5/4/2022 15:44	0.10	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)

**Table 1c. Flare (A-3) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Shutdown	Startup	Downtime Hours	Reason for Downtime and BAAQMD Exemption
5/4/2022 17:30	5/4/2022 17:42	0.20	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/4/2022 18:12	5/4/2022 18:32	0.33	PLC Malfunction (RCA Submitted, IDs 08H34 and 08H35)
5/6/2022 9:16	5/6/2022 9:56	0.67	Air Combustion Blower Filter Cleaning (113)
5/9/2022 13:38	5/9/2022 13:58	0.33	Flare Flow Meter Maintenance and Troubleshooting (113)
5/13/2022 12:12	5/13/2022 12:22	0.17	Low Gas Flow due to construction activities (113)
5/17/2022 8:26	5/17/2022 8:38	0.20	Air Combustion Blower Filter Cleaning (113)
5/18/2022 12:28	5/18/2022 12:40	0.20	Main Blower Variable Frequency Drive (VFD) Malfunction (RCA Submitted, IDs 08H81 and 08H82)
5/18/2022 13:02	5/18/2022 13:08	0.10	Flare Maintenance and Troubleshooting (113)
5/18/2022 13:24	5/18/2022 13:30	0.10	Flare Maintenance and Troubleshooting (113)
5/18/2022 13:44	5/18/2022 14:18	0.57	Flare Maintenance and Troubleshooting (113)
5/21/2022 9:36	5/21/2022 12:14	2.63	Air Combustion Blower Filter Cleaning (113)
5/21/2022 20:42	5/21/2022 20:54	0.20	Flare Maintenance and Troubleshooting (113)
5/26/2022 9:08	5/26/2022 12:14	3.10	Flares shutdown for 12-inch header work by SCS (113)
5/27/2022 1:36	5/27/2022 1:46	0.17	Low Gas Flow due to construction activities (113)
5/31/2022 0:32	5/31/2022 0:44	0.20	Low Gas Flow due to construction activities (113)
6/2/2022 23:42	6/2/2022 23:54	0.20	Low Gas Flow Shutdown due to construction (113)
6/4/2022 5:40	6/4/2022 8:14	2.57	High Burner Tip Temperature Shutdown (113)
6/4/2022 9:06	6/4/2022 9:40	0.57	Flare Maintenance and Troubleshooting (113)
6/8/2022 10:08	6/8/2022 11:18	1.17	Flare Manufacturer Flare Maintenance and Troubleshooting (113)
6/14/2022 6:58	6/14/2022 14:12	7.23	Air Combustion Blower Filter Cleaning (113)
6/15/2022 3:06	6/15/2022 7:24	4.30	PG&E Power Outage (RCA Submitted, IDs 08J42 and 08J43)
6/16/2022 14:00	6/16/2022 16:10	2.17	Manual Shutdown for construction activities (113)
6/27/2022 0:54	6/27/2022 1:06	0.20	Low Gas Flow Shutdown (113)
6/27/2022 13:34	6/27/2022 14:16	0.70	Air Combustion Blower Filter Cleaning (113)
7/5/2022 9:14	7/5/2022 9:54	0.67	Flare Maintenance and Troubleshooting (113)
7/7/2022 10:08	7/7/2022 10:20	0.20	Flare Maintenance and Troubleshooting (113)
7/18/2022 10:56	7/18/2022 12:40	1.73	Flow Meter Calibration Event (113)
7/18/2022 12:44	7/18/2022 13:08	0.40	Flow Meter Calibration Event (113)
7/19/2022 9:22	7/19/2022 9:34	0.20	Low Gas Flow due to construction activities (113)
7/19/2022 10:50	7/19/2022 10:56	0.10	Low Gas Flow due to construction activities (113)
7/21/2022 3:46	7/21/2022 3:58	0.20	Flare Maintenance and Troubleshooting (113)
7/21/2022 11:38	7/21/2022 12:26	0.80	Flare Maintenance and Troubleshooting (113)
7/23/2022 3:58	7/23/2022 4:10	0.20	Low Gas Flow due to construction activities (113)
7/24/2022 4:00	7/24/2022 4:14	0.23	Low Gas Flow due to construction activities (113)
7/24/2022 21:06	7/24/2022 21:18	0.20	Low Gas Flow due to construction activities (113)
7/24/2022 23:00	7/24/2022 23:12	0.20	Low Gas Flow due to construction activities (113)

**Table 1c. Flare (A-3) Downtime
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Shutdown	Startup	Downtime Hours	Reason for Downtime and BAAQMD Exemption
7/26/2022 8:40	7/26/2022 10:58	2.30	Air Combustion Blower Filter Cleaning (113)
7/26/2022 11:42	7/26/2022 11:50	0.13	Low Gas Flow due to construction activities (113)
7/27/2022 23:36	7/27/2022 23:54	0.30	Flame Failure (RCA Submitted, IDs 08K52 and 08K53)
7/28/2022 8:20	7/28/2022 9:26	1.10	Flare Maintenance and Troubleshooting (113)
7/29/2022 7:48	7/29/2022 12:38	4.83	Air Combustion Blower Filter Cleaning (113)
7/29/2022 13:26	7/29/2022 13:46	0.33	Low Gas Flow due to construction activities (113)
7/29/2022 21:28	7/29/2022 21:40	0.20	Low Gas Flow due to construction activities (113)
Total		91.60	

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 February 10, 22, March 21, April 6, May 1, 4, 18, June 15, July 27, 2022 which involved a low temperature shutdown, sump maintenance, PG&E outages, PLC malfunction, VFD malfunction, flame failure alarm, and high flow alarms. 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, 2022 through July 31, 2022)**

Well ID	Shutdown	Start-up	Days Offline	Reason for Shutdown/Startup
NILEW741*	7/14/2021		382.33	Well Temporarily Offline Due to Filling (actively offline)
NILEW726	9/14/2021	2/10/2022	149.00	Well Temporarily Offline Due to Filling
NILEW664	10/19/2021	7/7/2022	260.37	Well Temporarily Offline due to Construction Activities
NILEW451	11/3/2021	7/7/2022	245.28	Well Temporarily Offline due to Construction Activities
NILEW464	11/3/2021	7/7/2022	245.30	Well Temporarily Offline due to Construction Activities
NILEW465*	11/3/2021		270.29	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW496	11/3/2021	7/7/2022	245.35	Well Temporarily Offline due to Construction Activities
NILEW497	11/3/2021	7/12/2022	250.28	Well Temporarily Offline due to Construction Activities
NILEW626	11/3/2021	7/7/2022	245.29	Well Temporarily Offline due to Construction Activities
NILEW665	11/3/2021	7/7/2022	245.30	Well Temporarily Offline due to Construction Activities
NILEW674*	11/3/2021		270.29	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW711	11/3/2021	7/7/2022	245.30	Well Temporarily Offline due to Construction Activities
NILEW733*	11/3/2021		270.29	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW744*	11/3/2021		270.29	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW745*	11/3/2021		270.28	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW066*	11/11/2021		262.45	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW707	11/24/2021	7/7/2022	224.52	Well Temporarily Offline due to Construction Activities
NILEW491	2/24/2022	N/A	N/A	Vertical Well Decommissioning
NILEW00A	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW035	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW053	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW057	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW106	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW114	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW228	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW232	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW441	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW466	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW500	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW510	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW604	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW607	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW609	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW610	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW611	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW618	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW628	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW648	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW651	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW653	3/3/2022	N/A	N/A	Vertical Well Decommissioning

**Table 2. Individual Well Startups, Shutdowns and Decommissions
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Shutdown	Start-up	Days Offline	Reason for Shutdown/Startup
NILEW655	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW666	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW668	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW677	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW682	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW683	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW684	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW695	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW699	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW714	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW717	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW723	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW742	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW747	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILEW769	3/3/2022	N/A	N/A	Vertical Well Decommissioning
NILW627A	3/7/2022	N/A	N/A	Vertical Well Decommissioning
NILEW796	N/A	3/4/2022	N/A	Vertical Well Start Up
NILEW797	N/A	3/4/2022	N/A	Vertical Well Start Up
NILEW798	N/A	3/7/2022	N/A	Vertical Well Start Up
NILEW799	N/A	3/8/2022	N/A	Vertical Well Start Up
NILEW790	N/A	3/9/2022	N/A	Vertical Well Start Up
NILEW792	N/A	3/9/2022	N/A	Vertical Well Start Up
NILEW793	N/A	3/10/2022	N/A	Vertical Well Start Up
NILEW794	N/A	3/10/2022	N/A	Vertical Well Start Up
NILEW499*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW501*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW511*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW667*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW688*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW691*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILMW017*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILMW019*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILMW020*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILMW021*	3/11/2022		143.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW803	N/A	3/11/2022	N/A	Vertical Well Start Up
NILEW804	N/A	3/11/2022	N/A	Vertical Well Start Up
NILEW805	N/A	3/11/2022	N/A	Vertical Well Start Up
NILEW692	3/14/2022	4/1/2022	18.58	Well Temporarily Offline Due to Filling
NILEW693	3/14/2022	4/1/2022	18.56	Well Temporarily Offline Due to Filling
NILEW740	3/14/2022	4/1/2022	18.56	Well Temporarily Offline Due to Filling

**Table 2. Individual Well Startups, Shutdowns and Decommissions
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Shutdown	Start-up	Days Offline	Reason for Shutdown/Startup
NILEW795	N/A	3/14/2022	N/A	Vertical Well Start Up
NILEW806	N/A	3/14/2022	N/A	Vertical Well Start Up
NILEW788	N/A	3/15/2022	N/A	Vertical Well Start Up
NILEW789	N/A	3/15/2022	N/A	Vertical Well Start Up
NILEW802	N/A	3/16/2022	N/A	Vertical Well Start Up
NILEW775	N/A	3/22/2022	N/A	Vertical Well Start Up
NILEW791	N/A	3/22/2022	N/A	Vertical Well Start Up
NILEW800	N/A	3/23/2022	N/A	Vertical Well Start Up
NILEW476*	4/26/2022		97.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW786*	4/26/2022		97.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW725*	4/28/2022		95.00	Well Temporarily Offline due to Construction Activities (actively offline)
NIL3EW31*	5/5/2022		88.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW479*	5/5/2022		88.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW690*	5/5/2022		88.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW659	5/11/2022	N/A	N/A	Vertical Well Decommissioning
NILEW787*	5/11/2022		82.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW752*	5/23/2022		70.00	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW218	5/25/2022	N/A	N/A	Vertical Well Decommissioning
NILEW483*	6/1/2022		60.96	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW110*	6/23/2022		38.40	Well Temporarily Offline due to Construction Activities (actively offline)
NILEW772	N/A	7/7/2022	N/A	Vertical Well Start Up
NILEW00E*	7/15/2022		16.56	Well Temporarily Offline due to Construction Activities (actively offline)
NILMW023*	7/15/2022		16.56	Well Temporarily Offline due to Construction Activities (actively offline)
NILMW024*	7/15/2022		16.56	Well Temporarily Offline due to Construction Activities (actively offline)

*Well was offline at the end of the reporting period. For reporting purposes, the startup time is calculated as of August 1, 2022 at 00:00.

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, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NIHC227A	2/3/2022 14:28	4.3	-0.04	Adjusted Valve, In Compliance
NILCW001	3/22/2022 13:20	1.7	-0.32	Adjusted Valve, In Compliance
NILCW002	6/17/2022 15:37	0.02	-0.01	Adjusted Valve, In Compliance
NILCW003	6/17/2022 15:41	0.02	-0.01	Adjusted Valve, In Compliance
NILEW430	7/6/2022 14:36	0.24	-0.13	Adjusted Valve, In Compliance
NILEW430	7/21/2022 14:38	0.42	-0.3	Adjusted Valve, In Compliance
NILEW451	7/6/2022 16:11	27.33	17.99	(Initial Exceedance was on 7/30/21 and was previously taken offline) Well taken online; Adjusted Valve
NILEW451	7/6/2022 16:13	16.19	16.21	Second Reading
NILEW451	7/12/2022 12:10	-39.28	-39.28	In Compliance
NILEW464	7/6/2022 15:46	-12.42	-12.29	(Initial Exceedance was on 9/22/21 and was previously taken offline) Well taken online; In Compliance
NILEW496	7/6/2022 15:20	0.85	-0.17	(Initial Exceedance was on 10/22/21 and was previously taken offline) Well taken online; Adjusted Valve, In Compliance
NILEW497	7/12/2022 12:07	-41.49	-41.99	(Initial Exceedance was on 7/30/21 and was previously taken offline) Well taken online; Adjusted Valve
NILEW514	2/7/2022 15:41	7.84	-24.23	Adjusted Valve, In Compliance
NILEW593	3/1/2022 12:46	6.08	-11.77	Adjusted Valve, In Compliance
NILEW593	6/1/2022 13:20	1.04	-4.36	Adjusted Valve, In Compliance
NILEW595	3/17/2022 10:45	25.41	-28.85	Adjusted Valve, In Compliance
NILEW609	3/3/2022 15:28	1.06	1.07	Adjusted Valve
NILEW609	3/3/2022 15:31	0.89	0.9	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW620	2/11/2022 14:27	16.43	16.45	Adjusted Valve
NILEW620	2/11/2022 14:32	16.71	17.41	Second Reading
NILEW620	2/21/2022 14:48	-6.31	-6.73	In Compliance

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NILEW620	3/3/2022 15:39	7.82	-0.14	Adjusted Valve, In Compliance
NILEW625	5/3/2022 11:15	0.82	-0.33	Adjusted Valve, In Compliance
NILEW626	7/6/2022 16:03	13.39	7.8	(Initial Exceedance was on 7/30/21 and was previously taken offline) Well taken online; Adjusted Valve
NILEW626	7/6/2022 16:04	7.09	7.12	Second Reading
NILEW626	7/12/2022 12:01	-4.01	-7.44	In Compliance
NILEW628	2/7/2022 11:28	12.88	12.88	(Initial Exceedance was on 12/13/21) Adjusted Valve
NILEW628	3/3/2022 10:06	12.75	12.75	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW639	3/30/2022 13:38	29.58	-3.91	Adjusted Valve, In Compliance
NILEW644	7/22/2022 13:51	1.72	1.61	Adjusted Valve
NILEW644	7/22/2022 13:55	1.56	1.57	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by November 19, 2022.
NILEW648	2/10/2022 17:16	15.95	-1.22	Adjusted Valve, In Compliance
NILEW648	2/14/2022 14:50	2.91	-54.66	Adjusted Valve, In Compliance
NILEW650	2/25/2022 16:31	1.11	-0.43	Adjusted Valve, In Compliance
NILEW650	6/2/2022 15:18	3.07	-0.41	Adjusted Valve, In Compliance
NILEW650	6/8/2022 12:07	0.27	-4.47	Adjusted Valve, In Compliance
NILEW664	7/6/2022 16:23	3.65	-2.31	(Initial Exceedance was on 8/10/21 and was previously taken offline) Well taken online; Adjusted Valve, In Compliance
NILEW665	7/6/2022 15:53	0.9	-0.13	(Initial Exceedance was on 8/10/21 and was previously taken offline) Well taken online; Adjusted Valve, In Compliance
NILEW666	3/3/2022 9:58	0.8	0.82	Adjusted Valve
NILEW666	3/3/2022 10:05	1.42	1.43	Adjusted Valve, In Compliance

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NILEW679	5/2/2022 11:08	3.17	-1.17	Adjusted Valve, In Compliance
NILEW693	4/1/2022 13:31	0.37	-0.03	Adjusted Valve, In Compliance
NILEW699	2/10/2022 16:17	-41.72	-42.01	(Initial Exceedance was on 1/13/22) In Compliance
NILEW704	3/17/2022 13:40	0.27	-0.01	Adjusted Valve, In Compliance*
NILEW704	7/28/2022 11:31	0.2	-0.1	Adjusted Valve, In Compliance*
NILEW707	7/6/2022 15:12	-7.12	-7.14	(Initial Exceedance was on 11/11/21 and was previously taken offline) Well taken online; In Compliance
NILEW711	7/6/2022 15:39	-1.58	-1.56	(Initial Exceedance was on 8/10/21 and was previously taken offline) Well taken online; In Compliance
NILEW712	3/22/2022 14:39	0.03	-1.38	Adjusted Valve, In Compliance
NILEW712	4/11/2022 13:34	1.58	-0.32	Adjusted Valve, In Compliance
NILEW712	6/21/2022 14:38	0.27	-0.55	Adjusted Valve, In Compliance
NILEW714	2/11/2022 11:28	0.65	0.65	Adjusted Valve
NILEW714	2/11/2022 13:18	1.32	-0.15	Adjusted Valve, In Compliance
NILEW714	3/3/2022 9:15	0.07	0.16	Adjusted Valve
NILEW714	3/3/2022 9:29	1.15	1.15	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW719	3/16/2022 10:35	57.27	-7.28	Adjusted Valve, In Compliance
NILEW720	3/16/2022 10:44	11.25	-5.08	Adjusted Valve, In Compliance
NILEW722	3/16/2022 10:19	2.72	-2.28	Adjusted Valve, In Compliance
NILEW722	5/10/2022 14:48	1.67	-0.74	Adjusted Valve, In Compliance
NILEW726	2/10/2022 16:11	10.03	-1.05	(Initial Exceedance was on 7/14/21 and was previously taken offline) Well taken online; Adjusted Valve, In Compliance
NILEW739	4/25/2022 11:59	4.98	-1.5	Adjusted Valve, In Compliance

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NILEW757	3/9/2022 14:40	0.66	-5.03	Adjusted Valve, In Compliance
NILEW757	5/19/2022 17:09	4.88	-1.77	Adjusted Valve, In Compliance
NILEW759	2/25/2022 17:26	1.49	-2.15	Adjusted Valve, In Compliance
NILEW759	3/3/2022 14:16	52.69	-6.37	Adjusted Valve, In Compliance
NILEW759	3/21/2022 14:15	2.66	-1.68	Adjusted Valve, In Compliance
NILEW759	3/29/2022 12:46	2.06	-1.19	Adjusted Valve, In Compliance
NILEW759	6/21/2022 14:51	1.82	-0.21	Adjusted Valve, In Compliance
NILEW760	5/19/2022 15:32	0.44	-0.13	Adjusted Valve, In Compliance
NILEW761	5/26/2022 14:25	0.3	-0.14	Adjusted Valve, In Compliance
NILEW762	2/14/2022 10:30	0.08	-0.04	Adjusted Valve, In Compliance
NILEW762	7/22/2022 14:20	0.04	-0.41	Adjusted Valve, In Compliance
NILEW764	4/25/2022 12:42	0.78	-17.79	Adjusted Valve, In Compliance
NILEW768	3/11/2022 15:51	1.21	-1.88	Adjusted Valve, In Compliance
NILEW768	6/20/2022 11:03	0.09	-0.49	Adjusted Valve, In Compliance
NILEW768	7/12/2022 15:07	0.24	-0.4	Adjusted Valve, In Compliance
NILEW772	7/7/2022 11:57	15.93	15.93	Adjusted Valve
NILEW772	7/7/2022 12:01	16.25	8.76	Second Reading
NILEW772	7/7/2022 12:02	8.75	8.81	Third Reading
NILEW772	7/12/2022 11:38	-6.44	-8.42	In Compliance
NILEW775	3/22/2022 10:29	4.27	4.27	Adjusted Valve
NILEW775	3/22/2022 10:37	4.25	2.35	Second Reading
NILEW775	3/22/2022 10:38	2.22	2.26	Third Reading
NILEW775	3/22/2022 15:25	1.1	0.55	Fourth Reading
NILEW775	3/22/2022 15:27	0.48	0.5	Fifth Reading
NILEW775	3/23/2022 16:03	-1.55	-1.54	In Compliance
NILEW775	4/1/2022 13:38	5.63	-0.95	Adjusted Valve, In Compliance

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NILEW775	4/25/2022 14:08	6.89	-0.32	Adjusted Valve, In Compliance
NILEW786	3/29/2022 10:56	3.89	3.89	Adjusted Valve
NILEW786	3/29/2022 10:59	3.9	1.95	Second Reading
NILEW786	3/29/2022 11:00	1.65	1.65	Third Reading
NILEW786	3/29/2022 13:15	2.32	1.15	Fourth Reading
NILEW786	3/29/2022 13:16	0.81	0.81	Fifth Reading
NILEW786	3/30/2022 8:45	1.26	-0.1	In Compliance
NILEW787	3/29/2022 9:26	6.19	6.44	Adjusted Valve
NILEW787	3/29/2022 9:28	6.2	6.24	Second Reading
NILEW787	3/29/2022 9:29	6.27	6.44	Third Reading
NILEW787	4/13/2022 14:36	5.76	5.81	Adjusted Valve
NILEW787	4/26/2022 14:48	7.58	7.56	Adjusted Valve; Well was temporarily taken offline.
NILEW789	3/15/2022 14:32	0.22	0.21	Adjusted Valve
NILEW789	3/15/2022 15:35	0.29	0.14	Second Reading
NILEW789	3/15/2022 15:37	0.1	0.11	Third Reading
NILEW789	3/16/2022 13:16	0.36	-0.12	In Compliance
NILEW789	3/21/2022 15:04	0.02	-0.24	Adjusted Valve, In Compliance
NILEW790	3/9/2022 13:35	5.12	5.16	Adjusted Valve
NILEW790	3/9/2022 13:38	5.08	2.55	Second Reading
NILEW790	3/9/2022 13:40	2.52	2.52	Third Reading
NILEW790	3/9/2022 15:38	1.72	0.85	Fourth Reading
NILEW790	3/9/2022 15:39	0.61	0.59	Fifth Reading
NILEW790	3/10/2022 13:54	-0.05	-0.31	In Compliance
NILEW791	3/22/2022 14:04	4.4	4.34	Adjusted Valve
NILEW791	3/22/2022 14:08	4.35	2.68	Second Reading
NILEW791	3/22/2022 14:09	2.86	2.9	Third Reading
NILEW791	3/22/2022 15:39	3.28	1.64	Fourth Reading
NILEW791	3/22/2022 15:40	1.41	1.41	Fifth Reading
NILEW791	3/23/2022 16:19	1.12	-0.1	In Compliance
NILEW791	3/31/2022 16:23	0.03	-0.05	Adjusted Valve, In Compliance
NILEW792	3/9/2022 14:14	7.12	7.12	Adjusted Valve
NILEW792	3/9/2022 14:22	7.12	3.52	Second Reading
NILEW792	3/9/2022 14:23	3.44	3.44	Third Reading
NILEW792	3/9/2022 15:45	2.78	1.39	Fourth Reading
NILEW792	3/9/2022 15:46	1.28	1.29	Fifth Reading
NILEW792	3/10/2022 10:35	1.15	0.49	Adjusted Valve

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NILEW792	3/10/2022 10:37	-0.15	-0.16	In Compliance
NILEW792	3/11/2022 14:07	0.44	-0.07	Adjusted Valve, In Compliance
NILEW792	4/13/2022 11:30	0.37	-0.1	Adjusted Valve, In Compliance
NILEW793	3/10/2022 15:57	1.3	1.11	Adjusted Valve
NILEW793	3/10/2022 15:59	0.75	0.76	Second Reading
NILEW793	3/11/2022 14:19	0.98	0.97	Adjusted Valve
NILEW793	3/11/2022 14:21	0.75	0.74	Second Reading
NILEW793	3/21/2022 10:11	0.5	-0.25	Adjusted Valve, In Compliance
NILEW795	3/14/2022 14:05	1.78	1.79	Adjusted Valve
NILEW795	3/14/2022 14:10	1.77	0.88	Second Reading
NILEW795	3/14/2022 14:12	0.88	0.91	Third Reading
NILEW795	3/14/2022 15:12	0.87	0.36	Fourth Reading
NILEW795	3/14/2022 15:13	0.35	0.3	Fifth Reading
NILEW795	3/15/2022 13:04	0.14	-0.14	Adjusted Valve, In Compliance
NILEW795	3/21/2022 10:23	1.01	-1.02	Adjusted Valve, In Compliance
NILEW795	4/14/2022 15:22	2.69	-27.94	Adjusted Valve, In Compliance
NILEW795	5/20/2022 15:28	2.67	-0.41	Adjusted Valve, In Compliance
NILEW796	3/4/2022 11:00	1.92	1.98	Adjusted Valve
NILEW796	3/4/2022 14:48	2.22	2.37	Second Reading
NILEW796	3/7/2022 9:22	2.47	2.41	Adjusted Valve
NILEW796	3/7/2022 9:30	1.84	1.86	Second Reading
NILEW796	3/8/2022 10:08	1.82	1.06	Adjusted Valve
NILEW796	3/8/2022 10:09	0.78	0.78	Second Reading
NILEW796	3/10/2022 12:39	0.63	-0.02	Adjusted Valve, In Compliance
NILEW796	3/29/2022 10:34	0.48	-0.16	Adjusted Valve, In Compliance
NILEW796	4/13/2022 11:41	1.78	-0.2	Adjusted Valve, In Compliance
NILEW796	5/11/2022 11:19	2.4	2.4	Adjusted Valve
NILEW796	5/11/2022 11:20	2.4	2.39	Second Reading
NILEW796	5/12/2022 13:00	-4.25	-5.34	In Compliance
NILEW797	3/4/2022 10:54	1.08	1.06	Adjusted Valve
NILEW797	3/4/2022 14:54	2.86	2.79	Second Reading
NILEW797	3/7/2022 9:14	2.9	2.88	Adjusted Valve
NILEW797	3/7/2022 9:19	2.61	2.61	Second Reading

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H₂O)	Adjusted Static Pressure ("H₂O)	Comments
NILEW797	3/8/2022 9:51	2.62	1.93	Adjusted Valve
NILEW797	3/8/2022 9:52	1.86	1.89	Second Reading
NILEW797	3/10/2022 12:33	1.62	1.5	Adjusted Valve
NILEW797	3/10/2022 12:35	1.27	1.26	Second Reading
NILEW797	3/11/2022 15:14	1.55	1.02	Adjusted Valve
NILEW797	3/11/2022 15:16	0.93	0.92	Second Reading
NILEW797	3/29/2022 10:27	-3.37	-3.43	In Compliance
NILEW798	3/7/2022 9:39	2.54	2.09	Adjusted Valve
NILEW798	3/7/2022 9:43	1.82	1.83	Second Reading
NILEW798	3/8/2022 10:00	1.5	0.81	Adjusted Valve
NILEW798	3/8/2022 10:02	0.58	0.58	Second Reading
NILEW798	3/10/2022 12:22	0.03	-0.1	Adjusted Valve, In Compliance
NILEW798	4/13/2022 11:15	3.33	-0.99	Adjusted Valve, In Compliance
NILEW798	4/19/2022 12:06	0.3	-2.92	Adjusted Valve, In Compliance
NILEW799	3/8/2022 10:58	3.11	3.13	Adjusted Valve
NILEW799	3/8/2022 11:06	3.2	2.99	Second Reading
NILEW799	3/8/2022 11:07	2.88	2.88	Third Reading
NILEW799	3/8/2022 13:23	2.84	2.85	Fourth Reading
NILEW799	3/9/2022 8:37	2.47	-0.13	Adjusted Valve, In Compliance
NILEW799	3/10/2022 12:15	0.62	0.47	Adjusted Valve
NILEW799	3/10/2022 12:18	-0.07	-0.07	In Compliance
NILEW800	3/23/2022 13:53	2.15	2.19	Adjusted Valve
NILEW800	3/23/2022 13:58	2.25	1.12	Second Reading
NILEW800	3/23/2022 14:00	0.95	0.94	Third Reading
NILEW800	3/23/2022 16:09	0.29	0.15	Fourth Reading
NILEW800	3/23/2022 16:11	0.13	0.12	Fifth Reading
NILEW800	4/14/2022 15:12	-26.44	-26.44	In Compliance
NILEW803	3/11/2022 14:51	3.11	3.11	Adjusted Valve
NILEW803	3/11/2022 15:02	3.1	1.54	Second Reading
NILEW803	3/11/2022 15:04	1.3	1.29	Third Reading
NILEW803	3/14/2022 14:55	1.9	0.95	Adjusted Valve
NILEW803	3/14/2022 14:56	0.82	0.83	Second Reading
NILEW803	3/16/2022 10:58	1.41	-1.08	In Compliance
NILEW804	3/11/2022 13:58	18.64	18.64	Adjusted Valve
NILEW804	3/11/2022 14:01	18.37	9.23	Second Reading
NILEW804	3/11/2022 14:05	9.75	9.53	Third Reading
NILEW804	3/14/2022 14:36	2.84	1.12	Adjusted Valve

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NILEW804	3/14/2022 14:41	0.32	0.31	Second Reading
NILEW804	3/17/2022 14:44	-4.98	-10.69	In Compliance
NILEW804	7/13/2022 14:14	11.6	-0.3	Adjusted Valve, In Compliance
NILEW805	3/11/2022 16:06	39.26	39.28	Adjusted Valve
NILEW805	3/11/2022 16:24	34.56	17.67	Second Reading
NILEW805	3/14/2022 15:02	-5.83	-5.82	In Compliance
NILEW806	3/14/2022 12:36	1.02	1.03	Adjusted Valve
NILEW806	3/14/2022 12:57	1.48	0.76	Second Reading
NILEW806	3/14/2022 14:29	0.79	0.4	Third Reading
NILEW806	3/14/2022 14:32	0.39	0.35	Fourth Reading
NILEW806	3/15/2022 12:30	-1.51	-1.5	In Compliance
NILEW806	7/21/2022 14:24	0.15	-0.45	Adjusted Valve, In Compliance
NILHC246	2/4/2022 13:09	-0.06	-0.09	(Initial Exceedance was on 1/20/22) In Compliance
NILHC246	5/20/2022 13:03	0.07	-0.57	Adjusted Valve, In Compliance
NILHC247	2/4/2022 13:13	-0.11	-0.1	(Initial Exceedance was on 1/20/22) In Compliance
NILHC247	2/10/2022 13:44	0.07	0.08	Adjusted Valve
NILHC247	2/10/2022 13:46	0.06	0.06	Second Reading
NILHC247	2/17/2022 11:31	-1.1	-1.9	In Compliance
NILHC248	2/3/2022 15:12	-10.44	-10.43	(Initial Exceedance was on 1/20/22) In Compliance
NILHC248	2/10/2022 13:55	0.04	0.04	Adjusted Valve
NILHC248	2/10/2022 13:57	0.03	0.05	Second Reading
NILHC248	2/17/2022 11:39	-1.17	-2.15	In Compliance
NILHC249	2/4/2022 13:23	-0.21	-0.19	(Initial Exceedance was on 1/20/22) In Compliance
NILHC249	2/10/2022 13:59	0.06	0.07	Adjusted Valve
NILHC249	2/10/2022 14:04	0.03	0.04	Second Reading
NILHC249	2/17/2022 11:48	-1.5	-3.03	In Compliance
NILHC250	2/4/2022 13:29	-0.09	-0.18	(Initial Exceedance was on 1/20/22) In Compliance

**Table 3. Wells with Positive Pressure
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Static Pressure ("H ₂ O)	Adjusted Static Pressure ("H ₂ O)	Comments
NILHC251	5/20/2022 12:21	0.08	-0.37	Adjusted Valve, In Compliance
NILHC252	5/20/2022 12:14	1.03	-3.48	Adjusted Valve, In Compliance
NILLEW16	3/17/2022 13:02	14.93	-0.68	Adjusted Valve, In Compliance
NILLEW16	3/17/2022 13:04	-0.55	0.06	Adjusted Valve
NILLEW16	4/1/2022 10:20	-42.6	-42.6	In Compliance
NILLEW16	6/17/2022 10:48	0.1	0.11	Adjusted Valve
NILLEW16	6/17/2022 10:49	-0.01	-0.03	In Compliance
NILLEW16	7/7/2022 12:24	0.01	-0.67	Adjusted Valve, In Compliance
NILMW003	2/3/2022 15:38	1.52	-0.31	Adjusted Valve, In Compliance
NILMW031	5/16/2022 13:06	0.45	-0.48	Adjusted Valve, In Compliance
NILMW033	2/4/2022 15:24	0.29	-0.31	Adjusted Valve, In Compliance
NILMW034	5/16/2022 13:19	0.03	-0.02	Adjusted Valve, In Compliance
NILW632A	5/26/2022 14:05	20.78	-0.25	Adjusted Valve, In Compliance
NLCR0910	2/10/2022 13:31	2.83	2.83	Adjusted Valve
NLCR0910	2/10/2022 13:37	4.14	4.15	Second Reading
NLCR0910	2/25/2022 15:37	0.83	-3.09	In Compliance
NLCR1112	5/17/2022 12:21	13.48	-0.14	Adjusted Valve, In Compliance
NLCRST05	2/10/2022 9:30	17.54	-2.94	Adjusted Valve, In Compliance
NLCRST3A	5/17/2022 12:16	10.08	-5.27	Adjusted Valve, In Compliance
NLCRST3B	5/17/2022 12:10	16.4	2.85	Adjusted Valve
NLCRST3B	5/17/2022 12:11	-22.92	-22.84	In Compliance

Note: All required corrective action and remonitoring was completed in accordance with Rule 8-34 and NSPS timelines. All pressure exceedance were corrected within 15 days except for the wells noted in ***bold italics*** . Root cause analysis forms were completed for these wells.

*Wells noted in ***bold italics with an asterick*** indicates wells with pressure exceedances that exceeded 60 days. Corrective action analysis and 75-day notifications were completed for these wells.

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILCW004	2/25/2022 14:58	7.1	Adjusted Valve
NILCW004	2/25/2022 15:00	5.6	Second Reading
NILCW004	3/2/2022 14:26	4.9	In Compliance
NILCW004	3/9/2022 9:10	9	Adjusted Valve
NILCW004	3/9/2022 9:12	6.1	Second Reading
NILCW004	3/14/2022 13:09	4.3	In Compliance
NILCW004	4/11/2022 15:13	6.5	Adjusted Valve
NILCW004	4/11/2022 15:14	6.5	Second Reading
NILCW004	4/20/2022 15:13	0.4	In Compliance
NILCW004	5/19/2022 17:25	16.2	Adjusted Valve
NILCW004	5/19/2022 17:27	15.8	Second Reading
NILCW004	5/26/2022 13:47	3.5	In Compliance
NILCW004	6/17/2022 15:44	12.2	Adjusted Valve
NILCW004	6/17/2022 15:45	12.2	Second Reading
NILCW004	7/1/2022 15:27	0.7	In Compliance
NIHC227A	2/3/2022 14:28	0.1	(Initial Exceedance was on 1/21/22) In Compliance
NILEW035	2/4/2022 15:41	10.7	(Initial Exceedance was on 1/21/22) Adjusted Valve
NILEW035	2/18/2022 17:18	8.1	Adjusted Valve
NILEW035	2/18/2022 17:21	8.1	Second Reading
NILEW035	3/3/2022 18:13	6.5	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW228	2/7/2022 12:39	17	(Initial Exceedance was on 12/9/21) Adjusted Valve
NILEW228	2/25/2022 12:44	12.8	Adjusted Valve
NILEW228	2/25/2022 12:46	9.4	Second Reading
NILEW228	3/2/2022 11:45	11.4	Adjusted Valve
NILEW228	3/3/2022 17:00	12	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW461	7/21/2022 14:35	20.8	Adjusted Valve
NILEW461	7/21/2022 14:36	20.8	Second Reading; Well remains in exceedance and compliance will be documented in the next report.

