## PETITION FOR VARIANCE BEFORE THE HEARING BOARD OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

HEARING BOARD BAY AREA AIR QUALITY MANAGEMENT DISTRICT

FILED

NOV 2 6 2024

**DOCKET** NO. 3757

#### PETITIONER

Name:Ameresco Keller Canyon RNG LLC
Check One:Sole ProprietorPartnershipX_Corporation
GovernmentNon-Profit (specify)
Mailing Address:901 Bailey Road, Pittsburg, CA 94565
Phone number:(508) 661-2242
Email Address: _ <i>amcclelland@ameresco.com</i>
Name, title, and phone number of person(s) authorized to receive notices (no more than two):
Andrew McClelland, Environmental Compliance Manager, (508) 661- 2242
Richard Peary, Director – Compliance, (508) 598-

3076\_\_\_\_\_

Briefly describe the type of business or organization/agency activity:

#### Facility Background

In April 2024, Ameresco Keller Canyon RNG LLC (Ameresco) completed construction of a renewable natural gas (RNG) facility (Facility) that was built to receive landfill gas (LFG) from the Keller Canyon Landfill (Facility #A4618) (Landfill) and process the LFG into RNG for injection into a nearby PG&E pipeline (process S-1). Ameresco began pipeline injections in September 2024.

By operating the Facility, Ameresco takes a waste that would otherwise be unused (that is, LFG) and processes it into a valuable commodity (RNG). The Facility reduces the need for the production and use of conventional natural gas, thereby eliminating criteria pollutant and greenhouse gas emissions that would otherwise result from conventional natural gas exploration and production. The Facility is located at 901 Bailey Road, Pittsburg, California 94565 (Contra Costa County) and holds an Authority to Construct (ATC) initially dated June 29, 2022 and renewed on August 19, 2024 (Application No. 30557, Plant No. 24772). The Facility is permitted, owned, and operated separately from the Landfill. The Facility utilizes one Thermal Oxidizer (A-1) and one Enclosed Flare (A-2) to control waste gas emissions from the RNG processing operations.

#### Purpose of Variance Petition

Ameresco respectfully requests this variance due to erroneous partially processed RNG (PPRNG) total reduced sulfur (TRS) concentration and Thermal Oxidizer and Enclosed Flare post-combustion SO2 mass emissions limits in its ATC. Ameresco seeks a variance for increased limits while the District processes Ameresco's pending permit application seeking the same.

Ameresco treats all LFG received from the Landfill in the Facility's H2S treatment system, which removes nearly all hydrogen sulfide (H2S) from the LFG. However, non-H2S species of sulfur cannot reasonably be removed from the LFG.

During initial permitting, Ameresco and District engineering staff correctly identified low levels of H2S in gas that is treated by the H2S scrubber. However, it was not recognized at the time that non-H2S sulfur species would be present in the gas treated by the H2S treatment system (known as PPRNG following treatment). As a result, Ameresco's ATC includes PPRNG TRS and SO2 emissions limits that are too low—and unintentionally fail to allow Ameresco to fully utilize Facility capacity to process LFG (that would otherwise be flared directly to the atmosphere) into RNG.

Upon realizing that the permit's TRS and SO2 limits were too low, Ameresco notified District engineering staff, and Ameresco has been working with the District since November 2023 to modify the TRS concentration and SO2 emissions limits in its permit. (Please see Ameresco ATC Modification Application, dated November 16, 2023.)

As of the date of this variance petition, Ameresco is continuing to work with District staff to amend the permit to increase the fuel sulfur concentration and sulfur mass emissions limits. However, an updated permit has not yet been issued, and Ameresco desires to process increased quantities of LFG now that commissioning is complete and injection to the PG&E pipeline has commenced. Absent variance coverage, the Facility is expected to exceed the fuel sulfur concentration and SO2 mass emissions limits in its permit applicable to the Thermal Oxidizer and Enclosed Flare controlling waste gas from RNG processing operations. The Facility's ATC includes Thermal Oxidizer and Enclosed Flare mass emissions limits that do not account for the levels of non-H2S sulfur that cannot be removed and may pass through the H2S treatment system. As such, when the Facility operates at its full permitted capacity, the non-H2S in the treated LFG stream is expected to cause the SO2 emissions from the Thermal Oxidizer to exceed the 7.23 pounds per day emissions limit and could cause the SO2 emissions from the Enclosed Flare to exceed the 6.40 pounds per day emissions limit. However, because the Facility has not yet operated at full capacity (and because the Facility does not yet have source testing results to verify compliance with the Thermal Oxidizer and Enclosed Flare SO2 emissions limits),<sup>1</sup> the Facility has not confirmed any exceedances of the Thermal Oxidizer or Enclosed Flare SO2 emissions limit. That said, now that the Facility is moving beyond its initial start-up and troubleshooting phase of operations, the Facility will need to increase production and operate at higher capacity. When Ameresco operates the Facility at its full permitted capacity, it anticipates that it will not be able to operate in compliance with the Thermal Oxidizer and Enclosed Flare mass SO2 emissions limits.

Further, the Facility's ATC permit provides for Ameresco to conduct monthly portable analyzer measurements of the PPRNG H2S concentration and use a multiplier of 1.2 to estimate the PPRNG TRS concentration. Although Facility analyzer testing to date yields results that, when multiplied by 1.2, are less than 10 ppmv, Ameresco believes that the 1.2 multiplier may be underestimating the actual TRS concentration, and laboratory testing conducted in November 2024 may show noncompliance with the PPRNG TRS limit. As a result, Ameresco proactively requests variance coverage for this PPRNG TRS concentration limit as well.

#### **Conclusion**

Ameresco respectfully requests this variance to allow it to operate the Facility notwithstanding the mistakes in the permitting process, which are likely to result in exceedances of the permit's PPRNG TRS concentration and SO2 emissions limits. While Ameresco is actively working with District staff to revise its ATC to accurately reflect the TRS concentration of PPRNG entering the Thermal Oxidizer and Enclosed Flare, and the potential SO2 emissions from those devices, such revisions have not been finalized and, as a result, Ameresco requires this variance to continue to operate the Facility.

Are you a Small Business as defined in Health and Safety Code Section 42352.5(b)?

\_Yes \_X\_No

<sup>&</sup>lt;sup>1</sup> The Facility is required to verify compliance with the Thermal Oxidizer and Enclosed Flare SO2 emissions limits only when there is a PPRNG TRS concentration measurement above 10 ppmv, which is yet to occur.

Are you a public agency providing an "essential public service" as defined in Health and Safety Code Section 42352?

\_\_\_Yes \_X\_No

#### VARIANCE REQUEST

Type of Variance Requested:

If you are selecting Interim Variance, you must also select a Short or Regular Variance to follow.

\_\_\_Interim \_\_Short \_\_X\_Regular \_\_Emergency \_\_Product \_\_Group

Good Cause: (Required only for Emergency and Interim Variances Explain why this Petition was not filed in sufficient time to issue the required public notice.)

N/A

#### **OPERATION**

Briefly describe the type of equipment or process that is the subject of this variance petition, and why it is necessary to your operation. Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For Title V facilities, attach only the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this Petition. You must bring the entire Facility Permit to the hearing:

The pieces of equipment that are the subject of this variance petition are the Facility's Hydrogen Sulfide Scrubber (A-3), Thermal Oxidizer (A-1) and Process Enclosed Flare (A-2). LFG going to the Facility is first processed in the Hydrogen Sulfide Scrubber, which employs a non-regenerative carbon-based media to entrain H2S. The H2S scrubber is a pass-through, closed system with no emissions to the atmosphere. Gas exiting the H2S scrubber, referred to as preprocessed RNG (PPRNG) is then routed to dehydration systems as well as systems for the removal of VOCs, carbon dioxide, and nitrogen.

There are no emissions to the atmosphere prior to the Thermal Oxidizer or Flare outlets. The Thermal Oxidizer is the Facility's primary emissions control device for waste gases from PPRNG processing operations, and the Enclosed Flare is used to control waste gases during startup, shutdown, and process upsets. Both emissions control devices use PPRNG and natural gas to start up and/or maintain combustion temperature. The Thermal Oxidizer and Enclosed Flare are necessary for the Facility's operation because, absent their operation, the waste gases from PPRNG processing operations would be emitted directly to the atmosphere without being controlled.

#### REGULATORY REQUIREMENTS

List all District Regulations, rules, and permit conditions that are the subject of this variance request. Identify all applicable subsections:

Permit Condition 27705.3 – S-1 Processing LFG into RNG – PPRNG shall not exceed a concentration limit of 10 ppmv of total reduced sulfur compounds, expressed as H2S

Permit Condition 27707.9.c – A-1 Thermal Oxidizer – PPRNG shall not exceed more than 10 ppmv of total reduced sulfur compounds (dry basis), expressed as H2S

Permit Condition 27708.9.c – A-2 Process Enclosed Flare – PPRNG shall not exceed more than 10 ppmv of total reduced sulfur compounds (dry basis), expressed as H2S

Permit Condition 27707(9)(a) – A-1 Thermal Oxidizer – The total SO2 emissions from A-1 shall not exceed 7.23 pounds per day of SO2 during any 24-hour period.

Permit Condition 27708(9)(a) – A-2 Process Enclosed Flare – The total SO2 emissions from A-1 shall not exceed 6.40 pounds per day of SO2 during any 24-hour period.

Permit Condition 27707(9)(d)(iii) – A-1 Thermal Oxidizer – If the corrected TRS concentration determined pursuant to Part 9(d) is 10 ppmv of TRS or less for each monthly measurement during a rolling 12-month period, no additional calculations are required to verify compliance with the SO2 emission limits identified in Part 9(a). If any corrected TRS concentration measurement is greater than 10 ppmv of TRS during a rolling 12-month period, the Permit Holder shall use the calculation procedures in Part 9(d) to demonstrate compliance with the daily and annual SO2 emission limits.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Please note that in Ameresco's ATC Modification Application, dated November 16, 2023, Ameresco has also requested revisions to Permit Conditions 27707(9)(d)(iii) and 27708(9)(d)(iii) to further clarify this condition, including the calculation procedure to be used in connection with demonstrating compliance with the SO2 emissions limits when there is a measurement that shows TRS concentrations above 10 ppmv.

Permit Condition 27708(9)(d)(iii) – A-2 Process Enclosed Flare – If the corrected TRS concentration determined pursuant to Part 9(d) is 10 ppmv of TRS or less for each monthly measurement during a rolling 12-month period, no additional calculations are required to verify compliance with the SO2 emission limits identified in Part 9(a). If any corrected TRS concentration measurement is greater than 10 ppmv of TRS during a rolling 12-month period, the Permit Holder shall use the calculation procedures in Part 9(d) to demonstrate compliance with the daily and annual SO2 emission limits.

Regulation 2-1-307 – Failure to Meet Permit Conditions

#### **INFORMATION FOR VARIANCE FINDINGS**

Is there a regular maintenance and/or inspection schedule for this equipment?

\_X\_Yes \_\_\_No

If yes, how often: For the H2S treatment system, the H2S scrubber is monitored for breakthrough on a monthly basis and the carbon media is changed out with fresh carbon media once breakthrough is detected. For the Thermal Oxidizer and Enclosed Flare, maintenance is conducted as recommended by the manufacturer.

Date of last maintenance and/or inspection: Monitoring has occurred in the past month

Was there any indication of problems with the subject equipment?

\_\_\_Yes \_X\_No

Were you issued any Notice(s) of Violation or Notice(s) to Comply concerning the equipment or activity that are the subject of this variance request within the past year?

\_X\_Yes \_\_\_No

If yes, attach a copy of each notice.

Have you received any complaints from the public regarding the operation of the subject equipment or activity within the last six months?

\_X\_Yes \_\_No

If yes, be prepared to present detailed testimony about the nature of these complaints at the hearing.

We understand that there have been noise complaints related to the Facility. However, the noise complaints are not related to the equipment that is the subject of this petition—the H2S treatment system, Thermal Oxidizer, and Flare.

Has this matter been the subject of previous variance requests?

No. This matter has not been the subject of a previous variance request, but is the subject of a pending ATC modification application. Additionally,

Ameresco requested and received a short variance in September 2024 extending the time to conduct initial source testing.

If yes, provide date of hearing, type of variance, and Hearing Board decision:

Ameresco requested and received a short variance in September 2024 extending the time to conduct initial source testing.

