apcd air pollution control district
SANTA BARBARA COUNTY

February 21, 2025

Lindsay Cokeley
County of Santa Barbara - Public Works Dpt
130 E. Victoria Street, Suite 100
Santa Barbara, CA 93101

FID: 11480
Permit: P 14500
SSID: 03707

Re: Part 70 Permit Application 14500 Completeness

Dear Lindsay Cokeley:

On February 21, 2025, the Santa Barbara County Air Pollution Control District (District) determined that your application for Part 70 Permit 14500 for the Tajiguas ReSource Center project at Tajiguas Landfill was complete. The District will make a decision to either issue or deny the permit for the application within 180 days from the completeness date or 180 days after lead agency approval of the project, whichever time period is longer.

Please include the Facility Identification (FID) and Permit numbers shown above on all correspondence regarding this permit application. If you have any questions, please contact me at (805) 979-8314 or MountainC@sbcapcd.org.

Sincerely,

Charlotte Mountain
Engineering Division

cc: County of Santa Barbara - Tajiguas Anaerobic Digestion 11480 Project File
John Hancock
Engr Chron File

\\sbcapcd.org\shares\Groups\ENGR\WP\Landfills & WWT\03707 Tajiguas\FID 11480 Tajiguas Anaerobic Digestion\PTOs\PT-70 14500/Pt70 14500 - PTO Completeness - 2-21-2025.docx

17 Corporate Plaza Drive, Suite 200
Newport Beach, CA 92660
O: 805.259.9499

June 30, 2023

David Harris
Division Manager
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

FID: 11480
Permit: ATC 14500-05(10)

RE: MSB Investors, LLC PTO Application

David,

Attached please find a Permit to Operate (PTO) application for the ReSource Center at the Tajiguas Landfill. Based on our discissions with Kevin Brown, we request the district to combine all outstanding ATC's and modifications into one, single PTO.

Please let us know if we can provide and additional information about this request.

Sincerely,

MSB Investors, LLC

John Dewey
CEO & Managing Member

Print Form

air pollution control district
SANTA BARBARA COUNTY

General Permit Application Form -01

Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110-1315

1. APPLICATION TYPE (check all that apply)**:**

- ☐ Authority to Construct (ATC)
- ☒ Permit to Operate (PTO)
- ☐ ATC Modification
- ☐ PTO Modification
- ☐ Other (Specify) 14500-05
- ☐ Transfer of Owner/Operator (use Form -01T)
- ☐ Emission Reduction Credits
- ☐ Increase in Production Rate or Throughput
- ☐ Decrease in Production Rate or Throughput

Previous ATC/PTO Number (if known)

○ Yes ◉ No Are Title 5 Minor Modification Forms Attached? (this applies to Title 5 sources only and applies to all application types except ATCs and Emission Reduction Credits). Complete Title 5 Form -1302 A1/A2, B, and M. Complete Title 5 Form -1302 C1/C2, D1/D2, E1/E2, F1/F2, G1/G2 as appropriate. http://www.ourair.org/wp-content/uploads/t5-forms.pdf

Mail or email the completed application to the APCD's Engineering Division at the address listed above or permits@sbcapcd.org.

2. FILING FEE:

A $456 application filing fee must be included with each application. The application filing fee is COLA-adjusted every July 1st. Please ensure you are remitting the correct current fee (the current fee schedule is available on the APCD's webpage at: http://www.ourair.org/district-fees). This filing fee will not be refunded or applied to any subsequent application. Payment may also be made by credit card by submitting the Credit Card Authorization Form found here https://www.ourair.org/wp-content/uploads/apcd-01c.pdf via mail or calling 805-979-8050 to pay via phone.

Do not submit the Credit Card Authorization Form via email.

3. IS YOUR PROJECT'S PROPERTY BOUNDARY LOCATED OR PROPOSED TO BE LOCATED WITHIN 1,000 FEET FROM THE OUTER BOUNDARY OF A SCHOOL? If yes, and the project results in an emissions increase, submit a completed Form -03 (*School Summary Form*) http://www.ourair.org/wp-content/uploads/apcd-03.pdf ○ Yes ○ No

If yes, provide the name of school(s)

Address of school(s)

City Zip Code

4. DOES YOUR APPLICATION CONTAIN CONFIDENTIAL INFORMATION? ○ Yes ◉ No

If yes, please submit with a redacted duplicate application which shall be a public document. In order to be protected from disclosure to the public, all information claimed as confidential shall be submitted in accordance with APCD Policy & Procedure 6100-020 (*Handling of Confidential Information*): http://www.ourair.org/wp-content/uploads/6100-020.pdf, and meet the criteria of CA Govt Code Sec 6254.7. Failure to follow required procedures for submitting confidential information, or to declare it as confidential at the time of application, shall be deemed a waiver by the applicant of the right to protect such information from public disclosure. *Note: Part 70 permit applications may contain confidential information in accordance with the above procedures, however, the content of the permit documents must be public (no redactions).*

FOR APCD USE ONLY				DATE STAMP
FID	11480	Permit No.	PT-70 14500	Rec'vd 6/30/2023
Project Name	County of Santa Barbara - Tajiguas Landfill			
Filing Fee	$456		202.E? YES / NO	

