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TV Tracking #: 804 (Semi-Annual)
TV Tracking #: 805 (Annual)

1. ☐ RECEIVED IN ENFORCEMENT: 09/29/2023

September 29, 2023

Director 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 Report, 8-34 Semi-Annual Report, 40 CFR Subpart AAA Semi-Annual Report, SSM Plan Report, Title V Semi-Annual Monitoring Report and Title V Annual Compliance Certification
Keller Canyon Landfill, Pittsburg, California (Title V Facility No. A4618)

Dear Sir or Madam:

Keller Canyon Landfill Company, LLC is pleased to submit the enclosed combined National Emission Standards for Hazardous Air Pollutants (NESHAP) report, Bay Area Air Quality Management District (BAAQMD), Regulation 8, Rule 34 Semi-Annual Report; Semi-Annual Startup, Shutdown and Malfunction (SSM) Plan Report; Title V Semi-Annual Monitoring Report and Title V Annual Compliance Certification (ACC) to the BAAQMD and the U.S. Environmental Protection Agency (EPA) Region IX for the Keller Canyon Landfill (Keller).

The NESHAP Report, Title V Semi-Annual Monitoring Report, BAAQMD Rule 8-34 Semi-Annual Report, and the SSM Plan Report cover the period from March 1, 2023 through August 31, 2023. The Title V ACC Report covers the period from September 1, 2022 through August 31, 2023.

The Title V report meets the requirements specified in the Title V permit, BAAQMD guidance on Title V report submittals, and Regulation 2, Rule 6. The Rule 8-34 report includes the information required by BAAQMD Rule 8-34-411 and also satisfies the requirements under the New Source Performance Standards (NSPS) for municipal solid waste landfills (40 Code of Federal Regulation [CFR] Part 60, Subpart WWW and applicable sections of 40 CFR Part 62, Subpart OOO which became effective on July 21, 2021), including 40 CFR 60.757(f)/40 CFR 62.16724(h). 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 Keller.

If you have any questions regarding this submittal, please do not hesitate to reach out to Antonia Gunner at (619) 201-3764 or agunner@republicservices.com or Maria Bowen at (619) 455-9518 or mbowen@scsengineers.com.

Sincerely,

Josh Mills
General Manager
Keller Canyon Landfill

cc: Antonia Gunner, Keller
Maria Bowen, SCS Engineers
Hannah Morse, SCS Engineers

NESHAP Report/NSPS/BAAQMD Rule 8-34 Semi-Annual Report, and SSM Plan Semi-Annual Report
Keller Canyon Landfill
Pittsburg, California (Title V Facility No. 4618)

Prepared for:

Keller Canyon Landfill Company, LLC
901 Bailey Road
Pittsburg, CA 94565

For Submittal to:

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

SCS ENGINEERS

01205161.01 Task 1 | September 2023

3843 Brickway Boulevard, Suite 208
Santa Rosa, CA 95403
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This submittal consisting of the New Source Performance Standards (NSPS)/Bay Area Air Quality Management District (BAAQMD) Rule 8-34 Semi-Annual/National Emission Standards for Hazardous Air Pollutants (NESHAP) Report, and the Semi-Annual Startup, Shutdown, and Malfunction (SSM) Plan Report for the Keller Canyon Landfill in Pittsburg, California, dated September 2023, was prepared and reviewed by the following:

Hannah Morse
Staff Professional
SCS ENGINEERS

Maria Bowen
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Patrick S. Sullivan, REA, CPP, BCES
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Table of Contents

Section Page

Tables

Appendices

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

1.0 INTRODUCTION

On behalf of Keller Canyon Landfill Company, LLC (KCLC), SCS Engineers (SCS) hereby submits this New Source Performance Standard (NSPS), National Emissions Standard for Hazardous Air Pollutants (NESHAP), and Bay Area Air Quality Management District (BAAQMD or District) Rule 8-34 Semi-Annual Report and Semi-Annual Start-up, Shutdown, and Malfunction (SSM) Plan Report for the period of March 1, 2023 through August 31, 2023 to the BAAQMD.

1.1 UPDATED NESHAP 40 CFR 63, SUBPART AAAA

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 (mg/year), as of September 27, 2021, the site became subject to the NESHAP under 40 CFR 63, Subpart AAAA, which essentially implement and enhance provisions of 40 CFR 60, Subparts XXX (which were updated NSPS for Municipal Solid Waste (MSW) landfills promulgated in 2016) as well as remove the SSM Plan requirements. However, because the Title V Permit references, Subpart WWW and the outdated SSM requirements, this semi-annual report will continue to include Subpart WWW and SSM requirements. References to Subpart WWW 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. KCLC has chosen to comply with provisions of Subpart AAAA in lieu of equivalent provisions of Subpart OOO (or XXX), as allowed by the regulation.

For the entire reporting period from March 1, 2023 through August 31, 2023, this Semi-Annual Report complies with the sections specified in Subpart WWW, 40 CFR 60.757(f), and Subpart AAAA, 40 CFR 63.1981(h), which describes the items to be submitted in an annual report for landfills using an active collection system. In accordance with NESHAP 40 CFR 63, Subpart AAAA, this report is submitted semi-annually. This report includes a certification signed by a Responsible Official which is provided in Appendix A.

2.0 SITE BACKGROUND INFORMATION

The Keller Canyon Landfill (Keller or Site) is located in Pittsburg, California and is owned and operated by KCLC. The Landfill began accepting waste circa 1992. The site is currently in operation, accepting nonhazardous solid waste and inert waste.

2.1 EXISTING AIR PERMITS

Keller maintains a BAAQMD permit to operate (PTO) (Plant No. 4618), which includes conditions for the wellfield, collection system, and flare station (Condition No. 17309). This condition incorporates all applicable requirements from NSPS Subpart WWW and BAAQMD Rule 8-34, which are addressed in this report. Keller also maintains a Title V Permit (Facility No. A4618), which was issued on August 18, 2021 and expires on August 17, 2025.

As the new rules are in effect, they are being implemented by the Landfill, and applications for the Title V Modification to add the new rule elements, specific parts of NSPS Subpart OOO and NESHAP, and remove the old NSPS Subpart WWW removed will be submitted accordingly.

A Gas Collection and Control System (GCCS) Design Plan was prepared for the site to review and determine the adequacy of the existing landfill gas (LFG) system. The current design of the system was determined to be adequate to comply with both NSPS, NESHAP 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 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 Keller 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 from collection system components.

KCLC, LLC owns and operates the wellfield and the two enclosed flares, the A-1 Flare and A-2 Flare, permitted under the BAAQMD Title V Permit Facility Number A4618. Ameresco – Keller Canyon, LLC (Ameresco) owns and operates two internal combustion (IC) engines fueled by LFG diverted from the GCCS. Ameresco maintains and reports via a separate BAAQMD Title V Permit (Facility Number B7667). In September 2023, the permitted A-3 flare begun construction, in accordance with application No. 28642, to replace the A-1 Flare.

In the event the LFGTE facility goes offline and the LFG flares goes off-line concurrently, an automatic valve is actuated that prevents LFG flow to the control systems. As a result, LFG flow from the collection system ceases entirely, such that there is no free-venting of uncombusted LFG to the atmosphere.

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

3.0 REPORTING REQUIREMENTS

The following information is required to be reported in a semi-annual report:

Table 1. Reporting Requirements, Corresponding Regulatory References

NSPS Subpart WWW	Updated NESHAP Subpart AAAA
40 CFR 60.757(f), (g)	**40 CFR 63.1981(h), (i), (j), (k), (l)**
Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).	Number of times that applicable parameters monitored under 40 CFR 63.1958(b), (c), and (d) were exceeded and when the gas collection and control

NSPS Subpart WWW	Updated NESHAP Subpart AAAA
40 CFR 60.757(f), (g)	**40 CFR 63.1981(h), (i), (j), (k), (l)**
	system was not operating under 40 CFR 63.1958(e), including periods of SSM.
Description and duration of all periods when the gas stream is diverted from the control device.	Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified under 40 CFR 63.1961.
Description and duration of all periods when the control device was not operating for more than 1 hour.	Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.
All periods when the collection system was not operating in excess of 5 days.	All periods when the collection system was not operating.
The location of each 500 ppmv methane exceedance, and the concentration recorded at each location for which an exceedance was recorded in the previous month.	The location of each exceedance of the 500-ppm methane concentration as provided in 40 CFR 63.1958(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755 paragraphs (a)(3), (b), and (c)(4).	The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 63.1960(a)(3) and (4), (b), and (c)(4).
Required information of the initial performance source test report pursuant to 40 CFR 60.757(g).	Required information of the initial performance source test report pursuant to 40 CFR 63.1981(i).
--	For any corrective action analysis for which corrective actions are required in 40 CFR 63.1960(a)(3)(i) or (a)(5) and that take more than 60 days to correct the exceedance, the root cause analysis conducted.
--	Each owner or operator required to conduct enhanced monitoring in 40 CFR 63.1961(a)(5) and (6) must include the results of all monitoring activities conducted during the period.
--	Where an owner or operator subject to the provisions of subpart 40 CFR 63.1981(k) seeks to demonstrate compliance with the operational standard for temperature in § 63.1958(c)(1) and a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured is greater than or equal to 1,000 ppmv, then you must report the date, time, well identifier, temperature

NSPS Subpart WWW	Updated NESHAP Subpart AAAA
40 CFR 60.757(f), (g)	**40 CFR 63.1981(h), (i), (j), (k), (l)**
	and carbon monoxide reading via email to the Administrator within 24 hours of the measurement.
--	Beginning no later than September 27, 2021, the owner or operator must submit reports electronically according to paragraphs 40 CFR 63.1981(l)(1) and (2) of this section.
--	--
--	Submit semi-annual CMS summary reports including required items listed in 40 CFR 63.10(e)(3)(vi)

Note that BAAQMD Rule 8-34 incorporates the NSPS Subpart WWW requirements in various instances.

3.1 MONITORED PARAMETERS

The following information is required to be monitored:

Table 2. Monitored Parameters, Corresponding Regulatory References

NSPS Subpart WWW	Updated NESHAP Subpart AAAA
40 CFR 60.756(a), (b), (c), (d)	**40 CFR 63.1961(a), (b), (f)**
Vacuum applied to the extraction wells via the gas collection header is monitored on a monthly basis. A vacuum must be maintained at each wellhead to be in compliance with 40 CFR 60.753 (b).	Vacuum applied to the extraction wells via the gas collection header is monitored on a monthly basis. A vacuum must be maintained at each wellhead to be in compliance with 40 CFR 63.1961 (a)(1).
Nitrogen or oxygen content of LFG at the wellheads is monitored on a monthly basis. Nitrogen must be less than 20 percent (%) or oxygen less than five (5) % to comply with 40 CFR 60.753 (c).	Nitrogen or oxygen content of LFG at the wellheads is monitored on a monthly basis.
Temperature of the LFG at the wellheads is monitored on a monthly basis. Temperature must be maintained below 55 degrees C (131 degrees F) to comply with 40 CFR 60.753 (c).	Temperature of the LFG at the wellheads is monitored on a monthly basis. Temperature must be maintained below 62.8 degrees C (145 degrees F) to comply with 40 CFR 63.1961(a)(3).
A temperature or flame presence monitoring device with a continuous recorder, and a gas flow rate measuring device, which records flow at least once every 15 minutes, must be installed at the flare station. The temperature/flame presence and LFG flow rate monitoring data are used to determine the amount of time the LFG collection and control systems are on-line and to ensure compliance with the minimum temperature requirement for enclosed flares. The flare	A temperature or flame presence monitoring device with a continuous recorder, and a gas flow rate measuring device, which records flow at least once every 15 minutes, must be installed at the flare station. The temperature/flame presence and LFG flow rate monitoring data are used to determine the amount of time the LFG collection and control systems are on-line and to ensure compliance with the minimum temperature requirement for enclosed

NSPS Subpart WWW	Updated NESHAP Subpart AAAA
40 CFR 60.756(a), (b), (c), (d)	**40 CFR 63.1961(a), (b), (f)**
monitoring devices must be operating continuously to comply with 40 CFR 60.756 (b) and to show that the flare is on-line at any time that the collection system is operating (in compliance with 40 CFR 60.753 (e) and (f)).	flares. The flare monitoring devices must be operating continuously to comply with 40 CFR 63.1961(b) and to show that the flare is on-line at any time that the collection system is operating (in compliance with 40 CFR 63.1958 (e) and (f)).
Landfill surface emissions monitoring was performed on a quarterly basis to measure concentrations of total organic carbon (TOC) as methane. A portable flame ionization detector (FID) organic vapor analyzer, which meets NSPS specifications, was used to measure concentrations of TOC as methane (in compliance with 40 CFR 60.756(f).	Landfill surface emissions monitoring was performed on a quarterly basis to measure concentrations of TOC as methane. A portable FID organic vapor analyzer, which meets NSPS specifications, was used to measure concentrations of TOC as methane (in compliance with 40 CFR 63.1961(f)).
The landfill surface was inspected at least monthly for evidence of cracks or other surface integrity issues, in accordance with 40 CFR 60.755(c)(5).	The landfill surface was inspected at least monthly for evidence of cracks or other surface integrity issues, in accordance with 40 CFR 63.1960(c)(5).
Per 40 CFR 60 758(c)(1)(i), the average temperature of the flare for a 3-hour time period cannot fall below 28°C (50°F) less than the average operation temperature based on the most recent source test except during periods of SSM.	Per 40 CFR 63.1983(c)(1)(i), the average temperature of the flare for a 3-hour time period cannot fall below 28°C (50°F) less than the average operation temperature based on the most recent source test. Please note, continuous monitoring of temperature monitoring is required at all times except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (in compliance with 40 CFR 63.1961(h)).

Note that BAAQMD Rule 8-34 incorporates the NSPS Subpart WWW requirements in various instances.

3.1.1 Gas Extraction System Downtime

During the reporting period, the LFG extraction system was offline, per condition No. 20 of the PTO, on several occasions for a total of 403.41 hours. During this reporting period, 328.43 of the downtime hours were a result of construction and were covered under the BAAQMD approved 118 Plans in place. Site submitted two 118 plans during the reporting period, covering the time period of March 14, 2023 through June 1, 2023 and July 5, 2023 through October 6, 2023. Shutdowns involved pre-programmed or manual system shutdowns for inspection, maintenance and/or repair of the GCCS, and thus meet the criteria for allowed GCCS downtime, as specified in Rule 8-34-113 and in accordance with the BAAQMD November 5, 2018 Compliance Advisory with one (1) exception. The event occurred on July 7, 2023 and was due to air compressor failure.

A Reportable Compliance Activity (RCA) form was submitted to the BAAQMD on July 7, 2023, to request breakdown relief and to report the parametric excursion for the downtime event. BAAQMD

issued RCA and Breakdown IDS of 08T40 and 08T41. The 10- and 30-Day Breakdown report was submitted on July 17, 2023.

Pursuant to Title V Permit Condition 17309, Part 20, collected LFG shall be vented to either:

(a) Two on-site flares operating concurrently, or

(b) One on-site flare and two off-site engines operating concurrently.

Apart from the events described above, there were no instances during the reporting period during which both flares were not operating concurrently while one or more engines were offline, or engines were operating concurrently without operation of at least one flare, outside of collection system installation, maintenance, or repair performed in compliance with Regulation 8-34-113, 116, 117, and 118.

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. GCCSs are "closed" systems designed and constructed with mechanisms to prevent the uncontrolled release of LFG to the atmosphere. These automated mechanisms, as well additional manual shutdown procedures, are standard work practices that are implemented during all system shutdowns to minimize emissions of methane to the atmosphere. As noted above, collected LFG was at no time diverted from the flare, because the blowers automatically shut down whenever the flare shuts down. Thus, collected LFG was at no time diverted from both control devices during the reporting period.

3.1.2 Emission Control System Downtime

A-1 Flare

During the reporting period, the flare was off-line on several occasions. A summary of A-1 Flare downtime is provided in **Table 1b**, including the date, reason for the downtime, and the total elapsed time for each event. During the reporting period, the flare was offline over a cumulative period of approximately 1,557.55 hours. During the reporting period, 1,405.20 of the downtime hours were a result of construction and are covered under the BAAQMD approved 118 Plan. Emission control system downtime records are available for review at the site. A-1 flare is due to be replaced by the A-3 flare in late September.

A-2 Flare

During the reporting period, the flare was off-line on several occasions. A summary of A-2 Flare downtime is provided in **Table 1c**, including the date, reason for the downtime, and the total elapsed time for each event. During the reporting period, the flare was offline over a cumulative period of approximately 190.90 hours. During the reporting period, 130.87 of the downtime hours were a result of construction and are covered under the BAAQMD approved 118 Plan. Emission control system downtime records are available for review at the site.

LFGTE Facility

During the reporting period, individual IC engines were offline on several occasions. In addition, there were several periods when the entire LFGTE facility was offline (both engines were offline

concurrently). Downtime logs, which include individual IC engine shut downs, are included in Appendix C.

As previously noted, whenever the LFGTE facility and the flares are offline concurrently, LFG flow to the control systems is automatically stopped. Therefore, during this reporting period, there were no instances during which LFG flow passed through the control devices uncontrolled (i.e., free venting), and the collected LFG stream was never diverted from the control devices.

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, 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 due to well raising/active filling.

Sixteen (16) wells were taken off-line during the reporting period due to proximity to active fill and well raising. Seven (7) wells were abandoned due to poor gas production, and twelve (12) new wells were started up during the reporting period.

Details of individual well shutdown and well startups occurring during the reporting period are provided in Table 2. Please see the Semi-Annual SSM Report included as Section II of this report 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 the flare and the flare combustion temperature. As required by Rule 8-34, the Keller flares are equipped with a flow measuring device and a temperature gauge that provide continuous readout displays using digital chart recorders. During the reporting period, the flow meter and temperature gauge/recorder 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

Keller is required by permit condition No. 17309, Part 23 to operate the A-1 and A-2 Flares in such a manner that the combustion zone temperature within the flares do not drop below the permitted limit of 1,504 and 1,400 degrees Fahrenheit (°F) (averaged over a 3-hour period), respectively, or a higher or lower temperature based on the most recent source test.

From March 1, 2023 through August 31, 2023, the minimum temperature above which the A-1 Flare was required to operate was 1,536°F (test temperature of 1,586°F minus 50°F) based on the 2022 source test, for which the final report was issued on September 29, 2022.

From March 1, 2023 through March 16, 2023, the minimum temperature above which the A-2 Flare was required to operate was 1,513°F (test temperature of 1,563°F minus 50°F), based on the source test results in the test report dated March 19, 2022. From March 17, 2023 through August 31, 2023, the minimum temperature above which the A-2 Flare was required to operate was

1,501°F (test temperature of 1,551°F minus 50°F), based on the source test results in the test report dated March 17, 2023.

During the reporting period, the A-1 Flare operated above the permitted limit of 1,504°F at all times, except during periods that can be excluded from the average temperature. The flare operating records also indicated that the flare combustion zone temperature did not drop below 1,536°F for the entirety of the reporting period.

During the reporting period, the A-2 Flare operated above the permitted limit of 1,400°F at all times, except during periods that can be excluded from the average temperature. The flare operating records also indicated that the flare combustion zone temperature did not drop below 1,513°F on a three-hour average basis while in operation from the start of the reporting period through March 16, 2023. And not below 1,501°F from March 17, 2023 through the end of the reporting period.

Flare temperature records are available for review at the site. Excerpts from the March 17, 2023 source test report, summarizing the test results for A-2 Flare is provided in **Appendix D** of this report. The September 2022 source test of A-1 Flare was provided in the previous semi-annual report.

3.2 COMPONENT LEAK QUARTERLY MONITORING

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

3.2.1 First Quarter 2023 Monitoring

SCSFS conducted component leak testing of the wellfield and flare station on March 13, 2023. One (1) component leak above 1,000 ppm_v was detected at the flare station during the First Quarter 2023 monitoring events. Re-monitoring was conducted on March 20, and 30, 2023. The location returned to below 1,000 ppm_v by the second re-monitoring event.

3.2.2 Second Quarter 2023 Monitoring

SCSFS conducted component leak testing of the wellfield and flare station on June 21, 2023. One (1) component leak above 1,000 ppm_v was detected at the flare station during the Second Quarter 2023 monitoring events. Re-monitoring was conducted on June 30, and July 10, 2023. The location returned to below 1,000 ppm_v within the first re-monitoring event.

3.3 CONTROL EFFICIENCY

LFG Flare A-1 was tested on August 10, 2022 to demonstrate compliance with the control efficiency standard of 98 percent NMOC destruction efficiency or outlet concentration of 30 ppm_v of NMOC as methane (for flares) as required by BAAQMD Rules 8-34-301.3, 8-34-412, 8-34-501.4, and Condition # 17309, Part 30. The NMOC destruction efficiency for the August 2022 source test (source test report dated September 29, 2022) was measured to be >99.64 percent by weight, and the NMOC as methane concentration in the flare outlet was <2.5 ppm_v. As such, Flare A-1 is in compliance with the aforementioned rules and permit condition by meeting the exhaust ppm_v limit.

LFG Flare A-2 was also tested on January 17, 2023 to demonstrate compliance with the control efficiency standard of 98 percent NMOC destruction efficiency or outlet concentration of 30 ppm_v of NMOC as methane (for flares) as required by BAAQMD Rules 8-34-301.3, 8-34-412, 8-34-501.4, and Condition # 17309, Part 30. The NMOC destruction efficiency for the January 2023 source test (source test report dated March 17, 2023) was measured to be >98.79 percent by weight, and the NMOC as methane concentration in the flare outlet was <2.2 ppm_v. As such, Flare A-2 is in compliance with the aforementioned rules and permit condition by meeting the exhaust ppm_v limit.

Excerpts from the March 17, 2023 source test report, summarizing the test results for Flare A-2 is provided in **Appendix D** of this report. September 2022 source test of Flare A-1 was provided in the previous semi-annual report.

3.4 LANDFILL SURFACE EMISSIONS MONITORING

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

3.4.1 First Quarter 2023 Monitoring

SCSFS technicians monitored the landfill surface for leaks with a methane concentration of greater than 500 ppm_v for instantaneous monitoring and 25 ppm_v for integrated monitoring on March 13, 20, 30, and April 12, 2023. Surface emissions in excess of 500 ppm_v were detected at seven (7) locations during the First Quarter 2023 monitoring event. Calculated integrated monitoring in excess of 25 ppm_v were detected at twenty-five (25) locations during the First Quarter 2023 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the First Quarter 2023 SEM report (**Appendix E**).

SCSFS 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 first and second 10-day and one-month re-monitoring event for these locations on March 20, 30 and April 12, 2023, respectively. All the instantaneous locations were under the 500 ppm_v threshold and thus back in compliance. All but five (5) integrated locations, Grid No. 68, 76, 84, 91, and 93, were under the 25 ppm_v threshold. Expansion of the wellfield began in July of 2023 to remediate these exceedances.

3.4.1 Second Quarter 2023 Monitoring

SCSFS technicians monitored the landfill surface for leaks with a methane concentration of greater than 500 ppm_v for instantaneous monitoring and 25 ppm_v for integrated monitoring on June 8, 20, 21, 30, and July 10, and 20, 2023. Surface emissions in excess of 500 ppm_v were detected at twenty-one (21) locations during the Second Quarter 2023 monitoring event. Surface emissions in excess of 25 ppm_v were detected at nine (9) locations during the Second Quarter 2023 monitoring event. The locations with the exceedances and associated methane concentrations are provided in the Second Quarter 2023 SEM report (**Appendix E**).

SCSFS 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 first and second 10-day and one-month re-monitoring events for these locations on June 30, and July 10, and 20, 2023 respectively. All the locations were under the respective 500 $ppm_{v,}$ and 25 ppm_v thresholds and thus back in compliance.

3.5 WELLHEAD MONTHLY MONITORING

Monthly wellhead monitoring for pressure, temperature, and oxygen content was conducted by SCSFS from March 1, 2023 through August 31, 2023 to comply with BAAQMD Rule 8-34-305 and 9-34-414, as well as NSPS/NESHAP requirements. The results of this monitoring are summarized below. Wellhead exceedances are provided in **Table 3, 4, and 5.** After June 21, 2021, for wellhead pressure and temperature exceedances that are unresolved after 15 days, a root cause analysis must be conducted to correct the exceedances as soon as practicable. Well exceedance documentation is provided in **Appendix F**.

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

3.5.1 Pressure

The majority of the operational extraction wells were operating 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 5**. 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 and NESHAP regulations and in Rule 8-34.

As of the end of the previous reporting period, all but two (2) wells, KCLEW193 and KCLEW194, were operating under positive pressure. These wells will be brought back under positive pressure according to appropriate timelines, and will be documented in the next semi-annual reporting period.

3.5.2 Oxygen

Keller has elected to use oxygen as its compliance standard under Rule 8-34-305, rather than nitrogen. Per Keller's PTO Condition No. 17309, Part 19(b)i, KCLW27RR is permitted to operate at an oxygen Higher Operating Value (HOV) of 15% oxygen.

Horizontal Collectors KCLEWHC3 (HC-3), KCHC2001 (HC-2001), and Leachate Collectors KCLEWR1 (LCRS-1) and KCLEWLR2 (LCRS-2) are exempt from NSPS wellfield regulations because they are located outside of the waste footprint. Per Title V Condition Number 17309 Part 18(a)(ii), collectors located outside of waste are not subject to NSPS operating parameters.

The majority of the wells were operating within the regulatory limit of five (5) percent oxygen during the monitoring events conducted during the reporting period. The dates when wells were operating with excessive oxygen, and the well identification number, corrective actions, and re-monitoring results for these wells are provided in **Table 6**.

As of the end of the reporting period, all of the operating wells were operating with an oxygen concentration below the 5 or 15 percent limit except for seven (7) wells (KCLEW10A, KCEW2105,

KCLEWLR2, KCLFEW02, KCLFEW30, KCLFEW33, and KCLFEWB6). These wells will be returned to below the 5 or 15 percent limit as specified in BAAQMD Rule 8-34-414, and compliance will be documented in the next semi-annual report. Note under the EG rule and Subpart OOO, which took effect June 21, 2021, and the updated NESHAP Rule that took effect September 27, 2021, oxygen above 5 percent is no longer an exceedance, but under BAAQMD Rule 8-34-414 it still is, and the Landfill will continue to follow these requirements.

As of the end of the previous reporting period three (3) wells (KCLFEWB3, KCLFEW96, and KCLW27RR) were operating with an oxygen concentration above the 5 percent limit. All of these wells were decommissioned or brought back into compliance during this reporting period.

3.5.3 Temperature

BAAQMD Rule 8-34-305 and NSPS Subparts WWW/OOO requires the landfill gas temperature in each wellhead to measure less than 55 degrees Celsius (°C) or 131°F. However, Condition No. 17309, Part 19b(i) in Keller's BAAQMD PTO allows Keller to operate wells KCLEW-12A, KCLEW-148, KCLEW-14A, KCLEW-154, KCLEW-26A, KCLFEW-27, KCLFEW-34, KCLFEW-53, KCLFEW-54, KCLFEW-57, KCLFEW-68, KCLFEW-73 at an alternative temperature of 150°F.

Horizontal Collectors KCLEWHC3 (HC-3), KCHC2001 (HC-2001), and Leachate Collectors KCLEWR1 (LCRS-1) and KCLEWLR2 (LCRS- 2) are exempt from 8-34, NSPS, and NESHAP wellfield regulations because they are located outside of the waste footprint. Per Title V Condition Number 17309 Part 18(a)(ii), collectors located outside of waste are not subject to wellhead operating parameters.

The majority of wells were operating within their respective limits of 131°F or 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 7.**

As of the end of the reporting period, one (1) well (KCEW2125) were operating with a temperature above 131 °F. Compliance will be documented for these wells in the next semi-annual report.

As of the end of the previous reporting period, one (1) well (KCEW2203) was operating with a temperature higher than 131 °F. Additionally, there were no wells above 145°F that triggers additional monitoring requirements under NESHAP.

3.5.1 Root Cause Analysis

40 CFR 63.1981(j) and the 40 CFR 62.16724(k) require notifications for corrective action that will exceed 60 days to implement. Such corrective actions also require a "root cause analysis" to determine the reason for the exceedance if exceedances cannot be corrected in 15 days. For corrective actions that require more than 60 days to complete, an additional "corrective action analysis" is also required. There were multiple exceedances during the reporting period where this occurred, and the appropriate corrective actions and root cause analyses were completed. The root cause analysis and corrective action reports can be found in **Appendix F**.

3.6 COVER INTEGRITY MONITORING

Under BAAQMD Rule 8-34-510 and the NSPS/NESHAP, 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 in conjunction with the wellhead monitoring on:

- March 12, 2023;
- April 16, 2023;
- May 31, 2023;
- June 16, 2023;
- July 16, 2023; and
- August 16, 2023.

Procedures specified in the GCCS Design Plan were utilized. 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

Keller 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

Keller is an active landfill that continues to accept refuse for disposal. From March 1, 2023 through August 31, 2023, the site accepted 583,956.51 tons of decomposable waste and cover material, resulting in a cumulative waste-in-place total of 26,286,684.38 tons as of August 31, 2023.

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.

3.9 24 HOUR HIGH TEMPERATURE

40 CFR 63.1981(k) and 40 CFR 62.16724(q) require the reporting of any landfill gas temperature measurements greater than or equal to 170°F. During the reporting period, there were no readings greater or equal to 170°F.

3.10 TREATMENT SYSTEM MONITORING PLAN

There are no vents within the treatment system, which allow venting of gas to the atmosphere, and the treatment system is not designed nor equipped to bypass a control device and vent directly to the atmosphere. A calibrated flow meter is installed to measure flow to the treatment system. Treated landfill gas, which cannot be routed for sale or beneficial use, is routed to a control system.

Ameresco maintains and operates all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required by §62.16726(b)(5)(ii) and §63.1983(b)(5)(ii). During this reporting period, per Ameresco there were no parameter exceedances of the Treatment System Monitoring Plan.

SECTION II. SSM PLAN REPORT

As mentioned previously, Keller is subject to 40 CFR Part 63, Subpart AAAA, the NESHAPS for MSW Landfills. Keller 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 September 1, 2022 through February 28, 2023 are documented in this section. Note that he SSM requirements under the NESHAP Subpart AAAA rule ended on September 27, 2021. However, since these SSM requirements are contained within the site's Title V permit, Keller has continued to comply with them.

During the reporting period, there were one hundred and forty-five (145) SSM events involving shutdown of the entire GCCS. One hundred twenty-seven (127) of these events were planned startups/shutdowns and eighteen (18) of these startup/shutdown events were associated with malfunctions.

During the reporting period, there were thirty-four(34) SSM events involving the wellfield as seven (7) wells were permanently decommissioned due to poor gas quality, twelve (12) new wells were started up and seven (7) wells were taken offline and returned online before the end of the reporting period. 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 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 3a (GCCS Downtime), 3b (A-1 Flare Downtime), 3c (A-2 Flare Downtime), and 4 (Individual Well Startup, Shutdown, and Decommissions)**.

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.

Tables

Table 1a. GCCS Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime
3/2/23 11:05	**3/2/23 13:14**	**2.15**	**Air compressor service**
3/2/23 13:31	**3/2/23 13:36**	**0.08**	**Air compressor service**
3/2/23 13:59	**3/2/23 14:05**	**0.10**	**Air compressor service**
3/2/23 16:30	**3/2/23 19:59**	**3.48**	**Air compressor service**
3/2/23 20:02	**3/2/23 20:07**	**0.08**	**Air compressor service**
3/2/23 21:04	**3/2/23 21:08**	**0.07**	**Air compressor service**
3/2/23 21:11	**3/2/23 21:16**	**0.08**	**Air compressor service**
3/2/23 22:40	**3/2/23 22:51**	**0.18**	**Air compressor service**
3/2/23 22:53	**3/2/23 23:06**	**0.22**	**Air compressor service**
3/2/23 23:06	**3/2/23 23:20**	**0.23**	**Air compressor service**
3/3/23 7:27	**3/3/23 7:38**	**0.18**	**Air compressor service**
3/3/23 8:21	**3/3/23 8:33**	**0.20**	**Air compressor service**
3/3/23 10:02	**3/3/23 10:52**	**0.83**	**Air compressor service**
3/8/23 9:44	3/8/23 10:10	0.43	Shutdown to install generator plugs
3/8/23 10:18	3/8/23 11:32	1.23	Shutdown to install generator plugs
3/9/23 11:41	3/9/23 11:45	0.07	Flare maintenance and troubleshooting
3/9/23 11:47	3/9/23 11:51	0.07	Flare maintenance and troubleshooting
3/9/23 11:56	3/9/23 19:20	7.40	Flare maintenance and troubleshooting
3/9/23 19:23	3/9/23 19:33	0.17	Flare maintenance and troubleshooting
3/9/23 19:36	3/9/23 19:44	0.13	Flare maintenance and troubleshooting
3/9/23 19:47	3/9/23 20:05	0.30	Flare maintenance and troubleshooting
3/9/23 20:08	3/9/23 20:13	0.08	Flare maintenance and troubleshooting

Table 1a. GCCS Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime
3/9/23 20:16	3/9/23 20:21	0.08	Flare maintenance and troubleshooting
3/9/23 20:26	3/9/23 20:30	0.07	Flare maintenance and troubleshooting
3/9/23 21:27	3/9/23 21:36	0.15	Flare maintenance and troubleshooting
3/9/23 21:52	3/9/23 21:54	0.03	Flare maintenance and troubleshooting
3/9/23 22:39	3/9/23 22:42	0.05	Flare maintenance and troubleshooting
3/10/23 1:01	3/10/23 1:06	0.08	Flare maintenance and troubleshooting
3/10/23 2:55	3/10/23 3:00	0.08	Flare maintenance and troubleshooting
3/10/23 3:16	3/10/23 3:21	0.08	Flare maintenance and troubleshooting
3/14/23 6:04	*3/14/23 6:08*	*0.07*	*Flare maintenance and troubleshooting*
4/3/23 9:54	*4/3/23 10:06*	*0.20*	*Manual shutdown for flare maintenance and troubleshooting*
4/3/23 10:10	*4/3/23 10:16*	*0.10*	*Manual shutdown for flare maintenance and troubleshooting*
4/3/23 10:49	*4/3/23 11:13*	*0.40*	*Manual shutdown for flare maintenance and troubleshooting*
4/3/23 15:27	*4/3/23 15:32*	*0.08*	*Manual shutdown for flare maintenance and troubleshooting*
4/3/23 19:20	*4/3/23 20:49*	*1.48*	*Air compressor service*
4/8/23 19:00	*4/8/23 22:03*	*3.05*	*Manual shutdown for flare maintenance and troubleshooting*
4/8/23 22:06	*4/8/23 22:12*	*0.10*	*Air compressor service*
4/9/23 14:00	*4/9/23 15:32*	*1.53*	*Air compressor service*
4/9/23 16:12	*4/10/23 10:58*	*18.77*	*Air compressor service*
4/12/23 7:35	*4/12/23 9:07*	*1.53*	*Air compressor service*
4/13/23 9:29	*4/13/23 10:29*	*1.00*	*Air compressor service*
4/13/23 10:50	*4/13/23 11:00*	*0.17*	*Air compressor service*
4/16/23 1:51	*4/16/23 10:04*	*8.22*	*Air compressor service*

Table 1a. GCCS Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime
4/16/23 11:56	*4/16/23 12:08*	*0.20*	*Shutdown to switch to generator power*
4/16/23 18:38	*4/17/23 8:28*	*13.83*	*Manual Manual Manual shutdown due to high flow when plant shutdown - restarted*
4/18/23 21:55	*4/19/23 0:35*	*2.67*	*Air compressor service*
4/21/23 14:41	*4/21/23 15:54*	*1.22*	*Air compressor service*
4/22/23 16:07	*4/22/23 18:39*	*2.53*	*Manual Manual shutdown due to high flow when plant shutdown - restarted*
4/22/23 18:45	*4/22/23 18:47*	*0.03*	*Manual shutdown for flare maintenance and troubleshooting*
4/22/23 18:49	*4/22/23 18:58*	*0.15*	*Manual shutdown for flare maintenance and troubleshooting*
4/22/23 19:01	*4/22/23 19:04*	*0.05*	*Manual shutdown for flare maintenance and troubleshooting*
4/22/23 19:17	*4/22/23 19:37*	*0.33*	*Manual shutdown for flare maintenance and troubleshooting*
4/22/23 23:07	*4/22/23 23:50*	*0.72*	*Manual shutdown for flare maintenance and troubleshooting*
4/22/23 23:51	*4/22/23 23:59*	*0.13*	*Manual shutdown for flare maintenance and troubleshooting*
4/24/23 7:48	*4/24/23 8:05*	*0.28*	*Manual Manual shutdown due to high flow when plant shutdown - restarted*
4/25/23 7:36	*4/25/23 7:40*	*0.07*	*Manual shutdown for flare maintenance and troubleshooting*
4/25/23 7:44	*4/25/23 8:47*	*1.05*	*Manual Manual shutdown due to high flow when plant shutdown - restarted*
4/27/23 11:59	*4/27/23 12:04*	*0.08*	*Manual shutdown for flare maintenance and troubleshooting on generator*
4/27/23 12:08	*4/27/23 12:30*	*0.37*	*Manual shutdown for flare maintenance and troubleshooting after generator turned off*
4/29/23 18:38	*4/29/23 20:18*	*1.67*	*Manual shutdown due to avoid compressor failure*
4/30/23 9:02	*4/30/23 13:19*	*4.28*	*Manual shutdown due to avoid compressor failure*
5/1/23 7:17	*5/1/23 8:22*	*1.08*	*Manual shutdown due to avoid compressor failure*
5/2/23 10:43	*5/2/23 11:05*	*0.37*	*Manual shutdown due to avoid compressor failure*
5/3/23 7:51	*5/3/23 7:56*	*0.08*	*Manual shutdown due to avoid compressor failure*
5/3/23 8:01	*5/3/23 8:03*	*0.03*	*Manual shutdown due to avoid compressor failure*

Table 1a. GCCS Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime
5/3/23 8:09	*5/3/23 8:13*	*0.07*	*Manual shutdown due to avoid compressor failure*
5/4/23 7:45	*5/4/23 7:57*	*0.20*	*Manual shutdown due to avoid compressor failure*
5/13/23 15:29	*5/13/23 18:19*	*2.83*	*Manual shutdown due to avoid compressor failure*
5/13/23 21:19	*5/13/23 22:58*	*1.65*	*Manual shutdown due to avoid compressor failure*
5/16/23 9:46	*5/16/23 17:27*	*7.68*	*Manual Shutdown for Scheduled Construction Header Tie-In*
5/19/23 10:36	*5/19/23 14:08*	*3.53*	*Manual Shutdown for Scheduled Construction Header Tie-In*
5/19/23 14:21	*5/19/23 14:30*	*0.15*	*Manual shutdown due to avoid compressor failure*
5/28/23 2:08	*5/28/23 9:58*	*7.83*	*Manual Shutdown for Scheduled Construction Header Tie-In*
5/28/23 10:03	*5/28/23 10:18*	*0.25*	*Manual shutdown due to avoid compressor failure*
5/30/23 4:02	*5/30/23 8:02*	*4.00*	*Manual Shutdown for Scheduled Construction Header Tie-In*
6/4/23 1:51	6/4/23 11:45	9.90	Manual shutdown due to avoid compressor failure
6/5/23 8:23	6/5/23 9:05	0.70	Manual shutdown due to avoid compressor failure
6/8/23 10:07	6/8/23 10:09	0.03	Manual shutdown due to avoid compressor failure
6/8/23 10:17	6/8/23 11:43	1.43	Manual shutdown due to avoid compressor failure
6/11/23 1:50	6/11/23 9:14	7.40	Manual shutdown due to avoid compressor failure
6/11/23 9:17	6/11/23 9:22	0.08	Manual shutdown due to avoid compressor failure
6/14/23 9:42	6/15/23 16:18	30.60	Manual shutdown for maintenance for Liquids in Header flare station
6/22/23 7:53	6/22/23 8:43	0.83	Maintenance at Power Generation Facility (PGF)
6/23/23 6:45	**6/23/23 6:54**	**0.15**	**Pacific, Gas, and Electric (PGE) testing**
6/23/23 11:31	**6/23/23 11:43**	**0.20**	**PGE testing**
6/25/23 18:46	**6/25/23 18:52**	**0.10**	**PGE power outage over**
6/26/23 10:41	6/26/23 10:46	0.08	Maintenance at PGF

Table 1a. GCCS Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime
7/1/23 17:10	7/1/23 19:48	2.63	Maintenance at PGF
7/1/23 20:06	7/1/23 20:09	0.05	Maintenance at PGF
7/2/23 15:40	7/2/23 17:50	2.17	Maintenance at PGF
7/6/23 11:05	*7/6/23 11:17*	*0.20*	*Maintenance at PGF*
7/6/23 11:47	*7/6/23 11:50*	*0.05*	*Maintenance at PGF*
7/6/23 12:14	*7/6/23 12:33*	*0.32*	*Maintenance at PGF*
7/6/23 13:15	*7/6/23 13:27*	*0.20*	*Maintenance at PGF*
7/6/23 14:34	*7/6/23 14:55*	*0.35*	*Maintenance at PGF*
7/6/23 15:04	*7/6/23 15:16*	*0.20*	*Maintenance at PGF*
7/6/23 15:54	*7/6/23 16:15*	*0.35*	*Maintenance at PGF*
7/6/23 18:05	*7/6/23 18:11*	*0.10*	*Maintenance at PGF*
7/7/23 1:07	*7/7/23 7:34*	*6.45*	*Flare maintenance and troubleshooting*
7/13/23 22:08	*7/14/23 0:20*	*2.20*	*Engine maintenance*
7/14/23 0:23	*7/14/23 0:30*	*0.12*	*Maintenance at PGF*
7/15/23 17:02	*7/15/23 20:39*	*3.62*	*Maintenance at PGF*
7/15/23 20:40	*7/15/23 20:45*	*0.08*	*Maintenance at PGF*
7/17/23 0:00	*7/17/23 10:23*	*10.38*	*John Zink conducting maintenance and inspection at flares*
7/17/23 10:28	*7/17/23 10:36*	*0.13*	*John Zink conducting maintenance and inspection at flares*
7/17/23 10:41	*7/17/23 11:06*	*0.42*	*John Zink conducting maintenance and inspection at flares*
7/17/23 11:10	*7/17/23 11:18*	*0.13*	*John Zink conducting maintenance and inspection at flares*
7/17/23 11:42	*7/17/23 15:26*	*3.73*	*John Zink conducting maintenance and inspection at flares*
7/17/23 20:50	*7/17/23 22:19*	*1.48*	*Engine maintenance*

Table 1a. GCCS Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime
7/17/23 22:49	*7/18/23 10:38*	*11.82*	*Engine maintenance*
7/19/23 7:45	*7/19/23 8:10*	*0.42*	*Engine maintenance*
7/20/23 8:22	*7/20/23 17:36*	*9.23*	*Engine maintenance*
7/20/23 17:39	*7/20/23 18:11*	*0.53*	*Engine maintenance*
7/20/23 18:14	*7/20/23 18:25*	*0.18*	*Engine maintenance/flare*
7/21/23 13:10	*7/21/23 13:59*	*0.82*	*Engine maintenance/flare*
7/21/23 13:52	*7/21/23 14:00*	*0.13*	*Engine maintenance/flare*
7/21/23 14:03	*7/21/23 14:09*	*0.10*	*Engine maintenance/flare*
7/23/23 6:16	*7/23/23 11:25*	*5.15*	*Engine maintenance/flare*
7/28/23 22:30	*7/29/23 2:30*	*4.00*	*Engine maintenance/flare*
8/3/23 16:04	*8/4/23 15:03*	*22.98*	*Engine maintenance/flare*
8/4/23 17:18	*8/4/23 21:11*	*3.88*	*Engine maintenance/flare*
8/4/23 22:40	*8/5/23 14:09*	*15.48*	*Engine maintenance/flare*
8/5/23 17:42	*8/5/23 20:19*	*2.62*	*Engine maintenance/flare*
8/5/23 20:39	*8/6/23 10:23*	*13.73*	*Engine maintenance/flare*
8/6/23 10:24	*8/6/23 10:32*	*0.13*	*Engine maintenance/flare*
8/6/23 11:55	*8/6/23 13:06*	*1.18*	*Engine maintenance/flare*
8/6/23 13:28	*8/6/23 13:53*	*0.42*	*Engine maintenance/flare*
8/6/23 14:18	*8/7/23 7:17*	*16.98*	*Engine maintenance/flare*
8/7/23 7:23	*8/7/23 7:28*	*0.08*	*Engine maintenance/flare*
8/7/23 13:17	*8/7/23 13:51*	*0.57*	*Engine maintenance/flare*
8/7/23 14:01	*8/8/23 8:00*	*17.98*	*Shutdown high temp FL- 100*

Table 1a. GCCS Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

GCCS Shutdown	Restarted	Downtime Hours	Reason for Downtime
8/8/23 12:35	*8/8/23 12:58*	*0.38*	*Source test flare*
8/8/23 16:22	*8/8/23 16:28*	*0.10*	*Engine maintenance/flare*
8/8/23 18:15	*8/9/23 8:59*	*14.73*	*Engine maintenance/flare*
8/9/23 9:08	*8/9/23 15:59*	*6.85*	*Engine maintenance/flare*
8/9/23 16:02	*8/9/23 16:11*	*0.15*	*Engine maintenance/flare*
8/9/23 21:26	*8/11/23 8:12*	*34.77*	*Engine maintenance/flare*
8/16/23 10:33	*8/16/23 11:47*	*1.23*	*flare flow meter calibration*
8/20/23 2:30	*8/20/23 13:33*	*11.05*	*Engine maintenance/flares*
8/21/23 13:11	*8/21/23 14:32*	*1.35*	*Engine maintenance/flares*
8/24/23 8:43	*8/24/23 10:39*	*1.93*	*Engine maintenance/flares*
8/24/23 10:45	*8/24/23 10:52*	*0.12*	*Engine maintenance/flares*
8/25/23 10:30	*8/25/23 11:07*	*0.62*	*Engine maintenance/flares*
8/25/23 11:11	*8/25/23 11:15*	*0.07*	*Engine maintenance/flares*
	Total:	**403.21**	
Total (excluding events under 118 plan)		**74.78**	

Notes:
Events in bold type denotes Malfunction Events
Events in italic type denotes Events under the 118 plan
Downtimes listed represent periods when both flares or one flare and at least one engine were offline concurrently per condition #20 in the permit.
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/NESHAP requirements and the BAAQMD Compliance Advisory for Municipal Solid Waste Landfills, dated November 5, 2018, except as noted.