Explain why it is beyond your reasonable control to comply with the regulations and permit conditions that will be the subject of this variance:

It is beyond Ameresco's reasonable control to comply with the District's regulations and its permit conditions due to erroneous PPRNG TRS concentration and SO2 emissions limits in the Facility's ATC. During initial permitting, Ameresco and District engineering staff did not appreciate that significant concentrations of non-H2S species of sulfur would be present in the LFG that cannot be effectively removed by the H2S treatment system and would pass through to the Thermal Oxidizer and Enclosed Flare. Both Ameresco and District engineering staff assumed that the sulfur content in the LFG would consist mostly or exclusively of H2S. As a result, Ameresco's current ATC includes PPRNG TRS and post-combustion SO2 mass emissions limits that are too low.

The Facility's ATC permit assumes a maximum PPRNG TRS concentration of 10 ppmv. However, this assumption does not account for the levels of non-H2S sulfur that cannot be effectively removed by the H2S treatment system and may be present in the PPRNG. As such, when the Facility operates at full capacity, the non-H2S in the treated LFG stream is expected to cause the SO2 emissions from the Thermal Oxidizer to exceed the 7.23 pounds per day and the Enclosed Flare to exceed the 6.40 pounds per day emissions limits.

Because the Facility has not yet operated at full capacity (and due to the TRS calculation methodology in the ATC permit, which likely underestimates the TRS concentration in the PPRNG), the Facility has not yet confirmed exceedances of the Thermal Oxidizer or Enclosed Flare SO2 emissions limits. Further, although portable analyzer testing yields results that, when multiplied by 1.2, are less than 10 ppmv, Ameresco believes that source testing conducted in November 2024 may show noncompliance with the PPRNG TRS limit, and Ameresco proactively requests variance coverage for this limit as well.

As a result of this oversight during the Facility's permitting, Ameresco has been working diligently with District staff since November 2023 to modify these limits in its permit. Ameresco reasonably anticipated that the permit modification would have been completed by now, but the process is ongoing. Thus, Ameresco requires this variance to be able to operate its Facility at full capacity in exceedance of the TRS and SO2 limits. **If you are seeking a product variance**, briefly describe how you attempted to locate, research, or develop a product that is in compliance with District rules and regulations:

N/A

When and how did you first become aware that you are not (or will not be) in compliance with the regulations, rules and/or permit conditions?

Ameresco became aware that it will likely not be in compliance with the regulations and the Facility's permit conditions when it realized that the LFG entering the H2S treatment system had higher non-H2S sulfur species than it and the District previously expected. Ameresco promptly filed an application to modify its ATC in November 2023.

List the date(s) and action(s) you have taken since that time to achieve compliance:

Since November 2023, Ameresco has worked diligently with the District to obtain a permit modification to increase the PPRNG TRS concentration limit and the limits for SO2 emitted from the Thermal Oxidizer and Enclosed Flare to accurately reflect the actual concentrations of TRS in the PPRNG entering the Thermal Oxidizer and Enclosed Flare, and the actual SO2 emitted from those devices.

What would be the harm to your business, agency or organization if the variance is not granted?

Economic losses: *\$1,100,000 per month or greater in revenue* 

Number of employees laid off, if any: All facility employees except for one

Provide detailed information regarding economic losses, if any (anticipated business closure, breach of contracts, hardship on customers, employees or the public, and/or similar impacts):

The Facility would be forced to shut down and lay off all employees except for one if it is unable to operate in compliance with its permitted PPRNG TRS limit. Such a shutdown would mean that the Facility would forgo \$1,100,000 per month or greater of revenue.

Can you curtail or terminate any operations in lieu of seeking a variance?

\_\_\_\_Yes (provide brief explanation)

\_*X*\_ No

Will any emissions occurring during the variance period result in odor, dust or smoke?

No.

If yes, identify the type and amount of these emissions; what you can do to monitor and mitigate those emissions; and, the likely impact on the surrounding community.

N/A

Will any emissions occurring during the variance period result in excess opacity (total opacity above \_\_%)?

No.

If yes, identify the type and amount of these emissions; the likely duration of the excess opacity during the variance period; and, what you can do to monitor and mitigate those emissions.

N/A

Estimate all other excess emissions that will occur on a daily basis during the variance period. Excess emissions are those that exceed rule and permit condition limits.

Pollutant	Excess Emissions	Mitigation	Net Emissions after Mitigation
	(lbs/day)	(lbs/day)	(lbs/day)
SO2	50.80	U	0

Show calculations used to estimate quantities of excess emissions or explain why there will be no excess emissions:

Excess emissions are calculated based on a worst-case scenario of 50 ppm TRS in the PPRNG, which is the concentration Ameresco understands the District is currently considering with respect to Ameresco's pending permit application. Assuming all sulfur is sent to the Thermal Oxidizer via PPRNG and waste gas for worst-case emissions estimation purposes, the maximum daily SO2 exceedance for the Thermal Oxidizer is 49.97 lbs/day. Assuming all sulfur is sent to the Enclosed Flare via PPRNG and waste gas for worst-case emissions estimation purposes, the maximum daily SO2 exceedance for the Enclosed Flare is 50.80 lbs/day.

Here are the calculations:

### TOU SO2 in excess of ATC limit of 7.23 lbs/day

{(PPRNG flow to TOU \* PPRNG TRS / 10<sup>6</sup> \* 64.06 / 379)<sup>3</sup> + {{[PPRNG flow - (PPRNG flow to TOU + PPRNG flow to flare)] \* PPRNG TRS / 10<sup>6</sup> \* 64.06 /

<sup>&</sup>lt;sup>3</sup> SO2 from PPRNG combustion in TOU.

379}<sup>4</sup> \* [Waste gas flow to TOU / (Waste gas flow to TOU + Waste gas flow to flare)]<sup>5</sup>}} - 7.23

#### Flare SO2 in excess of ATC limit of 6.40 lbs/day

{(PPRNG flow to flare \* PPRNG TRS /  $10^6$  \* 64.06 / 379)<sup>6</sup> + {{[PPRNG flow - (PPRNG flow to TOU + PPRNG flow to flare)] \* PPRNG TRS /  $10^6$  \* 64.06 / 379}<sup>7</sup> \* [Waste gas flow to flare / (Waste gas flow to TOU + Waste gas flow to flare)]<sup>8</sup>} - 6.40

Briefly describe the measures that will be taken to mitigate excess emissions to the maximum extent feasible during the variance period, or explain why mitigation measures are not feasible:

Effective emissions controls are already in place at the Facility, and further mitigation measures are not feasible. Because Ameresco cannot control the sulfur content of the LFG, it cannot mitigate the types of sulfur species passing through the Facility. As such, a permit modification is needed to account for the sulfur content that Ameresco now realizes is present in the LFG it receives from the Landfill.

How do you plan to monitor or quantify emissions levels from the equipment or operations during the variance period?

Ameresco will continue to monitor and quantify emissions levels from the equipment in accordance with proposed operating conditions 5(a) - 5(d), which are listed below.

Will you provide information regarding emissions during the variance period in a manner and frequency as requested by the District?

\_X\_Yes \_\_\_No

#### COMPLIANCE

How do you intend to achieve compliance with the regulations and permit conditions that are the subject of the variance? Briefly describe any necessary process changes; equipment to be installed; or modifications to equipment or your facility. Identify whether

<sup>&</sup>lt;sup>4</sup> SO2 resulting from waste gas combustion (PPRNG that is not sent to the TOU or flare as supplemental fuel flows through the RNG process where the rest of the sulfur is removed and sent to the control devices in waste gas).

<sup>&</sup>lt;sup>5</sup> Ratio of total waste gas flow sent to the TOU.

<sup>&</sup>lt;sup>6</sup> SO2 from PPRNG combustion in Flare.

<sup>&</sup>lt;sup>7</sup> SO2 resulting from waste gas combustion.

<sup>&</sup>lt;sup>8</sup> Ratio of total waste gas flow sent to the Flare.

authority to construct or a permit amendment will be necessary. Include dates by which you estimate actions will be completed and an estimate of total costs.

Since November 2023, Ameresco has been working with the District to modify the permit's TRS concentration and SO2 mass emissions limits. (Please see Ameresco's ATC Modification Application, dated November 16, 2023.) Ameresco intends to attain compliance through modification of the permit. Because the compliance issue that is the subject of this petition is caused by a permitting error, to Ameresco's knowledge, there are no feasible process changes or equipment that can be installed (or modifications to current equipment) that would enable Ameresco to operate in compliance with the TRS concentration and SO2 mass emissions limits.

List any operating conditions or increments of progress, if any, that you propose to include in the variance order. If the variance is to extend beyond one year, you must propose increments of progress:

#### Proposed Operating Conditions

The regular variance shall be subject to the following conditions:

1. The PPRNG passing through the A-3 Hydrogen Sulfide Scrubber shall not contain more than 50 ppmv of total reduced sulfur (TRS) compounds (dry basis), expressed as H2S.

2. The total SO2 emissions from the A-1 Thermal Oxidizer shall not exceed 57.20 pounds per day of SO2 during any 24-hour period.

3. The total SO2 emissions from the A-2 Process Enclosed Flare shall not exceed 57.20 pounds per day of SO2 during any 24-hour period.

4. Total SO2 emissions combined from the A-1 Thermal Oxidizer and A-2 Process Enclosed Flare shall not exceed 57.20 pounds per day of SO2 during any 24-hour period.

5. To demonstrate compliance with the above operating conditions, Ameresco shall comply with the following compliance monitoring and analysis requirements:

a. Ameresco shall collect portable analyzer H2S readings of the PPRNG at the outlet of the A-3 H2S scrubber each week that the Facility operates for more than 24 hours.

*b.* Following the date that the District Hearing Board approves the variance, Ameresco shall conduct a PPRNG TRS laboratory analysis at the outlet of the A-3 Hydrogen Sulfide Scrubber at least once every 6 months during the variance period. c. Ameresco shall use the data from the most recent laboratory analysis from the outlet of the A-3 Hydrogen Sulfide Scrubber to determine the PPRNG TRS concentration for emissions calculation purposes.

d. The calculated PPRNG TRS concentration, along with PPRNG and waste gas flow rates, shall be used to determine the total emissions from the A-1 Thermal Oxidizer and A-2 Process Enclosed Flare each day according to the calculation methodology below:

#### TOU SO2 in excess of ATC limit of 7.23 lbs/day

(PPRNG flow to TOU \* PPRNG TRS / 10<sup>6</sup> \* 64.06 / 379)<sup>9</sup> + {{[PPRNG flow - (PPRNG flow to TOU + PPRNG flow to flare)] \* PPRNG TRS / 10<sup>6</sup> \* 64.06 / 379}<sup>10</sup> \* [Waste gas flow to TOU / (Waste gas flow to TOU + Waste gas flow to flare)]<sup>11</sup>}

#### Flare SO2 in excess of ATC limit of 6.40 lbs/day

(PPRNG flow to flare \* PPRNG TRS / 10<sup>6</sup> \* 64.06 / 379)<sup>12</sup> + {{[PPRNG flow - (PPRNG flow to TOU + PPRNG flow to flare)] \* PPRNG TRS / 10<sup>6</sup> \* 64.06 / 379}<sup>13</sup> \* [Waste gas flow to flare / (Waste gas flow to TOU + Waste gas flow to flare)]<sup>14</sup>}

6. Prior to conducting any of the new laboratory analyses required under 5(b), Ameresco shall give the District at least seven (7) calendar days advance notice of the proposed sample collection date.

7. Ameresco shall submit the information required by 5.a. through 5.d. and 6 to the District via email to the following email addresses: [mkiffe@bqaamd.gov, <u>akobayashi@bqaamd.gov</u>, and mnishiki@bqaamd.gov.]

8. Ameresco shall pay excess emissions fees as required by District Hearing Board Rule 7.17.

State the date you are requesting the variance to begin: April 1, 2024

State the date on which you will achieve final compliance: *Expected by March 31, 2025* (or as soon as the District issues a revised permit)

<sup>&</sup>lt;sup>9</sup> SO2 from PPRNG combustion in TOU.

<sup>&</sup>lt;sup>10</sup> SO2 resulting from waste gas combustion (PPRNG that is not sent to the TOU or flare as supplemental fuel flows through the RNG process where the rest of the sulfur is removed and sent to the control devices in waste gas).

<sup>&</sup>lt;sup>11</sup> Ratio of total waste gas flow sent to the TOU.

<sup>&</sup>lt;sup>12</sup> SO2 from PPRNG combustion in Flare.

<sup>&</sup>lt;sup>13</sup> SO2 resulting from waste gas combustion.

<sup>&</sup>lt;sup>14</sup> Ratio of total waste gas flow sent to the Flare.