CC #6594 John Dewey

5. COMPANY/CONTACT INFORMATION:

Owner Info	○ Yes ○ No	Use as Billing Contact?			
Company Name	Santa Barbara County Public Works Department				
Doing Business As	Resource Recovery & Waste Management				
Contact Name	Marty Wilder	Position/Title	Deputy Director		
Mailing Address	12110 East Victoria Street				
City	Santa Barbara	State	CA	Zip Code	93101
Telephone	908-882-3600	Cell		Email	mwilder@countyofsb.org

Operator Info	○ Yes ○ No	Use as Billing Contact?			
Company Name	MSB Investors, LLC				
Doing Business As					
Contact Name	John Dewey	Position/Title	CEO		
Mailing Address	17 Corporate Plaza Dr.				
City	Newport Beach	State	CA	Zip Code	92660
Telephone	805-259-9499	Cell		Email	john@deweygroup.com

Authorized Agent Info*	◉ Yes ○ No	Use as Billing Contact?			
Company Name	MSB Investors, LLC				
Doing Business As					
Contact Name	John Dewey	Position/Title	CEO		
Mailing Address	17 Corporate Plaza Dr.				
City	Newport Beach	State	CA	Zip Code	92660
Telephone	805-259-9499	Cell		Email	john@deweygroup.com

*Use this section if the application is not submitted by the owner/operator. Complete APCD Form -01A (http://www.ourair.org/wp-content/uploads/apcd-01a.pdf). Owner/Operator information above is still required.

SEND PERMITTING CORRESPONDENCE TO *(check all that apply)*:

- ☐ Owner
- ☐ Operator
- ☒ Authorized Agent
- ☐ Other (attach mailing information)

6. GENERAL NATURE OF BUSINESS OR AGENCY:

The ReSource Center separates incoming MSW into organics, recyclables and residue. The organics are digested in the Anaerobic Digestion Facility (ADF). Digestate is processed/cured into soil amendments/compost. The recyclables are sent to market. The residue leftover is landfilled.

7. EQUIPMENT LOCATION (Address):

Specify the street address of the proposed or actual equipment location. If the location does not have a designated address, please specify the location by cross streets, or lease name, UTM coordinates, or township, range, and section.

Equipment Address: 14470 Calle Real

City: Goleta State: CA Zip Code: 93117

Work Site Phone:

(●) Incorporated (within city limits) ( ) Unincorporated (outside city limits) ( ) Used at Various Locations

Assessors Parcel No(s): 081-150-019

8. PROJECT DESCRIPTION:

(Describe the equipment to be constructed, modified and/or operated or the desired change in the existing permit. Attach a separate page if needed):

As set forth in ATC modification 14500-10, recently deemed completed by district engineering.

9. DO YOU REQUIRE A LAND USE PERMIT OR OTHER LEAD AGENCY PERMIT FOR THE PROJECT DESCRIBED IN THIS APPLICATION?: ( ) Yes ( ) No

A. If **yes,** please provide the following information

Agency Name	Permit #	Phone #	Permit Date
SB County Public Works	12EIR-00000-00002	805-568-3000	11/14/2017

* The lead agency is the public agency that has the principal discretionary authority to approve a project. The lead agency is responsible for determining whether the project will have a significant effect on the environment and determines what environmental review and environmental document will be necessary. The lead agency will normally be a city or county planning agency or similar, rather than the Air Pollution Control District.

B. If **yes,** has the lead agency permit application been deemed complete and is a copy of their completeness letter attached?

( ) Yes (●) No

Please note that the APCD will not deem your application complete until the lead agency application is deemed complete.

C. If the lead agency permit application has not been deemed complete, please explain.

D. A copy of the final lead agency permit or other discretionary approval by the lead agency may be requested by the APCD as part of our completeness review process.

10. PROJECT STATUS:

A. Date of Equipment Installation: 6/29/2023

B. Have you been issued a Notice of Violation (NOV) for not obtaining a permit for this equipment/modification *and/or* have you installed this equipment without the required APCD permit(s)? If yes, the application filing is double per Rule 210. ○ Yes ◉ No

C. Is this application being submitted due to the loss of a Rule 202 exemption? ○ Yes ◉ No

D. Will this project be constructed in multiple phases? If yes, attach a separate description of the nature and extent of each project phase, including the associated timing, equipment and emissions. ○ Yes ◉ No

E. Is this application also for a change of owner/operator? If yes, please also include a completed APCD Form -01T. ○ Yes ○ No

11. APPLICANT/PREPARER STATEMENT:

The person who prepares the application also must sign the permit application. The preparer may be an employee of the owner/operator or an authorized agent (contractor/consultant) working on behalf of the owner/operator (an *Authorized Agent Form -01A* is required).

I certify pursuant to H&SC Section 42303.5 that all information contained herein and information submitted with this application is true and correct.

Signature of application preparer	Date
John Dewey	6/29/2023

Print name of application preparer	Employer name
John Dewey	MSB Investors, LLC

12. APPLICATION CHECKLIST (*check all that apply*)

☒ Application Filing Fee (Fee = $456. The application filing fee is COLA adjusted every July 1st. Please ensure you are remitting the current fee.) As a convenience to applicants, the APCD will accept credit card payments. If you wish to use this payment option, please complete a *Credit Card Form-01C* https://www.ourair.org/wp-content/uploads/apcd-01c.pdf and submit it via mail or call 805-979-8050 to pay over the phone. **Do not submit the *Credit Card Form-01C* via email**.