Table 1b. Flare (A-1) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
3/2/23 11:05	3/2/23 13:14	2.15	Air compressor maintenance
3/2/23 13:31	3/2/23 13:36	0.08	Flare maintenance and troubleshooting
3/2/23 13:59	3/2/23 14:05	0.10	Flare maintenance and troubleshooting
3/2/23 16:30	3/2/23 19:59	3.48	Air compressor maintenance
3/2/23 20:02	3/2/23 20:07	0.08	FL100 in operation- 1 engine offline -performing restarts
3/2/23 21:04	3/2/23 21:08	0.07	FL100 in operation- 1 engine offline -performing restarts
3/2/23 21:11	3/2/23 21:16	0.08	FL100 in operation- 1 engine offline -performing restarts
3/2/23 22:36	3/3/23 10:54	12.30	FL100 in operation- 1 engine offline -performing restarts
3/5/23 10:57	3/6/23 11:54	24.95	FL100 in operation- 1 engine offline -performing restarts
3/8/23 9:44	3/8/23 10:11	0.45	Shutdown to install generator plugs
3/8/23 10:18	3/8/23 11:32	1.23	Shutdown to install generator plugs
3/9/23 11:41	3/9/23 11:45	0.07	FL100 in operation- 1 engine offline -performing restarts
3/9/23 11:47	3/9/23 11:51	0.07	FL100 in operation- 1 engine offline -performing restarts
3/9/23 11:56	3/9/23 19:20	7.40	FL100 in operation- 1 engine offline -performing restarts
3/9/23 19:23	3/9/23 19:33	0.17	FL100 in operation- 1 engine offline -performing restarts
3/9/23 19:36	3/9/23 19:44	0.13	FL100 in operation- 1 engine offline -performing restarts
3/9/23 19:47	3/9/23 20:05	0.30	FL100 in operation- 1 engine offline -performing restarts
3/9/23 20:08	3/9/23 20:13	0.08	FL100 in operation- 1 engine offline -performing restarts
3/9/23 20:16	3/9/23 20:21	0.08	FL100 in operation- 1 engine offline -performing restarts
3/9/23 20:26	3/9/23 20:30	0.07	FL100 in operation- 1 engine offline -performing restarts
3/9/23 21:27	3/9/23 21:36	0.15	FL100 in operation- 1 engine offline -performing restarts

Table 1b. Flare (A-1) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
3/9/23 21:52	3/9/23 21:54	0.03	FL100 in operation- 1 engine offline -performing restarts
3/9/23 22:39	3/9/23 22:42	0.05	FL100 in operation- 1 engine offline -performing restarts
3/10/23 1:01	3/10/23 1:06	0.08	FL100 in operation
3/10/23 2:55	3/10/23 3:00	0.08	FL100 in operation
3/10/23 3:16	3/10/23 3:21	0.08	FL100 in operation
3/14/23 6:04	*3/14/23 6:08*	*0.07*	*FL100 in operation*
3/22/23 15:15	*3/23/23 8:12*	*16.95*	*FL100 in operation*
4/3/23 9:55	*4/3/23 10:06*	*0.18*	*Shutdown during plant maintenance*
4/3/23 10:10	*4/3/23 10:16*	*0.10*	*Flare maintenance and troubleshooting*
4/3/23 10:49	*4/3/23 10:53*	*0.07*	*Flare maintenance and troubleshooting*
4/3/23 11:00	*4/3/23 11:13*	*0.22*	*Flare maintenance and troubleshooting*
4/3/23 15:27	*4/3/23 15:32*	*0.08*	*Flare maintenance and troubleshooting*
4/3/23 19:20	*4/3/23 20:49*	*1.48*	*shutdown during plant maintenance*
4/8/23 19:00	*4/8/23 22:04*	*3.07*	*Manual shutdown due to avoid compressor failure*
4/8/23 22:06	*4/8/23 22:12*	*0.10*	*Flare maintenance and troubleshooting*
4/8/23 22:14	*4/9/23 15:33*	*17.32*	*Manual shutdown due to avoid compressor failure*
4/9/23 16:12	*4/10/23 11:00*	*18.80*	*Manual shutdown due to avoid compressor failure*
4/12/23 7:35	*4/12/23 9:07*	*1.53*	*Manual shutdown due to avoid compressor failure*
4/13/23 9:28	*4/13/23 10:31*	*1.05*	*Manual shutdown due to avoid compressor failure*
4/13/23 10:50	*4/13/23 11:01*	*0.18*	*Manual shutdown due to avoid compressor failure*
4/16/23 1:51	*4/16/23 10:07*	*8.27*	*Manual shutdown due to avoid compressor failure*

Table 1b. Flare (A-1) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
4/16/23 11:55	*4/16/23 12:10*	*0.25*	*shutdown to switch to generator power*
4/16/23 18:38	*4/17/23 8:28*	*13.83*	*Manual shutdown due to high flow when plant shutdown - restarted*
4/18/23 21:55	*4/19/23 0:36*	*2.68*	*Manual shutdown due to avoid compressor failure*
4/21/23 14:41	*4/21/23 16:15*	*1.57*	*Manual shutdown due to avoid compressor failure*
4/22/23 16:07	*4/22/23 18:39*	*2.53*	*Manual shutdown due to high flow when plant shutdown - restarted*
4/22/23 18:45	*4/22/23 18:47*	*0.03*	*Flare maintenance and troubleshooting*
4/22/23 18:49	*4/22/23 18:58*	*0.15*	*Flare maintenance and troubleshooting*
4/22/23 19:01	*4/22/23 19:04*	*0.05*	*Flare maintenance and troubleshooting*
4/22/23 19:17	*4/22/23 19:37*	*0.33*	*Flare maintenance and troubleshooting*
4/22/23 22:05	*4/24/23 8:21*	*34.27*	*shutdown due to temperature shutdown during plant restart*
4/25/23 7:36	*4/25/23 7:40*	*0.07*	*Flare maintenance and troubleshooting*
4/25/23 7:44	*4/25/23 8:47*	*1.05*	*Manual shutdown due to high flow when plant shutdown - restarted*
4/27/23 11:59	*4/27/23 12:04*	*0.08*	*Manual shutdown for flare maintenance and troubleshooting on generator*
4/27/23 12:08	*4/27/23 12:30*	*0.37*	*shutdown to return to line power*
4/29/23 18:38	*4/29/23 20:19*	*1.68*	*Manual shutdown due to avoid compressor failure*
4/30/23 9:02	*4/30/23 13:19*	*4.28*	*Manual shutdown due to avoid compressor failure*
4/30/23 13:37	*4/30/23 13:42*	*0.08*	*Flare maintenance and troubleshooting*
5/1/23 7:17	*5/1/23 8:23*	*1.10*	*Manual shutdown due to avoid compressor failure*
5/2/23 10:43	*5/2/23 11:05*	*0.37*	*Manual shutdown due to avoid compressor failure*
5/3/23 7:51	*5/3/23 7:56*	*0.08*	*Manual shutdown due to avoid compressor failure*
5/3/23 8:01	*5/3/23 8:03*	*0.03*	*Manual shutdown due to avoid compressor failure*

Table 1b. Flare (A-1) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
5/3/23 8:09	*5/3/23 8:13*	*0.07*	*Manual shutdown due to avoid compressor failure*
5/3/23 23:20	*5/4/23 7:57*	*8.62*	*Manual shutdown due to avoid compressor failure*
5/11/23 16:48	*5/12/23 7:43*	*14.92*	*Manual shutdown due to avoid compressor failure*
5/13/23 15:29	*5/13/23 18:26*	*2.95*	*Manual shutdown due to avoid compressor failure*
5/13/23 21:19	*5/13/23 23:05*	*1.77*	*Manual shutdown due to avoid compressor failure*
5/13/23 23:16	*5/13/23 23:19*	*0.05*	*Manual shutdown due to avoid compressor failure*
5/13/23 23:39	*5/15/23 19:33*	*43.90*	*Manual shutdown due to avoid compressor failure*
5/16/23 9:46	*5/16/23 17:42*	*7.93*	*Manual shutdown due to avoid compressor failure*
5/19/23 10:36	*5/19/23 14:02*	*3.43*	*Construction work shutdown*
5/19/23 14:05	*5/19/23 14:07*	*0.03*	*Manual shutdown due to avoid compressor failure*
5/19/23 14:21	*5/19/23 14:44*	*0.38*	*Manual shutdown due to avoid compressor failure*
5/19/23 16:34	*5/19/23 19:24*	*2.83*	*Construction work shutdown*
5/28/23 2:08	*5/28/23 9:58*	*7.83*	*Construction work shutdown*
5/28/23 10:03	*5/28/23 10:21*	*0.30*	*Manual shutdown due to avoid compressor failure*
5/28/23 10:45	*5/28/23 10:49*	*0.07*	*Manual shutdown due to avoid compressor failure*
5/30/23 4:02	*5/30/23 8:02*	*4.00*	*Construction work shutdown*
5/31/23 11:53	*5/31/23 13:05*	*1.20*	*Manual shutdown due to avoid compressor failure*
6/4/23 1:51	6/4/23 11:46	9.92	Manual shutdown due to avoid compressor failure
6/5/23 7:07	6/5/23 8:11	1.07	Manual shutdown due to avoid compressor failure
6/5/23 8:23	6/5/23 9:11	0.80	Manual shutdown due to avoid compressor failure
6/5/23 13:09	6/6/23 7:57	18.80	Manual shutdown due to avoid compressor failure

Table 1b. Flare (A-1) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
6/8/23 10:07	6/8/23 10:09	0.03	Manual shutdown due to avoid compressor failure
6/8/23 10:17	6/8/23 11:50	1.55	Manual shutdown due to avoid compressor failure
6/11/23 1:50	6/11/23 9:22	7.53	Manual shutdown due to avoid compressor failure
6/11/23 10:45	6/11/23 12:18	1.55	Manual shutdown due to avoid compressor failure
6/11/23 12:35	6/11/23 13:06	0.52	Manual shutdown due to avoid compressor failure
6/14/23 9:47	6/15/23 16:18	30.52	Liquids in Header flare station
6/22/23 7:53	6/22/23 8:43	0.83	Maintenance at Power Generation Facility (PGF)
6/23/23 6:45	6/23/23 6:57	0.20	Pacific, Gas, and Electric (PGE) testing
6/23/23 11:31	6/23/23 11:51	0.33	PGE testing
6/26/23 10:51	6/26/23 11:14	0.38	Maintenance at PGF
7/1/23 17:10	7/1/23 19:43	2.55	Maintenance at PGF
7/1/23 19:46	7/1/23 19:48	0.03	Maintenance at PGF
7/1/23 20:06	7/1/23 20:09	0.05	Maintenance at PGF
7/2/23 11:45	7/2/23 17:50	6.08	Maintenance at PGF
7/2/23 19:12	7/3/23 10:10	14.97	Flame failure
7/3/23 10:30	7/3/23 10:57	0.45	Flame failure during startup
7/3/23 11:12	7/3/23 11:25	0.22	Flame failure during startup
7/3/23 12:26	7/3/23 12:34	0.13	Flame failure during startup
7/6/23 11:05	*7/6/23 11:17*	*0.20*	*Maintenance at PGF*
7/6/23 11:47	*7/6/23 11:50*	*0.05*	*Maintenance at PGF*
7/6/23 12:14	*7/6/23 12:33*	*0.32*	*Maintenance at PGF*

Table 1b. Flare (A-1) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
7/6/23 13:15	*7/6/23 13:27*	*0.20*	*Maintenance at PGF*
7/6/23 14:34	*7/6/23 14:55*	*0.35*	*Maintenance at PGF*
7/6/23 15:04	*7/6/23 15:13*	*0.15*	*Maintenance at PGF*
7/6/23 15:54	*7/6/23 16:31*	*0.62*	*Maintenance at PGF*
7/6/23 17:26	*7/6/23 17:28*	*0.03*	*Maintenance at PGF*
7/6/23 17:39	*7/17/23 10:23*	*256.73*	*Flare maintenance and troubleshooting*
7/17/23 10:28	*7/17/23 10:36*	*0.13*	*John Zink repairs*
7/17/23 10:41	*7/17/23 10:47*	*0.10*	*John Zink repairs*
7/17/23 10:50	*7/17/23 10:55*	*0.08*	*John Zink repairs*
7/17/23 10:59	*7/17/23 11:05*	*0.10*	*John Zink repairs*
7/17/23 11:10	*7/17/23 11:18*	*0.13*	*John Zink repairs*
7/17/23 11:42	*7/21/23 8:20*	*92.63*	*Replace fireye wiring /then turned off for valve repair*
7/21/23 10:29	*8/3/23 15:17*	*316.80*	*Repair at valve*
8/3/23 17:40	*8/7/23 7:17*	*85.62*	*Repair at valve*
8/7/23 7:23	*8/7/23 7:28*	*0.08*	*started to verify operations*
8/7/23 12:13	*8/8/23 7:54*	*19.68*	*Started for Source test Source test*
8/8/23 7:56	*8/8/23 8:00*	*0.07*	*Started for Source test Source test*
8/8/23 12:35	*8/15/23 6:44*	*162.15*	*Repair at valve*
8/15/23 9:11	*8/24/23 11:04*	*217.88*	*Flare maintenance and troubleshooting*
8/24/23 11:07	*8/24/23 11:15*	*0.13*	*Shutdown low Temp*
8/24/23 19:23	*8/25/23 11:15*	*15.87*	*Shutdown low Temp*

Table 1b. Flare (A-1) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
8/25/23 11:18	*8/25/23 11:44*	*0.43*	*Shutdown low Temp*
Total		**1557.55**	

Notes:

Events in bold type denotes Malfunction Events

Events in italic type denotes Events under the 118 plan

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.

A-1 Flare in the process of being replaced by A-3 flare.

Table 1c. Flare (A-2) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
3/2/2023 11:05	3/2/2023 13:14	2.15	Air compressor maintenance
3/2/2023 13:31	3/2/2023 13:36	0.08	Flare maintenance and troubleshooting
3/2/2023 16:30	3/2/2023 19:52	3.37	Air compressor maintenance
3/3/2023 7:27	3/3/2023 7:38	0.18	Flare maintenance and troubleshooting
3/3/2023 8:21	3/3/2023 8:33	0.20	Flare maintenance and troubleshooting
3/3/2023 10:02	3/3/2023 10:52	0.83	Flare maintenance and troubleshooting
3/8/2023 9:44	3/8/2023 10:10	0.43	Shutdown to install generator plugs
3/8/2023 10:18	3/8/2023 11:33	1.25	Shutdown to install generator plugs
4/3/2023 9:54	*4/3/2023 10:06*	*0.20*	*Flare maintenance and troubleshooting*
4/3/2023 10:10	*4/3/2023 10:16*	*0.10*	*Flare maintenance and troubleshooting*
4/3/2023 10:49	*4/3/2023 11:13*	*0.40*	*Flare maintenance and troubleshooting*
4/3/2023 20:41	*4/3/2023 20:47*	*0.10*	*Flare maintenance and troubleshooting*
4/8/2023 18:55	*4/8/2023 22:03*	*3.13*	*Automatic shutdown due to compressor*
4/8/2023 22:06	*4/8/2023 22:12*	*0.10*	*Flare maintenance and troubleshooting*
4/9/2023 14:00	*4/9/2023 15:32*	*1.53*	*Automatic shutdown due to compressor*
4/9/2023 16:08	*4/10/2023 10:58*	*18.83*	*Automatic shutdown due to compressor*
4/12/2023 8:03	*4/12/2023 9:06*	*1.05*	*Automatic shutdown due to compressor*
4/13/2023 9:29	*4/13/2023 10:29*	*1.00*	*Automatic shutdown due to compressor*

Table 1c. Flare (A-2) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
4/13/2023 10:50	*4/13/2023 11:00*	*0.17*	*Automatic shutdown due to compressor*
4/16/2023 1:51	*4/16/2023 10:04*	*8.22*	*Automatic shutdown due to compressor*
4/16/2023 11:56	*4/16/2023 12:08*	*0.20*	*shutdown to switch to generator power*
4/17/2023 7:48	*4/17/2023 8:27*	*0.65*	*Manual shutdown due to avoid compressor failure*
4/18/2023 21:47	*4/19/2023 0:35*	*2.80*	*Manual shutdown due to avoid compressor failure*
4/21/2023 14:33	*4/21/2023 15:54*	*1.35*	*Manual shutdown due to avoid compressor failure*
4/22/2023 16:00	*4/22/2023 18:38*	*2.63*	*Manual shutdown due to high flow when plant shutdown - restarted*
4/24/2023 7:48	*4/24/2023 8:05*	*0.28*	*Manual shutdown due to high flow when plant shutdown - restarted*
4/29/2023 18:38	*4/29/2023 20:18*	*1.67*	*Manual shutdown due to avoid compressor failure*
4/30/2023 9:02	*4/30/2023 13:37*	*4.58*	*Manual shutdown due to avoid compressor failure*
5/1/2023 7:11	*5/1/2023 8:22*	*1.18*	*Manual shutdown due to avoid compressor failure*
5/3/2023 7:50	*5/3/2023 7:55*	*0.08*	*Manual shutdown due to avoid compressor failure*
5/13/2023 15:20	*5/13/2023 18:19*	*2.98*	*Construction work shutdown*
5/13/2023 19:01	*5/13/2023 19:25*	*0.40*	*Manual shutdown due to avoid compressor failure*
5/13/2023 21:12	*5/13/2023 22:58*	*1.77*	*Manual shutdown due to avoid compressor failure*
5/19/2023 11:38	*5/19/2023 13:55*	*2.28*	*Construction work shutdown*
5/19/2023 14:02	*5/19/2023 14:08*	*0.10*	*Manual shutdown due to avoid compressor failure*
5/28/2023 1:48	*5/28/2023 10:18*	*8.50*	*Construction work shutdown*

Table 1c. Flare (A-2) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
5/30/2023 3:42	*5/30/2023 8:07*	*4.42*	*Construction work shutdown*
6/4/2023 1:42	6/4/2023 11:45	10.05	Manual shutdown due to avoid compressor failure
6/5/2023 8:21	6/5/2023 9:05	0.73	Manual shutdown due to avoid compressor failure
6/8/2023 10:07	6/8/2023 11:43	1.60	Manual shutdown due to avoid compressor failure
6/11/2023 1:40	6/11/2023 9:14	7.57	Manual shutdown due to avoid compressor failure
6/11/2023 9:17	6/11/2023 9:39	0.37	Manual shutdown due to avoid compressor failure
6/14/2023 9:42	6/15/2023 16:07	30.42	Liquids in Header flare station
6/23/2023 6:45	6/23/2023 6:54	0.15	Pacific, Gas, and Electric (PGE) testing
6/23/2023 11:27	6/23/2023 11:43	0.27	PGE testing
6/25/2023 18:46	6/25/2023 18:52	0.10	PGE power outage over
6/26/2023 10:41	6/26/2023 10:46	0.08	Maintenance at Power Generation Facility (PGF)
7/1/2023 19:36	7/1/2023 19:48	0.20	Maintenance at PGF
7/6/2023 12:14	*7/6/2023 12:20*	*0.10*	*Maintenance at PGF*
7/6/2023 13:15	*7/6/2023 13:20*	*0.08*	*Maintenance at PGF*
7/6/2023 15:10	*7/6/2023 15:16*	*0.10*	*Maintenance at PGF*
7/6/2023 18:05	*7/6/2023 18:11*	*0.10*	*Maintenance at PGF*
7/7/2023 1:07	*7/7/2023 7:34*	*6.45*	*Flame failure*
7/13/2023 22:13	*7/14/2023 0:20*	*2.12*	*Maintenance at PGF*

Table 1c. Flare (A-2) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
7/14/2023 0:23	*7/14/2023 0:30*	*0.12*	*Maintenance at PGF*
7/15/2023 17:06	*7/15/2023 20:37*	*3.52*	*Maintenance at PGF*
7/15/2023 20:40	*7/15/2023 20:45*	*0.08*	*Maintenance at PGF*
7/17/2023 2:34	*7/17/2023 8:18*	*5.73*	*John Zink conducting maintenance and inspection at flares*
7/17/2023 8:21	*7/17/2023 9:08*	*0.78*	*Maintenance at PGF*
7/17/2023 9:11	*7/17/2023 9:17*	*0.10*	*Maintenance at PGF*
7/17/2023 9:28	*7/17/2023 9:34*	*0.10*	*Maintenance at PGF*
7/17/2023 9:45	*7/17/2023 9:51*	*0.10*	*Maintenance at PGF*
7/17/2023 9:58	*7/17/2023 10:23*	*0.42*	*Maintenance at PGF*
7/17/2023 10:28	*7/17/2023 10:36*	*0.13*	*Maintenance at PGF*
7/17/2023 10:41	*7/17/2023 11:06*	*0.42*	*Maintenance at PGF*
7/21/2023 13:17	*7/21/2023 13:49*	*0.53*	*Maintenance at PGF*
7/21/2023 13:52	*7/21/2023 14:00*	*0.13*	*Maintenance at PGF*
7/21/2023 14:03	*7/21/2023 14:09*	*0.10*	*Maintenance at PGF*
7/23/2023 8:50	*7/23/2023 11:25*	*2.58*	*Maintenance at PGF*
7/28/2023 22:40	*7/29/2023 0:34*	*1.90*	*Engine maintenance/flares*
7/29/2023 0:36	*7/29/2023 0:42*	*0.10*	*Engine maintenance/flares*
7/29/2023 0:46	*7/29/2023 0:55*	*0.15*	*Engine maintenance/flares*

Table 1c. Flare (A-2) Downtime
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Shutdown	Startup	Downtime Hours	Reason for Downtime
8/7/2023 13:21	*8/7/2023 13:51*	*0.50*	*Engine maintenance/flares*
8/7/2023 14:05	*8/8/2023 7:03*	*16.97*	*Shutdown high temp*
8/8/2023 7:06	*8/8/2023 7:21*	*0.25*	*Source Test*
8/8/2023 7:25	*8/8/2023 7:30*	*0.08*	*Source Test*
8/8/2023 7:54	*8/8/2023 7:59*	*0.08*	*Source Test*
8/16/2023 10:33	*8/16/2023 11:47*	*1.23*	*Flow meter calibration- both engines on line A! running*
8/20/2023 2:30	*8/20/2023 13:33*	*11.05*	*Engine maintenance/flares*
8/21/2023 13:15	*8/21/2023 14:32*	*1.28*	*Engine maintenance/flares*
8/24/2023 8:43	*8/24/2023 10:39*	*1.93*	*Engine maintenance/flares*
8/24/2023 10:45	*8/24/2023 10:52*	*0.12*	*Engine maintenance/flares*
8/25/2023 10:30	*8/25/2023 11:07*	*0.62*	*Engine maintenance/flares*
8/25/2023 11:11	*8/25/2023 11:16*	*0.08*	*Engine maintenance/flares*
Total		**190.90**	

Notes:

Events in bold type denotes Malfunction Events

Events in italic type denotes Events under the 118 plan

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.

Table 4. Individual Well Startups, Shutdowns and Decommissions
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Well ID	Shutdown	Start-up	Days Offline	Reason for Shutdown
KCLEW193	4/3/2023	4/3/2023	0.0	Well Raising
KCLFEW97	4/3/2023	4/3/2023	0.0	Well Raising
KCEW2315	--	4/5/2023	N/A	New well start-up
KCLEW193	4/24/2023	4/24/2023	0.0	Well Raising
KCEW2307	--	5/17/2023	N/A	New well start-up
KCEW2308	--	5/17/2023	N/A	New well start-up
KCEW2310	--	5/17/2023	N/A	New well start-up
KCEW2313	--	5/17/2023	N/A	New well start-up
KCEW2317	--	5/17/2023	N/A	New well start-up
KCEW2319	--	5/17/2023	N/A	New well start-up
KCEW2312	--	5/17/2023	N/A	New well start-up
KCEW2314	--	5/17/2023	N/A	New well start-up
KCLEW194	3/17/2023	5/30/2023	74.2	Active Filling
KCLEW195	3/17/2023	5/30/2023	74.3	Active Filling
KCLFEW19	1/23/2023	6/23/2023	150.9	Active Filling
KCEWHC2A	--	7/3/2023	N/A	New well start-up
KCEW2226	--	7/10/2023	N/A	New well start-up
KCLEW195	7/19/2023	7/19/2023	0.0	Well Raising
KCLEW192	7/19/2023	7/19/2023	0.0	Well Raising
KCLEW193	7/19/2023	7/19/2023	0.0	Well Raising
KCLEW196	3/22/2023	7/27/2023	127.2	Active Filling
KCHZ2301	--	8/28/2023	N/A	New well start-up
KCHZ2302	--	8/28/2023	N/A	New well start-up
KCEW2107	8/31/2023	8/31/2023	0.0	Replace flexhose
KCEW2108	8/31/2023	8/31/2023	0.0	Replace flexhose
KCLFEWB3	5/10/2023	--	N/A	Abandoned
KCEW2115	5/4/2023	--	N/A	Abandoned
KCEW2124	5/4/2023	--	N/A	Abandoned
KCEW2123	5/2/2023	--	N/A	Abandoned
KCLEW141	5/1/2023	--	N/A	Abandoned
KCLEWM12	4/28/2023	--	N/A	Abandoned
KCLFEW18	3/22/2023	--	N/A	Abandoned
KCLEW194	7/19/2023	Ongoing	N/A	Active Filling
KCEW2113	5/3/2023	Ongoing	N/A	Active Filling

Note: All well downtime events listed are consistent with applicable Rule 8-34 provisions and BAAQMD permit conditions. No more than five wells offline at a time.

Table 5. Wells with Positive Pressure
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Well ID	Date	Initial Static Pressure ("H_2O)	Adjusted Static Pressure ("H_2O)	5-Day Corrective Action Date	Corrective Action	15-Day Follow-Up Pressure ["H2O]	15-Day Follow-Up Date	Comments	Additional Corrective Action
KCLEW09A	6/27/2023	0.27	0.28	6/27/2023	Adjusted Valve	0.55	7/3/2023	Compliant reading (-11.05 "H2O) on 7/28/23	RCA
KCLEW10A	4/26/2023	0.53	0.53	4/26/2023	Adjusted Valve	0.55	5/4/2023	Compliant reading (-16.55 "H2O) on 5/23/23	RCA
KCLF2308	5/17/2023	0.25	0.36	5/17/2023	Adjusted Valve	-0.01	5/31/2023		
KCLF2310	5/17/2023	0.45	0.44	5/17/2023	Adjusted Valve	-0.31	5/31/2023		
KCLF2312	5/17/2023	0.94	0.53	5/17/2023	Adjusted Valve	1.03	5/31/2023	Compliant reading (-1.98 "H2O) on 7/28/23	RCA/CAA/75-Day
KCLF2313	5/17/2023	0.82	0.43	5/17/2023	Adjusted Valve	-0.41	5/31/2023		
KCLF2314	5/17/2023	0.03	0.01	5/17/2023	Adjusted Valve	-0.1	5/23/2023		
KCLF2315	4/5/2023	0.56	0.54	4/5/2023	Adjusted Valve	0.45	4/20/2023	Compliant reading (-0.39 "H2O) on 5/17/23	RCA
KCLF2319	5/17/2023	0.08	0.04	5/17/2023	Adjusted Valve	-0.11	5/17/2023		
KCLEW176	5/30/2023	1.13	-1.8	5/30/2023	Adjusted Valve	-0.23	5/1/2023		
KCLEW190	4/26/2023	0.14	0.14	4/26/2023	Adjusted Valve	0.32	5/2/2023	Compliant reading (-0.19 "H2O) on 6/9/23	RCA
KCLEW193	4/26/2023	0.26	0.25	4/26/2023	Adjusted Valve	0.51	5/4/2023*	Offline in active fill	RCA/CAA/75-Day
KCLEW194	5/30/2023	2.3	2.32	5/30/2023	Adjusted Valve	1.86	6/9/2023*	Offline in active fill	RCA/CAA/75-Day
KCLEW196	7/27/2023	0.74	0.75	7/27/2023	Adjusted Valve	-0.12	8/3/2023		
KCEW2105	8/3/2023	0.07	0.09	8/3/2023	Adjusted Valve	0.8	8/3/2023	Compliant reading (-7.05 "H2O) on 8/28/23	RCA
KCEW2125	5/30/2023	1.27	1.19	5/30/2023	Adjusted Valve	0.77	6/9/2023	Compliant reading (-0.46 "H2O) on 7/28/23	RCA
KCLEW124	5/30/2023	6.26	6.28	5/30/2023	Adjusted Valve	5.76	6/9/2023	Compliant reading (-0.27 "H2O) on 7/12/23	RCA
KCLEW124	7/24/2023	0.48	0.54	7/24/2023	Adjusted Valve	-11.95	8/3/2023		
KCLEW62A	8/9/2023	0.13	0.14	8/9/2023	Adjusted Valve	-0.18	8/23/2023		

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

*Exceedance was not corrected in 15 days. Compliance will be achieved by the 120-day compliance dates specified above.

RCA = Root Cause Analysis, CAA = Corrective Action Analysis, 75-day = 75-Day Notification or request for additional time.

Table 6. Wells with Oxygen Exceedances
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Well ID	Date	Initial O2 [%]	5-Day Corrective Action Date	Corrective Action	Adjusted O2 [%]	15-Day Follow-Up Date	Comments
KCLEW10A	7/25/2023	11.2	7/25/2023	Adjusted Valve	17.4	8/10/23*	
KCLF2317	5/17/2023	14.6	5/17/2023	Adjusted Valve	0	5/23/2023	
KCLEW195	8/29/2023	11.4	8/29/2023	Adjusted Valve	11.4	8/29/2023	
KCLEW196	8/29/2023	15.8	8/29/2023	Adjusted Valve	16.5	8/29/2023	
KCLEWK18	7/27/2023	18.6	7/27/2023	Adjusted Valve	20	8/3/2023	Compliant reading (3.0%) on 8/15/23
KCEW2105	4/4/2023	6.8	4/4/2023	Adjusted Valve	8.7	4/10/2023	Compliant reading (4.1%) on 4/27/23
KCEW2105	7/25/2023	10.2	7/25/2023	Adjusted Valve	0	8/3/2023	
KCEW2105	8/28/2023	11.7	8/28/2023	Adjusted Valve	12.1	8/28/2023*	
KCEW2106	7/13/2023	20.7	7/13/2023	Adjusted Valve	2.2	7/24/2023	
KCEW2106	8/9/2023	9.1	8/9/2023	Adjusted Valve	4.6	8/23/2023	
KCEW2109	5/9/2023	5.4	5/9/2023	Adjusted Valve	3.9	5/17/2023	
KCEW2117	7/5/2023	6.6	7/5/2023	Adjusted Valve	0.1	7/10/2023	
KCEW2123	4/26/2023	12.8	4/26/2023	Adjusted Valve	14.9	5/2/2023	Abandoned on 5/2/23
KCEW2124	4/20/2023	9.7	4/20/2023	Adjusted Valve	4.5	5/4/2023	Abandoned on 5/4/23
KCEW2211	8/3/2023	17.7	8/3/2023	Adjusted Valve	16.2	8/3/2023	Compliant reading (2.3%) on 8/23/23
KCEW2221	7/27/2023	18.2	7/27/2023	Adjusted Valve	0.1	8/3/2023	
KCLEWLR2	8/29/2023	15.4	8/29/2023	Adjusted Valve	18	8/29/2023*	
KCLFEW02	6/22/2023	6.3	6/22/2023	Adjusted Valve	2.6	6/22/2023	
KCLFEW02	7/24/2023	7.7	7/24/2023	Adjusted Valve	15.8	8/2/2023*	
KCLEW105	7/5/2023	6.9	7/5/2023	Adjusted Valve	0	7/7/2023	
KCLEW117	7/5/2023	8.3	7/5/2023	Adjusted Valve	0.2	7/10/2023	
KCLEW135	7/5/2023	7.7	7/5/2023	Adjusted Valve	0	7/7/2023	
KCLEW164	4/26/2023	20.3	4/26/2023	Adjusted Valve	0	5/2/2023	
KCLEW164	7/12/2023	17	7/12/2023	Adjusted Valve	1.9	7/24/2023	
KCLW27RR	3/22/2023	18.8	3/22/2023	Adjusted Valve	20	4/4/2023	Compliant reading (14.0%) on 4/10/23, HOV of 15% Oxygen
KCLW27RR	4/28/2023	18.7	4/28/2023	Adjusted Valve	19.2	5/3/2023	Compliant reading (8.4%) on 6/28/23, HOV of 15% Oxygen
KCLW27RR	7/27/2023	20.6	7/27/2023	Adjusted Valve	19.4	8/3/2023	Compliant reading (14.3%) on 8/29/23, HOV of 15% Oxygen
KCLFEW30	8/3/2023	19.1	8/3/2023	Adjusted Valve	17.4	8/3/23*	
KCLFEW33	3/17/2023	7.6	3/17/2023	Adjusted Valve	1.8	3/17/2023	
KCLFEW33	8/3/2023	10.9	8/3/2023	Adjusted Valve	10.8	8/23/2023*	
KCLEW93A	6/23/2023	13.3	6/23/2023	Adjusted Valve	4.6	6/27/2023	
KCLEW93A	7/13/2023	13.5	7/13/2023	Adjusted Valve	15.5	7/19/2023	Compliant reading (0.3%) on 8/23/23
KCLFEW96	1/26/2023	8.3	1/26/2023	Adjusted Valve	7.8	1/26/2023	Compliant reading (4.6%) on 4/4/23
KCLFEWB6	8/3/2023	11.9	8/3/2023	Adjusted Valve	12	8/17/23*	
KCLFEWB3	1/5/2023	19	1/5/2023	Adjusted Valve	17.7	1/16/2023	Compliant reading (3.7%) on 3/22/23

Note: All required corrective action and remonitoring was completed in accordance with Rule 8-34 and NSPS/WWW/NESHAP timelines.
*Exceedance remains at end of reporting period. Compliance will be achieved by the 120-day compliance dates specified above.

Table 7. Wells with Temperature Exceedances
Keller Canyon Landfill, Pittsburg, California
(March 1, 2023 through August 31, 2023)

Well ID	Date	Initial Temperature [°F]	Adjusted Temperature [°F]	5-Day Corrective Action Date	Corrective Action	15-Day Follow-Up Temperature [°F]	15-Day Follow-Up Date	Comments	Additional Corrective Action
KCLEW184	7/10/2023	131.4	131.3	7/10/2023	Adjusted Valve	117.7	7/19/2023		
KCEW2110	3/17/2023	131.6	131.5	3/17/2023	Adjusted Valve	128.2	3/22/2023		
KCEW2110	8/17/2023	132.4	132.4	8/17/2023	Adjusted Valve	126.4	8/23/2023		
KCEW2203	1/25/2023	130.5	135.6	1/25/2023	Adjusted Valve	136.1	1/25/2022*	Compliant reading (130.5 F) on 3/22/23	RCA
KCEW2125	8/2/2023	131.6	131.7	8/2/2023	Adjusted Valve	132.5	8/17/2023*		RCA
KCEW2203	4/25/2023	137.5	139.5	4/25/2023	Adjusted Valve	133.4	5/2/2023	Compliant reading (115.9 F) on 7/3/23	RCA/CAA/75-Day
KCLEW150	4/25/2023	131.1	132.1	4/25/2023	Adjusted Valve	127.9	5/2/2023		
KCLEW163	6/23/2023	135	135.6	6/23/2023	Adjusted Valve	126	6/26/2023		

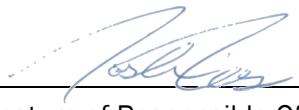
Note: All required corrective action and remonitoring was completed in accordance with Rule 8-34 and NSPS/NESHAP timelines.
*Exceedance not corrected within 15 days. Compliance will be achieved by the 60 or 120-day compliance dates specified above.
RCA = Root Cause Analysis, CAA = Corrective Action Analysis, 75-day = 75-Day Notification or request for additional time.

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:



Signature of Responsible Official

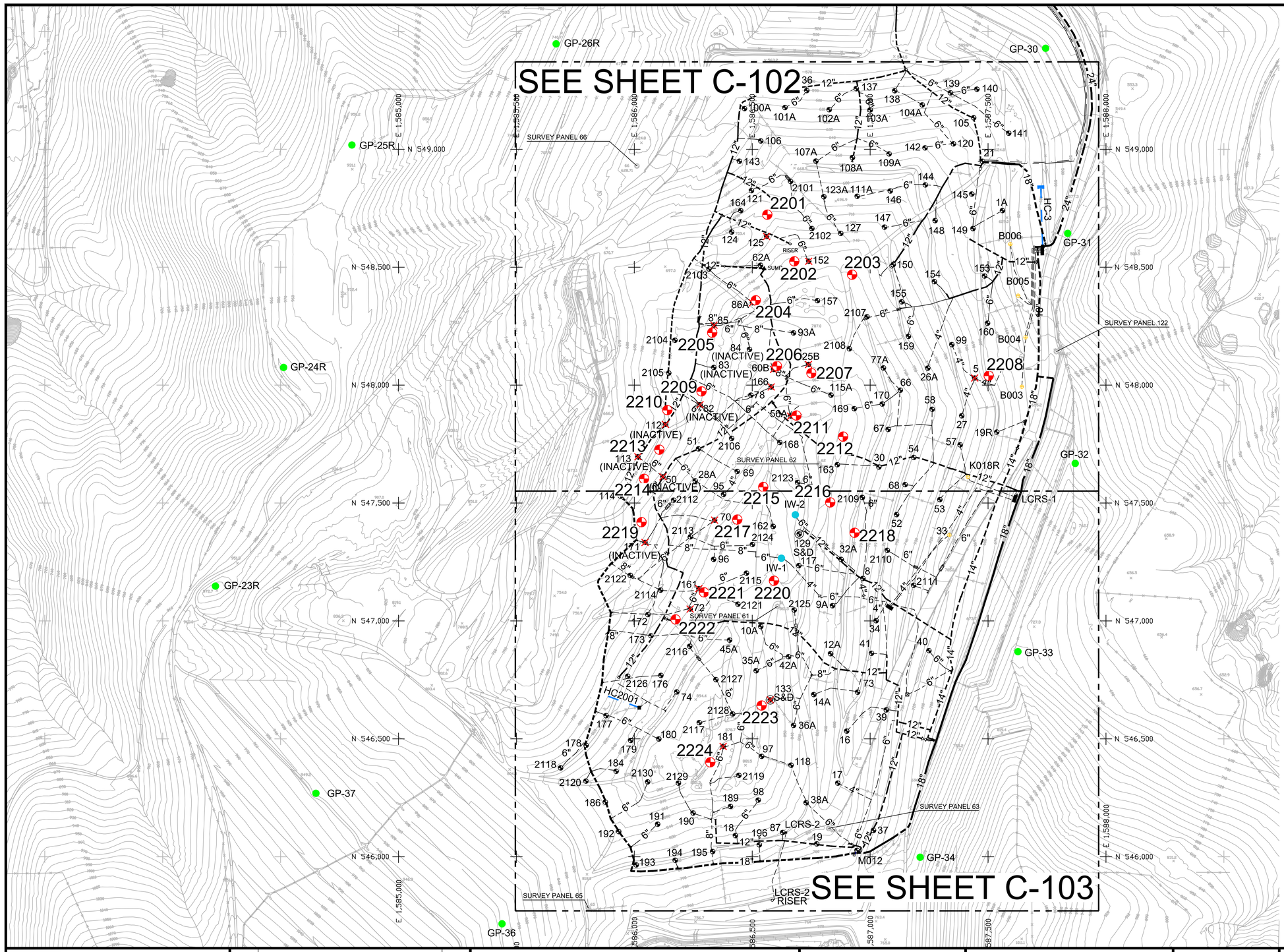
9/26/2023

Date

Josh Mills

Name of Responsible Official

Appendix B – Existing GCCS Layout



N

GRAPHIC SCALE

200 100 0 200 400

(IN FEET)

LEGEND

- PROPOSED VERTICAL GAS EXTRACTION WELL
- PROPOSED VERTICAL GAS EXTRACTION WELL ABANDONMENT
- EXISTING LFG HEADER, BELOW GRADE
- EXISTING LFG LATERAL, BELOW GRADE
- EXISTING LFG HEADER, ABOVE GRADE
- EXISTING LFG HORIZONTAL COLLECTOR
- EXISTING GAS MONITORING PROBE
- EXISTING DUAL COMPLETION LFG WELL,
- EXISTING SINGLE COMPLETION LFG WELL
- EXISTING SINGLE COMPLETION LFG WELL, BELOW GRADE/REMOTE
- EXISTING LIQUID INJECTION WELL WITH WELLHEAD
- EXISTING REMOTE WELLHEAD LOCATION

SITE SURVEY CONTROL POINTS

PANEL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
58	552725.640	1585186.282	269.84	TARGET
61	547061.822	1586607.214	861.50	TARGET
62	547665.589	1586783.484	829.40	TARGET
63	546120.345	1586823.743	808.48	TARGET
64	544331.571	1586779.784	922.42	TARGET
65	545782.907	1585804.515	820.11	TARGET
66	548929.028	1586011.029	628.71	TARGET
122	548142.042	1587789.509	649.87	TARGET
244	552511.508	1588181.888	225.86	TARGET
250	545883.021	1582758.169	677.39	TARGET

MAP DATUM

HORIZONTAL DATUM:	NAD27
VERTICAL DATUM:	NGVD29
COORDINATE SYSTEM:	CALIFORNIA STATE PLANE
ZONE:	III
UNITS:	US SURVEY FEET

90% DESIGN SUBMITTAL

NO.	REVISION DESCRIPTION	BY:

REPUBLIC SERVICES, INC.