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILEW491	2/11/2022 15:15	7.3	(Initial Exceedance was on 10/26/21) Well Permanently Decommissioned Due to Poor Gas Quality
NILEW514	2/7/2022 15:45	10	Adjusted Valve
NILEW514	2/7/2022 15:52	9.7	Second Reading
NILEW514	2/21/2022 15:02	4.8	In Compliance
NILEW514	3/3/2022 11:17	11.7	Adjusted Valve
NILEW514	3/3/2022 11:19	6.8	Second Reading
NILEW514	3/18/2022 14:40	2	In Compliance
NILEW514	5/10/2022 15:59	7.5	Adjusted Valve
NILEW514	5/10/2022 16:00	8.2	Second Reading
NILEW514	5/23/2022 12:03	4.2	In Compliance
NILEW566	7/21/2022 15:44	19	Adjusted Valve
NILEW566	7/21/2022 15:46	19.1	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by November 18, 2022.
NILEW597	5/18/2022 10:09	10.5	Adjusted Valve
NILEW597	5/18/2022 10:12	10.5	Second Reading
NILEW597	5/26/2022 15:08	4.9	In Compliance
NILEW601	3/7/2022 10:50	10.5	Adjusted Valve
NILEW601	3/7/2022 10:59	11.2	Second Reading
NILEW601	3/18/2022 14:23	11.2	Adjusted Valve
NILEW601	4/1/2022 12:56	4.1	In Compliance
NILEW604	2/10/2022 17:13	19.4	(Initial Exceedance was on 11/17/21) Adjusted Valve
NILEW604	2/28/2022 9:21	20.6	Adjusted Valve
NILEW604	3/3/2022 15:17	20.2	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW620	2/11/2022 14:27	16.5	(Initial Exceedance was on 1/28/22) Adjusted Valve
NILEW620	2/11/2022 14:32	16.4	Second Reading
NILEW620	2/21/2022 14:48	16.3	Adjusted Valve
NILEW620	2/21/2022 14:52	16.6	Second Reading
NILEW620	3/3/2022 15:39	0	In Compliance

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILEW639	3/17/2022 10:51	6.8	Adjusted Valve
NILEW639	3/17/2022 10:52	6.9	Second Reading
NILEW639	3/30/2022 13:38	0	In Compliance
NILEW639	5/17/2022 11:49	9.5	Adjusted Valve
NILEW639	5/17/2022 11:50	9.2	Second Reading
NILEW639	5/25/2022 12:55	3.9	In Compliance
NILEW639	6/6/2022 15:17	20.6	Adjusted Valve
NILEW639	6/6/2022 15:21	20.5	Second Reading
NILEW639	6/10/2022 11:56	8.1	Adjusted Valve
NILEW639	6/17/2022 13:27	0	In Compliance
NILEW650	2/11/2022 11:33	19	Adjusted Valve
NILEW650	2/11/2022 11:35	0.6	In Compliance
NILEW659	4/12/2022 15:05	9.5	Adjusted Valve
NILEW659	4/12/2022 15:06	9.4	Second Reading
NILEW659	4/19/2022 11:55	8.1	Adjusted Valve
NILEW659	5/11/2022 11:23	0	In Compliance
NILEW668	2/10/2022 16:22	17.8	(Initial Exceedance was on 11/11/21) Adjusted Valve
NILEW668	2/18/2022 15:14	17	Adjusted Valve
NILEW668	2/28/2022 11:08	12.1	Adjusted Valve
NILEW668	3/3/2022 13:03	19.7	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW669	3/23/2022 13:43	6.4	Adjusted Valve
NILEW669	3/23/2022 13:44	6.3	Second Reading
NILEW669	4/11/2022 14:45	4.9	In Compliance
NILEW669	5/23/2022 13:03	9.5	Adjusted Valve
NILEW669	5/23/2022 14:13	9	Second Reading
NILEW669	6/6/2022 13:51	6.6	Adjusted Valve
NILEW669	6/22/2022 12:49	5.3	Adjusted Valve
NILEW669	7/13/2022 13:43	4.6	In Compliance
NILEW672	2/7/2022 16:06	14.5	(Initial Exceedance was on 11/11/21) Adjusted Valve
NILEW672	2/25/2022 17:40	0.9	In Compliance
NILEW677	2/14/2022 15:17	11.6	(Initial Exceedance was on 1/13/22) Adjusted Valve

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILEW677	2/28/2022 11:26	18.9	Adjusted Valve
NILEW677	3/3/2022 14:07	20.7	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW683	2/14/2022 11:40	15.6	Adjusted Valve
NILEW683	2/14/2022 11:48	15.6	Second Reading
NILEW683	2/25/2022 17:16	1.8	In Compliance
NILEW683	3/3/2022 16:14	16.9	Adjusted Valve
NILEW683	3/3/2022 16:14	16.9	Second Reading
NILEW683	3/3/2022 16:14	17	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW684	3/3/2022 14:00	6.8	(Initial Exceedance was on 1/24/22) Adjusted Valve
NILEW684	3/3/2022 14:02	5.3	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW687	7/14/2022 14:56	18.8	Adjusted Valve
NILEW687	7/14/2022 14:59	18.7	Second Reading
NILEW687	7/26/2022 16:03	20.1	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by November 11, 2022.
NILEW695	2/10/2022 16:33	11.7	(Initial Exceedance was on 12/13/21) Adjusted Valve
NILEW695	2/28/2022 11:03	14.9	Adjusted Valve
NILEW695	3/3/2022 12:26	7.1	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW699	2/10/2022 16:17	10.8	Adjusted Valve
NILEW699	2/10/2022 16:19	10.3	Second Reading
NILEW699	2/18/2022 15:11	13.5	Adjusted Valve
NILEW699	3/3/2022 12:34	12.6	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW704	2/4/2022 14:27	18.9	(Initial Exceedance was on 1/21/22) Adjusted Valve
NILEW704	2/16/2022 13:54	19.2	Adjusted Valve
NILEW704	3/4/2022 14:31	18.4	Adjusted Valve
NILEW704	3/17/2022 13:40	0.2	In Compliance
NILEW704	4/1/2022 10:37	6.2	Adjusted Valve

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILEW704	4/1/2022 10:41	6.2	Second Reading
NILEW704	4/14/2022 10:55	5.1	Adjusted Valve
NILEW704	4/24/2022 12:24	5.9	Adjusted Valve
NILEW704	4/24/2022 12:29	5.9	Second Reading
NILEW704	5/7/2022 13:42	8	Adjusted Valve
NILEW704	5/7/2022 13:45	8	Second Reading
NILEW704	5/19/2022 15:27	4.2	In Compliance
NILEW704	6/2/2022 11:36	5.5	Adjusted Valve
NILEW704	6/2/2022 11:38	5.5	Second Reading
NILEW704	6/10/2022 12:24	3.7	In Compliance
NILEW704	6/17/2022 15:01	20.3	Adjusted Valve
NILEW704	6/17/2022 15:03	20.1	Second Reading
NILEW704	7/1/2022 14:43	4.8	In Compliance
NILEW714	2/21/2022 9:57	6.7	Adjusted Valve
NILEW714	2/21/2022 10:01	10.5	Second Reading
NILEW714	3/3/2022 9:15	0	In Compliance
NILEW715	6/6/2022 13:05	10.4	Adjusted Valve
NILEW715	6/6/2022 13:07	15.4	Second Reading
NILEW715	6/20/2022 11:55	0.5	In Compliance
NILEW720	2/28/2022 11:46	8.9	Adjusted Valve
NILEW720	2/28/2022 11:47	9	Second Reading
NILEW720	3/3/2022 13:54	3.2	In Compliance
NILEW720	5/10/2022 14:42	8.2	Adjusted Valve
NILEW720	5/10/2022 14:43	8.2	Second Reading
NILEW720	5/19/2022 14:14	16.3	Adjusted Valve
NILEW720	5/19/2022 14:25	9.7	Second Reading
NILEW720	5/26/2022 14:42	0	In Compliance
NILEW720	6/21/2022 13:02	11.9	Adjusted Valve
NILEW720	6/21/2022 13:03	12.8	Second Reading
NILEW720	7/6/2022 16:33	4.9	In Compliance
NILEW720	7/12/2022 14:09	7	Adjusted Valve
NILEW720	7/12/2022 14:10	9.1	Second Reading
NILEW720	7/22/2022 15:11	0	In Compliance
NILEW723	2/11/2022 15:10	18.3	(Initial Exceedance was on 12/2/21) Adjusted Valve

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILEW723	2/25/2022 16:37	0.1	In Compliance
NILEW726	7/14/2022 14:48	6.5	Adjusted Valve
NILEW726	7/14/2022 14:52	7.6	Second Reading
NILEW726	7/26/2022 15:55	3.1	In Compliance
NILEW740	3/31/2022 12:39	5.3	Adjusted Valve
NILEW740	3/31/2022 12:41	5.3	Second Reading
NILEW740	4/14/2022 10:36	4.1	In Compliance
NILEW749	2/10/2022 15:16	7.5	Adjusted Valve
NILEW749	2/10/2022 15:20	1.1	In Compliance
NILEW753	2/4/2022 16:52	6.9	Adjusted Valve
NILEW753	2/4/2022 16:54	6.9	Second Reading
NILEW753	2/14/2022 14:25	0.1	In Compliance
NILEW753	2/17/2022 16:06	5.3	Adjusted Valve
NILEW753	2/17/2022 16:07	5.3	Second Reading
NILEW753	3/4/2022 14:04	4.5	In Compliance
NILEW753	4/4/2022 16:34	10.6	Adjusted Valve
NILEW753	4/4/2022 16:36	11.1	Second Reading
NILEW753	4/19/2022 15:12	4.9	In Compliance
NILEW753	6/2/2022 12:20	5.8	Adjusted Valve
NILEW753	6/2/2022 12:22	5.8	Second Reading
NILEW753	6/10/2022 13:59	4.5	In Compliance
NILEW753	6/17/2022 12:07	6.8	Adjusted Valve
NILEW753	6/17/2022 12:09	6.8	Second Reading
NILEW753	7/1/2022 13:31	4.9	In Compliance
NILEW759	6/7/2022 10:33	6	Adjusted Valve
NILEW759	6/7/2022 10:40	4.8	In Compliance
NILEW761	3/3/2022 11:55	6.4	Adjusted Valve
NILEW761	3/3/2022 11:57	6.4	Second Reading
NILEW761	3/3/2022 12:00	1	In Compliance
NILEW761	5/19/2022 15:26	5.8	Adjusted Valve
NILEW761	5/19/2022 15:28	5.9	Second Reading
NILEW761	5/26/2022 14:25	0	In Compliance

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILEW761	6/21/2022 14:43	7.3	Adjusted Valve
NILEW761	6/21/2022 14:45	7.3	Second Reading
NILEW761	7/6/2022 16:37	0	In Compliance
NILEW762	4/12/2022 14:18	9.2	Adjusted Valve
NILEW762	4/12/2022 14:19	9.6	Second Reading
NILEW762	4/25/2022 11:40	7.1	Adjusted Valve
NILEW762	5/10/2022 11:25	4.7	In Compliance
NILEW762	7/13/2022 12:29	7.6	Adjusted Valve
NILEW762	7/13/2022 12:31	7.9	Second Reading
NILEW762	7/22/2022 14:20	0	In Compliance
NILEW763	2/7/2022 15:28	0	(Initial Exceedance was on 12/6/21) In Compliance
NILEW769	2/7/2022 12:24	9.5	(Initial Exceedance was on 12/30/21) Adjusted Valve
NILEW769	2/25/2022 12:55	9.1	Adjusted Valve
NILEW769	3/2/2022 11:53	9.2	Adjusted Valve
NILEW769	3/3/2022 17:11	9	Well Permanently Decommissioned Due to Poor Gas Quality
NILEW795	4/24/2022 16:06	8.6	Adjusted Valve
NILEW795	4/24/2022 16:09	9.1	Second Reading
NILEW795	5/10/2022 10:52	9.9	Adjusted Valve
NILEW795	5/10/2022 10:54	9.1	Second Reading
NILEW795	5/20/2022 15:28	0	In Compliance
NILEW802	4/26/2022 15:05	10.6	Adjusted Valve
NILEW802	4/28/2022 14:56	11.2	Adjusted Valve
NILEW802	5/10/2022 14:32	12.4	Adjusted Valve
NILEW802	5/19/2022 14:39	14.2	Adjusted Valve
NILEW802	6/3/2022 13:20	14.4	Adjusted Valve
NILEW802	6/21/2022 13:10	18.2	Adjusted Valve
NILEW802	7/12/2022 14:18	20	Adjusted Valve
NILEW802	7/22/2022 15:33	19.9	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by August 24, 2022.
NILEW803	6/6/2022 15:04	15.2	Adjusted Valve
NILEW803	6/6/2022 15:06	15.2	Second Reading
NILEW803	6/7/2022 14:23	0.7	In Compliance

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILEW804	6/6/2022 14:43	17	Adjusted Valve
NILEW804	6/6/2022 14:49	16.9	Second Reading
NILEW804	6/22/2022 14:25	18.9	Adjusted Valve
NILEW804	7/13/2022 14:14	0	In Compliance
NILEW805	5/23/2022 12:41	8.9	Adjusted Valve
NILEW805	5/23/2022 12:42	8.4	Second Reading
NILEW805	6/6/2022 14:38	0.1	In Compliance
NILEW805	6/22/2022 14:20	6.4	Adjusted Valve
NILEW805	6/22/2022 14:21	6.3	Second Reading
NILEW805	7/13/2022 14:09	0	In Compliance
NILEW805	7/26/2022 14:54	10	Adjusted Valve
NILEW805	7/26/2022 14:55	9.9	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by November 23, 2022.
NILHC250	4/4/2022 12:51	5.1	Adjusted Valve
NILHC250	4/4/2022 12:53	5	In Compliance
NILHC251	2/4/2022 13:36	8.1	Adjusted Valve
NILHC251	2/4/2022 13:37	8.1	Second Reading
NILHC251	2/10/2022 14:16	2.7	In Compliance
NILHC251	2/17/2022 12:02	18.3	Adjusted Valve
NILHC251	2/17/2022 12:13	18.2	Second Reading
NILHC251	2/18/2022 12:15	19.4	Adjusted Valve
NILHC251	2/21/2022 12:01	18.6	Adjusted Valve
NILHC251	2/25/2022 13:08	14.6	Adjusted Valve
NILHC251	2/28/2022 8:35	18.1	Adjusted Valve
NILHC251	3/4/2022 12:44	13.3	Adjusted Valve
NILHC251	3/7/2022 13:54	14.3	Adjusted Valve
NILHC251	3/21/2022 13:13	9.2	Adjusted Valve
NILHC251	4/4/2022 12:57	19.3	Adjusted Valve
NILHC251	4/25/2022 13:07	4.3	In Compliance
NILHC251	5/6/2022 14:26	8.2	Adjusted Valve
NILHC251	5/6/2022 14:27	8.5	Second Reading
NILHC251	5/20/2022 12:21	0	In Compliance
NILHC251	6/16/2022 11:51	13.9	Adjusted Valve

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILHC251	6/16/2022 11:53	14	Second Reading
NILHC251	7/1/2022 14:54	14.3	Adjusted Valve
NILHC251	7/18/2022 15:19	4.3	In Compliance
NILLEW16	2/28/2022 7:59	17.6	Adjusted Valve
NILLEW16	2/28/2022 8:00	17.6	Second Reading
NILLEW16	3/4/2022 12:12	19.5	Adjusted Valve
NILLEW16	3/4/2022 12:14	19.6	Second Reading
NILLEW16	3/17/2022 13:02	20.8	Adjusted Valve
NILLEW16	3/17/2022 13:04	20.6	Second Reading
NILLEW16	4/1/2022 10:20	2.3	In Compliance
NILLEW16	5/16/2022 12:19	20.8	Adjusted Valve
NILLEW16	5/16/2022 12:23	20.8	Second Reading
NILLEW16	5/31/2022 13:28	21.7	Adjusted Valve
NILLEW16	6/2/2022 11:24	20.9	Adjusted Valve
NILLEW16	6/17/2022 10:48	20.6	Adjusted Valve
NILLEW16	6/17/2022 10:49	20.6	Second Reading
NILLEW16	7/7/2022 12:24	0.3	In Compliance
NILLEW16	7/16/2022 12:47	15.2	Adjusted Valve
NILLEW16	7/16/2022 12:51	15.1	Second Reading
NILLEW16	7/29/2022 15:16	3.9	In Compliance
NILMW005	2/3/2022 16:25	9.1	(Initial Exceedance was on 12/28/21) Adjusted Valve
NILMW005	2/17/2022 13:58	7.2	Adjusted Valve
NILMW005	3/4/2022 10:21	7.2	Adjusted Valve
NILMW005	3/21/2022 9:47	4.5	In Compliance
NILMW005	7/21/2022 15:24	20.7	Adjusted Valve
NILMW005	7/21/2022 15:25	20.7	Second Reading
NILMW006	2/3/2022 16:30	5.9	Adjusted Valve
NILMW006	2/3/2022 16:31	5.5	Second Reading
NILMW006	2/14/2022 14:14	4.9	In Compliance
NILMW006	2/17/2022 13:51	5.7	Adjusted Valve
NILMW006	2/17/2022 13:53	5	In Compliance
NILMW008	2/2/2022 19:24	21.2	(Initial Exceedance was on 1/10/22) Adjusted Valve
NILMW008	2/4/2022 11:37	20.4	Adjusted Valve
NILMW008	2/17/2022 14:12	20.6	Adjusted Valve
NILMW008	3/4/2022 9:36	0.1	In Compliance

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILMW011	2/2/2022 19:36	18.3	(Initial Exceedance was on 12/28/21) Adjusted Valve
NILMW011	2/17/2022 14:16	7.3	Adjusted Valve
NILMW011	3/4/2022 9:54	0.7	In Compliance
NILMW011	7/21/2022 15:12	20	Adjusted Valve
NILMW011	7/21/2022 15:13	20	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by November 18, 2022.
NILMW019	2/18/2022 13:54	6.9	Adjusted Valve
NILMW019	2/18/2022 14:01	6.3	Second Reading
NILMW019	3/3/2022 10:22	10.3	Adjusted Valve
NILMW019	3/11/2022 13:07	6.8	Adjusted Valve
NILMW019	3/11/2022 13:11	9.3	Second Reading (Well was temporarily taken offline due to construction activities)
NILMW020	2/18/2022 11:59	5.7	(Initial Exceedance was on 1/21/22) Adjusted Valve
NILMW020	2/18/2022 12:03	5.7	Second Reading
NILMW020	3/3/2022 10:39	4.1	In Compliance
NILMW024	4/11/2022 13:25	11.7	Adjusted Valve
NILMW024	4/11/2022 13:27	12	Second Reading
NILMW024	4/24/2022 13:19	0	In Compliance
NILMW031	2/4/2022 15:31	6.8	(Initial Exceedance was on 1/21/22) Adjusted Valve
NILMW031	2/16/2022 11:37	7	Adjusted Valve
NILMW031	2/16/2022 11:52	7.1	Second Reading
NILMW031	3/4/2022 13:34	6.8	Adjusted Valve
NILMW031	3/21/2022 13:59	2.4	In Compliance
NILMW031	5/7/2022 13:19	6.3	Adjusted Valve
NILMW031	5/7/2022 13:21	6.4	Second Reading
NILMW031	5/11/2022 14:46	3	In Compliance
NILMW031	7/16/2022 15:07	20.8	Adjusted Valve
NILMW031	7/16/2022 15:09	9.3	Second Reading
NILMW031	7/29/2022 15:24	3.3	In Compliance
NILMW032	3/4/2022 13:37	6.9	Adjusted Valve

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILMW032	3/4/2022 13:39	6.9	Second Reading
NILMW032	3/18/2022 14:55	5.9	Adjusted Valve
NILMW032	4/4/2022 15:07	20.6	Adjusted Valve
NILMW032	4/22/2022 14:53	20.9	Adjusted Valve
NILMW032	5/7/2022 13:16	20.8	Adjusted Valve
NILMW032	5/16/2022 13:03	20.9	Adjusted Valve
NILMW032	6/2/2022 13:27	20.9	Adjusted Valve
NILMW032	6/15/2022 14:46	3.9	In Compliance
NILMW033	4/4/2022 14:57	5.1	Adjusted Valve
NILMW033	4/4/2022 14:58	5.1	Second Reading
NILMW033	4/19/2022 15:03	1.2	In Compliance
NILMW034	2/4/2022 15:22	7.5	(Initial Exceedance was on 1/21/22) Adjusted Valve
NILMW034	2/18/2022 9:06	9.3	Adjusted Valve
NILMW034	3/4/2022 13:26	10.2	Adjusted Valve
NILMW034	3/21/2022 13:51	10.6	Adjusted Valve
NILMW034	4/4/2022 14:54	11	Adjusted Valve
NILMW034	4/22/2022 14:41	11.5	Adjusted Valve
NILMW034	5/7/2022 13:06	10.6	Adjusted Valve
NILMW034	5/13/2022 9:54	4.9	In Compliance
NILMW034	6/2/2022 13:36	9.9	Adjusted Valve
NILMW034	6/2/2022 13:39	9.8	Second Reading
NILMW034	6/17/2022 14:36	0.3	In Compliance
NILW481A	3/17/2022 13:17	20.8	Adjusted Valve
NILW481A	3/17/2022 13:20	20.8	Well Permanently Decommissioned Due to Poor Gas Quality
NILW632A	4/18/2022 11:30	6	Adjusted Valve
NILW632A	4/18/2022 11:33	4.9	In Compliance
NILW632A	5/23/2022 11:47	15.3	Adjusted Valve
NILW632A	5/23/2022 11:49	15.4	Second Reading
NILW632A	5/26/2022 14:05	0.6	In Compliance
NILW728A	2/7/2022 15:35	19.6	(Initial Exceedance was on 1/28/22) Adjusted Valve
NILW728A	2/28/2022 13:35	0	In Compliance
NILW728A	3/25/2022 14:57	10.3	Adjusted Valve
NILW728A	3/25/2022 14:59	10.2	Second Reading

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NILW728A	4/11/2022 13:05	10.6	Adjusted Valve
NILW728A	4/25/2022 13:02	15.3	Adjusted Valve
NILW728A	5/10/2022 15:50	6.9	Adjusted Valve
NILW728A	5/23/2022 12:53	1.9	In Compliance
NILW728A	6/6/2022 13:32	13.2	Adjusted Valve
NILW728A	6/6/2022 13:36	14.3	Second Reading
NILW728A	6/10/2022 13:46	1	In Compliance
NILW728A	7/22/2022 12:51	12.3	Adjusted Valve
NILW728A	7/22/2022 13:27	6.8	Second Reading
NILW728A	7/22/2022 13:28	6.8	Third Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by November 19, 2022.
NLCR0910	2/10/2022 13:31	9.4	Adjusted Valve
NLCR0910	2/10/2022 13:37	9.4	Second Reading
NLCR0910	2/25/2022 15:37	0	In Compliance
NLCR0910	5/17/2022 13:10	13.5	Adjusted Valve
NLCR0910	5/17/2022 13:11	14.2	Second Reading
NLCR0910	6/1/2022 13:57	21.2	Adjusted Valve
NLCR0910	6/20/2022 13:09	19.4	Adjusted Valve
NLCR0910	7/6/2022 14:31	20.5	Adjusted Valve
NLCR0910	7/19/2022 15:11	19.7	Adjusted Valve; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by September 14, 2022.
NLCR1112	2/28/2022 14:56	5.5	Adjusted Valve
NLCR1112	2/28/2022 14:57	5.5	Second Reading
NLCR1112	3/1/2022 12:24	5.5	Adjusted Valve
NLCR1112	3/17/2022 11:06	0.7	In Compliance
NLCRST05	4/1/2022 11:49	20.1	Adjusted Valve
NLCRST05	4/1/2022 11:52	20.8	Second Reading
NLCRST05	4/24/2022 15:44	19.7	Adjusted Valve
NLCRST05	5/10/2022 13:41	0	In Compliance
NLCRST05	7/14/2022 15:14	19.5	Adjusted Valve
NLCRST05	7/14/2022 15:26	20.1	Second Reading

**Table 4. Wells with Oxygen Exceedances
Newby Island Landfill, Milpitas, California
(February 1, 2022 through July 31, 2022)**

Well ID	Date and Time	Oxygen (%)	Comments
NLCRST05	7/19/2022 12:52	19.7	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by November 11, 2022.
NLCRST3A	2/28/2022 14:52	9.4	Adjusted Valve
NLCRST3A	2/28/2022 14:53	9.6	Second Reading
NLCRST3A	3/1/2022 12:21	7.2	Adjusted Valve
NLCRST3A	3/17/2022 11:03	1	In Compliance
NLCRST3A	4/18/2022 14:04	5.8	Adjusted Valve
NLCRST3A	5/2/2022 13:30	4.2	In Compliance
NLCRST3B	2/28/2022 14:45	9.6	Adjusted Valve
NLCRST3B	2/28/2022 14:49	10.2	Second Reading
NLCRST3B	3/1/2022 12:19	7.3	Adjusted Valve
NLCRST3B	3/17/2022 11:01	1	In Compliance
NLCRST3B	4/18/2022 14:02	5.7	Adjusted Valve
NLCRST3B	5/2/2022 13:28	4.3	In Compliance

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, 2022 through July 31, 2022)**

Well ID	Date and Time	Initial Temp [°F]	Adjusted Temp [°F]	Comments
NILEW690*	2/7/2022 11:50	132.3	132.9	(Initial Exceedance was on 1/17/22) Adjusted Valve
NILEW690*	2/7/2022 11:57	132.3	132.4	Second Reading
NILEW690*	2/25/2022 11:26	134.9	134.9	Adjusted Valve
NILEW690*	2/25/2022 11:28	134.8	134.8	Second Reading
NILEW690*	3/2/2022 11:03	134.9	134.9	Adjusted Valve
NILEW690*	3/2/2022 11:05	135	135	Second Reading
NILEW690*	3/22/2022 12:02	135.3	135.3	Adjusted Valve
NILEW690*	3/31/2022 14:41	132.2	132.3	Adjusted Valve
NILEW690*	3/31/2022 14:43	131.2	131.6	Second Reading
NILEW690*	4/4/2022 17:46	131.9	131.8	Adjusted Valve
NILEW690*	4/21/2022 14:39	131.7	130.4	Adjusted Valve, In Compliance
NILEW701*	2/25/2022 11:10	134.7	134.4	Adjusted Valve
NILEW701*	2/25/2022 11:12	134	133.9	Second Reading
NILEW701*	3/2/2022 10:50	133.9	134.4	Adjusted Valve
NILEW701*	3/2/2022 10:52	135.1	135	Second Reading
NILEW701*	3/11/2022 16:33	131.6	132.1	Adjusted Valve
NILEW701*	3/11/2022 16:35	131.3	131.8	Second Reading
NILEW701*	3/22/2022 11:54	136.6	136.6	Adjusted Valve
NILEW701*	3/31/2022 14:48	133	133.5	Adjusted Valve
NILEW701*	3/31/2022 14:49	132.9	133.1	Second Reading
NILEW701*	4/4/2022 17:14	133.4	133.4	Adjusted Valve
NILEW701*	4/21/2022 14:20	136.1	136.1	Adjusted Valve
NILEW701*	5/7/2022 16:18	133.4	133.4	Adjusted Valve
NILEW701*	5/16/2022 15:08	131.7	131.7	Adjusted Valve
NILEW701*	6/2/2022 15:06	133.8	133.8	Adjusted Valve
NILEW701*	6/8/2022 14:10	133.7	130.4	Adjusted Valve, In Compliance
NILEW701	6/20/2022 14:48	134.1	134.2	Adjusted Valve
NILEW701	6/20/2022 14:50	134.2	134.2	Second Reading
NILEW701	7/7/2022 12:40	131.3	131.3	Adjusted Valve
NILEW701	7/15/2022 12:33	131.3	132.6	Adjusted Valve
NILEW701	7/15/2022 12:35	133.2	133.3	Second Reading
NILEW701	7/16/2022 13:08	134.2	134.2	Second Reading; Well remains in exceedance and compliance will be documented in the next report before its 120-day deadline, by October 18, 2022.
				(Initial Exceedance was on 1/7/22) Adjusted Valve
NILEW752*	2/7/2022 12:01	135.2	135	Adjusted Valve
NILEW752*	2/7/2022 12:02	134.8	134.8	Second Reading
NILEW752*	2/25/2022 13:18	135.4	135.5	Adjusted Valve
NILEW752*	2/25/2022 13:19	136.4	136.4	Second Reading
NILEW752*	3/2/2022 13:12	137.4	137.4	Adjusted Valve
NILEW752*	3/22/2022 12:10	137.3	137.3	Adjusted Valve
NILEW752*	3/31/2022 14:34	133	133.4	Adjusted Valve
NILEW752*	3/31/2022 14:36	133.3	133.4	Second Reading
NILEW752*	4/4/2022 17:51	131.3	131.4	Adjusted Valve
NILEW752*	5/5/2022 12:39	132.1	130.3	Adjusted Valve, In Compliance

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

All temperature exceedance were corrected within 15 days except for the wells noted in **bold italics**. Root cause analysis forms were completed for these wells.

*Wells noted in **bold italics with an asterick** indicates wells with temperature exceedances that exceeded 60 days.

Corrective action analysis and 75-day notifications were completed for these wells.

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:

Kevin Divincenzo

08/31/2022

Signature of Responsible Official

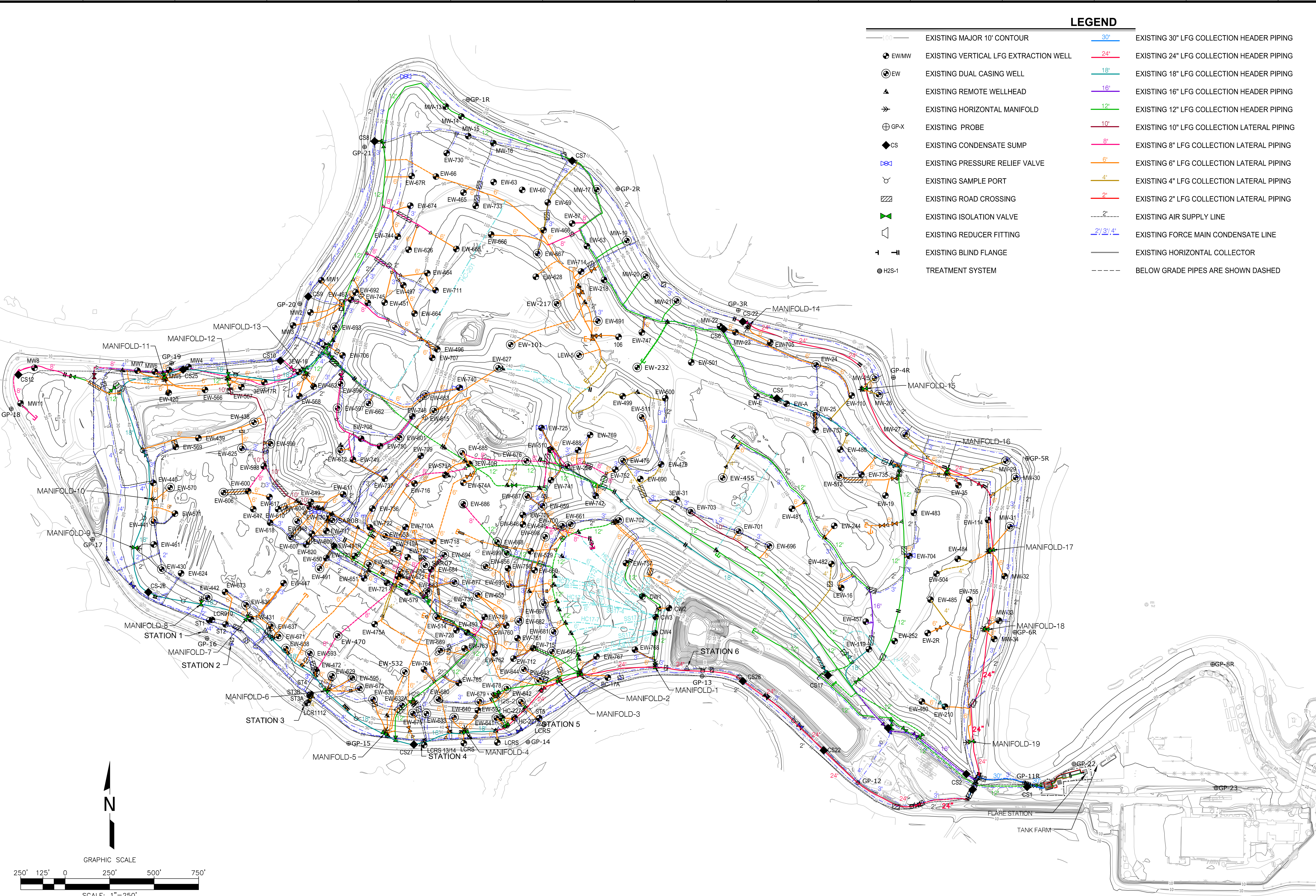
Date

Kevin Divincenzo

Name of Responsible Official

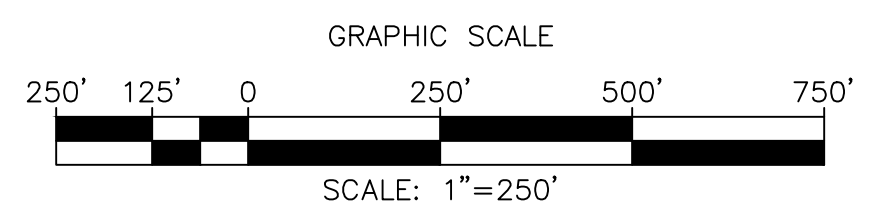
Appendix B – Existing GCCS Layout

C:\Users\4747a_s\Desktop\Newby_Island_LF - Task 2 - As-Built Drawings\NEWBY_LF_GCCS_LAYOUT\ASBUILT_SITE_UPDATE_062221.dwg Jun 29, 2021 - 9:56am By: 4747a_s



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:	
DATE:	062221
SCALE:	AS SHOWN
SHEET:	1

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

1500 BAY AREA AVENUE, SUITE 250
SAN DIEGO, CA 92125
(858) 571-5500 FAX (62) 427-0805

PROJ. NO. 01221039.01 T2
APP. BY: AAS
CHK. BY: MD

Appendix C – Surface Emission and GCCS Component Leak Monitoring Results

April 30, 2022
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 2022.

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 2022. 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 2022

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 | April 30, 2022

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 2022

INTRODUCTION

This letter provides results of the January 17, 18, 19, 26, 27, and 28, 2022 and February 2, and 16, 2022, 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, January 17, 18, 19, 26, 27, and 28, 2022 and February 2, and 16, 2022, SCS performed first quarter 2022 SEM as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that twenty-two (22) 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 not all areas return to below regulatory compliance limits following system adjustments and remediation (well field adjustments and . 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 which will be due on May 17, 2022. 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 thirty-nine (39) 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 did not return 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 observed exceedance which will be due on June 2, 2022. However, since the NSPS timeline will become due first, the May 17, 2022 deadline should be adhered to for complying with the NSPS and LMR exceedances.

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, two (2) 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 January 17, 18, 19, 26, 27, and 28, 2022 and February 2, and 16, 2022, 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 January 17, 18, 19, 26, 27, and 28, 2022 and February 2, and 16, 2022, SCS performed first quarter 2022 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that twenty-two (22) 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 January 27, and 28, 2022 and February 16, 2022, respectively, indicated that not all locations returned 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 May 17, 2022. Results of the initial and follow up monitoring are shown in Attachments 2 and 3 (Table 1).

Additionally, calculated integrated grid monitoring indicated thirty-nine (39) integrated exceedances of the 25-ppmv requirement on January 17, 18, and 19, 2022. The required first and second 10-day LMR follow-up monitoring performed on January 27, 28 and February 2, 2022, indicated that all

areas had not returned to compliance following system adjustments and remediation by site personnel. In accordance with LMR 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 third observed integrated exceedance, which will be due by June 2, 2022. However, since the NSPS timeline will become due first, the May 17, 2022 deadline should be adhered to for complying with the NSPS and LMR exceedances. 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 2022.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On January 20, 2022, 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 12 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

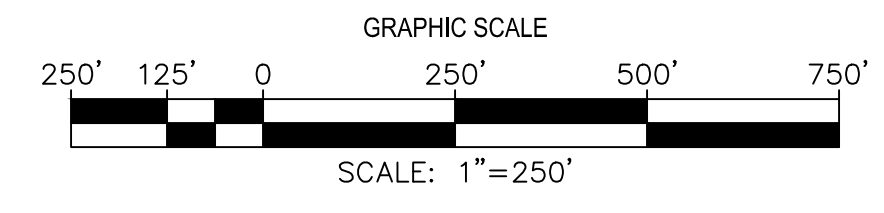
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the second quarter 2022 (April through June) surface emissions testing event is scheduled to be performed by the end of May 2022 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

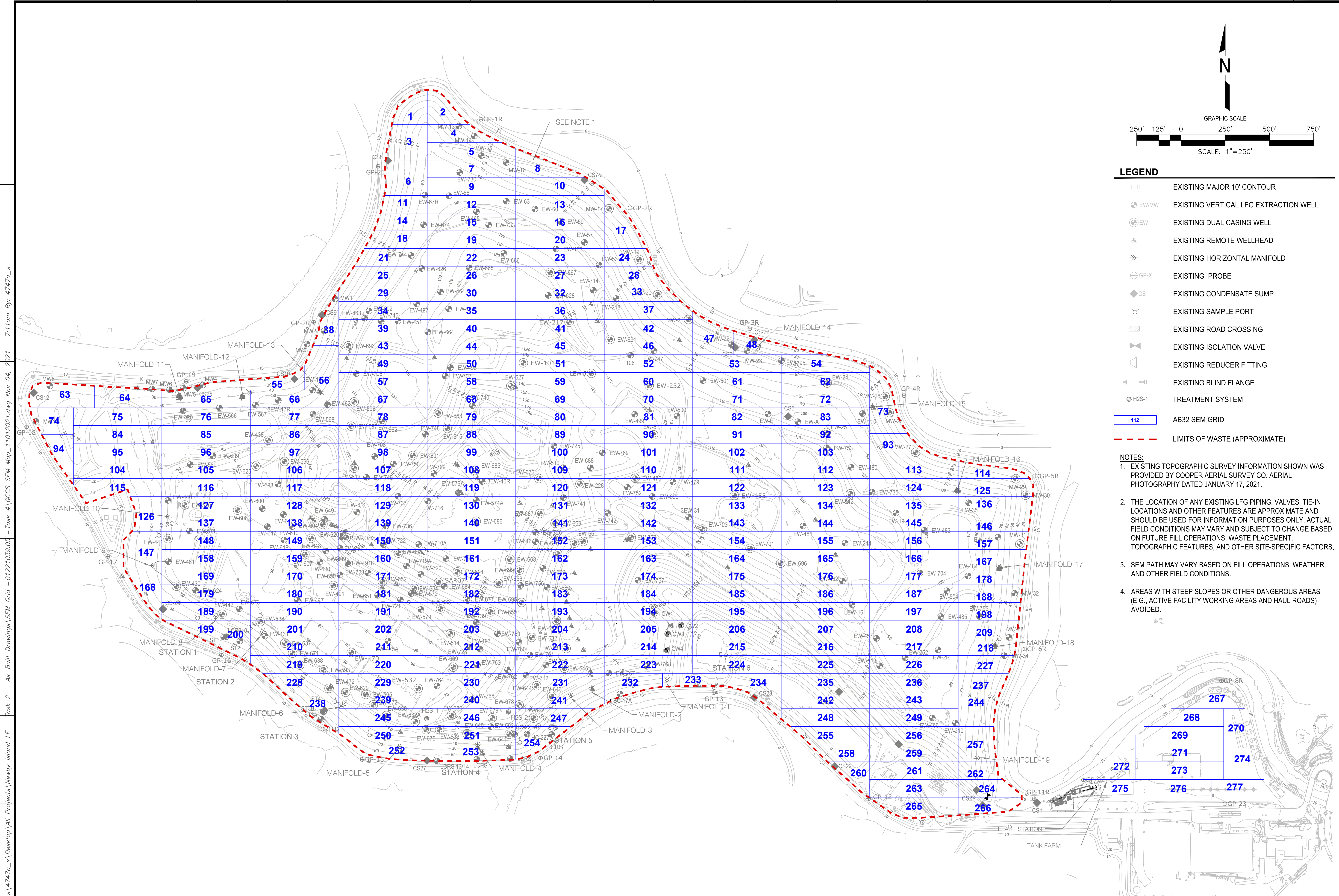
Landfill Grid



LEGEND

- EXISTING MAJOR 10' CONTOUR
- EXISTING VERTICAL LFG EXTRACTION WELL
- EXISTING DUAL CASING WELL
- EXISTING REMOTE WELLHEAD
- EXISTING HORIZONTAL MANIFOLD
- EXISTING PROBE
- EXISTING CONDENSATE SUMP
- EXISTING SAMPLE PORT
- EXISTING ROAD CROSSING
- EXISTING ISOLATION VALVE
- EXISTING REDUCER FITTING
- EXISTING BLIND FLANGE
- TREATMENT SYSTEM
- AB32 SEM GRID
- LIMITS OF WASTE (APPROXIMATE)

- NOTES:**
1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY COOPER AERIAL SURVEY CO. AERIAL PHOTOGRAPHY DATED JANUARY 17, 2021.
 2. THE LOCATION OF ANY EXISTING LFG PIPING, VALVES, TIE-IN LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
 3. SEM PATH MAY VARY BASED ON FILL OPERATIONS, WEATHER, AND OTHER FIELD CONDITIONS.
 4. AREAS WITH STEEP SLOPES OR OTHER DANGEROUS AREAS (E.G., ACTIVE FACILITY WORKING AREAS AND HAUL ROADS) AVOIDED.