☐ Existing permitted sources may request that the filing fee be deducted from their current reimbursable deposits by checking this box. Please deduct the filing fee from my existing reimbursement account.

☐ Form -01T (*Transfer of Owner/Operator*) attached if this application also addresses a change in owner and/or operator status from what is listed on the current permit. http://www.ourair.org/wp-content/uploads/apcd-01t.pdf

☐ Form -03 (*School Summary Form*) attached if the project's property boundary is within 1,000 feet of the outer boundary of a school (k-12) and the project results in an emissions increase. http://www.ourair.org/wp-content/uploads/apcd-03.pdf

☐ Information required by the APCD for processing the application as identified in APCD Rule 204 (*Applications*), the APCD's *General APCD Information Requirements List* (https://www.ourair.org/wp-content/uploads/gen-info.pdf), and any of the APCD's Process/Equipment Summary Forms (http://www.ourair.org/permit-applications) that apply to the project.

☐ Form -01A (*Authorized Agent Form*) attached if this application was prepared by and/or if correspondence is requested to be sent to an Authorized Agent (e.g., contractor or consultant). This form must accompany each application. http://www.ourair.org/wp-content/uploads/apcd-01a.pdf

☐ Confidential Information submitted according to APCD Policy & Procedure 6100-020. (*Failure to follow Policy and Procedure 6100-020 is a waiver of right to claim information as confidential.*)

13. NOTICE OF CERTIFICATION:

All applicants must complete the following Notice of Certification. This certification must be signed by the Authorized Company Representative representing the owner/operator. Signatures by Authorized Agents will not be accepted.

NOTICE of CERTIFICATION

I, John Dewey , am employed by or represent

Type or Print Name of Authorized Company Representative

MSB Investors, LLC

Type or Print Name of Business, Corporation, Company, Individual, or Agency

(hereinafter referred to as the applicant), and certify pursuant to H&SC Section 42303.5 that all information contained herein and information submitted with this application is true and correct and the equipment listed herein complies or can be expected to comply with said rules and regulations when operated in the manner and under the circumstances proposed. If the project fees are required to be funded by the cost reimbursement basis, as the responsible person, I agree that I will pay the Santa Barbara County Air Pollution Control District the actual recorded cost, plus administrative cost, incurred by the APCD in the processing of the application within 30 days of the billing date. If I withdraw my application, I further understand that I shall inform the APCD in writing and I will be charged for all costs incurred through closure of the APCD files on the project.

For applications submitted for Authority to Construct, modifications to existing Authority to Construct, and Authority to Construct/Permit to Operate permits, I hereby certify that all major stationary sources in the state and all stationary sources in the air basin which are owned or operated by the applicant, or by an entity controlling, controlled by, or under common control with the applicant, are in compliance, or are on approved schedule for compliance with all applicable emission limitations and standards under the Clean Air Act (42 USC 7401 *et seq.*) and all applicable emission limitations and standards which are part of the State Implementation Plan approved by the Environmental Protection Agency.

Completed By: John Dewey Title: CEO

Date: 6/29/2023 Phone: 805-259-9499

Signature of Authorized Company Representative John Dewey

PLEASE NOTE THAT FAILURE TO COMPLETELY PROVIDE ALL REQUIRED INFORMATION OR FEES WILL RESULT IN YOUR APPLICATION BEING RETURNED OR DEEMED INCOMPLETE.

SANTA BARBARA COUNTY
Resource Recovery &
Waste Management Division
Innovative Environmental Solutions

Chris Sneddon, P.E.
Public Works Director

Jeanette Gonzales-Knight, P.E.
Deputy Director

January 27, 2025

Charlotte Mountain
Santa Barbara County Air Pollution Control District
260 N San Antonio Rd Suite A
Santa Barbara, CA 93110

FID: 11480

Re: Response to Incompleteness Letter for Permit to Operate Application 14500

Dear Charlotte Mountain,

The County of Santa Barbara Public Works Resource Recovery and Waste Management Division is providing the below response to the Incomplete Permit to Operate Application 14500 letter which was received on January 9, 2024. Please see the list below for our responses to the incompleteness items referenced in the letter.

PTO 14500 Incompleteness Item List

1. *ATC Mod 14500-05 Condition C.21.b*

   This permit condition requires submission of data for CEMS downtime and CEMS detected excess emissions on a quarterly basis. The District has not received this data since issuance of the ATC. Please submit a downtime report and an excess emissions report.

   The quarterly CEMS downtime and CEMS detected excess emissions report has not been retrieved to date. The County is working with CEMTEK to develop a quarterly report as soon as possible and will send them as soon as they become available.

2. *ADF Ammonia CEMS Report*

   On 9/12/2023, an Ammonia CEMS report was submitted by John Dewey in response to an incompleteness letter issued on 7/26/2023. This report shows exceedances in Ammonia (ppmv) per Table 4.5 of ATC Mod 14500-05. Please submit an ATC to increase the Ammonia limit or to install Ammonia controls. In addition, this report only includes data for the ADF facility. Please include the Ammonia CEMS report for the MRF facility.

ATC 14500-10 was issued for the Tajiguas Resource Center in May of 2024. Table 4.7 of ATC 14500-10 includes the same ammonia limits as ATC 14500-05 Table 4.5. The MRF CHP engines were source tested in November and did not exceed the ammonia limit specified in the permit. The ADF engines are due to be tested in March of this year.