WASTE COLLECTION • RECYCLING • TRANSFER • DISPOSAL

TETRA TECH
21700 Copley Drive, Suite 200
Diamond Bar, CA 91765
TEL 909.860.7777 FAX 909.860.8017

KELLER CANYON SANITARY LANDFILL

2022 GCCS IMPROVEMENTS

SITE PLAN/SURVEY CONTROL/INDEX TO PLAN SHEETS

DESIGNED BY :	KJA	SCALE : AS SHOWN	
DRAWN BY :	KJA	DATE : 4/4/2022	FILE NO.: C-101
CHECKED BY :	AMN/SNA	DATE : 4/4/2022	
APPROVED BY :	PJS	DATE : 4/4/2022	SHEET C-101

Appendix C – LFGTE Facility Downtime Logs

LFGTE Facility Downtime Logs
Ameresco, Keller
(March 1, 2023 through August 31, 2023)

Equipment	Begin Time	End Time	Duration (HRS:MINS)	Engine Hours	Type	Reason 1	Reason 2	Operator
Engine 1	3/2/23 13:04	3/2/23 15:00	1:56	44988	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	3/2/23 19:48	3/2/23 22:24	2:36	44988	Unplanned	Ameresco	TSA / H2S / Siloxane Removal	Donnie Bodkin
Engine 2	3/2/23 21:48	3/2/23 22:15	0:27	44988	Unplanned	Ameresco	TSA / H2S / Siloxane Removal	Donnie Bodkin
Engine 1	3/2/23 22:40	3/2/23 22:51	0:11	44988	Unplanned	Ameresco	BOP Control System	Donnie Bodkin
Engine 1	3/2/23 22:53	3/2/23 23:06	0:13	44988	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	3/2/23 23:06	3/2/23 23:20	0:14	44988	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	3/9/23 9:08	3/10/23 2:39	17:31	44994	Planned	Ameresco	Engine	Donnie Bodkin
Engine 2	3/10/23 2:39	3/10/23 20:10	17:31	44994	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	3/10/23 20:21	3/10/23 20:44	0:23	44996	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	3/10/23 20:52	3/10/23 21:13	0:21	44996	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	3/10/23 21:14	3/10/23 21:22	0:08	44996	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	3/10/23 21:24	3/10/23 21:36	0:12	44996	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	3/14/23 5:15	3/14/23 7:41	2:26	44999	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	3/14/23 7:42	3/14/23 8:46	1:04	44999	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	3/16/23 6:07	3/16/23 7:30	1:23	45001	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	3/17/23 22:34	3/18/23 2:17	3:43	45003	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/3/23 9:13	4/7/23 13:42	100:29	110025	Planned	Ameresco	TSA / H2S / Siloxane Removal	Donnie Bodkin
Engine 2	4/3/23 9:47	4/3/23 12:01	2:14	110199	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 1	4/7/23 13:56	4/7/23 15:58	2:02	110025	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/7/23 16:00	4/7/23 16:05	0:05	110025	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/7/23 16:12	4/7/23 16:23	0:11	110026	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/7/23 16:34	4/7/23 19:38	3:04	110026	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/7/23 20:07	4/7/23 21:48	1:41	110026	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/9/23 3:10	4/9/23 14:36	11:26	110056	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/10/23 4:43	4/10/23 7:33	2:50	110070	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/10/23 23:12	4/11/23 7:32	8:20	110086	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/12/23 7:10	4/12/23 10:59	3:49	110109	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	4/12/23 7:13	4/12/23 11:06	3:53	110411	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	4/14/23 12:46	4/14/23 13:17	0:31	110460	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/16/2023 18:20	4/17/2023 9:09	14:49	110,213	Unplanned	Electrical Utility	Line / Substation Maintenance	Donnie Bodkin
Engine 2	4/16/2023 18:23	4/17/2023 9:03	14:40	110,513	Unplanned	Electrical Utility	Line / Substation Maintenance	Donnie Bodkin
Engine 1	4/22/2023 18:36	4/22/2023 21:58	3:22	110,343	Unplanned	Ameresco	TSA / H2S / Siloxane Removal	Donnie Bodkin
Engine 2	4/22/2023 20:36	4/22/2023 21:51	1:15	110,645	Unplanned	Ameresco	TSA / H2S / Siloxane Removal	Donnie Bodkin
Engine 1	4/22/2023 23:07	4/22/2023 23:50	0:43	110,344	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/22/2023 23:51	4/22/2023 23:59	0:08	110,344	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/24/2023 8:57	4/24/2023 13:46	4:49	110,377	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	4/24/2023 9:01	4/28/2023 14:52	5:51	110,680	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	4/25/2023 7:07	4/25/2023 9:40	2:33	110,394	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 1	4/27/2023 7:25	4/27/2023 9:53	2:28	110,440	Unplanned	Ameresco	Generator	Donnie Bodkin
Engine 1	4/27/2023 10:01	4/27/2023 13:35	3:34	110,441	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 1	4/27/2023 13:36	4/27/2023 13:47	0:11	110,441	Unplanned	Ameresco	Generator	Donnie Bodkin
Engine 2	4/28/2023 15:16	4/28/2023 15:35	0:19	110,681	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	4/28/2023 15:41	4/28/2023 16:05	0:24	110,681	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	5/2/23 1:51	5/2/23 11:31	9:40	110,763	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	5/2/23 11:31	5/2/23 21:12	9:41	110,763	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	5/2/23 21:14	5/2/23 21:26	0:12	110,763	Unplanned	Ameresco	Other	Donnie Bodkin
Engine 2	5/3/23 0:39	5/3/23 9:07	8:28	110,766	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	5/3/23 10:27	5/3/23 11:44	1:17	110,581	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	5/3/23 10:29	5/3/23 13:39	3:10	110,768	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	5/3/23 13:43	5/3/23 14:55	1:12	110,768	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	5/4/23 7:45	5/4/23 13:44	5:59	110,593	Unplanned	Ameresco	BOP Control System	Donnie Bodkin
Engine 2	5/4/23 7:45	5/4/23 13:39	5:54	110,776	Unplanned	Ameresco	BOP Control System	Donnie Bodkin
Engine 1	5/11/23 16:24	5/11/23 16:43	0:19	110,764	Unplanned	Ameresco	BOP Control System	Donnie Bodkin
Engine 2	5/11/23 16:24	5/11/23 16:37	0:13	110,947	Unplanned	Ameresco	BOP Control System	Donnie Bodkin
Engine 1	5/16/23 8:05	5/16/23 15:38	7:33	110,875	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	5/16/23 8:11	5/16/23 17:27	9:16	111,059	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 1	5/17/23 12:39	5/18/23 16:26	27:47	110,896	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	5/18/23 9:39	5/18/23 11:40	2:01	111,099	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 1	5/19/23 10:08	5/19/23 14:30	4:22	110,914	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	5/19/23 10:10	5/19/23 14:25	4:15	111,122	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin

LFGTE Facility Downtime Logs
Ameresco, Keller
(March 1, 2023 through August 31, 2023)

Equipment	Begin Time	End Time	Duration (HRS:MINS)	Engine Hours	Type	Reason 1	Reason 2	Operator
Engine 1	6/14/23 7:36	6/15/23 16:55	33:19	111,532	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	6/14/23 7:39	6/14/23 9:00	1:21	111,740	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	6/14/23 9:44	6/15/23 16:45	31:01	111,740	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 1	6/22/23 7:09	6/22/23 9:11	2:02	45,099	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 2	6/22/23 7:11	6/22/23 8:42	1:31	45,099	Unplanned	Landfill / Digester	Landfill Vacuum / Gas Limited	Donnie Bodkin
Engine 1	6/25/23 18:34	6/26/23 8:35	14:01	45,103	Unplanned	Electrical Utility	Line / Substation Maintenance	Donnie Bodkin
Engine 2	6/25/23 18:37	6/26/23 8:24	13:47	45,103	Unplanned	Electrical Utility	Line / Substation Maintenance	Donnie Bodkin
Engine 2	7/1/23 16:10	7/1/23 20:19	4:09	112,109	Unplanned	Ameresco	Generator	Donnie Bodkin
Engine 2	7/2/23 15:40	7/2/23 19:12	3:32	112,129	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	7/6/23 8:36	7/6/23 16:15	7:39	112,013	Planned	Ameresco	Engine	Donnie Bodkin
Engine 1	7/13/23 22:08	7/13/23 22:44	0:36	112,187	Unplanned	Ameresco	TSA / H2S / Siloxane Removal	Donnie Bodkin
Engine 2	7/15/23 17:02	7/15/23 20:39	3:37	112,439	0	0	0	Donnie Bodkin
Engine 2	7/17/23 0:00	7/17/23 7:43	7:43	112,467	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/17/23 7:43	7/17/23 15:26	7:43	112,467	Unplanned	Landfill / Digester	Landfill Blower Flare Controls	Donnie Bodkin
Engine 2	7/17/23 20:50	7/17/23 22:19	1:29	112,472	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/17/23 22:49	7/18/23 10:38	11:49	112,473	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/19/23 7:45	7/19/23 8:10	0:25	112,494	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/20/23 8:22	7/20/23 17:36	9:14	112,518	Planned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/20/23 17:39	7/20/23 18:11	0:32	112,518	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/20/23 18:14	7/20/23 18:25	0:11	112,518	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	7/21/23 13:10	7/21/23 13:59	0:49	112,369	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/23/23 6:16	7/23/23 9:01	2:45	112,578	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	7/23/23 9:04	7/23/23 9:29	0:25	112,578	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	7/28/2023 22:30	7/29/2023 2:30	4:00	112,546	Unplanned	Ameresco	Valves	Donnie Bodkin
Engine 2	7/29/2023 0:30	7/29/2023 2:13	1:43	112,713	Unplanned	Ameresco	Valves	Donnie Bodkin
Engine 2	8/3/23 16:04	8/4/23 15:03	22:59	112,847	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/4/23 17:18	8/4/23 21:11	3:53	112,850	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/4/23 22:40	8/5/23 14:09	15:29	112,851	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/5/23 17:42	8/5/23 20:19	2:37	112,855	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/5/23 20:39	8/6/23 10:23	13:44	112,855	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/6/23 10:24	8/6/23 10:32	0:08	112,855	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/6/23 11:55	8/6/23 13:06	1:11	112,857	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/6/23 13:28	8/6/23 13:53	0:25	112,857	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/6/23 14:18	8/7/23 12:03	21:45	112,858	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/7/23 13:17	8/7/23 13:26	0:09	112,859	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/7/23 14:01	8/7/23 14:51	0:50	112,859	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/7/23 16:49	8/7/23 17:09	0:20	112,862	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/7/23 17:57	8/8/23 12:58	19:01	112,862	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/8/23 16:22	8/8/23 16:28	0:06	112,866	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/8/23 18:15	8/9/23 8:59	14:44	112,868	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/9/23 9:08	8/9/23 15:59	6:51	112,868	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/9/23 16:02	8/9/23 16:11	0:09	112,868	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/9/23 21:26	8/11/23 8:12	34:46	112,873	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/21/2023 13:11	8/21/2023 13:25	0:14	113,119	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	8/28/23 17:11	8/28/23 18:23	1:12	45,167	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	8/28/23 18:26	8/28/23 18:34	0:08	45,167	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	8/28/23 18:47	8/28/23 19:52	1:05	45,167	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	8/28/23 19:53	8/28/23 20:07	0:14	45,167	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 1	8/28/23 20:15	8/28/23 20:29	0:14	45,167	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/31/23 0:58	8/31/23 7:44	6:46	45,169	Unplanned	Ameresco	Engine	Donnie Bodkin
Engine 2	8/31/23 7:46	8/31/23 7:54	0:08	45,169	Unplanned	Ameresco	Engine	Donnie Bodkin

Notes:

Downtime information provided to site by LFGTE Facility operator.

Appendix D – Excerpts from the 2023 A-2 Source Test Results (report dated March 14, 2023)

Keller Canyon Landfill Company

BAAQMD Title V Facility A4618

Annual Compliance Emissions Test Report #23015

Landfill Gas Flare A-2

Located at:
Keller Canyon Landfill Company
901 Bailey Road
Pittsburg, CA 94565

Prepared for:
Republic Services
901 Bailey Road
Pittsburg, CA 94565

Attn: Antonia Gunner
agunner@republicservices.com

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

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

Testing Performed on:
January 17, 2023

Final Report Submitted on:
March 17, 2023

Performed and Reported by:
Blue Sky Environmental, Inc.
2273 Lobert Street
Castro Valley, CA 94546

Office (510) 508-3469/Mobile (810) 923-3181
bluesky@blueskyenvironmental.com

REVIEW AND CERTIFICATION

Team Leader:

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 are 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 me at (810) 923-3181.

Jeramie Richardson

Project Manager

Blue Sky Environmental, Inc.

TABLE OF CONTENTS

SECTION 1. INTRODUCTION

1.1. Summary

Blue Sky Environmental, Inc. was contracted by Republic Services to perform emissions testing at the Keller Canyon Landfill Company in Pittsburg, California. This compliance source test was conducted to demonstrate that Landfill Gas Flare A-2 is operating in compliance with Condition 17309 of Bay Area Air Quality Management District (BAAQMD) Title V permit A4618.

Results of the test program are presented in this report. The source test information is summarized in Table 1-1. Test results derived from the source test are summarized in Table 1-2. Results for individual test runs are provided in Appendix A. The flare met all compliance emission criteria.

Table 1-1 Source Test Information

Test Location:	Keller Canyon Landfill Company, 901 Bailey Road, Pittsburg CA 94565
Source Contact:	Antonia Gunner, Republic Services (619) 201-3764
Source Tested:	Flare A-2 – 76 MMBtu/hr John Zink enclosed landfill gas flare
Source Test Date:	January 17, 2023
Test Objective:	Determine compliance with condition 17309 of Bay Area Air Quality Management District (BAAQMD) Title V permit A4618; BAAQMD Regulation 8, Rule 34; and the State Landfill Methane Gas Rule under AB32 for Flare performance.
Test Performed by:	Blue Sky Environmental, Inc 2273 Lobert Street, Castro Valley, CA 94546 Finnegan Schall (913) 530-4713 bluesky@blueskyenvironmental.com
Test Parameters:	<u>Landfill Gas</u> O_2, CO_2, BTU, THC, CH_4, NMOC, HHV, F-Factor, sulfur species, toxic air contaminants and volumetric flow rate <u>Flare Emissions</u> THC, CH_4, NMOC, NO_X, CO, O_2, SO_2, moisture, volumetric flow rate and temperature

Table 1-2 Compliance Summary

Emission Parameter	Average Results (Flare A-2)	Permit Limit	Compliance Status
NO_x, ppmvd @ 15% O_2	7.70	15	In Compliance
CO, ppmvd @ 15% O_2	31.3	81	In Compliance
Total Reduced Sulfurs in Fuel, ppmv	97.9	300	In Compliance
SO_2, ppmvd *(Reg 9-1-302)*	7.68	300	In Compliance
NMOC, ppmvd @ 3% O_2 as CH_4	<2.2	30*	In Compliance
NMOC Destruction Efficiency, %	>98.79	>98%*	In Compliance
CH_4 Destruction Efficiency, % *(AB32)*	>99.97	>99%	In Compliance

**>98% NMOC Destruction Efficiency or 30 ppmvd NMOC as CH_4 @ 3% O_2*

SECTION 2. SOURCE TEST PROGRAM

2.1. Overview

This annual source test was performed to demonstrate that landfill gas Flare A-2 is operating in compliance with Condition 17309 of Bay Area Air Quality Management District (BAAQMD) Title V permit A4618, and BAAQMD Regulation 8, Rule 34. This testing also satisfies compliance requirements outlined in the State Landfill Methane Gas Rule under AB32 for flare performance.

2.2. Pollutants Tested

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

EPA Method 1	Sample and Traverse Point Determination
EPA Method 3A	O_2 and CO_2 Emissions, Stack Gas Molecular Weight
EPA Method 10	CO Emissions
EPA Method 7E	NO_X Emissions and NO_2 Converter Check
EPA Method 4	Moisture Calculation
EPA Method 19	Flow Rate Calculation
EPA Method ALT-097	THC, CH_4 and VOC Emissions
EPA Method 25C	NMOC in Fuel
ASTM D-1945/3588	BTU, F-Factor and Fixed Gases in Fuel
ASTM D-5504	Sulfur Species, Hydrogen Sulfide (H_2S)
EPA Method TO-15	Toxic organic Compounds

2.3. Test Date

Testing was conducted on January 17, 2023.

2.4. Sampling and Observing Personnel

Testing was conducted by Finnegan Schall and Lesley Wolf, representing Blue Sky Environmental, Inc.

BAAQMD was notified of the scheduled testing in a source test protocol submitted on January 3, 2023 (revised January 9, 2023). A Source Test Protocol acknowledgement (NST-8025) was received the same day. No agency observers from the district were present during the test program. A copy of the source test protocol and email correspondence are provided in Appendix I.

2.5. Source/Process Description

Keller Canyon Landfill Company is a multi-material landfill located in Pittsburg, California with a gas collection system that is abated by two industrial landfill gas flares. All landfill gas collected by the gas collection system that is not abated by the on-site enclosed flares is vented off-site to the Ameresco Keller Landfill, LLC facility for gas processing and control.

Flare A-2 has a 76 MMBtu/hr multiple nozzle burner. The flare shell is approximately 40 feet high and 12 feet in diameter. The inside diameter (ID) is approximately 130 inches. The flare has a temperature monitor with readout display and continuous recorder, and a flow meter to measure the gas flow into the flare.

2.6. Source Operating Conditions

The flare was operated on landfill gas under normal operating conditions during testing. The average exhaust temperature was 1,551 °F. The landfill gas (LFG) flowrate ranged from 1,461 to 1,472 SCFM. The operating exhaust temperature, and LFG flowrate records are provided in Appendix E.

Oxygen content in the LFG sample collected during Run 1 was significantly higher than the other runs, indicating an air leak in the sample. The results were corrected based on an oxygen content determined by averaging Runs 2 and 3. The following equation was used: ppm corrected = ppm (20.9 - corrected O_2 concentration)/(20.9 - original O_2 concentration). LFG samples collected at the head of the flare had an average corrected methane content of 52.2% and a corrected oxygen content of 0.7%.

SECTION 3. SAMPLING AND ANALYSIS PROCEDURES

3.1. Port Location

Sampling was conducted at the 130-inch diameter ID stack of the flare through ports that were accessed with a 45-foot boom lift. The four 4-inch diameter flange ports were located approximately 35 feet above grade, five stack diameters downstream from the burners and one stack diameter upstream from the exhaust. Port locations met EPA Method 1 minimum criteria of two stack diameters downstream from the nearest disturbance and 0.5 stack diameters upstream from the nearest disturbance or exhaust.

3.2. Point Description/Labeling – Ports/Stack

Blue Sky Environmental, Inc. conducted two perpendicular 8-point traverses of the stack to check for the presence of stratification. The traverse points for the 130-inch diameter stack with 8-inch deep ports were 4.2, 13.7, 25.2, 42.0, 88.0, 104.8, 116.4 and 125.8 inches from the inside wall of the stack. Sampling was performed for two minutes per point for a total of 16 points for each 30-minute test run. O_2 stratification was greater than 10%; therefore, subsequent CEM sampling was conducted using all traverse points.

3.3. Sample Train Description

Sampling system diagrams are provided in Appendix H. Additional descriptive information is included in the following section.

3.4. Sampling Procedure Description

Three consecutive 30-minute gaseous emissions tests were performed for oxides of nitrogen (NO_X), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2), methane (CH_4) and non-methane organic compounds (NMOC) at the 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. Instrument linearity and system bias were checked. The system response time for each analyzer was recorded. 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.

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 EPA Method 7E. A NOx 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 three landfill gas samples (one per test run) in 6-liter SUMMA cannisters for analysis of fixed gases by ASTM D-1945. The molar composition was used to determine the HHV and F-factor by ASTM D-3588. The samples were also analyzed for non-methane organic compounds (NMOC) by EPA Method 25C and sulfur compounds by ASTM D-5504. Total reduced sulfur (TRS) results were used to calculate the SO_2 emission concentration of the stack gas. The samples were also analyzed for toxic organic compounds by EPA Method TO-15 (AP-42 2.4-1). All samples were analyzed by Atmospheric Analysis & Consulting, Inc (AAC) in Ventura, California.

The sampling and analysis procedures 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 (NO_2) concentrations are determined by passing the sample through a catalyst which reduces the NO_2 to NO. The total oxides of nitrogen concentration (NO_2 + NO) is then determined by chemiluminescence.

Section 16.2.2 of the method is used to determine the NO_X analyzer NO_2 to NO conversion efficiency.

EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources
This method is used to measure carbon monoxide 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. 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, 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.

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-1945/1946 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 CO_2 are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO_2 then reduced to methane and analyzed.

EPA Method ALT-097 Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer

This is an acceptable alternative to EPA Method 25A for the determination of total hydrocarbons, methane, and non-methane organic compounds in stationary source emissions. The test uses TECO 55C GC/FID methane/non-methane analyzer. Heated Teflon sample gas transfer lines are used to provide a continuous sample to the 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. A system linearity check is performed prior to testing and during testing and calibration drift checks are performed after every run. All data is corrected according to EPA Method 25A.

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.

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 7 days.

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.

3.5. Instrumentation and Analytical procedures

The following continuous emissions analyzers were used:

Instrumentation	Parameter	Principle
TECO Model 42C	NO_X/NO	Chemiluminescence
TECO Model 48C	CO	Gas Filter Correlation (GFC)/IR
TECO Model 55C	THC/NMOC/CH_4	Flame Ionization (FID)
Servomex Model 1440	CO_2	Infrared (IR)
Servomex Model 1440	O_2	Paramagnetic

3.6. System Performance Criteria

The analyzer data recording system consists of a Honeywell DPR300 strip chart recorder supported by a data acquisition system (DAS). The instrument response is recorded on strip charts and DAS. The averages are corrected for drift using BAAQMD and EPA Method 7E equations.

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

3.7. Comments: Limitations and Data Qualifications

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.

Oxygen content in the LFG sample collected during Run 1 was significantly higher than the other runs, indicating an air leak in the sample. The results were corrected based on an oxygen content determined by averaging Runs 2 and 3. The following equation was used: ppm corrected = ppm (20.9 - corrected O_2 concentration)/(20.9 - original O_2 concentration).

Blue Sky Environmental has reviewed this report for accuracy and concluded that the test procedures were followed and accurately described and documented. The review included the following items:

Review of the general text
Review of calculations
Review of CEMS data
Review of supporting documentation

The services described in this report were performed in a manner consistent with the generally accepted professional testing principles and practices. No other warranty, expressed or implied, is made. These services were performed in a manner consistent with our agreement with our

client. The report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions contained in this report pertain to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and operating parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations, subsequent to this, and do not warranty the accuracy of information supplied by others.

SECTION 4. APPENDICES

A.	**Tabulated Results**
B.	**Calculations**
C.	**Laboratory Reports**
D.	**Field Data Sheets**
E.	**Process Information**
F.	**Calibration Gas Certificates**
G.	**Instrument Calibration Records**
H.	**Sample Train Configuration and Stack Diagrams**
I.	**Related Correspondence (Source Test Plan)**
J.	**Permit to Operate**

A
Tabulated Results

TABLE #1

Keller Canyon Landfill Company
Flare A-2

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	1/17/23	1/17/23	1/17/23		
Test Time	1001-1039	1055-1127	1142-1219		
Standard Temperature, °F	70	70	70		
Flare Temperature, °F	1,551	1,552	1,551	1,551	>1,400
Fuel:					
Fuel Flow Rate, DSCFM	1,461	1,469	1,472	1,467	
Fuel Heat Input, MMBtu/hr	46.6	46.1	46.5	46.4	
TRS, ppmvd in Fuel as H_2S	110	126	57.6	97.9	300
Stack Gas:					
Exhaust Flow Rate, DSCFM *(EPA Method 19)*	18,808	18,556	18,781	18,715	
Oxygen (O_2), % volume dry	12.6	12.7	12.8	12.7	
Carbon Dioxide (CO_2), % volume dry	7.9	7.8	7.7	7.8	
Water Vapor (H_2O), % volume *(EPA Method 4)*	9.0	9.9	10.5	9.8	
NO_X Emissions (reported as NO_2):					
NOx, ppmvd	10.5	10.7	10.8	10.7	
NOx, ppmvd @ 15% O_2	7.53	7.71	7.86	7.70	15
NOx, lb/hr	1.41	1.42	1.45	1.43	
NOx, lb/MMBtu	0.0303	0.0307	0.0312	0.0307	
CO Emissions:					
CO, ppmvd	48.1	43.6	38.8	43.5	
CO, ppmvd @ 15% O_2	34.4	31.4	28.2	31.3	81
CO, lb/hr	3.93	3.52	3.17	3.54	
CO, lb/MMBtu	0.0843	0.0762	0.0681	0.0762	
SO_2 Emissions:					
SO_2, ppmvd *(calculated)*	8.54	9.98	4.51	7.68	300
SO_2, lb/hr	1.60	1.84	0.843	1.43	
THC Emissions (reported as CH_4):					
THC, ppmv wet *(Sum NMOC + CH_4)*	<12.5	<14.9	<12.1	<13.2	
THC, ppmvd	<13.8	<16.4	<13.3	<14.5	
THC, lb/hr	<0.643	<0.756	<0.619	<0.673	
Methane (CH_4) Emissions:					
CH_4, ppmv wet	<10.0	<10.0	<10.0	<10.0	
CH_4, ppmvd	<11.0	<11.0	<11.0	<11.0	
CH_4, lb/hr	<0.513	<0.506	<0.512	<0.510	
NMOC Emissions:					
NMOC, ppmv wet	1.4	3.6	<1.0	<2.0	
NMOC, ppmvd	1.5	4.0	<1.1	<2.2	
NMOC, lb/hr	0.072	0.18	<0.051	<0.102	
NMOC, ppmvd @ 3% O_2	3.3	8.7	<2.4	<4.8	30*
Inlet Hydrocarbons (reported as CH_4):					
NMOC, ppmvd *(EPA Method 25C)*	2,083	2,459	2,191	2,244	
NMOC, lb/hr	7.55	8.97	8.0	8.18	
NMOC Destruction Efficiency, %	**>99.05%**	**>97.97%**	**>99.36%**	**>98.79%**	>98%*
CH_4, ppmvd	525,234	519,000	523,000	522,411	
CH_4, lb/hr	1,905	1,893	1,911	1,903	
CH_4 Destruction Efficiency, %	**>99.97%**	**>99.97%**	**>99.97%**	**>99.97%**	>99%
THC (TOC), ppmvd	527,317	521,459	525,191	524,656	
THC (TOC), lb/hr	1,912	1,902	1,919	1,911	
THC (TOC) Destruction Efficiency, %	**>99.97%**	**>99.96%**	**>99.97%**	**>99.96%**	

* NMOC permit limits are 30 ppmvd @ 3% O_2 or DE >98%

Oxygen content in the LFG sample collected during Run 1 was significantly higher than the other runs, indicating an air leak in the sample.

The results were corrected based on an oxygen content determined by averaging runs 2 and 3.

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 NO_2 (MW = 46)
CO = carbon monoxide (MW = 28)
CH_4 = methane (MW = 16)
THC = total hydrocarbons, reported as CH_4 (MW = 16)
NMOC = total non-methane organic compounds, reported as CH_4 (MW = 16)
H_2S= hydrogen sulfide

CALCULATIONS,
ppmv dry = ppmv wet · 100 / (100 - H_2O%)
ppmvd @ 3% O_2 = ppmvd · 17.9 / (20.9 - %O_2)
lb/hr = ppmv · 8.223 E-05 · DSCFM · MW / Tstd. °R
lb/day = lb/hr · 24
lb/MMBtu = Fd · MW · ppmv · 2.59E-9 · 20.9/(20.9 - %O_2)
Destruction Efficiency (DE) = (inlet, lb/hr- outlet, lb/hr) / inlet, lb/hr
SO_2, calculated = H_2S · inlet, DSCFM / exhaust, DSCFM

<Value = 2% of analyzer range

TABLE #2

Landfill Gas Characterization

Keller Canyon Landfill Company

Flare A-2

1,551°F

Parameter	Units	R1-LFG-A2	R2-LFG-A2	R3-LFG-A2	Average Results	Permit Limits
Test Date		1/17/23	1/17/23	1/17/23	-	
Acrylonitrile	ppb	<39.6	<37.2	<34.7	<37.2	500
Benzene	ppb	1,290	1,690	1,650	1,543	20,000
Carbon Tetrachloride	ppb	<39.6	<37.2	<34.7	<37.2	100
Chloroform	ppb	<39.6	<37.2	<34.7	<37.2	100
Ethylene Dichloride (1,2 Dichloroethane)	ppb	425	584	550	520	750
Ethlyene Dibromide (1,2 Dibromoethane)	ppb	<39.6	52.8	51.3	47.9	100
Methylene Chloride	ppb	113	<74.3	<69.4	<85.6	7,600
Perchloroethylene (Tetrachloroethylene)	ppb	213	303	287	268	3,300
Trichloroethylene (Trichloroethene)	ppb	112	156	150	139	1,500
Vinyl Chloride	ppb	<39.6	52.8	51.3	47.9	1,700
Carbon Disulfide	ppm	<0.079	0.079	0.084	<0.081	-
Carbonyl Sulfide (COS/SO_2)	ppm	<0.079	<0.074	1.30	<0.484	-
Dimethyl Sulfide	ppm	5.64	6.71	5.96	6.10	-
Ethyl Mercaptan	ppm	<0.079	0.309	0.288	<0.225	-
Methyl Mercaptan	ppm	5.26	<7.01	5.13	5.80	-
Hydrogen Sulfide	ppm	95.1	109	43.4	82.5	300

Appendix E – Surface Emission and GCCS Component Leak Monitoring Results

June 20, 2023
File No. 07221005.01

Ms. Antonia Gunner
Republic Services – Keller Canyon Landfill
901 Bailey Road
Pittsburg, California 94565

Subject: Keller Canyon Landfill - Pittsburg, California

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring for First Quarter 2023.

Dear Ms. Gunner:

SCS Field Services (SCS-FS) is pleased to provide the Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Keller Canyon Landfill (Site) during the first quarter 2023. This report includes the results of surface scan, component emissions and blower/flare station emissions monitoring for the Site for this monitoring period.

SCS-FS appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Art Jones (209) 345-2062 or Whitney Stackhouse at (209) 338-7990 if you have any questions or comments.

Sincerely,

Max Polkabla

Max Polkabla
Senior Technician/Data Analyst
SCS Field Services

Whitney M Stackhouse
Project Manager
SCS Field Services

Encl.

Keller Canyon Landfill

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

First Quarter 2023

Presented to:

Ms. Antonia Gunner
Republic Services – Keller Canyon
901Bailey Road
Pittsburg, California 94565

SCS FIELD SERVICES

File No. 07221005.01 | June 20, 2023

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

Keller Canyon Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring First Quarter 2023

INTRODUCTION

This letter provides results of the March 13, 15, 20, 30 and April 12, 2023, 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/NSPS 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 Keller Canyon Landfill was performed on 25-foot pathways in accordance with the LMR.

On March 13, 15, 20, 30 and April 12, 2023, SCS performed the first quarter 2023 surface emissions monitoring testing as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that seven (7) locations exceeded the 500 ppmv maximum concentration during our initial monitoring (Table 1 in Attachment 3). The required 10/20-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring indicated that all areas, except three which failed the 20-day monitoring, returned to below regulatory compliance limits following system adjustments and remediation by site personnel. Based on these monitoring results expansion is required at this time in accordance with both LMR and NSPS requirements. 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 Keller Canyon Landfill surface area was therefore divided into 211 grids, as shown on Figure 1 in Attachment 1. During the monitoring event, there were twenty-five (25) 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 twenty-one (21) areas had returned to compliance following system adjustments and remediation by SCS and site personnel. However, the remaining 4 areas remained above compliance. Based on these monitoring results, and in accordance with the LMR, the site is required to perform a system expansion within 120-days of the

third detected exceedance or July 28, 2023. These results are discussed in a subsequent section of this report.

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.

In addition, quarterly monitoring of the pressurized piping or components of the Gas Collection and Control System (GCCS) that are under positive pressure must be performed quarterly. During the monitoring event, there was one (1) location observed to exceed the 500 ppmv threshold. Although the location was repaired on March 17, 2023, follow up monitoring performed on March 20, indicated the exceedance remained. Based on these results, additional repairs were performed on March 23, 2023 and the additional testing performed on March 30, 2023 indicated the location returned to compliance. These results are discussed in a subsequent section of this report.

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, fourteen (14) locations were observed to exceed the 200 ppmv, reporting threshold (see attached location map and table with GPS coordinates). When these readings are observed, the locations are reported to site personnel for tracking and/or general surface 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 Keller Canyon 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 Keller Canyon property contains a system to control the combustible gases generated in the landfill.

SURFACE EMISSIONS MONITORING

On March 13, 15, 20, 30 and April 12, 2023, the instantaneous and integrated SEM was performed over the surface of the subject site. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the LMR threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring in the 50,000 square foot grids as required under the LMR. During this event, SCS performed the monitoring on a 25-foot pathway in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

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

- Thermo Scientific TVA 2020 portable Flame Ionization Detector (FID). This instrument measures methane in air over a range of 1 to 50,000 ppmv. The TVA 2020 meets the State of California Air Resources Board (CARB) requirements for combined instantaneous and

integrated monitoring and was calibrated in accordance with United States Environmental Protection Agency (US EPA) Method 21.

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

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

SURFACE EMISSIONS MONITORING PROCEDURES

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

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

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

TESTING RESULTS

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

On March 13, 15, 20, 30 and April 12, 2023, SCS performed first quarter 2023 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that seven (7) locations exceeded the 500 ppmv maximum concentration. The required 10/20-day (LMR/NSPS) and 30-day (NSPS) follow-up monitoring indicated that all areas, except three which failed the 20-day monitoring, returned to below regulatory compliance limits following system adjustments and remediation by site personnel. Based on these monitoring results expansion is required at this time in accordance with both LMR and NSPS requirements. The expansion deadline due to these monitoring results is July 11. 2023.

During the monitoring event, there was twenty-five (25) areas observed to exceed the 25 ppmv LMR integrated average threshold (Table 2 in Attachment 4) that were not in the exempted areas. The required first and second 10-day LMR follow-up monitoring performed on March 20 and 30, 2023, indicated that twenty-one (21) areas had returned to compliance following system adjustments and remediation by site personnel. The remaining grid areas, Grid No. KC076, KC084, KC091 & KC093

did not return to compliance as shown on the testing performed on March 30, 2023. In accordance with requirements for expansion and remediation, the grid area needs to be remediated and returned to compliance in accordance with the rule (expansion of the collection system or an alternative compliance option if approved by the BAAQMD) within 120 days after the detected third integrated exceedance, which will be due by July 28, 2023. However, based on the NSPS exceedance the date for expansion is July 11, 2023.

Results of the monitoring are shown in Attachment 4 (Table 2). Calibration logs for the monitoring equipment are provided in Attachment 5.

During this monitoring event, several girds were not monitored, in accordance with the LMR, due to active landfilling activities, unsafe conditions or no waste in place. SCS will continue to monitor all accessible locations during the second quarter 2023.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On March 13, 2023, 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. One (1) location exceeding the 500 ppmv threshold was observed during our monitoring event. The required 7-day recheck follow-up monitoring was performed on March 20 2023, the location did not returned to compliance following repairs made by SCS. Although the location was repaired on March 17, 2023, follow up monitoring performed on March 20, indicated the exceedance remained. Based on these results, additional repairs were performed on March 23, 2023 and the additional testing performed on March 30, 2023 indicated the location returned to compliance. This flame arrestor is due to be replaced during the upcoming flare replacement.

PROJECT SCHEDULE

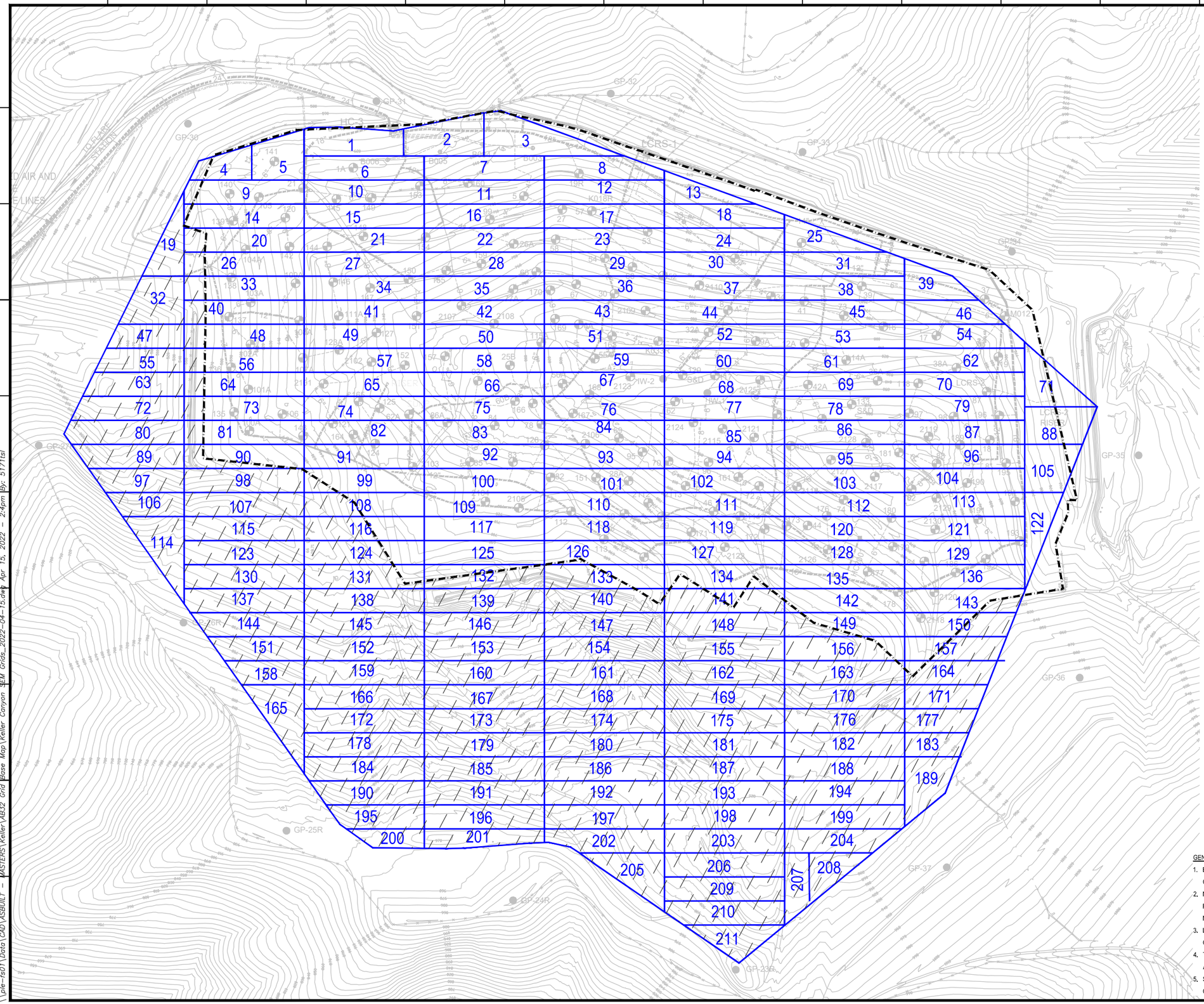
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the second quarter 2023 (April through June) surface emissions testing event is scheduled to be performed by the end of June 2023 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



GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY COOPER AERIAL. AERIAL PHOTOGRAPHY DATED 01-22-2022.
2. NORTH ARROW, THE GRID, AND THE COORDINATES SYSTEM SHOWN HERE ARE REFERENCED TO THE CALIFORNIA STATE PLANE ZONE III COORDINATE SYSTEM, NAD 27.
3. LOCATIONS DEPICTED FOR AS-BUILT GCCS COMPONENTS WERE UPDATED BASED ON AS-BUILT SURVEY DATA PROVIDED BY TETRA TECH, DATED 06-2021
4. THE LOCATIONS OF ANY EXISTING PIPING, VALVES, AND OTHER TIE-IN LOCATIONS ARE APPROXIMATE. ACTUAL FIELD CONDITIONS MAY VARY.
5. SEM PATH MAY VARY BASED ON FILL OPERATIONS, WEATHER, AND OTHER FIELD CONDITIONS.

DATE | REVISION | NO.