List the names of any District staff with whom you or any of your staff or representatives have had contact concerning this variance petition or any related Notice of Violation or Notice to Comply. Include name, title and phone number:

Mark Kiffe, Air Quality Engineer

Andrew Kobayashi, Air Quality Specialist

If this Petition was completed by someone other than the petitioner, provide their name and title:

The following verification must be signed by the owner, manager, director, or other responsible party of the plant, business, factory, agency or organization requesting the variance:

I, the undersigned, hereby declare under penalty of perjury, under the laws of the State of California, that I have read the foregoing Petition, including attachments, and that their contents are true and correct.

Dated: <u>Nov 26, 2024</u>, at (location)\_ *Portland, ME* \_\_\_\_\_.

Print name:	_Robert Meharg_	 
Signature:		_

Title: \_Authorized Representative\_\_\_\_\_

# Ameresco Keller - Petition for Variance (Emissions Limit Increases\_final

**Final Audit Report** 

2024-11-26

Created:	2024-11-26
Ву:	Richard Peary (rpeary@ameresco.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAnEZnZpwkJj2dlU1bX_s-b26xs1jJWJ89

# "Ameresco Keller - Petition for Variance (Emissions Limit Increa ses\_final" History

- Document created by Richard Peary (rpeary@ameresco.com) 2024-11-26 1:07:27 PM GMT- IP address: 173.48.215.16
- Document emailed to Robert Meharg (rmeharg@ameresco.com) for signature 2024-11-26 - 1:07:56 PM GMT
- Email viewed by Robert Meharg (rmeharg@ameresco.com) 2024-11-26 - 1:49:12 PM GMT- IP address: 104.47.73.126
- Document e-signed by Robert Meharg (rmeharg@ameresco.com) Signature Date: 2024-11-26 - 1:49:51 PM GMT - Time Source: server- IP address: 98.0.44.185
- Agreement completed. 2024-11-26 - 1:49:51 PM GMT



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

June 29, 2022

Ameresco Keller Canyon RNG LLC 901 Bailey Road Pittsburg, CA 94565

Attention: Alan Siegwarth

#### Authority to Construct for Permit Application No. 30557, Plant No. 24772

Required Action Your Authority to Construct is enclosed. This Authority to Construct is not a Permit to Operate. To receive your Permit to Operate you must:

- 1. Complete the Start-up Notification portion of the Authority to Construct.
- 2. Send the Start-up Notification to the assigned Permit Engineer via e-mail, fax or mail at least seven days prior to operating your equipment.
- *Note:* Operation of equipment without sending the Start-up Notification to the District may result in enforcement action.

Authorization of Limited Use

The Authority to Construct authorizes operation during the start-up period from the date of initial operation indicated in your Start-up Notification until the Permit to Operate is issued, up to a maximum of 90 days. All conditions (specific or implied) included in this Authority to Construct will be in effect during the start-up period.

Contact	If you have any question	ons, please contact your a	assigned Permit Engineer:
Information	Nimrat Sandhu, Senior	r Air Quality Engineer	
	Tel: (415) 749-8604	Fax: (415) 749-5030	Email: nsandhu@baagmd.gov

Authority to Construct (This is not a Permit to Operate) Plant No. 24772 Application No. 30557 Ameresco Keller Canyon RNG LLC 901 Bailey Road, Pittsburg, CA 94565	
Application No. 30557 Ameresco Keller Canyon RNG LLC 901 Bailey Road, Pittsburg, CA 94565	
901 Bailey Road, Pittsburg, CA 94565	
is hereby granted an Authority to Construct for the following equipment:	
rocessing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNG	
V	
crubber	
lydrogen Sulfide Scrubber, H2S Scrubber: 2-vessel fixed bed adsorbers in series; Max Cap 4.7 mcfm	
nt above is subject to attached condition no. 27705.	
Issue date: June 28, 2022 <i>iration date:</i> July 1, 2024 APPROVED BY GREG SOLOMON (SIGNED)	
for PAMELA J. LEONG DIRECTOR OF ENGINEERING	
y ci Iy Ca nt	rubber         rdrogen Sulfide Scrubber, H2S Scrubber: 2-vessel fixed bed adsorbers in series; Max         p 4.7 mcfm         above is subject to attached condition no. 27705.         Issue date:       June 28, 2022         ation date:       July 1, 2024         for       GREG SOLOMON (SIGNED)         PAMELA J. LEONG

Instructions: At least seven days before the scheduled initial operation contact your assigned Permit Engineer via e or complete and send this Start-up Notification to the District via fax or mail.

Engineer: Nimrat Sandhu, Senior Air Quality Engineer		enior Air Quality Engineer		Plant No.	24772
Tel:	(415) 749-8604	Fax: (415) 749-5030		Source No.	S-1
Email:	nsandhu@baaqmd	l.gov		Application No.	30557
	peration of this equest and last name	ipment is scheduled for		(mo	onth/day/year)
Telephone No	0		$x^{\mu}$		
Equipment Se	erial No				

BAY AREA AIR QU		AGEMENT DISTRIC	ст	
	rity to Co			
		Plant No. 2 Application No. 3		
Ameresco Keller Canyon RNG LLC 901 Bailey Road, Pittsburg, CA 94565 is hereby granted an <i>Authority to Construct</i> for the following equipment:				
A-1 Thermal Oxidizer, Air Clear, Capacity with process gas: 17		ty on pilot fuel: 8 MM BTU	/hr, Maximum	
		r E		
Equipment above is subject to attached con Issue date: June 28, 2022 Expiration date: July 1, 2024		Greg Solomon (signed)		
Expiration date. July 1, 2024	for	PAMELA J. LEONG DIRECTOR OF ENGINEERIN	G	
Star	t-up Noti	fication		
<i>Instructions</i> : At least seven days before the sche or Complete and send this Start-up Notification to			Engineer via email	
<ul> <li>Engineer: Nimrat Sandhu, Senior Air Quali</li> <li>Tel: (415) 749-8604 Fax: (415) 7</li> <li>Email: nsandhu@baaqmd.gov</li> </ul>		Plant No. Source No. Application No.	A-1	
The initial operation of this equipment is sch Print your first and last name	eduled for	(mc	onth/day/year)	

Telephone No.

Equipment Serial No.\_\_\_\_\_

		CEMENT DISTRICT
BAY AREA AIR QUA		
	not a Permit to	
		Plant No. 24772 Application No. 30557
901 Baile	y Road, Pittsburg	on RNG LLC , CA 94565 for the following equipment:
A-2 Process Enclosed Flare, John Z 35.8 MMBTU/hr	ink Zule Ultra L	ow Emissions Flare, Maximum Capacity:
Equipment above is subject to attached cond	lition no. 27708.	
Issue date: June 28, 2022 Expiration date: July 1, 2024	APPROVED BY for	GREG SOLOMON (SIGNED) PAMELA J. LEONG DIRECTOR OF ENGINEERING
	the District via fax y Engineer	on contact your assigned Permit Engineer via email
The initial operation of this equipment is sche	duled for	(month/day/year)
Print your first and last name		
Telephone No.		
Equipment Serial No		

-



S-1 Processing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNG

Condition No. 27705 Plant No. 24772

**Application No. 30557** 

The following permit conditions apply to the S-1 RNG Facility:

- 1. The owner/operator of S-1 shall not exceed the following landfill gas feed rates to S-1:
  - a. A heat input rate of 3,360 MM BTU (HHV) during any 24-hour period.
  - b. A heat input rate of 1,226,400 MM BTU (HHV) during any consecutive 12-month period.

The owner/operator of S-1 shall demonstrate compliance with this limit by maintaining records of the equivalent heat input to S-1 for each day, for each calendar month, and for each consecutive 12-month period. Heat input shall be calculated by multiplying the measured landfill gas flow rate (standard cubic feet per 24-hour period) by the high heating value of methane at 70 F and 1 atmosphere, 993.9 BTU/dscf, and multiplied by the percentage of methane as measured continuously. The calculated heat input rates shall be recorded in a data acquisition system or electronic spreadsheet. The landfill gas flow rate to S-1 shall be continuously monitored and recorded in accordance with Regulation 8-34-508. The landfill gas methane content supplied to S-1 shall be continuously monitored and recorded using a gas chromatograph or other District approved device. The flow meters and methane sensor shall be installed and properly calibrated prior to operation and shall be maintained in good working condition.

[Basis: Regulations 8-34-501.10 and 8-34-508, Cumulative Increase]

- 2. The owner/operator of S-1 shall ensure that all waste gas streams from S-1 which are generated during normal operations, during start-up/shut down procedures, during maintenance events, and other malfunctions shall either be vented to the properly maintained and properly operated per manufacturer's specifications, A-1 Thermal Oxidizer and/or to the A-2 Enclosed Flare for further control. Each waste gas stream to A-1 and A-2 shall be burned with a sufficient amount of partially processed renewable natural gas (PPRNG) to maintain compliance with all applicable requirements. [Basis: Cumulative Increase and Regulations 8-34-301.3, 8-34-301.4]
- 3. The owner/operator of S-1 shall ensure that no amount of landfill gas is sent to the A-1 Thermal Oxidizer and/or the A-2 Enclosed Flare without first being treated in the A-3 Hydrogen Sulfide (H2S) Scrubber. The landfill gas passing through this step, known as PPRNG, shall not



S-1 Processing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNG

Condition No. 27705 Plant No. 24772

Application No. 30557

exceed a concentration limit of 10 ppmv of total reduced sulfur compounds, expressed as H2S. [Basis: Cumulative Increase]

- 4. In order to demonstrate compliance with Part 3, the owner/operator of S-1 shall measure and record the sulfur content of the PPRNG on a monthly basis and during the annual performance test. This fuel sulfur data shall also be used as a surrogate for demonstrating compliance with the sulfur dioxide emission limits in Regulation 9-1-302. [Basis: BACT, Regulation 9-1-302]
- 5. The owner/operator of S-1 shall collect quarterly samples from the two condensate tanks for a period of at least one year from the startup of the facility and a sample at least once every 6 months thereafter. The samples shall be tested for volatile organic compounds (VOC) % by weight. Upon completion of a year, the test results shall be submitted to the Engineering Division to determine if the tanks will be exempt as per Regulation 2-1-123.2 or will be subject to permitting. If any of the test results are equal to or greater than 1% by weight organic compounds, the owner/operator shall submit an application to the Air District within 30 days of the test results. [Basis: Cumulative Increase, Regulation 2-1-123.2]
- 6. In order to demonstrate compliance with Parts 1 through 5, the owner or operator of the S-1 RNG Facility shall comply with all of the following monitoring and record keeping requirements. All records shall be kept on site or shall be made available to the District staff upon request. All records shall be retained for at least 5 years from the date of entry.
  - a. The S-1 RNG Facility shall be equipped with a continuous gas flow meter and recorder, which shall measure the inlet landfill gas flow rate to S-1 and shall meet the requirements of Regulation 8-34-508.
  - b. The owner or operator of S-1 shall measure and record the methane concentration in the landfill gas delivered to S-1 on a monthly basis.
  - c. On a monthly basis, the owner or operator of S-1 shall use the data collected pursuant to Parts 6(a) and 6(b) to calculate and record the maximum daily and total monthly heat input rate to the S-1 RNG Facility.
  - d. The owner or operator of S-1 shall summarize the Part 6(c) monthly heat input records for each



S-1 Processing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNG

Condition No. 27705 Plant No. 24772

Application No. 30557

consecutive rolling 12-month period.