Additionally, CEMS data for both the MRF and ADF engines are being transmitted to the district through monthly variance reports. The next report will be submitted on February 15, 2025.

3. *CEMS Plan*

a. *Section 4.7.1 Calibration Procedures*
Calibration of the analyzer is required on a monthly basis. Please provide calibration records.

The County is working with CEMTEK to provide the missing reports and information.

b. *Section 6.2.3 Cylinder Gas Audit*
Cylinder Gas Audit (CGA) Reports are required to be conducted on concentration analyzers for three out of four quarters. The following reports have been received by the District:

Q2 2022 CEMS CGA Report
Q3 2022 CEMS CGA Report
Q4 2022 CEMS CGA Report
Q1 2023 CEMS CGA Report

However, each of these reports are missing measurements for Ammonia in [lb/hr] and [ppmv]. Please provide the Ammonia measurements for each of these reports, and also the CGA Reports for Q2 – Q4 of 2023. In addition, these reports only include data for the ADF Engines. Please include the CGA Reports for concentration analyzers on the MRF Engines.

Please see attached email correspondence regarding the Cylinder Gas Audits in addition to the CGA reports we currently have on file. We are working with CEMTEK to ensure that the correct reports are compiled and submitted.

c. *Data Acquisition and Reporting*
Please submit all required reports per Section 7 of the CEMS Plan, including a quarterly written summary report, quarterly emission totals, data recovery efficiency, and audit reports.

The County is working with CEMTEK to provide the missing reports and information.

If you have any questions please contact me at LCokeley@countyofsb.org or John Hancock at jhancoc@countyofsb.org.

Sincerely,

Lindsay Cokeley
Regulatory Compliance Manager II
Santa Barbara County Public Works
Resource Recovery and Waste Management Division

Attachments: 2025.01 CEMTEK Report Email Correspondence
Q2 2023 Cylinder Gas Audit
Q3 2023 Cylinder Gas Audit
Q3 2024 Cylinder Gas Audit
Q4 2024 Cylinder Gas Audit

Continuous Emissions Monitoring System (CEMS)

Second Quarter Test Report

Cylinder Gas Audit

Test Date(s): June 29 and 30, 2023
CEMTEK Project No.: SN00170A

Prepared for:

Tajiguas Resource Recovery Project
Anaerobic Digesting Facility (ADF), Units A and B
Goleta, CA

Prepared by:

CEMTEK KVB-Enertec

3041 S. Orange Avenue, Santa Ana, CA 92707 • Phone: 714-437-7100 • Fax: 714-437-7177 • Toll Free: 888-400-0200
2849 Sterling Drive, Hatfield, PA 19440 • Phone: 215-996-9200 • Fax: 330-860-8982 • Tech Support Phone: 800-582-1670
Houston, TX Office • Phone: 281-729-8228

Contents

1 Introduction

This quarterly audit report outlines the procedures and results of the Cylinder Gas Audit (CGA) check performed on the monitors at this facility. All testing was done in accordance with 40 CFR 60, Appendix F Procedure 1.

Tajiguas Landfill is located at 14470 Calle Real in Goleta, California that is approximately 26 miles west of the City of Santa Barbara. The landfill began receiving refuse in 1967 to serve the City of Santa Barbara, City of Goleta, unincorporated areas of Montecito and Summerland, rural areas of southern Santa Barbara County, the Santa Ynez Valley and Cuyama Valley. It is located in a canyon known as Cañada de la Pila. Immediately south of the landfill site are U.S. Highway 101, which provides access to the site, Union Pacific Railroad tracks, and the Pacific Ocean. The southern portion of the site is within the California Coastal Zone. For District regulatory purposes, the facility location is in the Southern Zone of Santa Barbara County.

Municipal solid waste (MSW) is delivered to a tipping area inside the Material Recovery Facility (MRF) building at Tajiguas. The material is subsequently sorted into organics, recyclables, and residue in the materials sorting area. Recyclables collected in the materials sorting area are sold to the market while waste residue is landfilled. The sorted organics are placed in the anaerobic digesters to generate biogas in the Anaerobic Digester Facility (ADF). The biogas is treated and combusted in combined heat and power (CHP) internal combustion (IC) engines for power generation, or an enclosed flare located at the ADF. Following biogas generation, the digestate is processed into soil amendments and compost at the Compost Management Unit (CMU). The MRF, ADF, and CMU are designed and constructed by MSB and owned by Santa Barbara County Public Works Department (SBCPWD). The MRF is operated by MarBorg Industries.

The ADF and CMU are operated by Mustang and Bekon. The waste residue placed in the landfill generates LFG in the subsurface landfill through anaerobic biological decomposition. The LFG is collected onsite using a vapor extraction system and handled using a collection and transportation system. A leachate management system collects the groundwater found in the landfill subsurface. The LFG is scrubbed of moisture, particulates, and hydrogen sulfide. The landfill, LFG collection system, hydrogen sulfide scrubber system, and leachate management system are owned and operated by the SBCPWD and permitted separately under PT-70/Reeval 9788-R4.

Currently, treated LFG is combusted an onsite enclosed flare or IC engine that are respectively owned and operated by NEO Tajiguas LLC (NEOT) and MM Tajiguas Energy LLC (MMTE). The LFG treatment system, two LFG-fired CHP engines, and MRF enclosed flare subject to the ATC 14500-02 permit will replace the existing equipment.

