

111 Speen St, Ste 410 Framingham, MA 01701 P: (508) 661-2200 ameresco.com

January 17, 2024

TV Tracking #: 840

1. D RECEIVED IN 1/17/2024 ENFORCEMENT:

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

RE: Semiannual Monitoring and Deviation Report: 7/1/23 – 12/31/23 Ameresco Half Moon Bay LLC, Plant #B7040 Title V Permit - Condition I.F (Regulation 2-6-502)

Dear Director,

Ameresco Half Moon Bay LLC is submitting this Semiannual Monitoring and Deviation Report in accordance with Condition I.F (Regulation 2-6-502) of Title V Permit #B7040 issued on December 14, 2020. As required, this report covers the compliance period of July 1, 2023 through December 31, 2023.

This report is certified by the facility Responsible Official (RO). If you have any questions on this submittal or require additional information, please contact me or Rebecca Sherwood at rsherwood@ameresco.com or (508) 598-3049.

Sincerely, Ameresco Half Moon Bay LLC;

Nathan W. Hall, Authorized Representative

Attachments: 1.

- 1. Certification Statement
- 2. Semiannual Compliance Report
- 3. Summary of Deviations
- CC: H. Stewart, R. Peary, R. Sherwood, P. Ziesing, T. Tibbs, J. Lankford, R. DeVries, Ameresco R. Guittap, D. Oliver, T. Endow, compliance@baaqmd.gov, BAAQMD



ATTACHMENT 1:

CERTIFICATION STATEMENT

AMERESCO HALF MOON BAY LLC SEMIANNUAL MONITORING AND DEVIATION REPORT

JULY – DECEMBER 2023

FACILITY NAME Ameresco Half Moon Bay LLC FACILITY # 17040

STATEMENT OF COMPLIANCE:

I certify the following:

14

14

4

Read each statement carefully and initial each box for confirmation.

- Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form that is(are) in compliance will continue to comply with the applicable requirement(s);
 - Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form will comply with future-effective applicable requirement(s), on a timely basis;
 - Based on information and belief formed after reasonable inquiry, information on application forms, all accompanying reports, and other required certifications is true, accurate, and complete;

All fees required by Regulation 3, including Schedule P have been paid.

STATEMENT OF NON-COMPLIANCE

Read statement carefully. Initial box for confirmation if statement is true.

I certify the following:

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Schedule of Compliance application form that is(are) not in compliance with the applicable requirement(s) will comply in accordance with the attached compliance plan schedule.

MAAD

Signature of Responsible Official Nathan W. Hall

Jan 17, 2024

Date

H:\pub_data\TitleV\dataform\mfrform\T5-form\cert.doc

Name of Responsible Official



ATTACHMENT 3:

SUMMARY OF DEVIATIONS

AMERESCO HALF MOON BAY LLC SEMIANNUAL MONITORING AND DEVIATION REPORT

JULY – DECEMBER 2023

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments
BAAQMD Regulation 1	General Provisions and Definitions				
1-523	Parametric Monitoring and Recordkeeping Procedures				
523.1	Report periods of inoperation > 24 hours by next workday	Reporting	Y	I	See: "Summary of Deviations".
523.2	Limit on duration of inoperation	Monitoring	Y	С	
523.3	Report monitored violations of any applicable limits within 96 hours	Reporting	Y	С	
523.4	Record inoperation, tests, calibrations, adjustments, & maintenance	Recordkeeping	Y	С	
523.5	Maintain and calibrate monitors	Monitoring	Y	С	
BAAQMD Regulation 2 Rule 1	General Requirements				
2-1-405	Posting of Permit to Operate	Monitoring	Y	С	
2-1-429	Federal Emissions Statement	Reporting	Y	С	
BAAQMD Regulation 3	Fees				
3-319	Major Stationary Source Fees (Schedule M)	Monitoring	Y	С	
3-320	Toxic Inventory Fee (Schedule N)	Monitoring	Y	С	
3-327	Permit to Operate, Renewal Fees (Schedule B)	Monitoring	Y	С	