- e. The owner/operator of S-1 shall measure and record the sulfur concentrations in the PPRNG after being processed through the A-3 H2S scrubber on a monthly basis.
- f. The owner/operator of S-1 shall measure and record the VOC sampling data from the two condensate tanks on a quarterly basis. [Basis: Recordkeeping]
- 7. The owner/operator of S-1 shall ensure that the emissions from all fugitive components combined shall not exceed 1.096 tons of precursor organic compounds (POC) in any consecutive 12-month period. For the purposes of these conditions, POC is assumed to be equivalent to non-methane organic compounds (NMOC). [Basis: Cumulative Increase]
- 8. The owner/operator of S-1 shall ensure that the emissions from all fugitive components combined shall not exceed 7.067 tons of non-precursor compounds (NPOC) (including methane) in any consecutive 12-month period. [Basis: Cumulative Increase]
- 9. The owner/operator of S-1 shall demonstrate compliance with the above emission rate limit in Part 7 and Part 8 by using the following procedures:
  - a. The owner/operator of S-1 shall not exceed the following fugitive component/equivalent counts and/or leak rates except as provided in Part 9(c) at the facility:

Component	Total Facility	Maximum Emission Limit (ppmv)
	Count	
Valves	1510	100
Pump Seals	2	100
Compressors	17	100
Other Openings	0	100
Connectors	595	100
Flanges	1720	100
Open-ended	0	100
lines		

b. The owner/operator of S-1 shall ensure that the concentration of organic compounds at every valve, connector, flange, other fitting, compressor, and/or pump shall be inspected every calendar quarter. The first inspection and every inspection thereafter shall be conducted as prescribed by EPA Reference



Plant Name: Ameresco Keller Canyon RNG LLC S-1 Processing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNG

Condition No. 27705 Plant No. 24772 Application No. 30557

Method 21 (40 CFR 60, Appendix A). Any instrument used for the measurement of organic compounds shall be a combustible gas detector or any other type of instrument approved by the Air Pollution Control Officer (APCO) that meets the specifications and performance criteria of, and is calibrated in accordance with, EPA Reference Method 21. [Basis: Cumulative Increase, 8-18-401.2, 8-18-501]

- c. The owner/operator of S-1 shall ensure that any valve, flange, connector, compressor, other fitting, and/or pump that leaks total organic compounds in excess of the concentration limits in Part 9(a) as C1 shall be minimized within 24 hours and repaired within 7 days. [Basis: Regulation 8-18-302.1, Cumulative Increase]
- d. The owner/operator of S-1 shall not exceed emission limits of Parts 7, 8 and/or Part 9(a). These emission limits include fugitive component emissions from default zero components, non-pegged components, and from pegged leaking components. Pegged leaking components (pegged leakers) are defined as components leaking at or greater than 10,000 ppmv measured as C1. The owner/operator shall calculate the POC and/or NPOC fugitive emissions combined on a quarterly basis using the California Air Pollution Control Officers Association (CAPCOA) Correlation Equations with the actual screening levels including default zeros and using the 10,000 ppmv pegged emissions factor or other District approved method. The midpoint method shall be used to determine the length of time that a component is assumed to be leaking for the purposes of compliance with these conditions.

[Basis: Regulation 8-18, Cumulative Increase]

- e. The owner/operator of S-1 shall repair all pegged leakers as soon as possible. Under no circumstances shall the owner/operator have any individual pegged leaking component leak for more than 90 days in any consecutive 12-month period. The period of 90 days shall be determined using the midpoint method as stated in Part 9(d) above. [Basis: Cumulative Increase]
- f. The owner/operator of S-1 shall assign a unique identification code to each valve, flange, connector, compressor, pump seal, and miscellaneous (other fitting) component. The facility shall keep the following records: The fitting identification code, the date of each inspection, and the



S-1 Processing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNG

Condition No. 27705 Plant No. 24772

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corresponding leak concentration measured. Records shall be maintained for at least 5 years from the date of entry and shall be made available for inspection by District staff upon request. [Basis: Regulations 8-18-402, 8-18-502, Cumulative Increase, Recordkeeping]

g. To determine compliance with the above parts, the owner/operator of S-1 shall maintain a monthly log of the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:

- i. Unique identification code of each component.
- ii. Date of each inspection, and the corresponding leak concentration measured.
- iii. Number of days that each individual component leaks at or greater than 10,000 ppmv (measured as C1), type of component, identification number of components.
- iv. The total number of days identified in Part 9(g)(iii).
- v. Quarterly emissions calculations required in Part 9(d).
- vi. Each monitor reading or analysis result for the day of operation that the monitoring reading or analysis result is taken.

All records shall be retained on-site for five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. [Basis: Recordkeeping]

- 10. The owner/operator of S-1 shall calculate the fugitive component POC and/or NPOC emissions from the facility using the following procedure:
  - a. The NMOC and total hydrocarbon (THC) mass fractions shall be tested during each annual source test required as per Part 13 below.
  - b. The NMOC/THC mass fraction ratio shall be calculated and shall not exceed 0.112.
  - c. If the test results indicate that the NMOC/THC ratio is above 0.112, the facility will be considered in compliance as long as the facility can demonstrate that both the fugitive POC and/or fugitive NPOC emissions do not exceed the limits in Parts 7 and/or 8 respectively, of this condition. [Basis: Cumulative Increase]



Plant Name: Ameresco Keller Canyon RNG LLCS-1Processing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNGCondition No. 27705Plant No. 24772Application No. 30557

- 11. The owner/operator of S-1 shall calculate the fugitive component emissions of toxic air contaminants (TACs) from the facility using an Air District approved method and ensure that these shall not exceed any acute and/or chronic trigger levels per Regulation 2-5. The concentration of each TAC shall be taken from the source test results described in Part 13 below and a ratio of each TAC to the NMOC in the PPRNG shall be determined. This ratio shall then be multiplied by the NMOC mass emissions determined in Part 9(d) in order to determine the individual TAC mass emissions. [Basis: Regulation 2-5 and Cumulative Increase]
- 12. Within 30 days of the completion of the installation of all fugitive components, the owner/operator of S-1 shall submit a final component count and POC emissions estimate to the District. If any of the fugitive component counts exceed a count stated in Part 9(a), the plant's cumulative increase emissions shall be adjusted as needed, subject to APCO approval, to reflect only the difference between emissions based on predicted component counts versus actual component counts. The owner/operator of S-1 shall provide to the District all additional required offsets at an offset ratio of 1.15:1 no later than 21 days after the submittal of the final POC fugitive equipment count and corresponding final fugitive component POC emissions estimate. If any of the fugitive component counts are less than a count stated in Part 9(a), the total cumulative increase emissions may be adjusted accordingly, and emission offsets applied by the owner/operator in excess of the permitted levels may be requested by the owner/operator through the submittal of a banking application. [Basis: Cumulative Increase, Offsets, Regulation 2-5]
- 13. The owner/operator of S-1 shall conduct an annual PPRNG characterization test. The PPRNG sample shall be drawn from the main landfill gas header after it has gone through the A-3 H2S scrubber. The PPRNG shall be analyzed for the organic compounds listed below. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division and the Source Fest Section within 60 days of the test date.

NMOC/THC ratio

1,1 Dichloroethane (Ethylidene dichloride)
1,1 Dichloroethene (Vinylidene chloride)
1,1,1-Trichloroethane (Methyl chloroform)
1,1,2-Trichloroethane (Vinyl trichloride)
1,1,2,2-Tetrachloroethane
1,3-Butadiene
1,4-Dichlorobenzene



Condition No. 27705

Plant Name: Ameresco Keller Canyon RNG LLC

S-1 Processing LFG into RNG, 4,700 cfm LFG into 2,041 cfm RNG **Plant No. 24772** 

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1,4-Dioxane (1,4-Diethylene dioxide) 2-Propanol (Isopropyl alcohol, IPA) Acetaldehyde Acrolein Acrylonitrile Allyl Chloride (3-Chloropropene) Benzene Benzyl Chloride Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane (Ethyl chloride) Chloroform Dioxins Ethylbenzene Ethylene Dibromide (1,2-dibromoethane) Ethylene Dichloride (1,2-dichloroethane) Formaldehyde Hexane Hydrochloric Acid Hydrofluoric Acid Hydrogen Sulfide (H2S) Mercury Methanol (Methyl alcohol) Methyl Bromide (Bromomethane) Methyl Ethyl Ketone (2-butanone) Methyl tert-Butyl Ether Methylene Chloride (dichloromethane) Naphthalene Polycyclic aromatic hydrocarbons (PAHs (as B(a)-P equivalent)) Perchloroethylene (tetrachloroethylene) Propene (Propylene) Styrene Toluene Trichloroethylene Vinyl Acetate Vinyl Chloride Xylenes [Basis: Regulation 2-5, Cumulative Increase, and Regulation 8-34-412]

#### End of Conditions

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A-1 Thermal Oxidizer, Air Clear, 17.3 MM BTU/hr Condition No. 27707 Plant No. 24772

**Application No. 30557** 

The following permit conditions apply to the A-1 Thermal Oxidizer:

1. The owner/operator of the A-1 Thermal Oxidizer shall not exceed the following heat input limits:

a. 639 MM BTU during any 24-hour period. This heat input limit shall consist of heat input from the waste gas, the PPRNG, and natural gas usage and shall not exceed the following:

415 MM BTU for the waste gas flow,
96 MM BTU for PPRNG, and

- iii. 128 MMBTU for natural gas.
- b. 186,500 MM BTU during any consecutive 12-month period. This heat input limit shall consist of heat input from the waste gas, PPRNG, and natural gas usage and shall not exceed the following:

  151,460 MM BTU for the waste gas flow,
  17,520 MM BTU for PPRNG, and
  17,520 MMBTU for natural gas.
- 2. The owner/operator of the A-1 Thermal Oxidizer shall equip A-1 with both local and remote alarms, automatic combustion air control, automatic gas shut-off valves and automatic start/restart system. The local and the remote alarms shall be activated if A-1 shuts down unexpectedly or if the combustion zone temperature is less than the minimum temperature required by Part 5 below. [Basis: Regulation 8-34-501]
- 3. The owner/operator of the A-1 Thermal Oxidizer shall properly install and properly operate, as per manufacturer's recommendations, a continuous flow meter and recorder to measure and record the gas flow into the A-1 Thermal Oxidizer. [Basis: Cumulative Increase, Regulation 8-34-508 and 40 CFR 60.756(b)]
- 4. The owner/operator of the A-1 Thermal Oxidizer shall properly install and properly maintain a continuous temperature monitor with readout display and continuous recorder on or for A-1 per manufacturer's recommendations. One or more thermocouples shall be placed in the primary combustion zone of A-1 and shall accurately indicate flue gas temperature at all times. Temperature charts shall be retained for at least five years from the date of entry and made readily available to District Staff upon request. [Basis: Regulations 8-34-501.3 and 2-6-501 and 40 CFR 60.756(b)]



Plant Name: Ameresco Keller Canyon RNG LLC A-1 Thermal Oxidizer, Air Clear, 17.3 MM BTU/hr

Condition No. 27707 Plant No. 24772

**Application No. 30557** 

5. The owner/operator of the A-1 Thermal Oxidizer shall maintain the combustion zone temperature of A-1 at a minimum temperature of 1600 degrees F, averaged over any 3-hour period when combusting waste gas and/or PPRNG, excluding startup periods. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these minimum temperature requirements in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415 and the following criteria. The minimum combustion zone temperature for the A-1 Thermal Oxidizer when burning waste gas and/or PPRNG shall be equal to or above the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F on a rolling 3-hour average, provided that the minimum combustion zone temperature is not less than 1400 degrees F at all times of operation, excluding startup periods. During the startup period, the owner/operator of A-1 Thermal Oxidizer shall not combust any waste gas and/or PPRNG and shall only use natural gas exclusively. During the startup period, the owner/operator of A-1 Thermal Oxidizer shall not exceed any of the following Heat input rates:

a. 16 MM BTU/hour for any individual startup,
b. 128 MMBTU in any consecutive 24-hour period, and/or
c. 17,520 MMBTU in any consecutive 12-month period.
[Basis: Regulations 2-5-301 and 8-34-501.3, RACT, and Cumulative Increase]

- 6. The owner/operator of the A-1 Thermal Oxidizer shall not exceed any of the following limits:
  - a. 0.05 pounds of nitrogen oxide (NOX), expressed as NO2, per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 12 ppmv of NOX, expressed as NO2 at 15% oxygen on a dry basis.
  - b. 0.08 pounds of carbon monoxide (CO) per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 32 ppmv of CO at 15% oxygen on a dry basis. [Basis: RACT]
- 7. The owner/operator of A-1 Thermal Oxidizer shall achieve either a minimum destruction efficiency of 98.5% by weight or not exceed an outlet NMOC concentration of 120 ppmv at 3% O2. [Basis: Cumulative Increase, Regulation 8-34-301.4]



A-1 Thermal Oxidizer, Air Clear, 17.3 MM BTU/hr Condition No. 27707 Plant No. 24772

**Application No. 30557** 

- 8. The owner/operator of A-1 Thermal Oxidizer shall not exceed 1.41 pounds per hour of NMOC emissions. [Basis: Cumulative Increase, Regulation 8-34-301.4]
- 9. The owner/operator of the A-1 Thermal Oxidizer shall not exceed any of the following limits:
  - a. The total SO2 emissions from A-1 shall not exceed any of the following limits:
    - i. 7.23 pounds per day of SO2 during any 24-hour period
    - ii. 1.291 tons of SO2 during any consecutive 12month period.
  - b. The owner/operator shall demonstrate compliance with the emission limits in Part 9(a) by complying with the heat input limits of A-1 and monitoring procedures in Part 9(d).
  - c. The owner/operator of S-1 shall demonstrate that the PPRNG contains no more than 10 ppmv of total reduced sulfur (TRS) compounds (dry basis), expressed as H2S.
  - d. To demonstrate compliance with Part 9(c), the owner/operator shall conduct monthly measurements of PPRNG. The owner/operator shall use either a District approved portable hydrogen sulfide monitor or a District approved Laboratory analysis method to determine the concentration of TRS, measured as H2S and corrected to 50% methane in the PPRNG. Methane concentrations measured pursuant to Part 1 of Condition # 27705 shall be used to correct the calculated TRS concentrations to a landfill gas methane concentration of 50% by volume (corrected TRS = measured TRS/measured % CH4 \* 50). The sampling dates and results shall be recorded in a District approved log.
    - If the portable H2S analysis method is used, the TRS concentration shall be calculated by multiplying the measured H2S concentration by 1.2

(TRS = 1.2 \* H2S).