Two of the processes involved at the stationary source are as follows:

Anaerobic Digestion Facility: The organic (food and green) waste from the MRF is placed into digesters. An anaerobic digestion process generates biogas. This biogas is sent to the ADF combustion equipment. After the anaerobic digestion process is complete, the residual organic waste is sent to the CMU.

Anaerobic Digestion Facility Combustion Equipment: Biogas from the ADF digesters is sent to two CHP engines to produce electricity to the grid and for onsite needs. Treated LFG is used as a supplemental fuel. If one of the engines is offline or if one of the ADF digesters is being purged, biogas is routed to the ADF enclosed flare.

2 Monitor Information

The following table provides information on the monitors that were subject to this test program.

ADF Unit A

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1301
CO	TAPI T300M	0-150/0-300 ppm	668

ADF Unit B

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1302
CO	TAPI T300M	0-150/0-300 ppm	669

3 Summary of Results

The results for the Cylinder Gas Audit (CGA) checks performed on the facility monitors are summarized in the following results table.

Table 1: Unit A CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = 0.00% Mid = -0.97%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/30/23
NO_X High range	Low = 0.03% Mid = -0.61%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/29/23
CO Low range	Low = 1.57% Mid = 0.65%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/29/23
CO High range	Low = 2.49% Mid = 2.19	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/29/23
O_2	Low = 0.46% Mid = -0.33%	≤15% (40 CFR 60, Appendix F)	Pass	6/29/23

Table 2: Unit B CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = -0.42% Mid = -2.46%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/30/23
NO_X High range	Low = 6.18% Mid = 1.33%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/29/23
CO Low range	Low = -2.46% Mid = -2.16%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/29/23
CO High range	Low = 6.47% Mid = 6.03%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	6/29/23
O_2	Low = 0.86% Mid = 0.07%	≤15% (40 CFR 60, Appendix F)	Pass	6/29/23

4 Cylinder Gas Audit Test Procedure

The Cylinder Gas Audit (CGA) is performed for each pollutant concentration monitor at least once during each unit operating quarter based on the requirements of 40 CFR 60, Appendix F. CGAs are conducted in three consecutive quarters. Separate calibration gas cylinders are used for each concentration during the audit.

1. All audit gas cylinders are connected to the proper transport lines. EPA Protocol certified gases are used. Cylinders are checked to ensure that each audit gas has at least 200 psi.
2. The analyzers are challenged with an audit gas of known concentration at two points within the following concentration ranges (40 CFR 60, Appendix F):

Audit Point	***Pollutant Monitors*** ***% of span***	***O_2*** ***% by volume***
Low level	20-30% of span	4-6% by volume
Mid Level	50-60% of span	8-12% by volume

3. The analyzers are challenged three times at each audit point. Calibration gas injections are done alternately between the two audit values. The average of the three responses for each audit point is used in determining accuracy. The monitor is challenged at each audit point for a sufficient time to assure that any absorption-desorption phenomena at the CEMS sample transport surfaces have stabilized. The injection time also takes into account the response time of the analyzers and sample system.

4. Each monitor is operated in its normal sampling mode, that is, the audit gas passes through all filters, scrubbers, conditioners, and other monitor components used during normal sampling, and through as much of the sampling probe as is practical.
5. The difference between the actual concentration of the audit gas and the concentration indicated by the monitor will determine the accuracy of the CEMS.

The accuracy values for each concentration should not exceed 15% of reference value as the primary pass/fail criteria. As of May 30, 2023, the EPA has implemented an alternate pass/fail for pollutant analyzers using a tiered approached based on analyzer range as follows (reference 40 CFR 60, Appendix F, Procedure 1, section 5.2.3):

Analyzer range	*Alternate criteria, ppm difference*
>50 ppm	±5 ppm
≤50 ppm but >20 ppm	±3 ppm
≤20 ppm	±2 ppm

Cylinder Gas Audit Accuracy 40 CFR 60, Appendix F, Section 6.3	
$A = \frac{C_m - C_a}{C_a}\ x100$	A = Percent accuracy of the CEM C_m = The average monitor response to the specific audit gas (high or low) in units of concentration C_a = Certified value of audit gas (value according to EPA Protocol certification) in units of concentration

5 Worksheets and Supporting Documentation

The attached pages contain worksheets and supporting documentation for the CGA checks.

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **06/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	30
Test Date:	06/30/23

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	7.99	26.63	OK	DT0036234	04/15/24	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**07:48**	**8.54**	**07:53**	**17.25**
2	**07:56**	**7.83**	**08:02**	**16.92**
3	**08:05**	**7.60**	**08:10**	**16.93**
Average Response (Cm)		7.99		17.03
Difference (Cm-Ca)		0.00		-0.17
Status (for alt. criteria of +/-3 ppm difference)		PASS		PASS
Accuracy %, ((Cm-Ca)/Ca) * 100		**0.00**		**-0.97**
Status (for primary criteria of 15%)		PASS		PASS