SHEET TITLE: 2022 SEM MAP

PROJECT TITLE: KELLER CANYON LANDFILL PITTSBURG, CA

CLIENT: REPUBLIC SERVICES

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
4683 CHABOT DRIVE SUITE 200
PLEASANTON, CA 94588
(925) 426-0580

PROJ. NO. 07221004.02 | DSN. BY: TSL | DWN. BY: TSL | CHK. BY: MED | ACAD FILE: FIENGINEERS | APP. BY: MED

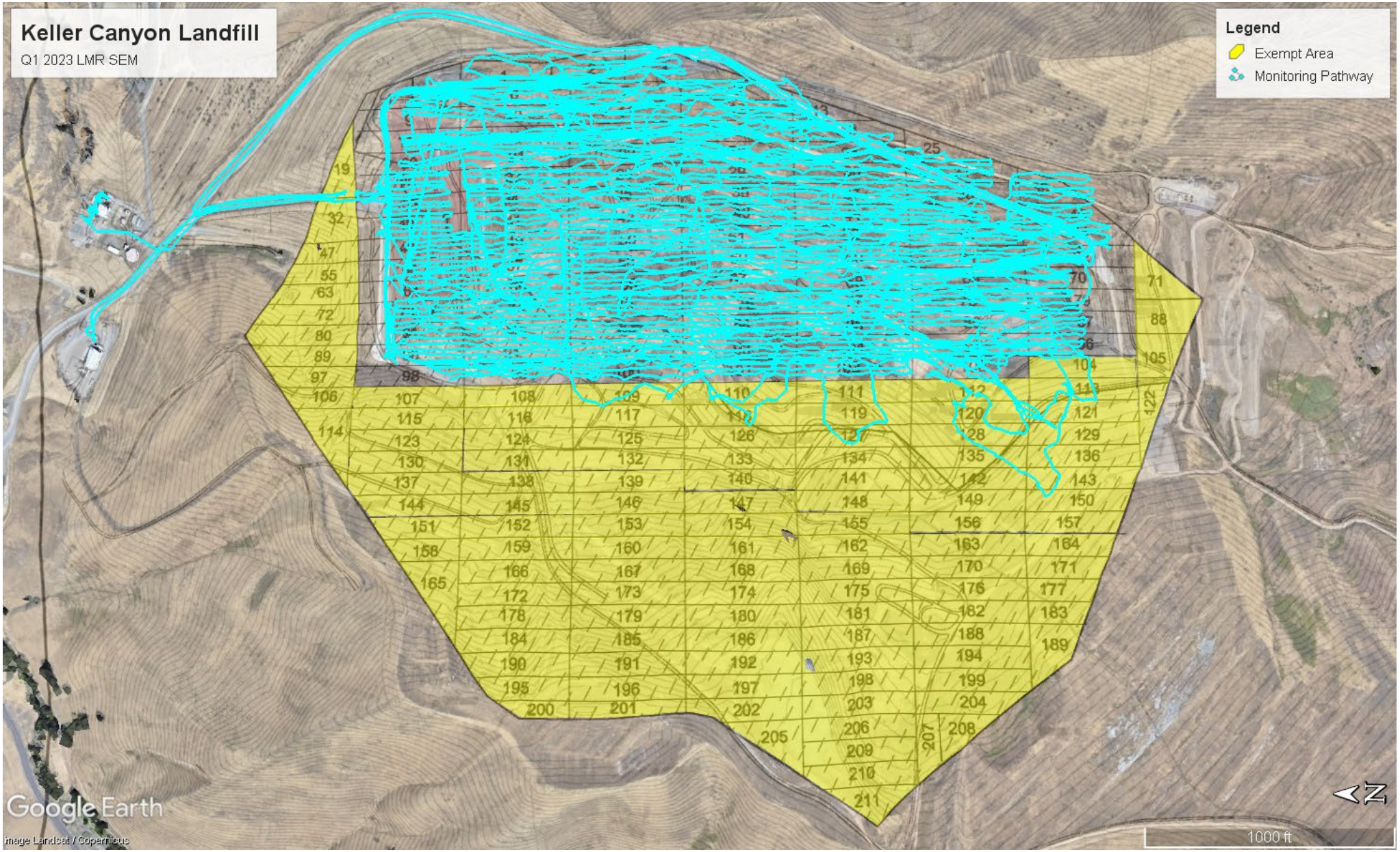
DATE: 04-15-2022

SCALE: AS SHOWN

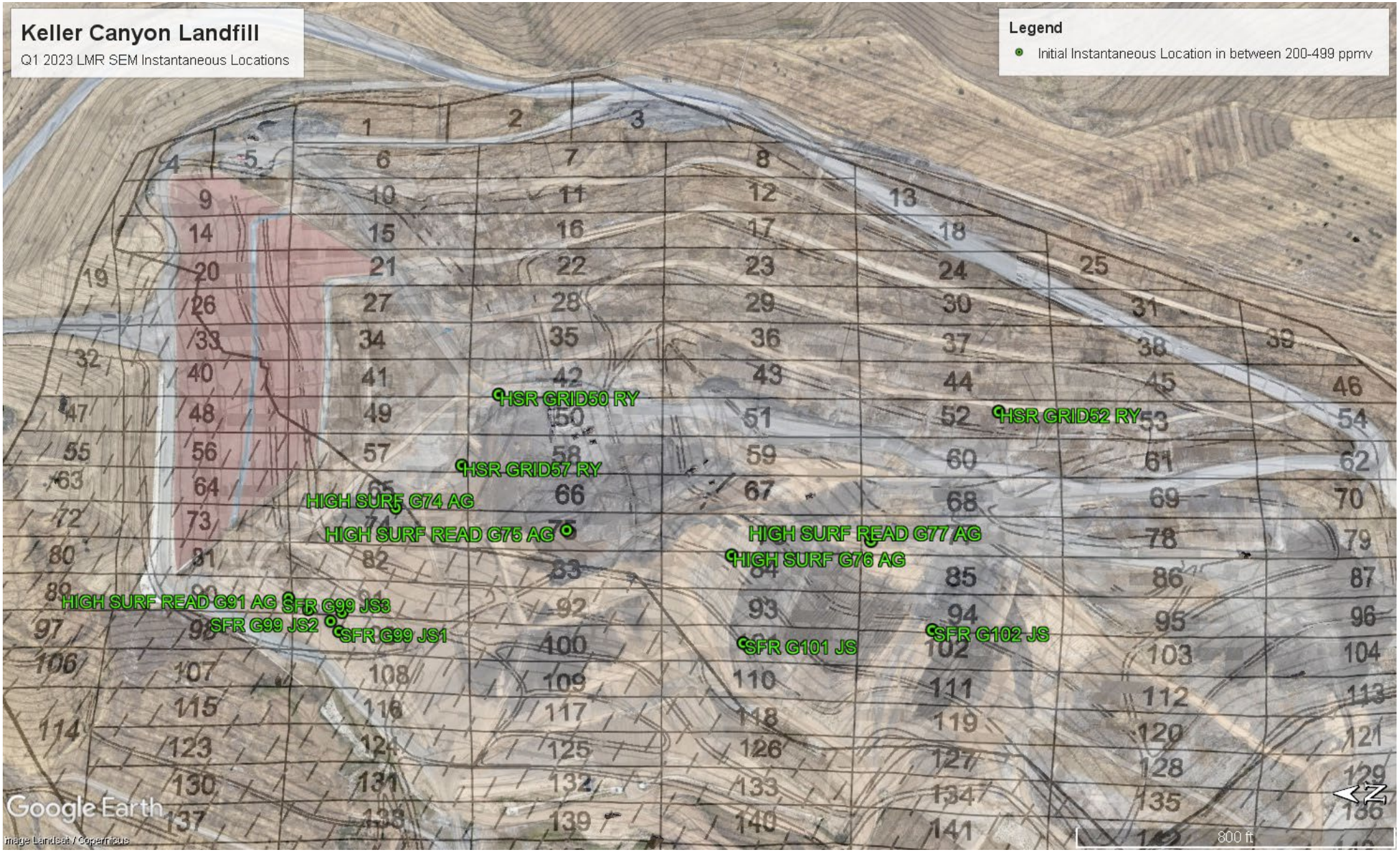
SHEET: 1

Attachment 2

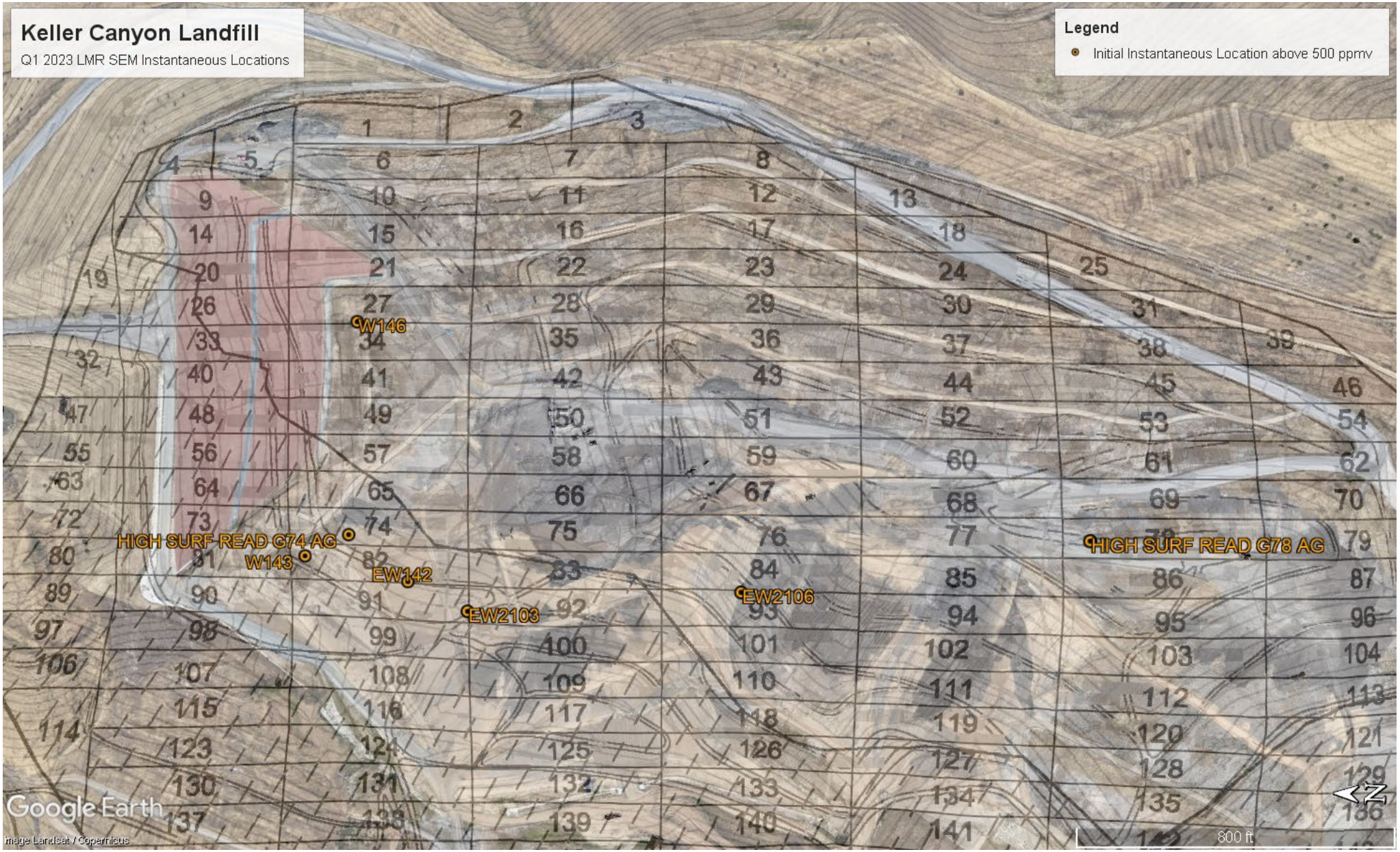
Surface Pathway,
Instantaneous Monitoring Exceedance Locations
And
200-499 Tracking Locations



First Quarter 2023
Initial LMR Surface Emissions Monitoring Pathway
Keller Canyon Landfill, Pittsburg, California



First Quarter 2023
Emissions Monitoring Results Between 200-499 ppmv
Keller Canyon Landfill, Pittsburg, California



First Quarter 2023
Emissions Monitoring Results Greater Than 500 ppmv
Keller Canyon Landfill, Pittsburg, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results and Exceedance GPS Locations

First Quarter 2023

Table 1. Instantaneous Surface and Component Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Instantaneous Data Report for March 13, 15, 20, 30 and April 12, 2023

Location (Surface)	Initial Monitoring Results (ppmv) 3/13/2023	10-Day Follow Up Monitoring Results (ppmv) 3/20/2023	2nd 10-Day Follow Up Monitoring Results (ppmv) 3/30/2023	30-Day Follow Up Monitoring Results (ppmv) 4/12/2023	Latitude	Longitude
EW2103	2,100	3,400	438	15	37.99764066	-121.936753
W143	2,000	600	467	29	37.99891773	-121.9363388
W146	1,300	3,300	5,400	11	37.99854431	-121.9341202
EW142	6,600	6,200	1,248	16	37.99810301	-121.936517
EW2106	800	1,200	2,247	69	37.99567183	-121.9364663
HIGH SURF READ G74 AG	690	21	--	37	37.99857097	-121.936111
HIGH SURF READ G78 AG	500	132	--	78	37.99327201	-121.935867

First Quarter 2023

Table 1. Instantaneous Surface and Component Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Instantaneous Data Report for March 13, 15, 20, 30 and April 12, 2023

Readings between 200-499 ppmv

Location (Surface)	Initial Monitoring Results (ppmv) 3/13/2023	Latitude	Longitude
HIGH SURF G74 AG	395	37.998203	-121.935843
HIGH SURF G76 AG	305	37.99575004	-121.936135
HIGH SURF READ G75 AG	267	37.996923	-121.935962
HIGH SURF READ G77 AG	230	37.99478704	-121.935945
HIGH SURF READ G91 AG	444	37.99905603	-121.936766
HSR GRID50 RY	211	37.99745601	-121.934763
HSR GRID52 RY	227	37.99389697	-121.93476
HSR GRID57 RY	200	37.99770797	-121.935421
SFR G101 JS	487	37.99563797	-121.936956
SFR G102 JS	277	37.99432998	-121.936723
SFR G99 JS1	427	37.99864699	-121.937053

First Quarter 2023

Table 1. Instantaneous Surface and Component Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Location (Surface)	Initial Monitoring Results (ppmv) 3/13/2023	Latitude	Longitude
SFR G99 JS2	376	37.99871698	-121.936963
SFR G99 JS3	302	37.99862696	-121.936872
SFR G99 JS4	246	37.99889904	-121.936869

Pressurized Pipe and Component Results

Route	Initial Monitoring Results (ppmv) 3/13/2023	Recheck Monitoring Results (ppmv) 3/20/2023	Recheck Monitoring Results (ppmv) 3/30/2023
Flare Station (Flame Arrestor)	2,200	10,000	100

No other exceedances of the 500 ppmv threshold were observed during the first quarter 2023 monitoring.

Attachment 4

Integrated Monitoring Results

First Quarter 2023
Table 2. Integrated Surface Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC001	3/13/2023 13:33	3.16	
KC002	3/13/2023 13:42	5.04	
KC003	3/13/2023 13:41	4.75	
KC004	3/13/2023 13:57	2.13	
KC005	3/13/2023 13:11	3.74	
KC006	3/13/2023 13:29	4.42	
KC007	3/13/2023 13:35	4.75	
KC008	3/13/2023 13:20	5.34	
KC009	3/13/2023 10:37	2.79	
KC010	3/13/2023 10:39	6.36	
KC011	3/13/2023 10:40	6.98	
KC012	3/13/2023 10:36	6.59	
KC013	3/13/2023 10:38	3.08	
KC014	3/13/2023 09:18	3.13	
KC015	3/13/2023 09:44	3.14	
KC016	3/13/2023 09:49	5.53	
KC017	3/13/2023 09:43	10.11	
KC018	3/13/2023 09:35	3.60	
KC019	--	--	Native Grid
KC020	3/13/2023 08:46	0.67	
KC021	3/13/2023 08:40	7.38	
KC022	3/13/2023 08:33	11.50	
KC023	3/13/2023 08:36	15.04	
KC024	3/13/2023 08:29	6.55	
KC025	3/13/2023 08:22	3.24	
KC026	3/13/2023 15:49	8.57	
KC027	3/13/2023 09:03	29.33	Initial Monitoring
KC027	3/20/2023 09:41	9.16	10-Day Recheck
KC028	3/13/2023 09:05	26.47	Initial Monitoring
KC028	3/20/2023 09:41	15.97	10-Day Recheck
KC029	3/13/2023 10:15	14.63	
KC030	3/13/2023 10:06	7.42	
KC031	3/13/2023 10:00	4.62	
KC032	--	--	Native Grid
KC033	3/13/2023 15:41	8.53	
KC034	3/13/2023 11:52	11.66	
KC035	3/13/2023 11:51	21.51	
KC036	3/13/2023 11:43	28.31	Initial Monitoring
KC036	3/20/2023 09:19	17.23	10-Day Recheck
KC037	3/13/2023 11:20	20.08	
KC038	3/13/2023 11:01	6.03	
KC039	3/13/2023 13:20	8.94	
KC040	3/13/2023 15:32	8.00	

First Quarter 2023
Table 2. Integrated Surface Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC041	3/13/2023 13:52	18.97	
KC042	3/13/2023 13:58	27.94	Initial Monitoring
KC042	3/20/2023 08:57	10.10	10-Day Recheck
KC043	3/13/2023 13:58	30.81	Initial Monitoring
KC043	3/20/2023 08:59	15.51	10-Day Recheck
KC044	3/13/2023 13:51	21.83	
KC045	3/13/2023 14:10	18.75	
KC046	3/13/2023 14:15	6.17	
KC047	--	--	Native Grid
KC048	3/13/2023 10:31	7.86	
KC049	3/13/2023 10:37	18.64	
KC050	3/13/2023 10:48	40.76	Initial Monitoring
KC050	3/20/2023 08:37	13.49	10-Day Recheck
KC051	3/13/2023 10:46	20.06	
KC052	3/13/2023 10:05	36.86	Initial Monitoring
KC052	3/20/2023 08:20	16.82	10-Day Recheck
KC053	3/13/2023 09:30	21.22	
KC054	3/13/2023 09:26	9.17	
KC055	--	--	Native Grid
KC056	3/13/2023 11:08	9.37	
KC057	3/13/2023 12:13	14.63	
KC058	3/13/2023 13:36	26.31	Initial Monitoring
KC058	3/20/2023 08:45	18.52	10-Day Recheck
KC059	3/13/2023 13:35	33.84	Initial Monitoring
KC059	3/20/2023 08:44	28.12	First 10-Day Recheck
KC059	3/30/2023 07:31	23.46	Second 10-Day Recheck
KC060	3/13/2023 12:00	42.12	Initial Monitoring
KC060	3/20/2023 07:49	22.95	10-Day Recheck
KC061	3/13/2023 11:11	16.31	
KC062	3/13/2023 10:24	23.14	
KC063	--	--	Native Grid
KC064	3/13/2023 15:25	20.12	
KC065	3/13/2023 14:54	20.95	
KC066	3/13/2023 15:01	26.06	Initial Monitoring
KC066	3/20/2023 09:33	8.87	10-Day Recheck
KC067	3/13/2023 15:08	24.78	
KC068	3/30/2023 07:43	45.32	Initial Monitoring
KC068	3/13/2023 15:12	26.03	First 10-Day Recheck
KC069	3/13/2023 15:13	9.67	Second 10-Day Recheck
KC070	3/13/2023 15:11	9.93	
KC071	--	--	Active Area
KC072	--	--	Native Grid
KC073	3/13/2023 09:40	3.96	

First Quarter 2023

Table 2. Integrated Surface Emissions Monitoring Results

Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC074	3/13/2023 10:04	36.03	Initial Monitoring
KC074	3/20/2023 08:26	10.07	10-Day Recheck
KC075	3/13/2023 09:46	27.82	Initial Monitoring
KC075	3/20/2023 08:23	14.31	10-Day Recheck
KC076	3/13/2023 09:51	51.11	Initial Monitoring
KC076	3/30/2023 08:08	43.50	First 10-Day Recheck
KC076	3/20/2023 08:28	32.07	Second 10-Day Recheck (120-day expansion required)
KC077	3/13/2023 09:51	30.11	Initial Monitoring
KC077	3/30/2023 07:55	22.72	10-Day Recheck
KC078	3/13/2023 09:36	12.90	
KC079	3/13/2023 09:43	3.11	
KC080	--	--	Native Grid
KC081	3/13/2023 12:20	19.82	
KC082	3/13/2023 12:34	36.63	
KC082	3/20/2023 09:36	30.50	
KC082	3/30/2023 10:18	14.29	
KC083	3/13/2023 12:14	27.28	
KC083	3/20/2023 09:34	16.00	
KC084	3/13/2023 12:07	52.95	Initial Monitoring
KC084	3/30/2023 10:42	39.54	First 10-Day Recheck
KC084	3/20/2023 09:48	34.04	Second 10-Day Recheck (120-day expansion required)
KC085	3/13/2023 12:20	21.91	
KC086	3/13/2023 12:27	3.17	
KC087	3/13/2023 12:22	4.48	
KC088	--	--	Active Area
KC089	--	--	Native Grid
KC090	3/13/2023 14:18	17.44	
KC091	3/13/2023 14:22	48.24	Initial Monitoring
KC091	3/30/2023 09:23	41.43	First 10-Day Recheck
KC091	3/20/2023 08:48	38.70	Second 10-Day Recheck (120-day expansion required)
KC092	3/13/2023 14:26	35.22	Initial Monitoring
KC092	3/20/2023 08:46	25.68	First 10-Day Recheck
KC092	3/30/2023 09:22	25.31	Second 10-Day Recheck (120-day expansion required)
KC093	3/30/2023 09:20	65.58	Initial Monitoring
KC093	3/20/2023 08:50	46.35	First 10-Day Recheck
KC093	3/13/2023 14:27	44.29	Second 10-Day Recheck (120-day expansion required)
KC094	3/13/2023 14:27	26.89	Initial Monitoring
KC094	3/20/2023 08:53	23.96	10-Day Recheck
KC095	3/13/2023 14:31	3.09	
KC096	3/13/2023 14:22	4.18	

First Quarter 2023

Table 2. Integrated Surface Emissions Monitoring Results

Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC097	--	--	Native Grid
KC098	3/13/2023 11:07	16.69	
KC099	3/13/2023 11:17	48.86	Initial Monitoring
KC099	3/20/2023 10:42	16.80	10-Day Recheck
KC100	3/13/2023 11:20	17.77	
KC101	3/13/2023 11:18	36.12	Initial Monitoring
KC101	3/20/2023 10:14	23.75	10-Day Recheck
KC102	3/13/2023 11:20	24.73	
KC103	3/13/2023 11:21	1.40	
KC104	--	--	Active Area
KC105	--	--	Active Area
KC106	--	--	Native Grid
KC107	--	--	Native Grid
KC108	--	--	Native Grid
KC109	--	--	Native Grid
KC110	--	--	Native Grid
KC111	--	--	Native Grid
KC112	--	--	Native Grid
KC113	--	--	Active Area
KC114	--	--	Native Grid
KC115	--	--	Native Grid
KC116	--	--	Exempt Grid due to Health and Safety Concerns
KC117	--	--	Exempt Grid due to Health and Safety Concerns
KC118	--	--	Exempt Grid due to Health and Safety Concerns
KC119	--	--	Exempt Grid due to Health and Safety Concerns
KC120	--	--	Exempt Grid due to Health and Safety Concerns
KC121	--	--	Active Area
KC122	--	--	Active Area
KC123	--	--	Native Grid
KC124	--	--	Exempt Grid due to Health and Safety Concerns
KC125	--	--	Exempt Grid due to Health and Safety Concerns
KC126	--	--	Exempt Grid due to Health and Safety Concerns
KC127	--	--	Exempt Grid due to Health and Safety Concerns
KC128	--	--	Exempt Grid due to Health and Safety Concerns
KC129	--	--	Exempt Grid due to Health and Safety Concerns
KC130	--	--	Native Grid
KC131	--	--	Exempt Grid due to Health and Safety Concerns
KC132	--	--	Exempt Grid due to Health and Safety Concerns
KC133	--	--	Exempt Grid due to Health and Safety Concerns
KC134	--	--	Exempt Grid due to Health and Safety Concerns
KC135	--	--	Exempt Grid due to Health and Safety Concerns
KC136	--	--	Exempt Grid due to Health and Safety Concerns
KC137	--	--	Native Grid

First Quarter 2023

Table 2. Integrated Surface Emissions Monitoring Results

Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC138	--	--	Native Grid
KC139	--	--	Native Grid
KC140	--	--	Exempt Grid due to Health and Safety Concerns
KC141	--	--	Exempt Grid due to Health and Safety Concerns
KC142	--	--	Exempt Grid due to Health and Safety Concerns
KC143	--	--	Exempt Grid due to Health and Safety Concerns
KC144	--	--	Native Grid
KC145	--	--	Native Grid
KC146	--	--	Native Grid
KC147	--	--	Native Grid
KC148	--	--	Exempt Grid due to Health and Safety Concerns
KC149	--	--	Exempt Grid due to Health and Safety Concerns
KC150	--	--	Exempt Grid due to Health and Safety Concerns
KC151	--	--	Native Grid
KC152	--	--	Native Grid
KC153	--	--	Native Grid
KC154	--	--	Native Grid
KC155	--	--	Native Grid
KC156	--	--	Exempt Grid due to Health and Safety Concerns
KC157	--	--	Exempt Grid due to Health and Safety Concerns
KC158	--	--	Native Grid
KC159	--	--	Native Grid
KC160	--	--	Native Grid
KC161	--	--	Native Grid
KC162	--	--	Native Grid
KC163	--	--	Native Grid
KC164	--	--	Native Grid
KC165	--	--	Native Grid
KC166	--	--	Native Grid
KC167	--	--	Native Grid
KC168	--	--	Native Grid
KC169	--	--	Native Grid
KC170	--	--	Native Grid
KC171	--	--	Native Grid
KC172	--	--	Native Grid
KC173	--	--	Native Grid
KC174	--	--	Native Grid
KC175	--	--	Native Grid
KC176	--	--	Native Grid
KC177	--	--	Native Grid
KC178	--	--	Native Grid
KC179	--	--	Native Grid
KC180	--	--	Native Grid

First Quarter 2023

Table 2. Integrated Surface Emissions Monitoring Results

Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC181	--	--	Native Grid
KC182	--	--	Native Grid
KC183	--	--	Native Grid
KC184	--	--	Native Grid
KC185	--	--	Native Grid
KC186	--	--	Native Grid
KC187	--	--	Native Grid
KC188	--	--	Native Grid
KC189	--	--	Native Grid
KC190	--	--	Native Grid
KC191	--	--	Native Grid
KC192	--	--	Native Grid
KC193	--	--	Native Grid
KC194	--	--	Native Grid
KC195	--	--	Native Grid
KC196	--	--	Native Grid
KC197	--	--	Native Grid
KC198	--	--	Native Grid
KC199	--	--	Native Grid
KC200	--	--	Native Grid
KC201	--	--	Native Grid
KC202	--	--	Native Grid
KC203	--	--	Native Grid
KC204	--	--	Native Grid
KC205	--	--	Native Grid
KC206	--	--	Native Grid
KC207	--	--	Native Grid
KC208	--	--	Native Grid
KC209	--	--	Native Grid
KC210	--	--	Native Grid
KC211	--	--	Native Grid

Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 03/13/23 Site Name: Keller

Inspector(s): Andrew Stone Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: N Barometric Pressure: 30.08 "Hg

Air Temperature: 51 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	501	1	3
2	-0.1	500	0	4
3	0	500	0	4

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

=99.9 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 132100
Counters Observed for the Zero= 3943

Trial 2:
Counts Observed for the Span= 125024
Counters Observed for the Zero= 3664

Trial 3:
Counts Observed for the Span= 130161
Counters Observed for the Zero= 4604

Post Monitoring Calibration Check

Zero Air Reading: 2.3 ppm Cal Gas Reading: 562 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.7 ppm

Downwind Location Description: Grid 4 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: 3-13-23 Site Name: Keller

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 5 MPH Wind Direction: S Barometric Pressure: 30.08 "Hg

Air Temperature: 52 °F General Weather Conditions: cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 2367 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	502	2	3
2	0.0	500	0	3
3	0.0	501	1	3

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 159596
Counters Observed for the Zero= 5196

Trial 2:
Counts Observed for the Span= 162836
Counters Observed for the Zero= 5186

Trial 3:
Counts Observed for the Span= 161812
Counters Observed for the Zero= 5203

Post Monitoring Calibration Check

Zero Air Reading: 1.3 ppm Cal Gas Reading: 2.1 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.7 ppm

Downwind Location Description: Grid 4 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: 3-13-23 Site Name: Keller

Inspector(s): Jonathan Sepulveda Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: N Barometric Pressure: 30.09 "Hg

Air Temperature: 52 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	502	2	3
2	0	497	3	4
3	0	498	2	2

Average Difference: 2.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.3 /500 x 100%

=99.54 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 128900
Counters Observed for the Zero= 5922

Trial 2:
Counts Observed for the Span= 139240
Counters Observed for the Zero= 4269

Trial 3:
Counts Observed for the Span= 141284
Counters Observed for the Zero= 4136

Post Monitoring Calibration Check

Zero Air Reading: -1.9 ppm Cal Gas Reading: 511 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Place Reading: 1.7 ppm

Downwind Location Description: Grid 4 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: 3-13-23 Site Name: Keller

Inspector(s): Alfredo Gomez Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: N Barometric Pressure: 30.09 "Hg

Air Temperature: 52 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 4386 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.2	503	3	3
2	0.1	496	4	5
3	0.0	500	0	4

Average Difference: 2.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.3 /500 x 100%

= 99.54%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 139828
Counters Observed for the Zero= 3783

Trial 2:
Counts Observed for the Span= 128420
Counters Observed for the Zero= 3689

Trial 3:
Counts Observed for the Span= 124488
Counters Observed for the Zero= 3884

Post Monitoring Calibration Check

Zero Air Reading: 2.6 ppm Cal Gas Reading: 493 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.7 ppm

Downwind Location Description: G4 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: 03/13/23 Site Name: Keller

Inspector(s): Ricardo Yepez Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: N Barometric Pressure: 30.08 "Hg

Air Temperature: 51 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

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

Average Difference: 3

*Perform recalibration if average difference is greater than 10

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

= 100%- 3 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 165120
Counters Observed for the Zero= 4756

Trial 2:
Counts Observed for the Span= 166368
Counters Observed for the Zero= 4626

Trial 3:
Counts Observed for the Span= 166704
Counters Observed for the Zero= 4677

Post Monitoring Calibration Check

Zero Air Reading: -1.9 ppm Cal Gas Reading: 509 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.

[illegible]

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 03/13/23 Site Name: Keller

Inspector(s): Arturo Olivares Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 4 MPH Wind Direction: N Barometric Pressure: 30.08 "Hg

Air Temperature: 51 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1153 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	497	3	4
2	-0.1	499	1	3
3	-0.1	503	3	3

Average Difference: 2.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.3 /500 x 100%

=99.5 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 163020
Counters Observed for the Zero= 3485

Trial 2:
Counts Observed for the Span= 157120
Counters Observed for the Zero= 3403

Trial 3:
Counts Observed for the Span= 150940
Counters Observed for the Zero= 3285

Post Monitoring Calibration Check

Zero Air Reading: 1.3 ppm Cal Gas Reading: 507 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Mark Grid 4 Reading: 1.7 ppm

Downwind Location Description: 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: 3/15/23 Site Name: Keller

Inspector(s): Art. O Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 29.97 "Hg

Air Temperature: 42 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	496	4	2
2	0	503	3	1
3	0	496	4	3

Average Difference: 11

*Perform recalibration if average difference is greater than 10

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

= 100%- 11 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 140212
Counters Observed for the Zero= 4198

Trial 2:
Counts Observed for the Span= 137488
Counters Observed for the Zero= 4179

Trial 3:
Counts Observed for the Span= 141572
Counters Observed for the Zero= 3952

Post Monitoring Calibration Check

Zero Air Reading: 0.4 ppm Cal Gas Reading: 502 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 2.8 ppm

Downwind Location Description: 6.30 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: 3/15/23 Site Name: Keller

Inspector(s): Alfredo G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 29.97 "Hg

Air Temperature: 42 °F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5419 Cal Gas Concentration: 500ppm

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

Average Difference: 0

*Perform recalibration if average difference is greater than 10

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

= 100%- 0 /500 x 100%

= 100 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 183532
Counters Observed for the Zero= 5032

Trial 2:
Counts Observed for the Span= 183544
Counters Observed for the Zero= 5017

Trial 3:
Counts Observed for the Span= 183540
Counters Observed for the Zero= 5002

Post Monitoring Calibration Check

Zero Air Reading: 0.5 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 2.8 ppm

Downwind Location Description: C-30 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: 3/15/23 Site Name: Keller

Inspector(s): RMarren Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 29.97 "Hg

Air Temperature: 42 °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: ~~12H~~ 1153 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.0	499	1	3
2	-0.1	~~498~~ 499	2	2
3	-0.2	503	3	1

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= 146464
Counters Observed for the Zero= 3034

Trial 2:
Counts Observed for the Span= 152008
Counters Observed for the Zero= 3073

Trial 3:
Counts Observed for the Span= 141492
Counters Observed for the Zero= 3117

Post Monitoring Calibration Check

Zero Air Reading: 0.2 ppm Cal Gas Reading: 502 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 2.8 ppm

Downwind Location Description: G-30 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: 3-20-23 Site Name: KELLER CANYON

Inspector(s): EPA 2 Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: E Barometric Pressure: 29.93 "Hg

Air Temperature: 46 °F General Weather Conditions: MOSTLY CLOUDY

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	502	2	5
2	-0.1	501	1	4
3	-0.1	503	3	4

Average Difference: 2

*Perform recalibration if average difference is greater than 10

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

= 100%- 2 /500 x 100%

= 99.6 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 124544
Counters Observed for the Zero= 3840

Trial 2:
Counts Observed for the Span= 129068
Counters Observed for the Zero= 3794

Trial 3:
Counts Observed for the Span= 130120
Counters Observed for the Zero= 3843

Post Monitoring Calibration Check

Zero Air Reading: 2.7 ppm Cal Gas Reading: 5.7 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: GRID Reading: 13.2 ppm

Downwind Location Description: ENTRANCE Reading: 4.9 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: 3-20-23 Site Name: Keller

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

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

Air Temperature: 41 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1211 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	.7	500	0	3
2	0	501	1	5
3	0	497	3	2

Average Difference: 4

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.74 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 121848

Counters Observed for the Zero= 5933

Trial 2:

Counts Observed for the Span= 128620

Counters Observed for the Zero= 5454

Trial 3:

Counts Observed for the Span= 136688

Counters Observed for the Zero= 4057

Post Monitoring Calibration Check

Zero Air Reading: 2.3 ppm Cal Gas Reading: 493 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid165 Reading: 13.2 ppm

Downwind Location Description: Entrance Reading: 4.9 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: 3-20-23 Site Name: Keller

Inspector(s): ALFREDO GOMEZ Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: .9 MPH Wind Direction: NE Barometric Pressure: 29.94 "Hg

Air Temperature: 41 °F General Weather Conditions: Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5419 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.2	498	2	3
2	0	502	2	5
3	-0.1	496	4	2

Average Difference: 8

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.6 /500 x 100%

= 99.48 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 159012
Counters Observed for the Zero= 6347

Trial 2:
Counts Observed for the Span= 182284
Counters Observed for the Zero= 5681

Trial 3:
Counts Observed for the Span= 174524
Counters Observed for the Zero= 5113

Post Monitoring Calibration Check

Zero Air Reading: -2.9 ppm Cal Gas Reading: 489 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 105 Reading: 13.2 ppm

Downwind Location Description: Entrance Reading: 4.9 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: 3-20-23 Site Name: Keller

Inspector(s): ARTURO OLIVERAS Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 29.93 "Hg

Air Temperature: 47 °F General Weather Conditions: Mostly Cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	502	2	4
2	0	496	4	2
3	-0.1	501	1	5

Average Difference: 7

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.3 /500 x 100%

= 99.54 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 102556
Counters Observed for the Zero= 4548

Trial 2:
Counts Observed for the Span= 148164
Counters Observed for the Zero= 4362

Trial 3:
Counts Observed for the Span= 145128
Counters Observed for the Zero= 4161

Post Monitoring Calibration Check

Zero Air Reading: -3.0 ppm Cal Gas Reading: 515 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 105 Reading: 13.2 ppm

Downwind Location Description: Entrance Reading: 4.9 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: 3-20-23 Site Name: Keller

Inspector(s): Ricardo YEPEZ Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 29.93 "Hg

Air Temperature: 47 °F General Weather Conditions: Mostly cloudy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1223 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	502	2	5
2	0	500	0	3
3	-0.1	498	2	5

Average Difference: 4

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.74 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 160352
Counters Observed for the Zero= 4525

Trial 2:
Counts Observed for the Span= 161658
Counters Observed for the Zero= 4478

Trial 3:
Counts Observed for the Span= 164662
Counters Observed for the Zero= 4550

Post Monitoring Calibration Check

Zero Air Reading: -1.9 ppm Cal Gas Reading: 498 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 105 Reading: 13.2 ppm

Downwind Location Description: Entrance Reading: 4.9 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: 3-20-23 Site Name: Keller

Inspector(s): _____ Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 29.93 "Hg

Air Temperature: 47 °F General Weather Conditions: Mostly 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: 4388 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	498	2	5
2	-0.1	501	1	4
3	-0.1	500	0	5

Average Difference: ~~3~~ 1

*Perform recalibration if average difference is greater than 10

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

= 100%- ~~3~~ 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 136276
Counters Observed for the Zero= 3870

Trial 2:
Counts Observed for the Span= 135652
Counters Observed for the Zero= 3882

Trial 3:
Counts Observed for the Span= 135476
Counters Observed for the Zero= 3862

Post Monitoring Calibration Check

Zero Air Reading: 2.8 ppm Cal Gas Reading: 5.7 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid Reading: 13.2 ppm

Downwind Location Description: Entrance Reading: 4.9 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: 3.20.23 Site Name: KELLER CANYON

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: E Barometric Pressure: 29.93 "Hg

Air Temperature: 46 °F General Weather Conditions: MOSTLY 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	0	500	0	5
2	-0.1	498	2	4
3	0	502	2	5

Average Difference: ~~13~~ 4

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.74 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 166064
Counters Observed for the Zero= 4937

Trial 2:
Counts Observed for the Span= 171524
Counters Observed for the Zero= 4906

Trial 3:
Counts Observed for the Span= 170136
Counters Observed for the Zero= 4892

Post Monitoring Calibration Check

Zero Air Reading: 2.8 ppm Cal Gas Reading: 5.6 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: GRID Reading: 13.2 ppm

Downwind Location Description: ENTRANCE Reading: 4.9 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: 3-30-23 Site Name: Keller

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 46 °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	0	501	1	5
2	0	501	1	3
3	-0.1	499	1	2

Average Difference: ~~+~~ 0.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 0.3 /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 160396
Counters Observed for the Zero= 4817

Trial 2:
Counts Observed for the Span= 165996
Counters Observed for the Zero= 4805

Trial 3:
Counts Observed for the Span= 168506
Counters Observed for the Zero= 4830

Post Monitoring Calibration Check

Zero Air Reading: -0.1 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 3.6 ppm

Downwind Location Description: G4 Reading: 22.5 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 3-30-23 Site Name: Keller

Inspector(s): Jonathan Sepulveda Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 2 MPH Wind Direction: SE Barometric Pressure: 29 "Hg

Air Temperature: 46 °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: 4388 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	501	1	3
2	-0.1	501	1	5
3	-0.1	500	0	4

Average Difference: 0.6

*Perform recalibration if average difference is greater than 10

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

= 100%- 0.6 /500 x 100%

= %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 130648
Counters Observed for the Zero= 3776

Trial 2:
Counts Observed for the Span= 130896
Counters Observed for the Zero= 3745

Trial 3:
Counts Observed for the Span= 131060
Counters Observed for the Zero= 3746

Post Monitoring Calibration Check

Zero Air Reading: -0.1 ppm Cal Gas Reading: 503 ppm

BACKGROUND CONCENTRATIONS CHECKS

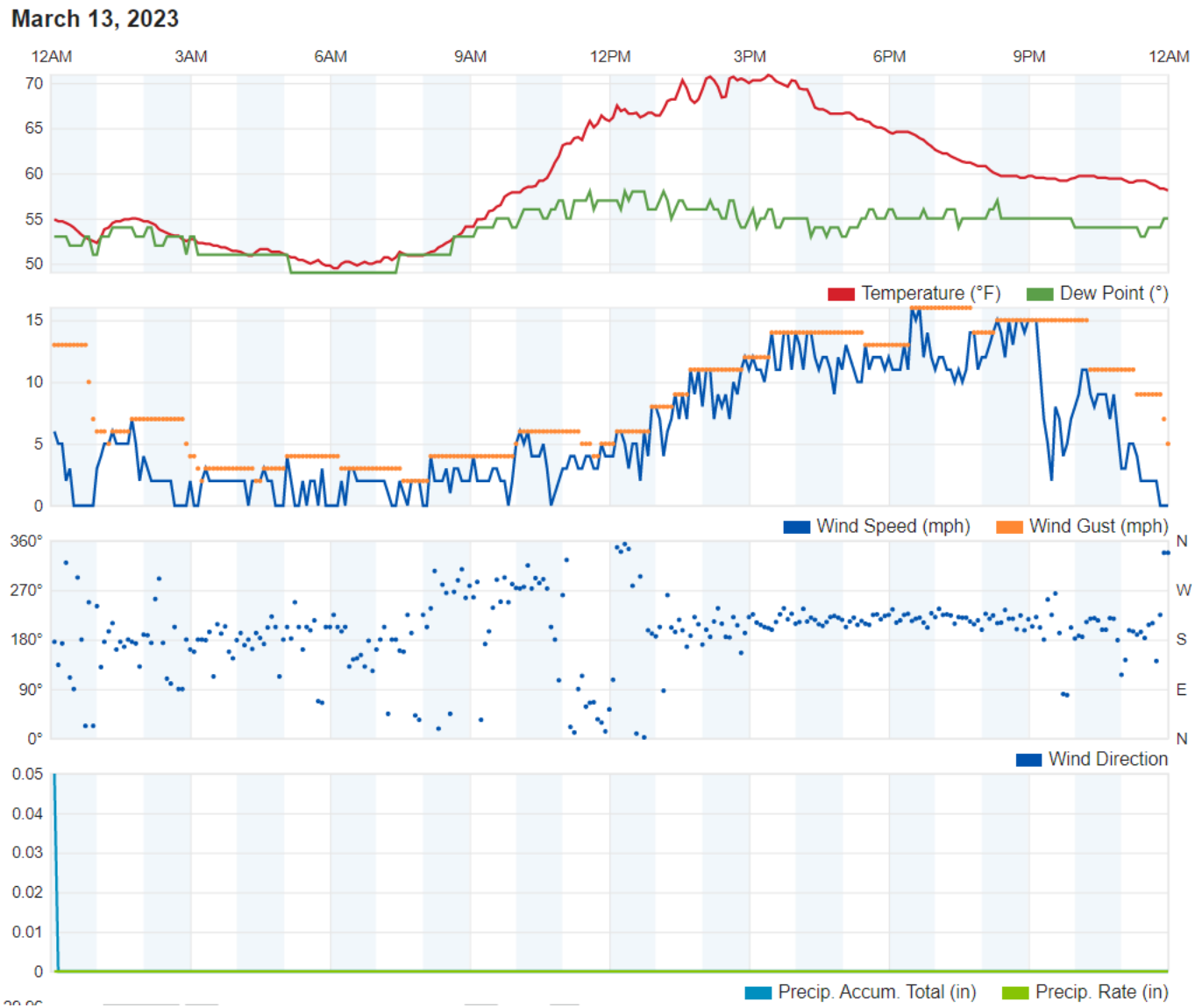
Upwind Location Description: Flare Reading: 3.6 ppm

Downwind Location Description: G4 Reading: 22.5 ppm

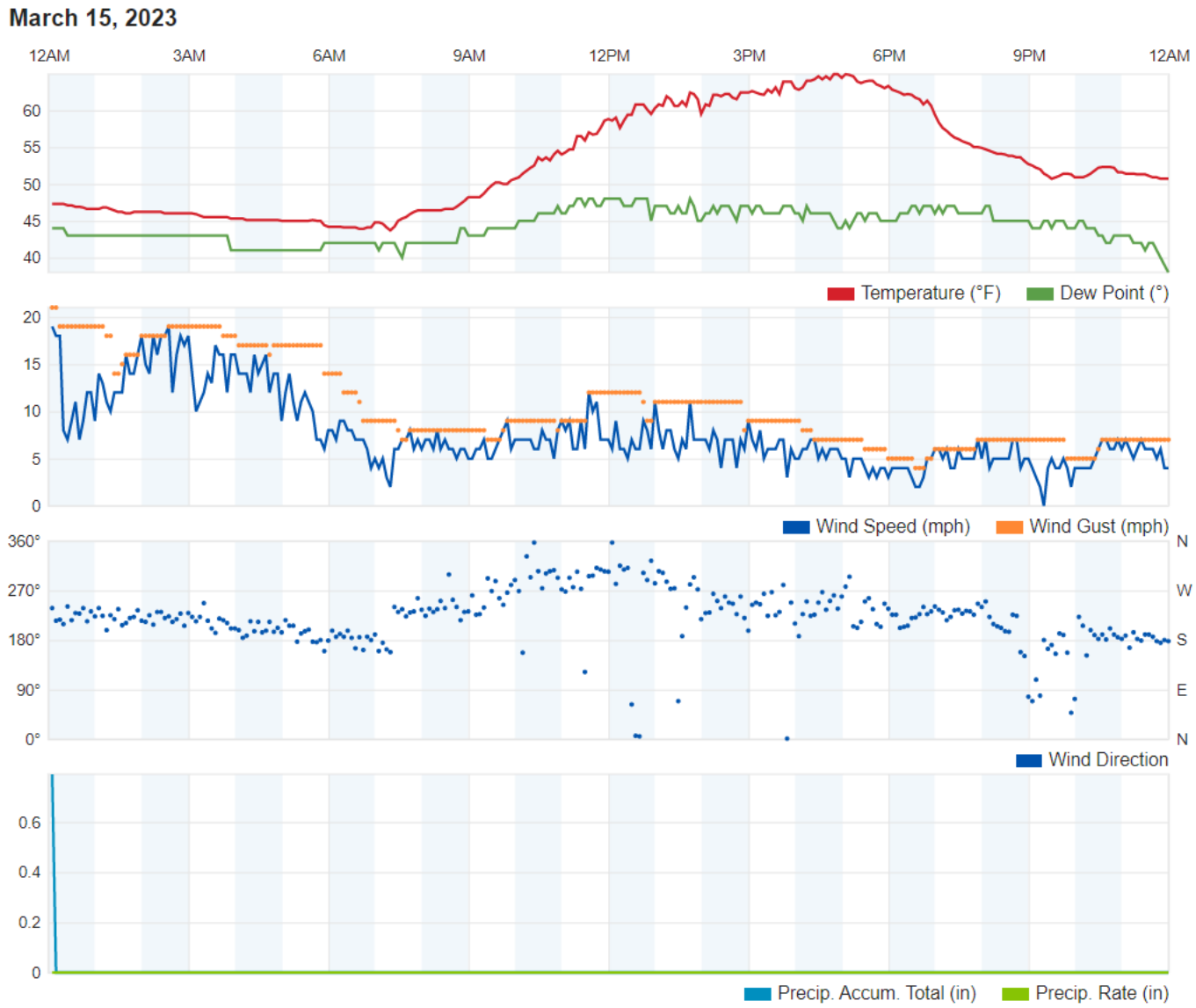
Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested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