- ii. If a laboratory analysis method is used, the TRS concentration shall be calculated as the sum of the measured concentrations for the individual sulfur compounds, expressed as H2S.
- iii.If the corrected TRS concentration determined
   pursuant to Part 9(d) is 10 ppmv of TRS or less
   for each monthly measurement during a rolling 12
   -month period, no additional calculations are
   required to verify compliance with the SO2
   emission limits identified above in Part 9(a).



A-1 Thermal Oxidizer, Air Clear, 17.3 MM BTU/hr Condition No. 27707 Plant No. 24772 **Application No. 30557** If any corrected TRS concentration measurement is greater than 10 ppmv of TRS during a rolling 12-month period, the Permit Holder shall use the calculation procedures in Part 9(d) to demonstrate compliance with the daily and annual SO2 emission limits above. [Basis: Cumulative Increase] 10. The owner/operator of A-1 Thermal Oxidizer shall not exceed 0.012 grains/dscf of PM10. [Basis: Cumulative Increase, Regulation 6-1] 11. The owner/operator of A-1 Thermal Oxidizer shall submit a permit application for a change of permit conditions, if any site-specific PPRNG characterization test indicates that the PPRNG at this site contains any of the following compounds at a level greater than the concentration listed below. The permit application shall be submitted to the Engineering Division, within 30 days of receipt of test results indicating a concentration above the levels listed below. Compound Concentration (ppbv) 1,3-Butadiene 386 1,4-Dichlorobenzene 2,590 Acrylonitrile 938 Renzene 8,850 Ethylbenzene 28,600 Ethylene dibromide 235 Ethylene dichloride 4,505 Hydrochloric Acid 70,910 Hydrofluoric Acid 18,885 Hydrogen Sulfide 570,000 Vinyl Chloride 680 The following TACs should not exceed the following emission factors: Compound Emission Factor (lb/MM scf) Acetaldehyde 2.58E-01 Acrolein 8.44E-02 Dioxins 1.09E-09 Formaldehyde 1.80E-01 Naphthalene 3.56E-02 PAHs (as B(a)P-equivalent) 2.52E-06

12. In order to demonstrate compliance with Parts 1 through 11 above, Regulations 8-34-301.4 and 8-34-412, 40 CFR 60.8, and 40 CFR 60.752(b)(2)(iii)(B), the owner/operator of A-1 Thermal Oxidizer shall conduct a source test at A-1 at least once annually. The source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The

[Basis: Regulation 2-5-302]



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Plant Name: Ameresco Keller Canyon RNG LLCA-1Thermal Oxidizer, Air Clear, 17.3 MM BTU/hrCondition No. 27707Plant No. 24772Applie

**Application No. 30557** 

first source test for A-1 shall be conducted within 1,440 operating hours, not to exceed 90 days from the date of initial operation of A-1. The annual source test shall be conducted when the A-1 Thermal Oxidizer is operating at or near its maximum operating rate. The source test shall be conducted in accordance using only District approved source test procedures and/or methods. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement, Engineering Divisions and the Source Test Section within 60 days of the test date. Each annual source test shall determine the following:

- a. Gas flow rate to A-1 (dry basis);
- b. Concentrations (dry basis) of carbon dioxide (CO2), nitrogen (N2), oxygen (O2), methane (CH4), total NMOC, H2S, TRS in the gas;
- c. Stack gas flow rate from A-1 (dry basis);
- d. Concentrations (dry basis) of NOx, CO, NMOC, PM10, PM2.5 (including both filterable and condensable fractions) and O2 in the stack gas of A-1;
- e. NMOC/THC ratio;
- f. NMOC destruction efficiency of A-1;
- g Hourly mass emission rate of NMOC in pounds per hour;
- h. NMOC concentrations in the exhaust of A-1 in lb/hr;
- NOx and CO emission rates from A-1 in units of pounds per MM BTU;
- j. Average combustion zone temperature in A-1 during the test period;
- k. High heating value of the PPRNG (BTU/scf);
- 1. PM10 emission rates in units of grains per dscf from A-1;
- m. PPRNG characterization results as per Condition #27705, Part 13. [Basis: Regulation 8-34-301.4, RACT, 40 CFR 60.752(b)(2)(iii)]
- 13. In order to demonstrate compliance with the above parts,



A-1 Thermal Oxidizer, Air Clear, 17.3 MM BTU/hr

Condition No. 27707 Plant No. 24772

Application No. 30557

the owner/operator of A-1 shall maintain the following records in a District-approved logbook. All records shall be maintained on-site and shall be made readily available to the District staff upon request for a period of 5 years from the date of entry. These recordkeeping requirements do not replace the recordkeeping requirements contained in any applicable rules or regulations.

- a. Record the date and time of each startup, shutdown and/or malfunction of A-1 and the reason for each shutdown.
- b. Summarize the operating hours of A-1 on a daily basis.
- c. Calculate and record, on a monthly basis, the maximum daily and the total monthly heat input rate to A-1 based on the operating hours for A-1, the waste gas, PPRNG and natural gas flow rate recorded pursuant to Part 3, the average methane concentration in the waste gas and PPRNG as determined by the most recent source test, and a high heating value for methane of 993.9 BTU/scf of landfill gas at 70 degrees F and 1 atmosphere.
- d. Maintain records of all test dates and tests results performed to maintain compliance with Parts 11, 12 or with any applicable part, rule, and/or regulation.
- e. All temperature monitoring data.

f. All TRS data and SO2 calculations.
[Basis: Cumulative Increase, Regulation 2-6-501, 8-34301, 8-34-501]

End of Conditions



A-2 Process Enclosed Flare, John Zink Zule Ultra Low Emissions Flare, 35.8 MMBTU/hr

Condition No. 27708 Plant No. 24772

Application No. 30557

The following permit conditions apply to the A-2 Enclosed Flare:

- The owner/operator of the A-2 Enclosed Flare shall not exceed the following heat input limits:
  - a. 933 million BTU during any 24-hour period. This heat input limit should consist of heat input from the propane, waste gas flow from upsets, PPRNG, and natural gas usage and shall not exceed any of the following:
    - i. 1 MM BTU for propane,
    - ii. 842 MM BTU for waste gas flow,
    - iii. 18 MM BTU for PPRNG, and
    - iv. 72 MM BTU for natural gas.
  - b. 95,865 million BTU during any consecutive 12-month period. This heat input limit should consist of heat input from the propane, waste gas flow from upsets, PPRNG, and natural gas usage and shall not exceed the following:
    - i. 17 MM BTU for propane,
    - ii. 63,144 MM BTU for waste gas flow,
    - iii. 6,570 MM BTU for PPRNG, and
    - iv. 26,134 MM BTU for natural gas.

[Basis: Cumulative Increase]

- 2. The owner/operator of the A-2 Enclosed Flare shall equip A-2 with both local and remote alarms, automatic combustion air control, and automatic start/restart system. The local and the remote alarms shall be activated if A-2 shuts down unexpectedly or if the combustion zone temperature is less than the minimum temperature required by Part 5 below. [Basis: Regulation 8-34-501]
- 3. The owner/operator of the A-2 Enclosed Flare shall properly install and properly operate, as per manufacturer's recommendations, a continuous flow meter and recorder to measure and record the gas flow into the A-2 Flare. [Basis: Cumulative Increase, Regulation 8-34-508 and 40 CFR 60.756(b)]
- 4. The owner/operator of the A-2 Enclosed Flare shall properly install and properly maintain a continuous temperature monitor with readout display and continuous recorder on A-2 per manufacturer's recommendations. One or more thermocouples shall be placed in the primary combustion zone of A-2 and shall accurately indicate flue gas temperature at all times. Temperature charts shall be retained for at least five years from the date of entry and made readily available to District Staff



A-2 Process Enclosed Flare, John Zink Zule Ultra Low Emissions Flare, 35.8 MMBTU/hr

Condition No. 27708 Plant No. 24772

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upon request. [Basis: Regulations 8-34-501.3 and 2-6-501.3 and 40 CFR 60.756(b)]

5. The owner/operator of the A-2 Enclosed Flare shall maintain the combustion zone temperature of A-2 at a minimum temperature of 1600 degrees F, averaged over any 3-hour period when combusting waste gas and/or PPRNG, excluding startup periods. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these minimum temperature requirements in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415 and the following criteria. The minimum combustion zone temperature for the A-2 Enclosed Flare when burning waste gas and/or PPRNG shall be equal to or above the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F on a rolling 3-hour average, provided that the minimum combustion zone temperature is not less than 1400 degrees F at all times of operation, excluding startup periods. During the startup period, the owner/operator of A-2 Enclosed Flare shall not combust any waste gas and/or PPRNG and shall only use natural gas exclusively. During the startup period, the owner/operator of A-2 Enclosed Flare shall not exceed any of the following heat input rates:

a. 72 MMBTU per hour for any individual startup,
b. 72 MMBTU in any consecutive 24-hour period, and
c. 26,134 MMBTU in any consecutive 12-month period.
[Basis: Regulations 2-5-301 and 8-34-501.3, RACT, and
Cumulative Increase]

- The owner/operator of the A-2 Enclosed Flare shall not exceed any of the following limits:
  - a. 0.025 pounds of nitrogen oxide (NOX), expressed as NO2, per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 6 ppmv of NOX, expressed as NO2 at 15% oxygen on a dry basis.
  - 0.06 pounds of carbon monoxide (CO) per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 24 ppmv of CO at 15% oxygen on a dry basis.
     [Basis: RACT]
- The owner/operator of A-2 Enclosed Flare shall achieve either a minimum destruction efficiency of 98% by weight



A-2 Process Enclosed Flare, John Zink Zule Ultra Low Emissions Flare, 35.8 MMBTU/hr

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or not exceed an outlet NMOC concentration of 30 ppmv at 3% O2. [Basis: Cumulative Increase, Regulation 8-34-301.3]

- 8. The owner/operator of A-2 Enclosed Flare shall not exceed 0.90 pounds per hour of NMOC emissions. [Basis: Cumulative Increase, Regulation 8-34-301.3]
- 9. The owner/operator of the A-2 Enclosed Flare shall not exceed any of the following limits:
  - a. The total SO2 emissions from A-2 shall not exceed any of the following limits:
    - i. 6.40 pounds per day of SO2 during any 24-hour period
    - ii. 0.248 tons of SO2 during any consecutive 12month period.
  - b. The owner/operator shall demonstrate compliance with the emission limits in Part 9(a) by complying with the heat input limits of A-2 and monitoring procedures in Part 9(d).
  - c. The owner/operator of S-1 shall demonstrate that the PPRNG contains no more than 10 ppmv of TRS compounds (dry basis), expressed as H2S.
  - d. To demonstrate compliance with Part 9(c), the owner/operator shall conduct monthly measurements of PPRNG. The owner/operator shall use either a District approved portable hydrogen sulfide monitor or a District approved Laboratory analysis method to determine the concentration of TRS, measured as H2S and corrected to 50% methane in the PPRNG. Methane concentrations measured pursuant to Part 1 of Condition # 27705 shall be used to correct the calculated TRS concentrations to a landfill gas methane concentration of 50% by volume (corrected TRS = measured TRS/measured % CH4 \* 50). The sampling dates and results shall be recorded in a District approved log.
    - i. If the portable H2S analysis method is used, the TRS concentration shall be calculated by multiplying the measured H2S concentration by 1.2

(TRS = 1.2 \* H2S).