range >20 but ≤ 50 ppm

Cylinder Gas Audit - NOx High Range

Analyzer Range:	100
Test Date:	06/29/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	25.8	25.80	OK	CC324929	04/16/24	OK
Mid	55.5	55.50	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**16:30**	**25.95**	**16:36**	**55.23**
2	**16:42**	**25.75**	**16:46**	**55.18**
3	**16:57**	**25.72**	**17:02**	**55.07**
Average Response (Cm)		25.81		55.16
Difference (Cm-Ca)		0.01		-0.34
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS
Accuracy %, ((Cm-Ca)/Ca) * 100		**0.03**		**-0.61**
Status (for primary criteria of 15%)		PASS		PASS

range > than 50 ppm

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **06/30/23**

Manufacturer: TAPI
Model: T300M
Serial Number: 668
Analyzer Range: 150
Test Date: 06/29/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.3	26.87	OK	CC324929	04/16/24	OK
Mid	80.6	53.73	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**16:31**	**40.87**	**16:35**	**81.06**
2	**16:42**	**40.92**	**16:47**	**81.12**
3	**16:56**	**41.01**	**17:01**	**81.18**
	Average Response (Cm)	40.93		81.12
	Difference (Cm-Ca)	0.63		0.52
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**1.57**		**0.65**
Status (for primary criteria of 15%)		PASS		PASS

Cylinder Gas Audit - CO High Range

Analyzer Range: 300
Test Date: 06/29/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	80.4	26.80	OK	EB0012199	09/16/30	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**15:38**	**82.5**	**15:43**	**172.7**
2	**15:46**	**82.5**	**15:51**	**172.8**
3	**15:55**	**82.2**	**15:58**	**172.9**
	Average Response (Cm)	82.40		172.80
	Difference (Cm-Ca)	2.00		3.70
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**2.49**		**2.19**
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **06/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	25
Test Date:	06/29/23

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.02	OK	EB0012199	09/16/30	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**15:38**	**5.04**	**15:43**	**10.00**
2	**15:46**	**5.05**	**15:51**	**10.00**
3	**15:54**	**5.04**	**15:58**	**10.00**
Average Response (Cm)		5.04		10.00
Difference (Cm-Ca)		0.02		-0.03
Accuracy %, ((Cm-Ca)/Ca) * 100		0.46		-0.30
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Average Values Report
Generated: 6/30/2023 08:31

Company: ~~Cemtek KVB-Enertec~~ **Mustang Renewable Power Ventures**
Plant: **Tajiguas Landfill**
City/St: ~~Santa Ana, CA 92707~~ **Goleta, CA**
Source: ADF2

Period Start: 6/30/2023 07:30
Period End: 6/30/2023 08:30
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_O2 %	Average A2_NOxLo ppm	Average A2_NOxHi ppm	Average A2_COLo ppm	Average A2_COHi ppm
06/30/2023 07:30	0.00	11.22	11.80	10.87	11.9
06/30/2023 07:31	0.00	9.98	10.49	6.11	7.0
06/30/2023 07:32	0.18	9.72	10.20	12.62	13.8
06/30/2023 07:33	-0.01	15.92	16.73	9.50	10.6
06/30/2023 07:34	1.72	23.35	26.06	83.28	141.4
06/30/2023 07:35	-0.02	27.52	28.94	11.25	12.4
06/30/2023 07:36	-0.02	27.20	28.62	6.39	7.1
06/30/2023 07:37	-0.01	27.07	28.58	6.47	7.2
06/30/2023 07:38	8.22	22.90	24.28	39.36	69.8
06/30/2023 07:39	22.51	3.80	4.00	N/A	261.6
06/30/2023 07:40	22.53	1.01	1.05	N/A	269.9
06/30/2023 07:41	22.53	0.33	1.01	N/A	268.9
06/30/2023 07:42	7.40	14.56	15.88	59.12	149.0
06/30/2023 07:43	0.00	25.96	27.56	9.47	10.5
06/30/2023 07:44	1.27	26.13	27.73	8.49	50.5
06/30/2023 07:45	6.84	30.22	40.18	N/A	N/A
06/30/2023 07:46	0.05	21.37	22.86	46.54	78.2
06/30/2023 07:47	0.01	8.79	9.94	7.68	8.6
06/30/2023 07:48	0.00	8.30	9.49	6.37	7.3
06/30/2023 07:49	0.23	8.18	9.37	13.42	11.9
06/30/2023 07:50	0.11	13.26	14.56	23.62	24.5
06/30/2023 07:51	-0.01	16.93	18.29	6.76	7.6
06/30/2023 07:52	0.00	16.91	18.29	6.47	7.3
06/30/2023 07:53	-0.01	16.90	18.27	6.24	7.0
06/30/2023 07:54	0.11	12.46	13.72	15.49	16.9
06/30/2023 07:55	0.00	7.86	9.03	6.41	7.2
06/30/2023 07:56	0.00	7.82	8.99	6.11	6.9
06/30/2023 07:57	0.00	7.81	8.97	5.97	6.7
06/30/2023 07:58	0.00	10.01	11.21	6.25	7.0
06/30/2023 07:59	-0.02	16.72	18.11	6.07	7.0
06/30/2023 08:00	-0.01	16.76	18.12	5.96	6.8
06/30/2023 08:01	-0.01	16.77	18.11	5.97	6.9
06/30/2023 08:02	0.00	16.05	17.40	6.09	7.0
06/30/2023 08:03	0.00	7.84	9.00	6.05	6.9
06/30/2023 08:04	0.00	7.77	8.93	6.12	6.9
06/30/2023 08:05	0.00	7.76	8.92	6.11	6.8
06/30/2023 08:06	0.03	7.75	8.89	7.39	8.3
06/30/2023 08:07	0.07	14.42	15.72	14.73	16.1
06/30/2023 08:08	-0.01	16.68	18.03	6.23	7.1
06/30/2023 08:09	-0.01	16.66	18.02	5.96	6.8
06/30/2023 08:10	-0.01	16.65	18.00	5.99	6.7
06/30/2023 08:11	4.99	22.51	24.01	76.00	83.0
06/30/2023 08:12	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:13	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:14	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:15	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:16	7.64	N/A	51.15	N/A	N/A
06/30/2023 08:17	7.63	N/A	57.14	N/A	N/A
06/30/2023 08:18	7.60	N/A	62.39	N/A	N/A
06/30/2023 08:19	7.66	N/A	55.97	N/A	N/A
06/30/2023 08:20	7.64	N/A	53.05	N/A	N/A
06/30/2023 08:21	7.63	N/A	54.68	N/A	N/A
06/30/2023 08:22	7.61	N/A	57.49	N/A	N/A
06/30/2023 08:23	7.59	N/A	63.40	N/A	N/A
06/30/2023 08:24	7.64	N/A	58.18	N/A	N/A
06/30/2023 08:25	7.67	N/A	51.61	N/A	N/A
06/30/2023 08:26	7.63	N/A	52.20	N/A	N/A
06/30/2023 08:27	7.62	N/A	57.21	N/A	N/A
06/30/2023 08:28	7.61	N/A	62.70	N/A	N/A
06/30/2023 08:29	7.68	N/A	53.81	N/A	N/A
06/30/2023 08:30	7.69	N/A	50.10	N/A	N/A
Final Average*	**3.85**	**13.43**	**27.49**	**13.78**	**37.0**
Maximum*	**22.53**	**30.22**	**63.40**	**83.28**	**269.9**
	06/30/2023 7:41	06/30/2023 7:45	06/30/2023 8:23	06/30/2023 7:34	06/30/2023 7:40
Minimum*	**-0.02**	**0.00**	**1.01**	**0.00**	**0.0**
	06/30/2023 7:59	06/30/2023 8:15	06/30/2023 7:41	06/30/2023 8:15	06/30/2023 8:15