Attachment 6

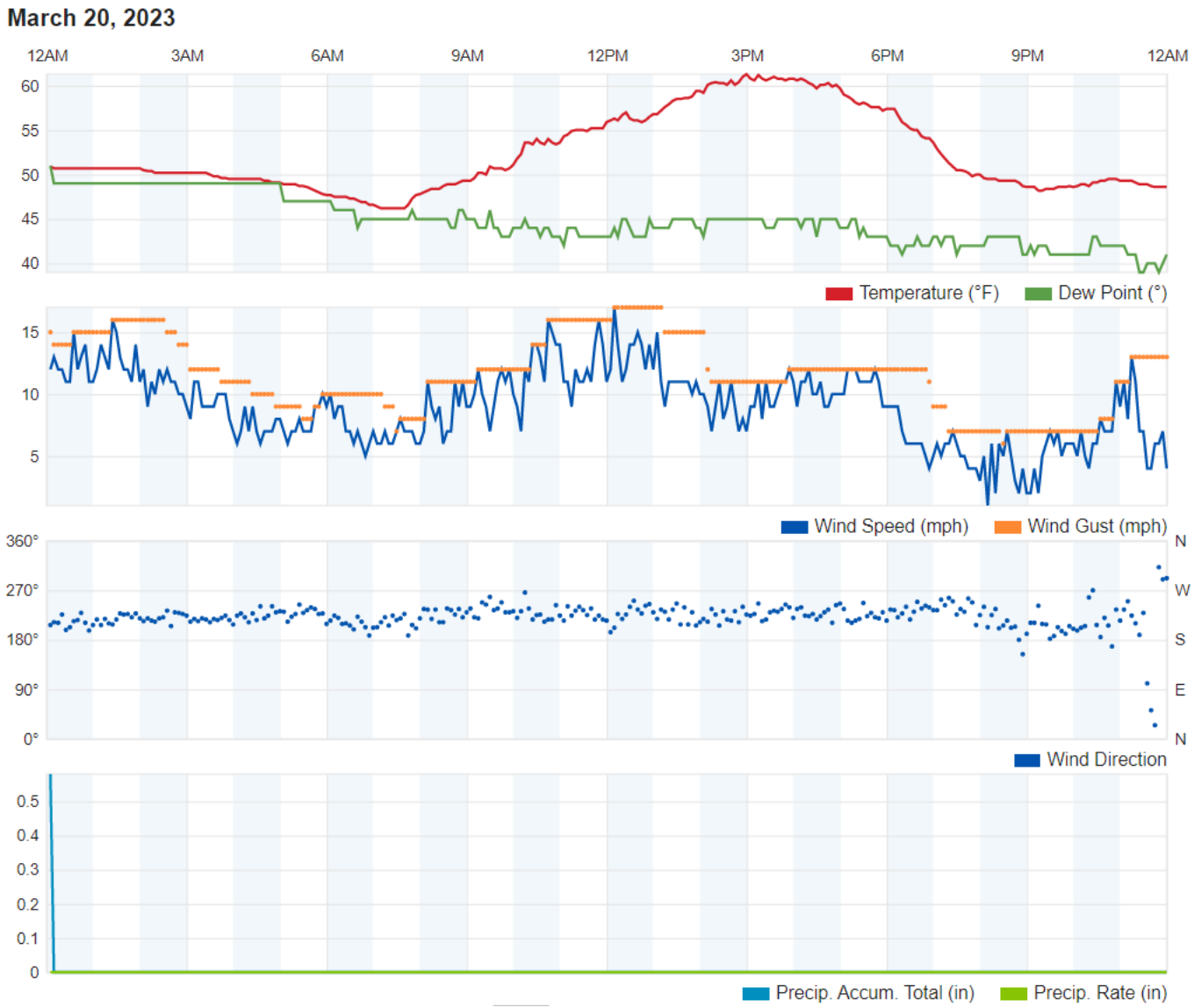
Weather Data



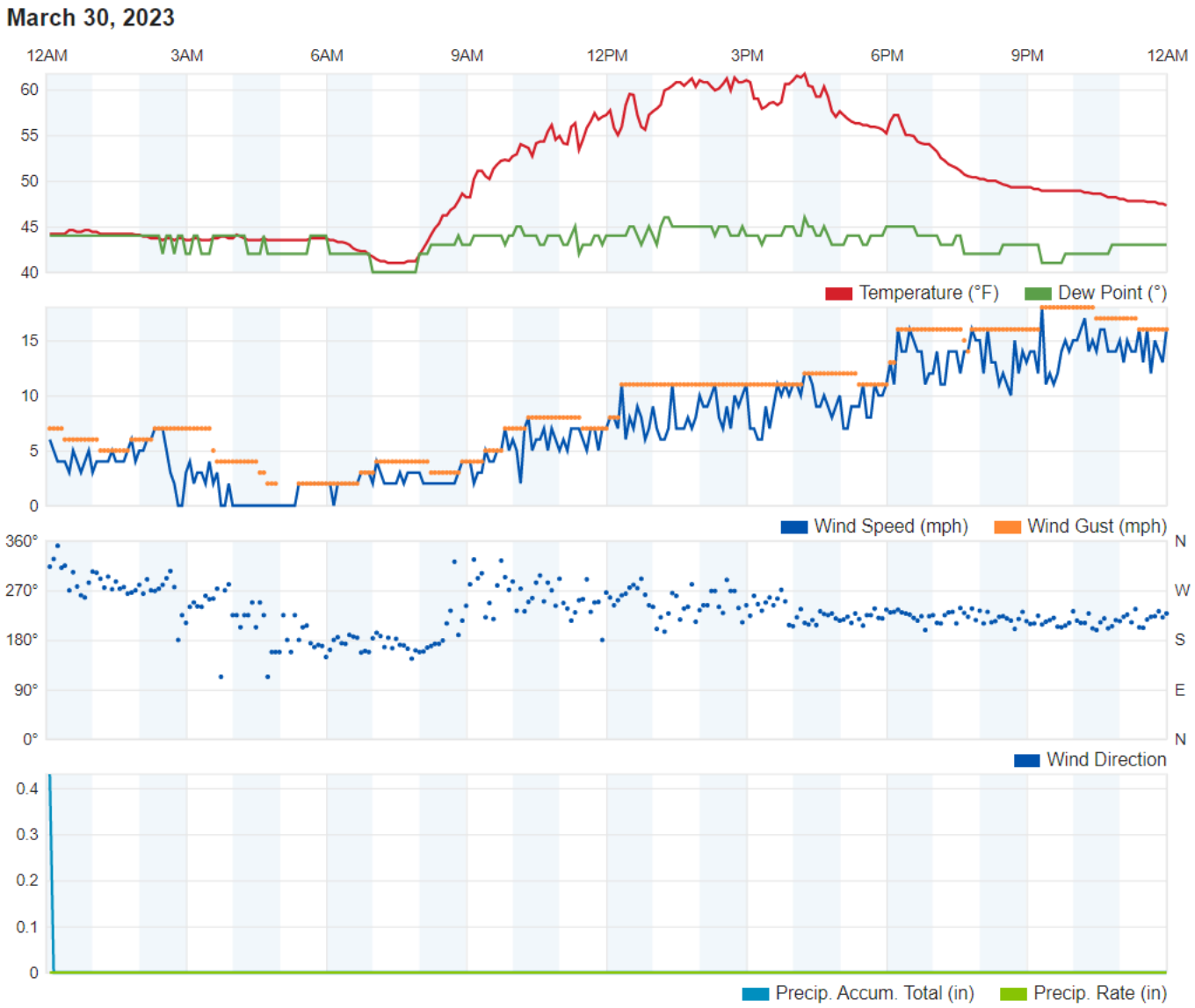
March 13, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



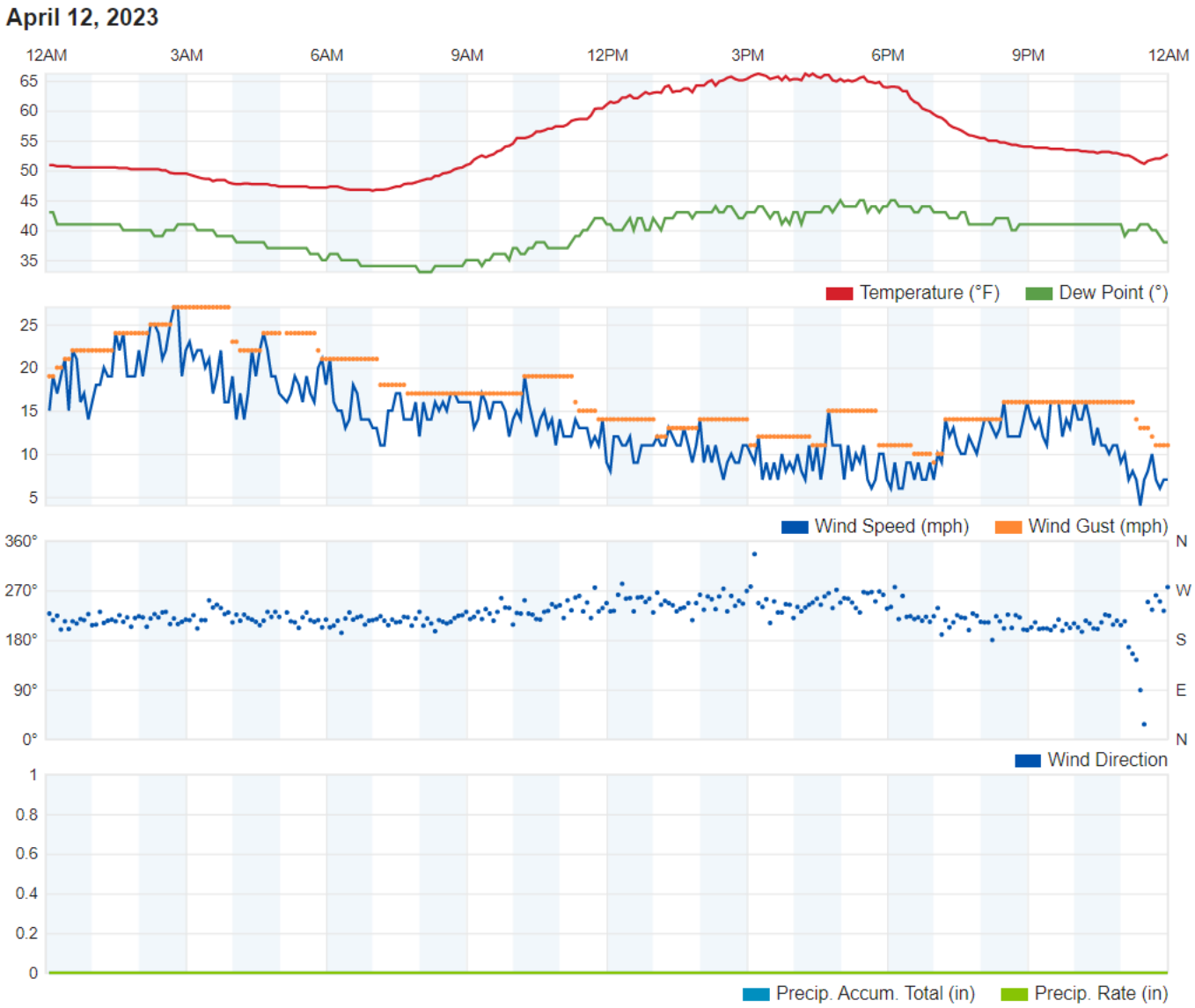
March 15, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



March 20, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



March 30, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



April 12, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California

Attachment 7

Exceedance Repair Logs

First Quarter 2023 repair Log
Keller Canyon Landfill

Location	Initial	repairs	First 10-day	repairs	Second 10-day
	13-Mar	well increases 3/14 to 3/18	20-Mar		30-Mar
KC027	29.33	well increases 3/14 to 3/18	9.16		--
KC028	26.47	well increases 3/14 to 3/18	15.97		--
KC036	28.31	well increases 3/14 to 3/18	17.23		--
KC042	27.94	well increases 3/14 to 3/18	10.10		--
KC043	30.81	well increases 3/14 to 3/18	15.51		--
KC050	40.76	well increases 3/14 to 3/18	13.49		--
KC052	36.86	well increases 3/14 to 3/18	16.82		--
KC058	26.31	well increases 3/14 to 3/18	18.52		--
KC059	33.84	well increases 3/14 to 3/18	28.12	Well increases 3/22 to 3/27 Areas too wet to track walk	23.46
KC060	42.12	well increases 3/14 to 3/18	22.95		--
KC066	26.06	well increases 3/14 to 3/18	8.87		--
KC068	26.03	well increases 3/14 to 3/18	Active		~~45.32~~/Active
KC074	36.03	well increases 3/14 to 3/18	10.07		--
KC075	27.82	well increases 3/14 to 3/18	14.31		--

First Quarter 2023 repair Log
Keller Canyon Landfill

KC076	51.11	well increases 3/14 to 3/18	32.07	Well increases 3/22 to 3/27 Areas too wet to track walk	43.5
KC077	30.11	well increases 3/14 to 3/18	Active		~~22.72~~/Active
KC082	36.63	well increases 3/14 to 3/18	30.50	Well increases 3/22 to 3/27 Areas too wet to track walk	14.29
KC083	27.28	well increases 3/14 to 3/18	16.00		--
KC084	52.95	well increases 3/14 to 3/18	34.04	Well increases 3/22 to 3/27 Areas too wet to track walk	39.54
KC091	48.24	well increases 3/14 to 3/18	38.70	Well increases 3/22 to 3/27 Areas too wet to track walk	41.43
KC092	35.22	well increases 3/14 to 3/18	25.68	Well increases 3/22 to 3/27 Areas too wet to track walk	25.31
KC093	44.29	well increases 3/14 to 3/18	46.35	Well increases 3/22 to 3/27 Areas too wet to track walk	65.58
KC094	26.89	well increases 3/14 to 3/18	23.96		--
KC099	48.86	well increases 3/14 to 3/18	16.80		--
KC101	36.12	well increases 3/14 to 3/18	23.75		--

First Quarter 2023 repair Log
Keller Canyon Landfill

	Location	Initial	Repairs	7-Day	First 10-day	repairs	Second 10-day		30-Day	Lat	Long	Position
		13-Mar	15-Mar	20-Mar	20-Mar	21-Mar	30-Mar		12-Apr			
Instantaneous	flame arrestor	2,200	re-sealed	10,000	--	removed flame arrestor and resealed 2 person job	100		2	38.00406396	-121.934	N38° 00.244' W121° 56.062'
	EW2103	2,100	flow increases 3/14 to 3/18	--	3,400	re-compacted soil around well 3-22 to 3-24	438		15	37.99764066	-121.937	N37° 59.858' W121° 56.205'
	W143	2,000	flow increases 3/14 to 3/18	--	600	re-compacted soil around well 3-22 to 3-24	467		29	37.99891773	-121.936	N37° 59.935' W121° 56.180'
	W146	1,300	flow increases 3/14 to 3/18	--	3,300	re-compacted soil around well 3-22 to 3-24	5,400	dig out and added bentonite 3-31	11	37.99854431	-121.934	N37° 59.913' W121° 56.047'
	EW142	6,600	flow increases 3/14 to 3/18	--	6,200	re-compacted soil around well 3-22 to 3-24	1,248	dig out and added bentonite 3-31	16	37.99810301	-121.937	N37° 59.886' W121° 56.191'
	EW2106	800	flow increases 3/14 to 3/18	--	1,200	re-compacted soil around well 3-22 to 3-24	2,247	dig out and added bentonite 3-31	69	37.99567183	-121.936	N37° 59.740' W121° 56.188'
	HIGH SURF READ G74 AG	690	flow increases 3/14 to 3/18	--	21		--		37	37.99857097	-121.936	N37° 59.914' W121° 56.167'
	HIGH SURF READ G78 AG	500	flow increases 3/14 to 3/18	--	132		--		78	37.99327201	-121.936	N37° 59.596' W121° 56.152'
	HIGH SURF G74 AG	395		--	--		--		--	37.998203	-121.936	N37° 59.892' W121° 56.151'
	HIGH SURF G76 AG	305		--	--		--		--	37.99575004	-121.936	N37° 59.745' W121° 56.168'
	HIGH SURF READ G75 AG	267		--	--		--		--	37.996923	-121.936	N37° 59.815' W121° 56.158'
	HIGH SURF READ G77 AG	230		--	--		--		--	37.99478704	-121.936	N37° 59.687' W121° 56.157'
	HIGH SURF READ G91 AG	444		--	--		--		--	37.99905603	-121.937	N37° 59.943' W121° 56.206'
	HSR GRID50 RY	211		--	--		--		--	37.99745601	-121.935	N37° 59.847' W121° 56.086'
	HSR GRID52 RY	227		--	--		--		--	37.99389697	-121.935	N37° 59.634' W121° 56.086'
	HSR GRID57 RY	200		--	--		--		--	37.99770797	-121.935	N37° 59.862' W121° 56.125'
	SFR G101 JS	487		--	--		--		--	37.99563797	-121.937	N37° 59.738' W121° 56.217'
	SFR G102 JS	277		--	--		--		--	37.99432998	-121.937	N37° 59.660' W121° 56.203'
	SFR G99 JS1	427		--	--		--		--	37.99864699	-121.937	N37° 59.919' W121° 56.223'
	SFR G99 JS2	376		--	--		--		--	37.99871698	-121.937	N37° 59.923' W121° 56.218'
	SFR G99 JS3	302		--	--		--		--	37.99862696	-121.937	N37° 59.918' W121° 56.212'
	SFR G99 JS4	246		--	--		--		--	37.99889904	-121.937	N37° 59.934' W121° 56.212'

September 12, 2023
File No. 07221005.01

Ms. Antonia Gunner
Republic Services – Keller Canyon Landfill
901 Bailey Road
Pittsburg, California 94565

Subject: Keller Canyon Landfill - Pittsburg, California

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring for Second Quarter 2023.

Dear Ms. Gunner:

SCS Field Services (SCS-FS) is pleased to provide Republic Services, with the enclosed report summarizing the surface emissions monitoring services provided at the Keller Canyon Landfill (Site) during the second quarter of 2023. This report includes the results of the surface scan, component emissions, and blower/flare station emissions monitoring for the Site for this monitoring period.

SCS-FS appreciates the opportunity to be of assistance to Republic Services on this project. As you review the enclosed information, please contact Sean Bass at (209) 345-2458 or Whitney Stackhouse at (209) 338-7990 if you have any questions or comments.

Sincerely,

Max Polkabla

Max Polkabla
Senior Technician/Data Analyst
SCS Field Services

Sean Bass

Sean T. Bass
Senior Project Manager
SCS Field Services

Encl.

Keller Canyon Landfill, LMR/NSPS SEM, Second Quarter 2023

Keller Canyon Landfill

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

Second Quarter 2023

Presented to:

Ms. Antonia Gunner
Republic Services – Keller Canyon
901Bailey Road
Pittsburg, California 94565

SCS FIELD SERVICES

File No. 07221005.01 | September 12, 2023

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

Keller Canyon Landfill

Landfill Methane Rule (LMR) and New Source Performance Standards (NSPS) Surface Emissions Monitoring Second Quarter 2023

INTRODUCTION

This letter provides results of the June 8, 20, 21, 30, and July 10, and 20, 2023, 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/NSPS 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 Keller Canyon Landfill was performed on 25-foot pathways in accordance with the LMR.

On June 8, 20, 21, 30, and July 10, and 20, 2023, SCS performed the second quarter of 2023 surface emissions monitoring testing as required by the Bay Area Air Quality Management District (BAAQMD). Instantaneous surface emissions monitoring results indicated that twenty-one (21) locations exceeded the 500 ppmv maximum concentration during our initial monitoring (Table 1 in Attachment 3). The required 10/20-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 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 Keller Canyon Landfill surface area was therefore divided into 211 grids, as shown in Figure 1 in Attachment 1. During the monitoring event, there were nine (9) 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 all nine (9) areas had returned to compliance following system adjustments and remediation by SCS and site personnel. Based on these monitoring results no additional follow-up testing was required at this time. These results are discussed in a subsequent section of this report.

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.

In addition, quarterly monitoring of the pressurized piping or components of the Gas Collection and Control System (GCCS) that are under positive pressure must be performed quarterly. During the monitoring event, there was one (1) location observed to exceed the 500 ppmv threshold. The location returned to compliance within 7 days as required by the LMR, following repairs made by SCS. These results are discussed in a subsequent section of this report.

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, eleven (11) locations were observed to exceed the 200 ppmv, reporting threshold (see attached location map and table with GPS coordinates). When these readings are observed, the locations are reported to site personnel for tracking and/or general surface 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 Keller Canyon 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 Keller Canyon property contains a system to control the combustible gases generated in the landfill.

SURFACE EMISSIONS MONITORING

On June 8, 20, 21, 30, and July 10, and 20, 2023, 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

The 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 the 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 the 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 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 June 8, 20, 21, 30, and July 10, and 20, 2023, SCS performed second quarter 2023 instantaneous emissions monitoring testing as required by the BAAQMD. During this monitoring, surface emissions results indicated that twenty-one (21) 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 30, and July 10, and 20, 2023, respectively, indicated that all locations returned to compliance, following system adjustments and remediation performed by SCS and 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.

During the monitoring event, there were nine (9) areas observed to exceed the 25 ppmv LMR integrated average threshold (Table 2 in Attachment 4) that were not in the exempted areas. The required first and second 10-day LMR follow-up monitoring performed on June 30 and July 10, 2023 indicated that all areas had returned to compliance following system adjustments and remediation by site personnel. The results of the monitoring are shown in Attachment 4 (Table 2). Calibration logs for the monitoring equipment are provided in Attachment 5.

Additionally, several girds 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 of 2023.

PRESSURIZED PIPE AND COMPONENT LEAK MONITORING

On June 21, 2023, 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 the pressurized pipe and associated components. One (1) location exceeding the 500 ppmv threshold was observed during our monitoring event. The required 7-day recheck follow-up monitoring was performed on June 30, 2023, the location did return to compliance following repairs made by SCS. Therefore, all pressurized pipes and components located at the LFG BFS were in compliance at the time of our testing. Results of the monitoring are shown in Table 1 for component results.

PROJECT SCHEDULE

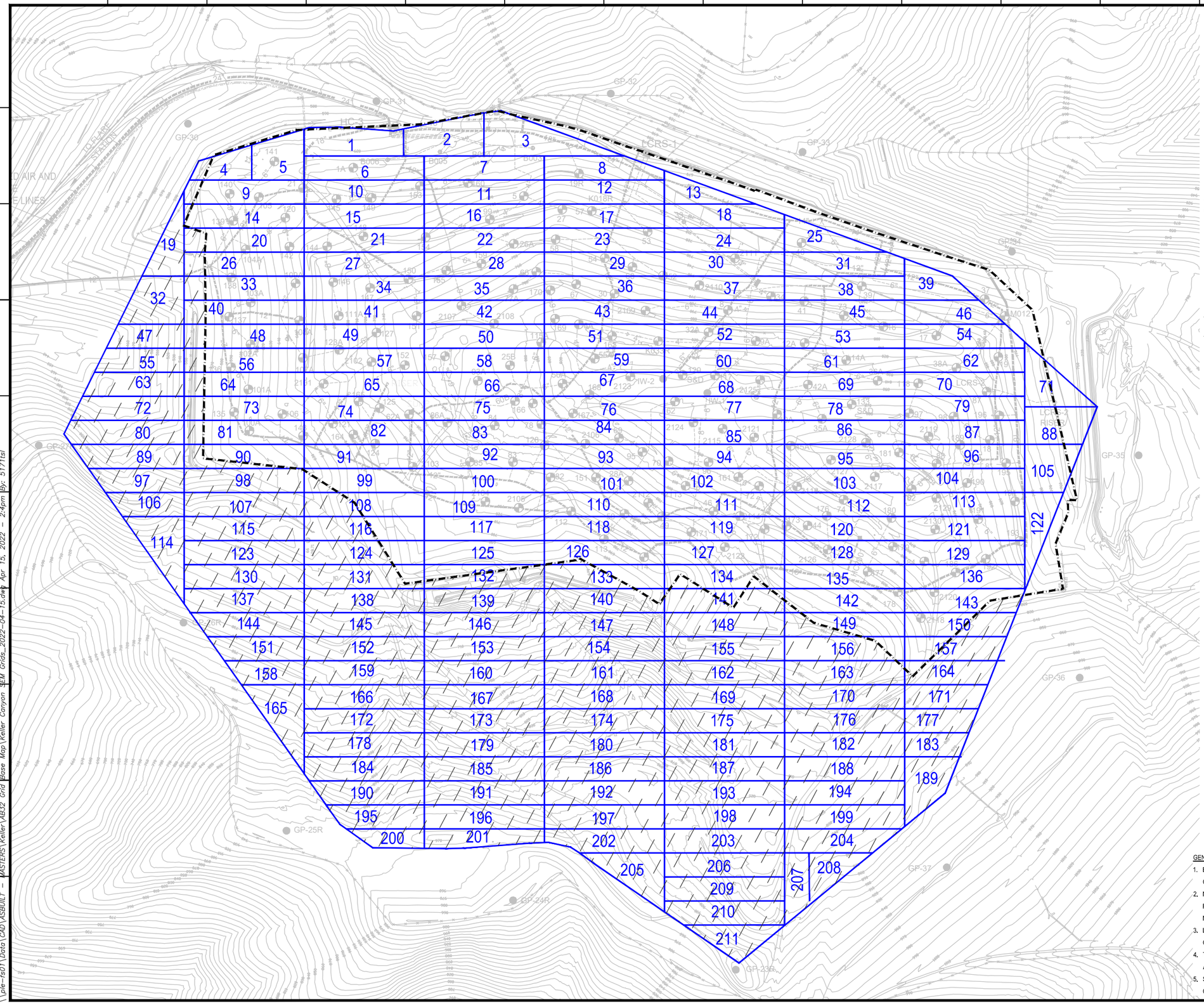
According to the LMR and NSPS, surface emissions monitoring at active landfills is required to be performed on a quarterly basis. Therefore, in accordance with our approved Work Scope, the third quarter 2023 (July through September) surface emissions testing event is scheduled to be performed by the end of September 2023 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



GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY COOPER AERIAL. AERIAL PHOTOGRAPHY DATED 01-22-2022.
2. NORTH ARROW, THE GRID, AND THE COORDINATES SYSTEM SHOWN HERE ARE REFERENCED TO THE CALIFORNIA STATE PLANE ZONE III COORDINATE SYSTEM, NAD 27.
3. LOCATIONS DEPICTED FOR AS-BUILT GCCS COMPONENTS WERE UPDATED BASED ON AS-BUILT SURVEY DATA PROVIDED BY TETRA TECH, DATED 06-2021
4. THE LOCATIONS OF ANY EXISTING PIPING, VALVES, AND OTHER TIE-IN LOCATIONS ARE APPROXIMATE. ACTUAL FIELD CONDITIONS MAY VARY.
5. SEM PATH MAY VARY BASED ON FILL OPERATIONS, WEATHER, AND OTHER FIELD CONDITIONS.

DATE | REVISION | NO.

SHEET TITLE: 2022 SEM MAP

PROJECT TITLE: KELLER CANYON LANDFILL PITTSBURG, CA

CLIENT: REPUBLIC SERVICES

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
4683 CHABOT DRIVE SUITE 200
PLEASANTON, CA 94588
(925) 426-0580

PROJ. NO. 07221004.02 | DSN. BY: TSL | DWN. BY: TSL | CHK. BY: MED | ACAD FILE: FIENGINEERS | APP. BY: MED

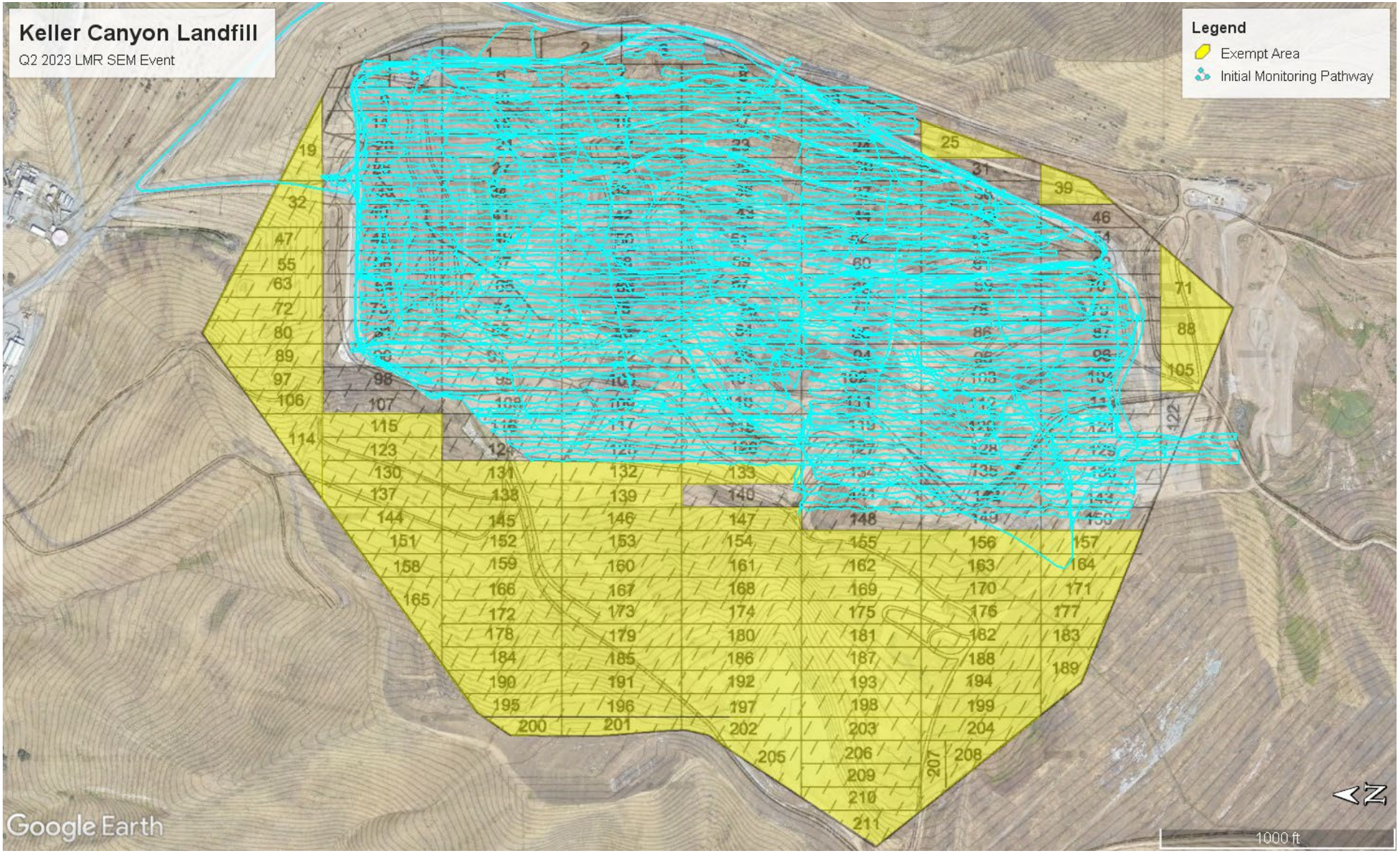
DATE: 04-15-2022

SCALE: AS SHOWN

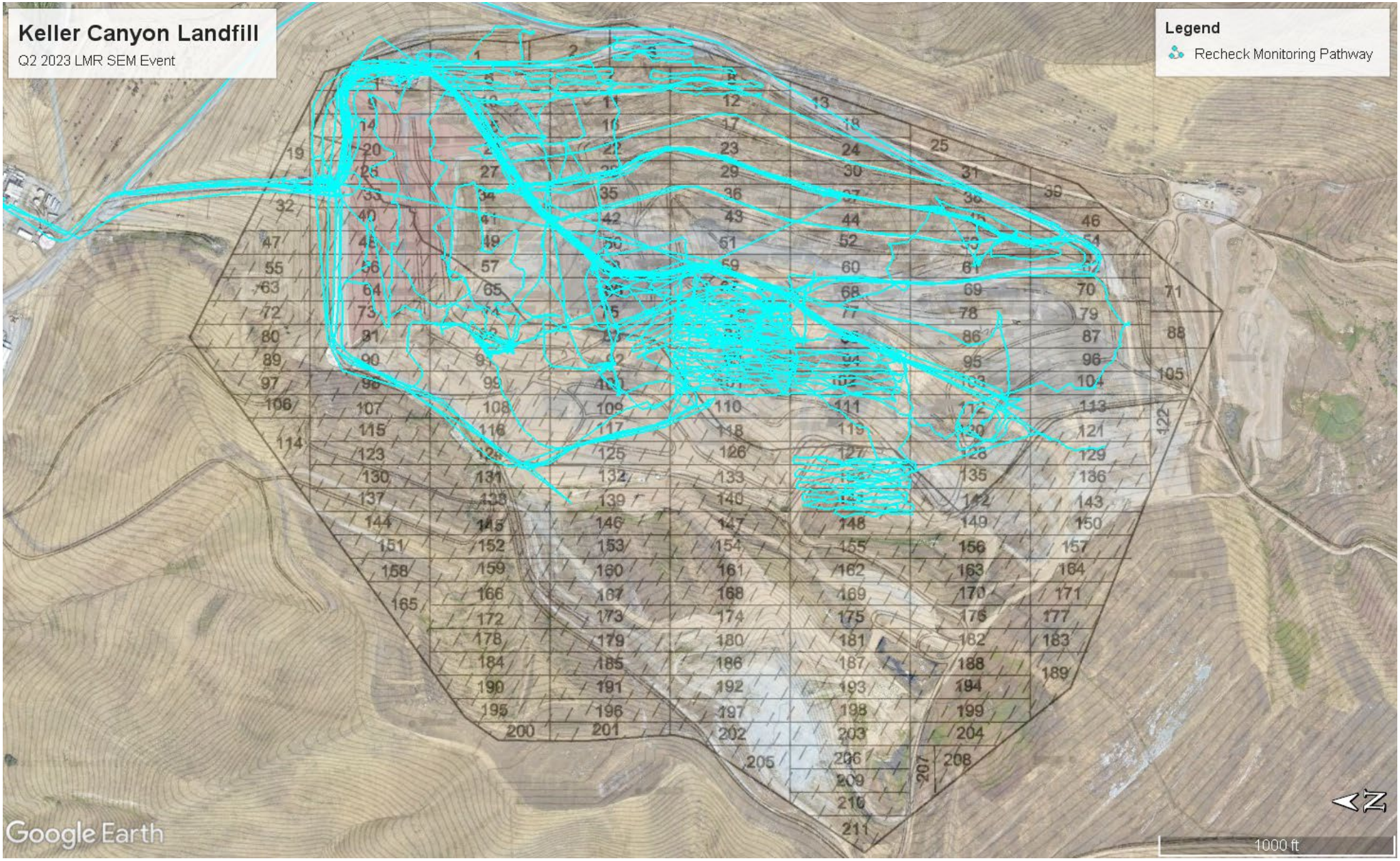
SHEET: 1

Attachment 2

Surface Pathway,
Instantaneous Monitoring Exceedance Locations
And
200-499 Tracking Locations



Second Quarter 2023
Initial LMR Surface Emissions Monitoring Pathway
Keller Canyon Landfill, Pittsburg, California



Second Quarter 2023
Recheck LMR Surface Emissions Monitoring Pathway
Keller Canyon Landfill, Pittsburg, California

Attachment 3

Instantaneous and Component Emissions Monitoring Results and Exceedance GPS Locations

Second Quarter 2023

Table 1. Instantaneous Surface and Component Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Instantaneous Data Report for June 8, 20, 21, 30, and July 10, and 20, 2023

Grid ID	Initial Monitoring	First 10-Day Recheck	Second 10-Day Recheck	30-Day Confirmation	Latitude	Longitude
	6/20/2023 & 6/21/2023	30-Jun	10-Jul	20-Jul		
HSR GRID87 RY	654	Inaccessible	Inaccessible	60.1	37.991033	-121.936244
High Reading AS7	1000	98.4	--	22.5	37.995124	-121.935860
High reading AS	1000	1082	27.7	108	37.995275	-121.936498
High reading AS1	4000	150	--	61.8	37.995162	-121.936642
High reading AS11	7000	280	--	22.4	37.996145	-121.934818
High reading AS3	2000	1700	35.5	138	37.994999	-121.936914
High reading AS4	1400	250	--	106	37.994820	-121.936702
High reading AS5	1000	548	32.6	280	37.994787	-121.936558
High reading AS6	1000	80.4	--	22.3	37.995152	-121.935963
High reading AS8	796	193	--	125	37.995094	-121.935799
High Reading AS9	1300	68.7	--	26.5	37.995163	-121.935700
High readingAS10	2200	133	--	24.7	37.995237	-121.935604
High readingAS2	5000	3000	43.7	65.1	37.995093	-121.936808
High surf read	4000	4000	108	49.6	37.995335	-121.936354
W124	900	1400	17.3	84.7	37.998115	-121.936508
W146	700	374	--	30.4	37.998544	-121.934120
W147	1210	1580	12.5	128	37.998171	-121.934144
W14A	5400	825	6.3	42.5	37.992698	-121.935103
W164	908	1580	6.3	346	37.998347	-121.936404
W190	2200	35	--	201	37.991315	-121.936855
W691	1000	6000	25.8	Removed	37.995344	-121.936385

Second Quarter 2023

Table 1. Instantaneous Surface and Component Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Instantaneous Data Report for June 8, 20, 21, 30, and July 10, and 20, 2023

Readings between 200-499 ppmv

Location (Surface)	Initial Monitoring Results (ppmv) 6/20/2023 & 6/21/2023	Latitude	Longitude
HIGH SURF READ G134 AS	328	37.994143	-121.938463
HIGH SURF READ G140	205	37.994821	-121.938613
HIGH SURF READ G82 AG	249	37.998109	-121.936539
HIGH SURF READ G84 AG	240	37.995279	-121.936356
HSR GRID193 RY	197	37.995670	-121.936783
HSR GRID91 RY	417	37.998815	-121.936879
HSR GRID94 RY	240	37.994456	-121.936768
SFR G119 JS	248	37.994175	-121.937610
SFR G127 JS	360	37.994445	-121.937952
ELEVATED READING AS1	384	37.994916	-121.937054
W106CAPPED	250	37.999155	-121.936055

CARB Inspection Results

Location	Initial CARB	First 10-day	Second 10-Day	Latitude	Longitude
	21-Jun	30-Jun	10-Jul		
W69	3,239	230	--	37.9952817	-121.9363291
2205	1,791	25.8	--	37.9969579	-121.9355880
Sample Port	1,000	1.7	--	38.0041600	-121.9345800

Second Quarter 2023

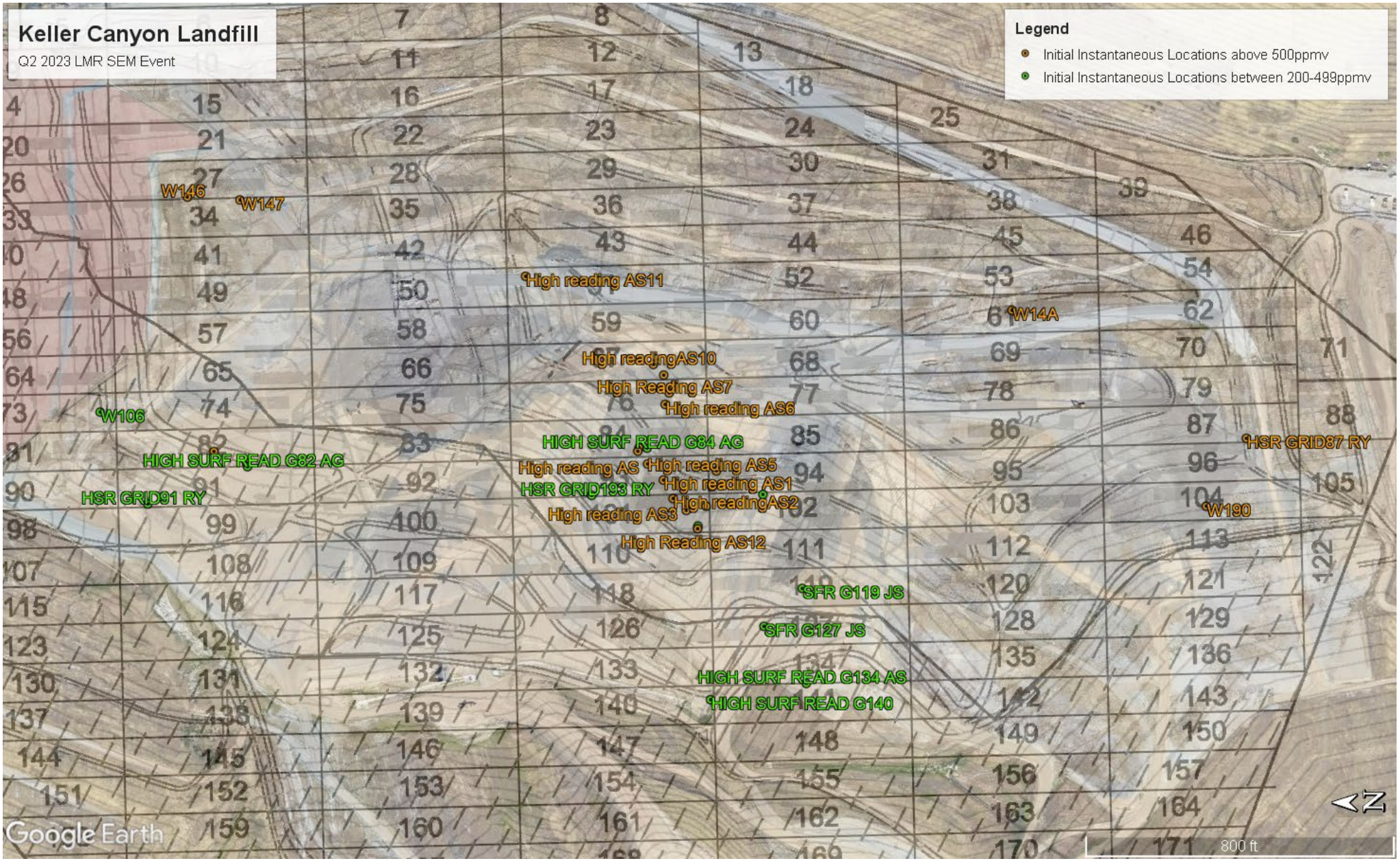
Table 1. Instantaneous Surface and Component Emissions Monitoring Results Keller Canyon Landfill, Pittsburg, California

Location	Initial CARB	First 10-day	Second 10-Day	Latitude	Longitude
	21-Jun	30-Jun	10-Jul		
Surface hit 3	1,000	180	--	37.9948590	-121.9368750
W150	850	230	--	37.9977200	-121.9341400
Surface hit	5,000	291	--	37.9949990	-121.9369140
Surface hit 2	2,200	385	--	37.9949180	-121.9370780
Surface hit 4	3,000	280	--	37.9948200	-121.9367020
Surface hit 5	1,400	285	--	37.9947870	-121.9365580
2209	6,018	10,000	70.8	37.9962722	-121.9357309
2211	17,000	2200	23.3	37.9960091	-121.9343306
2217	3,186	3,200	42.2	37.9947876	-121.9351746
Blower 4	4,300	5,000	3	38.0041600	-121.9345800
Flame Arrestor	10,000	1,300	4.2	38.0041600	-121.9345800
KCEW2110	2,399	2,200	70.8	37.9943947	-121.9340840
W145	3,128	2,200	22.2	37.9985600	-121.9329000
W147	2,067	1,200	12.5	37.9981400	-121.9342100

Pressurized Pipe and Component Results

Route	Initial Monitoring Results (ppmv) 6/21/2023	Recheck Monitoring Results (ppmv) 6/30/2023	Recheck Monitoring Results (ppmv) 7/10/2023
Flare Station (Flame Arrestor)	11,900	11.9	100

No other exceedances of the 500 ppmv threshold were observed during the second quarter of 2023 monitoring.