C:\Users\4747a_s\Desktop\Newby_Island_LF - Task 2 - As-Built Drawings\SEM Grid - 01221039.05 - Task 4\GCCS_SEM Map_11012021.dwg Nov 04, 2021 - 7:11am By: 4747a_s

DATE	REVISION	NO.

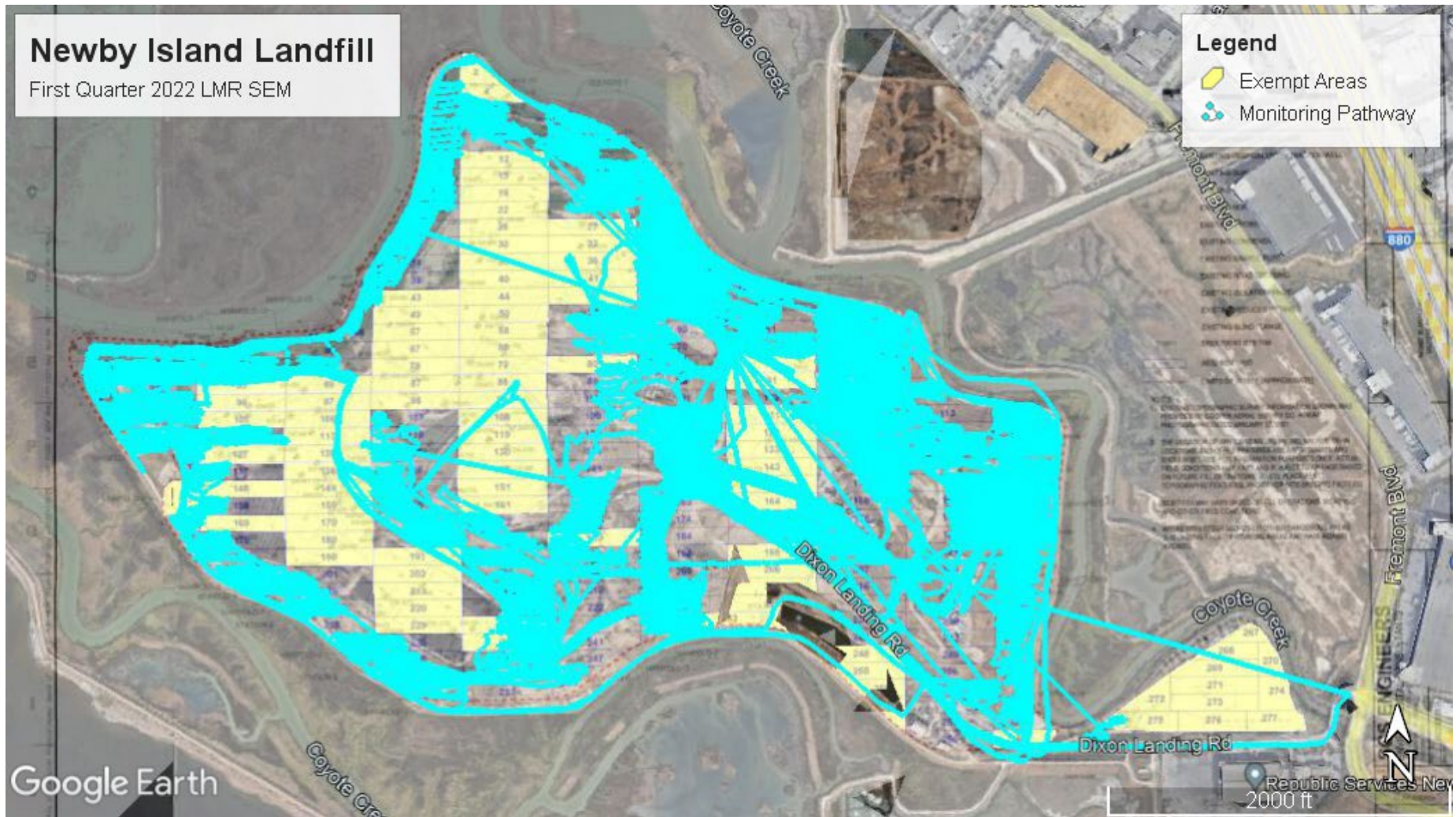
SHEET TITLE: GCCS SEM MAP
 PROJECT TITLE: NEWBY ISLAND LANDFILL MILPITAS, CALIFORNIA

CLIENT: SCS ENGINEERS ENVIRONMENTAL CONSULTANTS
 PROJECT NO: 01221039.05 T4
 APP. BY: AAS
 CHK. BY: MD

DATE: 11-04-21
 SCALE: AS SHOWN
 SHEET: 1

Attachment 2

Surface Pathway



**First Quarter 2022
LMR Surface Emissions Monitoring Pathway
Newby Island Landfill, Milpitas, California**



Attachment 3

Instantaneous and Component Emissions Monitoring Results

First Quarter 2022

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

Instantaneous Data Report for January 17, 18, 19, 26, and 27, 2022 and February 2, and 16, 2022.

Location	Initial	Initial	Initial	Initial NOV	First 10-Day	Second 10-Day	30-Day	120-Day Clock Due
	1/17/2022	1/18/2022	1/19/2022	1/26/2022	1/27/2022	2/2/2022	2/16/2022	
629	1,500	--	--	--	369	NA	8,054	5/17/2022
SS17-2	--	27,100	--	--	186	NA	147	NA
SS17-5	--	2,016	--	--	1,365	712	4,699	5/18/2022
683	--	580	--	--	1,704	475	445	NA
654	--	1,000	--	--	1,607	408	6,036	5/18/2022
659	--	--	1,000	--	931	132	1,413	5/19/2022
Surface BS1 (Grid 214)	--	--	871	--	285	NA	381	NA
Surface BS2 (Grid 214)	--	--	792	--	1,609	114	871	5/19/2022
Surface BS3 (Grid 194)	--	--	538	--	844	232	532	5/19/2022
Surface BS4 (Grid 184)	--	--	1,832	--	1,657	514	883	5/19/2022
Surface BS5 (Grid 174)	--	--	560	--	650	469	545	5/19/2022
Surface BS6 (Grid 163)	--	--	946	--	1,146	694	245	5/19/2022
Surface BS61 (Grid 142)	--	--	638	--	290	NA	64	NA
Surface BS7 (Grid 142)	--	--	529	--	544	107	228	NA
Surface BS8 (Grid 132)	--	--	510	--	172	NA	247	NA
Surface GRID 213	--	--	938	--	170	NA	644	5/19/2022
671	275	--	--	--	--	--	--	NA
PUMP	282	--	--	--	--	--	--	NA
702	--	--	--	AQMD	350	NA	16,700	5/26/2022
742	--	--	--	AQMD	430	NA	126	NA
690	--	--	--	AQMD	147	NA	57	NA
752	--	--	--	AQMD	25	NA	16	NA

First Quarter 2022

**Table 1. LMR Instantaneous Surface and Component
Emissions Monitoring Results
Newby Island Sanitary Landfill, Milpitas, California**

Pressurized Pipe

Location	Initial Concentration (ppmv) Jan 20, 2022	Latitude	Latitude
Flare Station	12.00	37.45492	-121.93176

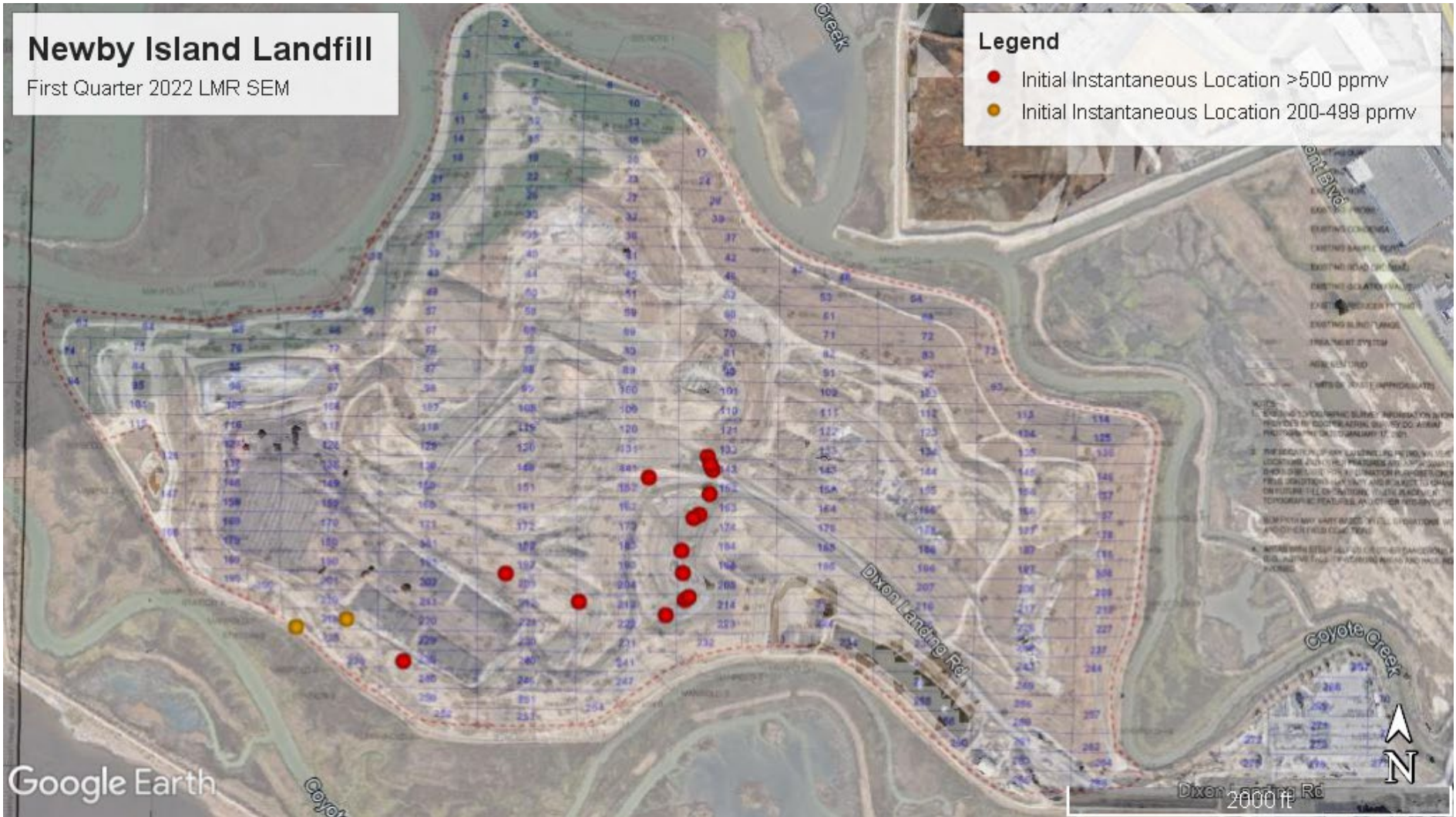
No other exceedances of the 500 ppm threshold observed during the LMR/NSPS monitoring performed during the first quarter 2022.

Newby Island Landfill

First Quarter 2022 LMR SEM

Legend

- Initial Instantaneous Location >500 ppmv
- Initial Instantaneous Location 200-499 ppmv



First Quarter 2022

**Initial Emissions Monitoring Locations Greater Than 200 ppmv
Newby Island Landfill Milpitas, California**

Attachment 4

Integrated Monitoring Results

First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-001	1/18/2022	78.75	Initial Monitoring
NIL-001	1/28/2022	7.48	First 10-Day Follow Up Monitoring
NIL-002	--	--	Exempted
NIL-003	1/20/2022	16.01	
NIL-004	--	--	Exempted
NIL-005	1/20/2022	16.24	
NIL-006	1/20/2022	9.48	
NIL-007	1/20/2022	18.47	
NIL-008	1/20/2022	3.21	
NIL-009	1/20/2022	12.05	
NIL-010	1/20/2022	6.59	
NIL-011	1/20/2022	21.93	
NIL-012	--	--	Exempted
NIL-013	1/19/2022	15.25	
NIL-014	1/20/2022	13.24	
NIL-015	--	--	Exempted
NIL-016	1/19/2022	14.69	
NIL-017	1/19/2022	9.39	
NIL-018	1/20/2022	15.24	
NIL-019	--	--	Exempted
NIL-020	1/19/2022	8.86	
NIL-021	1/20/2022	20.91	
NIL-022	--	--	Exempted
NIL-023	1/19/2022	13.46	
NIL-024	1/19/2022	10.83	
NIL-025	--	--	Exempted
NIL-026	--	--	Exempted
NIL-027	--	--	Exempted
NIL-028	1/19/2022	6.28	
NIL-029	1/20/2022	7.83	
NIL-030	--	--	Exempted
NIL-031	--	--	Not on Grid Map
NIL-032	--	--	Exempted
NIL-033	1/19/2022	3.27	
NIL-034	1/20/2022	9.72	
NIL-035	--	--	Exempted
NIL-036	--	--	Exempted
NIL-037	1/19/2022	5.01	
NIL-038	1/20/2022	3.67	
NIL-039	1/20/2022	6.23	
NIL-040	--	--	Exempted
NIL-041	--	--	Exempted
NIL-042	1/19/2022	5.60	



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-043	--	--	Exempted
NIL-044	--	--	Exempted
NIL-045	--	--	Exempted
NIL-046	1/19/2022	2.90	
NIL-047	1/19/2022	4.42	
NIL-048	1/19/2022	2.68	
NIL-049	--	--	Exempted
NIL-050	--	--	Exempted
NIL-051	--	--	Exempted
NIL-052	1/19/2022	1.36	
NIL-053	1/19/2022	4.37	
NIL-054	1/19/2022	2.76	
NIL-055	1/17/2022	41.42	Initial Monitoring
NIL-055	1/27/2022	2.86	First 10-Day Follow Up Monitoring
NIL-056	1/17/2022	17.96	
NIL-057	--	--	Exempted
NIL-058	--	--	Exempted
NIL-059	1/19/2022	13.22	
NIL-060	1/19/2022	7.44	
NIL-061	1/19/2022	2.80	
NIL-062	1/19/2022	3.04	
NIL-063	1/17/2022	33.73	Initial Monitoring
NIL-063	1/27/2022	9.20	First 10-Day Follow Up Monitoring
NIL-064	1/17/2022	32.05	Initial Monitoring
NIL-064	1/27/2022	11.10	First 10-Day Follow Up Monitoring
NIL-065	1/17/2022	37.68	Initial Monitoring
NIL-065	1/27/2022	14.88	First 10-Day Follow Up Monitoring
NIL-066	1/17/2022	50.51	Initial Monitoring
NIL-066	1/27/2022	12.85	First 10-Day Follow Up Monitoring
NIL-067	--	--	Exempted
NIL-068	--	--	Exempted
NIL-069	1/19/2022	17.23	
NIL-070	1/19/2022	17.51	
NIL-071	1/19/2022	2.13	
NIL-072	1/19/2022	2.14	
NIL-073	--	--	Exempted
NIL-074	1/17/2022	18.39	
NIL-075	1/17/2022	9.51	
NIL-076	1/17/2022	13.78	
NIL-077	1/17/2022	39.35	Initial Monitoring
NIL-077	1/27/2022	3.50	First 10-Day Follow Up Monitoring
NIL-078	--	--	Exempted
NIL-079	--	--	Exempted



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-080	--	--	Exempted
NIL-081	1/19/2022	11.03	
NIL-082	--	--	Exempted
NIL-083	1/19/2022	2.00	
NIL-084	1/17/2022	9.07	
NIL-085	1/17/2022	6.75	
NIL-086	1/17/2022	8.13	
NIL-087	--	--	Exempted
NIL-088	--	--	Exempted
NIL-089	1/19/2022	20.02	
NIL-090	1/19/2022	19.96	
NIL-091	--	--	Exempted
NIL-092	1/19/2022	1.84	
NIL-093	--	--	Exempted
NIL-094	1/20/2022	9.27	
NIL-095	1/17/2022	7.64	
NIL-096	--	--	Leachate Pond
NIL-097	--	--	Exempted
NIL-098	--	--	Exempted
NIL-099	--	--	Exempted
NIL-100	1/19/2022	9.43	
NIL-101	1/19/2022	2.59	
NIL-102	--	--	Exempted
NIL-103	1/19/2022	2.48	
NIL-104	1/17/2022	8.03	
NIL-105	1/17/2022	8.46	
NIL-106	--	--	Leachate Pond
NIL-107	1/19/2022	6.68	
NIL-108	--	--	Exempted
NIL-109	1/19/2022	5.04	
NIL-110	1/18/2022	6.41	
NIL-111	1/19/2022	2.26	
NIL-112	1/19/2022	1.82	
NIL-113	--	--	Exempted
NIL-114	1/20/2022	3.20	
NIL-115	1/17/2022	25.19	Initial Monitoring
NIL-115	1/27/2022	12.78	First 10-Day Follow Up Monitoring
NIL-116	1/17/2022	10.60	
NIL-117	--	--	Exempted
NIL-118	1/19/2022	6.40	
NIL-119	--	--	Exempted
NIL-120	--	--	Exempted
NIL-121	1/18/2022	13.61	



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-122	--	--	Exempted
NIL-123	1/19/2022	1.43	
NIL-124	--	--	Exempted
NIL-125	1/20/2022	3.45	
NIL-126	1/17/2022	8.89	
NIL-127	1/17/2022	20.84	
NIL-128	1/17/2022	7.13	
NIL-129	1/19/2022	7.43	
NIL-130	--	--	Exempted
NIL-131	--	--	Exempted
NIL-132	1/18/2022	37.89	Initial Monitoring
NIL-132	1/27/2022	38.32	First 10-Day Follow Up Monitoring
NIL-132	2/2/2022	24.66	Second 10-Day Follow Up Monitoring
NIL-133	--	--	Exempted
NIL-134	1/19/2022	1.20	
NIL-135	--	--	Exempted
NIL-136	1/20/2022	3.45	
NIL-137	1/17/2022	4.62	
NIL-138	--	--	Exempted
NIL-139	1/19/2022	36.27	Initial Monitoring
NIL-139	1/28/2022	26.73	First 10-Day Follow Up Monitoring
NIL-139	2/7/2022	25.59	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022
NIL-140	--	--	Exempted
NIL-141	1/19/2022	70.74	Initial Monitoring
NIL-141	1/28/2022	91.33	First 10-Day Follow Up Monitoring
NIL-141	2/7/2022	27.95	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022
NIL-142	1/18/2022	65.36	Initial Monitoring
NIL-142	1/27/2022	57.50	First 10-Day Follow Up Monitoring
NIL-142	2/2/2022	29.39	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-143	--	--	Exempted
NIL-144	1/19/2022	1.42	
NIL-145	--	--	Exempted
NIL-146	1/20/2022	2.65	
NIL-147	--	--	Leachate Pond
NIL-148	1/17/2022	15.66	
NIL-149	--	--	Exempted
NIL-150	1/18/2022	19.63	
NIL-151	--	--	Exempted
NIL-152	1/19/2022	76.61	Initial Monitoring
NIL-152	1/28/2022	87.58	First 10-Day Follow Up Monitoring
NIL-152	2/7/2022	64.48	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-153	1/18/2022	45.25	Initial Monitoring
NIL-153	1/27/2022	87.54	First 10-Day Follow Up Monitoring
NIL-153	2/2/2022	33.39	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-154	--	--	Exempted
NIL-155	1/19/2022	3.87	
NIL-156	--	--	Exempted
NIL-157	1/20/2022	3.66	
NIL-158	1/17/2022	9.05	
NIL-159	--	--	Exempted
NIL-160	1/18/2022	31.16	Initial Monitoring
NIL-160	1/27/2022	20.06	First 10-Day Follow Up Monitoring
NIL-161	1/18/2022	12.96	
NIL-162	1/18/2022	43.19	Initial Monitoring
NIL-162	1/27/2022	64.74	First 10-Day Follow Up Monitoring
NIL-162	2/2/2022	108.49	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-163	1/18/2022	112.31	Initial Monitoring
NIL-163	1/27/2022	157.22	First 10-Day Follow Up Monitoring
NIL-163	2/2/2022	106.72	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-164	--	--	Exempted
NIL-165	1/19/2022	3.91	
NIL-166	--	--	Exempted
NIL-167	1/20/2022	2.50	
NIL-168	--	--	Exempted
NIL-169	1/17/2022	15.50	
NIL-170	--	--	Exempted
NIL-171	1/18/2022	59.34	Initial Monitoring
NIL-171	1/28/2022	43.72	First 10-Day Follow Up Monitoring
NIL-171	2/7/2022	36.31	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022
NIL-172	1/18/2022	35.24	Initial Monitoring
NIL-172	1/28/2022	32.17	First 10-Day Follow Up Monitoring
NIL-172	2/7/2022	28.13	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022
NIL-173	1/18/2022	22.24	
NIL-174	1/18/2022	143.53	Initial Monitoring
NIL-174	1/27/2022	128.74	First 10-Day Follow Up Monitoring
NIL-174	2/2/2022	87.52	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-175	1/20/2022	3.85	
NIL-176	--	--	Exempted
NIL-177	--	--	Exempted
NIL-178	1/20/2022	4.53	
NIL-179	1/17/2022	11.41	
NIL-180	--	--	Exempted



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-181	1/18/2022	31.38	Initial Monitoring
NIL-181	1/27/2022	28.40	First 10-Day Follow Up Monitoring
NIL-181	2/2/2022	35.47	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-182	1/18/2022	82.98	Initial Monitoring
NIL-182	1/27/2022	37.00	First 10-Day Follow Up Monitoring
NIL-182	2/2/2022	48.40	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-183	--	--	Exempted
NIL-184	1/18/2022	144.92	Initial Monitoring
NIL-184	1/27/2022	171.73	First 10-Day Follow Up Monitoring
NIL-184	2/2/2022	93.95	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-185	1/20/2022	8.33	
NIL-186	--	--	Exempted
NIL-187	--	--	Exempted
NIL-188	--	--	Exempted
NIL-189	1/17/2022	14.62	
NIL-190	1/17/2022	8.42	
NIL-191	--	--	Exempted
NIL-192	1/18/2022	55.66	Initial Monitoring
NIL-192	1/28/2022	54.37	First 10-Day Follow Up Monitoring
NIL-192	2/7/2022	51.34	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022
NIL-193	1/18/2022	77.94	Initial Monitoring
NIL-193	1/27/2022	86.41	First 10-Day Follow Up Monitoring
NIL-193	2/2/2022	77.26	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-194	1/18/2022	82.72	Initial Monitoring
NIL-194	1/27/2022	106.95	First 10-Day Follow Up Monitoring
NIL-194	2/2/2022	57.78	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-195	--	--	Exempted
NIL-196	--	--	Exempted
NIL-197	--	--	Exempted
NIL-198	1/20/2022	2.18	
NIL-199	1/17/2022	14.08	
NIL-200	1/17/2022	8.98	
NIL-201	1/17/2022	11.52	
NIL-202	--	--	Exempted
NIL-203	1/18/2022	86.53	Initial Monitoring
NIL-203	1/27/2022	26.85	First 10-Day Follow Up Monitoring
NIL-203	2/2/2022	45.14	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-204	1/18/2022	59.35	Initial Monitoring
NIL-204	1/28/2022	186.47	First 10-Day Follow Up Monitoring
NIL-204	2/7/2022	64.29	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022
NIL-205	1/18/2022	155.65	Initial Monitoring
NIL-205	1/27/2022	80.46	First 10-Day Follow Up Monitoring
NIL-205	2/2/2022	80.07	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-206	--	--	Exempted
NIL-207	--	--	Exempted
NIL-208	--	--	Exempted
NIL-209	1/20/2022	2.89	
NIL-210	1/17/2022	10.57	
NIL-211	1/17/2022	12.17	
NIL-212	1/18/2022	108.99	Initial Monitoring
NIL-212	1/27/2022	41.47	First 10-Day Follow Up Monitoring
NIL-212	2/2/2022	77.99	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-213	1/18/2022	138.81	Initial Monitoring
NIL-213	1/28/2022	163.27	First 10-Day Follow Up Monitoring
NIL-213	2/7/2022	74.16	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 7, 2022
NIL-214	1/18/2022	40.31	Initial Monitoring
NIL-214	1/27/2022	14.48	First 10-Day Follow Up Monitoring
NIL-215	--	--	Exempted
NIL-216	--	--	Exempted
NIL-217	--	--	Exempted
NIL-218	1/20/2022	3.34	
NIL-219	1/17/2022	16.80	
NIL-220	--	--	Exempted
NIL-221	1/18/2022	72.30	Initial Monitoring
NIL-221	1/27/2022	34.25	First 10-Day Follow Up Monitoring
NIL-221	2/2/2022	33.02	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-222	1/18/2022	31.40	Initial Monitoring
NIL-222	1/27/2022	77.71	First 10-Day Follow Up Monitoring
NIL-222	2/2/2022	65.83	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-223	1/18/2022	34.98	Initial Monitoring
NIL-223	1/27/2022	16.46	First 10-Day Follow Up Monitoring
NIL-224	--	--	Exempted
NIL-225	--	--	Exempted
NIL-226	--	--	Exempted
NIL-227	1/20/2022	3.59	
NIL-228	1/17/2022	8.06	
NIL-229	--	--	Exempted
NIL-230	--	--	Exempted
NIL-231	1/18/2022	55.05	Initial Monitoring
NIL-231	1/27/2022	45.83	First 10-Day Follow Up Monitoring
NIL-231	2/2/2022	19.90	Second 10-Day Follow Up Monitoring
NIL-232	1/18/2022	28.54	Initial Monitoring
NIL-232	1/27/2022	54.04	First 10-Day Follow Up Monitoring
NIL-232	2/2/2022	29.59	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-233	--	--	Exempted
NIL-234	--	--	Exempted



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-235	--	--	Exempted
NIL-236	--	--	Exempted
NIL-237	1/20/2022	4.39	
NIL-238	1/17/2022	20.97	
NIL-239	1/17/2022	7.11	
NIL-240	--	--	Exempted
NIL-241	1/18/2022	50.10	Initial Monitoring
NIL-241	1/27/2022	28.08	First 10-Day Follow Up Monitoring
NIL-241	2/2/2022	36.16	Second 10-Day Follow Up Monitoring; 120-Day Clock Due June 2, 2022
NIL-242	--	--	Exempted
NIL-243	--	--	Exempted
NIL-244	1/20/2022	5.70	
NIL-245	1/17/2022	18.85	
NIL-246	1/17/2022	11.57	
NIL-247	1/18/2022	28.37	Initial Monitoring
NIL-247	1/27/2022	24.42	First 10-Day Follow Up Monitoring
NIL-248	--	--	Exempted
NIL-249	--	--	Exempted
NIL-250	1/17/2022	10.52	
NIL-251	1/17/2022	14.52	
NIL-252	1/17/2022	8.97	
NIL-253	1/17/2022	13.96	
NIL-254	1/17/2022	11.74	
NIL-255	--	--	Exempted
NIL-256	--	--	Exempted
NIL-257	1/20/2022	5.19	
NIL-258	--	--	Exempted
NIL-259	--	--	Exempted
NIL-260	--	--	Exempted
NIL-261	--	--	Exempted
NIL-262	1/20/2022	2.33	
NIL-263	--	--	Exempted
NIL-264	1/20/2022	2.24	
NIL-265	--	--	Exempted
NIL-266	--	--	Exempted
NIL-267	--	--	Exempted
NIL-268	--	--	Exempted
NIL-269	--	--	Exempted
NIL-270	--	--	Exempted
NIL-271	--	--	Exempted
NIL-272	--	--	Exempted
NIL-273	--	--	Exempted
NIL-274	--	--	Exempted



First Quarter 2022
Table 2.. Integrated Surface Emissions Monitoring Results
Newby Island Landfill, Milpitas, California

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-275	--	--	Exempted
NIL-276	--	--	Exempted
NIL-277	--	--	Exempted



Attachment 5

Calibration Logs

**SOURCE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 01-17-22 Site Name: Newby
 Inspector(s): Michael M Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 30 "Hg
 Air Temperature: 47 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>1.0</u>	<u>499</u>	<u>1</u>	<u>4</u>
2	<u>1.0</u>	<u>499</u>	<u>1</u>	<u>4</u>
3	<u>1.0</u>	<u>500</u>	<u>0</u>	<u>4</u>

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

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

= 100% - 17 / 500 x 100%

= 99.9%

Span Sensitivity:

Trial 1:	Counts Observed for the Span= <u>132034</u>	Trial 3:	Counts Observed for the Span= <u>198472</u>
	Counters Observed for the Zero= <u>3842</u>		Counters Observed for the Zero= <u>3769</u>
Trial 2:	Counts Observed for the Span= <u>134456</u>	mm-139444	
	Counters Observed for the Zero= <u>3779</u>		

Post Monitoring Calibration Check

Zero Air Reading: 1.0 ppm Cal Gas Reading: 475 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: _____ Reading: _____ ppm
 Downwind Location Description: _____ Reading: _____ ppm

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

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

Date: 9/17/22
Inspector(s): Liam M

Site Name: NEWBY
Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESB Barometric Pressure: 30 "Hg
Air Temperature: 47 °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: 2367 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	:0	507	7	4
2	:0	507	7	4
3		496	6	4

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

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

Span Sensitivity:

Trial 1:	Counts Observed for the Span= <u>139024</u>	Trial 3:	Counts Observed for the Span= <u>135268</u>
	Counters Observed for the Zero= <u>4815</u>		Counters Observed for the Zero= <u>4802</u>
Trial 2:	Counts Observed for the Span= <u>135912</u>		
	Counters Observed for the Zero= <u>4810</u>		

Post Monitoring Calibration Check

Zero Air Reading: _____ ppm Cal Gas Reading: 461 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: _____ Reading: _____ ppm
Downwind Location Description: _____ Reading: _____ ppm

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

CALIBRATION AND PERTINENT DATA

Date: 1/18/21 Site Name: Newby
 Inspector(s): Michael Instrument: TVAZ020

WEATHER OBSERVATIONS

Wind Speed: 0 MPH Wind Direction: NE Barometric Pressure: 30.13 "Hg
 Air Temperature: 45 °F General Weather Conditions: foggy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 4106 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>-0.1</u>	<u>504</u>	<u>4</u>	<u>3</u>
2	<u>-0.1</u>	<u>499</u>	<u>1</u>	<u>3</u>
3		<u>499</u>	<u>1</u>	<u>3</u>

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= <u>142596</u>	Trial 3:	Counts Observed for the Span= <u>139160</u>
	Counters Observed for the Zero= <u>5531</u>		Counters Observed for the Zero= <u>5482</u>
Trial 2:	Counts Observed for the Span= <u>139968</u>		
	Counters Observed for the Zero= <u>5496</u>		

Post Monitoring Calibration Check

Zero Air Reading: -2.3 ppm Cal Gas Reading: 506 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: 5nd 67 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.

**CONTRACT EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 1/18/21 Site Name: Newby
 Inspector(s): Brian S. Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 0 MPH Wind Direction: NE Barometric Pressure: 30.13 "Hg
 Air Temperature: 45 °F General Weather Conditions: foggy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the 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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>505</u>	<u>5</u>	
2	<u>-0.1</u>	<u>506</u>	<u>6</u>	
3	<u>-0.1</u>	<u>507</u>	<u>7</u>	

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:	Trial 3:
Counts Observed for the Span = <u>162944</u>	Counts Observed for the Span = <u>161820</u>
Counters Observed for the Zero = <u>3973</u>	Counters Observed for the Zero = <u>3784</u>
Trial 2:	
Counts Observed for the Span = <u>164108</u>	
Counters Observed for the Zero = <u>3974</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.4 ppm Cal Gas Reading: 591 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Enterprise Reading: 1.3 ppm
 Downwind Location Description: Old 67 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.

**CONCENTRATION MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 11/18/22 Site Name: Newby
 Inspector(s): Liam McGinn Instrument: TVAZ020

WEATHER OBSERVATIONS

Wind Speed: 0 MPH Wind Direction: NE Barometric Pressure: 30.13 "Hg
 Air Temperature: 45 °F General Weather Conditions: foggy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>.0</u>	<u>499</u>	<u>1</u>	<u>3</u>
2	<u>-0.1</u>	<u>500</u>	<u>0</u>	<u>3</u>
3	<u>.0</u>	<u>499</u>	<u>1</u>	<u>3</u>

Average Difference: 7

*Perform recalibration if average difference is greater than 10

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

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

Span Sensitivity:

138400

Trial 1:	Trial 3:
Counts Observed for the Span= <u>140656</u>	Counts Observed for the Span= <u>131812</u>
Counters Observed for the Zero= <u>3703</u>	Counters Observed for the Zero= <u>3655</u>
Trial 2:	
Counts Observed for the Span= <u>137380</u>	
Counters Observed for the Zero= <u>3080</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1.3 ppm Cal Gas Reading: 503. ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 67 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: 1-19-22 Site Name: Newby
 Inspector(s): Brians Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 30 "Hg
 Air Temperature: 47 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>499</u>	<u>1</u>	
2	<u>0</u>	<u>502</u>	<u>2</u>	
3	<u>0</u>	<u>499</u>	<u>1</u>	

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

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - 498.7 / 500 x 100%
 = 99.7 %

Span Sensitivity:

Trial 1:	Counts Observed for the Span= <u>129072</u>	Trial 3:	Counts Observed for the Span= <u>126080</u>
	Counters Observed for the Zero= <u>3818</u>		Counters Observed for the Zero= <u>3805</u>
Trial 2:	Counts Observed for the Span= <u>132804</u>		
	Counters Observed for the Zero= <u>3793</u>		

Post Monitoring Calibration Check

Zero Air Reading: -0.3 ppm Cal Gas Reading: 542 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: _____ Reading: _____ ppm
 Downwind Location Description: _____ Reading: _____ ppm

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

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 1-19-22 Site Name: Newby
 Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 30 "Hg
 Air Temperature: 47 °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: 2367 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>.0</u>	<u>498</u>	<u>2</u>	
2	<u>.0</u>	<u>501</u>	<u>1</u>	
3	<u>.0</u>	<u>499</u>	<u>1</u>	

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

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - $\frac{498.7}{500} \times 100\%$
 = 99.7 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>123324</u>	Counts Observed for the Span= <u>127984</u>
Counters Observed for the Zero= <u>4766</u>	Counters Observed for the Zero= <u>4767</u>
Trial 2:	
Counts Observed for the Span= <u>124052</u>	
Counters Observed for the Zero= <u>4783</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.7 ppm Cal Gas Reading: 455 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: _____ Reading: _____ ppm
 Downwind Location Description: _____ Reading: _____ ppm

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

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

Date: 6-20-22 Site Name: Newby
 Inspector(s): Brian S. Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: SE Barometric Pressure: 30 "Hg
 Air Temperature: 44 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 4106 Cal Gas Concentration: 500

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

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

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

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>134484</u>	Counts Observed for the Span= <u>134068</u>
Counters Observed for the Zero= <u>5361</u>	Counters Observed for the Zero= <u>5265</u>
Trial 2:	
Counts Observed for the Span= <u>135200</u>	
Counters Observed for the Zero= <u>5264</u>	

Post Monitoring Calibration Check

Zero Air Reading: -.2 ppm Cal Gas Reading: 505 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 71 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.

CALIBRATION AND PERTINENT DATA

Date: 01-21-22
 Inspector(s): Liam M

Site Name: Noway
 Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 17 MPH Wind Direction: NNE 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: 2367 Cal Gas Concentration: 500

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

Average Difference: -3

*Perform recalibration if average difference is greater than 10

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

$$= 100\% \cdot \frac{-3}{500} \times 100\% = -0.6\%$$

Span Sensitivity:

Trial 1:	Trial 2:	Trial 3:
Counts Observed for the Span = <u>122308</u>	Counts Observed for the Span = <u>122656</u>	Counts Observed for the Span = <u>122592</u>
Counters Observed for the Zero = <u>4247</u>	Counters Observed for the Zero = <u>4328</u>	Counters Observed for the Zero = <u>4340</u>

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm Cal Gas Reading: 501 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grnd 71 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.

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

PSX

Date: 01-21-22

Site Name: Newby

Inspector(s): Michael M

Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 13 MPH

Wind Direction: NNE

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: 2764

Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>-1</u>	<u>498</u>	<u>2</u>	<u>4</u>
2	<u>-6</u>	<u>500</u>	<u>9</u>	<u>3</u>
3	<u>-0</u>	<u>501</u>	<u>9</u>	<u>3</u>

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

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

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>138476</u>	Counts Observed for the Span = <u>139252</u>
Counters Observed for the Zero = <u>9493</u>	Counters Observed for the Zero = <u>3470</u>
Trial 2:	
Counts Observed for the Span = <u>137076</u>	
Counters Observed for the Zero = <u>3459</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 501 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm

Downwind Location Description: Grid 71 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.

CALIBRATION AND PERTINENT DATA

Post

Date: 1-21-22

Site Name: Newby

Inspector(s): Brian S

Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 13 MPH

Wind Direction: NIVE

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: 4106

Cal Gas Concentration: 500

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	.2	501	1	3

Average Difference: .7

*Perform recalibration if average difference is greater than 10

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

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

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>144100</u>	Counts Observed for the Span= <u>147084</u>
Counters Observed for the Zero= <u>4983</u>	Counters Observed for the Zero= <u>5098</u>
Trial 2:	
Counts Observed for the Span= <u>147600</u>	
Counters Observed for the Zero= <u>5051</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0 ppm

Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm

Downwind Location Description: Grid 71 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.