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 6/30/2023 08:22

Company: ~~Cemtek KVB-Enertec~~ **Mustang Renewable Power Ventures**
Plant: **Tajiguas Landfill**
City/St: ~~Santa Ana, CA 92707~~ **Goleta, CA**
Source: ADF1

Period Start: 6/29/2023 15:20
Period End: 6/29/2023 18:00
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_O2 %	Average A1_NOxLo ppm	Average A1_NOxHi ppm	Average A1_COLo ppm	Average A1_COHi ppm
06/29/2023 15:20	11.04	26.15	31.88	143.38	193.9
06/29/2023 15:21	18.36	16.64	20.23	105.52	141.8
06/29/2023 15:22	17.69	12.50	15.15	86.89	116.0
06/29/2023 15:23	16.57	11.91	14.43	34.06	43.3
06/29/2023 15:24	18.43	2.90	3.32	14.23	17.8
06/29/2023 15:25	17.33	9.67	11.66	15.64	19.6
06/29/2023 15:26	20.85	0.56	0.42	5.18	6.4
06/29/2023 15:27	20.88	0.31	0.14	1.83	2.3
06/29/2023 15:28	20.89	0.27	0.09	1.33	1.6
06/29/2023 15:29	20.89	0.17	-0.06	1.04	1.4
06/29/2023 15:30	20.89	0.09	-0.14	0.93	1.2
06/29/2023 15:31	20.89	0.04	-0.20	0.94	1.2
06/29/2023 15:32	20.89	0.01	-0.24	0.91	1.2
06/29/2023 15:33	19.70	-0.03	-0.28	1.10	1.4
06/29/2023 15:34	5.64	0.55	0.46	53.58	69.1
06/29/2023 15:35	5.06	-0.13	-0.40	63.36	82.4
06/29/2023 15:36	5.05	-0.16	-0.43	63.42	82.5
06/29/2023 15:37	5.04	-0.17	-0.44	63.48	82.5
06/29/2023 15:38	5.04	-0.18	-0.47	63.48	82.5
06/29/2023 15:39	5.04	-0.20	-0.48	63.45	82.4
06/29/2023 15:40	7.81	-0.21	-0.51	84.86	112.5
06/29/2023 15:41	10.01	-0.23	-0.53	127.49	171.4
06/29/2023 15:42	10.00	-0.25	-0.55	128.53	172.7
06/29/2023 15:43	10.00	-0.26	-0.55	128.50	172.7
06/29/2023 15:44	7.07	-0.27	-0.55	81.42	107.9
06/29/2023 15:45	5.05	-0.26	-0.58	63.62	82.7
06/29/2023 15:46	5.05	-0.27	-0.57	63.44	82.5
06/29/2023 15:47	5.04	-0.28	-0.59	63.51	82.6
06/29/2023 15:48	9.27	-0.28	-0.61	96.09	128.0
06/29/2023 15:49	10.01	-0.29	-0.61	128.25	172.4
06/29/2023 15:50	10.00	-0.32	-0.62	128.49	172.7
06/29/2023 15:51	10.00	-0.31	-0.62	128.55	172.8
06/29/2023 15:52	9.62	-0.32	-0.62	117.06	157.2
06/29/2023 15:53	5.05	-0.33	-0.63	66.04	86.2
06/29/2023 15:54	5.04	-0.33	-0.64	63.54	82.6
06/29/2023 15:55	5.51	-0.32	-0.62	63.40	82.2
06/29/2023 15:56	10.20	-0.34	-0.65	108.14	145.1
06/29/2023 15:57	9.99	-0.34	-0.66	128.47	172.6
06/29/2023 15:58	10.00	-0.35	-0.68	128.59	172.9
06/29/2023 15:59	13.27	-0.35	-0.65	97.32	132.5
06/29/2023 16:00	20.79	-0.34	-0.66	5.35	8.0
06/29/2023 16:01	20.29	-0.32	-0.63	7.59	9.5
06/29/2023 16:02	20.75	-0.32	-0.65	4.66	5.9
06/29/2023 16:03	20.53	-0.35	-0.66	3.36	4.2
06/29/2023 16:04	1.25	18.40	22.38	31.57	40.0
06/29/2023 16:05	0.03	25.17	30.68	32.68	41.5
06/29/2023 16:06	0.03	25.31	30.85	32.67	41.4
06/29/2023 16:07	0.11	25.36	51.55	50.60	65.2
06/29/2023 16:08	8.24	25.63	37.16	18.52	23.4
06/29/2023 16:09	4.76	12.78	17.12	18.88	24.4
06/29/2023 16:10	0.03	-99.99	54.00	99.73	134.1
06/29/2023 16:11	0.01	-99.99	-99.99	103.81	139.5
06/29/2023 16:12	0.01	-99.99	-99.99	131.49	139.6
06/29/2023 16:13	7.30	1.00	1.00	97.88	101.2
06/29/2023 16:14	20.82	0.45	0.31	3.91	4.1
06/29/2023 16:15	6.34	10.66	12.85	28.61	29.1
06/29/2023 16:16	0.04	25.58	31.15	40.72	41.4
06/29/2023 16:17	0.02	25.61	31.19	40.72	41.3
06/29/2023 16:18	4.19	25.63	31.24	37.21	37.9
06/29/2023 16:19	2.63	18.06	44.15	59.42	60.6
06/29/2023 16:20	0.01	-99.99	67.07	80.74	82.6
06/29/2023 16:21	0.01	-99.99	67.21	80.91	82.6
06/29/2023 16:22	0.01	-99.99	67.22	80.91	82.6