Second Quarter 2023
Emissions Monitoring Results Greater Than 200 ppmv
Keller Canyon Landfill, Pittsburg, California

Attachment 4

Integrated Monitoring Results

Second Quarter 2023
Table 2. Integrated Surface Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC001	6/8/2023	4.36	
KC002	6/21/2023	1.20	
KC003	6/8/2023	2.71	
KC004	6/8/2023	1.17	
KC005	6/8/2023	1.36	
KC006	6/8/2023	3.43	
KC007	6/8/2023	3.85	
KC008	6/8/2023	2.46	
KC009	6/8/2023	2.50	
KC010	6/8/2023	6.23	
KC011	6/8/2023	5.54	
KC012	6/8/2023	4.53	
KC013	6/8/2023	3.87	
KC014	6/8/2023	3.97	
KC015	6/8/2023	7.41	
KC016	6/8/2023	7.67	
KC017	6/8/2023	4.60	
KC018	6/8/2023	4.32	
KC019	--	--	Native Grid
KC020	6/20/2023	2.15	
KC021	6/20/2023	9.08	
KC022	6/20/2023	7.01	
KC023	6/20/2023	5.89	
KC024	6/20/2023	1.86	
KC025	--	--	Active Area
KC026	6/20/2023	1.05	
KC027	6/20/2023	8.79	
KC028	6/20/2023	5.72	
KC029	6/20/2023	6.08	
KC030	6/20/2023	2.43	
KC031	6/20/2023	2.17	
KC032	--	--	Native Grid
KC033	6/20/2023	0.92	
KC034	6/20/2023	4.64	
KC035	6/20/2023	2.75	
KC036	6/20/2023	5.70	
KC037	6/20/2023	7.42	
KC038	6/20/2023	3.39	
KC039	--	--	Active Area
KC040	6/20/2023	1.91	
KC041	6/20/2023	5.45	
KC042	6/20/2023	3.95	
KC043	6/20/2023	6.28	

Second Quarter 2023
Table 2. Integrated Surface Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC044	6/20/2023	11.35	
KC045	6/20/2023	5.86	
KC046	6/20/2023	2.89	
KC047	--	--	Native Grid
KC048	6/20/2023	2.47	
KC049	6/20/2023	4.11	
KC050	6/20/2023	9.02	
KC051	6/20/2023	6.45	
KC052	6/20/2023	12.36	
KC053	6/20/2023	5.49	
KC054	--	--	Active Area
KC055	--	--	Native Grid
KC056	6/20/2023	4.91	
KC057	6/20/2023	4.05	
KC058	6/20/2023	7.84	
KC059	6/20/2023	12.41	
KC060	6/20/2023	23.95	
KC061	6/20/2023	13.77	
KC062	6/20/2023	6.82	
KC063	--	--	Native Grid
KC064	6/20/2023	2.65	
KC065	6/20/2023	6.49	
KC066	6/20/2023	9.75	
KC067	6/20/2023	20.43	
KC068	6/20/2023	12.48	
KC069	6/20/2023	11.45	
KC070	6/20/2023	5.01	
KC071	--	--	Active Area
KC072	--	--	Native Grid
KC073	6/20/2023	2.65	
KC074	6/20/2023	8.16	
KC075	6/20/2023	6.56	
KC076	6/20/2023	29.99	Initiial
KC076	6/30/2023	45.91	First 10-Day
KC076	7/10/2023	23.18	Second 10-Day
KC077	6/20/2023	12.67	
KC078	6/20/2023	6.47	
KC079	6/20/2023	6.30	
KC080	--	--	Native Grid
KC081	6/20/2023	1.54	
KC082	6/20/2023	19.25	
KC083	6/20/2023	6.45	
KC084	6/20/2023	34.76	Initiial

Second Quarter 2023
Table 2. Integrated Surface Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC084	6/30/2023	49.66	First 10-Day
KC084	7/10/2023	24.50	Second 10-Day
KC085	6/20/2023	15.97	
KC086	6/20/2023	4.57	
KC087	6/20/2023	12.90	
KC088	--	--	Active Area
KC089	--	--	Native Grid
KC090	6/20/2023	4.93	
KC091	6/20/2023	20.81	
KC092	6/20/2023	11.32	
KC093	6/20/2023	42.49	Initiial
KC093	6/30/2023	27.69	First 10-Day
KC093	7/10/2023	18.91	Second 10-Day
KC094	6/20/2023	26.07	Initiial
KC094	6/30/2023	12.05	First 10-Day
KC095	6/20/2023	8.97	
KC096	6/20/2023	8.00	
KC097	--	--	Native Grid
KC098	6/20/2023	2.41	
KC099	6/20/2023	23.20	
KC100	6/20/2023	11.40	
KC101	6/20/2023	30.62	Initiial
KC101	6/30/2023	19.87	First 10-Day
KC102	6/20/2023	26.88	Initiial
KC102	6/30/2023	16.38	First 10-Day
KC103	6/20/2023	6.14	
KC104	6/20/2023	5.96	
KC105	--	--	Active Area
KC106	--	--	Native Grid
KC107	6/20/2023	0.81	
KC108	6/20/2023	8.97	
KC109	6/20/2023	11.07	
KC110	6/20/2023	10.87	
KC111	6/20/2023	19.47	
KC112	6/20/2023	4.52	
KC113	6/20/2023	4.14	
KC114	--	--	Native Grid
KC115	--	--	Native Grid
KC116	6/20/2023	6.23	
KC117	6/20/2023	9.92	
KC118	6/20/2023	9.83	
KC119	6/20/2023	23.19	
KC120	6/20/2023	4.82	

Second Quarter 2023
Table 2. Integrated Surface Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC121	6/20/2023	3.68	
KC122	6/20/2023	29.03	Initiial
KC122	6/30/2023	--	Became Active
KC123	--	--	Native Grid
KC124	6/20/2023	16.69	
KC125	6/20/2023	4.89	
KC126	6/20/2023	8.55	
KC127	6/20/2023	19.16	
KC128	6/20/2023	5.35	
KC129	6/20/2023	7.72	
KC130	--	--	Native Grid
KC131	--	--	Native Grid
KC132	--	--	Native Grid
KC133	--	--	Native Grid
KC134	6/20/2023	37.88	Initiial
KC134	6/30/2023	27.50	First 10-Day
KC134	7/10/2023	21.29	Second 10-Day
KC135	6/20/2023	6.83	
KC136	6/20/2023	5.40	
KC137	--	--	Native Grid
KC138	--	--	Native Grid
KC139	--	--	Native Grid
KC140	6/20/2023	24.52	
KC141	6/20/2023	37.49	Initiial
KC141	6/30/2023	61.64	First 10-Day
KC141	7/10/2023	22.20	Second 10-Day
KC142	6/20/2023	6.43	
KC143	6/20/2023	1.89	
KC144	--	--	Native Grid
KC145	--	--	Native Grid
KC146	--	--	Native Grid
KC147	--	--	Native Grid
KC148	6/20/2023	0.05	
KC149	6/20/2023	6.12	
KC150	6/20/2023	4.11	
KC151	--	--	Native Grid
KC152	--	--	Native Grid
KC153	--	--	Native Grid
KC154	--	--	Native Grid
KC155	--	--	Native Grid
KC156	--	--	Active Area
KC157	--	--	Active Area
KC158	--	--	Native Grid

Second Quarter 2023
Table 2. Integrated Surface Emissions Monitoring Results
Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC159	--	--	Native Grid
KC160	--	--	Native Grid
KC161	--	--	Native Grid
KC162	--	--	Native Grid
KC163	--	--	Native Grid
KC164	--	--	Native Grid
KC165	--	--	Native Grid
KC166	--	--	Native Grid
KC167	--	--	Native Grid
KC168	--	--	Native Grid
KC169	--	--	Native Grid
KC170	--	--	Native Grid
KC171	--	--	Native Grid
KC172	--	--	Native Grid
KC173	--	--	Native Grid
KC174	--	--	Native Grid
KC175	--	--	Native Grid
KC176	--	--	Native Grid
KC177	--	--	Native Grid
KC178	--	--	Native Grid
KC179	--	--	Native Grid
KC180	--	--	Native Grid
KC181	--	--	Native Grid
KC182	--	--	Native Grid
KC183	--	--	Native Grid
KC184	--	--	Native Grid
KC185	--	--	Native Grid
KC186	--	--	Native Grid
KC187	--	--	Native Grid
KC188	--	--	Native Grid
KC189	--	--	Native Grid
KC190	--	--	Native Grid
KC191	--	--	Native Grid
KC192	--	--	Native Grid
KC193	--	--	Native Grid
KC194	--	--	Native Grid
KC195	--	--	Native Grid
KC196	--	--	Native Grid
KC197	--	--	Native Grid
KC198	--	--	Native Grid
KC199	--	--	Native Grid
KC200	--	--	Native Grid
KC201	--	--	Native Grid

Second Quarter 2023

Table 2. Integrated Surface Emissions Monitoring Results

Keller Canyon Landfill, Pittsburg, California

Point Name	Record Date	FID Concentration (ppm)	Comments
KC202	--	--	Native Grid
KC203	--	--	Native Grid
KC204	--	--	Native Grid
KC205	--	--	Native Grid
KC206	--	--	Native Grid
KC207	--	--	Native Grid
KC208	--	--	Native Grid
KC209	--	--	Native Grid
KC210	--	--	Native Grid
KC211	--	--	Native Grid

Attachment 5

Calibration Logs

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 6/16/22 Site Name: Keller

Inspector(s): Alfredo Gomez Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 29.81 "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: 2367 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.0	500	0	1
2	0.0	500	0	1
3	0.0	501	1	2

Average Difference: 0.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 0.3 /500 x 100%

= 99.9%

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 169432
Counters Observed for the Zero= 4480

Trial 2:
Counts Observed for the Span= 169620
Counters Observed for the Zero= 4489

Trial 3:
Counts Observed for the Span= 168940
Counters Observed for the Zero= 4489

Post Monitoring Calibration Check

Zero Air Reading: 1.1 ppm Cal Gas Reading: 525 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 2.1 ppm

Downwind Location Description: offices Reading: 1.9 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 08/16/22 Site Name: Keller

Inspector(s): Ricardo Yepez Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 29.81 "Hg

Air Temperature: 64 °F General Weather Conditions: Sunny / 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	-0.1	499	1	3
2	-0.1	498	2	3
3	-0.1	500	0	1

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 137772

Counters Observed for the Zero= 2766

Trial 2:

Counts Observed for the Span= 141604

Counters Observed for the Zero= 2752

Trial 3:

Counts Observed for the Span= 139476

Counters Observed for the Zero= 2739

Post Monitoring Calibration Check

Zero Air Reading: 0.9 ppm Cal Gas Reading: 530 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 1.9 ppm

Downwind Location Description: G-110 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: 8/16/22 Site Name: Keller

Inspector(s): Bryan Ochoa Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 29.81 "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: 5420 Cal Gas Concentration: 500ppm

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

Average Difference: 0.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 0.3 /500 x 100%

= 99.9 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 136604

Counters Observed for the Zero= 3333

Trial 2:

Counts Observed for the Span= 135672

Counters Observed for the Zero= 3320

Trial 3:

Counts Observed for the Span= 134016

Counters Observed for the Zero= 3284

Post Monitoring Calibration Check

Zero Air Reading: 0.9 ppm Cal Gas Reading: 510 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Flare Reading: 2.2 ppm

Downwind Location Description: G-80 Reading: 2.0 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 08/16/22 Site Name: Keller

Inspector(s): Ruben Rios Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: SW Barometric Pressure: 29.81 "Hg

Air Temperature: 64 °F General Weather Conditions: Sunny/clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 2.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 2.3 /500 x 100%

= 99.5 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 143064
Counters Observed for the Zero= 3938

Trial 2:
Counts Observed for the Span= 142784
Counters Observed for the Zero= 3855

Trial 3:
Counts Observed for the Span= 144012
Counters Observed for the Zero= 3823

Post Monitoring Calibration Check

Zero Air Reading: 1.0 ppm Cal Gas Reading: 521 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 2.6 ppm

Downwind Location Description: C. 111 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: 6-30-23 Site Name: Keller

Inspector(s): Arturo Olivares Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 29.87 "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: 1223 Cal Gas Concentration: 500ppm

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

Average Difference: .3

*Perform recalibration if average difference is greater than 10

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

= 100%- .3 /500 x 100%

= 99.94 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 135808

Counters Observed for the Zero= 4930

Trial 2:

Counts Observed for the Span= 134906

Counters Observed for the Zero= 4802

Trial 3:

Counts Observed for the Span= 134072

Counters Observed for the Zero= 4772

Post Monitoring Calibration Check

Zero Air Reading: -2.0 ppm Cal Gas Reading: 499 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 4 Reading: 2.3 ppm

Downwind Location Description: Flare Reading: 2.0 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 6-30-23 Site Name: Keller

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NB Barometric Pressure: 29.87 "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: 1220 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	6	500	6	4
2	0	500	0	4
3	0	499	1	5

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%

= 99.94 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 127056

Counters Observed for the Zero= 3816

Trial 2:

Counts Observed for the Span= 126702

Counters Observed for the Zero= 3796

Trial 3:

Counts Observed for the Span= 125402

Counters Observed for the Zero= 3702

Post Monitoring Calibration Check

Zero Air Reading: -2.1 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 4 Reading: 2.3 ppm

Downwind Location Description: Flare Reading: 2.0 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 6-30-23 Site Name: Keller

Inspector(s): Andrew Stone Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 29.87 "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	-0.1	500	0	4
2	0	498	2	5
3	-0.1	499	1	5

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 192708
Counters Observed for the Zero= 5303

Trial 2:
Counts Observed for the Span= 191690
Counters Observed for the Zero= 5242

Trial 3:
Counts Observed for the Span= 190906
Counters Observed for the Zero= 5202

Post Monitoring Calibration Check

Zero Air Reading: -0.1 ppm Cal Gas Reading: 503 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 4 Reading: 2.3 ppm

Downwind Location Description: Flare Reading: 2.0 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 6-20-23 Site Name: Keller

Inspector(s): Arturo Olivares Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 30.11 "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	0	499	1	5
2	0	500	0	4
3	0	500	0	4

Average Difference: .3

*Perform recalibration if average difference is greater than 10

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

= 100%- ~~99.94~~ .3 /500 x 100%

=99.94 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 174928
Counters Observed for the Zero= 5664

Trial 2:
Counts Observed for the Span= 171360
Counters Observed for the Zero= 5583

Trial 3:
Counts Observed for the Span= 172704
Counters Observed for the Zero= 5546

Post Monitoring Calibration Check

Zero Air Reading: 1.2 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 3.5 ppm

Downwind Location Description: Flare Reading: 2.6 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: 6-20-23 Site Name: Keller

Inspector(s): Jonatha. S Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: WSW Barometric Pressure: 30.11 "Hg

Air Temperature: 55 °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: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.1	499	1	1
2	-0.1	501	1	3
3	-0.1	501	1	2

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 168208
Counters Observed for the Zero= 3986

Trial 2:
Counts Observed for the Span= 164892
Counters Observed for the Zero= ~~3984~~ 3983

Trial 3:
Counts Observed for the Span= 163904
Counters Observed for the Zero= 4008

Post Monitoring Calibration Check

Zero Air Reading: 1.3 ppm Cal Gas Reading: 502 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 3.5 ppm

Downwind Location Description: Flare Reading: 2.6 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: 6-20-23 Site Name: Keller

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 30.11 "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: 4388 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	500	0	5
2	0	500	0	4
3	0	500	0	4

Average Difference: 0

*Perform recalibration if average difference is greater than 10

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

= 100%- 0 /500 x 100%

=100 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 161036
Counters Observed for the Zero= 3882

Trial 2:
Counts Observed for the Span= 159356
Counters Observed for the Zero= 3817

Trial 3:
Counts Observed for the Span= 159568
Counters Observed for the Zero= 3785

Post Monitoring Calibration Check

Zero Air Reading: 1.2 ppm Cal Gas Reading: 501 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 3.5 ppm

Downwind Location Description: Flare Reading: 2.6 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: 6-20-23 Site Name: Keller

Inspector(s): Andrew Stone Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 30.11 "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: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	499	1	4
2	0	497	3	5
3	0	500	0	5

Average Difference: 1.3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.74 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 141560
Counters Observed for the Zero= 4521

Trial 2:
Counts Observed for the Span= 144032
Counters Observed for the Zero= 4355

Trial 3:
Counts Observed for the Span= 142748
Counters Observed for the Zero= 4310

Post Monitoring Calibration Check

Zero Air Reading: 1.2 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 3.5 ppm

Downwind Location Description: Flare Reading: 2.6 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: 6-20-23 Site Name: Keller

Inspector(s): Ricardo .Y Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: WSW Barometric Pressure: 30.11 "Hg

Air Temperature: 55 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 1220 Cal Gas Concentration: 500ppm

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

Average Difference: 3

*Perform recalibration if average difference is greater than 10

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

= 100%- 3 /500 x 100%

= 99.4 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 154220
Counters Observed for the Zero= 3450

Trial 2:
Counts Observed for the Span= 125108
Counters Observed for the Zero= 3436

Trial 3:
Counts Observed for the Span= 125572
Counters Observed for the Zero= 3439

Post Monitoring Calibration Check

Zero Air Reading: 1.7 ppm Cal Gas Reading: 500 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 14 Reading: 3.5 ppm

Downwind Location Description: Flare Reading: 2.6 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: 6-20-23 Site Name: Keller

Inspector(s): Alfredo G Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: WSW Barometric Pressure: 30.11 "Hg

Air Temperature: 55 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

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

Average Difference: 1

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 145268
Counters Observed for the Zero= 3780

Trial 2:
Counts Observed for the Span= 169420
Counters Observed for the Zero= 3760

Trial 3:
Counts Observed for the Span= 133512
Counters Observed for the Zero= 3585

Post Monitoring Calibration Check

Zero Air Reading: 1.5 ppm Cal Gas Reading: 503 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 3.3 ppm

Downwind Location Description: Flare Reading: 2.6 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: 6-21-23 Site Name: Keller canyon

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: NE Barometric Pressure: 30.04 "Hg

Air Temperature: 55 °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: 2364 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	-0.1	502	2	3
2	-0.1	501	1	4
3	-0.1	501	1	2

Average Difference: 4

*Perform recalibration if average difference is greater than 10

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

= 100%- 1.3 /500 x 100%

= 99.74 %

Span Sensitivity:

Trial 1:

Counts Observed for the Span= 158632

Counters Observed for the Zero= ~~5826~~ 4063

Trial 2:

Counts Observed for the Span= 158864

Counters Observed for the Zero= 4045

Trial 3:

Counts Observed for the Span= ~~HF~~ 159482

Counters Observed for the Zero= 3998

Post Monitoring Calibration Check

Zero Air Reading: 1.4 ppm Cal Gas Reading: 499 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 10.2 ppm

Downwind Location Description: Flare Reading: 8.6 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: 6-21-23 Site Name: Keller canyon

Inspector(s): Arturo olivares Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: NE Barometric Pressure: 30.04 "Hg

Air Temperature: 55 °F General Weather Conditions: Sunny

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	~~0.0~~ - 0.1	500	0	4
2	-0.1	501	1	4
3	-0.1	501	1	4

Average Difference: ±2

*Perform recalibration if average difference is greater than 10

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

= 100%- .6 /500 x 100%

= 99.88 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 153348
Counters Observed for the Zero= 3641

Trial 2:
Counts Observed for the Span= 140888
Counters Observed for the Zero= 3632

Trial 3:
Counts Observed for the Span= 142996
Counters Observed for the Zero= 3684

Post Monitoring Calibration Check

Zero Air Reading: 1.8 ppm Cal Gas Reading: 501 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 10.2 ppm

Downwind Location Description: Flare Reading: 8.6 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: 6-21-23 Site Name: Keller Canyon

Inspector(s): Andrew Stone Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 6 MPH Wind Direction: NE Barometric Pressure: 30.04 "Hg

Air Temperature: 55 °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	~~496~~ -0.1	~~499~~	1	4
2	-0.1	500	0	4
3	-0.1	498	2	4

Average Difference: 3

*Perform recalibration if average difference is greater than 10

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

= 100%- 1 /500 x 100%

= 99.8 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 172160
Counters Observed for the Zero= 5086

Trial 2:
Counts Observed for the Span= 172584
Counters Observed for the Zero= 5079

Trial 3:
Counts Observed for the Span= 172840
Counters Observed for the Zero= 5121

Post Monitoring Calibration Check

Zero Air Reading: -1.4 ppm Cal Gas Reading: 496 ppm

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Grid 171 Reading: 10.2 ppm

Downwind Location Description: Flare Reading: 8.6 ppm

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

SURFACE EMISSIONS MONITORING
CALIBRATION AND PERTINENT DATA

Date: 7-20-23 Site Name: Keller

Inspector(s): Arturo Olivares Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 29.99 "Hg

Air Temperature: 59 °F General Weather Conditions: Windy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5421 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0.1	500	0	4
2	-0.1	500	0	4
3	-0.1		0	5

Average Difference: 0

*Perform recalibration if average difference is greater than 10

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

= 100%- 0 /500 x 100%

= 100 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 131352
Counters Observed for the Zero= 3903

Trial 2:
Counts Observed for the Span= 132628
Counters Observed for the Zero= 3920

Trial 3:
Counts Observed for the Span= 130600
Counters Observed for the Zero= 3937

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

Upwind Location Description: Entrance Reading: 1.6 ppm

Downwind Location Description: Flare 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: 7-20-23 Site Name: Keller

Inspector(s): Don Gibson Instrument: TVA 2020

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: NE Barometric Pressure: 29.99 "Hg

Air Temperature: 59 °F General Weather Conditions: windy

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

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

Instrument Serial Number: 5420 Cal Gas Concentration: 500ppm

Trial	Zero Air Reading	Cal Gas Reading	|Cal Gas Conc.-Cal Gas Reading|	Response Time (seconds)
1	0	500	0	5
2	-0.1	501	1	5
3	-0.1	500	0	4

Average Difference: .3

*Perform recalibration if average difference is greater than 10

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

= 100%- .3 /500 x 100%

= 99.94 %

Span Sensitivity:

Trial 1:
Counts Observed for the Span= 136416
Counters Observed for the Zero= 3372

Trial 2:
Counts Observed for the Span= 136908
Counters Observed for the Zero= 3419

Trial 3:
Counts Observed for the Span= 139300
Counters Observed for the Zero= 3402

Post Monitoring Calibration Check

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

BACKGROUND CONCENTRATIONS CHECKS

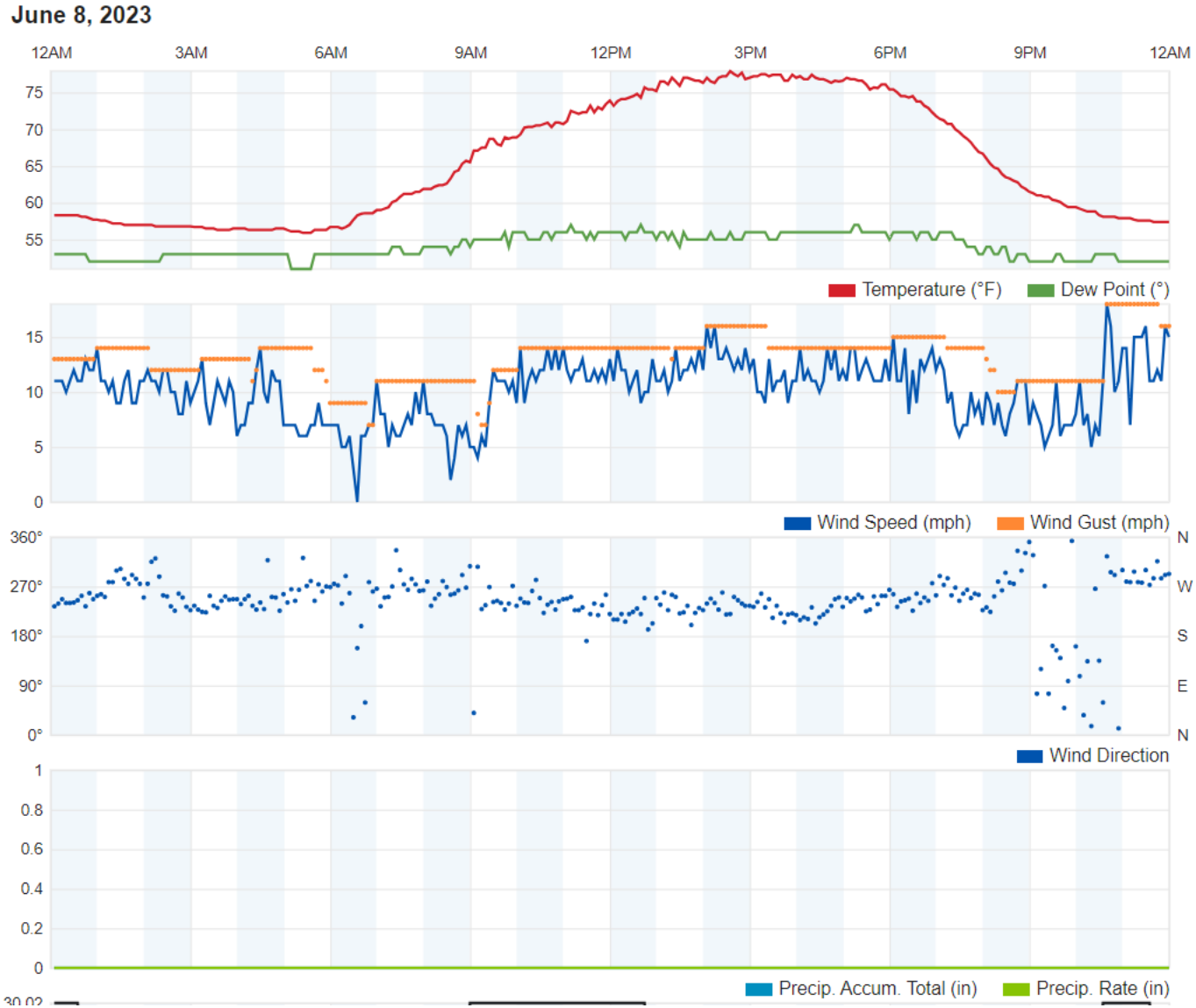
Upwind Location Description: Entrance Reading: 1.6 ppm

Downwind Location Description: Flare Reading: 2.1 ppm

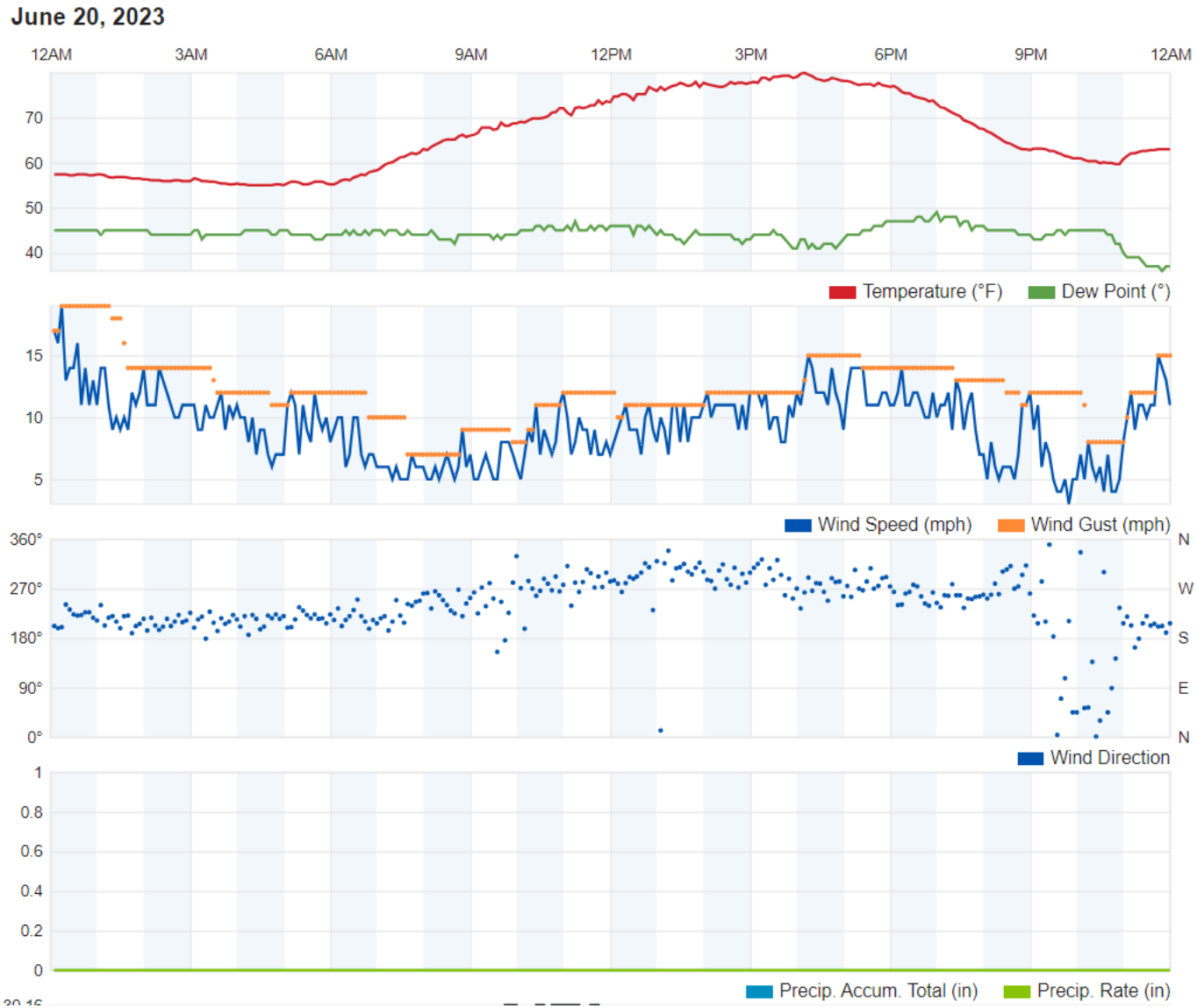
Notes: Wind speed averages were observed to remain below the alternative requested 10 miles per hour and no instantaneous speeds exceeded 20 miles per hour. No rainfall had occurred within the previous 24 hours of the monitoring event. Therefore, site meteorological conditions were within the requested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

Attachment 6

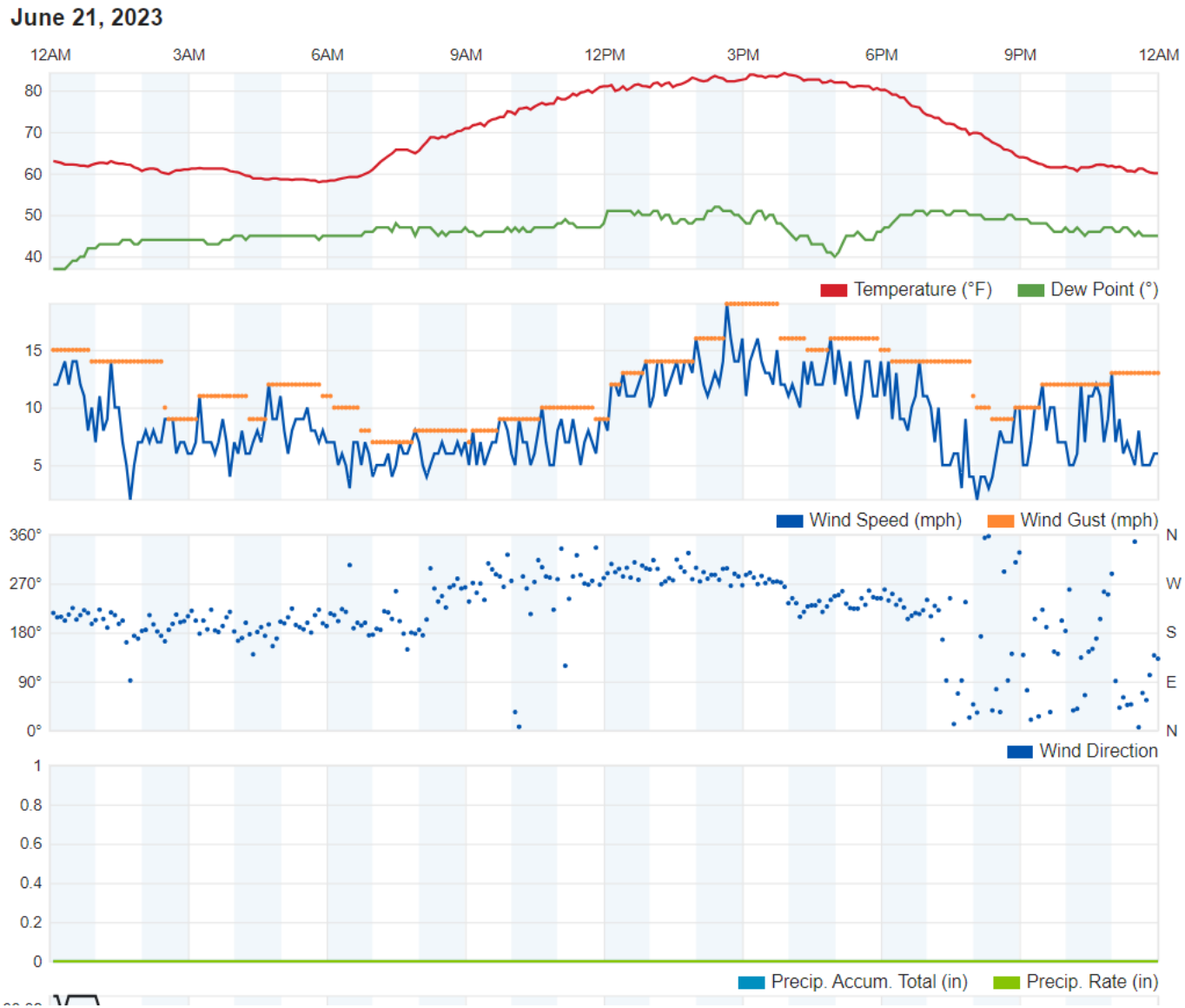
Weather Data



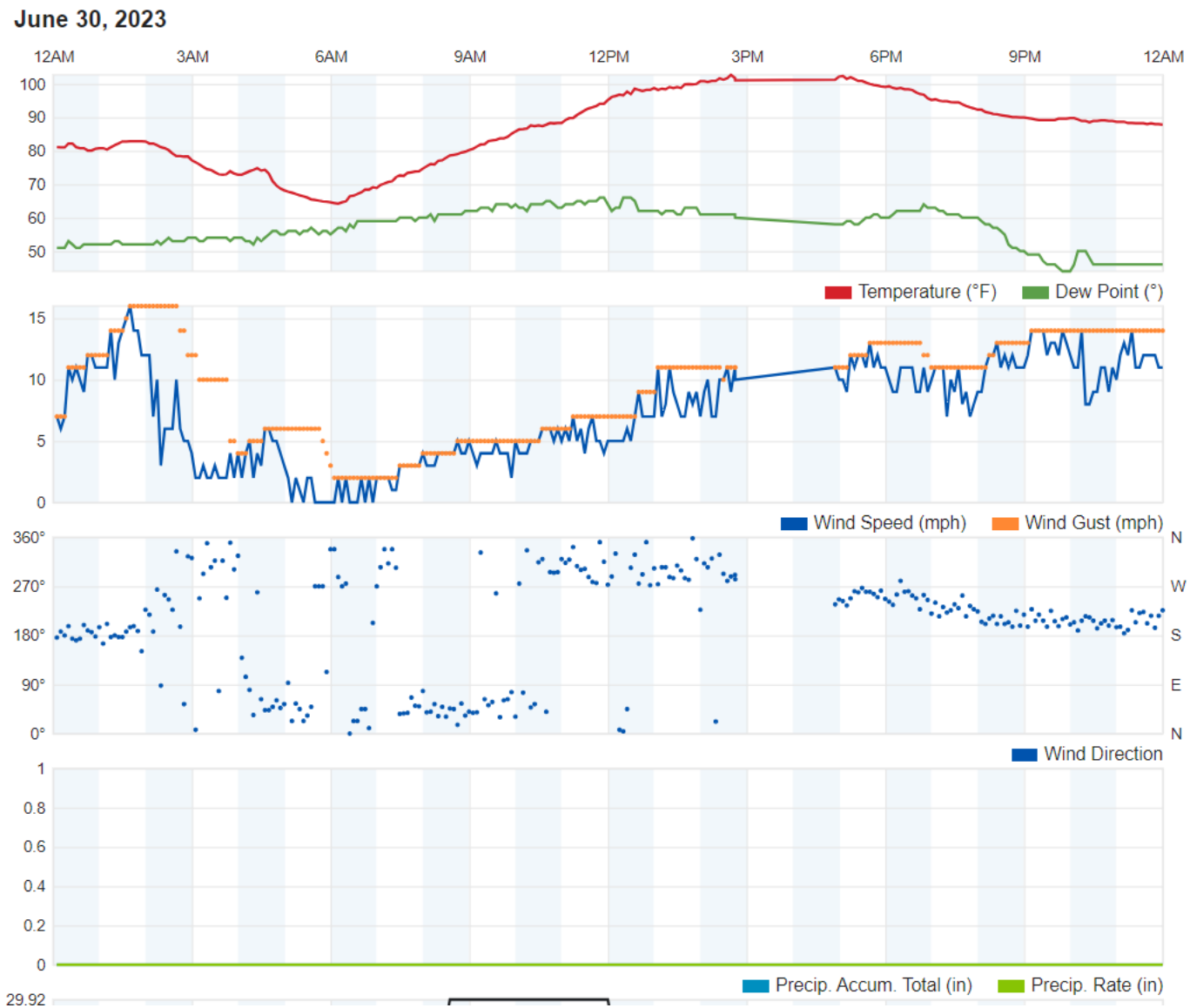
June 8, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



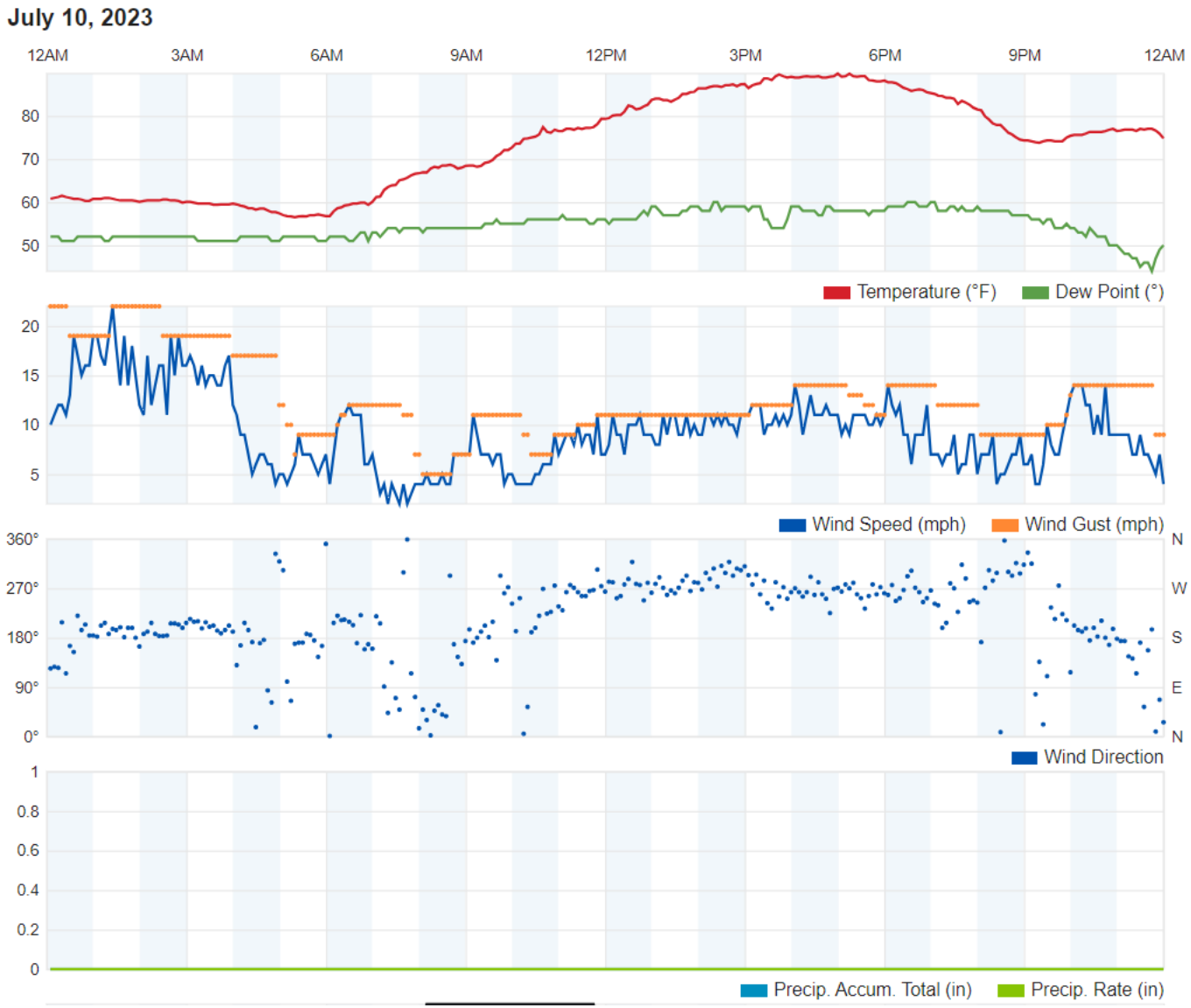
June 20, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



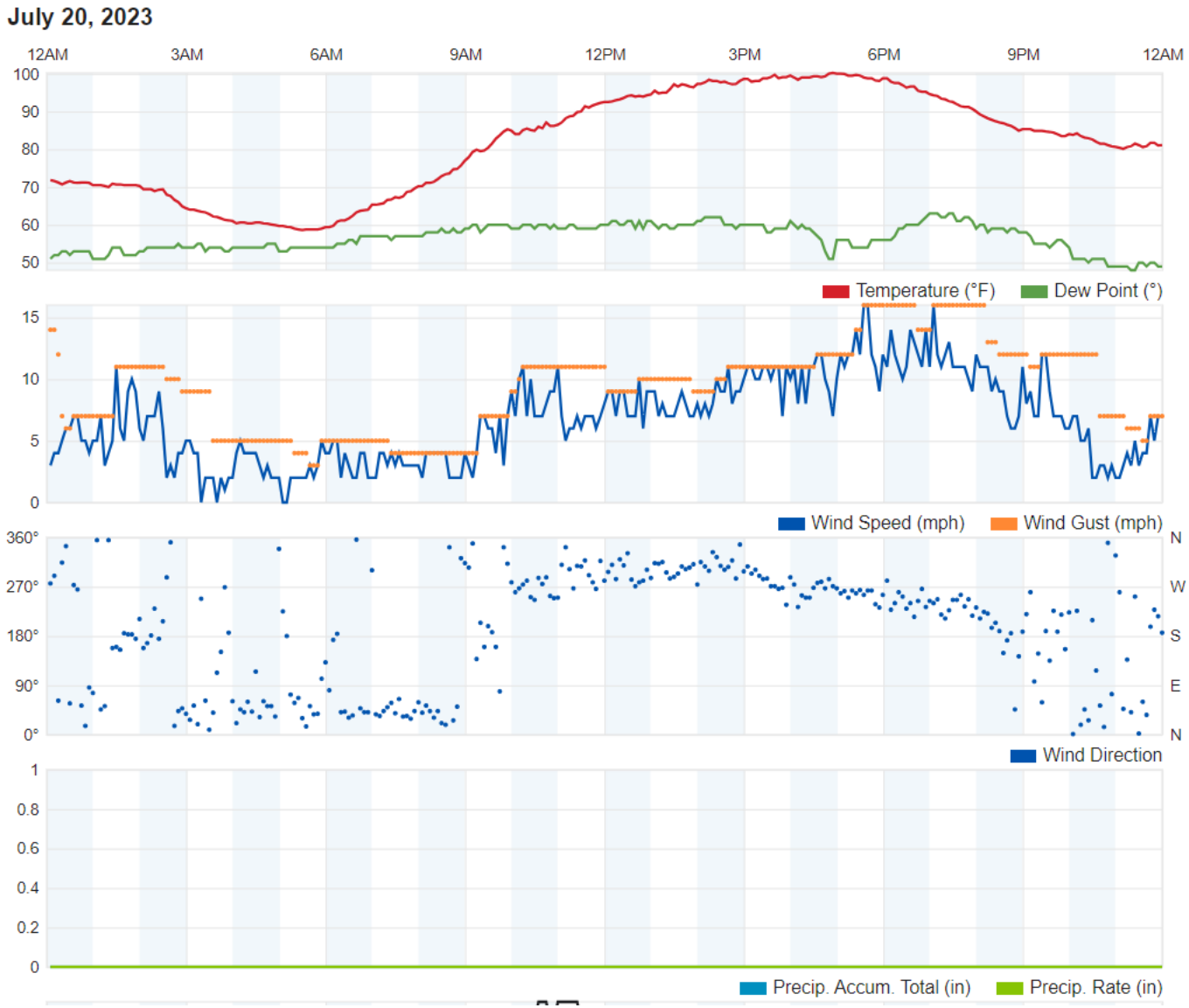
June 21, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



June 30, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



July 10, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California



July 20, 2023
Emissions Monitoring Weather Data
Keller Canyon Landfill, Pittsburg, California

Appendix F – Well Exceedance Documentation

July 18, 2023

Stanley Tom
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
Keller Canyon Landfill, Pittsburg, California
Facility Number A4618

Dear Mr. Tom;

On behalf of Keller Canyon Landfill Company (KCLC), SCS Engineers (SCS) 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) 62.16724(k)(1) for temperature exceedance. On June 21, 2021, Keller Canyon Landfill (Keller) became subject to the California Emissions Guidelines (EG) Rule, which includes compliance with Title 17 California Code of Regulations (CCR) Sections 95460 to 95476, known as AB 32 Landfill Methane Rule (LMR), and specific portions of 40 CFR Part 62 Subpart OOO. The updated federal National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart AAAA rule came into effect on September 27, 2021, and KCLC has chosen to comply with Subpart AAAA in lieu of equivalent compliance provisions of the California EG Rule, as allowed by the regulations. However, because Keller is still subject to BAAQMD Regulation 8, Rule 34 as well as the site's permit to operate (PTO) which incorporate the outdated New Source Performance Standards (NSPS) wellhead requirements, the site must still operate wells below 131 degrees Fahrenheit (°F), instead of the 145°F limit in the NESHAP rule, and we are providing this notification out of an abundance of caution until the outdated requirements can be removed from the PTO.

Well KCEW2203 at Keller had initial temperature exceedance reading of 137.5°F on April 25, 2023. Corrective actions were initiated within 5 days; however, the well could not be corrected within 15 days. As required under 40 CFR 62.16724(k)(1), a root cause analysis was completed within 60 days from the original exceedance date. All the steps for compliance were conducted, and the well was returned to compliance on July 3, 2023, 69 days after the initial exceedance.