- ii. If a laboratory analysis method is used, the TRS concentration shall be calculated as the sum of the measured concentrations for the individual sulfur compounds, expressed as H2S.
- iii. If the corrected TRS concentration determined pursuant to Part 9(d) is 10 ppmv of TRS or less for each monthly measurement during a



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rolling 12-month period, no additional calculations are required to verify compliance with the SO2 emission limits identified above in Part 9(a). If any corrected TRS concentration measurement is greater than 10 ppmv of TRS during a rolling 12-month period, the Permit Holder shall use the calculation procedures in Part 9(d) to demonstrate compliance with the daily and annual SO2 emission limits above. [Basis: Cumulative Increase]

- 10. The owner/operator of the A-2 Enclosed Flare shall not exceed 0.012 grains/dscf PM10. [Basis: Cumulative Increase, Regulation 6-1]
- 11. The owner/operator of A-2 Enclosed Flare shall submit a permit application for a change of permit conditions, if any of the annual site-specific PPRNG characterization test indicates that the PPRNG at this site contains any of the following compounds at a level greater than the concentration listed below. The permit application shall be submitted to the Engineering Division, within 30 days of receipt of test results indicating a concentration above the levels listed below.

Vinyl Chloride136The following TACs should not exceed the following emission factors: CompoundEmission Factor (lb/MM scf) AcetaldehydeAcrolein8.44E-02Dioxins1.09E-09Formaldehyde1.80E-01Naphthalene3.56E-02PAHs (as B(a)P-equivalent)2.52E-06[Basis: Regulation 2-5-302]	Compound 1,3-Butadiene 1,4-Dichlorobenzene Acrylonitrile Benzene Ethylbenzene Ethylene dibromide Ethylene dichloride Hydrochloric Acid Hydrofluoric Acid	Concentration (ppbv) 77 518 188 1770 5720 47 901 14182 3777 114000
	emission factors: Compound Emiss Acetaldehyde Acrolein Dioxins Formaldehyde Naphthalene PAHs (as B(a)P-equivalent	ion Factor (lb/MM scf) 2.58E-01 8.44E-02 1.09E-09 1.80E-01 3.56E-02 ) 2.52E-06

#### 12. In order to demonstrate compliance with Parts 1 through 11 above, Regulations 8-34-301.3 and 8-34-412, 40 CFR 60.8, and/or 40 CFR 60.752(b)(2)(iii)(B), the



Plant Name: Ameresco Keller Canyon RNG LLCA-2Process Enclosed Flare, John Zink Zule Ultra Low Emissions Flare, 35.8 MMBTU/hrCondition No. 27708Plant No. 24772Application No. 30557

owner/operator of A-2 Enclosed Flare shall conduct a source test at A-2 at least once annually. The source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The first source test for A-2 shall be conducted within 1,440 operating hours, not to exceed 90 days from the date of the initial operation of A-2. The annual source test shall be conducted when the A-2 Enclosed Flare is operating at or near its maximum operating rate. The source test shall be conducted in accordance using only District approved source test procedures and/or methods. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement, Engineering Divisions and the Source Test Section within 60 days of the test date. Each annual source test shall determine the following:

- a. Gas flow rate to A-2 (dry basis);
- b. Concentrations (dry basis) of carbon dioxide (CO2), nitrogen (N2), oxygen (O2), methane (CH4), total NMOC, H2S, TRS in the gas;
- c. Stack gas flow rate from A-2 (dry basis);
- Concentrations (dry basis) of NOx, CO, NMOC, PM10, PM2.5 (including both filterable and condensable fractions) and O2 in the stack gas of A-2;
- e. NMOC/THC ratio;
- f. NMOC destruction efficiency of A-2;
- g. Hourly mass emission rate of NMOC in pounds per hour;
- h. NMOC concentrations in the exhaust of A-2 in lb/hr;
- i. NOx and CO emission rates from A-2 in units of pounds per MM BTU;
- j. Average combustion zone temperature in A-2 during the test period;
- k. High heating value of the PPRNG (BTU/scf);
- PM10 emission rates in units of grains/dscf from A-2;
- m. PPRNG characterization results as per Condition #27705, Part 13.
Plant Name: Ameresco Keller Canyon RNG LLC



A-2 Process Enclosed Flare, John Zink Zule Ultra Low Emissions Flare, 35.8 MMBTU/hr

Condition No. 27708 Plant No. 24772

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[Basis: Regulation 8-34-301.3, RACT, 40 CFR 60.752(b)(2)(iii)]

- 13. In order to demonstrate compliance with the above parts, the owner/operator of A-2 shall maintain the following records in a District-approved logbook. All records shall be maintained on-site and shall be made readily available to the District staff upon request for a period of 5 years from the date of entry. These recordkeeping requirements do not replace the recordkeeping requirements contained in any applicable rules or regulations.
  - a. Record the date and time of each startup, shutdown and/or malfunction of A-2 and the reason for each shutdown.
  - b. Summarize the operating hours of A-2 on a daily basis.
  - c. Calculate and record, on a monthly basis, the maximum daily and the total monthly heat input rate to A-2 based on the operating hours for A-2, the propane, waste gas, PPRNG, and natural gas flow rate recorded pursuant to Part 3, the average methane concentration in the waste gas and PPRNG as determined by the most recent source test, and a high heating value for methane of 993. 9 BTU/scf of landfill gas at 70 degrees F and 1 atmosphere.
  - d. Record the total amount of propane used in a consecutive 12-month period.
  - Maintain records of all test dates and tests results performed to maintain compliance with Parts 11 and 12 or with any applicable part, rule, and/or regulation.
  - f. All temperature monitoring data.

g. TRS data and SO2 calculations. [Basis: Cumulative Increase, Regulation 2-6-501, 8-34-301, 8-34-501]

# End of Conditions

BAY AREA

**AIR QUALITY** 

MANAGEMENT

DISTRICT

April, 11 2024

Ameresco Keller Canyon Renewable Natural Gas, LLC

Attention: Richard Peary 111, Speen St., Suite 410 Framingham, MA 01701

> Application Number: 30557 Plant Number: 24772 Equipment Location: 901 Bailey Road, Pittsburg, CA, 94565

Dear Applicant:

SUBJECT:

CHANGE OF PERMIT CONDITIONS

This letter is to advise you that your request for changes in permit conditions as requested in your letter to the District on April 9, 2024 for the following equipment at this facility have been approved:

S-1 Processing and Cleaning of Landfill gas (LFG) to high BTU energy renewable natural gas (RNG) Operation, 4,700 cfm of LFG processed into 2,041 cfm of RNG

### abated by

- A-1 Thermal Oxidizer, Air Clear, 25.3 MMBTU/hr
- A-2 Process Enclosed Flare, John Zink, 35.8 MMBTU/hr

Hydrogen Sulfide scrubber, 2-vessel fixed bed adsorbers, Maximum 4700 scfm A-3

The equipment (A-1 and A-2) described above is subject to condition no. 27707 and 27708.

The requested condition change was to extend the deadline for the source test for A-1 and A-2.

If you have any questions regarding this matter, please contact Mark Kiffe, Air Quality Engineer at mkiffe@baaqmd.gov.

Very truly yours,

Pamela J. Leong Director of Engineering

by Sanjew Kamboj Air Quality Engineering Manager

BFC: MK~ Attachment: Permit Condition no. 27707 and 27708 Plant No. 24772, Ameresco Keller Canyon RNG

Source No. A-1, Thermal Oxidizer

Condition No. 27707 Application No. 30557

The following permit conditions apply to the A-1 Thermal Oxidizer:

- 1. The owner/operator of the A-1 Thermal Oxidizer shall not exceed the following heat input limits:
  - a. 639 MM BTU during any 24-hour period. This heat input limit shall consist of heat input from the waste gas, the PPRNG, and natural gas usage and shall not exceed the following:
    - i. 415 MM BTU for the waste gas flow,
    - ii. 96 MM BTU for PPRNG, and
    - iii. 128 MMBTU for natural gas.
  - b. 186,500 MM BTU during any consecutive 12-month period. This heat input limit shall consist of heat input from the waste gas, PPRNG, and natural gas usage and shall not exceed the following:
    - i. 151,460 MM BTU for the waste gas flow,
    - ii. 17,520 MM BTU for PPRNG, and
    - iii. 17,520 MMBTU for natural gas.

[Basis: Cumulative Increase]

2. The owner/operator of the A-1 Thermal Oxidizer shall equip A-1 with both local and remote alarms, automatic combustion air control, automatic gas shut-off valves and automatic start/restart system. The local and the remote alarms shall be activated if A-1 shuts down unexpectedly or if the combustion zone temperature is less than the minimum temperature required by Part 5 below.

[Basis: Regulation 8-34-501]

- The owner/operator of the A-1 Thermal Oxidizer shall properly install and properly operate, as per manufacturer's recommendations, a continuous flow meter and recorder to measure and record the gas flow into the A-1 Thermal Oxidizer.
   [Basis: Cumulative Increase, Regulation 8-34-508 and 40 CFR 60.756(b)]
- 4. The owner/operator of the A-1 Thermal Oxidizer shall properly install and properly maintain a continuous temperature monitor with readout display and continuous recorder on or for A-1 per manufacturer's recommendations. One or more thermocouples shall be placed in the primary combustion zone of A-1 and shall accurately indicate flue gas temperature at all times. Temperature charts shall be retained for at least five years from the date of entry and made readily available

Plant No. 24772, Ameresco Keller Canyon RNG

Source No. A-1, Thermal Oxidizer

Condition No. 27707 Application No. 30557

to District Staff upon request. [Basis: Regulations 8-34-501.3 and 2-6-501 and 40 CFR 60.756(b)]

5. The owner/operator of the A-1 Thermal Oxidizer shall maintain the combustion zone temperature of A-1 at a minimum temperature of 1600 degrees F, averaged over any 3-hour period when combusting waste gas and/or PPRNG. excluding startup periods. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these minimum temperature requirements in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415 and the following criteria. The minimum combustion zone temperature for the A-1 Thermal Oxidizer when burning waste gas and/or PPRNG shall be equal to or above the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F on a rolling 3-hour average, provided that the minimum combustion zone temperature is not less than 1400 degrees F at all times of operation, excluding startup periods. During the startup period, the owner/operator of A-1 Thermal Oxidizer shall not combust any waste gas and/or PPRNG and shall only use natural gas exclusively. During the startup period, the owner/operator of A-1 Thermal Oxidizer shall not exceed any of the following Heat input rates:

a. 16 MM BTU/hour for any individual startup,

b. 128 MMBTU in any consecutive 24-hour period, and/or c. 17,520 MMBTU in any consecutive 12-month period. [Basis: Regulations 2-5-301 and 8-34-501.3, RACT, and Cumulative Increase]

- 6. The owner/operator of the A-1 Thermal Oxidizer shall not exceed any of the following limits:
  - a. 0.05 pounds of nitrogen oxide (NOx), expressed as NO2, per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 12 ppmv of NOx, expressed as NO2 at 15% oxygen on a dry basis.
  - b. 0.08 pounds of carbon monoxide (CO) per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 32 ppmv of CO at 15% oxygen on a dry basis.
     [Basis: RACT]
- The owner/operator of A-1 Thermal Oxidizer shall achieve either a minimum destruction efficiency of 98.5% by weight or not exceed an outlet NMOC concentration of 120

Plant No. 24772, Ameresco Keller Canyon RNG Source No. A-1, Thermal Oxidizer Condition No. 27707 Application No. 30557

> ppmv at 3% O2. [Basis: Cumulative Increase, Regulation 8-34-301.4]

- The owner/operator of A-1 Thermal Oxidizer shall not exceed 1.41 pounds per hour of NMOC emissions. [Basis: Cumulative Increase, Regulation 8-34-301.4]
- 9. The owner/operator of the A-1 Thermal Oxidizer shall not exceed any of the following limits:
  - a. The total SO2 emissions from A-1 shall not exceed any of the following limits:
    - i. 7.23 pounds per day of SO2 during any 24-hour period
    - ii. 1.291 tons of SO2 during any consecutive 12month period.
  - b. The owner/operator shall demonstrate compliance with the emission limits in Part 9(a) by complying with the heat input limits of A-1 and monitoring procedures in Part 9(d).
  - c. The owner/operator of S-1 shall demonstrate that the PPRNG contains no more than 10 ppmv of total reduced sulfur (TRS) compounds (dry basis), expressed as H2S.
  - d. To demonstrate compliance with Part 9(c), the owner/operator shall conduct monthly measurements of PPRNG. The owner/operator shall use either a District approved portable hydrogen sulfide monitor or a District approved Laboratory analysis method to determine the concentration of TRS, measured as H2S and corrected to 50% methane in the PPRNG. Methane concentrations measured pursuant to Part 1 of Condition # 27705 shall be used to correct the calculated TRS concentrations to a landfill gas methane concentration of 50% by volume (corrected TRS = measured TRS/measured % CH4 \* 50). The sampling dates and results shall be recorded in a District approved log.
    - i. If the portable H2S analysis method is used, the TRS concentration shall be calculated by multiplying the measured H2S concentration by 1.2

(TRS = 1.2 \* H2S).