CALIBRATION AND PERTINENT DATA

Date: 01-21-22 Site Name: Newby
 Inspector(s): Michael M Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: N Barometric Pressure: 30 "Hg
 Air Temperature: 49 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>.0</u>	<u>498</u>	<u>2</u>	<u>3</u>
2	<u>.0</u>	<u>502</u>	<u>2</u>	<u>3</u>
3	<u>.0</u>	<u>501</u>	<u>1</u>	<u>3</u>

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

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

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>145696</u>	Counts Observed for the Span = <u>147048</u>
Counters Observed for the Zero = <u>3915</u>	Counters Observed for the Zero = <u>3870</u>
Trial 2:	
Counts Observed for the Span = <u>145428</u>	
Counters Observed for the Zero = <u>3897</u>	

Post Monitoring Calibration Check

Zero Air Reading: -.5 ppm Cal Gas Reading: 446 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 71 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.

CALIBRATION AND PERTINENT DATA

Date: 01-21-22 Site Name: Newby
 Inspector(s): Liam M Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: N Barometric Pressure: 30 "Hg
 Air Temperature: 49 °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: 2367 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>500</u>	<u>0</u>	<u>4</u>
2	<u>0</u>	<u>499</u>	<u>1</u>	<u>4</u>
3	<u>0</u>	<u>500</u>	<u>0</u>	<u>3</u>

Average Difference: .3

*Perform recalibration if average difference is greater than 10

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

$$= 100\% \cdot \frac{.3}{500} \times 100\% = 99.9\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>171162</u>	Counts Observed for the Span = <u>136004</u>
Counters Observed for the Zero = <u>463d</u>	Counters Observed for the Zero = <u>4581</u>
Trial 2:	
Counts Observed for the Span = <u>175270</u>	
Counters Observed for the Zero = <u>4617</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1.2 ppm Cal Gas Reading: 466 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 71 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.

CALIBRATION AND PERTINENT DATA

Date: 01-21-22 Site Name: NEWBY
 Inspector(s): Brian S Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: N Barometric Pressure: 30 "Hg
 Air Temperature: 40 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 4106 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>.0</u>	<u>499</u>	<u>1</u>	<u>3</u>
2	<u>.0</u>	<u>497</u>	<u>3</u>	<u>3</u>
3	<u>.0</u>	<u>499</u>	<u>1</u>	<u>3</u>

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

$$= \frac{100\% \cdot 1.6}{500} \times 100\% = 99.68\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>134020</u>	Counts Observed for the Span = <u>144348</u>
Counters Observed for the Zero = <u>5182</u>	Counters Observed for the Zero = <u>5153</u>
Trial 2:	
Counts Observed for the Span = <u>133920</u>	
Counters Observed for the Zero = <u>5186</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0.3 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 71 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: 01-27-22 Site Name: Newby
 Inspector(s): _____ Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 30 "Hg
 Air Temperature: 40 °F General Weather Conditions: clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 4106 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>500</u>	<u>0</u>	<u>5</u>
2	<u>0</u>	<u>500</u>	<u>0</u>	<u>5</u>
3	<u>0</u>	<u>500</u>	<u>0</u>	<u>5</u>

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

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

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Counts Observed for the Span = <u>140880</u>	Trial 3:	Counts Observed for the Span = <u>149528</u>
	Counters Observed for the Zero = <u>5330</u>		Counters Observed for the Zero = <u>5252</u>
Trial 2:	Counts Observed for the Span = <u>140816</u>		
	Counters Observed for the Zero = <u>5310</u>		

Post Monitoring Calibration Check

Zero Air Reading: _____ ppm Cal Gas Reading: _____ ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: grid 67 Reading: 9.8 ppm
 Downwind Location Description: Entrance Reading: 2.3 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: 01-27-22 Site Name: Noway
 Inspector(s): Nick h Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 30 "Hg
 Air Temperature: 40 °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: 2367 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>505</u>	<u>5</u>	<u>5</u>
2	<u>0</u>	<u>500</u>	<u>0</u>	<u>3</u>
3	<u>0</u>	<u>500</u>	<u>0</u>	<u>3</u>

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

$$= 100\% - \frac{1.6}{500} \times 100\%$$

$$= 99.68\%$$

Span Sensitivity:

Trial 1:	Counts Observed for the Span = <u>134304</u>	Trial 3:	Counts Observed for the Span = <u>136992</u>
	Counters Observed for the Zero = <u>4709</u>		Counters Observed for the Zero = <u>4664</u>
Trial 2:	Counts Observed for the Span = <u>136684</u>		
	Counters Observed for the Zero = <u>4690</u>		

Post Monitoring Calibration Check

Zero Air Reading: _____ ppm Cal Gas Reading: _____ ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 67 Reading: 3.8 ppm
 Downwind Location Description: EN Vance Reading: 2.3 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: 01-27-22 Site Name: NEWBY
 Inspector(s): _____ Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 30 "Hg
 Air Temperature: 40 °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: (223) 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	18	500	9	5
3	18	499	9	5

Average Difference: 0.3
*Perform recalibration if average difference is greater than 10

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

$$= 100\% - \frac{0.3}{500} \times 100\%$$

$$= 99.94\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>157316</u>	Counts Observed for the Span = <u>157324</u>
Counters Observed for the Zero = <u>2634</u>	Counters Observed for the Zero = <u>2655</u>
Trial 2:	
Counts Observed for the Span = <u>157700</u>	
Counters Observed for the Zero = <u>3640</u>	

Post Monitoring Calibration Check

Zero Air Reading: _____ ppm Cal Gas Reading: _____ ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Wind 67 Reading: 3.8 ppm
 Downwind Location Description: ENTRANCE Reading: 2.9 ppm

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

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 01-27-22 Site Name: Newry
 Inspector(s): Brian S Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 30 "Hg
 Air Temperature: 40 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>505</u>	<u>5</u>	<u>5</u>
2	<u>-1</u>	<u>504</u>	<u>3</u>	<u>5</u>
3	<u>-1</u>	<u>501</u>	<u>1</u>	<u>5</u>

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%
 = 0.48%

Span Sensitivity:

Trial 1:	Counts Observed for the Span = <u>145324</u>	Trial 3:	Counts Observed for the Span = <u>148032</u>
	Counters Observed for the Zero = <u>9670</u>		Counters Observed for the Zero = <u>3725</u>
Trial 2:	Counts Observed for the Span = <u>177896</u>		
	Counters Observed for the Zero = <u>3743</u>		

Post Monitoring Calibration Check

Zero Air Reading: _____ ppm Cal Gas Reading: _____ ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 67 Reading: 38 ppm
 Downwind Location Description: ENTRANCE Reading: 23 ppm

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

CALIBRATION AND PERTINENT DATA

Date: 01-27-22
 Inspector(s): Liam McGinn

Site Name: NEWBY
 Instrument: TVAZ020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH
 Wind Direction: ESE
 Barometric Pressure: 30 "Hg
 Air Temperature: 40 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>503</u>	<u>3</u>	<u>5</u>
2	<u>0</u>	<u>495</u>	<u>5</u>	<u>5</u>
3	<u>0</u>	<u>505</u>	<u>5</u>	<u>5</u>

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

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

$$= \frac{100\% \cdot 3.3}{500} \times 100\% = 99.34$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>145752</u>	Counts Observed for the Span = <u>147564</u>
Counters Observed for the Zero = <u>3832</u>	Counters Observed for the Zero = <u>3804</u>
Trial 2:	
Counts Observed for the Span = <u>149552</u>	
Counters Observed for the Zero = <u>3832</u>	

Post Monitoring Calibration Check

Zero Air Reading: 1.2 ppm
 Cal Gas Reading: 496 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: 9Kil 67 Reading: 0.38 ppm
 Downwind Location Description: Entrance Reading: 2.3 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.

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

Date: 1-28-22 Site Name: Newby
 Inspector(s): Michael M Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: NE Barometric Pressure: 30 "Hg
 Air Temperature: 65 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>-1</u>	<u>503</u>	<u>3</u>	
2	<u>-1</u>	<u>505</u>	<u>5</u>	
3	<u>-1</u>	<u>500</u>	<u>0</u>	

Average Difference: 2.6
*Perform recalibration if average difference is greater than 10

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

$$= \frac{100\% \cdot 2.6}{500} \times 100\% = 99.48\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>131196</u>	Counts Observed for the Span = <u>132236</u>
Counters Observed for the Zero = <u>4985</u>	Counters Observed for the Zero = <u>4790</u>
Trial 2: Counts Observed for the Span = <u>150929 LM</u>	<u>120805 133170</u>
Counters Observed for the Zero = <u>4907</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.8 ppm Cal Gas Reading: 510 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.3 ppm
 Downwind Location Description: Grid 67 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.

CALIBRATION AND PERTINENT DATA

Date: 1-28-22 Site Name: Newby
 Inspector(s): Liam M Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: NE Barometric Pressure: 30 "Hg
 Air Temperature: 65 °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: 500

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

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:	Trial 3:
Counts Observed for the Span = <u>154100</u>	Counts Observed for the Span = <u>146728</u>
Counters Observed for the Zero = <u>4113</u>	Counters Observed for the Zero = <u>3956</u>
Trial 2:	
Counts Observed for the Span = <u>150928</u>	
Counters Observed for the Zero = <u>4636</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.3 ppm Cal Gas Reading: 491 ppm

BACKGROUND CONCENTRATIONS CHECKS

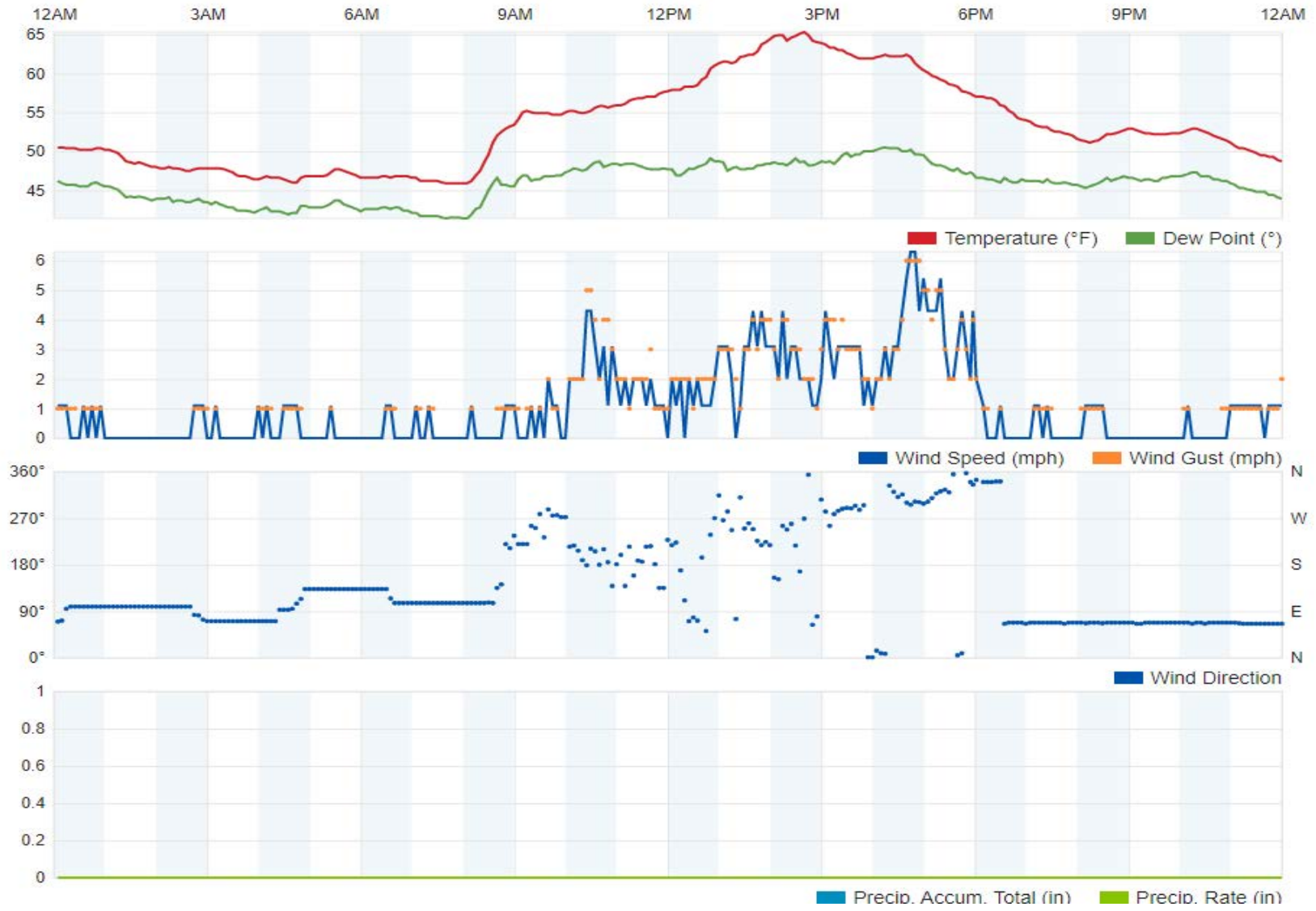
Upwind Location Description: Entrance Reading: 1.3 ppm
 Downwind Location Description: ond 67 Reading: 1.6 ppm

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

Attachment 6

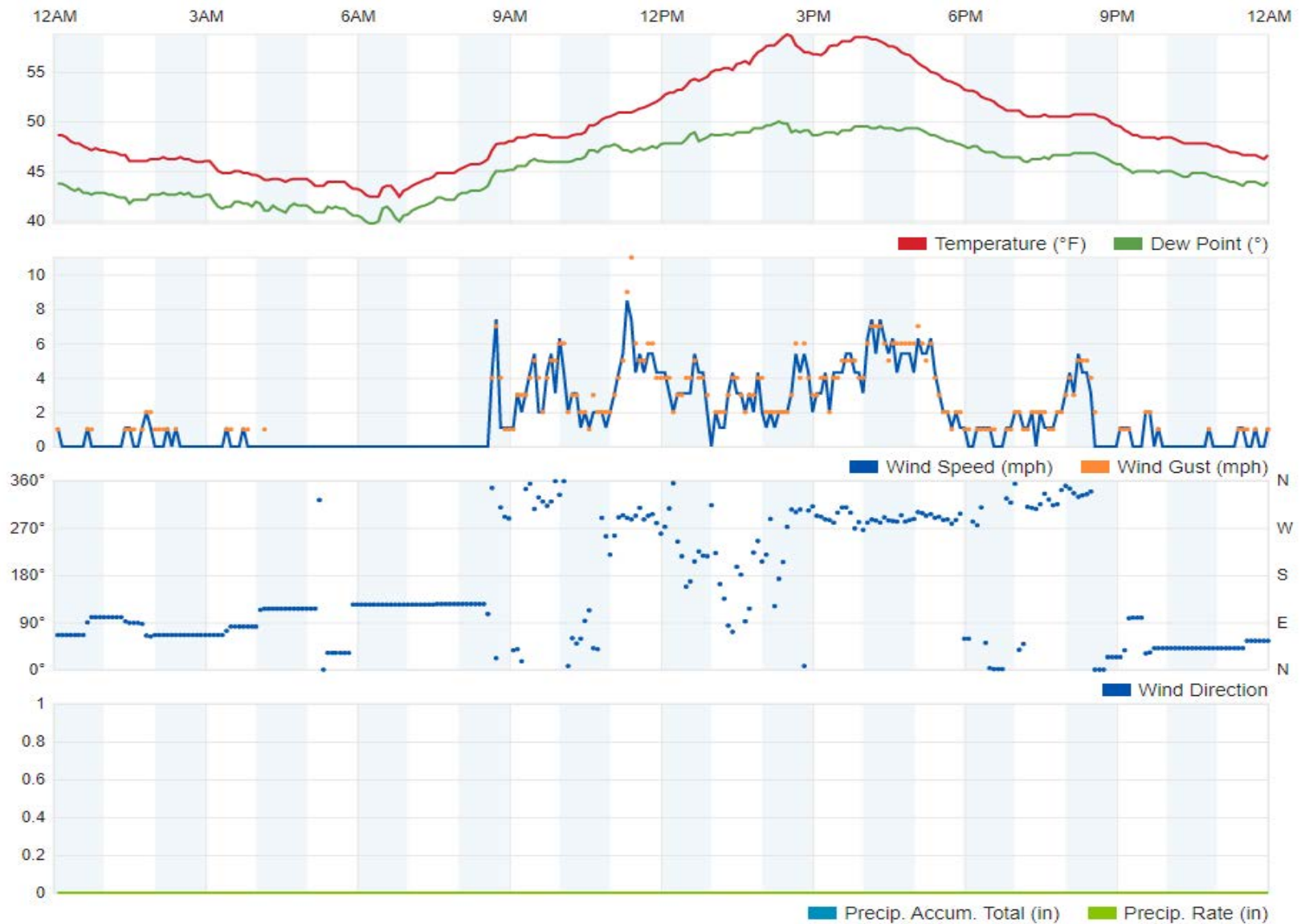
Weather Data

January 17, 2022



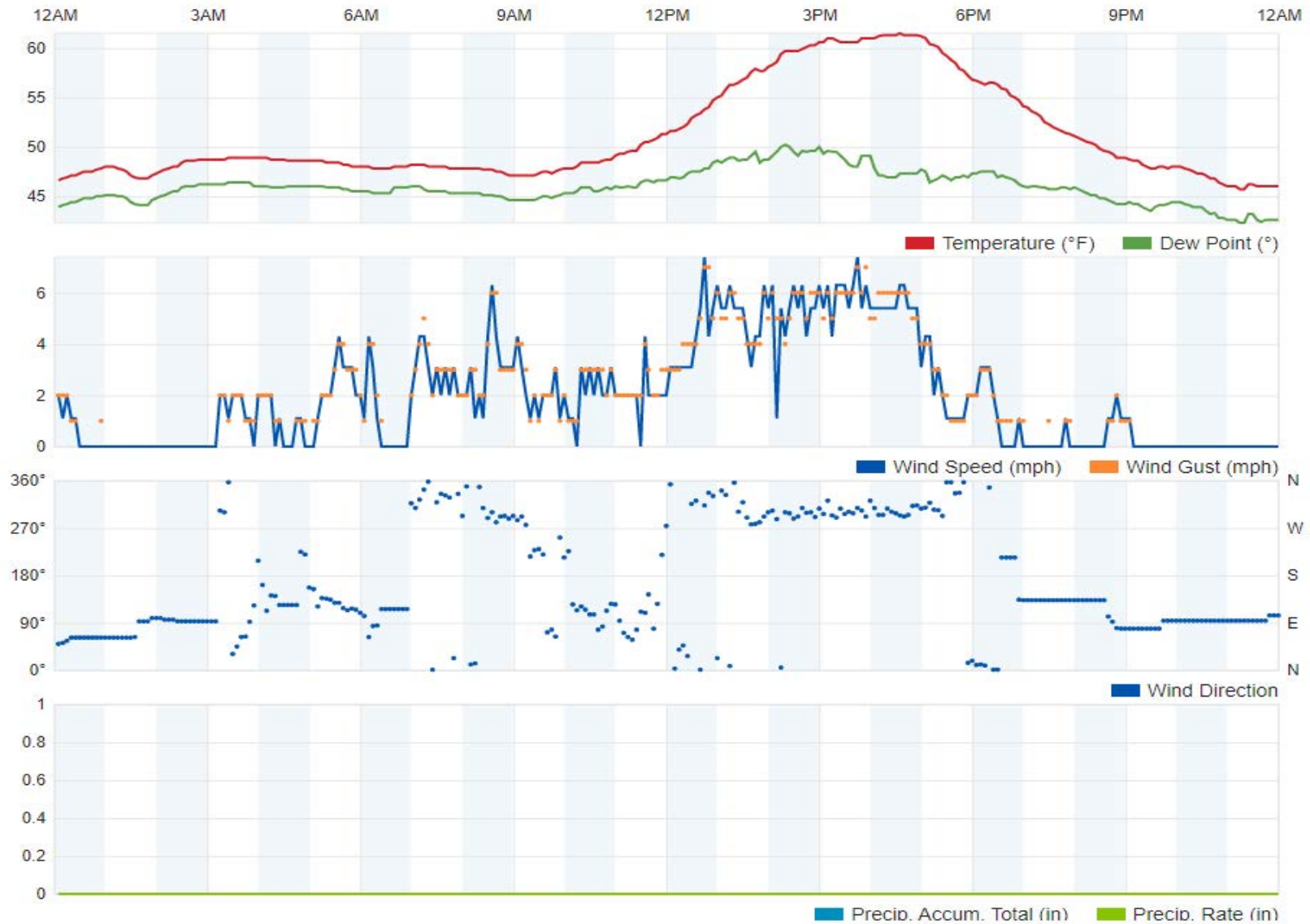
First Quarter 2022
LMR Surface Emissions Monitoring Weather Data
January 17, 2022
Newby Island Landfill, Milpitas, California

January 18, 2022



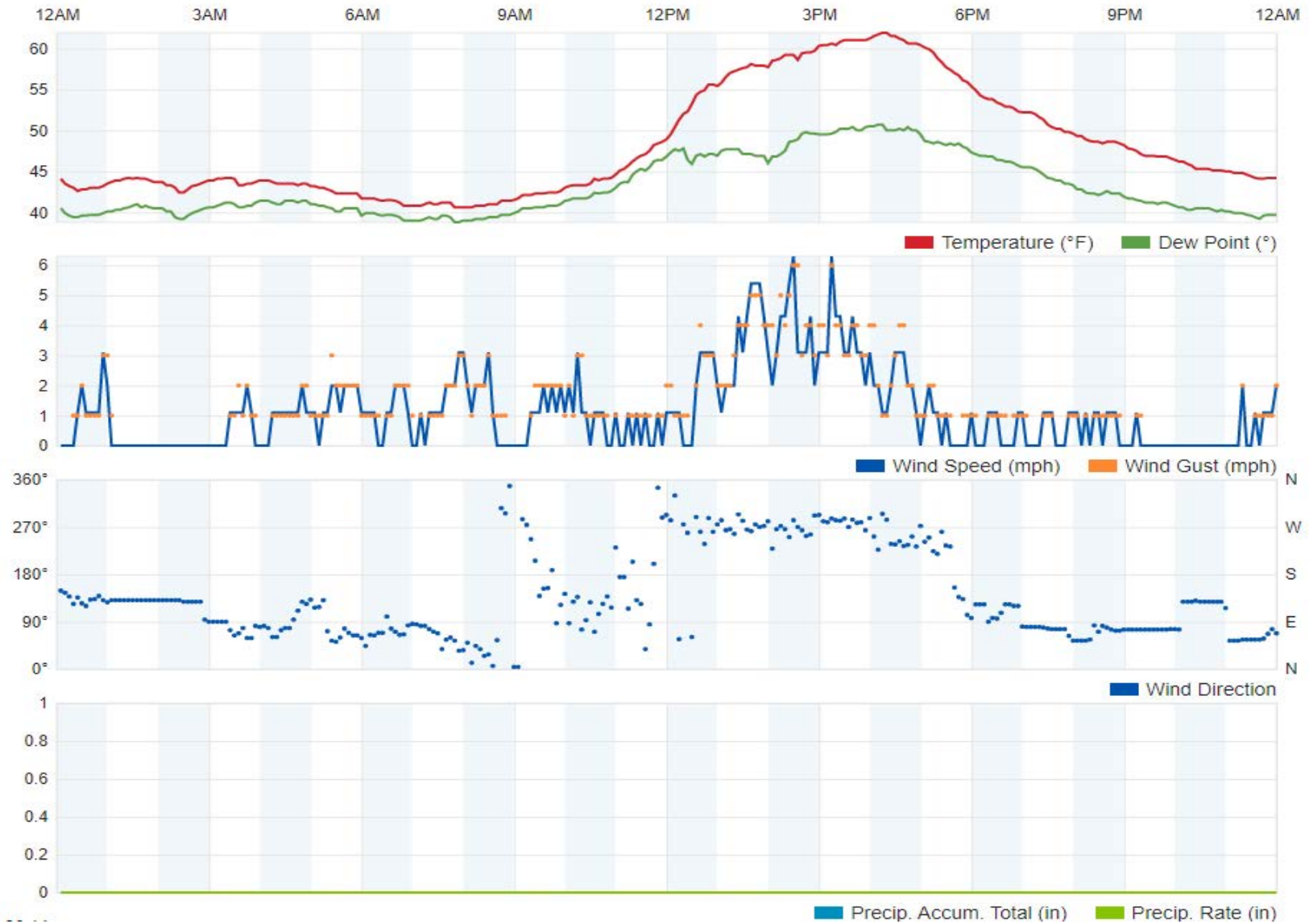
First Quarter 2022
LMR Surface Emissions Monitoring Weather
Data January 18, 2022
Newby Island Landfill, Milpitas, California

January 19, 2022



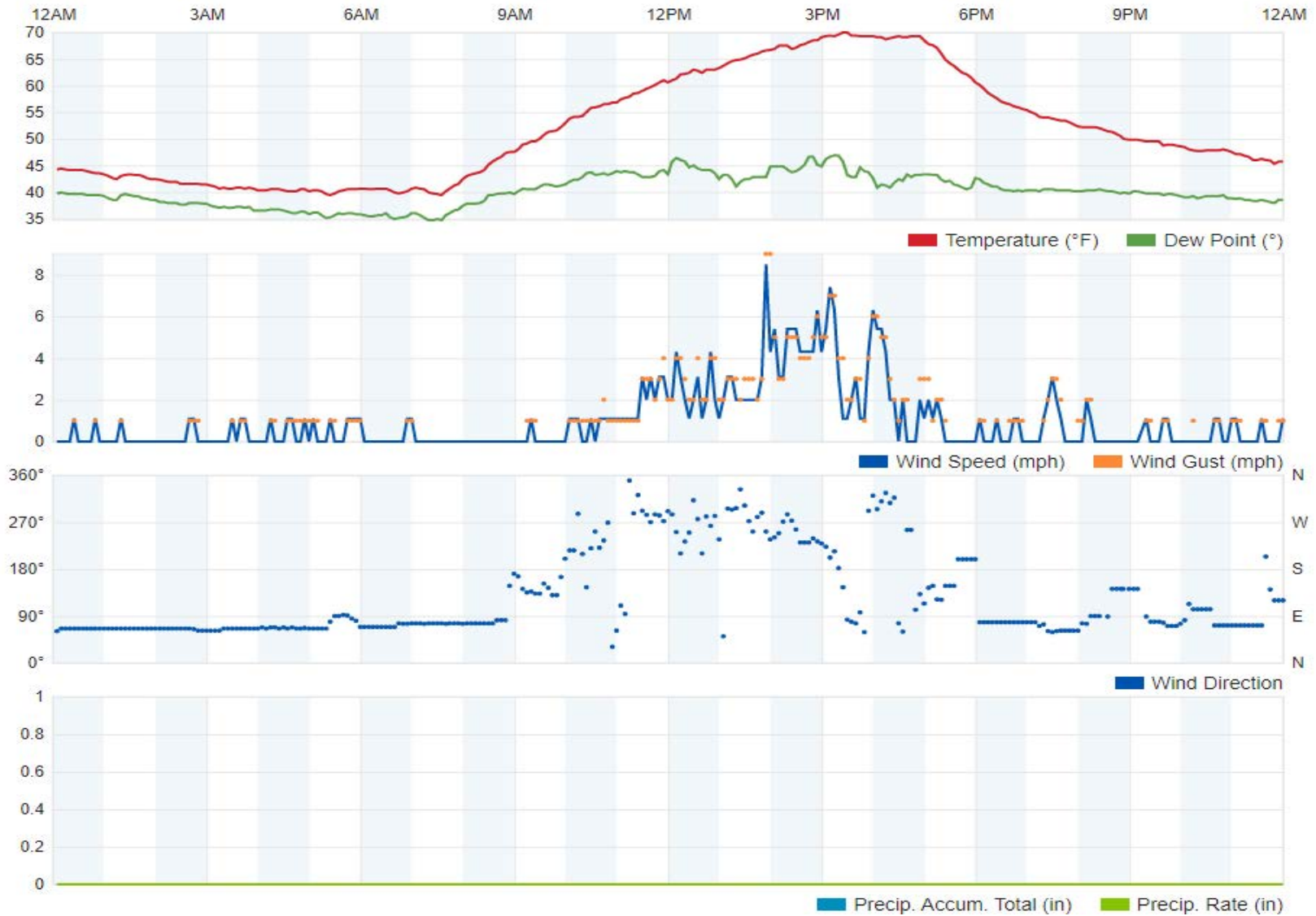
First Quarter 2022
LMR Surface Emissions Monitoring Weather
Data January 19, 2022
Newby Island Landfill, Milpitas, California

January 26, 2022



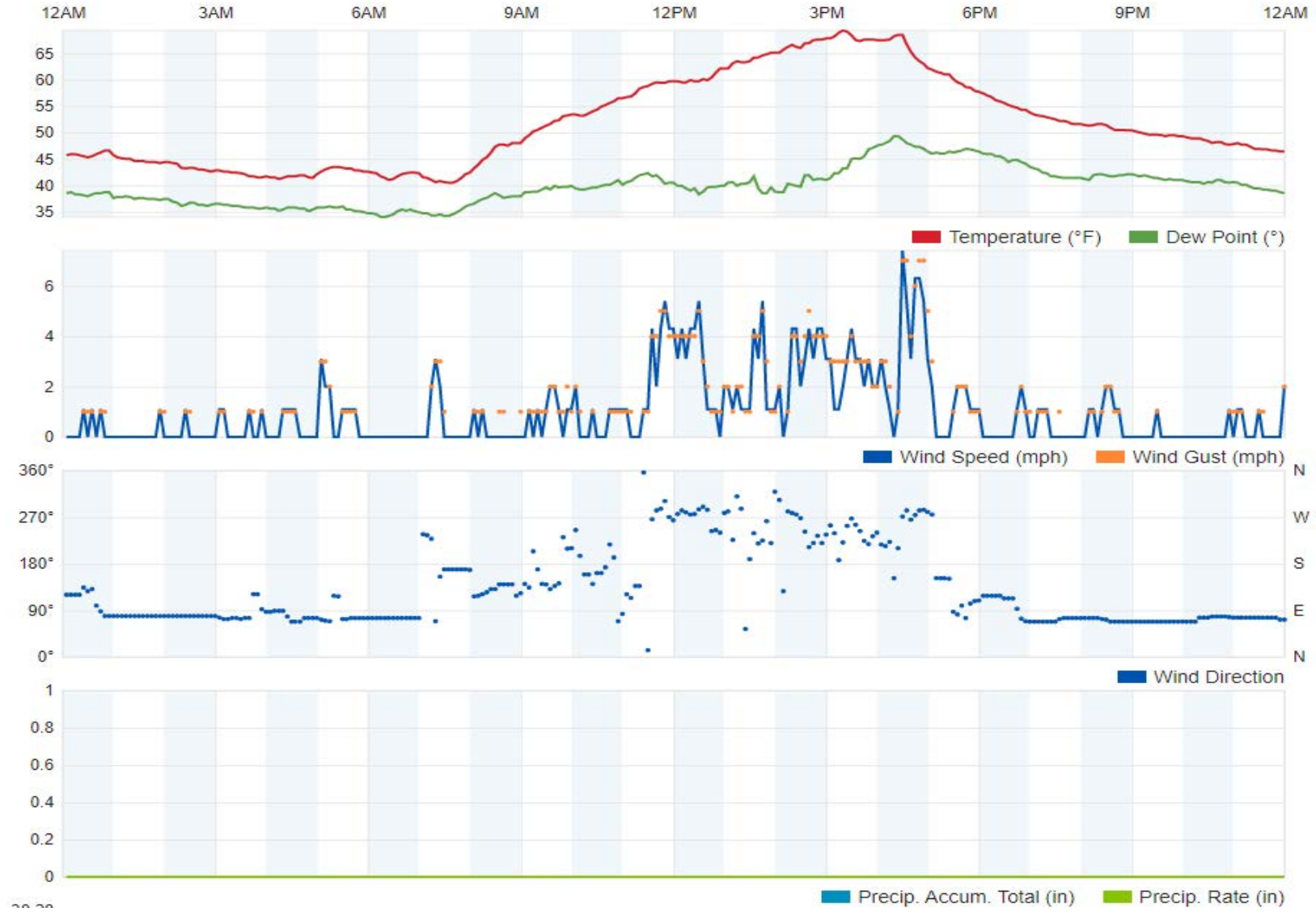
First Quarter 2022
LMR Surface Emissions Monitoring Weather
Data January 26, 2022
Newby Island Landfill, Milpitas, California

January 27, 2022



First Quarter 2022
LMR Surface Emissions Monitoring Weather
Data January 27, 2022
Newby Island Landfill, Milpitas, California

January 28, 2022



First Quarter 2022
LMR Surface Emissions Monitoring Weather
Data January 28, 2022
Newby Island Landfill, Milpitas, California

February 16, 2022



First Quarter 2022
LMR Surface Emissions Monitoring Weather
Data February 16, 2022
Newby Island Landfill, Milpitas, California

August 25, 2022
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 2022.

Dear Ms. Huber:

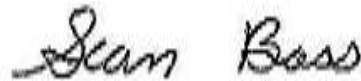
SCS Field Services (SCS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Newby Island Landfill (Site) during the Second Quarter 2022. This report includes the results of surface scan, component emissions and blower/flare 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 Sean Bass at (209) 2458 or Whitney Stackhouse at (209) 338-7990 if you have any questions or comments.

Sincerely,



Whitney Stackhouse
Project Manager
SCS Field Services



Sean T. Bass
Senior Project Manager
SCS Field Services

Encl.

Mike Flanagan, SCS Field Services



Newby Island Landfill

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

Second Quarter 2022

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 25, 2022

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 2022

INTRODUCTION

This letter provides results of the May 23, 24, 25 and 26, 2022 and June 2, 10 and 22, 2022, 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 May 23, 24, 25 and 26, 2022 and June 2, 10 and 22, 2022, SCS performed second quarter 2022 SEM as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that sixteen (16) 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 return 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 at this time. 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 twelve (12) 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 did not return 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 observed exceedance which will be due on October 8, 2022.

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, twenty-nine (29) 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 May 23, 24, 25 and 26, 2022 and June 2, 10 and 22, 2022, 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 May 23, 24, 25 and 26, 2022 and June 2, 10 and 22, 2022, SCS performed second quarter 2022 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that sixteen (16) 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 June 2, 10, and 22, 2022, respectively, indicated that all locations returned to 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. Based on these monitoring results no additional follow up testing was required at this time. Results of the initial and follow up monitoring are shown in Attachments 2 and 3 (Table 1).

Additionally, calculated integrated grid monitoring indicated twelve (12) integrated exceedances of the 25-ppmv requirement on May 23, 24, 25, and 26, 2022. The required first and second 10-day LMR follow-up monitoring performed on June 2, and 10, 2022, indicated that all areas had not returned to compliance following system adjustments and remediation by site personnel. In accordance with LMR 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 third observed integrated exceedance, which will be due by October 8, 2022. 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 2022.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On May 23, 2022, 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 83.00 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

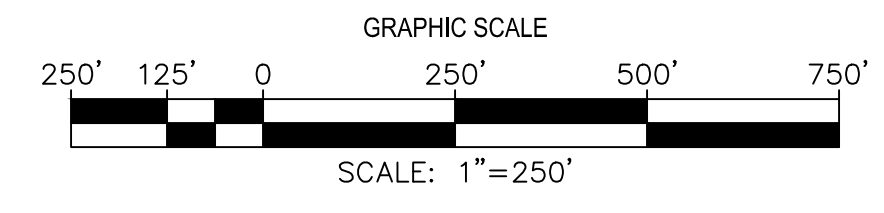
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the third quarter 2022 (July through September) surface emissions testing event is scheduled to be performed by the end of August 2022 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

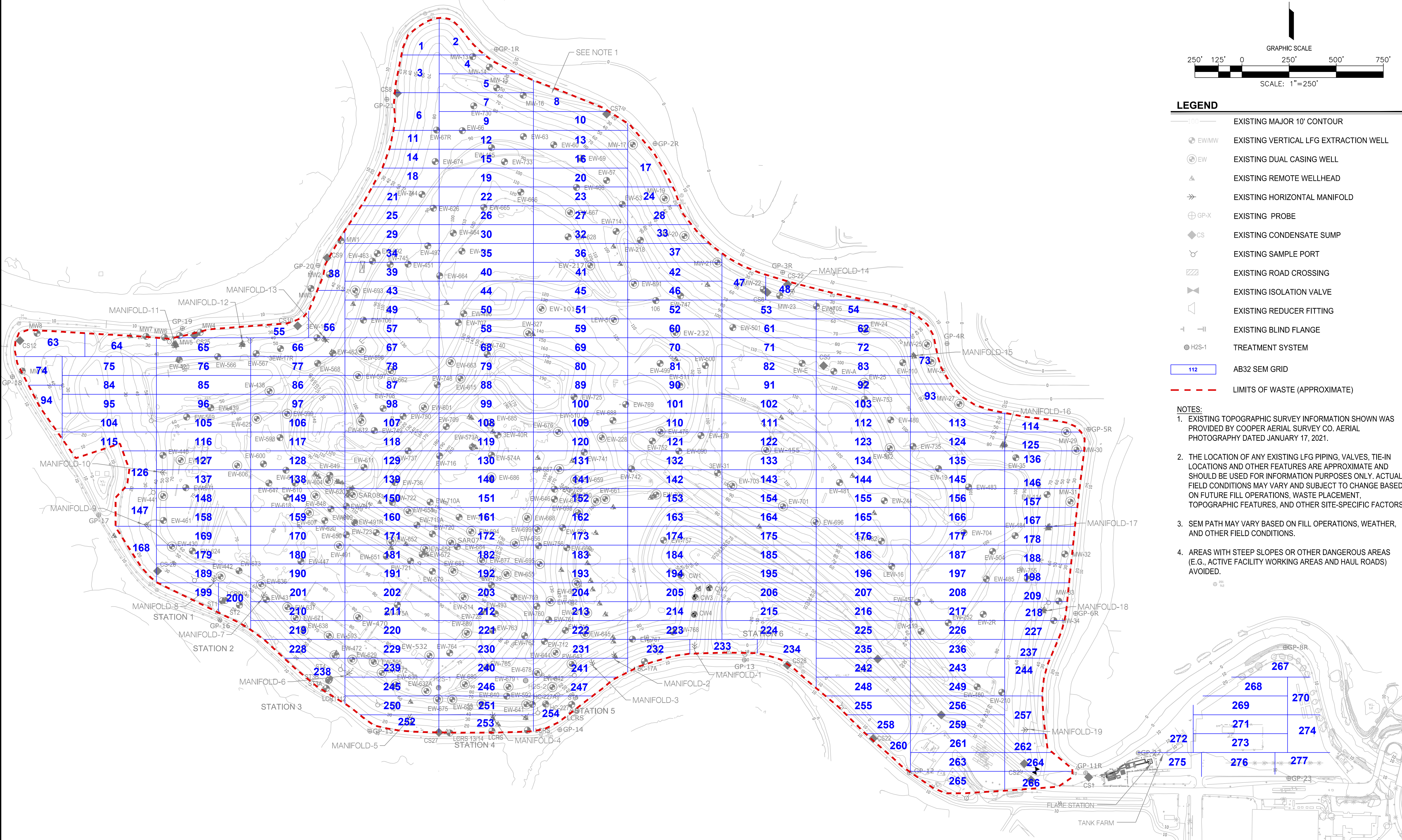
Landfill Grid



LEGEND

- EXISTING MAJOR 10' CONTOUR
- EXISTING VERTICAL LFG EXTRACTION WELL
- EXISTING DUAL CASING WELL
- EXISTING REMOTE WELLHEAD
- EXISTING HORIZONTAL MANIFOLD
- EXISTING PROBE
- EXISTING CONDENSATE SUMP
- EXISTING SAMPLE PORT
- EXISTING ROAD CROSSING
- EXISTING ISOLATION VALVE
- EXISTING REDUCER FITTING
- EXISTING BLIND FLANGE
- TREATMENT SYSTEM
- AB32 SEM GRID
- LIMITS OF WASTE (APPROXIMATE)

- NOTES:**
1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY COOPER AERIAL SURVEY CO. AERIAL PHOTOGRAPHY DATED JANUARY 17, 2021.
 2. THE LOCATION OF ANY EXISTING LFG PIPING, VALVES, TIE-IN LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
 3. SEM PATH MAY VARY BASED ON FILL OPERATIONS, WEATHER, AND OTHER FIELD CONDITIONS.
 4. AREAS WITH STEEP SLOPES OR OTHER DANGEROUS AREAS (E.G., ACTIVE FACILITY WORKING AREAS AND HAUL ROADS) AVOIDED.