This notification is being submitted due to the 131°F limit in the BAAQMD rules and PTO. As the wellhead temperature is under 145°F, Keller is in compliance with the federal NESHAP Subpart AAAA rule, which allows for wellhead temperatures of up to 145°F. As required under 40 CFR 62.16724(k)(1) and 63.1960(a)(4), this submittal contains the root cause analysis and corrective action analysis.

If you have any questions, please contact Maria Bowen of SCS at (619) 455-9518.

Sincerely,

Associate Staff Professional
SCS Engineers
Hannah Morse

Maria Bowen
Project Manager
SCS Engineers

cc: Antonia Gunner, KCLC
Josh Mills, KCLC
Sean Bass, SCSFS
Administrator, U.S. EPA Region 9

TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	4/25/2023
Collection Device ID:	EW 2203
Temperature Reading:	137.5

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?	☐ Yes	☒ No
• 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.		
Well and surrounding area. No issues observed. Well was tested three times for CO for an average 77 ppm.		
Describe what was determined to be the root cause of the exceedance.		
Normal decomposition		
Determine the required next steps.		
Was the temperature exceedance remediated within 60 days since the initial exceedance?	☐ Yes	☒ No
• 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:	4/25/2023
Collection Device ID:	EW 2203
Temperature Reading:	137.5

Corrective Action Analysis
Describe the corrective actions taken to remediate exceedance.
Well to be included in future HOV request. Under NESHAP well is in compliance with the new standard. CO testing indicates normal decomposition

Implementation Schedule	
Expected Start Date:	4/25/2023
Expected Completion Date:	7/3/2023
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
Monitored CO. Checked area. Well was brought back into compliance 69 days after initial exceedance on 7/3/2023.	

Final Steps		
Determine the required next steps.		
Is the remediation expected to take **<u>less than 120 days</u>** since initial exceedance per implementation schedule?	☒ Yes	☐ No

- 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.

July 18, 2023

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

Re: 75-Day Notification of Pressure Exceedances
Keller Canyon Landfill, Pittsburg, California
Facility Number A4618

Dear Mr. Tom;

On behalf of Keller Canyon Landfill (Keller), SCS Engineers (SCS) hereby provides the Bay Area Air Quality Management District (BAAQMD) with a 75-day notification pursuant to the compliance provisions identified in 40 Code of Federal Regulations (CFR) 62.16724(k)(1) and 63.1960(a)(4) for pressure exceedance.

Wells KCLEW193 and KCLF2312 at Keller had initial pressure readings of 0.26 and 0.94 inches of water ("H_2O) on April 26, and May 17, 2023, respectively. Corrective actions were initiated within 5 days; however, the wells could not be brought back into compliance within 15 days. As required under 40 CFR 62.16724(k)(1) and 63.1960(a)(4), a root cause analysis was completed within 60 days from the original exceedance date. In addition, a corrective action analysis was conducted as required for wells that could not be remediated in 60 days. All the steps for compliance were conducted and the wells, KCLEW193 and KCLF2312, will be able to come back into compliance within the 120-day timeframe from the original exceedance (August 24 and September 14, 2023, respectively). This submittal contains the root cause analysis, and corrective action (see attached).

If you have any questions or require additional information, please contact Maria Bowen at (619) 455-9518.

Sincerely,

Hannah Morse
Associate Staff Professional
SCS Engineers

Maria Bowen
Project Manager
SCS Engineers

cc: Tamiko Endow, BAAQMD
Antonia Gunner, Keller Canyon
Josh Mills, Keller Canyon
Sean Bass, SCSFS
Administrator, U.S. EPA Region 9

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	4/26/2023
Collection Device ID:	KCLEW193
Pressure Reading:	0.26 in H_2O

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Lateral was inspected. Vacuum adjusted		
Describe what was determined to be the root cause of the exceedance.		
Well in active area		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☐ Yes	☒ No
• 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

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	4/26/2023
Collection Device ID:	KCLEW193
Pressure Reading:	0.26 in H_2O

Corrective Action Analysis
Describe the corrective actions taken to remediate exceedance.
Vacuum adjusted. New lateral to be installed when filling is complete.

Implementation Schedule	
Expected Start Date:	4/26/2023
Expected Completion Date:	8/24/2023
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
In the process of installing a new lateral and awaiting material and filling to be complete.	

Final Steps		
Determine the required next steps.		
Is the remediation expected to take **less than 120 days** since initial exceedance per implementation schedule?	☒ Yes	☐ No

- 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 NSPS 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 NSPS Report.

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	5/17/2023
Collection Device ID:	KCLF2312
Pressure Reading:	0.94 in H_2O

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Lateral was inspected. Vacuum adjusted		
Describe what was determined to be the root cause of the exceedance.		
Well in active area		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☐ Yes	☒ No
• 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

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	5/17/2023
Collection Device ID:	KCLF2312
Pressure Reading:	0.94 in H_2O

Corrective Action Analysis
Describe the corrective actions taken to remediate exceedance.
Vacuum adjusted. New lateral to be installed when filling is complete.

Implementation Schedule	
Expected Start Date:	5/17/2023
Expected Completion Date:	9/14/2023
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
In the process of installing a new lateral and awaiting material and filling to be complete.	

Final Steps		
Determine the required next steps.		
Is the remediation expected to take **less than 120 days** since initial exceedance per implementation schedule?	☒ Yes	☐ No

- 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 NSPS 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 NSPS Report.

August 11, 2023

Stanley Tom
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
Keller Canyon Landfill, Pittsburg, California
Facility Number A4618

Dear Mr. Tom;

On behalf of Keller Canyon Landfill (Keller), SCS Engineers (SCS) hereby provides the Bay Area Air Quality Management District (BAAQMD) with a 75-day notification pursuant to the compliance provisions identified in 40 Code of Federal Regulations (CFR) 62.16724(k)(1) and 63.1960(a)(4) for pressure exceedance.

Well KCLEW194 at Keller had initial pressure reading of 2.32 inches of water ("H_2O) on May 30, 2023. Corrective actions were initiated within 5 days; however, the well could not be brought back into compliance within 15 days. As required under 40 CFR 62.16724(k)(1) and 63.1960(a)(4), a root cause analysis was completed within 60 days from the original exceedance date. In addition, a corrective action analysis was conducted as required for wells that could not be remediated in 60 days. All the steps for compliance were conducted and the well will be able to come back into compliance within the 120-day timeframe from the original exceedance (September 27, 2023). This submittal contains the root cause analysis, and corrective action (see attached).

If you have any questions or require additional information, please contact Maria Bowen at (619) 455-9518.

Sincerely,

Hannah Morse
Associate Staff Professional
SCS Engineers

Maria Bowen
Project Manager
SCS Engineers

cc:
Antonia Gunner, Keller Canyon
Josh Mills, Keller Canyon
Sean Bass, SCSFS
Administrator, U.S. EPA Region 9

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	5/30/2023
Collection Device ID:	KCLEW194
Pressure Reading:	2.32 inH_2O

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Lateral was inspected. Vacuum adjusted		
Describe what was determined to be the root cause of the exceedance.		
Well in active area		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☐ Yes	☒ No
• 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

Corrective Action Analysis and Implementation Schedule

Date of Initial Exceedance:	5/30/2023
Collection Device ID:	KCLEW194
Pressure Reading:	2.32 inH_2O

Corrective Action Analysis
Describe the corrective actions taken to remediate exceedance.
Vacuum adjusted. New lateral to be installed when filling is complete.

Implementation Schedule	
Expected Start Date:	5/30/2023
Expected Completion Date:	9/27/2023
Provide a description of proposed repairs and/or remedial action required and supporting information for implementation timeframe.	
In the process of installing a new lateral and awaiting material and filling to be complete.	

Final Steps		
Determine the required next steps.		
Is the remediation expected to take **less than 120 days** since initial exceedance per implementation schedule?	☒ Yes	☐ No
• 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 NSPS 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 NSPS Report.		

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	4/5/2023
Collection Device ID:	KCLF2315
Pressure Reading:	0.56

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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?	☒ Yes	☐ No
• 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:	4/26/2023
Collection Device ID:	KCLEW10A
Pressure Reading:	0.53

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Wellhead, well casing, and vacuum lateral source.		
Describe what was determined to be the root cause of the exceedance.		
The vacuum line to the well was disrupted due to landfill active operations in the area.		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☒ Yes	☐ No
• If YES, keep records of Root Cause Analysis. No reporting is required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to the state agency within 75 days of initial exceedance.		

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	4/26/2023
Collection Device ID:	KCLEW190
Pressure Reading:	0.14

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Wellhead, well casing, and vacuum lateral source.		
Describe what was determined to be the root cause of the exceedance.		
The vacuum line to the well was disrupted due to landfill active operations in the area.		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☒ Yes	☐ No
• If YES, keep records of Root Cause Analysis. No reporting is required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to the state agency within 75 days of initial exceedance.		

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	5/30/2023
Collection Device ID:	KCEW2125
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.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Wellhead, well casing, and vacuum lateral source.		
Describe what was determined to be the root cause of the exceedance.		
The vacuum line to the well was disrupted due to landfill active operations in the area.		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☒ Yes	☐ No
• If YES, keep records of Root Cause Analysis. No reporting is required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to the state agency within 75 days of initial exceedance.		

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	5/30/2023
Collection Device ID:	KCLEW124
Pressure Reading:	6.28

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Wellhead, well casing, and vacuum lateral source.		
Describe what was determined to be the root cause of the exceedance.		
The vacuum line to the well was disrupted due to landfill active operations in the area.		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☒ Yes	☐ No
• If YES, keep records of Root Cause Analysis. No reporting is required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to the state agency within 75 days of initial exceedance.		

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	6/27/2023
Collection Device ID:	KCLEW09A
Pressure Reading:	0.28

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Wellhead, well casing, and vacuum lateral source.		
Describe what was determined to be the root cause of the exceedance.		
The vacuum line to the well was disrupted due to landfill active operations in the area.		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☒ Yes	☐ No
• If YES, keep records of Root Cause Analysis. No reporting is required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to the state agency within 75 days of initial exceedance.		

TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	8/2/2023
Collection Device ID:	KCEW2125
Temperature Reading:	131.7

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?	☐ Yes	☒ No
• 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 the air board. Waiting for approval.		
Was the temperature exceedance remediated within 60 days since the initial exceedance?	☐ Yes	☐ No
• If YES, keep records of Root Cause Analysis. No reporting is required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to the state agency within 75 days of initial exceedance.		

PRESSURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	8/3/2023
Collection Device ID:	KCEW2125
Pressure Reading:	0.09

Root Cause Analysis		
Was the reason for the positive pressure due to one of the following:		
A fire or increased well temperature.	☐ Yes	☒ No
Use of a geomembrane or synthetic cover.	☐ Yes	☒ No
A decommissioned well.	☐ Yes	☒ No
• 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.		
Wellhead, well casing, and vacuum lateral source.		
Describe what was determined to be the root cause of the exceedance.		
The vacuum line to the well was disrupted due to landfill active operations in the area.		
Determine the required next steps.		
Was the positive pressure remediated within 60 days since the initial exceedance?	☐ Yes	☐ No
• If YES, keep records of Root Cause Analysis. No reporting is required. • If NO, continue with Corrective Action Analysis and Implementation Plan and submit Notification to the state agency within 75 days of initial exceedance.		

TEMPERATURE EXCEEDANCE

Root Cause Analysis

Date of Initial Exceedance:	1/25/2023
Collection Device ID:	EW 2203
Temperature Reading:	135.6

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?	☐ Yes	☒ No
• 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.		
Well and surrounding area. No issues observed.		
Describe what was determined to be the root cause of the exceedance.		
Normal decomposition		
Determine the required next steps.		
Was the temperature exceedance remediated within 60 days since the initial exceedance?	☐ Yes	☐ No
• 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.		

KELLER CANYON LANDFILL

TITLE V ANNUAL CERTIFICATION

SITE: KELLER CANYON LANDFILL	**FACILITY ID#:** A4618
REPORTING PERIOD: *from* 09/01/2022	*through* 08/31/2023

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:

Signature of Responsible Official

9/26/2023

Date

Josh Mills

Name of Responsible Official (please print)

General Manager

Title of Responsible Official (please print)

Mail to:

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

Compliance Certification Report

Site #: A4618 **Site Name:** Keller Canyon Landfill **Reporting Period:** 09/1/2022 to 08/31/2023

Address: 901 Bailey Rd **City:** Pittsburg, CA **Zip Code:** 94565

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 1	General Provisions and Definitions (5/4/11)	N	C	
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y	C	
BAAQMD Regulation 2, Rule 1	Permits – General Requirements (12/6/17)	N	C	
SIP Regulation 2, Rule 1	Permits - General Requirements (5/21/18)	Y	C	
BAAQMD 2-1-429	Permits – General Requirements: Federal Emissions Statement (12/21/04)	N	C	
SIP Regulation 2-1-429	Permits – General Requirements: Federal Emissions Statement (4/3/95)	Y	C	
BAAQMD Regulation 2, Rule 5	Permits – New Source Review of Toxic Air Contaminants (12/6/16)	N	C	
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N	C	
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y	C	
SIP Regulation 4, Table 1	Air Pollution Episode Plan, Episode Stage Criteria (8/6/90)	Y	C	
BAAQMD Regulation 5	Open Burning (11/20/2019)	C	C	
SIP Regulation 5	Open Burning (9/4/98)	Y	C	
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (7/31/18)	N	C	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y	C	
BAAQMD Regulation 6, Rule 6	Particulate Matter – Prohibition of Trackout (7/31/18)	N	C	
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N	C	
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y	C	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	N	C	
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y	C	
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (7/1/09)	N	C	
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (1/2/04)	Y	C	
BAAQMD Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (10/16/02)	Y	C	
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y	C	
BAAQMD Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (10/16/02)	Y	C	
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N	C	

Compliance Certification Report

Site #: A4618 **Site Name:** Keller Canyon Landfill **Reporting Period:** 09/1/2022 to 08/31/2023

Address: 901 Bailey Rd **City:** Pittsburg, CA **Zip Code:** 94565

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
BAAQMD Regulation 8-40-116	Exemption, Small Volume	Y	C	
BAAQMD Regulation 8-40-117	Exemption, Accidental Spills	Y	C	
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y	C	
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N	C	
SIP Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (4/26/95)	Y	C	
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N	C	
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y	C	
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N	C	
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y	C	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	N	C	
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)	Y	C	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)	N	C	
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants - Lead (3/17/82)	N	C	
SIP Regulation 11, Rule 1	Hazardous Pollutants - Lead (9/2/81)	Y	C	
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N	C	
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants - Asbestos Containing Serpentine (7/17/91)	N	C	
BAAQMD Regulation 11, Rule 18	Reduction of Risk from Air Toxics Emissions at Existing Facilities (11/14/17)	N	C	
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N	C	
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y	C	
BAAQMD Regulation 14, Rule 1	Mobile Source Emission Reduction Methods – Bay Area Commuter Benefits Program (3/19/14)	N	C	
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N	C	
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N	C	

Compliance Certification Report

Site #: A4618 **Site Name:** Keller Canyon Landfill **Reporting Period:** 09/1/2022 to 08/31/2023

Address: 901 Bailey Rd **City:** Pittsburg, CA **Zip Code:** 94565

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Notes
California Code of Regulations Title 17, Section 93105	Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (7/26/01)	N	C	
California Code of Regulations Title 17, Section 93106	Asbestos Airborne Toxic Control measure for Asbestos Containing Serpentine (7/20/00)	N	C	
California Code of Regulations Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (2/19/11)	N	C	
California Code of Regulations, Article 4, Subarticle 6, Title 17, Section 95460-95476	Methane Emissions from Municipal Solid Waste Landfills (6/17/2010)	Y	I (See Comment)	On August 9, 2023, the Site received NOV A62508 for an alleged violation of California Code of Regulations Title 17 Rule 95465 during site inspections that occurred on June 21, 2023. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letter that was submitted to the BAAQMD and EPA on August 18, 2023.
40 CFR 61, Subpart A	National Emission Standards for Hazardous Air Pollutants - General Provisions (2/16/12)	Y	C	
40 CFR 61, Subpart M	National Emission Standards for Hazardous Air Pollutants - National Emission Standard for Asbestos (1/16/91)	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**			
1-523	Parametric Monitoring and Recordkeeping Procedures	N	C	
1-523.1	Parametric monitor periods of inoperation	Y	C	
1-523.2	Limit on duration of inoperation	Y	C	
1-523.3	Reporting requirement for violations of any applicable limits	N	C	
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	C	
1-523.5	Maintenance and calibration	N	C	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**			
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
1-523.3	Reports of Violations	Y	C	
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (8/1/18)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-310	Total Suspended Particulate (TSP) Concentration Limits (applies to flares only)	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-310.1	Total Suspended Particulate (TSP) Concentration Limits (applies to flares only)	Y	C	
6-401	Appearance of Emissions	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
BAAQMD Regulation 6, Rule 6	**Particulate Matter – Prohibition of Trackout (7/31/18)**			
6-6-301	Prohibition of Trackout onto Paved Roadways	N	C	
6-6-302	Prohibition of Visible Emissions During Cleanup of Trackout	N	C	
6-6-501	Monitoring and Recordkeeping	N	C	
BAAQMD Regulation 8, Rule 2	**Organic Compounds – Miscellaneous Operations (7/20/05)**			
8-2-301	Miscellaneous Operations (applies to VOC-laden soil handling and disposal activities only)	Y	C	
BAAQMD Regulation 8, Rule 34	**Organic Compounds – Solid Waste Disposal Sites (6/15/05)**			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	C	
8-34-113.1	Emission Minimization Requirement	Y	C	
8-34-113.2	Shutdown Time Limitation	Y	C	
8-34-113.3	Recordkeeping Requirement	Y	C	
8-34-116	Limited Exemption, Well Raising	Y	C	
8-34-116.1	New Fill	Y	C	
8-34-116.2	Limits on Number of Wells Shutdown	Y	C	
8-34-116.3	Shutdown Duration Limit	Y	C	
8-34-116.4	Capping Well Extensions	Y	C	
8-34-116.5	Well Disconnection Records	Y	C	
8-34-117	Limited Exemption, Gas Collection System Components	Y	C	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	C	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
8-34-117.3	Meets Section 8-34-118 Requirements	Y	C	
8-34-117.4	Limits on Number of Wells Shutdown	Y	C	
8-34-117.5	Shutdown Duration Limit	Y	C	
8-34-117.6	Well Disconnection Records	Y	C	
8-34-118	Limited Exemption, Construction Activities	Y	C	
8-34-118.1	Construction Plan	Y	C	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	C	
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	C	
8-34-118.4	Emission Minimization Requirement	Y	C	
8-34-118.5	Excavated Refuse Requirements	Y	C	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	C	
8-34-118.7	Installation Time Limit	Y	C	
8-34-118.8	Capping Required for New Components	Y	C	
8-34-118.9	Construction Activity Records	Y	C	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
8-34-301.1	Continuous Operation	Y	I (See Comment)	On September 18, 25, 26, 28, 30, October 7, 9, 13, and November 2, and 3, 2022 and July 7, 2023 gas collection system downtime occurred due to Pacific Gas and Electric (PG&E) utility power outage, equipment failure, and liquids surging. For additional information, including corrective actions taken, please refer to the combined 10/30- Day Deviation Letters that were submitted to the BAAQMD and EPA. Breakdown relief was granted for the events on September 18, 30, and October 7, 2022 and July 7, 2023. NOV Breakdown IDs for events that were not granted relief are as follows: 08M20, 08M26, 08M29, 08M47, 08M55, 08M98, and 08N02.

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
8-34-301.2	Collection and Control Systems Leak Limitations	Y	I(See Comment)	During first and second quarter 2023 surface and component leak monitoring, a leak greater than 1,000 ppmv was detected at the flame arrestor. For more information on this component leak including when it was remediated please refer to the first and second quarter Surface Emissions Monitoring (SEM) report. On September 11, 2023, Site received a notice of violation (NOV) for an alleged violation of BAAQMD 8-34-301.2 during an United States EPA and BAAQMD inspection that occurred on August 21, 2023. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letter that was submitted to the BAAQMD on September 21, 2023.
8-34-301.3	Limits for Enclosed Flares	Y	C	
8-34-303	Landfill Surface Requirements	Y	I (See Comment)	On August 9, and September 11, 2023, Site received NOVs A62205 and A62509 for an alleged violation of BAAQMD 8-34-303 during site inspections that occurred on May 16, and August 21, 2023, respectively. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letters that were submitted to the BAAQMD on August 18, and September 21, 2023.
8-34-304	Gas Collection System Installation Requirements	Y	C	

Compliance Certification Report

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Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	C	
8-34-304.2	Based on Waste Age For Active Areas	Y	C	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	C	
8-34-304.4	Based on NMOC Emission Rate	Y	C	
8-34-305	Wellhead Requirements	Y	C	
8-34-305.1	Wellhead Vacuum Requirements	Y	C	
8-34-305.2	Wellhead Temperature Limit	Y	C	
8-34-305.3	Nitrogen Concentration Limit for Wellhead Gas or	Y	C	
8-34-305.4	Oxygen Concentration Limit for Wellhead Gas (except for wells identified in Condition #17309, Part 20c(i))	Y	C	
8-34-404	Less than Continuous Operation Petition	Y	C	
8-34-405	Design Capacity Reports	Y	C	
8-34-408	Collection and Control System Design Plans	Y	C	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	C	
8-34-411	Annual Report	Y	C	
8-34-412	Compliance Demonstration Tests	Y	C	
8-34-413	Performance Test Report	Y	C	
8-34-414	Repair Schedule for Wellhead Excesses	Y	C	
8-34-414.1	Records of Excesses	Y	C	
8-34-414.2	Corrective Action	Y	C	
8-34-414.3	Collection System Expansion	Y	C	
8-34-414.4	Operational Due Date for Expansion	Y	C	
8-34-415	Repair Schedule for Surface Leak Excesses	Y	C	
8-34-415.1	Records of Excesses	Y	C	
8-34-415.2	Corrective Action	Y	C	
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	C	
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	C	

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Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	C	
8-34-415.6	Additional Corrective Action	Y	C	
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	C	
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	C	
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	C	
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	C	
8-34-415.11	Operational Due Date for Expansion	Y	C	
8-34-416	Cover Repairs	Y	C	
8-34-501	Operating Records	Y	C	
8-34-501.1	Collection System Downtime	Y	C	
8-34-501.2	Emission Control System Downtime (applies to flares only)	Y	C	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors (applies to flares only)	Y	C	
8-34-501.4	Testing	Y	C	
8-34-501.6	Leak Discovery and Repair Records	Y	C	
8-34-501.7	Waste Acceptance Records	Y	C	
8-34-501.8	Non-decomposable Waste Records	Y	C	
8-34-501.9	Wellhead Excesses and Repair Records	Y	C	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	C	
8-34-501.12	Records Retention for 5 Years	Y	C	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	C	
8-34-504	Portable Hydrocarbon Detector	Y	C	
8-34-505	Well Head Monitoring	Y	C	
8-34-506	Landfill Surface Monitoring	Y	C	
8-34-507	Continuous Temperature Monitor and Recorder (applies to flares only)	Y	C	
8-34-508	Gas Flow Meter	Y	C	
8-34-510	Cover Integrity Monitoring	Y	C	

Compliance Certification Report

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Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
BAAQMD Regulation 8, Rule 40	**Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)**			
8-40-110	Exemption, Storage Pile	Y	C	
8-40-112	Exemption, Sampling	Y	C	
8-40-113	Exemption, Non-Volatile Hydrocarbons	Y	C	
8-40-116	Exemption, Small Volume	Y	C	
8-40-116.1	Volume does not exceed 1 cubic yard	Y	C	
8-40-116.2	Volume does not exceed 8 cubic yards, organic content does not exceed 500 ppmv, may be used only once per quarter	Y	C	
8-40-117	Exemption, Accidental Spills	Y	C	
8-40-118	Exemption, Aeration Projects of Limited Impact	Y	C	
8-40-301	Uncontrolled Contaminated Soil Aeration	Y	C	
8-40-304	Active Storage Piles	Y	C	
8-40-305	Inactive Storage Piles	Y	C	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**			
9-1-301	Limitations on Ground Level Concentrations (applies flare only)	Y	C	
9-1-302	General Emission Limitations (applies to flare only)	Y	C	
BAAQMD Regulation 9, Rule 2	**Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)**			
9-2-301	Limitations on Hydrogen Sulfide	N	C	
40 CFR Part 60, Subpart A	**Standards of Performance for New Stationary Sources – General Provisions (9/13/10)**			
60.4	Address	Y	C	

Compliance Certification Report

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Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	C	
60.7	Notification and Record Keeping	Y	C	
60.8	Performance Tests	Y	C	
60.11	Compliance with Standards and Maintenance Requirements	Y	C	
60.11(a)	Compliance determined by performance tests	Y	C	
60.11(d)	Control devices operated using good air pollution control practice	Y	C	
60.12	Circumvention	Y	C	
60.13	Monitoring Requirements	Y	C	
60.13(a)	Applies to all continuous monitoring systems	Y	C	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	C	
60.13(e)	Continuous monitors shall operate continuously	Y	C	
60.13(f)	Monitors shall be installed in proper locations	Y	C	
60.13(g)	Requires multiple monitors for multiple stacks	Y	C	
60.14	Modification	Y	C	
60.15	Reconstruction	Y	C	
60.19	General Notification and Reporting Requirements	Y	C	
40 CFR Part 60, Subpart WWW	**Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification on or After May 30, 1991, but Before July 18, 2014. (9/21/06)**			On June 21, 2021, the facility complies with the new Emission Guidelines (EG) requirements in California. The approved state plan for the EG includes compliance with Title 17 California Code of Regulations (CCR) Sections 95460 to 95476, known as AB 32 Landfill Methane Rule (LMR) and specific portions of 40 CFR Part 62 Subpart OOO. Note, both EG and Subpart WWW rules were followed during the reporting period.

Compliance Certification Report

Site #: A4618
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Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	C	
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m^3 (Large Designated Facilities)	Y	C	
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	C	
60.752 (b)(2)(i)	Submit a Collection and Control System Design Plan	Y	C	
60.752 (b)(2)(i)(A)	The collection and control system in the Design Plan shall comply with 60.752(b)(2)(ii)	Y	C	
60.752 (b)(2)(i)(B)	Design Plan shall include all proposed alternatives to 60.753 through 60.758	Y	C	
60.752 (b)(2)(i)(C)	Design Plan shall conform to 60.759 (active collection system) or demonstrate sufficiency of proposed alternatives	Y	C	
60.752 (b)(2)(ii)	Install a collection and control system	Y	C	
60.752 (b)(2)(iii)	Route collected gases to a control system.	Y	I (See Comment)	On September 18, 25, 26, 28, 30, October 7, 9, 13, and November 2, and 3, 2022 and July 7, 2023 gas collection system downtime occurred due to Pacific Gas and Electric (PG&E) utility power outage, equipment failure, and liquids surging. For additional information, including corrective actions taken, please refer to the combined 10/30- Day Deviation Letters that were submitted to the BAAQMD and EPA. Breakdown relief was granted for the events on September 18, 30, and October 7, 2022 and July 7, 2023. NOV Breakdown IDs for events that were not granted relief are as follows: 08M20, 08M26, 08M29, 08M47, 08M55, 08M98, and 08N02.

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O_2, dry basis, as demonstrated by initial performance test within 180 days of start-up (applies to flares only).	Y	C	
60.752 (b)(2)(iii)(C)	Process the collected gas for subsequent sale or use in a treatment system, where any atmospheric vents from this treatment system comply with paragraph (b)(2)(iii)(B) above.	Y	C	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	C	
60.752(c)	Title V Operating Permit Requirements	Y	C	
60.752(c)(1)	Subject date is June 10, 1996 for Landfills new or modified between May 30, 1991 and March 12, 1996	Y	C	
60.753	Operational Standards for Collection and Control Systems	Y	C	
60.753(a)	Operate a Collection System in each area or cell in which:	Y	C	
60.753(a)(1)	Active Cell – solid waste in place for 5 years or more	Y	C	
60.753(a)(2)	Closed/Final Grade – solid waste in place for 2 years or more	Y	C	
60.753(b)	Operate each wellhead under negative pressure unless:	Y	C	
60.753(b)(1)	Fire or increased well temperature or to prevent fire	Y	C	
60.753(b)(2)	Use of geomembrane or synthetic cover (subject to alternative pressure limits)	Y	C	
60.753(b)(3)	Decommissioned well after approval received for shut-down	Y	C	
60.753(c)	Operate each wellhead at < 55 °C, and either < 20% N_2 or < than 5% O2 (or other approved alternative levels for wells identified in Condition #17309, Part 20c(i))	Y	C	
60.753(c)(1)	N2 determined by Method 3C	Y	C	
60.753(c)(2)	O2 determined by 3A and as described in (2)(i-v)	Y	C	
60.753(d)	Surface Leak Limit is less than 500 ppm methane above background at landfill surface. This section also describes some surface monitoring procedures.	Y	C	

Compliance Certification Report

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Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii). If collection or control system inoperable, shut down gas mover and close all vents within 1 hour.	Y	C	
60.753(f)	Operate the control system at all times when collected gas is routed to the control system (applies to flares only).	Y	C	
60.753(g)	If monitoring demonstrates that 60.753(b), (c), or (d) are not being met, corrective action must be taken.	Y	C	
60.754	Test Methods and Procedures	Y	C	
60.754(a)	NMOC Calculation Procedures for NMOC Emission Rate Reports and Comparison to 50 Mg/Year Standard.	Y	C	
60.754(a)(1)	Calculate NMOC Emission Rate using either or both of the equations in 60.754(a)(1)(i-ii) with the listed default values.	Y	C	
60.754 (a)(1)(i)	Equation for known year-to-year waste acceptance rate	Y	C	
60.754 (a)(1)(ii)	Equation for unknown year-to-year waste acceptance rate	Y	C	
60.754(a)(2)	Tier 1 - compare calculated NMOC emission rate to 50 Mg/year	Y	C	
60.754 (a)(2)(ii)	If NMOC Emission Rate $\geq$ 50 Mg/year, comply with 60.752(b)(2) or determine a site-specific NMOC concentration and follow 60.754(a)(3).	Y	C	
60.754(c)	For PSD, NMOC emissions shall be calculated using AP-42	Y	C	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	C	
60.755	Compliance Provisions	Y	C	
60.755(a)	For Gas Collection Systems	Y	C	
60.755(a)(1)	Calculation procedures for maximum expected gas generation flow rate	Y	C	
60.755 (a)(1)(i)	Equation for unknown year-to-year waste acceptance rate	Y	C	
60.755 (a)(1)(ii)	Equation for known year-to-year waste acceptance rate	Y	C	
60.755(a)(2)	Vertical wells and horizontal collectors shall be of sufficient density to meet all performance specifications.	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.755(a)(3)	Measure wellhead pressure monthly. If pressure is positive, take corrective action (final corrective action = expand system within 120 days of initial positive pressure reading).	Y	C	
60.755(a)(4)	Expansion not required during first 180 days after startup.	Y	C	
60.755(a)(5)	Monitor wellheads monthly for temperature and either nitrogen or oxygen. If readings exceed limits, take corrective action up to expanding system within 120 days of first excess.	Y	C	
60.755(b)	Wells shall be placed in cells as described in Design Plan and no later than 60 days after:	Y	C	
60.755(b)(1)	Five years after initial waste placement in cell, for active cells	Y	C	
60.755(b)(2)	Two years after initial waste placement in cell, for closed/final grade cells.	Y	C	
60.755(c)	Procedures for complying with surface methane standard	Y	C	
60.755(c)(1)	Quarterly monitoring of surface and perimeter	Y	C	
60.755(c)(2)	Procedure for determining background concentration	Y	C	
60.755(c)(3)	Method 21 except probe inlet placed 5-10 cm above ground	Y	C	
60.755(c)(4)	Excess is any reading of 500 ppmv or more. Take corrective action indicated below (i-v).	Y	C	
60.755 (c)(4)(i)	Mark and record location of excess	Y	C	
60.755 (c)(4)(ii)	Repair cover or adjust vacuum. Re-monitor within 10calendar days.	Y	C	
60.755 (c)(4)(iii)	If still exceeding 500 ppmv, take additional corrective action. Re-monitor within 10 calendar days of 2nd excess.	Y	C	
60.755 (c)(4)(iv)	Re-monitor within 1 month of initial excess.	Y	C	
60.755 (c)(4)(v)	For any location with 3 monitored excesses in a quarter, additional collectors (or other approved collection system repairs) shall be operational within 120 days of 1st excess.	Y	C	
60.755(c)(5)	Monitor cover integrity monthly and repair as needed.	Y	C	
60.755(d)	Instrumentation and procedures for complying with 60.755(c).	Y	C	
60.755(d)(1)	Portable analyzer meeting Section 3 of Method 21	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.755(d)(2)	Calibrated with methane diluted to 500 ppmv in air	Y	C	
60.755(d)(3)	Use Method 21, Section 4.4 instrument evaluation procedures	Y	C	
60.755(d)(4)	Calibrate per Method 21, Section 4.2 immediately before monitoring.	Y	C	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems.	Y	C	
60.756	Monitoring of Operations	Y	C	
60.756(a)	For active collection systems, install wellhead sampling port	Y	C	
60.756(a)(1)	Measure gauge pressure in wellhead on a monthly basis	Y	C	
60.756(a)(2)	Measure nitrogen or oxygen concentration in wellhead gas on a monthly basis.	Y	C	
60.756(a)(3)	Measure temperature of wellhead gas on a monthly basis.	Y	C	
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	C	
60.756(b)(1)	Temperature monitor and continuous recorder (not required for boilers and process heaters with capacity > 44 MW)	Y	C	
60.756(b)(2)	Device that records flow to or bypass of the control device (i or ii below)	Y	C	
60.756 (b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	C	
60.756 (b)(2)(ii)	Secure the bypass line valve in closed position, visual inspection of the lock at least once every month	Y	C	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	C	
60.756(f)	Monitor surface on a quarterly basis.	Y	C	
60.757	Reporting Requirements	Y	C	
60.757(a)	Submit an Initial Design Capacity Report	Y	C	
60.757(a)(3)	Amended Design Capacity Report required within 90 days of receiving a permitted increase in design capacity or within 90 days of an annual density calculation that results in a design capacity over the thresholds.	Y	C	
60.757(b)	Submit Initial and Annual NMOC Emission Rate Report	Y	C	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.757(b)(3)	Sites with collection and control systems operating in compliance with this subpart are exempt from (b)(1) and (b)(2) above.	Y	C	
60.757(c)	Submit a Collection and Control System Design Plan within 1 year of first NMOC emission rate report showing NMOC > 50 MG/year.	Y	C	
60.757(f)	Submit Annual Reports containing information required by (f)(1) through (f)(6)	Y	C	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(a), (b) or (d)	Y	C	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	C	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	C	
60.757(f)(4)	All periods when collection system was not operating for more than 5 days.	Y	C	
60.757(f)(5)	Location of each surface emission excess and all re-monitoring dates and concentrations.	Y	C	
60.757(f)(6)	Location and installation dates for any wells or collectors added as a result of corrective action for a monitored excess.	Y	C	
60.757(g)	Initial Performance Test Report Requirements (g)(1-6)	Y	C	
60.757(g)(1)	Diagram of collection system showing positions of all existing collectors, proposed positions for future collectors, and areas to be excluded from control.	Y	C	
60.757(g)(2)	Basis for collector positioning to meet sufficient density req.	Y	C	
60.757(g)(4)	For areas excluded from collection due to non-productivity, calculations and gas generation rates for each non-productive area and the sum for all nonproductive areas.	Y	C	
60.757(g)(5)	Provisions for increasing gas mover equipment if current system is inadequate to handle maximum projected gas flow rate.	Y	C	
60.757(g)(6)	Provisions for control of off-site migration	Y	C	
60.758	Recordkeeping Requirements	Y	C	
60.758(a)	Design Capacity and Waste Acceptance Records (retain 5 years)	Y	C	
60.758(b)	Collection and Control Equipment Records (retain for life of control equipment except 5 years for monitoring data)	Y	C	

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Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.758(b)(1)	Collection System Records	Y	C	
60.758 (b)(1)(i)	Maximum expected gas generation flow rate.	Y	C	
60.758 (b)(1)(ii)	Density of wells and collectors	Y	C	
60.758(b)(2)	Control System Records - enclosed combustors other than boilers or process heaters with heat input > 44 MW (applies to flares only)	Y	C	
60.758 (b)(2)(i)	Combustion temperature measured every 15 minutes and averaged over the same time period as the performance test (applies to flares only)	Y	C	
60.758 (b)(2)(ii)	Percent NMOC reduction achieved by the control device (applies to flares only)	Y	C	
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years)	Y	C	
60.758(c)(1)	Exceedances subject to record keeping are	Y	C	
60.758 (c)(1)(i)	All 3-hour periods when average combustion temperature was more than 28 ºC below the average combustion temperature during the most recent complying performance test (applies to flares only)	Y	C	
60.758(c)(2)	Records of continuous flow to control device or monthly inspection records if seal and lock for bypass valves	Y	C	
60.758(d)	Plot map showing location of all existing and planned collectors with a unique label for each collector (retain for life of collection system).	Y	C	
60.758(d)(1)	Installation date and location of all newly installed collectors	Y	C	
60.758(d)(2)	Records of nature, deposition date, amount, and location of asbestos or non-degradable waste excluded from control	Y	C	
60.758(e)	Records of any exceedance of 60.753, location of exceedance and re- monitoring dates and data (for wellheads and surface). Retain for 5 years.	Y	C	
60.759	Specifications for Active Collection Systems	Y	C	
60.759(a)	Active wells and collectors shall be at sufficient density	Y	C	
60.759(a)(1)	Collection System in refuse shall be certified by PE to achieve comprehensive control of surface gas emissions.	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
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Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
60.759(a)(2)	Collection Systems (active or passive) outside of refuse shall address migration control.	Y	C	
60.759(a)(3)	All gas producing areas shall be controlled except as described below (i-iii).	Y	C	
60.759 (a)(3)(i)	Any segregated area of asbestos or non-degradable material only may be excluded, if documented adequately per 60.758(d).	Y	C	
60.759 (a)(3)(ii)	Any non-productive areas may be excluded from control, provided total NMOC emissions from all excluded areas is < 1% of total NMOC emissions from landfill. Document amount, location, and age of waste and all calculations for each excluded area.	Y	C	
60.759 (a)(3)(iii)	For calculating NMOC emissions, values for k and concentration of NMOC that have been previously approved shall be used or defaults if no values were approved. All non- degradable wastes that are being subtracted from total wastes for NMOC calculations must be documented adequately.	Y	C	
60.759(b)	Gas Collection System Components	Y	C	
60.759(b)(1)	Must be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved material and of suitable dimensions to convey projected gas amounts and withstand settling, traffic, etc.	Y	C	
60.759(b)(2)	Collectors shall not endanger liner, shall manage condensate and leachate, and shall prevent air intrusion and surface leaks.	Y	C	
60.759(b)(3)	Header connection assemblies shall include positive closing throttle valve, seals and couplings to prevent leaks, at least one sampling port, and shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved materials.	Y	C	
60.759(c)	Gas Mover Equipment shall be sized to handle maximum expected gas generation rate over the intended period of use.	Y	C	
60.759(c)(1)	For existing systems, flow data shall be used to project maximum flow rate.	Y	C	
60.759(c)(2)	For new systems, gas generation rate shall be calculated per 60.755(a)(1).	Y	C	

Compliance Certification Report

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Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
40 CFR Part 63, Subpart A	**National Emission Standards for Hazardous Air Pollutants: General Provisions (2/16/12)**			
63.4	Prohibited activities and circumvention	Y	C	
63.5	Preconstruction review and notification requirements	Y	C	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	C	
63.6	Compliance with standards and maintenance requirements	Y	C	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	C	
63.6(f)	Compliance with non-opacity emission standards	Y	C	
63.10	Recordkeeping and reporting requirements	Y	C	
63.10(b)	General record keeping requirements	Y	C	
63.10(b)(2)	For affected sources, maintain relevant records of:			
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	C	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	C	
40 CFR Part 63, Subpart AAAA	**National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (4/20/06)**			
63.1945	When do I have to comply with this subpart?	Y	C	
63.1945(b)	Compliance date for existing affected landfills	Y	C	
63.1955	What requirements must I meet?	Y	C	
63.1955(a)	Comply with either 63.1955(a)(1) or (a)(2)	Y	C	
63.1955(a)(1)	Comply with 40 CFR Part 60, Subpart WWW	Y	C	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	C	

Compliance Certification Report

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Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	C	
63.1960	How is compliance determined?	Y	C	
63.1965	What is a deviation?	Y	C	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	C	
63.1980	What records and reports must I keep and submit?	Y	C	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	C	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	C	
CARB, CCR, Title 17, Sections 95460-95476	**Methane Emissions from Municipal Solid Waste Landfills**	Y	C	
95460	Purpose of Regulation	Y	C	
95461	Applicability	Y	C	
95463	Determination for Installing a Landfill Gas Collection and Control System	Y	C	
95463(b)	MSW landfills greater than or equal to 450,000 tons of waste-in-place	Y	C	
	Must Submit a Landfill Gas Heat Input Capacity Report to Executive Officer	Y	C	
95463(b)(2)	Comply with Sections 95464 through 95476 if the heat input capacity is more than 3 MM BTU/hr	Y	C	
95464(b)	Gas Collection and Control System Requirements	Y	C	

Compliance Certification Report

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Reporting Period: 09/1/2022 to 08/31/2023
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
95464(b)(1)	General Requirements	Y	C	
95464(b)(1)(A)	Route the collected gas to a gas control device and operate the gas collection and control system continuously	Y	C	
95464(b)(1)(B)	No LFG leak exceeding 500 ppmv, as methane, at any component under positive pressure	Y	C	
95464(b)(1)(C)	System must be designed and operated to draw all LFG to gas control device	Y	C	
95464(b)(2)	Requirements for Flares	Y	C	
95464(b)(2)(A)(1)	LFG must be routed to an enclosed flare with a minimum methane destruction efficiency of 99% by wt.	Y	C	
95464(b)(2)(A)(2)	Enclosed flare must be equipped with automatic dampers, automatic shutdown device, flame arrestors, and continuous recording temperature sensors	Y	C	
95464(b)(2)(A)(3)	Sufficient flow of propane or commercial natural gas during startup to prevent emission of unburned methane	Y	C	
95464(b)(2)(A)(4)	Control device must be operated within the parameter ranges established during the source test	Y	C	
95464(b)(3)	Requirements for Gas Control Devices other than Flares	Y	C	
95464(b)(3)(A)	Route the LFG to an energy recovery device which has minimum methane destruction efficiency of 99% by wt. Lean burn IC engines must reduce the outlet methane concentration to less than 3000 ppmv corrected to 15% O_2	Y	C	
95464(b)(3)(B)	Route the collected gas to a treatment system that processes the gas for subsequent sale or use	Y	C	
95464(b)(4)	Source Test Requirements: Initial source test must be conducted within 180 days of the start up of the gas control device. Annual source must be completed no later than 45 days after the anniversary date of the initial source test	Y	C	
95464(b)(4)(A)	If in compliance after 3 consecutive source tests, frequency can be reduced to once every 3 years. If subsequent source testing shows out of compliance, frequency shall return to annual.	Y	C	
95464(c)	Each wellhead shall be operated under negative pressure except for a decommissioned well	Y	C	
95464(d)	Exemption for well raising	Y	C	

Compliance Certification Report

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
95464(e)	Repairs and Temporary Shutdown of Gas Collection system	Y	C	
95465	Surface Methane Emission Standards	Y	C	
95465(a)(1)	No location of the MSW landfill surface can exceed 500 ppmv of methane as determined by instantaneous surface emissions monitoring	Y	I (See Comment)	On August 9, 2023, Site received a NOV, A62508, for an alleged violation of California Code of Regulations Title 17 Rule 95465 (a)(1) during site inspections that occurred on June 21, 2023. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letters that were submitted to the BAAQMD on August 18.California Code of Regulations Title 17 Rule 95465 (a)(1)
95465(a)(2)	No location of the MSW landfill surface can exceed an average of 25 ppmv as determined by integrated surface emissions monitoring	Y	I (See Comment)	On August 9, 2023, Site received a NOV, A62508, for an alleged violation of California Code of Regulations Title 17 Rule 95465 (a)(2) during site inspections that occurred on June 21, 2023. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letter that was submitted to the BAAQMD on August 18, 2023.
95466	Exemption for Construction Activities	Y	C	
95467	Permanent Shutdown and Removal of LFG Collection and Control System	Y	C	
95467(a)(1-3)	LFG collection and control system can be capped at a closed landfill if it was operational for at least 15 years, surface emissions meet the standards in 95465 and an Equipment Removal Report is submitted to the Executive Officer	Y	C	
95468	Alternative Compliance Options	Y	C	