- ii. If a laboratory analysis method is used, the TRS concentration shall be calculated as the sum of the measured concentrations for the individual sulfur compounds, expressed as H2S.
- iii.If the corrected TRS concentration determined pursuant to Part 9(d) is 10 ppmv of TRS or less for each monthly measurement during a rolling 12

Plant No. 24772, Ameresco Keller Canyon RNG

Source No. A-1, Thermal Oxidizer

Condition No. 27707 Application No. 30557

-month period, no additional calculations are required to verify compliance with the SO2 emission limits identified above in Part 9(a). If any corrected TRS concentration measurement is greater than 10 ppmv of TRS during a rolling 12-month period, the Permit Holder shall use the calculation procedures in Part 9(d) to demonstrate compliance with the daily and annual SO2 emission limits above.
[Basis: Cumulative Increase]

- The owner/operator of A-1 Thermal Oxidizer shall not exceed 0.012 grains/dscf of PM10.
   [Basis: Cumulative Increase, Regulation 6-1]
- 11. The owner/operator of A-1 Thermal Oxidizer shall submit a permit application for a change of permit conditions, if any site-specific PPRNG characterization test indicates that the PPRNG at this site contains any of the following compounds at a level greater than the concentration listed below. The permit application shall be submitted to the Engineering Division, within 30 days of receipt of test results indicating a concentration above the levels listed below.

Compound	Concentration (ppbv)	
1,3-Butadiene	386	
1,4-Dichlorobenzene	2,590	
Acrylonitrile	938	
Benzene	8,850	
Ethylbenzene	28,600	
Ethylene dibromide	235	
Ethylene dichloride	4,505	
Hydrochloric Acid	70,910	
Hydrofluoric Acid	18,885	
Hydrogen Sulfide	570,000	
Vinyl Chloride	680	

The following TACs should not exceed the following emission factors: Compound Emission Factor (lb/MM scf) Acetaldehyde 2.58E-01 Acrolein 8.44E-02 Dioxins 1.09E-09 Formaldehyde 1.80E-01 Naphthalene 3.56E-02 PAHs (as B(a)P-equivalent) 2.52E-06 [Basis: Regulation 2-5-302]

 In order to demonstrate compliance with Parts 1 through 11 above, Regulations 8-34-301.4 and 8-34-412, 40 CFR 60.8, and 40 CFR 60.752(b)(2)(iii)(B), the owner/operator of A-1 Thermal Oxidizer shall conduct a Plant No. 24772, Ameresco Keller Canyon RNG Source No. A-1, Thermal Oxidizer Condition No. 27707 Application No. 30557

t

source test at A-1 at least once annually. The source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The first source test for A-1 shall be conducted within 1,440-1,920 operating hours, not to exceed 90-120 days from the date of initial operation of A-1. The annual source test shall be conducted when the A-1 Thermal Oxidizer is operating at or near its maximum operating rate. The source test shall be conducted in accordance using only District approved source test procedures and/or methods. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement, Engineering Divisions and the Source Test Section within 60 days of the test date. Each annual source test shall determine the following:

- a. Gas flow rate to A-1 (dry basis);
- b. Concentrations (dry basis) of carbon dioxide (CO2), nitrogen (N2), oxygen (O2), methane (CH4), total NMOC, H2S, TRS in the gas;
- c. Stack gas flow rate from A-1 (dry basis);
- d. Concentrations (dry basis) of NOx, CO, NMOC, PM10, PM2.5 (including both filterable and condensable fractions) and O2 in the stack gas of A-1;
- e. NMOC/THC ratio;
- f. NMOC destruction efficiency of A-1;
- g. Hourly mass emission rate of NMOC in pounds per hour;
- h. NMOC concentrations in the exhaust of A-1 in lb/hr;
- NOx and CO emission rates from A-1 in units of pounds per MM BTU;
- j. Average combustion zone temperature in A-1 during the test period;
- k. High heating value of the PPRNG (BTU/scf);
- I. PM10 emission rates in units of grains per dscf from A-1;
- m. PPRNG characterization results as per Condition #27705, Part 13.
   [Basis: Regulation 8-34-301.4, RACT, 40 CFR

Plant No. 24772, Ameresco Keller Canyon RNG Source No. A-1, Thermal Oxidizer Condition No. 27707 Application No. 30557

## 60.752(b)(2)(iii)]

- 13. In order to demonstrate compliance with the above parts, the owner/operator of A-1 shall maintain the following records in a District-approved logbook. All records shall be maintained on-site and shall be made readily available to the District staff upon request for a period of 5 years from the date of entry. These recordkeeping requirements do not replace the recordkeeping requirements contained in any applicable rules or regulations.
  - a. Record the date and time of each startup, shutdown and/or malfunction of A-1 and the reason for each shutdown.
  - b. Summarize the operating hours of A-1 on a daily basis.
  - c. Calculate and record, on a monthly basis, the maximum daily and the total monthly heat input rate to A-1 based on the operating hours for A-1, the waste gas, PPRNG and natural gas flow rate recorded pursuant to Part 3, the average methane concentration in the waste gas and PPRNG as determined by the most recent source test, and a high heating value for methane of 993.9 BTU/scf of landfill gas at 70 degrees F and 1 atmosphere.
  - Maintain records of all test dates and tests results performed to maintain compliance with Parts 11, 12 or with any applicable part, rule, and/or regulation.
  - e. All temperature monitoring data.

f. All TRS data and SO2 calculations. [Basis: Cumulative Increase, Regulation 2-6-501, 8-34-301, 8-34-501]

# End of Conditions



The following permit conditions apply to the A-2 Enclosed Flare:

- 1. The owner/operator of the A-2 Enclosed Flare shall not exceed the following heat input limits:
  - a. 933 million BTU during any 24-hour period. This heat input limit should consist of heat input from the propane, waste gas flow from upsets, PPRNG, and natural gas usage and shall not exceed any of the following:
    - i. 1 MM BTU for propane,
    - ii. 842 MM BTU for waste gas flow,
    - iii. 18 MM BTU for PPRNG, and
    - iv. 72 MM BTU for natural gas.
  - b. 95,865 million BTU during any consecutive 12-month period. This heat input limit should consist of heat input from the propane, waste gas flow from upsets, PPRNG, and natural gas usage and shall not exceed the following:
    - i. 17 MM BTU for propane,
    - ii. 63,144 MM BTU for waste gas flow,
    - iii. 6,570 MM BTU for PPRNG, and
    - iv. 26,134 MM BTU for natural gas.

[Basis: Cumulative Increase]

- The owner/operator of the A-2 Enclosed Flare shall equip A-2 with both local and remote alarms, automatic combustion air control, and automatic start/restart system. The local and the remote alarms shall be activated if A-2 shuts down unexpectedly or if the combustion zone temperature is less than the minimum temperature required by Part 5 below. [Basis: Regulation 8-34-501]
- 3. The owner/operator of the A-2 Enclosed Flare shall properly install and properly operate, as per manufacturer's recommendations, a continuous flow meter and recorder to measure and record the gas flow into the A-2 Flare.

[Basis: Cumulative Increase, Regulation 8-34-508 and 40 CFR 60.756(b)]

4. The owner/operator of the A-2 Enclosed Flare shall properly install and properly maintain a continuous temperature monitor with readout display and continuous recorder on A-2 per manufacturer's recommendations. One or more thermocouples shall be placed in the primary combustion zone of A-2 and shall accurately indicate flue gas temperature at all times. Temperature charts



shall be retained for at least five years from the date of entry and made readily available to District Staff upon request. [Basis: Regulations 8-34-501.3 and 2-6-501.3 and 40 CFR 60.756(b)]

5. The owner/operator of the A-2 Enclosed Flare shall maintain the combustion zone temperature of A-2 at a minimum temperature of 1600 degrees F, averaged over any 3-hour period when combusting waste gas and/or PPRNG, excluding startup periods. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these minimum temperature requirements in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415 and the following criteria. The minimum combustion zone temperature for the A-2 Enclosed Flare when burning waste gas and/or PPRNG shall be equal to or above the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F on a rolling 3-hour average, provided that the minimum combustion zone temperature is not less than 1400 degrees F at all times of operation, excluding startup periods. During the startup period, the owner/operator of A-2 Enclosed Flare shall not combust any waste gas and/or PPRNG and shall only use natural gas exclusively. During the startup period, the owner/operator of A-2 Enclosed Flare shall not exceed any of the following heat input rates:

a. 72 MMBTU per hour for any individual startup,
b. 72 MMBTU in any consecutive 24-hour period, and
c. 26,134 MMBTU in any consecutive 12-month period.
[Basis: Regulations 2-5-301 and 8-34-501.3, RACT, and
Cumulative Increase]

- 6. The owner/operator of the A-2 Enclosed Flare shall not exceed any of the following limits:
  - a. 0.025 pounds of nitrogen oxide (NOx), expressed as NO2, per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 6 ppmv of NOx, expressed as NO2 at 15% oxygen on a dry basis.
  - b. 0.06 pounds of carbon monoxide (CO) per million BTU of heat input. Compliance with this emission limit may be demonstrated by not exceeding the following exhaust gas concentration limit: 24 ppmv of CO at 15% oxygen on a dry basis.
     [Basis: RACT]

7. The owner/operator of A-2 Enclosed Flare shall achieve



either a minimum destruction efficiency of 98% by weight or not exceed an outlet NMOC concentration of 30 ppmv at 3% O2.

[Basis: Cumulative Increase, Regulation 8-34-301.3]

- The owner/operator of A-2 Enclosed Flare shall not exceed 0.90 pounds per hour of NMOC emissions. [Basis: Cumulative Increase, Regulation 8-34-301.3]
- 9. The owner/operator of the A-2 Enclosed Flare shall not exceed any of the following limits:
  - a. The total SO2 emissions from A-2 shall not exceed any of the following limits:
    - i. 6.40 pounds per day of SO2 during any 24-hour period
    - ii. 0.248 tons of SO2 during any consecutive 12month period.
  - b. The owner/operator shall demonstrate compliance with the emission limits in Part 9(a) by complying with the heat input limits of A-2 and monitoring procedures in Part 9(d).
  - c. The owner/operator of S-1 shall demonstrate that the PPRNG contains no more than 10 ppmv of TRS compounds (dry basis), expressed as H2S.
  - d. To demonstrate compliance with Part 9(c), the owner/operator shall conduct monthly measurements of PPRNG. The owner/operator shall use either a District approved portable hydrogen sulfide monitor or a District approved Laboratory analysis method to determine the concentration of TRS, measured as H2S and corrected to 50% methane in the PPRNG. Methane concentrations measured pursuant to Part 1 of Condition # 27705 shall be used to correct the calculated TRS concentrations to a landfill gas methane concentration of 50% by volume (corrected TRS = measured TRS/measured % CH4 \* 50). The sampling dates and results shall be recorded in a District approved log.
    - If the portable H2S analysis method is used, the TRS concentration shall be calculated by multiplying the measured H2S concentration by 1.2

(TRS = 1.2 \* H2S).

- ii. If a laboratory analysis method is used, the TRS concentration shall be calculated as the sum of the measured concentrations for the individual sulfur compounds, expressed as H2S.
- iii. If the corrected TRS concentration determined pursuant to Part 9(d) is 10 ppmv of TRS or less for each monthly measurement during a



rolling 12-month period, no additional calculations are required to verify compliance with the SO2 emission limits identified above in Part 9(a). If any corrected TRS concentration measurement is greater than 10 ppmv of TRS during a rolling 12-month period, the Permit Holder shall use the calculation procedures in Part 9(d) to demonstrate compliance with the daily and annual SO2 emission limits above. [Basis: Cumulative Increase]

 The owner/operator of the A-2 Enclosed Flare shall not exceed 0.012 grains/dscf PM10. [Basis: Cumulative Increase, Regulation 6-1]

11. The owner/operator of A-2 Enclosed Flare shall submit a permit application for a change of permit conditions, if any of the annual site-specific PPRNG characterization test indicates that the PPRNG at this site contains any of the following compounds at a level greater than the concentration listed below. The permit application shall be submitted to the Engineering Division, within 30 days of receipt of test results indicating a concentration above the levels listed below.