C:\Users\4747a_s\Desktop\Newby_Island_LF - Task 2 - As-Built Drawings\SEM Grid - 01221039.05 - Task 4\GCCS_SEM Map_11012021.dwg Nov 04, 2021 - 7:11am By: 4747a_s

DATE	REVISION	NO.

SHEET TITLE: GCCS SEM MAP
 PROJECT TITLE: NEWBY ISLAND LANDFILL MILPITAS, CALIFORNIA

CLIENT: SCS ENGINEERS ENVIRONMENTAL CONSULTANTS

DATE: 11-04-21
 SCALE: AS SHOWN
 SHEET: 1

DATE: 11-04-21
 SCALE: AS SHOWN
 SHEET: 1

Attachment 2

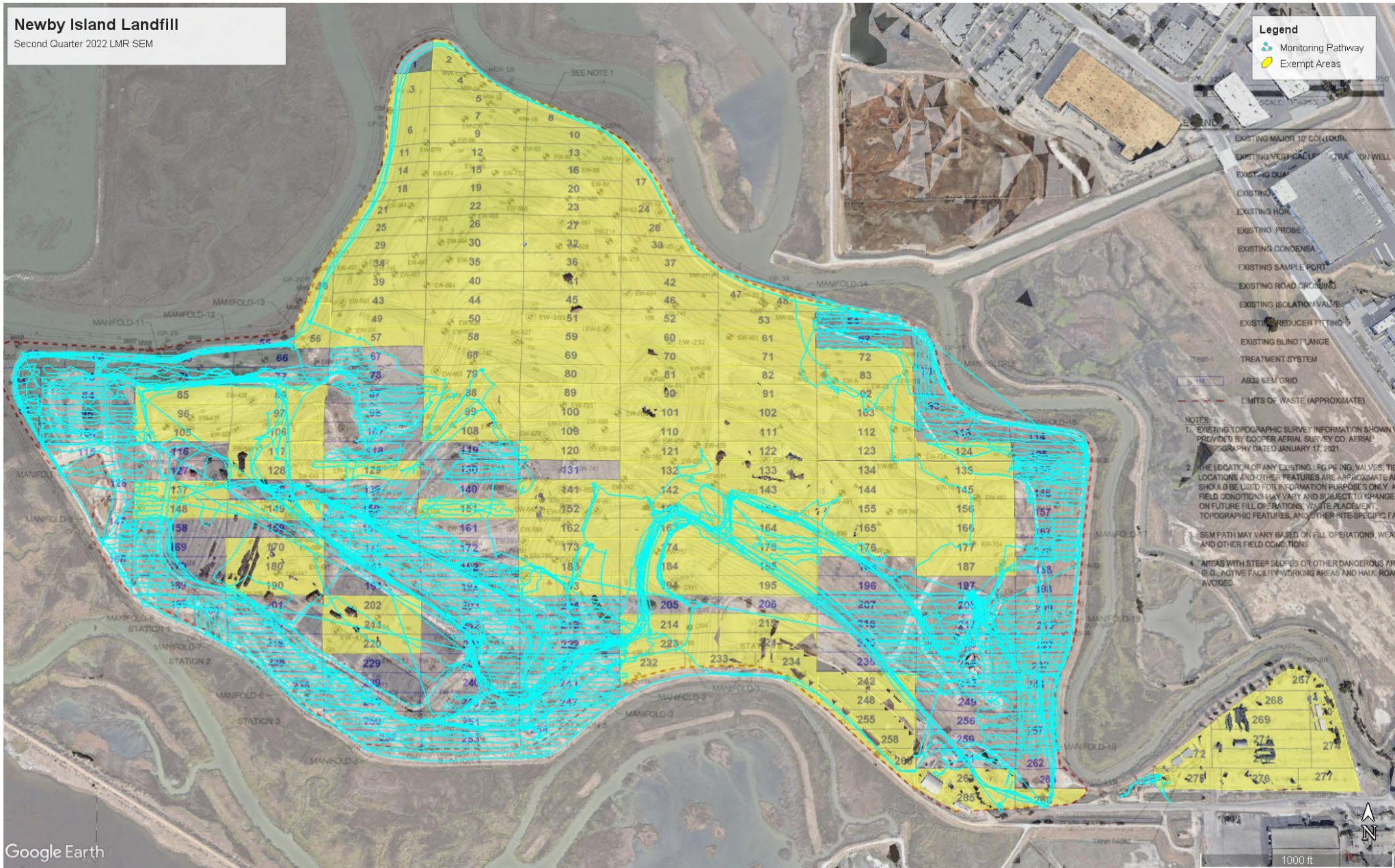
Surface Pathway

Newby Island Landfill

Second Quarter 2022 LMR SEM

Legend

- Monitoring Pathway
- Exempt Areas



- EXISTING MAJOR 10' DRAINAGE
- EXISTING VERTICAL CURB
- EXISTING DRAINAGE
- EXISTING DRAINAGE
- EXISTING HORIZONTAL
- EXISTING PROBE
- EXISTING CONDENSATE
- EXISTING SAMPLE PORT
- EXISTING ROAD CROSSING
- EXISTING ISOLATION VALVE
- EXISTING REDUCER FITTING
- EXISTING BLIND FLANGE
- TREATMENT SYSTEM
- AB32 SEM GRID
- LIMITS OF WASTE (APPROXIMATE)

- NOTES:
- EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN IS PROVIDED BY COOPER AERIAL SURVEY CO. AERIAL PHOTOGRAPHY DATED JANUARY 17, 2021.
 - THE LOCATION OF ANY EXISTING LEG PIPING, VALVES, TIE LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. A FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
 - SEM PATH MAY VARY BASED ON FILL OPERATIONS, WEAR AND OTHER FIELD CONDITIONS.
 - AREAS WITH STEEP SLOPES OR OTHER DANGEROUS AREAS (E.G. ACTIVE FACILITY WORKING AREAS AND HAUL ROAD) SHOULD BE AVOIDED.

Google Earth

1000 ft

Second Quarter 2022 LMR Surface Emissions Monitoring Pathway Newby Island Landfill, Milpitas, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results

Second Quarter 2022

Table 1. LMR Instantaneous Surface and Component Emissions Monitoring Results

Newby Island Sanitary Landfill, Milpitas, California

*Instantaneous Data Report for May 23, 24, 25, 2022
and June 2, 10, and 22, 2022.*

Location Well ID or Grid Number	Initial Monitoring (ppmv)	Initial Monitoring (ppmv)	Initial Monitoring (ppmv)	10-Day Follow Up Monitoring (ppmv)	Second 10-Day Follow Up Monitoring (ppmv)	30-Day Follow Up Monitoring (ppmv)	Location
	23-May	24-May	25-May	2-Jun	10-Jun	22-Jun	
598	2,000	-	-	757	35.8	32.4	N37° 27.569' W121° 56.864'
601 (P) (HOV Temp)	3,000	-	-	932	20.5	54.4	N37° 27.598' W121° 56.707'
615 (P)	2,600	-	-	1441	11.2	5.6	N37° 27.623' W121° 56.667'
712 (P)	6,617	-	-	13.7	NA	1.8	N37° 27.394' W121° 56.571'
720 (P)	20,000(BH)/1,200	-	-	583	60.5	28.5	N37° 27.487' W121° 56.699'
740 (P)	3,000 (flange)	-	-	94.4	NA	8.4	N37° 27.645' W121° 56.642'
748 (P)	20,000	-	-	1244	13.7	40	N37° 27.620' W121° 56.691'
749 (P)	1,300	-	-	1775	17.5	12.6	N37° 27.580' W121° 56.759'
761 (P)	971	-	-	1059	12.2	72.4	N37° 27.414' W121° 56.568'
BLACK PIPE	910	-	-	1975	22.2	32.2	N37° 27.333' W121° 56.577'
DGTPOST1	600	-	-	216	NA	75.4	N37° 27.642' W121° 56.648'
NIHC-245	513	2500	-	513	55.9	17.5	N37° 27.464' W121° 56.643'
RWRB1	1,999	-	-	6008	170	84.9	N37° 27.386' W121° 56.537'
706	-	5,000	-	216	NA	13.8	N37° 27.676' W121° 56.773'
756	-	900	-	813	15.2	113	N37° 27.478' W121° 56.582'
BO11 (Surface Reading Grid 213)	-	-	953	607	94.2	137	N37° 27.433' W121° 56.583'
462	200 (WH)	-	-	-	-	-	N37° 27.644' W121° 56.808'
684	461	-	-	-	-	-	N37° 27.476' W121° 56.669'
798	-	-	475(WH)	-	-	-	N37° 27.467' W121° 56.545'
800	209	-	-	-	-	-	N37° 27.450' W121° 56.609'
568 (HOV Temp)	345(BH)/250(WH)	-	-	-	-	-	N37° 27.635' W121° 56.824'
739 (P)	391	-	-	-	-	-	N37° 27.443' W121° 56.631'
759 (P)	200	-	-	-	-	-	N37° 27.433' W121° 56.606'

Second Quarter 2022

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)	Initial Monitoring (ppmv)	Initial Monitoring (ppmv)	10-Day Follow Up Monitoring (ppmv)	Second 10-Day Follow Up Monitoring (ppmv)	30-Day Follow Up Monitoring (ppmv)	Location
	23-May	24-May	25-May	2-Jun	10-Jun	22-Jun	
797 (P)	-	-	345	-	-	-	N37° 27.510' W121° 56.532'
BO (Surface Reading Grid 213)	-	-	213	-	-	-	N37° 27.421' W121° 56.565'
BO10 (Surface Reading Grid 213)	-	-	200	-	-	-	N37° 27.434' W121° 56.522'
BO12 (Surface Reading Grid 203)	-	-	480	-	-	-	N37° 27.440' W121° 56.651'
BO13 (Surface Reading Grid 203)	-	-	200	-	-	-	N37° 27.448' W121° 56.606'
BO14 (Surface Reading Grid 204)	-	-	297	-	-	-	N37° 27.452' W121° 56.577'
BO15 (Surface Reading Grid 192)	-	-	200	-	-	-	N37° 27.464' W121° 56.603'
BO2 (Surface Reading Grid 213)	-	-	486	-	-	-	N37° 27.421' W121° 56.531'
BO3 (Surface Reading Grid 213)	-	-	207	-	-	-	N37° 27.420' W121° 56.495'
BO4 (Surface Reading Grid 213)	-	-	322	-	-	-	N37° 27.425' W121° 56.516'
BO5 (Surface Reading Grid 213)	-	-	315	-	-	-	N37° 27.426' W121° 56.520'
BO6 (Surface Reading Grid 212)	-	-	480	-	-	-	N37° 27.429' W121° 56.600'
BO7 (Surface Reading Grid 213)	-	-	200	-	-	-	N37° 27.431' W121° 56.566'
BO8 (Surface Reading Grid 213)	-	-	296	-	-	-	N37° 27.428' W121° 56.530'
BO9 (Surface Reading Grid 212)	-	-	256	-	-	-	N37° 27.434' W121° 56.618'
BOFL1	479	-	-	-	-	-	N37° 27.443' W121° 56.591'
BOLRB	377	-	-	-	-	-	N37° 27.497' W121° 56.749'
JS SR2	-	-	277	-	-	-	N37° 27.420' W121° 56.540'
JS SR	-	-	227	-	-	-	N37° 27.420' W121° 56.506'
JS SR3	-	-	280	-	-	-	N37° 27.411' W121° 56.534'
JS SR4	-	-	234	-	-	-	N37° 27.408' W121° 56.537'
NILHC244	200	-	-	-	-	-	N37° 27.489' W121° 56.652'

Second Quarter 2022

**Table 1. LMR Instantaneous Surface and Component
Emissions Monitoring Results
Newby Island Sanitary Landfill, Milpitas, California**

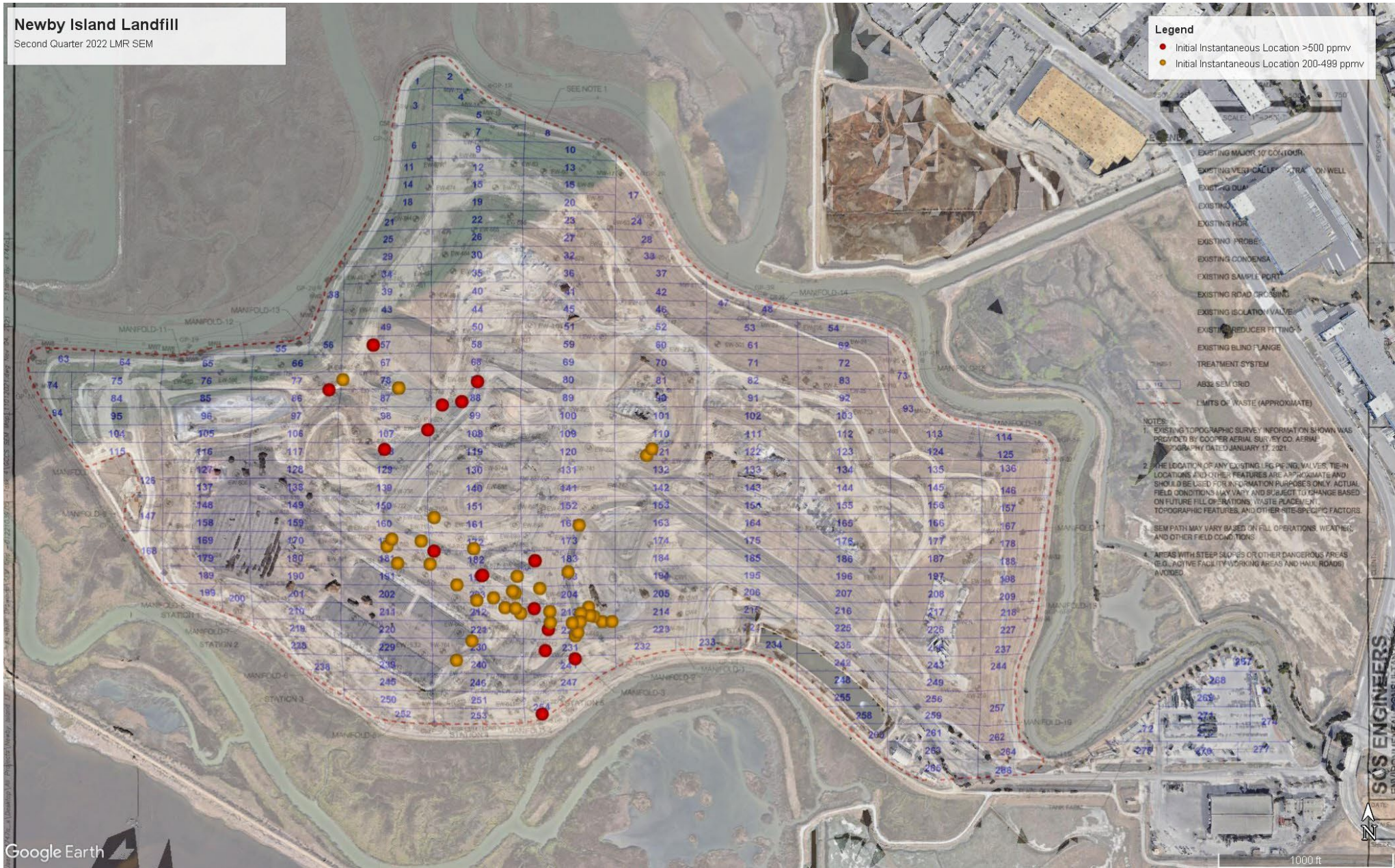
Pressurized Pipe

Location	Initial Concentration (ppmv) Nov 29, 2021	Latitude	Latitude
Flare Station	83.00	37.455070°	121.950284°

No other exceedances of the 500 ppm threshold observed during the LMR/NSPS monitoring performed during the second quarter 2022.

Newby Island Landfill

Second Quarter 2022 LMR SEM



**Second Quarter 2022
Initial Emissions Monitoring Locations Greater Than 200 ppmv
Newby Island Landfill Milpitas, California**

Attachment 4

Integrated Monitoring Results

Second Quarter 2022

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

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-001	5/25/2022 15:33	24.60	
NIL-002	--	--	Exempted
NIL-003	--	--	Exempted
NIL-004	--	--	Exempted
NIL-005	--	--	Exempted
NIL-006	--	--	Exempted
NIL-007	--	--	Exempted
NIL-008	--	--	Exempted
NIL-009	--	--	Exempted
NIL-010	--	--	Exempted
NIL-011	--	--	Exempted
NIL-012	--	--	Exempted
NIL-013	--	--	Exempted
NIL-014	--	--	Exempted
NIL-015	--	--	Exempted
NIL-016	--	--	Exempted
NIL-017	--	--	Exempted
NIL-018	--	--	Exempted
NIL-019	--	--	Exempted
NIL-020	--	--	Exempted
NIL-021	--	--	Exempted
NIL-022	--	--	Exempted
NIL-023	--	--	Exempted
NIL-024	--	--	Exempted
NIL-025	--	--	Exempted
NIL-026	--	--	Exempted
NIL-027	--	--	Exempted
NIL-028	--	--	Exempted
NIL-029	--	--	Exempted
NIL-030	--	--	Exempted
NIL-031	--	--	Exempted
NIL-032	--	--	Exempted
NIL-033	--	--	Exempted
NIL-034	--	--	Exempted
NIL-035	--	--	Exempted
NIL-036	--	--	Exempted
NIL-037	--	--	Exempted
NIL-038	--	--	Exempted
NIL-039	--	--	Exempted
NIL-040	--	--	Exempted
NIL-041	--	--	Exempted
NIL-042	--	--	Exempted
NIL-043	--	--	Exempted



Second Quarter 2022

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

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-044	--	--	Exempted
NIL-045	--	--	Exempted
NIL-046	--	--	Exempted
NIL-047	--	--	Exempted
NIL-048	--	--	Exempted
NIL-049	--	--	Exempted
NIL-050	--	--	Exempted
NIL-051	--	--	Exempted
NIL-052	--	--	Exempted
NIL-053	--	--	Exempted
NIL-054	5/25/2022 09:09	3.70	
NIL-055	5/25/2022 08:55	2.19	
NIL-056	--	--	Exempted
NIL-057	--	--	Exempted
NIL-058	--	--	Exempted
NIL-059	--	--	Exempted
NIL-060	--	--	Exempted
NIL-061	--	--	Exempted
NIL-062	5/25/2022 09:29	4.38	
NIL-063	5/25/2022 08:37	4.15	
NIL-064	5/25/2022 08:43	4.14	
NIL-065	5/25/2022 09:07	3.54	
NIL-066	5/25/2022 11:02	6.01	
NIL-067	--	--	Exempted
NIL-068	--	--	Exempted
NIL-069	--	--	Exempted
NIL-070	--	--	Exempted
NIL-071	--	--	Exempted
NIL-072	--	--	Exempted
NIL-073	--	--	Exempted
NIL-074	5/25/2022 09:21	2.23	
NIL-075	--	--	Exempted
NIL-076	--	--	Exempted
NIL-077	--	--	Exempted
NIL-078	--	--	Exempted
NIL-079	--	--	Exempted
NIL-080	--	--	Exempted
NIL-081	--	--	Exempted
NIL-082	--	--	Exempted
NIL-083	--	--	Exempted
NIL-084	5/25/2022 09:43	3.12	
NIL-085	--	--	Exempted
NIL-086	--	--	Exempted



Second Quarter 2022

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

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-087	--	--	Exempted
NIL-088	--	--	Exempted
NIL-089	--	--	Exempted
NIL-090	--	--	Exempted
NIL-091	--	--	Exempted
NIL-092	--	--	Exempted
NIL-093	--	--	Exempted
NIL-094	5/25/2022 09:29	2.53	
NIL-095	5/24/2022 14:00	2.99	
NIL-096	--	--	Exempted
NIL-097	--	--	Exempted
NIL-098	--	--	Exempted
NIL-099	--	--	Exempted
NIL-100	--	--	Exempted
NIL-101	--	--	Exempted
NIL-102	--	--	Exempted
NIL-103	--	--	Exempted
NIL-104	5/24/2022 13:32	3.94	
NIL-105	--	--	Exempted
NIL-106	--	--	Exempted
NIL-107	--	--	Exempted
NIL-108	--	--	Exempted
NIL-109	--	--	Exempted
NIL-110	--	--	Exempted
NIL-111	--	--	Exempted
NIL-112	--	--	Exempted
NIL-113	--	--	Exempted
NIL-114	5/25/2022 10:17	3.43	
NIL-115	5/24/2022 13:30	5.60	
NIL-116	5/24/2022 13:28	4.25	
NIL-117	--	--	Exempted
NIL-118	--	--	Exempted
NIL-119	--	--	Exempted
NIL-120	--	--	Exempted
NIL-121	5/25/2022 09:58	16.19	
NIL-122	5/25/2022 09:54	26.82	Initial Monitoring
NIL-122	6/2/2022 00:00	--	Active
NIL-123	--	--	Exempted
NIL-124	--	--	Exempted
NIL-125	5/25/2022 08:21	2.40	
NIL-126	5/24/2022 13:54	14.06	
NIL-127	5/24/2022 14:08	5.62	
NIL-128	--	--	Exempted



Second Quarter 2022

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

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-129	--	--	Exempted
NIL-130	5/25/2022 10:44	10.07	
NIL-131	5/25/2022 10:24	19.92	
NIL-132	--	--	Exempted
NIL-133	--	--	Exempted
NIL-134	--	--	Exempted
NIL-135	--	--	Exempted
NIL-136	5/25/2022 08:10	2.00	
NIL-137	--	--	Exempted
NIL-138	5/24/2022 13:24	3.02	
NIL-139	5/24/2022 14:53	3.95	
NIL-140	5/24/2022 14:57	9.72	
NIL-141	--	--	Exempted
NIL-142	--	--	Exempted
NIL-143	--	--	Exempted
NIL-144	--	--	Exempted
NIL-145	--	--	Exempted
NIL-146	--	--	Exempted
NIL-147	--	--	Exempted
NIL-148	--	--	Exempted
NIL-149	--	--	Exempted
NIL-150	5/25/2022 12:16	11.24	
NIL-151	--	--	Exempted
NIL-152	--	--	Exempted
NIL-153	--	--	Exempted
NIL-154	--	--	Exempted
NIL-155	--	--	Exempted
NIL-156	--	--	Exempted
NIL-157	--	--	Exempted
NIL-158	5/24/2022 14:55	1.88	
NIL-159	5/25/2022 12:50	11.48	
NIL-160	5/25/2022 12:49	10.84	
NIL-161	5/25/2022 12:46	17.80	
NIL-162	--	--	Exempted
NIL-163	--	--	Exempted
NIL-164	--	--	Exempted
NIL-165	--	--	Exempted
NIL-166	--	--	Exempted
NIL-167	5/24/2022 11:03	3.34	
NIL-168	5/24/2022 14:35	2.04	
NIL-169	5/24/2022 15:03	2.52	
NIL-170	--	--	Exempted



Second Quarter 2022

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

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-171	5/25/2022 12:21	25.11	Initial Monitoring
NIL-171	6/2/2022 11:59	18.30	First 10-Day Follow Up Monitoring
NIL-172	5/25/2022 12:21	19.12	
NIL-173	--	--	Exempted
NIL-174	--	--	Exempted
NIL-175	--	--	Exempted
NIL-176	--	--	Exempted
NIL-177	--	--	Exempted
NIL-178	5/24/2022 10:49	3.43	
NIL-179	5/24/2022 14:58	3.27	
NIL-180	--	--	Exempted
NIL-181	5/25/2022 11:22	30.84	Initial Monitoring
NIL-181	6/2/2022 11:48	26.36	First 10-Day Follow Up Monitoring
NIL-181	6/10/2022 14:02	17.06	Second 10-Day Follow Up Monitoring
NIL-182	5/25/2022 10:55	30.55	Initial Monitoring
NIL-182	6/2/2022 10:22	25.62	First 10-Day Follow Up Monitoring
NIL-182	6/10/2022 13:46	16.36	Second 10-Day Follow Up Monitoring
NIL-183	--	--	Exempted
NIL-184	--	--	Exempted
NIL-185	--	--	Exempted
NIL-186	5/24/2022 11:01	6.41	
NIL-187	--	--	Exempted
NIL-188	5/25/2022 13:34	3.64	
NIL-189	5/24/2022 15:14	2.52	
NIL-190	--	--	Exempted
NIL-191	5/25/2022 10:13	36.22	Initial Monitoring
NIL-191	6/2/2022 11:42	21.76	First 10-Day Follow Up Monitoring
NIL-192	5/25/2022 10:09	37.39	Initial Monitoring
NIL-192	6/2/2022 10:01	33.41	First 10-Day Follow Up Monitoring
NIL-192	6/10/2022 13:22	18.26	Second 10-Day Follow Up Monitoring
NIL-193	--	--	Exempted
NIL-194	--	--	Exempted
NIL-195	--	--	Exempted
NIL-196	5/24/2022 10:54	4.44	
NIL-197	5/24/2022 10:26	3.55	
NIL-198	5/24/2022 10:25	2.18	
NIL-199	5/24/2022 15:23	3.97	
NIL-200	--	--	Exempted
NIL-201	5/24/2022 15:18	4.61	
NIL-202	--	--	Exempted
NIL-203	5/25/2022 09:40	47.01	Initial Monitoring
NIL-203	6/2/2022 09:45	36.10	First 10-Day Follow Up Monitoring
NIL-203	6/10/2022 13:09	20.02	Second 10-Day Follow Up Monitoring



Second Quarter 2022

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

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-204	5/25/2022 09:39	45.42	Initial Monitoring
NIL-204	6/2/2022 08:57	46.60	First 10-Day Follow Up Monitoring
NIL-204	6/10/2022 14:02	25.69	Second 10-Day Follow Up Monitoring
NIL-205	5/25/2022 09:30	54.01	Initial Monitoring
NIL-205	6/2/2022 09:09	73.15	First 10-Day Follow Up Monitoring
NIL-205	6/10/2022 14:03	41.69	Second 10-Day Follow Up Monitoring
NIL-206	5/24/2022 09:04	4.37	
NIL-207	5/24/2022 09:31	4.60	
NIL-208	5/24/2022 09:34	2.53	
NIL-209	5/24/2022 09:49	2.37	
NIL-210	5/24/2022 15:27	5.77	
NIL-211	--	--	Exempted
NIL-212	5/25/2022 10:08	40.80	Initial Monitoring
NIL-212	6/2/2022 09:32	51.72	First 10-Day Follow Up Monitoring
NIL-212	6/10/2022 12:54	20.88	Second 10-Day Follow Up Monitoring
NIL-213	5/25/2022 10:08	74.24	Initial Monitoring
NIL-213	6/2/2022 08:39	84.09	First 10-Day Follow Up Monitoring
NIL-213	6/10/2022 13:28	48.37	Second 10-Day Follow Up Monitoring
NIL-214	--	--	Exempted
NIL-215	--	--	Exempted
NIL-216	5/24/2022 11:09	4.78	
NIL-217	5/24/2022 11:03	4.28	
NIL-218	5/24/2022 11:10	3.34	
NIL-219	5/24/2022 15:36	6.77	
NIL-220	--	--	Exempted
NIL-221	5/25/2022 09:05	18.55	
NIL-222	5/25/2022 09:13	39.59	Initial Monitoring
NIL-222	6/2/2022 08:22	57.22	First 10-Day Follow Up Monitoring
NIL-222	6/10/2022 13:00	15.99	Second 10-Day Follow Up Monitoring
NIL-223	--	--	Exempted
NIL-224	--	--	Exempted
NIL-225	5/24/2022 09:30	3.80	
NIL-226	5/24/2022 09:37	3.43	
NIL-227	5/24/2022 09:01	2.54	
NIL-228	5/24/2022 15:50	5.50	
NIL-229	5/24/2022 15:59	5.56	
NIL-230	--	--	Exempted
NIL-231	--	--	Exempted
NIL-232	--	--	Exempted
NIL-233	--	--	Exempted
NIL-234	--	--	Exempted
NIL-235	5/24/2022 10:10	4.14	
NIL-236	5/24/2022 10:09	2.33	

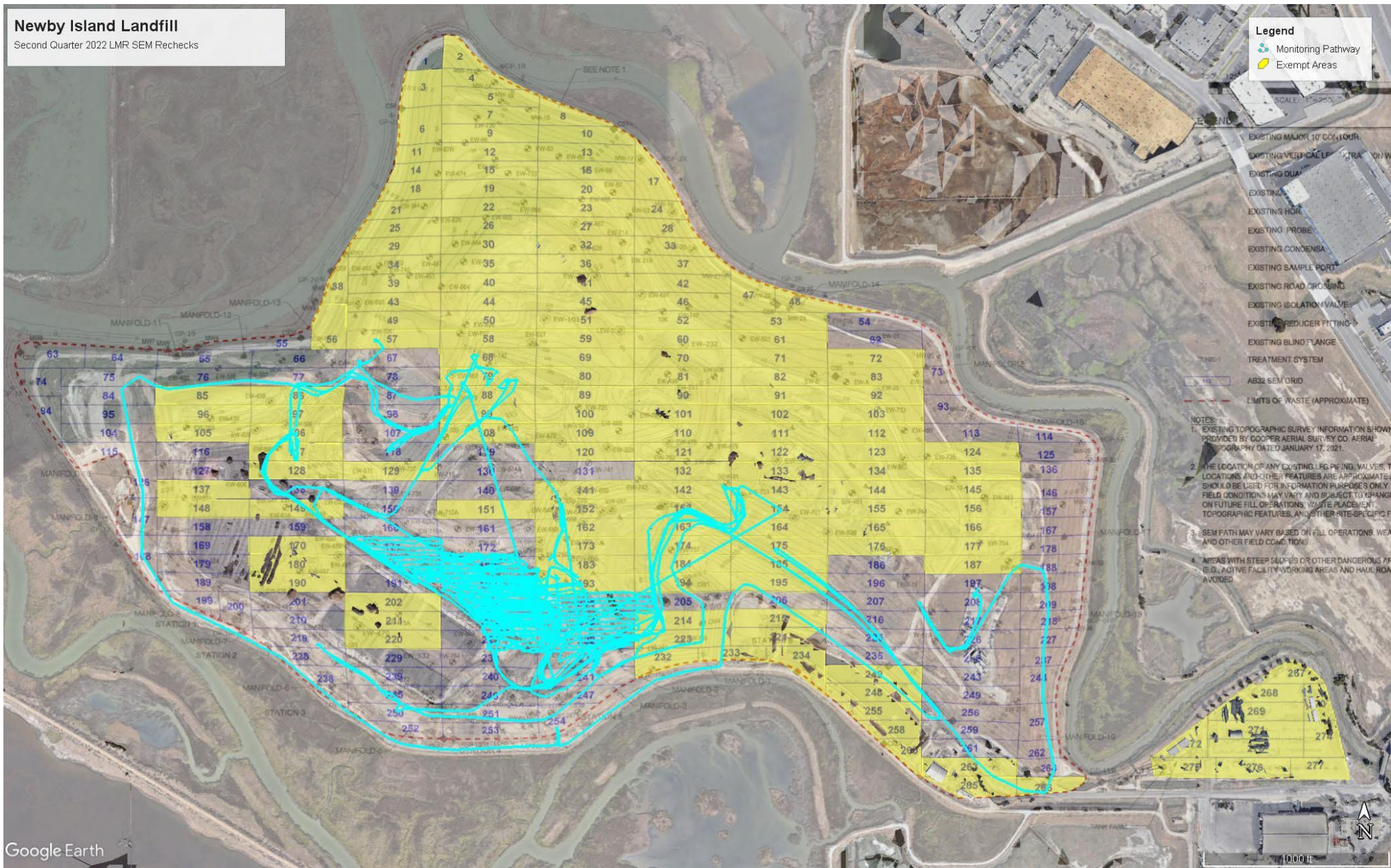


Second Quarter 2022

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

Point Name	Record Date	FID Concentration (ppm)	Comments
NIL-237	5/24/2022 10:06	2.77	
NIL-238	--	--	Exempted
NIL-239	5/24/2022 16:04	6.30	
NIL-240	5/25/2022 12:03	7.74	
NIL-241	5/25/2022 11:58	15.45	
NIL-242	--	--	Exempted
NIL-243	5/24/2022 11:01	3.33	
NIL-244	5/24/2022 09:37	3.12	
NIL-245	--	--	Exempted
NIL-246	--	--	Exempted
NIL-247	--	--	Exempted
NIL-248	--	--	Exempted
NIL-249	5/24/2022 11:43	4.18	
NIL-250	--	--	Exempted
NIL-251	--	--	Exempted
NIL-252	5/24/2022 15:47	9.46	
NIL-253	--	--	Exempted
NIL-254	--	--	Exempted
NIL-255	--	--	Exempted
NIL-256	--	--	Exempted
NIL-257	5/24/2022 10:38	3.61	
NIL-258	--	--	Exempted
NIL-259	--	--	Exempted
NIL-260	--	--	Exempted
NIL-261	5/25/2022 12:43	0.75	
NIL-262	5/24/2022 10:28	2.75	
NIL-263	--	--	Exempted
NIL-264	5/25/2022 12:21	2.73	
NIL-265	--	--	Exempted
NIL-266	--	--	Exempted
NIL-267	--	--	Exempted
NIL-268	--	--	Exempted
NIL-269	--	--	Exempted
NIL-270	--	--	Exempted
NIL-271	--	--	Exempted
NIL-272	--	--	Exempted
NIL-273	--	--	Exempted
NIL-274	--	--	Exempted
NIL-275	--	--	Exempted
NIL-276	--	--	Exempted
NIL-277	--	--	Exempted





Google Earth

1000 ft

Second Quarter 2022 LMR Surface Emissions Monitoring First and Second 10-Day Pathways Newby Island Landfill, Milpitas, California

Attachment 5

Calibration Logs

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-23-22 Site Name: Newby
 Inspector(s): R. Warren Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 30.01 "Hg
 Air Temperature: 60 °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	0	502	2	1
2	0	500	0	
3	0	500	0	2

Average Difference: 0.4
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%
 = 100% - 0.08 / 500 x 100%
 = 99.92 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>131728</u>	Counts Observed for the Span = <u>135692</u>
Counters Observed for the Zero = <u>3497</u>	Counters Observed for the Zero = <u>3339</u>
Trial 2:	
Counts Observed for the Span = <u>134528</u>	
Counters Observed for the Zero = <u>3423</u>	

Post Monitoring Calibration Check

Zero Air Reading: -01 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plowz Reading: 2.4 ppm
 Downwind Location Description: G 156 Reading: 2.1 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.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 5-23-22
Inspector(s): J. Dove

Site Name: hewley
Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 30.01 "Hg
Air Temperature: 60° °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	0	504	4	2
2	0	496	2	1
3	0	497	3	1

Average Difference: 3

*Perform recalibration if average difference is greater than 10

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

$$= 100\% - \frac{3}{500} \times 100\%$$

$$= 99.4\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>131928</u>	Counts Observed for the Span= <u>137656</u>
Counters Observed for the Zero= <u>4159</u>	Counters Observed for the Zero= <u>4029</u>
Trial 2:	
Counts Observed for the Span= <u>134700</u>	
Counters Observed for the Zero= <u>4092</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1 ppm Cal Gas Reading: 498 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plave Reading: 2.4 ppm
Downwind Location Description: Gr 156 Reading: 2.1 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.