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments
3-333	Major Facility Review (MFR) Fees (Schedule P) Monitoring		Y	С	
3-334	Greenhouse Gas Fees (Schedule T)	Monitoring	Y	С	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions				
6-1-301	Ringelmann No.1 Limitation	Monitoring	Y	С	
6-1-302	Opacity Limitation	Monitoring	Y	С	
6-1-305	Visible Particles	Monitoring	Y	С	
6-1-310	Particle Weight Limitation (343 mg/dscm or 0.15 grains/dscf)	Monitoring	Y	С	
6-1-401	Appearance of Emissions	Monitoring	Y	С	
6-1-501	Sampling Facilities and Instruments Required	Monitoring	Y	С	
6-1-502	Data, Records, and Reporting	Monitoring/Records	Y	С	
6-1-504	Demonstration of Total Suspended Particles (TSP) Compliance	Testing	Y	С	
BAAQMD Regulation 8	LFG Collection and Control System	•			
8-34-301	Landfill Gas Collection and Emission Control System				
301.2	Control Systems Leak Limit < 1000 as CH4; repair leaks within 7 days	Monitoring	Y	С	
301.3	Flare NMOC Limit < 30 ppmv as CH4 at 3% O2 or 98% destruction	Monitoring	Y	С	

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments
301.4	Engines NMOC Limit < 120 ppmvd as CH4 at 3% O2 or 98% destruction or 97% destruction of organic compounds and CH4	Monitoring	Y	С	
8-34-412	Compliance Demonstration Tests	Monitoring	Y	С	
8-34-413	Performance Test Report	Reporting	Y	С	
8-34-501	Operating Records	_			
501.2	Emission Control System Downtime	Recordkeeping	Y	С	
501.3	Continuous Temperature	Recordkeeping	Y	С	
501.4	Testing Records	Recordkeeping	Y	С	
501.6	Leak Discovery and Repair Records	Recordkeeping	Y	С	
501.10	Continuous Gas Flow Records	Recordkeeping	Y	С	
501.11	Records of Key Emission Control System Operating Parameters	Recordkeeping	Y	С	
501.12	Maintain records 5 years	Recordkeeping	Y	С	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Monitoring	Y	С	
8-34-504	Portable Hydrocarbon Detector	Monitoring	Y	С	
8-34-507	Continuously operate temperature recording device (flare)	Monitoring	Y	С	
8-34-508	Gas flow meter records flow rate at least every 15 minutes	Monitoring/Records	Y	С	
8-34-509	Key emission control system operating parameters	Monitoring/Records	Y	С	

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide					
9-1-301	Ground Level SO ₂ Concentration Limit	N/A	N/A	N/A		
9-1-302	General Emission Limitations	Monitoring	Y	С		
BAAQMD Regulation 9 Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide					
9-2-301	Ground Level H ₂ S Concentration Limit	N/A	N/A	N/A		
BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines					
9-8-302	Emission Limits – Waste Derived Fuel Gas					
302.1	Lean-Burn Engines: NOx Emission Limit	Monitoring	Y	С		
302.3	CO Emission Limit	Monitoring	Y	С		
9-8-501	Initial Demonstration of Compliance	Monitoring	Y	С		
9-8-502.3	Compliance Demonstration Test Records	Recordkeeping	Y	С		
9-8-503	Quarterly Demonstration of Compliance (ECOM)	Monitoring	Y	С		

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Semiannual Monitoring and Deviation Report