Compliance Certification Report

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
95469	Monitoring Requirements	Y	C	
95469(a)	Surface Emission Monitoring Requirements: Must conduct instantaneous and integrated surface emission monitoring quarterly	Y	C	
95469(a)(1)	Instantaneous Surface Emission Monitoring:	Y	C	
95469(a)(1)(A)	Exceedances (> 500 ppmv as methane) must be marked, recorded and corrective action initiated.	Y	C	
95469(a)(1)(B)	Re-monitoring shall be conducted within 10 days of a measured exceedance.	Y	C	
95469(a)(1)(B)(1)	If re-monitoring shows a second exceedance, more corrective action shall be taken and re-monitoring shall be conducted within 10 days of the second exceedance.	Y	C	
95469(a)(1)(B)(2)	If the re-monitoring shows a third exceedance, well shall be replaced and compliance must be determined within 120 days of the third exceedance.	Y	C	
95469(a)(1)(C)	Can monitor annually if four consecutive monitoring events show no exceedances. Any exceedances which can not be corrected within 10 calendar days will return the frequency to quarterly monitoring	Y	C	
95469(a)(1)(D)	Any exceedance discovered during a compliance inspection will return the monitoring to quarterly frequency.	Y	C	
95469(a)(2)	Integrated Surface Emissions Monitoring:	Y	C	
95469(a)(2)(A)	Exceedances (> 25 ppmv as methane) must be marked, recorded and corrective action initiated.	Y	C	
95469(a)(2)(B)	Re-monitoring shall be conducted within 10 days of a measured exceedance.	Y	C	
95469(a)(2)(B)(1)	If re-monitoring shows a second exceedance, more corrective action shall be taken and re-monitoring shall be conducted within 10 days of the second exceedance.	Y	C	
95469(a)(2)(B)(2)	If the re-monitoring shows a third exceedance, well shall be replaced and compliance must be determined within 120 days of the third exceedance.	Y	C	

Compliance Certification Report

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
95469(a)(2)(C)	Can monitor annually if four consecutive monitoring events show no exceedances. Any exceedances which cannot be corrected within 10 calendar days will return the frequency to quarterly monitoring	Y	C	
95469(a)(2)(D)	Any exceedance discovered during a compliance inspection will return the monitoring to quarterly frequency.	Y	C	
95469(b)	Gas Control System Equipment Monitoring: The equipment must be installed, calibrated, maintained and operated as per the manufacturer specifications	Y	C	
95469(b)(1)(A)	Enclosed flares must be equipped with a temperature (accuracy of +/- 1% of the temperature being measured)	Y	C	
95469(b)(1)(B)	Enclosed flares must be equipped with at least one flow rate measuring device (capability of measuring flow rate every 15 minutes)	Y	C	
95469(b)(2)	For equipment other than enclosed flares, describe operation of the device, operating parameters, and monitoring requirements.	Y	C	
95469(b)(3)	Components containing LFG and under positive pressure must be monitored quarterly for leaks, leaks must be repaired within 10 days	Y	C	
95469(b)(3)(A)	Leak Testing at MSW landfills with LFGTE facilities may be conducted prior to scheduled maintenance of planned outage	Y	C	
95469(c)	Wellhead Monitoring: Monitoring shall be done monthly.	Y	C	
95469(c)(1)	Initiate corrective action within 5 days of a positive pressure	Y	C	
95469(c)(2)	If it cannot be resolved within 15 days from the positive measurement date, additional corrective actions shall be taken such as expansion of gas collection system	Y	C	
95469(c)(3)	Corrective actions, including operation of any new wells, shall be completed within 120 days from the first positive measurement.	Y	C	
95470(a)	Recordkeeping Requirements	Y	C	
95470(a)(1)	Following records must be maintained:	Y	C	
95470(a)(1)(A)	Gas collection system downtime exceeding 5 calendar days, list of components shut down and the reason for downtime	Y	C	
95470(a)(1)(B)	Gas collection system downtime exceeding one hour, the reason and duration of downtime	Y	C	

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95470(a)(1)(C)	Expected gas generation flow rate	Y	C	
95470(a)(1)(D)	All instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in 95464(b)(1)(B). Records shall include location of the leak, concentration in ppmv, date and time of measurement, the corrective action taken, date of action, re-monitoring and the re-monitored concentration in ppmv, and wind speed during surface sampling; the installation date and location of each well installed as part of well field expansion	Y	C	
95470(a)(1)(E)	Any positive wellhead gauge pressure measurements, the date of measurements, the well identification number, and the corrective action taken	Y	C	
95470(a)(1)(F)	Annual solid waste acceptance rate and the current amount of waste-in-place	Y	C	
95470(a)(1)(G)	Nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system	Y	C	
95470(a)(1)(H)	Results of any source tests conducted pursuant to section 95464(b)(4)	Y	C	
95470(a)(1)(I)	Mitigation measures taken to prevent the release of methane or other emissions.	Y	C	
95470(a)(1)(I)(1)	When solid waste was brought to the surface during the installation of wells, piping, or other equipment;	Y	C	
95470(a)(1)(I)(2)	During repairs or temporary shutdown of gas collection system components	Y	C	
95470(a)(1)(I)(3)	When solid waste was excavated and moved	Y	C	
95470(a)(1)(J)	Any construction activities pursuant to section 95466	Y	C	
95470(a)(1)(J)(1)	A description of the actions being taken, affected areas, reason the actions are required, and any affected components	Y	C	
95470(a)(1)(J)(2)	Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual components	Y	C	

Compliance Certification Report

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95470(a)(1)(J)(3)	Description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts	Y	C	
95470(a)(1)(K)	Equipment operating parameters specified under sections 95469(b)(1) and 95469(b)(2) as well as exceedance records	Y	C	
95470(a)(1)(K)(1)	For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) and 95464(b)(3)(A) was determined	Y	C	
95470(a)(2)	Following records must be maintained for the life of each gas control device	Y	C	
95470(a)(2)(A)	Vendor specifications	Y	C	
95470(a)(2)(B)	Expected gas generation flow rate	Y	C	
95470(a)(2)(C)	Percent reduction of methane achieved by the control device	Y	C	
95470(a)(3)	Maintain copies of all records in the State of CA and provide them to Executive Officer within 5 business days upon request	Y	C	
95470(b)	Reporting Requirements	Y	C	
95470(b)(1)	Submit a Closure Notification to the Executive Officer within 30 days of waste acceptance cessation	Y	C	
95470(b)(1)(A)	Closure Notification must include the last day solid waste was accepted, the anticipated closure date of the MSW landfill, and the estimated waste-in-place	Y	C	
95470(b)(1)(B)	Executive Officer may request additional information to verify that permanent closure took place in accordance with the local, state or federal requirements	Y	C	
95470(b)(2)	Submit an Equipment Removal Report to the Executive Officer 30 days prior to well capping, removal or cessation which contains:	Y	C	
95470(b)(2)(A)	A copy of the Closure Notification submitted pursuant to section 95470(b)(1)	Y	C	

Compliance Certification Report

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95470(b)(2)(B)	A copy of the initial source test report or other documentation demonstrating that the gas collection and control system has been installed and operated for a minimum of 15 years unless demonstrated otherwise	Y	C	
95470(b)(2)(C)	Surface emissions monitoring results verifying that surface methane concentration measurements do not exceed the limits specified in section 95465.	Y	C	
95470(b)(3)	Prepare an annual report for the period of January 1 through December 31 of each year and submit to the Executive Officer by March 15 of the following year. The annual report must contain:	Y	C	
95470(b)(3)(A)	MSW landfill name, owner and operator, address, and solid waste information system (SWIS) identification number	Y	C	
95470(b)(3)(B)	Total volume of landfill gas collected in standard cubic feet	Y	C	
95470(b)(3)(C)	Average composition of the landfill gas collected over the reporting period (reported in percent methane and percent carbon dioxide by volume	Y	C	
95470(b)(3)(D)	Gas control device type, year of installation, rating, fuel type, and total amount of landfill gas combusted in each device	Y	C	
95470(b)(3)(E)	Date that the gas collection and control system was installed and in full operation	Y	C	
95470(b)(3)(F)	Percent methane destruction efficiency of each gas control device	Y	C	
95470(b)(3)(G)	Type and amount of supplemental fuels burned with the landfill gas in each device	Y	C	
95470(b)(3)(H)	Total volume of landfill gas shipped off-site, the composition of the landfill gas collected, and the recipient of the gas	Y	C	
95470(b)(3)(I)	Most recent topographic map of the site	Y	C	
95470(b)(3)(J)	Information required by pertinent sections of 95470(a)(1)	Y	C	
95470(b)(5)	Submit a Landfill Gas Heat Input Capacity Report: Calculate the heat input capacity and report the results to the Executive Officer within 90 days of the effective date of this subarticle or upon reaching 450,000 tons of waste-in-place.	Y	C	

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95470(b)(6)	Submit certification by a responsible official of truth, accuracy, and completeness	Y	C	
95471	Test Methods and Procedures	Y	C	
95471(a)	Hydrocarbon Detector Specifications: Any instrument used for the measurement of methane must be a gas detector approved by the Executive Officer that meets the EPA Reference Method 21, Determination of Volatile Organic Compound Leaks, 40 CFR Part 60, Appendix A	Y	C	
95471(b)(1)	Landfill gas heat input capacity for MSW landfills without carbon adsorption or passive venting system shall be calculated using the procedure specified in Appendix I	Y	C	
95471(c)	Surface Emission Monitoring Procedures: Landfill surface concentration of methane must be measured using a hydrocarbon detector using the following procedures:	Y	C	
95471(c)(1)	Entire landfill surface must be divided into individually identified 50,000 square foot grids	Y	C	
95471(c)(1)(A)	Testing must be performed by holding the hydrocarbon detector's probe within 3 inches of the landfill surface while traversing the grid	Y	C	
95471(c)(1)(B)	The walking pattern must be no more than a 25-foot spacing interval and must traverse each monitoring grid	Y	C	
95471(c)(1)(B)(1)	Spacing may be increased to 100-foot intervals if no exceedances of the limits in section 95465 are observed after any four consecutive quarterly monitoring events. It must return to a 25-foot spacing interval upon observation of any exceedances	Y	C	
95471(c)(1)(C)	Surface testing must be terminated when the average wind speed exceeds 5 mph or the instantaneous wind speed exceeds 10 mph. Alternatives can be approved for sites with consistently higher wind speeds by the Executive Officer. Average wind speed must be determined on a 15-minute average using an on-site anemometer with a continuous recorder	Y	C	
95471(c)(1)(D)	Surface emissions testing must be conducted only when there has been no measurable precipitation in the preceding 72 hours	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
95471(c)(2)	Instantaneous Surface Emissions Monitoring Procedures	Y	C	
95471(c)(2)(A)	Record any instantaneous surface readings of methane 200 ppmv or greater	Y	C	
95471(c)(2)(B)	Exceedances of methane concentration limit of 500 ppmv must be marked and remediated pursuant to section 95469(a)(1)	Y	C	
95471(c)(2)(C)	The wind speed must be recorded during the sampling period	Y	C	
95471(c)(2)(D)	Areas with cover penetrations/distressed vegetation/cracks/seeps must be inspected visually and with a hydrocarbon detector	Y	C	
95471(c)(3)	Integrated Surface Emissions Monitoring Procedures	Y	C	
95471(c)(3)(A)	Record and average integrated surface readings for each grid	Y	C	
95471(c)(3)(B)	Exceedances of methane concentration limit of 25 ppmv must be marked and remediated pursuant to section 95469(a)(2)	Y	C	
95471(c)(2)(C)	The wind speed must be recorded during the sampling period	Y	C	
95471(d)	Measure leaks using a hydrocarbon detector	Y	C	
95471(e)	Determine the expected gas generation flow rate as per the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 3, using a recovery rate of 75 percent	Y	C	
95471(f)(1)	Determine the destruction efficiency of the control device using EPA Methods 18, 25, 25A, and 25C	Y	C	
95471(g)	Determine gauge pressure using a hand-held manometer, magnahelic gauge, or other pressure measuring device approved by the Executive Officer.	Y	C	
95471(h)	Alternative test methods may be used if approved in writing by the Executive Officer	Y	C	
95472	Penalties	Y	C	
95473	Implementation, Enforcement, and Related Fees	Y	C	
95474	Applicability of Other Rules and Regulations	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
BAAQMD Condition #17309				
Part 1	Operating Time Restrictions (Cumulative Increase)	Y	C	
Part 2	Waste Acceptance Rate Limits (Cumulative Increase and Regulation 2-1-301)	Y	C	
Part 3	Daily Cover Requirements and Limitations (Regulation 1-301 and Cumulative Increase)	Y	C	
Part 4	Road Surfacing Requirements for Parking and Maintenance Areas (Cumulative Increase)	Y	C	
Part 5	Road Surfacing Requirements for On-Site Road Ways (Cumulative Increase)	Y	C	
Part 6	Speed Limits for Unpaved Roads (Cumulative Increase)	Y	C	
Part 7	Road Surfacing Requirements for Unpaved Roads (Cumulative Increase)	Y	C	
Part 8	Minimum Water and Dust Suppressant Application Rates for Unpaved Roads (Cumulative Increase)	Y	C	
Part 9	Water Truck Requirements (Cumulative Increase)	Y	C	
Part 10	Watering Requirements for Paved and Aggregate Based Road Ways (Cumulative Increase)	Y	C	
Part 11	Traffic Volume Limitations (Cumulative Increase)	Y	C	
Part 12	Trip Length Limitations for Heavy Duty Vehicles (Cumulative Increase)	Y	C	
Part 13	Watering Requirements for Active Face, Cover Soil Areas, and Off-Road Soil Areas (Cumulative Increase)	Y	C	
Part 14	Vegetation Requirements for Inactive Cover Soil Stockpiles (CEQA, Dust Mitigation Measures)	N	C	
Part 15	Vegetation Requirements for Completed Landfill Phases (CEQA, Dust Mitigation Measures)	N	C	
Part 16	Record Keeping Requirements (Cumulative Increase and Regulation 2-6-501)	Y	C	
Part 17	Reporting Periods and Report Submittal Due Dates for the Regulation 8, Rule 34 and NESHAP Reports (Regulation 8-34-411 and 40 CFR 63.1980(a))	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
Part 18	Landfill Gas Collection System Design and Alteration Requirements (Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, and 40 CFR 60.755(a) and 60.759)	Y	C	
Part 19	Operating Requirements for Landfill Gas Collection System and Collection System Components (Regulations 8-34-301, 8-34-305, and 8-34-404, and 40 CFR 60.753(b and c) and 60.755(e))	Y	C	
Part 20	Control Requirements for Collected Landfill Gas (Regulations 8-34-301 and 8-34-303 and 40 CFR 60.752(b)(2)(ii-iii), 60.753(d-f) and 60.755(e))	Y	C	
Part 21	Continuous Operation Requirement for Flares (Regulation 8-34-301 and 40 CFR 60.752(b)(2)(iii), 60.753(e), and 60.755(e))	Y	C	
Part 22	Temperature Monitoring and Recording Requirements for Flares (Regulations 2-6-501 and 8-34-501 and 40 CFR 60.756(b))	Y	C	
Part 23	Minimum Temperature Requirement for Flares (RACT, Regulations 2-5- 301 and 8-34-301, and 40 CFR 60.758(c)(1)(i))	Y	C	
Part 24	Nitrogen Oxide Emission Limit for Flares (RACT)	Y	C	
Part 25	Carbon Monoxide Emission Limit for Flares (RACT)	Y	C	
Part 26	[deleted]			
Part 27	Gas Flow Meter Requirement (Regulation 8-34-508 and 40 CFR 60.756(b))	Y	C	
Part 28	Alarm and Automated Control Requirements for Flares (Regulation 8-34-301)	Y	C	
Part 29	[deleted]			
Part 30	Annual Source Testing Requirement (RACT, Regulation 8-34-301.3, and 40 CFR 60.752(b)(2)(iii))	Y	C	
Part 31	Annual Landfill Gas Characterization Test (Air Toxics Hot Spots Act, Regulations 2-5-501, 8-34-301 and 9-1-302, and 40 CFR 60.754(d))	Y	C	
Part 32	Limits on Toxic Air Contaminants in Landfill Gas (Air Toxics Hot Spots Act and Regulation 2-5-302)	N	C	
Part 33	Precursor Organic Compound Emission Limit and Calculation Procedures (Offsets)	Y	C	
Part 34	Landfill Gas Sulfur Content Limit and Testing Procedures (Cumulative Increase and Regulations 9-1-302 and 2-6-503)	Y	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-1, S-4, S-5

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-1 Keller Canyon Landfill abated by A-1 Landfill gas flare, and A-2 Landfill gas flare; S-4 waste and cover material dumping; and S-5 excavating, bulldozing, and compacting activities

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Continuous or Intermittent	Comments
Part 35	Heat Input Limits for Flares (Offsets, Cumulative Increases, and Regulation 2-1-301)	Y	C	
Part 36	Contaminated Soil Throughput Limit and Records (Regulation 8-2-301)	Y	C	
Part 37	Handling Procedures for Soil Containing Volatile Organic Compounds (Regulations 2-1-403, 8-40-301, 8-40-304, and 8-40-305)	Y	C	
Part 38	Prohibition of trackout and cleanup of trackout (Regulation 6-6-301, 302)	N	C	

Compliance Certification Report

Site #: A4618
Address: 901 Bailey Rd
Source #: S-3

Site Name: Keller Canyon Landfill
City: Pittsburg, CA
Source Name: S-3 Yard and Green Waste Stockpiles

Reporting Period: 09/1/2022 to 08/31/2023
Zip Code: 94565

Applicable Requirement	Regulation Title or Description of Requirement	Compliance (Y/N)	Continuous or Intermittent	Days out of compliance / Comments
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (7/31/18)**			
6-1-301	Ringelmann No. 1 Limitation	N	C	
6-1-305	Visible Particles	N	C	
6-1-311.1	Total Suspended Particulate (TSP) Weight Limits	N	C	
6-1-401	Appearance of Emissions	N	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann No. 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-311	Process Weight Limitations	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Regulation 6, Rule 6	**Particulate Matter – Prohibition of Trackout (7/31/18)**			
6-6-301	Prohibition of Trackout onto Paved Roadways	N	C	
6-6-302	Prohibition of Visible Emissions During Cleanup of Trackout	N	C	
6-6-501	Monitoring and Recordkeeping	N	C	
BAAQMD Condition #16462				
Part 1	Limit on Yard and Green Waste Received (Cumulative Increase)	Y	C	
Part 2	Watering Requirements (Regulations 6-1-301, 6-1-305, and 2-6-503)	Y	C	
Part 3	Maximum Storage Time for Incoming Waste Prior to Processing (Regulation 1-301)	N	C	
Part 4	Maximum Storage Time for “Odorous” Stockpile (Regulation 1-301)	N	C	
Part 5	Public Nuisance Control Measures (Regulation 1-301)	N	C	
Part 6	Record Keeping Requirements (Cumulative Increase and Regulations 1-301, 2-6-501, 6-1-301 and 6-1-305)	Y	C	

KELLER CANYON LANDIFLL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: KELLER CANYON LANDFILL	**FACILITY ID#:** A4618
REPORTING PERIOD: *from* 03/01/2023	*through* 08/31/2023

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:

Signature of Responsible Official

9/26/2023

Date

Josh Mills

Name of Responsible Official (please print)

General Manager

Title of Responsible Official (please print)

Mail to:

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

KELLER CANYON LANDIFLL

TITLE V SEMI-ANNUAL MONITORING REPORT

SITE: KELLER CANYON LANDFILL	**FACILITY ID#:** A4618
REPORTING PERIOD: *from* 03/01/2023	*through* 08/31/2023

List of Permitted Sources and Abatement Device

Permit Unit Number	**Equipment Description**
S-#	**Description**
S-1	Keller Canyon Landfill – Waste Decomposition Process; Abated by A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare
S-4	Keller Canyon Landfill – Waste and Cover Material Dumping
S-5	Keller Canyon Landfill – Excavating, Bulldozing and Compacting Activities
S-3	Yard and Green Waste Stockpiles

Notes:

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

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 # 17309, Part 16d-h	Records	Periodic / On event basis	BAAQMD 8-34-304.1	For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	Continuous	N/A
Collection System Installation Dates	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 17309, Part 16d-h	Records	Periodic / On event basis	BAAQMD 8-34-304.2 and BAAQMD Condition # 17309, Part 18b	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 # 17309, Part 16d-h	Records	Periodic / On event basis	BAAQMD 8-34-304.3 and BAAQMD Condition # 17309, Part 18b	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

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Collection System Installation Dates	40 CFR 60.758(a), (d)(1) and (d)(2), and 60.759(a)(3)	Records	Periodic / On event basis	40 CFR 60.753 (a)(2) and 60.755 (b)(2)	For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	Continuous	N/A
Collection System Installation Dates	40 CFR 60.758(a), (d)(1) and (d)(2)	Records	Periodic / On event basis	40 CFR 60.753 (a)(1) and 60.755 (b)(1)	For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	Continuous	N/A
Gas Flow	BAAQMD 8-34-501.10 and 508 and BAAQMD Condition # 17309, Parts 27 and 28	Gas Flow Meter and Recorder (every 15 minutes)	Continuous	BAAQMD 8-34-301 and 301.1 and BAAQMD Condition # 17309, Parts 19, 20, 21	Landfill gas collection system shall operate continuously, all collected gases shall be vented to a properly operating control system, and control system shall operate continuously	Intermittent	On July 7, 2023 gas collection system downtime occurred due to air compressor failure. For additional information, including corrective actions taken, please refer to the combined 10/30-Day Deviation Letter that was submitted to

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
							the BAAQMD.
Gas Flow	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records	Continuous, Periodic / Monthly	40 CFR 60.752 (b)(2)(iii) and 40 CFR 60.753(a) and (e)	Operate a collection system in each area or cell, vent all collected gases to a properly operating control system, and operate control system at all times when gas is vented to it	Intermittent	On July 7, 2023 gas collection system downtime occurred due to air compressor failure. For additional information, including corrective actions taken, please refer to the combined 10/30-Day Deviation Letter that was submitted to the BAAQMD.
Gas Flow	CARB LMR 95469(b)(1)(B)	Gas Flow Meter and Recorder (every 15 minutes)	Continuous	CARB LMR 95464(b)(1)	Route all collected gases to a properly operating control system, and operate control system at all times so that no gas leak exceed 500 ppmv as methane	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

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 and 501.2	Operating Records (all occurrences and duration of each)	Periodic / Daily	BAAQMD 8-34-113.2	For Collection and Control Systems: ≤ 240 hours per year and ≤ 5 consecutive days	Continuous	N/A
Collection and Control Systems Startup Shutdown or Malfunction	40 CFR 60.7(b), 60.757(f)(2-4)	Operating Records (all occurrences and duration of each)	Periodic / Daily	40 CFR 60.755(e)	For Collection System: < 5 days per event and For Control System: < 1 hour per event	Continuous	N/A
Collection and Control Systems Shutdown Time	CARB LMR 95470(a)(1)(A-B)	Operating Records (all occurrences and duration of each)	Periodic/ On event basis	CARB LMR 95464(a)(1)(D) and 95464(e)	For Collection System: < 5 days per event and For Control System: < 1 hour per event	Continuous	N/A
Startup Shutdown or Mal-function Procedures	40 CFR 63.1980(a-b)	Records (all occurrences, duration of each, corrective actions)	Periodic / Daily	40 CFR 63.6(e)	Minimize Emissions by Implementing SSM Plan	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Startup Shutdown or Mal-function Procedures	CARB LMR 95470(a)(1)(I)	Records of mitigation measures taken	Periodic / On event basis	CARB LMR 95464(e)(1-2)	Include any new components in Design Plan and minimize methane emissions	Continuous	N/A
Periods of Inoperation for Para-metric 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, calibrations, 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 that are connected to the vacuum system)	Continuous	N/A
Wellhead Pressure	40 CFR 60.755(a)(3), 60.756(a)(1), and 60.758(c) and (e)	Monthly Inspection and Records	Periodic / Monthly	40 CFR 60.753(b)	< 0 psig (Applies to all wells that are connected to the vacuum system)	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Wellhead Pressure	CARB LMR 95469(c)	Monthly Inspection and Records	Periodic / Monthly	CARB LMR 95464(c)	< 0 psig (Applies to all wells 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 ºC (Applies to all wells that are connected to the vacuum system)	Continuous	N/A
Temperature of Gas at Wellhead	40 CFR 60.755(a)(5), 60.756(a)(3), and 60.758(c) and (e)	Monthly Inspection and Records	Periodic / Monthly	40 CFR 60.753(c)	< 55 ºC (Applies to all wells that are connected to the vacuum system)	Continuous	N/A
Temperature of Gas at Wellhead	BAAQMD 8-34-414, 501.9, 505.2, and BAAQMD Condition #17309, Part 19	Monthly or more frequent Inspection and Records	Periodic / Monthly, bimonthly, or weekly	BAAQMD 8-34-505 and BAAQMD Condition 17309, Part 19	<150 degrees F (Alternative wellhead temperature limit that applies only to wells specified in BAAQMD Condition #17309, Part 19(b)(i)	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Gas Concentrations in LFG 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 that are connected to the vacuum system, except for wells identified in Condition # 17309, Part 19b(i))	Continuous	N/A
Gas Concentration at Wellhead	40 CFR 60.755(a)(5), 60.756(a)(2), and 60.758(c) and (e)	Monthly Inspection and Records	Periodic / Monthly	40 CFR 60.753(c)	N2 < 20% OR O2 < 5% (Applies to all wells that are connected to the vacuum system, except for wells identified in Condition # 17309, Part 19b(i))	Continuous	N/A
Gas Concentrations at Wellhead	BAAQMD Condition # 17309, Part 19b(ii and iii)	Monthly Inspection and Records	Periodic / Monthly	BAAQMD Condition # 17309, Part 19b(i)	O2 < 15% (Applies to wells identified in Condition # 17309, Part 19b(i) that are connected to the vacuum system)	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Well Shutdown Limits	BAAQMD 8-34-116.5 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-116.2	No more than 5 wells at a time or 10% of total collection system, whichever is less	Continuous	N/A
Well Shutdown Limits	BAAQMD 8-34-116.5 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-116.3	< 24 hours per well	Continuous	N/A
Well Shutdown Limits	BAAQMD 8-34-117.6 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-117.4	No more than 5 wells at a time or 10% of total collection system, whichever is less	Continuous	N/A
Well Shutdown Limits	BAAQMD 8-34-117.6 and 501.1	Records	Periodic / Daily	BAAQMD 8-34-117.5	< 24 hours per well or < 5 days per well for component replacements	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Well Shutdown Limits	BAAQMD Condition # 17309, Part 19c(v)	Records	Periodic / Daily	BAAQMD Condition # 17309, Parts 19c (i and ii)	For individual components that are temporarily disconnected from the vacuum system: < 5 components disconnected at any one time and < 120 days of vacuum disconnection time during any 12-month period for each individual component	Continuous	N/A
TOC (Total Organic Com-pounds Plus Methane)	BAAQMD 8-34-501.6 and 503 and BAAQMD Condition # 17309, Part 19c(iv and v)	Quarterly Inspection of collection and control system components with OVA, Additional Inspection of Temporarily Disconnected	Periodic / Quarterly	BAAQMD 8-34-301.2 and BAAQMD Condition # 17309, Part 19c(iv)	Component Leak Limit: < 1000 ppmv as methane	Intermittent	During first and second quarter 2023 surface and component leak monitoring, a leak greater than 1,000 ppmv was detected at the flame arrestor. For more information on this component leak including when it was

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-1 KELLER CANYON LANDFILL, A-1 AND A-2 LANDFILL GAS FLARE; S-4 WASTE AND COVER MATERIAL DUMPING; S-5 EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
		Components and Records					remediated please refer to the first and second quarter Surface Emissions Monitoring (SEM) reports. On September 11, 2023, Site received a notice of violation (NOV) for an alleged violation of BAAQMD 8-34-301.2 during an United States EPA and BAAQMD inspection that occurred on August 21, 2023. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letter that was submitted to the BAAQMD on September 21, 2023.

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
TOC	BAAQMD 8-34-415, 416, 501.6, 506 and 510	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, 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	On August 9, and September 11, 2023, Site received NOVs A62205 and A62509, respectively, for an alleged violation of BAAQMD 8-34-303 during site inspections that occurred on May 16, and August 21, 2023, respectively. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letters that were submitted to the BAAQMD on August 18, and September 21, 2023.

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
TOC	Condition # 17309, Part 19b(iv-vi)	Monthly Inspection with OVA of Surface (3 points within 15 m of well), Various Reinspection Times for Leaking Areas, and Records	Periodic / Monthly	BAAQMD 8-34-303 and BAAQMD Condition # 17309, Part 19b(iv)	Surface Leak Limit: < 500 ppmv as methane at 2 inches above surface (Applies to surface vicinity near wells identified in Condition # 17309, Part 19b(i) that are complying with an alternative wellhead oxygen standard instead of the 8-34-305.4 limit)	Intermittent	On August 9, and September 11, 2023, Site received NOVs, A62205 and A62509, respectively for an alleged violation of BAAQMD 8-34-303 during site inspections that occurred on May 16, and August 21, 2023, respectively. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letters that were submitted to the BAAQMD on August 18, and September 21, 2023.

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
TOC	40 CFR 60.755(c)(1), (4) and (5), 60.756(f), and 60.758(c) and (e)	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records	Periodic / Monthly, Quarterly, and on an Event Basis	40 CFR 60.753(d)	Surface Leak Limit: < 500 ppmv as methane at 5-10 cm from surface	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Methane	CARB LMR 95469(a-b)	Quarterly Monitoring, Various Reinspection Times for Leaking Areas, and Records	Periodic / Quarterly / On event basis	CARB LMR 95465(a)	Surface Leak Limit: < 500 ppmv as methane at 5-10 cm from surface	Intermittent	On August 9, 2023 Site received NOV A62508 for an alleged violation of California Code of Regulations Title 17 Rule 95465 during site inspections that occurred on June 21, 2023. For additional information, including corrective actions taken, please refer to the combined 10/30-Day NOV response Letter that was submitted to the BAAQMD on August 18, 2023.

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
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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 # 17309, Parts 30 and 31	Initial and Annual Source Tests	Periodic / Annual	BAAQMD 8-34-301.3	For Flares: > 98% removal by weight OR < 30 ppmvd @ 3% O2, expressed as methane	Continuous	N/A
NMOC	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758 (b)(2)(ii)	Initial and Annual Source Tests	Periodic / On event basis	40 CFR 60.752(b)(2)(iii)(B)	For Flares: > 98% removal by weight OR < 20 ppmvd @ 3% O2, expressed as hexane	Continuous	N/A
Methane	CARB LMR 95469(b)(1)	Temperature Sensor and Recorder (continuous) and gas flow rate measuring device	Continuous	CARB LMR 95464(b)(2)(A)	For Flares: > 99% Methane removal by weight	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Temperature of Combustion Zone (CT)	BAAQMD 8-34-501.3 and 507, and BAAQMD Condition # 17309, Part 22	Temperature Sensor and Recorder (continuous)	Continuous	BAAQMD Condition # 17309, Part 23	For A-1 Flare: CT > 1504 °F (3-hour average) For A-2 Flare: CT > 1400 °F (3-hour average)	Continuous	N/A
Temperature of Combustion Zone (CT)	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	Temperature Sensor and Recorder (measured every 15 minutes and averaged over performance test time period and 3-hours)	Continuous	40 CFR 60.758 (c)(1)(i)	For A-1 Flare: CT > 1504 °F (3-hour average) from (CT > CTPF – 28 □C), where CTPF is the average combustion temperature during the most recent complying performance test, CTPF was 1554 °F during 10/13/04 test For A-2 Flare: CT will be determined during initial performance test	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
POC (Precursor Organic Compounds)	BAAQMD Condition # 17309, Part 33	Calculation Procedure (once every 5 years)	Periodic / On event basis	BAAQMD Condition # 17309, Part 33	< 112.828 tons per year (fugitive POC from all landfill operations)	Continuous	N/A
Total Carbon	BAAQMD Condition # 17309, Part 36a-c	Records	Periodic / On event basis	BAAQMD 8-2-301	< 15 pounds/day or < 300 ppm, dry basis only for aeration of or use as cover soil of soil containing < 50 ppmw of volatile organic compounds	Continuous	N/A
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD Condition # 17309, Parts 36a-c and 37m	Records	Periodic / On event basis	BAAQMD 8-40-116.1	< 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 # 17309, Parts 36a-c and 37m	Records	Periodic / On event basis	BAAQMD 8-40-116.2	< 8 cubic yards per project, provided organic content < 500 ppmw and limited to 1 exempt project per 3 month period	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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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	Soil Contaminated by Accidental Spillage of < 5 gallons of Liquid Organic Compounds	Continuous	N/A
Total Aeration Project Emissions	BAAQMD Condition # 17309, Part 37m	Records	Periodic / On event basis	BAAQMD 8-40-118	< 150 pounds per project and toxic air contaminant emissions per year < BAAQMD Table 2-5-1 limits	Continuous	N/A
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD Condition # 17309, Parts 36a-c and 37m	Calculations and Records	Periodic / On event basis	BAAQMD 8-40-301 and BAAQMD Condition # 17309, Part 37k	Prohibited for Soil with Organic Content > 50 ppmw unless exempt per BAAQMD 8-40-116, 117, or 118	Continuous	N/A
Contaminated Soil Handling	BAAQMD Condition # 17309, Part 37m	Records	Periodic / On event basis	BAAQMD Condition # 17309, Part 37e	Limited to 2 on-site transfers per lot of contaminated soil	Continuous	N/A
Contaminated Soil On-Site Storage Time	BAAQMD Condition # 17309, Part 37m	Records	Periodic / On event basis	BAAQMD Condition # 17309, Part 37f-g	If organic content is: < 500 ppmw, storage time < 90 days; If organic content is: > 500 ppmw, storage time < 45 days	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
SO_2	None	N/A	None	BAAQMD 9-1-301	Property Line Ground Level Limits: < 0.5 ppm for 3 minutes, < 0.25 ppm for 60 minutes, and <0.05 ppm for 24 hours	Continuous	N/A
SO_2	BAAQMD Condition # 17309, Parts 31 and 34	Sulfur Analysis of Landfill Gas	Periodic / Quarterly	BAAQMD 9-1-302	In Exhaust Gases From Flares: < 300 ppm (dry)	Continuous	N/A
H_2S	None	N/A	None	BAAQMD 9-2-301	Property Line Ground Level Limits: < 0.06 ppm, averaged over 3 minutes and < 0.03 ppm, averaged over 60 minutes	Continuous	N/A
Total Reduced Sulfur (TRS) Com-pounds	BAAQMD Condition # 17309, Parts 31 and 34	Sulfur Analysis of Landfill Gas	Periodic / Quarterly	BAAQMD Condition # 17309, Part 34	In Collected Landfill Gas: < 300 ppmv (dry)	Continuous	N/A
Opacity	BAAQMD Condition # 17309, Part 16j-l	Records of Water and Dust Suppressant Application	Periodic / Quarterly	BAAQMD 6-1-301 and SIP 6-301	For Landfill Operations: < Ringelmann No. 1 for 3 minutes in any hour	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	BAAQMD 8-34-501.3 and 507, and BAAQMD Condition # 17309, Part 22	Temperature Sensor and Recorder (continuous)	Continuous	BAAQMD 6-1-301 and SIP 6-301	For Flares: < Ringelmann No. 1 for 3 minutes in any hour	Continuous	N/A
FP	None	N/A	None	BAAQMD 6-1-310 and SIP 6-310	For Flares: < 0.15 grains/dscf	Continuous	N/A
Operating Time	BAAQMD Condition # 17309, Parts 16a and 16i	Records of Waste Received and Truck Traffic	Periodic / Daily	BAAQMD Condition # 17309, Part 1	Monday through Friday	Continuous	N/A
Waste Received	BAAQMD Condition # 17309, Part 16a	Records of Waste Received	Periodic / Daily	BAAQMD Condition # 17309, Part 2a	< 3500 tons per day	Continuous	N/A
Cumulative Waste In-Place	BAAQMD Condition # 17309, Part 16a	Records of Waste Placed in Landfills	Periodic / Daily	BAAQMD Condition # 17309, Part 2b	< 38.4 million tons (<34.8 million Mg)	Continuous	N/A
Design Capacity	BAAQMD Condition # 17309, Parts 16a, 36a, and 37m	Records of Material Placed in Landfill	Periodic / Daily	BAAQMD Condition # 17309, Part 2c	< 75 million yd3 (< 57.3 million m3) of all wastes and cover materials (excluding final cover)	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Unpaved Road Length	BAAQMD Condition # 17309, Part 12	Site Maps	Periodic / On event basis	BAAQMD Condition # 17309, Part 5a	< 3000 feet from cover stockpile to working face midpoint	Continuous	N/A
Unpaved Road Length	BAAQMD Condition # 17309, Part 12	Site Maps	Periodic / On event basis	BAAQMD Condition # 17309, Part 5b	< 400 feet from end of main access road to working face midpoint	Continuous	N/A
Unpaved Road Length	BAAQMD Condition # 17309, Part 12	Site Maps	Periodic / On event basis	BAAQMD Condition # 17309, Part 5c	< 750 feet from end of paved road to end of main access road (this section must have 12 inches of gravel or crushed asphalt)	Continuous	N/A
Unpaved Road Length	BAAQMD Condition # 17309, Part 12	Site Maps	Periodic / On event basis	BAAQMD Condition # 17309, Part 5d	< 1400 feet of fire access roads	Continuous	N/A
Vehicle Speed	BAAQMD Condition # 17309, Part 6	Posted Signs and Enforcement if Necessary	Periodic / On event basis	BAAQMD Condition # 17309, Part 6	< 10 mph on unpaved roads and < 25 mph on fire access roads	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Dust Suppress-ant Application Rate for Unpaved Roads	BAAQMD Condition # 17309, Part 16k	Records	Periodic / Daily	BAAQMD Condition # 17309, Part 8a-c	> 0.5 gallons per square yard of 10% magnesium chloride applied once every 30 days between May 1 and November 1 and once every 30 consecutive dry days between November 1 and May 1	Continuous	N/A
Water Application Rate for Roads	BAAQMD Condition # 17309, Part 16i-j	Records	Periodic / Daily	BAAQMD Condition # 17309, Parts 8 and 10	Once every fifth heavy duty vehicle and more often as necessary	Continuous	N/A
Water Application Rate for Active face and Soil Areas	BAAQMD Condition # 17309, Part 16 l	Records	Periodic / Daily	BAAQMD Condition # 17309, Part 13	> 0.5 gallons per square yard twice per day on all dry days	Continuous	N/A
Truck Traffic Volume	BAAQMD Condition # 17309, Part 16i	Records	Periodic / Daily	BAAQMD Condition # 17309, Part 11a	< 175 transfer truck trips per annual average day	Continuous	N/A
Truck Traffic Volume	BAAQMD Condition # 17309, Part 16i	Records	Periodic / Daily	BAAQMD Condition # 17309, Part 11b	< 4 leachate truck trips per annual average day	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Truck Traffic Volume	BAAQMD Condition # 17309, Part 16i	Records	Periodic / Daily	BAAQMD Condition # 17309, Part 11c	< 45 scraper trips per annual average day	Continuous	N/A
Truck Traffic Trip Length	BAAQMD Condition # 17309, Part 12	Site Maps and Records	Periodic / On event basis	BAAQMD Condition # 17309, Part 12a	< 7800 feet for transfer trucks	Continuous	N/A
Truck Traffic Trip Length	BAAQMD Condition # 17309, Part 12	Site Maps and Records	Periodic / On event basis	BAAQMD Condition # 17309, Part 12b	< 3600 feet for leachate trucks	Continuous	N/A
Truck Traffic Trip Length	BAAQMD Condition # 17309, Part 12	Site Maps and Records	Periodic / On event basis	BAAQMD Condition # 17309, Part 12c	< 3000 feet for scrapers	Continuous	N/A
NOx	BAAQMD Condition # 17309, Part 30	Annual Source Test	Periodic / Annual	BAAQMD Condition # 17309, Part 24	For both A-1 Flare and A-2 Flare: < 15 ppmv of NOx, expressed as NO2 at 15% O2, dry	Continuous	N/A
CO	BAAQMD Condition # 17309, Part 30	Annual Source Test	Periodic / Annual	BAAQMD Condition # 17309, Part 25	For A-1 Flare: < 114 ppmv of CO at 15% O2, dry For A-2 Flare: < 81 ppmv of CO at 15% O2, dry	Continuous	N/A
Acrylonitrile	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 500 ppbv or Fugitive Emissions: < 60 pounds/year	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Benzene	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 20,000 ppbv or Fugitive Emissions: < 3557 pounds/year	Continuous	N/A
Carbon Tetrachloride	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 100 ppbv or Fugitive Emissions: < 35 pounds/year	Continuous	N/A
Chloroform	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 100 ppbv or Fugitive Emissions: < 27 pounds/year	Continuous	N/A
Ethylene Dibromide	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 100 ppbv or Fugitive Emissions: < 40 pounds/year	Continuous	N/A
Ethylene Dichloride	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 750 ppbv or Fugitive Emissions: < 169 pounds/year	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Methylene Chloride	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 7,600 ppbv or Fugitive Emissions: < 1470 pounds/year	Continuous	N/A
Perchloroethylene	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 3,300 ppbv or Fugitive Emissions: < 1246 pounds/year	Continuous	N/A
Trichloroethylene	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 1,500 ppbv or Fugitive Emissions: < 449 pounds/year	Continuous	N/A
Vinyl Chloride	BAAQMD Condition # 17309, Part 31	Annual Laboratory Analysis	Periodic / Annual	BAAQMD Condition # 17309, Part 32	Concentration in Landfill Gas: < 1,700 ppbv or Fugitive Emissions: < 242 pounds/year	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
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Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Heat Input	BAAQMD Condition # 17309, Part 35	Records	Periodic / Monthly	BAAQMD Condition # 17309, Part 35	For A-1 Flare: < 1744.8 MM BTU per day and < 636,852 MM BTU per year For A-2 Flare: < 1824 MM BTU per day and < 665,760 MM BTU per year	Continuous	N/A
Trackout onto Paved Roadways	BAAQMD 6-6-501, BAAQMD Permit Condition #17309, Part 38	Records	Periodic / Daily	BAAQMD 6-6-301	Trackout causing visible emissions: < 25 linear feet for no more than 4 hours; and Trackout remaining on adjacent paved public roadway or paved shoulder: < 1 quart at end of each workday	Continuous	N/A
Visible Emissions from Cleaning Trackout	BAAQMD 6-6-501, BAAQMD Permit Condition #17309, Part 38	Records	Periodic / Daily	BAAQMD 6-6-302	< Ringelmann No. 1 Limitation for no more than 3 minutes in any 60-minuite period	Continuous	N/A

KELLER CANYON LANDFILL

TITLE V SEMI-ANNUAL MONITORING REPORT

Site: Keller Canyon Landfill	**Facility ID#:** A4618
Permitted Unit: S-3 YARD AND GREEN WASTE STOCKPILES	**Reporting Period:** *from* 03/01/2023 *through* 08/31/2023

Type of Limit or Criteria	Monitoring Requirement Citation	Monitoring Type	Monitoring Frequency	Citation of Limit	Limit	Compliance	Corrective Actions Taken
Opacity	BAAQMD Condition # 16462, Part 2	Visual Observation of Source in Operation	Continuous	BAAQMD 6-1-301 and SIP 6-301	< Ringelmann No. 1 for 3 minutes in any hour	Continuous	N/A
Waste Received	BAAQMD Condition # 16462, Part 6a and b	Records of Amount of Waste Received	Periodic / On event basis	BAAQMD Condition # 16462, Part 1	< 225 tons per day and < 70,200 tons per 12-month period	Continuous	N/A
Waste Storage Time	BAAQMD Condition # 16462, Part 6a and c	Records of Date and Time for Waste Receipt and Processing	Periodic / On event basis	BAAQMD Condition # 16462, Part 3	< 4 days from receipt of waste	Continuous	N/A
Odorous Stockpile Storage Time	BAAQMD Condition # 16462, Part 6a and c	Records of Date and Time for Waste Receipt and Processing	Periodic / On event basis	BAAQMD Condition # 16462, Part 4	< 24 hours from the time the stockpile is deemed “odorous”	Continuous	N/A