SURFACE EMISSIONS MONITORING CALIBRATION AND PERTINENT DATA

Date: 5-23-22

Site Name: Newby

Inspector(s): J. Saig

Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH

Wind Direction: SE

Barometric Pressure: 30.01 "Hg

Air Temperature: 60 °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	<u>-0.1</u>	<u>499</u>	<u>1</u>	<u>2</u>
2	<u>-0.1</u>	<u>499</u>	<u>1</u>	<u>1</u>
3	<u>0</u>	<u>502</u>	<u>2</u>	<u>2</u>

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

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

$$= 99.74\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>13446</u>	Counts Observed for the Span = <u>132212</u>
Counters Observed for the Zero = <u>4754</u>	Counters Observed for the Zero = <u>4614</u>
Trial 2:	
Counts Observed for the Span = <u>135444</u>	
Counters Observed for the Zero = <u>4697</u>	

Post Monitoring Calibration Check

Zero Air Reading: 2.7 ppm

Cal Gas Reading: 495 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plow

Reading: 2.4 ppm

Downwind Location Description: G156

Reading: 2.1 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.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-23-22 Site Name: Newby
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: WNW Barometric Pressure: 30 "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	<u>00</u>	<u>503</u>	<u>3</u>	<u>3</u>
2	<u>00</u>	<u>503</u>	<u>3</u>	<u>3</u>
3	<u>00</u>	<u>500</u>	<u>0</u>	<u>3</u>

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

$$= 100\% \cdot \frac{2}{500} \times 100\% = 99.5\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>125892</u>	Counts Observed for the Span= <u>124436</u>
Counters Observed for the Zero= <u>4523</u>	Counters Observed for the Zero= <u>4400</u>
Trial 2:	
Counts Observed for the Span= <u>123672</u>	
Counters Observed for the Zero= <u>4430</u>	

Post Monitoring Calibration Check

Zero Air Reading: -2 ppm Cal Gas Reading: 478 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 2.3 ppm
 Downwind Location Description: G156 Reading: 1.8 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 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: S-23-22 Site Name: Newby
 Inspector(s): Bryam Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: WNW Barometric Pressure: 30 "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: 4106 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>499</u>	<u>1</u>	<u>3</u>
2	<u>0</u>	<u>501</u>	<u>1</u>	<u>2</u>
3	<u>0</u>	<u>501</u>	<u>1</u>	<u>3</u>

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

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

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>166264</u>	Counts Observed for the Span = <u>171420</u>
Counters Observed for the Zero = <u>5184</u>	Counters Observed for the Zero = <u>5097</u>
Trial 2:	
Counts Observed for the Span = <u>170140</u>	
Counters Observed for the Zero = <u>5132</u>	

Post Monitoring Calibration Check

Zero Air Reading: 1.8 ppm Cal Gas Reading: 487 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.9 ppm
 Downwind Location Description: G156 Reading: 1.8 ppm

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

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-23-22 Site Name: Newby
 Inspector(s): Junior Valadez Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 3 MPH Wind Direction: WNW Barometric Pressure: 30 "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: 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>497</u>	<u>3</u>	<u>5</u>
2	<u>0</u>	<u>499</u>	<u>1</u>	<u>3</u>
3	<u>0</u>	<u>498</u>	<u>2</u>	<u>3</u>

Average Difference: 2
*Perform recalibration if average difference is greater than 10

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

$$= 100\% - \frac{2}{500} \times 100\% = 99.5\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>162504</u>	Counts Observed for the Span = <u>151132</u>
Counters Observed for the Zero = <u>4683</u>	Counters Observed for the Zero = <u>4578</u>
Trial 2:	
Counts Observed for the Span = <u>153936</u>	
Counters Observed for the Zero = <u>4627</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1.0 ppm Cal Gas Reading: 498 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Clare Reading: 23 ppm
 Downwind Location Description: G156 Reading: 1.8 ppm

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

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-24-22 Site Name: Newby
 Inspector(s): ~~Bryen Ochoa~~ Jonathan Soria Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: N Barometric Pressure: 29 "Hg
 Air Temperature: 64 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>-1</u>	<u>498</u>	<u>2</u>	<u>5</u>
2	<u>0</u>	<u>504</u>	<u>4</u>	<u>4</u>
3	<u>0</u>	<u>500</u>	<u>0</u>	

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%
 = 99.5 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>149924</u>	Counts Observed for the Span = <u>146720</u>
Counters Observed for the Zero = <u>3931</u>	Counters Observed for the Zero = <u>129348</u>
Trial 2:	
Counts Observed for the Span = <u>147480</u>	<u>3641</u>
Counters Observed for the Zero = <u>3716</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1 ppm Cal Gas Reading: 496 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 23 ppm
 Downwind Location Description: Q156 Reading: 1.8 ppm

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

**CONTACT EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-24-22 Site Name: Newby
 Inspector(s): ~~Don Gibson~~ Jeff Dave Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: N Barometric Pressure: 29 "Hg
 Air Temperature: 64 °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~~ 5415 Cal Gas Concentration: 500

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

Average Difference: .6

*Perform recalibration if average difference is greater than 10

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

$$= 100\% - \frac{.6}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>127952</u>	Counts Observed for the Span= <u>134330</u>
Counters Observed for the Zero= <u>5031</u>	Counters Observed for the Zero= <u>4801</u>
Trial 2:	
Counts Observed for the Span= <u>1299348</u>	
Counters Observed for the Zero= <u>4867</u>	

Post Monitoring Calibration Check

Zero Air Reading: -2.2 ppm Cal Gas Reading: 528 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plow Reading: 2.3 ppm
 Downwind Location Description: G156 Reading: 1.8 ppm

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

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-24-22 Site Name: Newby
 Inspector(s): Junior Valadez Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: S Barometric Pressure: 29 "Hg
 Air Temperature: 56 °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: 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>498</u>	<u>2</u>	<u>4</u>
2	<u>-0.1</u>	<u>499</u>	<u>1</u>	<u>5</u>
3	<u>0</u>	<u>501</u>	<u>1</u>	<u>3</u>

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

Calibration Precision= Average Difference/Cal Gas Conc. X 100%
 = 100% - 1.3 / 500 x 100%
 = 99.7 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>183956</u>	Counts Observed for the Span= <u>180500</u>
Counters Observed for the Zero= <u>5144</u>	Counters Observed for the Zero= <u>4932</u>
Trial 2:	
Counts Observed for the Span= <u>182344</u>	
Counters Observed for the Zero= <u>5017</u>	

Post Monitoring Calibration Check

Zero Air Reading: 1.6 ppm Cal Gas Reading: 525 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Alare Reading: 23 ppm
 Downwind Location Description: G156 Reading: 1.8 ppm

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

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5/24/22 Site Name: Newby
 Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: S Barometric Pressure: 29.86 "Hg
 Air Temperature: 56 °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: 54201211 Cal Gas Concentration: 500ppm

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

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

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

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

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Counts Observed for the Span= <u>127536</u>	Trial 3:	Counts Observed for the Span= <u>130756</u>
	Counters Observed for the Zero= <u>4028</u>		Counters Observed for the Zero= <u>4018</u>
Trial 2:	Counts Observed for the Span= <u>128552</u>		
	Counters Observed for the Zero= <u>4017</u>		

Post Monitoring Calibration Check

Zero Air Reading: -1 ppm Cal Gas Reading: 400 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plave Reading: 2.0 ppm
 Downwind Location Description: GRU Reading: 2.1 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.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-24-22 Site Name: Newby
 Inspector(s): Bryan O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: S Barometric Pressure: 29.86 "Hg
 Air Temperature: 56 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 4106 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>-0.1</u>	<u>507</u>	<u>7</u>	<u>1</u>
2	<u>-0.1</u>	<u>501</u>	<u>1</u>	<u>2</u>
3	<u>0</u>	<u>501</u>	<u>1</u>	<u>1</u>

Average Difference: 3
*Perform recalibration if average difference is greater than 10

Calibration Precision = Average Difference / Cal Gas Conc. X 100%
 = 100% 3 / 500 x 100%
 = 99.4 %

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>154156</u>	Counts Observed for the Span = <u>158180</u>
Counters Observed for the Zero = <u>5941</u>	Counters Observed for the Zero = <u>5888</u>
Trial 2:	
Counts Observed for the Span = <u>158544</u>	
Counters Observed for the Zero = <u>5917</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1.5 ppm Cal Gas Reading: 485 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Place Reading: 2.0 ppm
 Downwind Location Description: Gate Reading: 2.1 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.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-24-22 Site Name: Newby
 Inspector(s): Rashad Warren Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: S Barometric Pressure: 29.86 "Hg
 Air Temperature: 56 °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: ~~XXXX~~ 1215 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>-0.1</u>	<u>498</u>	<u>2</u>	<u>1</u>
2	<u>0</u>	<u>503</u>	<u>3</u>	<u>2</u>
3	<u>0</u>	<u>499</u>	<u>1</u>	<u>1</u>

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:	Trial 3:
Counts Observed for the Span= <u>126592</u>	Counts Observed for the Span= <u>130524</u>
Counters Observed for the Zero= <u>3464</u>	Counters Observed for the Zero= <u>3426</u>
Trial 2:	
Counts Observed for the Span= <u>126536</u>	
Counters Observed for the Zero= <u>3444</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.6 ppm Cal Gas Reading: 478 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 2.0 ppm
 Downwind Location Description: G156 Reading: 2.1 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.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5.25.22

Site Name: Newby

Inspector(s): Junior Valadez

Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 7° MPH

Wind Direction: WN

Barometric Pressure: 29.86 "Hg

Air Temperature: 57° °F

General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5419

Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	0	499	1	1
2	0	603	3	1
3	0	501	1	2

Average Difference: 1.6

*Perform recalibration if average difference is greater than 10

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

$$= \frac{100\% - 1.6}{500} \times 100\% = 99.6\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>182216</u>	Counts Observed for the Span = <u>173712</u>
Counters Observed for the Zero = <u>4944</u>	Counters Observed for the Zero = <u>4764</u>
Trial 2:	
Counts Observed for the Span = <u>177544</u>	
Counters Observed for the Zero = <u>4833</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.1 ppm

Cal Gas Reading: 490 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare

Reading: 1.9 ppm

Downwind Location Description: G65

Reading: 2.1 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.

**SCS DATA SERVICES EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5.25.22 Site Name: Newby
 Inspector(s): Bryan Ochoa Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 7° MPH Wind Direction: WN Barometric Pressure: 29.86 "Hg
 Air Temperature: 57° °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1215 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	0	498	2	1
2	0.1	499	1	2
3	0	503	3	1

Average Difference: 2
*Perform recalibration if average difference is greater than 10

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

$$= \frac{100\% \cdot 2}{500} \times 100\% = 99.6\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>132484</u>	Counts Observed for the Span = <u>132516</u>
Counters Observed for the Zero = <u>2456</u>	Counters Observed for the Zero = <u>2795</u>
Trial 2:	
Counts Observed for the Span = <u>131456</u>	
Counters Observed for the Zero = <u>2781</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0.1 ppm Cal Gas Reading: 498 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.9 ppm
 Downwind Location Description: G 65 Reading: 2.1 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.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-25-22 Site Name: Newby
 Inspector(s): ~~_____~~ Bryon Ochoa Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 29 "Hg
 Air Temperature: 64 °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: 1211 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>500</u>	<u>0</u>	<u>4</u>
2	<u>0</u>	<u>500</u>	<u>0</u>	<u>3</u>
3	<u>0</u>	<u>505</u>	<u>5</u>	<u>1</u>

Average Difference: 1.6
*Perform recalibration if average difference is greater than 10

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

$$= \frac{100\% - 1.6}{500} \times 100\%$$

$$= 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>129128</u>	Counts Observed for the Span = <u>123564</u>
Counters Observed for the Zero = <u>3577</u>	Counters Observed for the Zero = <u>3497</u>
Trial 2:	
Counts Observed for the Span = <u>137224</u>	
Counters Observed for the Zero = <u>3532</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1 ppm Cal Gas Reading: 489 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.9 ppm
 Downwind Location Description: G65 Reading: 2.1 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.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-25-22
 Inspector(s): J. Done

Site Name: Nealey
 Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 29 "Hg
 Air Temperature: 64 °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: 2155420 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>499</u>	<u>1</u>	<u>3</u>
2	<u>0</u>	<u>498</u>	<u>2</u>	<u>2</u>
3	<u>0</u>	<u>500</u>	<u>0</u>	<u>2</u>

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

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

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>136228</u>	Counts Observed for the Span = <u>130436</u>
Counters Observed for the Zero = <u>33884</u>	Counters Observed for the Zero = <u>3241</u>
Trial 2:	
Counts Observed for the Span = <u>134724</u>	
Counters Observed for the Zero = <u>3236</u>	

Post Monitoring Calibration Check

Zero Air Reading: -1 ppm Cal Gas Reading: 499 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.9 ppm
 Downwind Location Description: G 65 Reading: 2.1 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.

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

Date: 8-25-22 Site Name: Newby
 Inspector(s): R. Warren Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 29 "Hg
 Air Temperature: 64 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc. - Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>501</u>	<u>1</u>	<u>3</u>
2	<u>-0.1</u>	<u>499</u>	<u>1</u>	<u>3</u>
3	<u>0</u>	<u>500</u>	<u>0</u>	<u>2</u>

Average Difference: 0.6

*Perform recalibration if average difference is greater than 10

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

$$= 100\% - \frac{0.6}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>146012</u>	Counts Observed for the Span = <u>140140</u>
Counters Observed for the Zero = <u>3823</u>	Counters Observed for the Zero = <u>3547</u>
Trial 2:	
Counts Observed for the Span = <u>146812</u>	
Counters Observed for the Zero = <u>3736</u>	

Post Monitoring Calibration Check

Zero Air Reading: 0.1 ppm Cal Gas Reading: 499 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 0.9 ppm
 Downwind Location Description: G65 Reading: 2.1 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.

CALIBRATION AND PERTINENT DATA

Date: 5-25-22 Site Name: Newby
 Inspector(s): J. Sora Instrument: TVA2020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: ESE Barometric Pressure: 29 "Hg
 Air Temperature: 64 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 4106 Cal Gas Concentration: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>499</u>	<u>1</u>	<u>4</u>
2	<u>-0.1</u>	<u>499</u>	<u>1</u>	<u>3</u>
3		<u>500</u>	<u>0</u>	<u>2</u>

Average Difference: 0.6

*Perform recalibration if average difference is greater than 10

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

$$= 100\% - \frac{0.6}{500} \times 100\% = 99.8\%$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span = <u>160040</u>	Counts Observed for the Span = <u>158304</u>
Counters Observed for the Zero = <u>8136</u>	Counters Observed for the Zero = <u>5887</u>
Trial 2:	
Counts Observed for the Span = <u>158416</u>	
Counters Observed for the Zero = <u>5120</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.1 ppm Cal Gas Reading: 478 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.9 ppm
 Downwind Location Description: G 65 Reading: 2.1 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.

**SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA**

Date: 5-25-22

Site Name: Newby

Inspector(s): Don Gibson

Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH

Wind Direction: ESE

Barometric Pressure: 29 "Hg

Air Temperature: 64 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	0	499	1	3
2	0	500	0	4
3	0	505	5	1

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

$$= \frac{100\% - \underline{2}}{500} \times 100\% = \underline{99.5\%}$$

Span Sensitivity:

Trial 1:	Trial 3:
Counts Observed for the Span= <u>122960</u>	Counts Observed for the Span= <u>117640</u>
Counters Observed for the Zero= <u>4519</u>	Counters Observed for the Zero= <u>4421</u>
Trial 2:	
Counts Observed for the Span= <u>118612</u>	
Counters Observed for the Zero= <u>4472</u>	

Post Monitoring Calibration Check

Zero Air Reading: 1 ppm

Cal Gas Reading: 496 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Plare Reading: 1.9 ppm

Downwind Location Description: G 65 Reading: 2.1 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.

CALIBRATION AND PERTINENT DATA

Date: 6-2-22 Site Name: Newby
 Inspector(s): Bryan O Instrument: TVA7020

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: NW Barometric Pressure: 29.9 "Hg
 Air Temperature: 69 °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: 500

Trial	Zero Air Reading	Cal Gas Reading	Cal Gas Conc.-Cal Gas Reading	Response Time (seconds)
1	<u>0</u>	<u>498</u>	<u>2</u>	<u>4</u>
2	<u>-0.2</u>	<u>500</u>	<u>0</u>	<u>3</u>
3	<u>0</u>	<u>500</u>	<u>0</u>	<u>5</u>

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:	Trial 3:
Counts Observed for the Span = <u>142044</u>	Counts Observed for the Span = <u>142440</u>
Counters Observed for the Zero = <u>5000</u>	Counters Observed for the Zero = <u>4908</u>
Trial 2:	
Counts Observed for the Span = <u>141532</u>	
Counters Observed for the Zero = <u>4962</u>	

Post Monitoring Calibration Check

Zero Air Reading: -0.4 ppm Cal Gas Reading: 508 ppm

BACKGROUND CONCENTRATIONS CHECKS

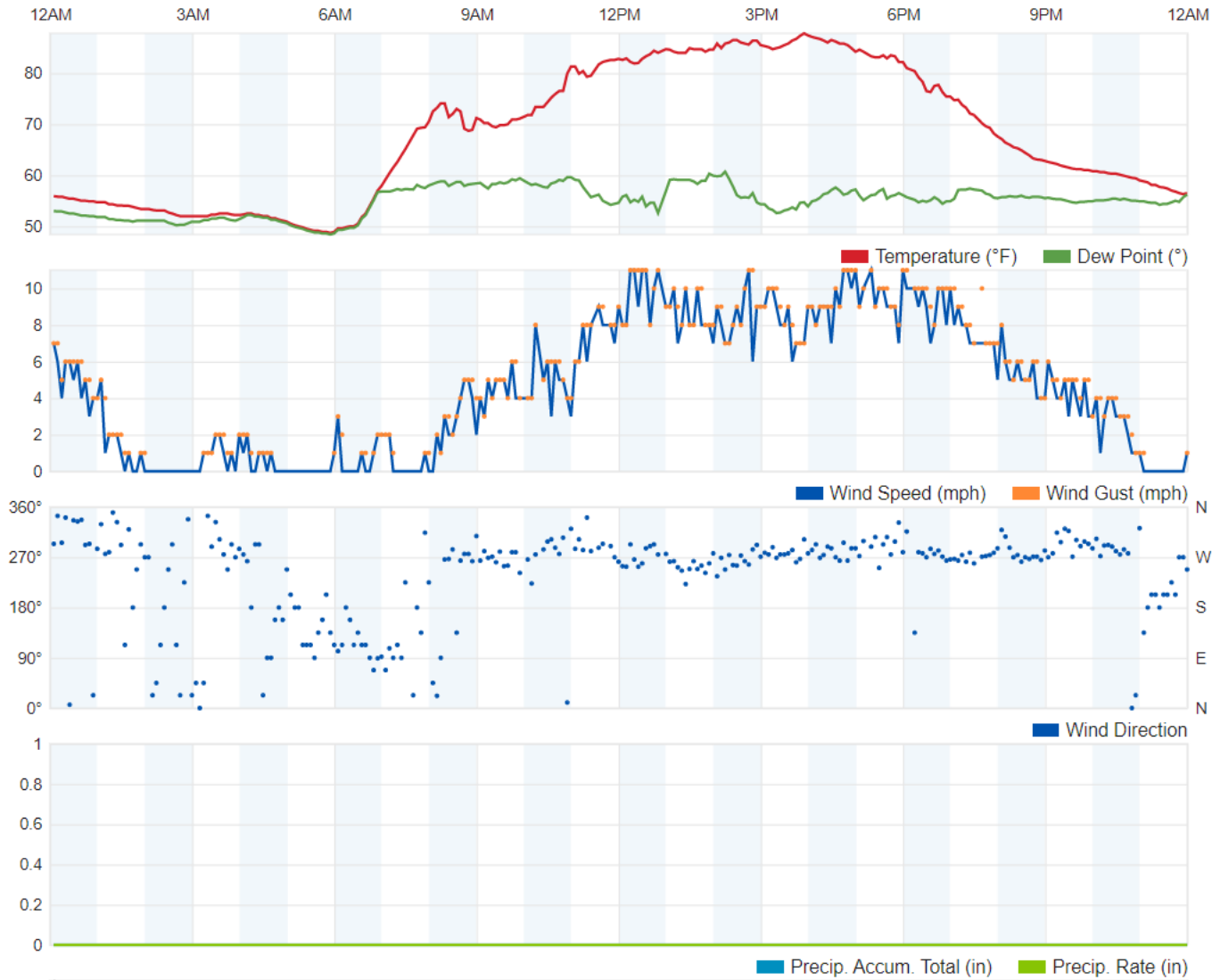
Upwind Location Description: C38 Reading: 3.1 ppm
 Downwind Location Description: Flare Reading: 1.8 ppm

Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 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

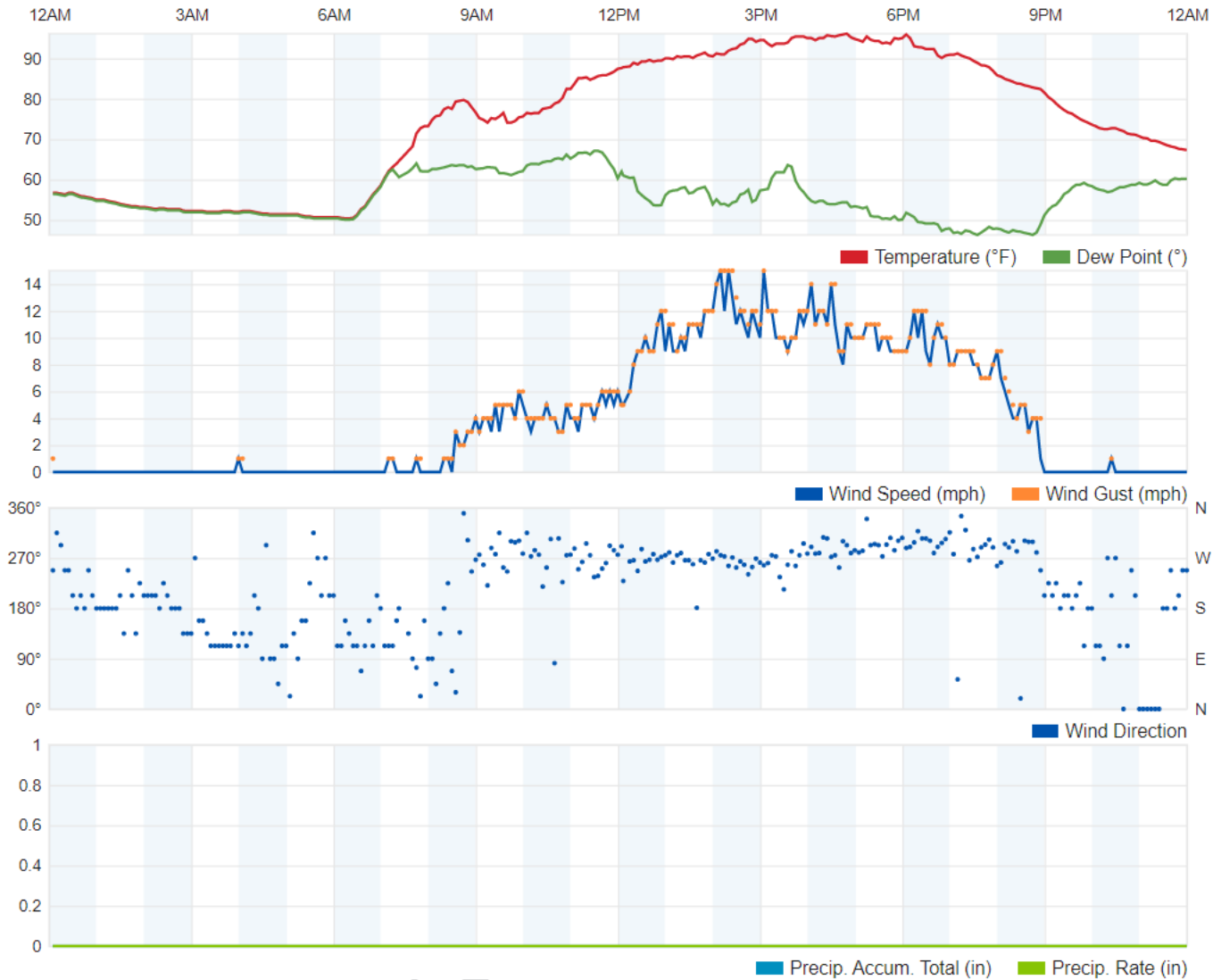
Weather Data

May 23, 2022



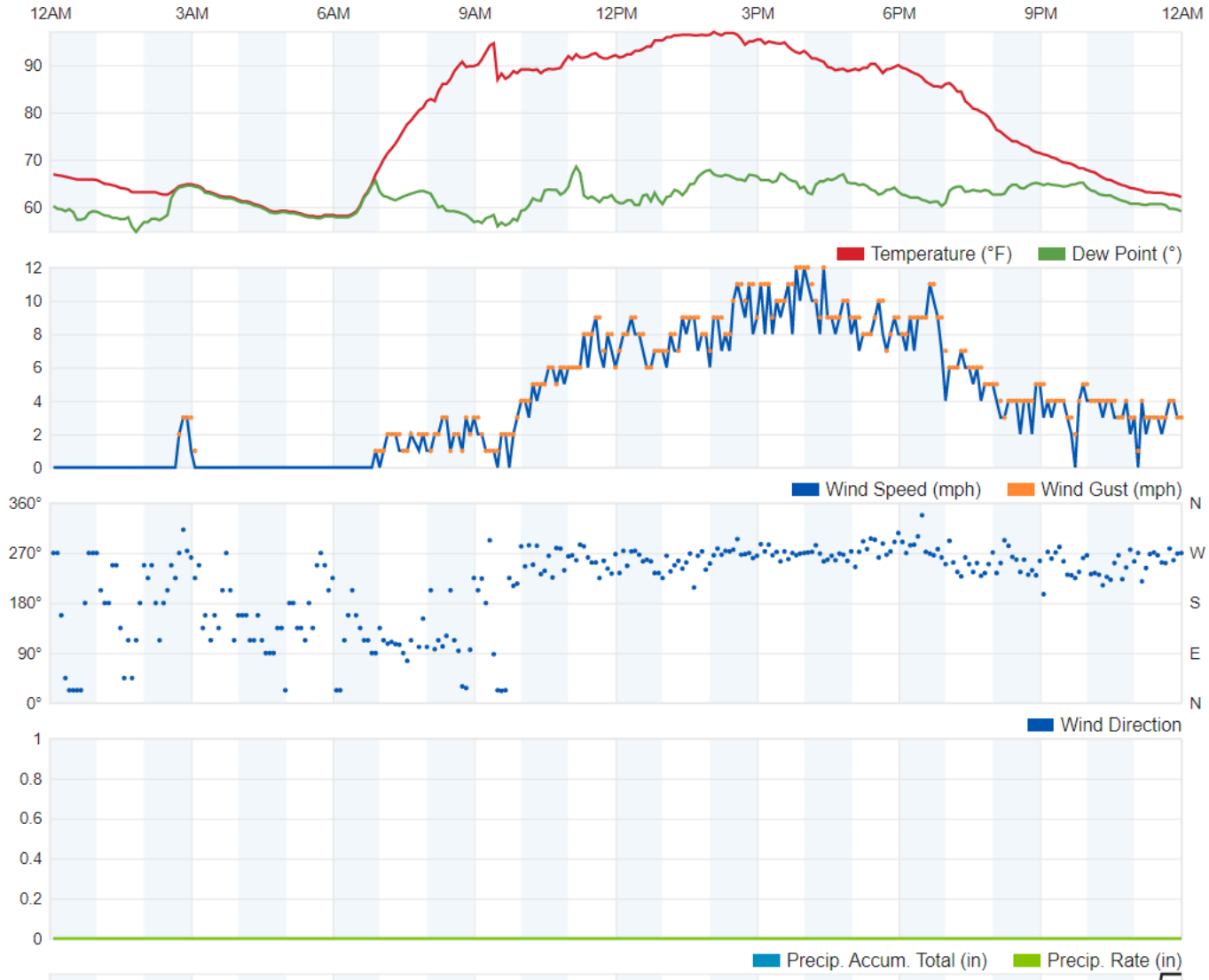
Second Quarter 2022
LMR Surface Emissions Monitoring Weather Data
May 23, 2022
Newby Island Landfill, Milpitas, California

May 24, 2022



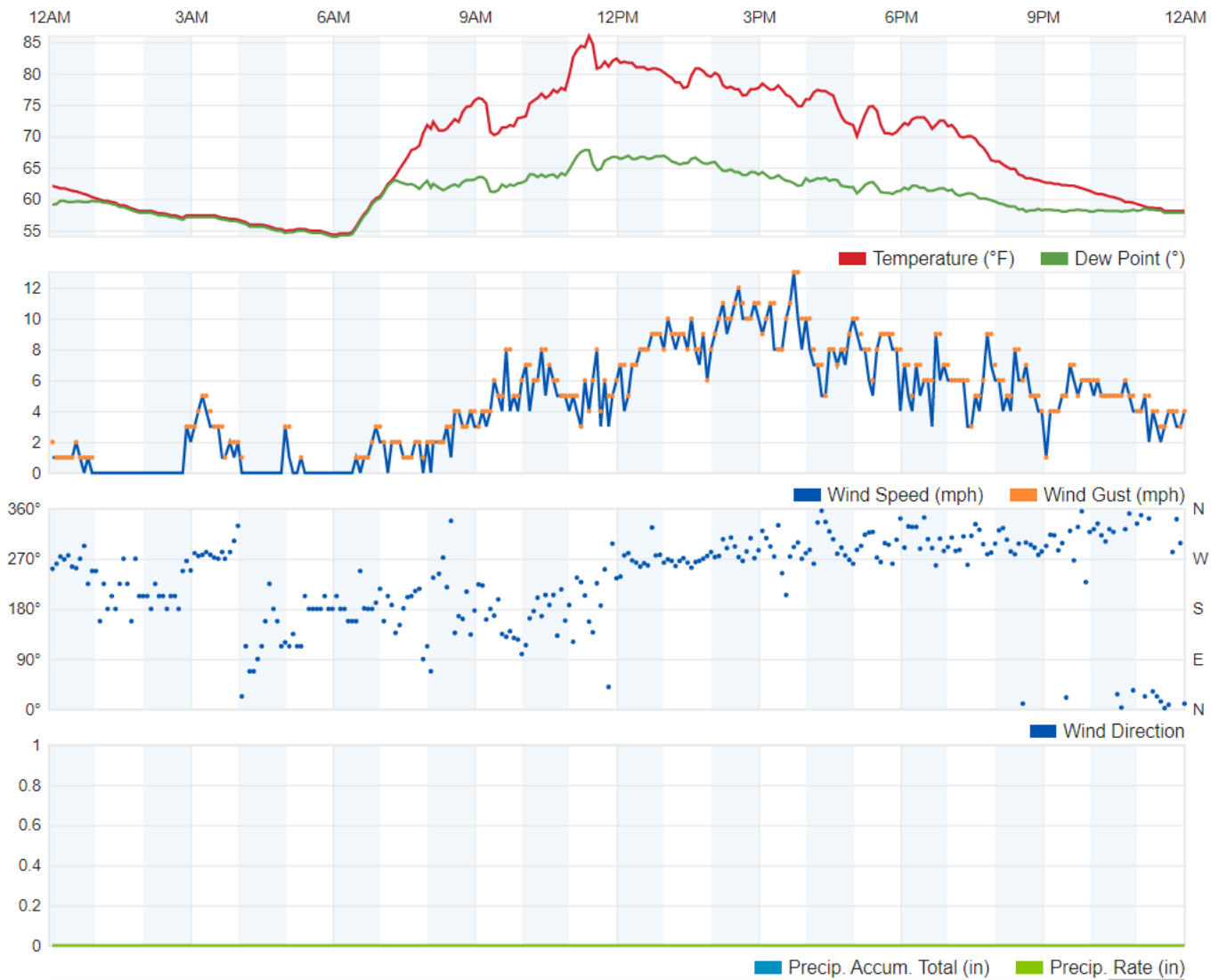
Second Quarter 2022
LMR Surface Emissions Monitoring Weather Data
May 24, 2022
Newby Island Landfill, Milpitas, California

May 25, 2022



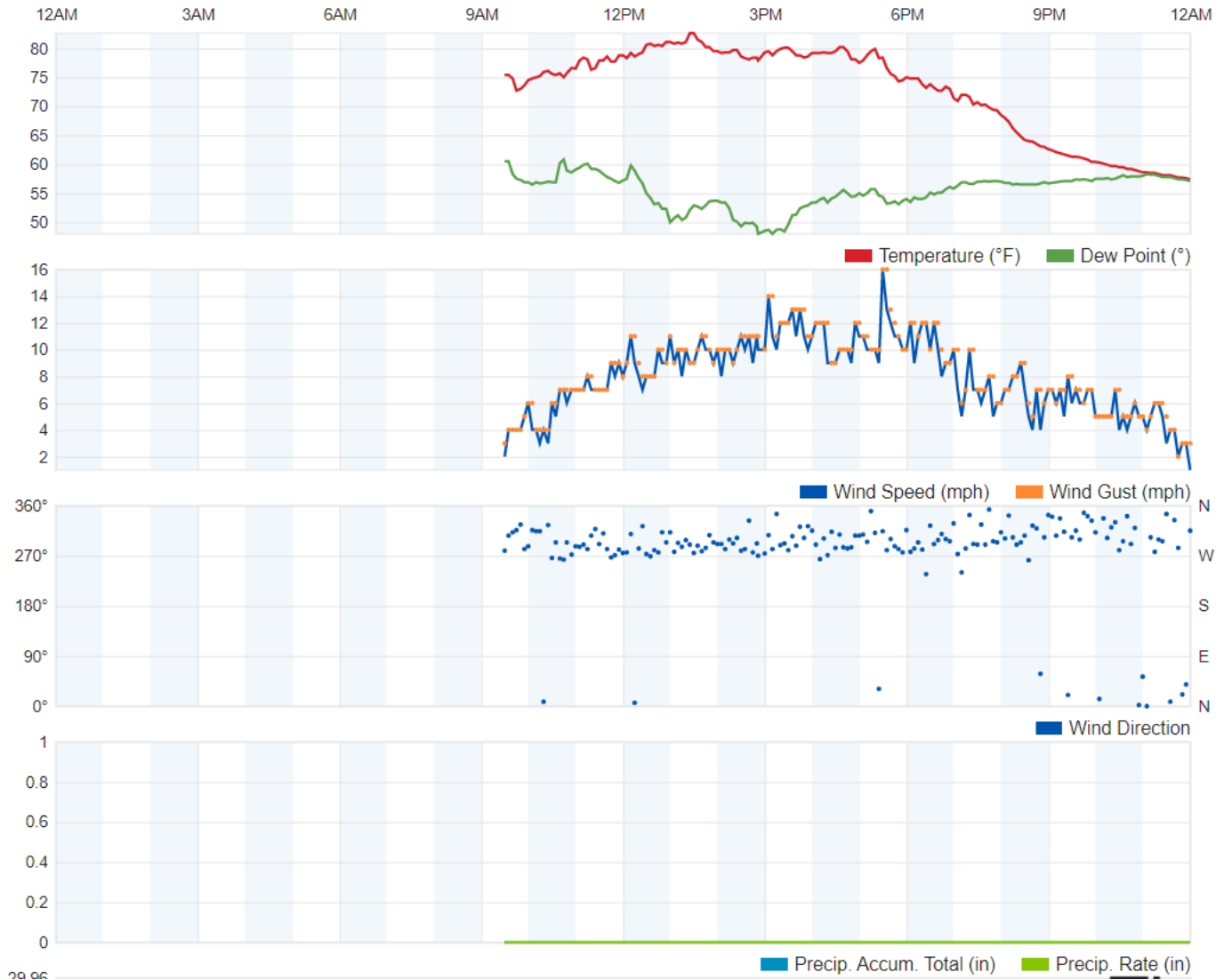
Second Quarter 2022
LMR Surface Emissions Monitoring Weather Data
May 25, 2022
Newby Island Landfill, Milpitas, California

May 26, 2022



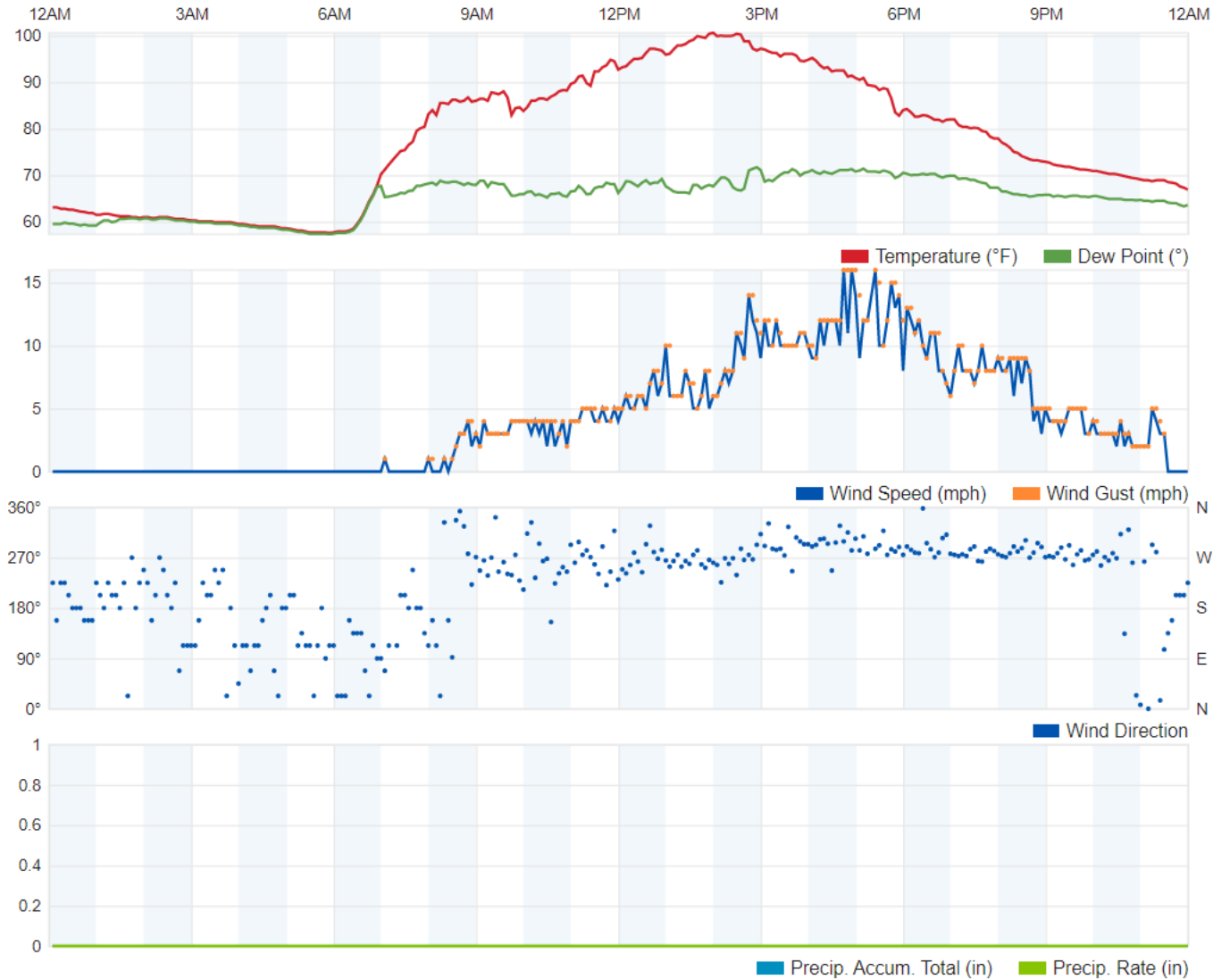
Second Quarter 2022
LMR Surface Emissions Monitoring Weather Data
May 26, 2022
Newby Island Landfill, Milpitas, California