Permits to Operate

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments
BAAQMD Perm	nits to Operate Cond #25465				
Part 1	Fuel Restrictions and Bypass Event Limitations	Monitoring/Records	Y	С	
Part 2	Heat Input Limits and Monitoring Requirements	Monitoring/Records	Y	С	
Part 3	CO Emissions < 1.8 g/bhp-hr	Monitoring/Records	Y	С	
Part 4	S1 NOx Emissions < 0.15 g/bhp-hr	Monitoring/Records	Y	С	
Part 5	S2-6 NOx Emissions < 0.6 g/bhp-hr	Monitoring/Records	Y	С	
Part 6	Start-up and Shutdown < 1 hr	Monitoring/Records	Y	С	
Part 7	S1-S6 POC emissions < 0.2 g/ bhp-hr	Monitoring/Records	Y	С	
Part 8	LFG Fuel < 150 ppmv total sulfur, as H ₂ S	Monitoring/Records	Y	С	
Part 9	Abate S1-S6 with CO oxidation catalyst	Monitoring/Records	Y	С	
Part 10	Abate S1 with NOx SCR	Monitoring/Records	Y	С	
Part 11	Annual / Quadrennial Engine Source Testing Requirements	Testing	Y	С	
Part 12	Monitoring Records	Recordkeeping	Y	С	
BAAQMD Perm	hits to Operate Cond #26864				
Part 1	Facility-Wide CO Emissions Limit	Monitoring/Records	Y	С	
Part 2	Facility-Wide Record Keeping Requirements	Monitoring/Records	Y	С	

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments
BAAQMD Perm	its to Operate Cond #26865				
Part 1	Landfill Gas Throughput to S-7	Monitoring/Records	Y	С	
Part 2	Landfill Gas Combustion in A-8	Monitoring/Records	Y	С	
Part 3	Landfill Gas Throughput to A-8, Heat Input Limit for Flare	Monitoring/Records	Y	С	
Part 4	NMOC Emission Limit for Flare	Testing	Y	С	
Part 5	Combustion Zone Temperature Limit for Flare	Monitoring/Records	Y	С	
Part 6	NOx Emission Limit for Flare	Testing	Y	С	
Part 7	CO Emission Limit for Flare	Testing	Y	С	
Part 8	SO2 Emission Limit for Flare	Testing	Y	С	
Part 9	Benzene, Formaldehyde, Acetaldehyde, and PAH Emissions from Flare	Testing	Y	С	
Part 10	Compliance Demonstration Test for Flare	Testing	Y	С	
Part 11	Landfill Gas Analysis Procedures	Testing	Y	С	
BAAQMD Perm	nits to Operate Cond #26782				
Part 1	LFG Condensate Throughput Limit 5000 gal/12-month	Monitoring/Records	Y	С	
Part 2	LFG Condensate Tank Recordkeeping Requirements	Monitoring/Records	Y	С	

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Semiannual Monitoring and Deviation Report

Federal Requirements

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments		
40 CFR Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants: General Provisions						
63.4	Prohibited activities and circumvention	Monitoring	Y	С			
63.5	Preconstruction review and notification requirements						
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Monitoring, Reporting	Y	С			
63.6	Compliance with standards and maintenance requirements						
63.6(e)	Operation and maintenance requirements and SSM Plan	Monitoring	Y	С			
63.6(f)	Compliance with non-opacity emission standards	Monitoring	Y	С			
63.10	Record Keeping and reporting requirements						
63.10(b)	General record keeping requirements	Recordkeeping	Y	С			
63.10(b)(2)	For affected sources, maintain relevant records of:	Recordkeeping	Y	С			
63.10(b)(2)(i- v)	Records for startup, shutdown, malfunction, and maintenance	Recordkeeping	Y	С			
63.10(d)	General reporting requirements	Reporting	Y	С			
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Reporting	Y	С			

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Applicable Requirement	Description	Compliance Determination Method	Compliance (Y/N)	Continuous or Intermittent	Comments
40 CFR Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants: Stationary Internal Combustion Engines				
63.6585	An area source of HAP emissions is a source that is not a major source	Monitoring/Records	Y	С	
63.6590(a)	Affected Source	Monitoring/Records	Y	С	
63.6590(a)(ii)	Existing Stationary RICE manufactured before 7/1/2007	Monitoring/Records	Y	С	
63.6595	Affected Source – major source of HAPs	Monitoring/Records	Y	С	
63.6603	Maintenance activities	Monitoring	Y	С	
63.6605	Compliance Limitations	Monitoring	Y	С	
63.6625	Monitoring, Operation and Maintenance Requirements	Monitoring	Y	С	
63.6640	Compliance Limitations	Monitoring	Y	С	
63.6655	Compliance Records	Recordkeeping	Y	С	
63.6650	Semiannual Monitoring Reports	Reporting	Y	С	
63.6660	Maintain records for a minimum period of 5 years	Recordkeeping	Y	С	