Compound 1,3-Butadiene	Concentration (ppbv) 77	
1,4-Dichlorobenzene	518	
Acrylonitrile	188	
Benzene	1770	
Ethylbenzene	5720	
Ethylene dibromide	47	
Ethylene dichloride	901	
Hydrochloric Acid	14182	
Hydrofluoric Acid	3777	
Hydrogen Sulfide	114000	
Vinyl Chloride	136	

The following TACs should not exceed the following emission factors: Compound Emission Factor (lb/MM scf) Acetaldehyde 2.58E-01 Acrolein 8.44E-02 Dioxins 1.09E-09 Formaldehyde 1.80E-01 Naphthalene 3.56E-02 PAHs (as B(a)P-equivalent) 2.52E-06 [Basis: Regulation 2-5-302]

12. In order to demonstrate compliance with Parts 1 through 11 above, Regulations 8-34-301.3 and 8-34-412, 40 CFR 60.8, and/or 40 CFR 60.752(b)(2)(iii)(B), the owner/operator of A-2 Enclosed Flare shall conduct a



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Plant No. 24772, Ameresco Keller Canyon RNG Source No. A-2, Enclosed Flare Condition No. 27708 Application No. 30557

source test at A-2 at least once annually. The source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The first source test for A-2 shall be conducted within 1,4401,920 operating hours, not to exceed 90-120 days from the date of the initial operation of A-2. The annual source test shall be conducted when the A-2 Enclosed Flare is operating at or near its maximum operating rate. The source test shall be conducted in accordance using only District approved source test procedures and/or methods. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement, Engineering Divisions and the Source Test Section within 60 days of the test date. Each annual source test shall determine the following:

- a. Gas flow rate to A-2 (dry basis);
- b. Concentrations (dry basis) of carbon dioxide (CO2), nitrogen (N2), oxygen (O2), methane (CH4), total NMOC, H2S, TRS in the gas;
- c. Stack gas flow rate from A-2 (dry basis);
- d. Concentrations (dry basis) of NOx, CO, NMOC, PM10, PM2.5 (including both filterable and condensable fractions) and O2 in the stack gas of A-2;
- e. NMOC/THC ratio;
- f. NMOC destruction efficiency of A-2;
- g. Hourly mass emission rate of NMOC in pounds per hour;
- h. NMOC concentrations in the exhaust of A-2 in lb/hr;
- NOx and CO emission rates from A-2 in units of pounds per MM BTU;
- j. Average combustion zone temperature in A-2 during the test period;
- k. High heating value of the PPRNG (BTU/scf);
- PM10 emission rates in units of grains/dscf from A-2;
- m. PPRNG characterization results as per Condition #27705, Part 13.
  [Basis: Regulation 8-34-301.3, RACT, 40 CFR 60.752(b)(2)(iii)]



- 13. In order to demonstrate compliance with the above parts, the owner/operator of A-2 shall maintain the following records in a District-approved logbook. All records shall be maintained on-site and shall be made readily available to the District staff upon request for a period of 5 years from the date of entry. These recordkeeping requirements do not replace the recordkeeping requirements contained in any applicable rules or regulations.
  - a. Record the date and time of each startup, shutdown and/or malfunction of A-2 and the reason for each shutdown.
  - b. Summarize the operating hours of A-2 on a daily basis.
  - c. Calculate and record, on a monthly basis, the maximum daily and the total monthly heat input rate to A-2 based on the operating hours for A-2, the propane, waste gas, PPRNG, and natural gas flow rate recorded pursuant to Part 3, the average methane concentration in the waste gas and PPRNG as determined by the most recent source test, and a high heating value for methane of 993. 9 BTU/scf of landfill gas at 70 degrees F and 1 atmosphere.
  - d. Record the total amount of propane used in a consecutive 12-month period.
  - e. Maintain records of all test dates and tests results performed to maintain compliance with Parts 11 and 12 or with any applicable part, rule, and/or regulation.
  - f. All temperature monitoring data.

 g. TRS data and SO2 calculations.
 [Basis: Cumulative Increase, Regulation 2-6-501, 8-34-301, 8-34-501]

End of Conditions

been paid. Such denial shall not be based solely on the type of construction or design of equipment.

#### (Amended March 17, 1982)

2-1-305 Conformance with Authority to Construct: A person shall not put in place, build, erect, install, modify, modernize, alter or replace any article, machine, equipment, or other contrivance for which an authority to construct has been issued except in a manner substantially in conformance with the authority to construct. If the APCO finds, prior to the issuance of a permit to operate, that the subject of the application was not built substantially in conformance with the authority to construct, the APCO shall deny the permit to operate.

## (Amended December 21, 2004)

- 2-1-306 Mandated Reductions Not Applicable: Emission reductions resulting from requirements of federal, state or District laws, rules or regulations shall not be banked or allowed as emission offsets or emission reduction credits unless a complete application for such banking or emission reduction credits was filed with the District at least 90 days prior to the adoption date of such laws, rules or regulations. Only emission reduction credits exceeding the emission reductions required by measures described in the Air Quality Management Plan or required by permits or orders; and reductions achieved by measures not specified in the Air Quality Management Plan shall be banked or allowed as emission offsets or emission reduction credits.
- (Amended 10/7/81; 7/17/91; 6/15/94)
   2-1-307 Failure to Meet Permit Conditions: A person shall not operate any article, machine, equipment or other contrivance, for which an authority to construct or permit to operate has been issued, in violation of any permit condition imposed pursuant to Section 2-1-403.

#### (Adopted 3/17/82; Amended 7/17/91)

**2-1-308** Fugitive Emissions: Fugitive emissions shall be included as emissions from a source or facility except as required under this Regulation.

(Adopted 10/19/83; Amended 7/17/91)

**2-1-309 Canceled Application:** The APCO may cancel an application for an authority to construct and a permit to operate if, within 90 days after the application was deemed incomplete, the applicant fails to furnish the requested information or pay all appropriate fees. The 90 day period may be extended for an additional 90 days upon receipt of a written request from the applicant and written approval thereof by the APCO. The APCO shall notify the applicant in writing of a cancellation, and the reasons therefore. A cancellation shall become effective 10 days after the applicant has been notified. The cancellation shall be without prejudice to any future applications.

#### (Adopted April 6, 1988)

- **2-1-310** Applicability of CEQA: Except for permit applications which will be reviewed as ministerial projects under Section 2-1-311 or which are exempt from CEQA pursuant to Section 2-1-312, all proposed new and modified sources for which an authority to construct must be obtained from the District shall be reviewed in accordance with the requirements of CEQA.
  - 310.1 For those District permit applications which must be reviewed in accordance with the requirements of CEQA, the District will not normally be a Lead Agency under CEQA. Rather, pursuant to CEQA, the Lead Agency will normally be an agency with general governmental powers, such as a city or county, rather than a special purpose agency such as the District.

Bay Area Air Quality Management District

Reports containing the information required by Sections 8-34-501, 503, 505, 506, 507, 508, and 509. The initial Annual Report shall include the initial Performance Test Report required by Section 8-34-413 and is due no later than 180 days from the initial start-up of the gas collection system, but not earlier than January 1, 2003.

(Adopted October 6, 1999)

- 8-34-412 Compliance Demonstration Test: Except as provided in Sections 8-34-119 or 120, any operator of equipment that is subject to Sections 8-34-301.3 or 301.4, shall conduct a Compliance Demonstration Test in accordance with the requirements of 40 CFR 60.8 and 60.752(b)(2)(iii)(B) using the test methods identified in 40 CFR 60.754(d). The initial Compliance Demonstration Test shall be conducted within 120 days of initial start up of the gas collection system or by October 1, 2002, whichever is later. Any operator that is subject to this requirement and that is required to have a Major Facility Review Permit, shall conduct annual Compliance Demonstration Tests. (Adopted October 6, 1999)
- 8-34-413 **Performance Test Report:** Any operator required to meet Section 8-34-412 shall submit a Performance Test Report to the APCO in accordance with the provisions of 40 CFR 60.8. The initial Performance Test Report shall contain the information specified in 40 CFR 60.757(g) and shall be included in the initial Annual Report required by Section 8-34-411. Any operator required to perform annual Compliance Demonstration Tests shall submit the annual Performance Test Report along with the Annual Report required by Section 8-34-411.

(Adopted October 6, 1999)

- 8-34-414 Repair Schedule for Wellhead Excesses: In accordance with the provisions of 40 CFR 60.755(a)(3 and 5), any operator subject to the requirements of Section 8-34-305 shall meet the following requirements, if any excess of a limit specified in Sections 8-34-305.1, 305.2, 305.3, or 305.4 is detected.
  - 414.1 The operator shall record the date, the excess value and the well identification number.
  - 414.2 The operator shall initiate action to correct the excess within 5 calendar days of discovering the problem.
  - 414.3 If the excess cannot be corrected within 15 days of the date that the problem was first discovered, the gas collection system shall be expanded to correct the excess.
  - 414.4 If a gas collection system expansion is required pursuant to Section 8-34-414.3, the expansion shall be completed and all new wells shall be operating within 120 days of the date that the problem was first discovered.

(Adopted October 6, 1999)

- 8-34-415 Repair Schedule for Landfill Surface Leak Excesses: In accordance with the provisions of 40 CFR 60.755(c)(4), any operator subject to the requirements of Section 8-34-303 shall meet the following requirements, if any excess of the limit specified in Section 8-34-303 is detected:
  - 415.1 The operator shall mark the location and record the date, location and value of each monitored excess.
  - 415.2 The operator shall initiate action, such as cover maintenance or well vacuum adjustments, to correct the excess within 5 calendar days of discovering the excess.
  - 415.3 The location of the excess shall be re-monitored within 10 calendar days of the date that the excess was first discovered.
  - 415.4 If the re-monitoring pursuant to Section 8-34-415.3 indicates no excess of the Section 8-34-303 limit, the location shall be re-monitored within 1 month of the date that the excess was first discovered.
  - 415.5 If the re-monitoring pursuant to Section 8-34-415.4 indicates no excess of the Section 8-34-303 limit, no further monitoring is required until the next regularly scheduled quarterly monitoring date.
  - 415.6 If monitoring pursuant to Sections 8-34-415.3 or 415.4 indicates a second excess of the Section 8-34-303 limit, additional corrective action shall be initiated within 5 calendar days of detecting the second excess.
  - 415.7 Any location exhibiting a second excess within a quarterly period shall be remonitored within 10 calendar days of detecting the second excess.



		ANAGEMENT DISTRICT San Francisco, CA 94105 000
NOTICE OF VIOL	ATION	No. A60769
ISSUED TO: Ameresco Keller Canyor	n RNG	_ <b>/</b> P_G_N# <u>24722</u>
ADDRESS: 901 Bailey Rd.		
CITY: Pittsburg	STATE:C/	A ZIP: <u>94565</u>
PHONE: (508 )661-2242		
✓ N# Mailing Address on F61		
NAME:		
ADDRESS:		🗹 Same As Above
	ZIP	
SOURCE: S#1NAME: Pro		
EMISSION PT: P# NAME: DATE: 05/01/24		
REG 2 RULE 1 SEC 301 No Authority to Construct		2 RULE 1 SEC 302 Permit to Operate
REG 1 SEC 301 H & S CODE - 41700 Public Nuisance		3 2 RULE 1 SEC 307 are to Meet Permit Condition
REG 5 SEC 301 Prohibited Open Burning		6 RULE 1 SEC 301 essive Visible Emissions
		CODE
Details: Failure to sample A1, A2, and A3 monthly. 27705.4, 27707.9, 27708.9		
RECIPIENT NAME: Andrew McClella	nd	
TITLE: Authorized Representative		
SIGNING THIS NOTICE IS NOT AN ADMISSION OF GUILT X		
DESCRIPTION OF THE I TAKEN TO PREVENT CO	MMEDIATE CORREC NTINUED OR RECL IO SUBSTANTIAL PI	S NOTICE WITH A WRITTEN CTIVE ACTION YOU HAVE JRRENT VIOLATION. <u>THIS</u> ENALTY, YOUR RESPONSE DN.
ISSUED BY; A. Kobayashi		INSP #

PLEASE PRESS HARD

DATE: 06/20/24

TIME: 1100

MAILED

HRS 🔽

# INSTRUCTIONS

# PERMIT VIOLATIONS - (REG 2, RULE 1, SECTION 301 AND/OR 302)

Within 30 days, a permit application must be submitted to the District's Permit Division. The permit application must reference the Violation Notice Number Shown on the front of this notice. If either the Violation Notice Number is not referenced or no permit application is received, then this matter will be referred to the District's Legal Department for legal action. Your response does not preclude further legal action.

If there are any questions regarding the submission of a Permit Application, call the Permit Services Division at (415) 749-4990.

# ALL OTHER VIOLATIONS

Within 10 days, return a copy of this notice with a written description of the corrective action you have taken to prevent continued or recurrent violation. Immediate corrective action must be taken to stop the violation. This violation is subject to substantial penalty. Your response does not preclude further legal action.

A variance should be sought if it is necessary to continue to operate in violation of District Regulations. For information on eligiblity for, or filing of, a variance, call (415) 749-5073.