June 2, 2022



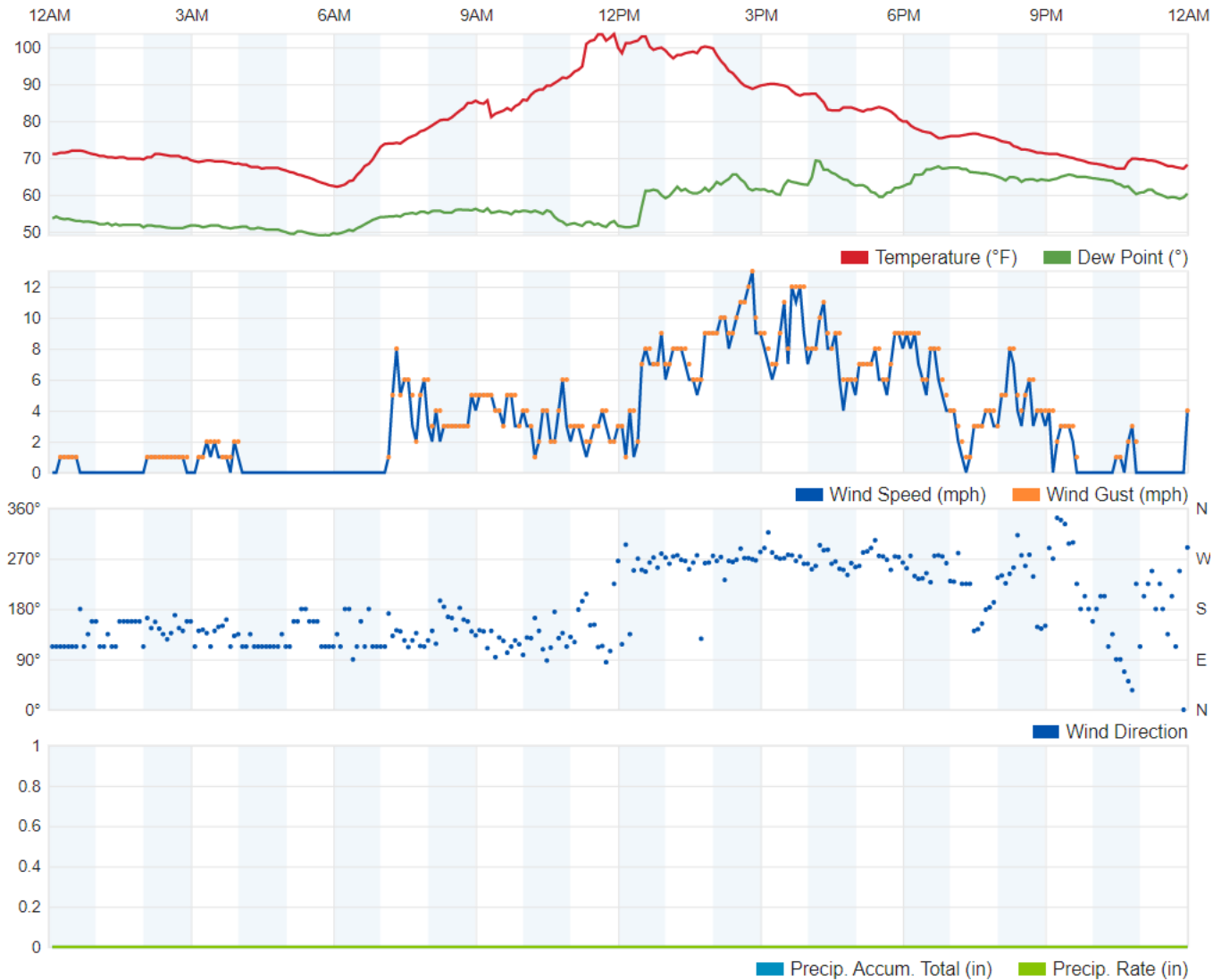
Second Quarter 2022
LMR Surface Emissions Monitoring Weather Data
June 2, 2022
Newby Island Landfill, Milpitas, California

June 10, 2022



Second Quarter 2022
LMR Surface Emissions Monitoring Weather Data
June 10, 2022
Newby Island Landfill, Milpitas, California

June 22, 2022



Second Quarter 2022
LMR Surface Emissions Monitoring Weather Data
June 22, 2022
Newby Island Landfill, Milpitas, California

Appendix D – Flare Source Test Excerpt (Issued March 25, 2022)

International Disposal Corporation of California

BAAQMD Plant No: 9013

Compliance Emissions Test Report #22040

Flare (A-2) FL-150

Flare (A-3) FL-100

Located at:

Newby Island Landfill

1601 W Dixon Landing Road
Milpitas, CA 95035

Prepared for:

Republic Services Newby Island Landfill

1601 W 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 and Gloria Espena
mhernandez@baaqmd.gov / gespena@baaqmd.gov

Testing Performed on:

February 9th, 2022

Final Report Submitted on:

March 25th, 2022

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

March 25th, 2022

Newby Island Landfill
1601 Dixon Landing Road
Milpitas, CA 95035

Attn.: Rachelle Huber

Subject: Compliance emission test report for Flares A-2 and A-3 located at Newby Island Landfill in Milpitas, California, to demonstrate compliance with condition 10423 of the Bay Area Air Quality Management District (BAAQMD) permit to operate for Facility #9013.

Flare A-2 – 75 MMBtu/hr John Zink landfill gas flare

Flare A-3 – 152 MMBtu/hr John Zink enclosed landfill gas flare with ultra-low emissions

Test Date: Sampling was conducted on February 9th, 2022.

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 EPA Method 1 minimum criteria of 2 stack diameters downstream from the nearest disturbance and 0.5 stack diameters upstream from the nearest disturbance or exhaust.

Blue Sky Environmental conducted an eight-point traverse of each stack at each port to check for the presence of cyclonic flow. Flare A-2, with a 92-inch ID exhaust stack, had only one suitable test port; therefore, this port was traversed twice. Flare A-3, with a 144-inch ID exhaust stack and two sampling ports was traversed at each port, 90° apart. Stratification in both stacks was greater than 10%; therefore, subsequent CEM sampling was conducted using the same traverse points.

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

Observing Personnel: BAAQMD was notified of the scheduled testing in a source test protocol submitted on January 27th, 2022 (NST 7174 and 7175). There were no agency observers from BAAQMD present during the test program. Mike Flannigan of SCS Engineers was on-site to operate the flares and provide operating records of fuel flow and combustion temperatures.

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). Flare A-2 is maintained at a setpoint of 1,400 °F. Flare A-3 is maintained at a setpoint of 1,501 °F.

Test Program: Testing was conducted to demonstrate compliance of Flares A-2 and A-3 with nitrogen oxide (NO_x) and carbon monoxide (CO) emission limits stated in condition 10423 of the BAAQMD permit to operate for Plant #9013.

Three consecutive 30-minute tests were performed for NO_x, CO, carbon dioxide (CO₂) and oxygen (O₂) at each flare 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. The temperatures of the heated sample line between the probe and sample conditioner/condenser and the condenser exhaust temperatures were maintained within limits during each test run. Instrument linearity and system bias were checked. The system response time for each analyzer was recorded. Analyzer external calibrations were performed before and after each run using EPA protocol certified gas standards. Calibration gases were introduced to the sample manifold at the same flow rate as the sample. Any drift or bias was corrected using equation 100-3 from CARB 100.

A NO_x analyzer converter efficiency check was performed before the first test run and achieved an efficiency greater than 90%.

Concurrent with the exhaust sampling, Blue Sky Environmental collected a total of six LFG samples (three samples from each flare) in 6-L Silco SUMMA canisters for off-site analysis by Atmospheric Analysis & Consulting, Inc., located in Ventura, California. The samples were analyzed for HHV, F-factor, fixed gases, methane, non-methane organic compounds (NMOC) by EPA Method 25C and ASTM D-1945, and total reduced sulfurs (TRS) by ASTM D-5504.

One of the integrated landfill gas samples collected from each flare was also analyzed by EPA Method TO-15 to determine the VOC Species Landfill Gas Characterization.

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

EPA Method 1	Sample Travers Point Determination
EPA Method 3A	O ₂ , CO ₂ Emissions
EPA Method 7E	NO _x Emissions
EPA Method 10	CO Emissions
EPA Method 25A	THC/CH ₄ /NMHC Emissions
EPA Method 4, part 16.4	Stack Moisture
EPA Method 19	Stack Gas Flowrate
EPA Method 25C	Analysis of landfill gas for TNMHC (NMOC)
ASTM D-1945/3588	Fuel Analysis for BTU and F-Factors & Fixed Gases
ASTM D-5504	Total Reduced Sulfur Compounds (TRS) in Fuel
EPA Method TO-15	Volatile Organic Compounds (VOC) in Fuel

The sampling and analysis methods are summarized below:

EPA Method 1 – Sample and Velocity Traverses for Stationary Sources

This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements.

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

This method is used to measure oxygen and carbon dioxide in stationary source emissions using a continuous instrumental analyzer to determine the molecular weight of the stack gas. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. A small portion of the sample is passed through a fuel cell type paramagnetic oxygen analyzer which measures the electrical current generated by the oxidation reaction at the



gas/fuel cell interface. Carbon dioxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon dioxide absorbs infrared radiation.

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

This method is used to measure nitrogen oxides in stationary source emissions using a continuous instrumental analyzer. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Nitric oxide is determined by passing the sample through a chemiluminescent analyzer. The chemiluminescent process is based on the light given off when nitric oxide and ozone react. Nitrogen dioxide (NO₂) concentrations are determined by passing the sample through a catalyst which reduces the NO₂ to NO. The total oxides of nitrogen concentration (NO₂ + NO) is then determined by chemiluminescence.

Section 16.2.2 of the method is used to determine the NO_x analyzer NO₂ to NO conversion efficiency.

EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources

This method is used to measure carbon monoxide from integrated or continuous gas samples extracted from a sampling point. A continuous representative gas sample is extracted from the sampling point and conditioned to remove water and particulate material. Carbon monoxide is determined by passing the sample through a non-dispersive infrared analyzer (NDIR) tuned to a frequency at which carbon monoxide absorbs infrared radiation.

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

The sampling and analytical system is checked for linearity with zero, mid (40-60%) and high span (80-100%) calibrations and is checked for system bias at the beginning and end of each run. System bias is determined by introducing calibration gas to the probe and pulling it through the entire sampling system. Individual test run calibrations use the calibration gas that most closely matches the stack gas effluent. All calibrations during testing are performed externally to incorporate any system bias that may exist. Sampling system bias, zero and calibration drift values are determined for each test. EPA Methods 3A, 6C, 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 DPR3000 strip chart recorder supported by a Data Acquisition System (DAS).

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

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



GC/FID hydrocarbon analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation.

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

EPA Method 4 – Determination of Moisture Content in Stack Gas

This method is used to determine the moisture content of stack gas. The sample is extracted and condensed in Greenburg-Smith impingers immersed in an ice bath and in a final impinger silica gel trap. The moisture is condensed in a solution of de-ionized water, or solutions of another type of sampling train if the moisture is being determined as part of another sampling method, such as EPA Method 5, SCAQMD Method 201.7 or BAAQMD ST-32. The moisture gain in the impinger solutions and silica gel is determined volumetrically and gravimetrically respectively.

QA/QC procedures require that a minimum of 21 cubic feet of sample is pulled using a leak tight pump. The sample volume is measured with a calibrated dry gas meter. The impingers are immersed in an ice bath to maintain a gas outlet temperature of less than 68°F. Pre-test leak checks are performed for each run using a minimum 15 inches of mercury vacuum. Post-test leak checks are performed at the highest sample vacuum or greater. The leak test is acceptable if the leak rate is less than 0.02 cubic feet per minute or 4% of the average sampling rate, whichever is less. If the final leak check exceeds the criteria, either the volume is corrected based on the leak rate or the run is voided and repeated.

EPA Method 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 D-1946/1945 gas chromatography analytical procedures. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine emission rates.

EPA Method 25C – Determination of Nonmethane Organic Compounds (NMOC) in Landfill Gas

This method is used to sample and measure NMOC in landfill gases. Gases are collected in a pre-evacuated 6-Liter SUMMA canister with pre-set flow controller set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consists of capillary orifice tubing designed to sample for a pre-set duration of 0.5 hrs. The sample is injected into a GC column where the methane and CO₂ are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO₂ then reduced to methane and analyzed.

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

This method is used to measure fixed gases (such as oxygen, nitrogen, carbon monoxide, and carbon dioxide) and methane by gas chromatography (GC/TCD). Light hydrocarbons, including C1-C7, are



analyzed by GC/FID. Samples are collected in pre-evacuated 6-Liter SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the TO-15 Method list of volatile organics. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. The flow controller consisted of capillary orifice tubing designed to sample for a pre-set duration of 0.75hrs.

ASTM D-3588 – Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels

This method uses the molar composition of gaseous fuel determined from Method ASTM D-1945 to calculate the heating value and F-factor.

ASTM D-5504 – Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence

This method is used for the determination of speciated volatile sulfur-containing compounds in high methane content gaseous fuels by gas chromatography. Sulfur compounds are processed using a flame ionization detector (GC/FID). The products are then analyzed with a sulfur chemiluminescence detector (GC/SCD). Samples may be collected in Tedlar bags and analyzed within 24 hours or in Silco SUMMA canisters and analyzed within 72 hours.

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

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

Instrumentation: The following continuous emissions analyzers were used:

Instrument	Analyte	Principle
Servomex Model 1400	O ₂	Paramagnetic
Servomex Model 1400	CO ₂	Infrared (IR)
TECO Model 42C	NO / NO ₂ / NO _x	Chemiluminescence
TECO Model 48C	CO	Gas Filter Correlation/IR
TECO Model 55C	THC/CH ₄ /VOC	Flame Ionization (FID)



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

Emission Parameter	Average Results Flare A-2	Permit Limits	Compliance Status
NO _x ppmvd @ 15% O ₂	10.6	12	In Compliance
NO _x , lb/MMBtu	0.0424	0.05	In Compliance
CO ppmvd @ 15% O ₂	2.5	81	In Compliance
CO, lb/MMBtu	0.0061	0.20	In Compliance
NMOC, ppmvd @ 3% O ₂ as CH ₄	<5.1	30 or >98%	In Compliance
NMOC Destruction Efficiency, %	>98.76		In Compliance
CH ₄ Destruction Efficiency, %	>99.97	>99%	In Compliance
THC Destruction Efficiency, %	>99.97	>98%	In Compliance
TRS, ppmvd in LFG	280	1,300	In Compliance

Emission Parameter	Average Results Flare A-3	Permit Limits	Compliance Status
NO _x ppmvd @ 15% O ₂	5.7	6	In Compliance
NO _x , lb/MMBtu	0.023	0.025	In Compliance
CO ppmvd @ 15% O ₂	0.5	24	In Compliance
CO, lb/MMBtu	0.001	0.060	In Compliance
NMOC, ppmvd @ 3% O ₂ as CH ₄	<4.9	30 or >98%	In Compliance
NMOC Destruction Efficiency, %	>98.59		In Compliance
CH ₄ Destruction Efficiency, %	>99.97	>99%	In Compliance
THC Destruction Efficiency, %	>99.97	>98%	In Compliance
TRS, ppmvd in LFG	439	1,300	In Compliance



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 documents.

Field Data Sheets

CEMS data and any transcribed data from the strip charts.

Process Data

Relevant and available facility process operating documentation.

Calibration Gas Certificates

Certificates for the instrument calibration gas standards.

Stack Diagram

Sketch or photograph of the stack.

Sample System Diagram

Schematic of the sampling system configuration.

Permit to Operate / ATC

Facility permits to operate or authority to construct.

Source Test Plan

Sampling protocols submitted to BAAQMD prior to testing.

Comments: This source test was performed in accordance with the protocol submitted to BAAQMD. No deviations from the protocol or anomalies were observed during testing. No process interruptions were encountered, and no operational changes were required during the test program. The measured emissions met permit-required limits.

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

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

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

Prepared by,

Anne Richardson

Reviewed by,

Julie Wose-Jennings

TABLE #1
Newby Island Landfill
Flare (A-2)

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	2/9/22	2/9/22	2/9/22		
Test Time	1211-1258	1311-1356	1407-1452		
Standard Temperature, °F	70	70	70	70	
Fuel:					
Flare Temperature, °F	1,504	1,504	1,504	1,504	
Fuel Flow Rate, DSCFM	1,387	1,413	1,416	1,405	
Fuel Heat Input, MMBtu/hr	40.6	39.4	41.2	40.4	
Inlet Hydrogen Sulfide (H ₂ S), ppmv (ASTM D5504)	282	356	172	270	
Inlet TRS, ppmv as H ₂ S (ASTM D5504)	293	365	183	280	1,300
Stack Gas:					
Exhaust Flow Rate, DSCFM (EPA Method 19)	17,291	17,280	18,508	17,693	
Oxygen (O ₂), % volume dry	13.1	13.3	13.5	13.3	
Carbon Dioxide (CO ₂), % volume dry	6.7	6.6	6.4	6.6	
CO ₂ , lb/hr	7,947	7,770	8,089	7,935	
Water Vapor (H ₂ O), % volume (EPA Method 4)	7.2	7.2	8.5	7.6	
SO ₂ , ppm (calculated)	0.69	0.83	0.41	0.64	
NO_x Emissions (reported as NO₂):					
NO _x , ppmvd	14.4	13.3	13.1	13.6	
NO _x , ppmvd @ 15% O ₂	10.9	10.3	10.5	10.6	12
NO _x , lb/hr	1.78	1.63	1.73	1.71	
NO _x , lb/day	42.7	39.2	41.5	41.1	
NO _x , lb/MMBtu	0.0438	0.0415	0.0419	0.0424	0.05
CO Emissions:					
CO, ppmvd	3.9	2.9	2.9	3.2	
CO, ppmvd @ 15% O ₂	3.0	2.2	2.3	2.5	81
CO, lb/hr	0.29	0.22	0.23	0.25	
CO, lb/day	7.1	5.2	5.5	5.9	
CO, lb/MMBtu	0.0073	0.0055	0.0056	0.0061	0.20
THC Emissions (reported as CH₄):					
THC, ppmv wet (EPA Method 25.A)	<10.0	<10.0	<10.0	<10.0	
THC, ppmvd	<10.8	<10.8	<10.9	<10.8	
THC, lb/hr	<0.46	<0.46	<0.50	<0.48	
Methane (CH₄) Emissions:					
CH ₄ , ppmv wet (EPA Method 25.A)	<10.0	<10.0	<10.0	<10.0	
CH ₄ , ppmvd	<10.8	<10.8	<10.9	<10.8	
CH ₄ , lb/hr	<0.463	<0.462	<0.502	<0.476	
NMOC Emissions (reported as CH₄):					
NMOC, ppmv wet (EPA Method 25.A)	<2.0	<2.0	<2.0	<2.0	
NMOC, ppmvd	<2.2	<2.2	<2.2	<2.2	
NMOC, ppmvd @ 3% O ₂	<5.0	<5.1	<5.3	<5.1	30
NMOC, lb/hr	<0.093	<0.092	<0.10	<0.10	
Inlet Hydrocarbons:					
Inlet NMOC, ppmvd (EPA Method 25C)	2,064	2,393	2,121	2,193	
Inlet NMOC, lb/hr	7.11	8.39	7.46	7.65	
NMOC Destruction Efficiency, %	>98.70%	>98.90%	>98.65%	>98.76%	>98%
Inlet CH ₄ , ppmvd (ASTM D-1945)	489,000	466,000	487,000	480,667	
Inlet CH ₄ , lb/hr	1,684	1,634	1,712	1,677	
CH₄ Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC (TOC), ppmvd	491,064	468,393	489,121	482,859	
Inlet THC (TOC), lb/hr	1,691	1,643	1,719	1,684	
THC (TOC) Destruction Efficiency, %	99.97%	99.97%	99.97%	99.97%	>98%

WHERE,
 ppmvd = parts per million concentration by volume expressed on a dry gas basis
 lb/hr = pound per hour emission rate
 Tstd. = standard temperature (°R = °F+460)
 MW = molecular weight
 DSCFM = dry standard cubic feet per minute
 NO_x = oxides of nitrogen, reported as NO₂ (MW = 46)
 CO = carbon monoxide (MW = 28)
 CH₄ = methane (MW = 16)
 TOC = THC = total organic compounds, reported as CH₄ (MW = 16)
 THC = total hydrocarbons, reported as CH₄ (MW = 16)
 NMOC = non-methane organic compounds, reported as CH₄ (MW = 16)

CALCULATIONS,
 15% O₂ Correction = ppm · 5.9 / (20.9 - %O₂)
 3% O₂ Correction = ppm · 17.9 / (20.9 - %O₂)
 lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
 lb/day = lb/hr · 24
 lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O₂)
 Destruction Efficiency = (inlet, lb/hr - outlet, lb/hr) / inlet, lb/hr
 <value = 2% of analyzer range

TABLE #2
AP42 2.4-1 - Landfill Gas Samples

Newby Island Landfill
Flare (A-2)

Constituent	Method	Units	Results
			2/9/22 A-2 LFG Run 2
1,1,1-Trichloroethane	EPA TO-15	ppb	<81.0
1,1,2,2-Tetrachloroethane	EPA TO-15	ppb	<81.0
1,1-Dichloroethane (Ethylidene Dichloride)	EPA TO-15	ppb	<81.0
1,1-Dichloroethene (1,1-Dichloroethylene)	EPA TO-15	ppb	<81.0
1,2-Dichloroethane (Ethylene Dichloride)	EPA TO-15	ppb	<81.0
1,2-Dichloropropane	EPA TO-15	ppb	<81.0
2-Propanol (Isopropyl Alcohol, IPA)	EPA TO-15	ppb	9,080
Acrylonitrile	EPA TO-15	ppb	<324
Bromodichloromethane	EPA TO-15	ppb	<81.0
Butane (C4)	EPA 18/ASTM 1945	ppm	7.3
Carbon Disulfide	EPA TO-15	ppb	<324
Carbon Monoxide	EPA 3C/ASTM 1945	%	<0.2
Carbon Tetrachloride	EPA TO-15	ppb	<81.0
Carbonyl sulfide (COS)	ASTM D-5504	ppm	1.18*
Chlorobenzene	EPA TO-15	ppb	<93.9
Chlorodifluoromethane	EPA TO-15	ppb	134
Chloroethane	EPA TO-15	ppb	<81.0
Chloroform	EPA TO-15	ppb	<81.0
Chloromethane	EPA TO-15	ppb	<81.0
1,3-Dichlorobenzene	EPA TO-15	ppb	<81.0
1,4-Dichlorobenzene	EPA TO-15	ppb	560
1,2-Dichlorobenzene	EPA TO-15	ppb	<81.0
Dichlorodifluoromethane	EPA TO-15	ppb	88
Dichlorofluoromethane	EPA TO-15	ppb	<162.0
Dichloromethane (Methylene Chloride)	EPA TO-15	ppb	<1,490
Dimethyl Sulfide	ASTM D-5504	ppm	1.927*
Ethane (C2)	EPA 18/ASTM 1945	ppm	<4.0
Ethanol	EPA TO-15	ppb	21,100
Ethyl Mercaptan	ASTM D-5504	ppm	0.210*
Ethyl Benzene	EPA TO-15	ppb	4,200
1,2 Dibromoethane (Ethylene Dibromide)	EPA TO-15	ppb	<81.0
Trichlorofluoromethane (Fluorotrichloromethane)	EPA TO-15	ppb	<81.0
Hexane	EPA TO-15	ppb	227
Hydrogen sulfide	ASTM D-5504	ppm	270*
2-Butanone (MEK)	EPA TO-15	ppb	12,100
Methyl isoButyl Ketone (MiBK)	EPA TO-15	ppb	878
Pentane (C5)	EPA 18/ASTM 1945	ppm	7.3
Tetrachloroethylene (Perchloroethylene)	EPA TO-15	ppb	<81.0
Propane (C3)	EPA 18/ASTM 1945	ppm	16.4
trans-1,2-Dichloroethene (t-1,2-Dichloroethylene)	EPA TO-15	ppb	<81.0
Trichloroethylene (Trichloroethene)	EPA TO-15	ppb	<81.0
Vinyl Chloride	EPA TO-15	ppb	<81.0
m,p-Xylene	EPA TO-15	ppb	5,820
o-Xylene	EPA TO-15	ppb	1,920
Benzene	EPA TO-15	ppb	1,700
Toluene	EPA TO-15	ppb	9,610

* Results are the average of three samples
< = less than the method reporting limit

TABLE #3

Newby Island Landfill
Flare (A-3)

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	2/9/22	2/9/22	2/9/22		
Test Time	0816-0904	0921-1007	1023-1110		
Standard Temperature, °F	70	70	70	70	
Fuel:					
Flare Temperature, °F (Mid TC)	1,510	1,509	1,508	1,509	
Fuel Flow Rate, DSCFM	2,376	2,398	2,420	2,398	
Fuel Heat Input, MMBtu/hr	68.32	66.64	66.66	67.21	
Inlet Hydrogen Sulfide (H ₂ S), ppmv (ASTM D5504)	429	391	466	429	
Inlet TRS, ppmv as H ₂ S (ASTM D5504)	440	401	477	439	1,300
Stack Gas:					
Exhaust Flow Rate, DSCFM (EPA Method 19)	28,705	28,468	27,600	28,258	
Oxygen (O ₂), % volume dry	13.0	13.1	12.8	13.0	
Carbon Dioxide (CO ₂), % volume dry	6.9	6.8	6.9	6.9	
CO ₂ , lb/hr	13,468	13,227	13,012	13,236	
Water Vapor (H ₂ O), % volume (EPA Method 4)	7.8	8.0	9.1	8.3	
SO₂ Emissions:					
SO ₂ , ppmvd (calculated)	1.05	0.94	1.15	1.05	
SO ₂ , ppmvd @ 15% O ₂	0.78	0.71	0.84	0.78	
SO ₂ , lb/hr	0.21	0.22	0.26	0.23	
NO_x Emissions (reported as NO₂):					
NO _x , ppmvd	7.6	7.5	8.1	7.7	
NO _x , ppmvd @ 15% O ₂	5.7	5.7	5.9	5.7	6
NO _x , lb/hr	1.6	1.5	1.6	1.6	
NO _x , lb/day	37.4	36.7	38.1	37.4	
NO _x , lb/MMBtu	0.023	0.023	0.024	0.023	0.025
CO Emissions:					
CO, ppmvd	0.5	1.1	<0.5	0.7	
CO, ppmvd @ 15% O ₂	0.4	0.8	<0.4	0.5	24
CO, lb/hr	0.07	0.1	<0.06	0.09	
CO, lb/day	1.6	3.3	<1.4	2.1	
CO, lb/MMBtu	0.001	0.002	<0.001	0.001	0.060
THC Emissions (reported as CH₄):					
THC, ppmv wet (EPA Method 25.A)	<10.0	<10.0	<10.0	<10.0	
THC, ppmvd	<10.8	<10.9	<11.0	<10.9	
THC, lb/hr	<0.773	<0.768	<0.754	<0.765	
Methane (CH₄) Emissions:					
CH ₄ , ppmv wet (EPA Method 25.A)	<10.0	<10.0	<10.0	<10.0	
CH ₄ , ppmvd	<10.8	<10.9	<11.0	<10.9	
CH ₄ , lb/hr	<0.773	<0.768	<0.754	<0.765	
NMOC Emissions (reported as CH₄):					
NMOC, ppmv wet (EPA Method 25.A)	<2.0	<2.0	<2.0	<2.0	
NMOC, ppmvd	<2.2	<2.2	<2.2	<2.2	
NMOC, ppmvd @ 3% O ₂	<4.9	<5.0	<4.9	<4.9	30
NMOC, lb/hr	<0.15	<0.15	<0.15	<0.15	
Inlet:					
Inlet NMOC, ppmvd (EPA Method 25C)	1,693	1,843	1,926	1,821	
Inlet NMOC, lb/hr	9.98	10.97	11.57	10.84	
NMOC Destruction Efficiency, %	>98.45%	>98.60%	>98.70%	>98.59%	>98%
Inlet CH ₄ , ppmvd (ASTM D-1945)	481,000	464,000	460,000	468,333	
Inlet CH ₄ , lb/hr	2,837	2,762	2,764	2,788	
CH₄ Destruction Efficiency, %	>99.97%	>99.97%	>99.97%	>99.97%	>99%
Inlet THC (TOC), ppmvd	482,693	465,843	461,926	470,154	
Inlet THC (TOC), lb/hr	2,847	2,773	2,775	2,799	
THC (TOC) Destruction Efficiency, %	99.97%	99.97%	99.97%	99.97%	>98%

WHERE,
 ppmvd = parts per million concentration by volume expressed on a dry gas basis
 lb/hr = pound per hour emission rate
 Tstd. = standard temperature (°R = °F+460)
 MW = molecular weight
 DSCFM = dry standard cubic feet per minute
 NO_x = oxides of nitrogen, reported as NO₂ (MW = 46)
 CO = carbon monoxide (MW = 28)
 CH₄ = methane (MW = 16)
 TOC = THC = total organic compounds, reported as CH₄ (MW = 16)
 THC = total hydrocarbons, reported as CH₄ (MW = 16)
 NMOC = non-methane organic compounds, reported as CH₄ (MW = 16)

CALCULATIONS,
 15% O₂ Correction = ppm · 5.9 / (20.9 - %O₂)
 3% O₂ Correction = ppm · 17.9 / (20.9 - %O₂)
 lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
 lb/day = lb/hr · 24
 lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9 / (20.9 - %O₂)
 Destruction Efficiency = (inlet, lb/hr - outlet, lb/hr) / inlet, lb/hr
 <value = 2% of analyzer range

TABLE #4
AP42 2.4-1 - Landfill Gas Samples

Newby Island Landfill
Flare (A-3)

Constituent	Method	Units	Results
			2/9/22 A-3 LFG Run 2
1,1,1-Trichloroethane	EPA TO-15	ppb	<84.3
1,1,2,2-Tetrachloroethane	EPA TO-15	ppb	<84.3
1,1-Dichloroethane (Ethylidene Dichloride)	EPA TO-15	ppb	<84.3
1,1-Dichloroethene (1,1-Dichloroethylene)	EPA TO-15	ppb	<84.3
1,2-Dichloroethane (Ethylene Dichloride)	EPA TO-15	ppb	<84.3
1,2-Dichloropropane	EPA TO-15	ppb	<84.3
2-Propanol (Isopropyl Alcohol, IPA)	EPA TO-15	ppb	8,100
Acrylonitrile	EPA TO-15	ppb	<337
Bromodichloromethane	EPA TO-15	ppb	<84.3
Butane (C4)	EPA 18/ASTM 1945	ppm	6.8
Carbon Disulfide	EPA TO-15	ppb	<337
Carbon Monoxide	EPA 3C/ASTM 1945	%	<0.2
Carbon Tetrachloride	EPA TO-15	ppb	<84.3
Carbonyl sulfide (COS)	ASTM D-5504	ppm	1.29*
Chlorobenzene	EPA TO-15	ppb	<84.3
Chlorodifluoromethane	EPA TO-15	ppb	180
Chloroethane	EPA TO-15	ppb	<84.3
Chloroform	EPA TO-15	ppb	<84.3
Chloromethane	EPA TO-15	ppb	<84.3
1,3-Dichlorobenzene	EPA TO-15	ppb	<84.3
1,4-Dichlorobenzene	EPA TO-15	ppb	657
1,2-Dichlorobenzene	EPA TO-15	ppb	<84.3
Dichlorodifluoromethane	EPA TO-15	ppb	120
Dichlorofluoromethane	EPA TO-15	ppb	<84.3
Dichloromethane (Methylene Chloride)	EPA TO-15	ppb	<169
Dimethyl Sulfide	ASTM D-5504	ppm	1.99*
Ethane (C2)	EPA 18/ASTM 1945	ppm	<4.2
Ethanol	EPA TO-15	ppb	20,600
Ethyl Mercaptan	ASTM D-5504	ppm	0.247*
Ethyl Benzene	EPA TO-15	ppb	4,220
1,2 Dibromoethane (Ethylene Dibromide)	EPA TO-15	ppb	<84.3
Trichlorofluoromethane (Fluorotrichloromethane)	EPA TO-15	ppb	<84.3
Hexane	EPA TO-15	ppb	194
Hydrogen sulfide	ASTM D-5504	ppm	428.7*
2-Butanone (MEK)	EPA TO-15	ppb	16,500
Methyl isoButyl Ketone (MiBK)	EPA TO-15	ppb	787
Pentane (C5)	EPA 18/ASTM 1945	ppm	25.2
Tetrachloroethylene (Perchloroethylene)	EPA TO-15	ppb	<84.3
Propane (C3)	EPA 18/ASTM 1945	ppm	16.4
trans-1,2-Dichloroethene (t-1,2-Dichloroethylene)	EPA TO-15	ppb	<84.3
Trichloroethylene (Trichloroethene)	EPA TO-15	ppb	<84.3
Vinyl Chloride	EPA TO-15	ppb	<84.3
m,p-Xylene	EPA TO-15	ppb	6,000
o-Xylene	EPA TO-15	ppb	1,990
Benzene	EPA TO-15	ppb	1,590
Toluene	EPA TO-15	ppb	8,470

* Results are the average of three samples
< = less than the method reporting limit

Appendix E – Well Exceedance Documentation

Root Cause Analysis and Corrective Action Analysis Forms



TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/7/2022
Collection Device ID:	NILEW752
Temperature Reading:	132.4

Root Cause Analysis	
Has the owner/operator received approval from the state agency to operate at a temperature higher than 55°C (131°F) for this well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, exempt as per 40 CFR 62.16720(a)(4)(iii)/ 40 CFR 63.1958(c). If NO, continue the form. 	
Describe what was inspected.	
Gas Sample and de-watering system.	
Describe what was determined to be the root cause of the exceedance.	
Elevated microbial activity	
Determine the required next steps.	
Was the temperature exceedance remediated within 60 days since the initial exceedance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	1/7/2022
Collection Device ID:	NILEW752
Temperature Reading:	132.4

Corrective Action Analysis	
Describe the corrective actions taken to remediate exceedance.	
O&M to reduced applied vacuum to well	
HOV letter sent to air district. Awaiting approval.	

Implementation Schedule	
Expected Start Date:	1/1/2022
Expected Completion Date:	5/2/2022
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Reduce vacuum/gas extraction. Application for temperature HOV pending approval	

Final Steps	
Determine the required next steps.	
Is the remediation expected to take less than 120 days since initial exceedance per implementation schedule?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, send notification to state agency within 75 days of initial exceedance. Include Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule in the next Annual Report. • If NO, send Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule to state agency within 75 days for approval and include in next Annual Report. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/13/2022
Collection Device ID:	NILEW699
Pressure Reading:	0.01

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/17/2022
Collection Device ID:	NILEW690
Temperature Reading:	133.4

Root Cause Analysis	
Has the owner/operator received approval from the state agency to operate at a temperature higher than 55°C (131°F) for this well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, exempt as per 40 CFR 62.16720(a)(4)(iii)/ 40 CFR 63.1958(c). If NO, continue the form. 	
Describe what was inspected.	
Gas Sample and de-watering system.	
Describe what was determined to be the root cause of the exceedance.	
Elevated microbial activity	
Determine the required next steps.	
Was the temperature exceedance remediated within 60 days since the initial exceedance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	1/17/2022
Collection Device ID:	NILEW690
Temperature Reading:	133.4

Corrective Action Analysis	
Describe the corrective actions taken to remediate exceedance.	
O&M to reduced applied vacuum to well	
HOV letter sent to air district. Awaiting approval.	