ATTACHMENT 2:

SEMIANNUAL COMPLIANCE REPORT

AMERESCO HALF MOON BAY LLC SEMIANNUAL MONITORING AND DEVIATION REPORT

JULY – DECEMBER 2023

Plant Number: 17040

Reporting Period: July 1, 2023 to December 31, 2023 **Source Name:** Internal Combustion Lean Burn Engines and TSA System with Control Flare **Sources #:** S-1; S-2; S-3; S-4; S-5; S-6; S-7; S-8, A-8

Semiannual Monitoring and Deviation Report

Summary of Deviations

Applicable Requirement	Permit Unit(s)	Description of Deviation	Probable Cause of Deviation	Corrective / Preventative Actions
BAAQMD Rule 1-523	N/A (Gas Chromatograph)	Initial Determination: On October 26, 2023, during a routine review of operational data, Ameresco discovered that the facility's gas chromatograph (GC) recorded static/invalid data from October 25, 2023, at 11:20AM PT to October 26, 2023, at 3:03PM PT. Because this was an inoperative parametric monitor event that lasted more than 24 hours, it was reported in an RCA form to BAAQMD via email on October 27, 2023. Updated Findings: On October 30, 2023, during a review of the GC data from Ameresco's backup data collection system, Ameresco discovered that the start of the inoperative monitor event occurred on October 24, 2023, at 5:07PM PT, not on October 25, 2023, at 11:20AM PT as originally detected. This meant that 24 hours of GC downtime occurred on October 25, 2023, at 5:07PM PT and should have been reported on October 26, 2023 (the following working day) rather than on October 27, 2023.	The GC inoperative monitor event that first began on October 24, 2023, occurred due to failed power supply when the plant was brought online following a utility outage requested by PG&E. Following the outage, Ameresco also experienced issues accessing its primary data collection system, which is what caused the incorrect identification of the GC inoperative monitor event start time on October 26, 2023, coupled with the fact that Ameresco did not evaluate the backup system's data until October 30, 2023.	On October 26, 2023, immediately upon discovery that the GC was not working properly, facility personnel started investigating the issue. Ameresco located the failed power supply, replaced it that day, and returned the GC to service. Facility personnel also collected a gas composition reading with a GEM handheld device on October 26, 2023. On October 30, 2023, upon discovery that the GC event began a day earlier than originally determined and the initial RCA form was therefore submitted a day late, Ameresco conducted an additional review of the data. On November 2, 2023, the 10-Day Deviation Report as well as GC/engine flow data from before, during and after the event was provided to BAAQMD. To prevent recurrence of similar issues, Ameresco plans to implement a more robust check of GC operations and data following plant outages to ensure the unit returned to service properly. During investigations of future inoperative monitor events, Ameresco will continue to use the facility's backup data collection system, in addition to the primary data collection system, to verify the data in order to develop a better understanding of the event.

DRAFT HMB 2023-2 SAR 20240117

Final Audit Report

2024-01-17

Created:	2024-01-17
Ву:	Rebecca Sherwood (rsherwood@ameresco.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAx-iVWVR5Jv7OuLN2r4C59yT6yAJZiKQ4

"DRAFT HMB 2023-2 SAR 20240117" History

- Document created by Rebecca Sherwood (rsherwood@ameresco.com) 2024-01-17 4:42:00 PM GMT- IP address: 73.126.75.96
- Document emailed to Nathan Hall (nhall@ameresco.com) for signature 2024-01-17 - 4:43:21 PM GMT
- Email viewed by Nathan Hall (nhall@ameresco.com) 2024-01-17 - 5:15:19 PM GMT- IP address: 166.181.88.116
- Document e-signed by Nathan Hall (nhall@ameresco.com) Signature Date: 2024-01-17 - 5:15:51 PM GMT - Time Source: server- IP address: 104.28.104.161

Agreement completed. 2024-01-17 - 5:15:51 PM GMT