Implementation Schedule	
Expected Start Date:	1/1/2022
Expected Completion Date:	5/2/2022
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Reduce vacuum/gas extraction. Application for temperature HOV pending approval	

Final Steps	
Determine the required next steps.	
Is the remediation expected to take less than 120 days since initial exceedance per implementation schedule?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, send notification to state agency within 75 days of initial exceedance. Include Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule in the next Annual Report. • If NO, send Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule to state agency within 75 days for approval and include in next Annual Report. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/20/2022
Collection Device ID:	NILHC246
Pressure Reading:	1.34

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). • If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, keep records of Root Cause Analysis. No reporting required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/20/2022
Collection Device ID:	NILHC247
Pressure Reading:	1.31

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/20/2022
Collection Device ID:	NILHC248
Pressure Reading:	1.23

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). • If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, keep records of Root Cause Analysis. No reporting required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/20/2022
Collection Device ID:	NILHC249
Pressure Reading:	1.19

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/20/2022
Collection Device ID:	NILHC250
Pressure Reading:	1.16

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	2/25/2022
Collection Device ID:	NILEW701
Temperature Reading:	134.7

Root Cause Analysis	
Has the owner/operator received approval from the state agency to operate at a temperature higher than 55°C (131°F) for this well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, exempt as per 40 CFR 62.16720(a)(4)(iii)/ 40 CFR 63.1958(c). If NO, continue the form. 	
Describe what was inspected.	
Gas Sample and de-watering system.	
Describe what was determined to be the root cause of the exceedance.	
Elevated microbial activity	
Determine the required next steps.	
HOV submitted to air board. Waiting approval.	
Was the temperature exceedance remediated within 60 days since the initial exceedance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	2/25/2022
Collection Device ID:	NILEW701
Temperature Reading:	134.7

Corrective Action Analysis	
Describe the corrective actions taken to remediate exceedance.	
O&M to reduced applied vacuum to well	
HOV letter sent to air district. Awaiting approval.	

Implementation Schedule	
Expected Start Date:	4/25/2022
Expected Completion Date:	6/25/2022
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Reduce vacuum/gas extraction. Application for temperature HOV pending approval	

Final Steps	
Determine the required next steps.	
Is the remediation expected to take less than 120 days since initial exceedance per implementation schedule?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, send notification to state agency within 75 days of initial exceedance. Include Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule in the next Annual Report. • If NO, send Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule to state agency within 75 days for approval and include in next Annual Report. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	3/4/2022
Collection Device ID:	NILEW797
Pressure Reading:	1.08

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). • If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Well head, well casing, and vacuum lateral source.	
Describe what was determined to be the root cause of the exceedance.	
New well start-up. Followed Republic Services SOP.	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, keep records of Root Cause Analysis. No reporting required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	3/23/2022
Collection Device ID:	NILEW800
Pressure Reading:	2.15

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	6/17/2022
Collection Device ID:	NILEW701
Temperature Reading:	131.0

Root Cause Analysis	
Has the owner/operator received approval from the state agency to operate at a temperature higher than 55°C (131°F) for this well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, exempt as per 40 CFR 62.16720(a)(4)(iii)/ 40 CFR 63.1958(c). If NO, continue the form. 	
Describe what was inspected.	
Gas Sample and de-watering system.	
Describe what was determined to be the root cause of the exceedance.	
Elevated microbial activity	
Determine the required next steps.	
HOV submitted to air board. Waiting approval.	
Was the temperature exceedance remediated within 60 days since the initial exceedance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	6/17/2022
Collection Device ID:	NILEW701
Temperature Reading:	131.0

Corrective Action Analysis	
Describe the corrective actions taken to remediate exceedance.	
O&M to reduced applied vacuum to well	
HOV letter sent to air district. Awaiting approval.	

Implementation Schedule	
Expected Start Date:	4/25/2022
Expected Completion Date:	6/25/2022
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Reduce vacuum/gas extraction. Application for temperature HOV pending approval	

Final Steps	
Determine the required next steps.	
Is the remediation expected to take less than 120 days since initial exceedance per implementation schedule?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, send notification to state agency within 75 days of initial exceedance. Include Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule in the next Annual Report. • If NO, send Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule to state agency within 75 days for approval and include in next Annual Report. 	



PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	7/22/2022
Collection Device ID:	NILEW644
Pressure Reading:	1.72

Root Cause Analysis	
Was the reason for the positive pressure due to one of the following:	
A fire or increased well temperature.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Use of a geomembrane or synthetic cover.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A decommissioned well.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If YES to ANY of the above, exempt as per 40 CFR 62.16720(a)(3)(iii)/ 40 CFR §63.1958(b). • If NO to ALL of the above, continue the form. 	
Describe what was inspected.	
Vacuum source at wellhead (lateral is buried/inaccessible)	
Describe what was determined to be the root cause of the exceedance.	
Lack of vacuum on lateral riser, due to construction	
Determine the required next steps.	
Was the positive pressure remediated within 60 days since the initial exceedance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, keep records of Root Cause Analysis. No reporting required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	

75-Day Notification Letters
(including relevant Higher Operating Value requests)



Newby Island Landfill 1601 Dixon Landing Road, Milpitas, CA 95035
o 408.586.2263 c 510.298.7892 republicservices.com

February 24, 2022

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

Re: 75-Day Notification of Pressure Exceedance
International Disposal Corp. of California, Milpitas, California
Facility Number A9013

Ms. Endow:

International Disposal Corp. of CA (IDCC), owner and operator of the Newby Island Sanitary Landfill and Recyclery (Newby), located in Milpitas, California, hereby provides the Bay Area Air Quality Management District (BAAQMD) with a 75-day notification pursuant to the compliance provisions identified in Title 40 of the Code of Federal Regulations (CFR) 60.767(j)(2) and 40 CFR 63.1981(j)(1) for a pressure exceedance at landfill gas (LFG) extraction well NILEW628.

The initial pressure exceedance occurred at NILEW628 on December 13, 2021. The well had an initial pressure exceedance of 11.82 inches of water ("H₂O"). Corrective actions were initiated within 5 days as the valves were adjusted; however, the well could not be brought back into compliance within 15 days. As required under 40 CFR 60.765(a)(5) and 40 CFR 63.1960(a)(3)(i)(A), a root cause analysis was completed within 60 days from the original exceedance for the well. When the well could not be corrected within 60 days, a corrective action analysis and implementation schedule was completed. These forms are available on site for review and will be included in the next semi-annual report. All the steps for compliance were conducted, however, NILEW628 remains in exceedance as of the submittal of this notification. As such, this 75-day notification is required. The well is planned to be decommissioned and remediated before its 120-day deadline.

If you have any questions or require additional information, please do not hesitate to contact Rachelle Huber at (408) 586-2263 or by email at rhuber2@republicservices.com or Michael Flanagan of SCS Field Services (SCSFS) at 510-363-7796 or by email at MFlanagan@scsengineers.com.

Sincerely,

A handwritten signature in blue ink that reads "Rachelle Huber".

Rachelle Huber
Environmental Manager
Newby Island Landfill

Tamiko Endow
Senior Air Quality Engineer
BAAQMD
February 24, 2022
Page 2

cc: Josh Mills, Newby Island
Michael Flanagan, SCS Field Services
Maria Bowen, SCS Engineers
Jay Patel, BAAQMD
Administrator, U.S. EPA Region 9



Newby Island Landfill 1601 Dixon Landing Road, Milpitas, CA 95035
o 408.586.2263 c 510.298.7892 republicservices.com

March 21, 2022

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

Re: 75-Day Notification of Temperature Exceedances
International Disposal Corp. of California, Milpitas, California
Facility Number A9013

Ms. Endow:

International Disposal Corp. of CA (IDCC), owner and operator of the Newby Island Landfill (Newby), located in Milpitas, California, hereby provides the Bay Area Air Quality Management District (BAAQMD) with a 75-day notification pursuant to the compliance provisions identified in Title 40 of the Code of Federal Regulations (CFR) 60.767(j)(2) for temperature exceedances at NILEW752 and NILEW690.

Well NILEW752 had an initial temperature exceedance of 132.4 degrees Fahrenheit (°F) on January 7, 2022. In addition, Well NILEW690 had an initial temperature exceedance of 133.4 degrees °F on January 17, 2022. Corrective actions were initiated within 5 days as the valves were adjusted; however, the wells could not be brought back into compliance within 15 days.

As required under 40 CFR 60.765(a)(5), a root cause analysis and a corrective action analysis and implementation schedule were completed within 60 days from the original exceedance for both wells. Copies of these forms are attached. All the steps for compliance were conducted, however, these wells remain in exceedance but will be remediated prior to the 120-day deadlines. As such, this 75-day notification is required.

On February 6, 2020 and August 13, 2021, IDCC submitted higher operating value (HOV) requests to operate NILEW690 and NILEW752 at a temperature of 145°F, respectively. IDCC has received conditional approval from the BAAQMD pending approval from the United States Environmental Protection Agency (USEPA). At the time of this submittal, IDCC has followed up with the USEPA regarding the application in August 2020, September 2020, October 2020, April 2021, August 2021, and October 2021 but no response has been received. The USEPA promulgated the revised National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart AAAA rules, which took effect on September 27, 2021, which allows wells to operate at a temperature of 145°F. In the NESHAP rule, the USEPA allows an operating temperature of 145°F, the same temperature as requested with the HOV which was approved by BAAQMD. We believe this implicates USEPA approval of a higher temperature of 145°F and that the HOV is approved by both USEPA and BAAQMD. Thus, this notification should not be required, however to be conservative and because the 131°F limit is still contained within Newby's permit, this notification is being submitted until BAAQMD confirms that the HOV is now fully approved.

If you have any questions or require additional information, please do not hesitate to contact Rachelle Huber at (408) 586-2263 or by email at rhuber2@republicservices.com or Sean Bass 209-345-2458 or by email at SBass@scsengineers.com.

Tamiko Endow
Senior Air Quality Engineer
BAAQMD
March 21, 2022
Page 2

Sincerely,

A handwritten signature in blue ink that reads "Rachelle Huber". The signature is written in a cursive, flowing style.

Rachelle Huber
Environmental Manager
Newby Island Landfill

cc: Josh Mills, Newby Island
Sean Bass, SCS Field Services
Maria Bowen, SCS Engineers
Anne Liu, SCS Engineers
Jay Patel, BAAQMD
Administrator, U.S. EPA Region 9

Attachment A: Root Cause Analysis Forms and Corrective Action Analysis and Implementation
Schedule Forms

Attachment B: Temperature HOV Requests

**Attachment A:
Root Cause Analysis Forms and
Corrective Action Analysis and Implementation Schedule Forms**



TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/7/2022
Collection Device ID:	NILEW752
Temperature Reading:	132.4

Root Cause Analysis	
Has the owner/operator received approval from the state agency to operate at a temperature higher than 55°C (131°F) for this well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, exempt as per 40 CFR 62.16720(a)(4)(iii)/ 40 CFR 63.1958(c). If NO, continue the form. 	
Describe what was inspected.	
Gas Sample and de-watering system.	
Describe what was determined to be the root cause of the exceedance.	
Elevated microbial activity	
Determine the required next steps.	
Was the temperature exceedance remediated within 60 days since the initial exceedance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	1/7/2022
Collection Device ID:	NILEW752
Temperature Reading:	132.4

Corrective Action Analysis	
Describe the corrective actions taken to remediate exceedance.	
O&M to reduced applied vacuum to well	
HOV letter sent to air district. Awaiting approval.	

Implementation Schedule	
Expected Start Date:	1/1/2022
Expected Completion Date:	5/2/2022
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Reduce vacuum/gas extraction. Application for temperature HOV pending approval	

Final Steps	
Determine the required next steps.	
Is the remediation expected to take less than 120 days since initial exceedance per implementation schedule?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, send notification to state agency within 75 days of initial exceedance. Include Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule in the next Annual Report. • If NO, send Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule to state agency within 75 days for approval and include in next Annual Report. 	



TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/17/2022
Collection Device ID:	NILEW690
Temperature Reading:	133.4

Root Cause Analysis	
Has the owner/operator received approval from the state agency to operate at a temperature higher than 55°C (131°F) for this well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, exempt as per 40 CFR 62.16720(a)(4)(iii)/ 40 CFR 63.1958(c). If NO, continue the form. 	
Describe what was inspected.	
Gas Sample and de-watering system.	
Describe what was determined to be the root cause of the exceedance.	
Elevated microbial activity	
Determine the required next steps.	
Was the temperature exceedance remediated within 60 days since the initial exceedance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	1/17/2022
Collection Device ID:	NILEW690
Temperature Reading:	133.4

Corrective Action Analysis	
Describe the corrective actions taken to remediate exceedance.	
O&M to reduced applied vacuum to well	
HOV letter sent to air district. Awaiting approval.	

Implementation Schedule	
Expected Start Date:	1/1/2022
Expected Completion Date:	5/2/2022
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Reduce vacuum/gas extraction. Application for temperature HOV pending approval	

Final Steps	
Determine the required next steps.	
Is the remediation expected to take less than 120 days since initial exceedance per implementation schedule?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, send notification to state agency within 75 days of initial exceedance. Include Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule in the next Annual Report. • If NO, send Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule to state agency within 75 days for approval and include in next Annual Report. 	

**Attachment B:
Temperature HOV Requests**



February 6, 2020

Ms. Roshni Brahmbhatt
Air Enforcement Section Manager
USEPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: Temperature Higher Operating Value (HOV) Request for Four Landfill Gas Wells
Newby Island Sanitary Landfill and Recyclery, Milpitas, California
Plant Number A9013

Dear Ms. Brahmbhatt:

Tetra Tech, on behalf of the International Disposal Corporation of California, Inc. (IDCC), submits this application to the United States Environmental Protection Agency (USEPA), Region IX, to operate four vertical landfill gas (LFG) extraction wells at a temperature higher operating value (HOV) of 145 degrees Fahrenheit (°F) at the Newby Island Sanitary Landfill and Recyclery (Newby Island). Pursuant to New Source Performance Standards/Emissions Guidelines (NSPS/EG), it is required that wellhead temperature levels remain below 131°F. Moreover, pursuant to NSPS Subpart XXX Section 60.763, a HOV demonstration must be submitted to the Administrator for approval.

Newby Island is regulated under the NSPS, based upon a design capacity exceeding 2.5 million Megagrams (Mg) and 2.5 million cubic meters, and based upon a non-methane organic compounds (NMOC) emission rate calculation, which demonstrated an annual NMOC emission rate exceeding 34 Mg per year. Effective September 1, 2019, the gas collection and control system (GCCS) at Newby Island became subject to the monitoring and reporting requirements of NSPS Subpart XXX since it commenced construction, reconstruction, or modification after July 17, 2014. An update of Newby Island's GCCS Design Plan to include NSPS Subpart XXX requirements was submitted to the Bay Area Air Quality Management District (BAAQMD) and USEPA on March 6, 2018.

Per previous correspondence with the BAAQMD Permit Engineer assigned to Newby Island, the BAAQMD has not received delegation from the USEPA for NSPS Subpart XXX. Therefore, the BAAQMD cannot issue exemptions from the regulation for standards, monitoring, or reporting. Thus, IDCC requests an increase of the allowable wellhead temperature limit from 131°F to 145°F for the following four vertical LFG extraction wells:

Well ID
NILEW690
NILEW691
NILEW701
NILEW703

Background

The following discussion on the relationship between LFG production and temperatures will serve to justify this request for higher temperatures for these wells under NSPS XXX.

Decomposition of the waste occurs in four stages. During the first two stages, decomposition of the waste occurs aerobically. Aerobic decomposition is exothermic (i.e. heat is produced). The degree of the exothermic reaction is governed by the ambient air temperatures during waste placement, the amount of moisture present, the types of waste deposited, etc. The heat generated during the aerobic phases sets the stage for the types of anaerobic bacteria populations that flourish during later decomposition phases.

There are three types of anaerobic bacterial populations which produce LFG. Methane producing bacteria are called methanogens. The psychrophilic bacteria (organisms that are capable of growth in low temperatures) are found at temperatures below 59°F. This population produces the least amount of LFG and is not normally found in landfills in North America. Methanogens that generate LFG at temperatures below 110°F are known as mesophilic bacteria, while those that generate gas at temperatures in excess of 110°F are called thermophilic bacteria. The mesophilic bacteria predominate in most of the landfills in North America, with the exception of those found in the southernmost states. Therefore, it is not uncommon to find normal LFG temperatures in excess of 140°F to 160°F. It is also not uncommon to find pockets of thermophilic bacteria in any landfill, based on the conditions which existed during waste placement.

The vertical LFG extraction wells NILEW690, NILEW691, NILEW701, and NILEW703 have exhibited elevated readings on a consistent basis. However, the wells are viable and important to the GCCS at Newby Island to collect LFG produced by the Source-2 (S-2) landfill. As vacuum increases at the wells, temperature is projected to increase as well. Tetra Tech operations and maintenance (O&M) personnel have been tuning the wells to prevent prolonged temperature exceedances. As a result, the ability to pull vacuum on these wells has been limited due to the current temperature limit of 131°F. A new temperature limit of 145°F is being requested as it is believed that the wells will be able to operate at their full potential, allowing optimal LFG production and mitigating potential surface emissions. Based on previous attempts by O&M personnel to bring these wells back within allowable temperature parameters, it was concluded that without temperature being the limiting factor, the gas collection efficiency of these wells would greatly improve.

Additionally, carbon monoxide (CO) samples were taken at each well via Draeger tubes and results indicated extremely low levels of CO at each of the four wells (0 to 10 parts per million by volume [ppmv]), indicating that no SSO is occurring. CO concentrations of 500 ppmv or greater indicate likely SSOs, while concentrations between 100 and 499 ppmv would indicate concerns of SSOs. CO sample results are included in this application as Attachment A and in the table below.

Well ID	CO Sample (ppmv)
NILEW690	0
NILEW691	10
NILEW701	0
NILEW703	0

HOV Request

IDCC requests an HOV for temperature for the four vertical LFG extraction wells identified herein be increased from the standard 131°F to 145°F, as decommissioning these viable vertical LFG extraction wells due to elevated temperature readings above the NSPS limit of 131°F would be counterproductive. Additionally, IDCC requests the Newby Island Title V Permit Condition Number 10423 Part 6(d)(i) be altered to include Wells NILEW690, NILEW691, NILEW701, and NILEW703. Historical data for these four vertical LFG extraction wells is included in this application as Attachment B.

A Title V Permit Renewal Application was submitted to the BAAQMD on June 19, 2017. As IDCC is currently awaiting a renewed Title V Permit for Newby Island, including NSPS Subpart XXX requirements, this request is being submitted to obtain approval for an HOV of 145°F to allow LFG extraction wells NILEW690, NILEW691, NILEW701, and NILEW703 to continue operation, while remaining in compliance with permitted limits. In addition, a temperature HOV request for the aforementioned wells to be approved under NSPS Subpart WWW and BAAQMD Regulation 8-34 was also submitted to the BAAQMD.

If you have any questions or require additional information, please do not hesitate to contact Rachele Huber at (408) 586-2263 or by email at rhuber2@republicservices.com or Meghan Caesar at (925) 241-1074 or by email at meghan.caesar@tetrattech.com.

Ms. Roshni Brahmbhatt
February 6, 2020
Page 4

Sincerely,

A handwritten signature in blue ink that reads "Rachelle Huber". The signature is written in a cursive style with a large, looping initial "R".

Rachelle Huber
Environmental Manager
Newby Island Landfill

Attachments: Attachment A – CO Sample Results
Attachment B – Historical Wellfield Data
Attachment C - Site Map

cc: Anthony Boccaleoni, IDCC
Rachelle Huber, IDCC
Jennifer Baker, BEL-Engineering
Meghan Caesar, Tetra Tech
Maria Bowen, Tetra Tech
Tamiko Endow, BAAQMD
Mark Sims, USEPA Region IX



Newby Island Landfill 1601 Dixon Landing Road, Milpitas, CA 95035
o 408.586.2263 c 510.298.7892 republicservices.com

May 4, 2022

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

Re: 75-Day Notification of Temperature Exceedance
International Disposal Corp. of California, Milpitas, California
Facility Number A9013

Ms. Endow:

International Disposal Corp. of CA (IDCC), owner and operator of the Newby Island Landfill (Newby), located in Milpitas, California, hereby provides the Bay Area Air Quality Management District (BAAQMD or District) with a 75-day notification pursuant to the compliance provisions identified in Title 40 of the Code of Federal Regulations (CFR) Section 60.767(j)(2) for a temperature exceedance at NILEW701.

Well NILEW701 had an initial temperature exceedance of 134.7 degrees Fahrenheit (°F) on February 25, 2022. Corrective actions were initiated within 5 days as the valve was adjusted; however, the well could not be brought back into compliance within 15 days.

As required under 40 CFR 60.765(a)(5), a root cause analysis and a corrective action analysis and implementation schedule were completed within 60 days from the original exceedance. Copies of these forms are attached. All the steps for compliance were conducted, however, the well remain in exceedance but will be remediated prior to the 120-day deadline. As such, this 75-day notification is required.

On February 6, 2020, IDCC submitted higher operating value (HOV) requests to operate NILEW701 at a temperature of 145°F, respectively. IDCC has received conditional approval from the BAAQMD pending approval from the United States Environmental Protection Agency (USEPA). At the time of this submittal, IDCC has followed up with the USEPA regarding the application in August 2020, September 2020, October 2020, April 2021, August 2021, and October 2021 but no response has been received. The USEPA promulgated the revised National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart AAAA rules, which took effect on September 27, 2021, which allows wells to operate at a temperature of 145°F. In the NESHAP rule, the USEPA allows an operating temperature of 145°F, the same temperature as requested with the HOV which was approved by BAAQMD. Moreover, the federal rules clearly state that the NESHAP provisions under Subpart AAAA replace the major compliance provisions of Subpart XXX, including wellhead temperature requirements. We believe this implicates USEPA approval of a higher temperature of 145°F and that the HOV is approved by both USEPA and BAAQMD. Thus, this notification should not be required, however to be conservative and because the 131°F limit is still contained within Newby's permit, this notification is being submitted until BAAQMD confirms that the HOV is now fully approved.

If you have any questions or require additional information, please do not hesitate to contact Rachelle Huber at (408) 586-2263 or by email at rhuber2@republicservices.com or Sean Bass 209-345-2458 or by email at SBass@scsengineers.com.

Tamiko Endow
Senior Air Quality Engineer
BAAQMD
May 4, 2022
Page 2

Sincerely,

A handwritten signature in blue ink that reads "Rachelle Huber". The signature is written in a cursive, flowing style.

Rachelle Huber
Environmental Manager
Newby Island Landfill

cc: Josh Mills, Newby Island
Sean Bass, SCS Field Services
Maria Bowen, SCS Engineers
Jay Patel, BAAQMD
Administrator, U.S. EPA Region 9

Attachment A: Root Cause Analysis Form and Corrective Action Analysis and Implementation Schedule
Form

Attachment B: Temperature HOV Request

**Attachment A:
Root Cause Analysis Form and
Corrective Action Analysis and Implementation Schedule Form**



TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	2/25/2022
Collection Device ID:	NILEW701
Temperature Reading:	134.7

Root Cause Analysis	
Has the owner/operator received approval from the state agency to operate at a temperature higher than 55°C (131°F) for this well?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, exempt as per 40 CFR 62.16720(a)(4)(iii)/ 40 CFR 63.1958(c). If NO, continue the form. 	
Describe what was inspected.	
Gas Sample and de-watering system.	
Describe what was determined to be the root cause of the exceedance.	
Elevated microbial activity	
Determine the required next steps.	
HOV submitted to air board. Waiting approval.	
Was the temperature exceedance remediated within 60 days since the initial exceedance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> If YES, keep records of Root Cause Analysis. No reporting required. If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to state agency within 75 days of initial exceedance. 	



TEMPERATURE EXCEEDANCE

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	2/25/2022
Collection Device ID:	NILEW701
Temperature Reading:	134.7

Corrective Action Analysis	
Describe the corrective actions taken to remediate exceedance.	
O&M to reduced applied vacuum to well	
HOV letter sent to air district. Awaiting approval.	

Implementation Schedule	
Expected Start Date:	4/25/2022
Expected Completion Date:	6/25/2022
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Reduce vacuum/gas extraction. Application for temperature HOV pending approval	

Final Steps	
Determine the required next steps.	
Is the remediation expected to take less than 120 days since initial exceedance per implementation schedule?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If YES, send notification to state agency within 75 days of initial exceedance. Include Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule in the next Annual Report. • If NO, send Root Cause Analysis, Corrective Action Analysis, and Implementation Schedule to state agency within 75 days for approval and include in next Annual Report. 	

**Attachment B:
Temperature HOV Request**



February 6, 2020

Ms. Roshni Brahmbhatt
Air Enforcement Section Manager
USEPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: Temperature Higher Operating Value (HOV) Request for Four Landfill Gas Wells
Newby Island Sanitary Landfill and Recyclery, Milpitas, California
Plant Number A9013

Dear Ms. Brahmbhatt:

Tetra Tech, on behalf of the International Disposal Corporation of California, Inc. (IDCC), submits this application to the United States Environmental Protection Agency (USEPA), Region IX, to operate four vertical landfill gas (LFG) extraction wells at a temperature higher operating value (HOV) of 145 degrees Fahrenheit (°F) at the Newby Island Sanitary Landfill and Recyclery (Newby Island). Pursuant to New Source Performance Standards/Emissions Guidelines (NSPS/EG), it is required that wellhead temperature levels remain below 131°F. Moreover, pursuant to NSPS Subpart XXX Section 60.763, a HOV demonstration must be submitted to the Administrator for approval.

Newby Island is regulated under the NSPS, based upon a design capacity exceeding 2.5 million Megagrams (Mg) and 2.5 million cubic meters, and based upon a non-methane organic compounds (NMOC) emission rate calculation, which demonstrated an annual NMOC emission rate exceeding 34 Mg per year. Effective September 1, 2019, the gas collection and control system (GCCS) at Newby Island became subject to the monitoring and reporting requirements of NSPS Subpart XXX since it commenced construction, reconstruction, or modification after July 17, 2014. An update of Newby Island's GCCS Design Plan to include NSPS Subpart XXX requirements was submitted to the Bay Area Air Quality Management District (BAAQMD) and USEPA on March 6, 2018.

Per previous correspondence with the BAAQMD Permit Engineer assigned to Newby Island, the BAAQMD has not received delegation from the USEPA for NSPS Subpart XXX. Therefore, the BAAQMD cannot issue exemptions from the regulation for standards, monitoring, or reporting. Thus, IDCC requests an increase of the allowable wellhead temperature limit from 131°F to 145°F for the following four vertical LFG extraction wells:

Well ID
NILEW690
NILEW691
NILEW701
NILEW703

Background

The following discussion on the relationship between LFG production and temperatures will serve to justify this request for higher temperatures for these wells under NSPS XXX.

Decomposition of the waste occurs in four stages. During the first two stages, decomposition of the waste occurs aerobically. Aerobic decomposition is exothermic (i.e. heat is produced). The degree of the exothermic reaction is governed by the ambient air temperatures during waste placement, the amount of moisture present, the types of waste deposited, etc. The heat generated during the aerobic phases sets the stage for the types of anaerobic bacteria populations that flourish during later decomposition phases.

There are three types of anaerobic bacterial populations which produce LFG. Methane producing bacteria are called methanogens. The psychrophilic bacteria (organisms that are capable of growth in low temperatures) are found at temperatures below 59°F. This population produces the least amount of LFG and is not normally found in landfills in North America. Methanogens that generate LFG at temperatures below 110°F are known as mesophilic bacteria, while those that generate gas at temperatures in excess of 110°F are called thermophilic bacteria. The mesophilic bacteria predominate in most of the landfills in North America, with the exception of those found in the southernmost states. Therefore, it is not uncommon to find normal LFG temperatures in excess of 140°F to 160°F. It is also not uncommon to find pockets of thermophilic bacteria in any landfill, based on the conditions which existed during waste placement.

The vertical LFG extraction wells NILEW690, NILEW691, NILEW701, and NILEW703 have exhibited elevated readings on a consistent basis. However, the wells are viable and important to the GCCS at Newby Island to collect LFG produced by the Source-2 (S-2) landfill. As vacuum increases at the wells, temperature is projected to increase as well. Tetra Tech operations and maintenance (O&M) personnel have been tuning the wells to prevent prolonged temperature exceedances. As a result, the ability to pull vacuum on these wells has been limited due to the current temperature limit of 131°F. A new temperature limit of 145°F is being requested as it is believed that the wells will be able to operate at their full potential, allowing optimal LFG production and mitigating potential surface emissions. Based on previous attempts by O&M personnel to bring these wells back within allowable temperature parameters, it was concluded that without temperature being the limiting factor, the gas collection efficiency of these wells would greatly improve.

Additionally, carbon monoxide (CO) samples were taken at each well via Draeger tubes and results indicated extremely low levels of CO at each of the four wells (0 to 10 parts per million by volume [ppmv]), indicating that no SSO is occurring. CO concentrations of 500 ppmv or greater indicate likely SSOs, while concentrations between 100 and 499 ppmv would indicate concerns of SSOs. CO sample results are included in this application as Attachment A and in the table below.

Well ID	CO Sample (ppmv)
NILEW690	0
NILEW691	10
NILEW701	0
NILEW703	0

HOV Request

IDCC requests an HOV for temperature for the four vertical LFG extraction wells identified herein be increased from the standard 131°F to 145°F, as decommissioning these viable vertical LFG extraction wells due to elevated temperature readings above the NSPS limit of 131°F would be counterproductive. Additionally, IDCC requests the Newby Island Title V Permit Condition Number 10423 Part 6(d)(i) be altered to include Wells NILEW690, NILEW691, NILEW701, and NILEW703. Historical data for these four vertical LFG extraction wells is included in this application as Attachment B.

A Title V Permit Renewal Application was submitted to the BAAQMD on June 19, 2017. As IDCC is currently awaiting a renewed Title V Permit for Newby Island, including NSPS Subpart XXX requirements, this request is being submitted to obtain approval for an HOV of 145°F to allow LFG extraction wells NILEW690, NILEW691, NILEW701, and NILEW703 to continue operation, while remaining in compliance with permitted limits. In addition, a temperature HOV request for the aforementioned wells to be approved under NSPS Subpart WWW and BAAQMD Regulation 8-34 was also submitted to the BAAQMD.

If you have any questions or require additional information, please do not hesitate to contact Rachele Huber at (408) 586-2263 or by email at rhuber2@republicservices.com or Meghan Caesar at (925) 241-1074 or by email at meghan.caesar@tetrattech.com.

Ms. Roshni Brahmbhatt
February 6, 2020
Page 4

Sincerely,

A handwritten signature in blue ink that reads "Rachelle Huber". The signature is written in a cursive, flowing style with a large loop at the beginning of the first name.

Rachelle Huber
Environmental Manager
Newby Island Landfill

Attachments: Attachment A – CO Sample Results
Attachment B – Historical Wellfield Data
Attachment C - Site Map

cc: Anthony Boccaleoni, IDCC
Rachelle Huber, IDCC
Jennifer Baker, BEL-Engineering
Meghan Caesar, Tetra Tech
Maria Bowen, Tetra Tech
Tamiko Endow, BAAQMD
Mark Sims, USEPA Region IX

Appendix F – Title V Semi-Annual Report

NEWBY ISLAND LANDFILL
TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: NEWBY ISLAND LANDFILL	FACILITY ID#: A9013
REPORTING PERIOD: from 02/01/2022 through 07/31/2022	

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:



08/31/2022

Signature of Responsible Official

Date

Kevin Divincenzo
Name of Responsible Official (please print)

Area Vice President
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: <i>from</i> 02/01/2022 <i>through</i> 07/31/2022	

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-3	Composting Operation; A-3 Water Truck
S-4	Non-retail Gasoline Dispensing Facility
S-5	Newby Island Sanitary Landfill – Waste and Cover Material Dumping
S-6	Newby Island Sanitary Landfill – Excavating, Bulldozing and Compacting Activities
S-7	Diesel engine Powering Air Compressor
S-8 and S-9	Horizontal Grinder/Operations, Trommel Screen/Operations
S-10	Screening/Separating, Multi-material Recycling Sorting Line
S-153	Portable Self-Propelled Horizontal Grinder with Conveyor
S-156	Portable Diesel Engine Propel/Power Grinder
S-1003	Composting, aerated static piles, Green waste Composting Operations
S-1008	Waste material grinding, Multi-material Portable Tub Grinder
S-1009	Screening/Separating, Green waste, Portable Power Screen
S-1038	Portable Diesel Engine Powering 3300 Screen
S-1040	Portable Diesel Engine Powering Power Screen
S-1042	Portable Diesel Engine Powering Power Screen
S-1043	Screening/Separating, Green waste, Portable 3300 Screen
S-1055	Stationary Prime Diesel Engine Powering CASP Blower
S-1056	Stationary Prime Diesel Engine Powering CASP Blower
S-1057	Portable Backup Prime Diesel Engine
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. On November 30, 2021, Mr. Dennis Jang with the BAAQMD informed IDCC that the renewal application (Application Number [A/N] 28723) is open and in process and another renewal application will not be needed.

The conditions listed below are incorporated in the BAAQMD Permit to Operate (PTO) that expired August 1, 2022 but has not yet been incorporated into the Title V permit. All conditions have been reviewed for 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;
- Condition #27359 – applies to S#153

During the compilation of this report, the following deviations were discovered.

- Condition 26607 Part 2
 - The daily operating hours for the S-1040 were exceeded on 2/16 and 2/23.
- Condition 26609 Part 2
 - The daily operating hours for the S-1042 were exceeded on 5/16.

On July 21, 2021, Newby received the following permit conditions for S-1055, 1056, and 1057.

- Condition #27446 – applies S#1057; and
- Condition #27477 – applies to S#1055, 1056.

Please note that IDCC does not own the engines for S-1055, 1056, and 1057. As such, IDCC is inquiring with the owners, United Rentals, how to comply with the following permit conditions as the site does not have full autonomy on the equipment. IDCC followed up with the BAAQMD for recommendations on how to comply with these conditions under these circumstances. At this time, no recommendation has been provided by the BAAQMD.

- Condition 27446 Part 10
 - Part 10: Within 30 days after the end of every calendar year, the owner/operator shall provide a year-end summary of the total hours of operation or fuel usage for S-1057 for the previous 12 months. Please note the S-1057 engine did not run in 2021.
- Condition 27447 Part 2 and 3
 - Part 2: The owner/operator shall properly install, operate, and maintain a non-resettable totalizing meter to measure hours of operation and shall also record actual fuel usage at each engine, S-1055 and S-1056.
 - Part 3: The owner/operator shall ensure both engines S-1055 and S-1056 comply with the NOx and co emission limits in Regulation 9-8-304.2, and each calendar quarter, the owner/operator shall monitor to ensure that both engines comply with these emissions limits, in accordance with Regulation 9-8-503.

Newby also maintains an Authority to Construct (ATC) 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 BAAQMD on

November 21, 2019, and expired on November 21, 2021. On September 21, 2021, IDCC submitted a request to extend the ATC. On October 18, 2021, the BAAQMD informed IDCC that the ATC will not be cancelled. All conditions have been reviewed for compliance this reporting period.

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 02/01/2022 through 07/31/2022

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
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	There were unplanned shutdowns of the gas collection and control system (GCCS) that did not meet the exemption criteria in BAAQMD Rule 8-34-113. These events were reported to the BAAQMD as reportable compliance activities (RCA) and breakdown relief was requested. These events occurred on the following dates:

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 02/01/2022 through 07/31/2022

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
							<ul style="list-style-type: none"> • February 10, 2022 (IDs 08F38 and 08F39 – low temperature); • February 22, 2022 (IDs 08F64 and 08F65 – pump work); • March 21, 2022 (IDs 08G42 and 08G43 – sump maintenance); • April 6, 2022 (IDs 08G88 and 08G89 – routine quarterly sump jetting maintenance); • May 1, 2022 (IDs 08H21 and 08H22 – utility outage); • May 4, 2022 (IDs 08H34 and 08H35 - programmable logic controller [PLC] malfunction); • May 18, 2022 (IDs 08H81 and 08H82 - main blower variable Frequency Drive [VFD] malfunction) • June 15, 2022 (IDs 08J42 and 08J43 – Pacific Gas and Energy [PG&E] power outage); and • July 27, 2022 (IDs 08K52 and 08K53 – flame failure).

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 02/01/2022 through 07/31/2022

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
							On July 14, 2022, Ms. Aleah Zapf issued Notice of Violation (NOV) A61610 for an alleged failure to operate the GCCS continuously during RCA event Breakdown ID 08J42 and Excess Excursion ID 08J43, which was due to an unplanned utility power outage from PG&E. For additional information, including corrective actions taken, please refer to the July 22, 2022 10/30-Day Combined Deviation Letter and NOV Response Letter.
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 02/01/2022 through 07/31/2022

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 °C (< 131 °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 02/01/2022 through 07/31/2022

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

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 02/01/2022 through 07/31/2022

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

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 02/01/2022 through 07/31/2022

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
TOC (Total Organic Compounds 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	Intermittent	During a BAAQMD and California Air Resource Board (CARB) inspection conducted on April 27, 2022, five (5) alleged surface leaks exceeding 500 ppmv and four (4) alleged component leaks exceeding 1,000 ppmv were identified by BAAQMD and CARB staff. This resulted in the BAAQMD issuing NOV No. A61608 on June 1, 2022. For additional information, including corrective actions taken, please refer to the June 6, 2022 10/30-Day Combined Deviation Letter and NOV Response Letter.
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	Intermittent	During a BAAQMD and California Air Resource Board (CARB) inspection conducted on April 27, 2022, five (5) alleged surface leaks exceeding 500 ppmv and four (4) alleged component leaks exceeding 1,000 ppmv were identified by BAAQMD and CARB staff. This resulted in the BAAQMD issuing NOV No. A61608 on June 1, 2022. For additional information, including corrective actions taken, please refer to the June 6, 2022 10/30-Day Combined Deviation Letter and NOV 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 02/01/2022 through 07/31/2022

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 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
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 °F, averaged over any 3-hour period (applies to A-1/A-3 only) CT > 1400 °F, 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, the site was not yet able to provide SCS with the records needed to review. SCS will submit a Title V semi-annual report amendment to confirm compliance once records are available for review.

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 02/01/2022 through 07/31/2022

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 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
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

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 02/01/2022 through 07/31/2022

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

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 02/01/2022 through 07/31/2022

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 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 02/01/2022 through 07/31/2022

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)	Continuous	N/A
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 ₂ S	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

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 02/01/2022 through 07/31/2022

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
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
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: <i>from</i> 02/01/2022 <i>through</i> 07/31/2022

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 02/01/2022 through 07/31/2022

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	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 02/01/2022 through 07/31/2022

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
		System					
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	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 02/01/2022 through 07/31/2022

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
					> 5 gallons/minute		
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 02/01/2022 through 07/31/2022

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