Period Start:	Average A1_O2 %	Average A1_NOxLo ppm	Average A1_NOxHi ppm	Average A1_COLo ppm	Average A1_COHi ppm
06/29/2023 16:23	5.23	28.25	48.86	79.46	81.0
06/29/2023 16:24	0.02	-99.99	-99.99	135.48	138.1
06/29/2023 16:25	0.02	-99.99	90.34	137.04	139.7
06/29/2023 16:26	0.02	-99.99	90.35	137.18	139.8
06/29/2023 16:27	6.72	-99.99	84.01	135.88	138.5
06/29/2023 16:28	16.86	16.39	22.22	134.47	179.8
06/29/2023 16:29	1.36	25.50	25.50	69.26	87.9
06/29/2023 16:30	0.03	25.96	25.95	42.45	43.3
06/29/2023 16:31	0.03	25.86	25.87	40.87	41.6
06/29/2023 16:32	0.06	25.76	25.75	41.07	41.9
06/29/2023 16:33	0.24	25.73	45.20	75.28	77.4
06/29/2023 16:34	0.01	-99.99	55.15	81.03	82.6
06/29/2023 16:35	0.02	-99.99	55.22	81.06	82.8
06/29/2023 16:36	0.02	-99.99	55.23	80.99	82.7
06/29/2023 16:37	0.00	-99.99	55.20	81.03	82.8
06/29/2023 16:38	0.00	-99.99	55.24	81.08	82.7
06/29/2023 16:39	0.05	-99.99	55.26	80.62	82.3
06/29/2023 16:40	0.02	25.97	28.46	44.40	45.1
06/29/2023 16:41	0.01	25.78	25.78	40.97	41.6
06/29/2023 16:42	0.02	25.75	25.75	40.92	41.6
06/29/2023 16:43	0.07	25.70	37.85	61.63	62.8
06/29/2023 16:44	0.02	-99.99	55.10	80.88	82.5
06/29/2023 16:45	0.01	-99.99	55.19	81.06	82.8
06/29/2023 16:46	0.01	-99.99	55.18	81.14	82.8
06/29/2023 16:47	0.01	-99.99	55.20	81.12	82.8
06/29/2023 16:48	4.20	-99.99	48.84	99.02	173.9
06/29/2023 16:49	0.02	-99.99	55.54	85.55	87.3
06/29/2023 16:50	2.93	-99.99	55.23	96.18	127.7
06/29/2023 16:51	4.68	-99.99	49.65	106.26	153.6
06/29/2023 16:52	0.02	-99.99	55.48	82.73	84.4
06/29/2023 16:53	0.02	-99.99	55.35	81.21	83.0
06/29/2023 16:54	0.08	26.02	50.35	72.64	74.2
06/29/2023 16:55	0.01	25.84	25.84	42.15	42.8
06/29/2023 16:56	0.02	25.72	25.72	41.01	41.6
06/29/2023 16:57	0.02	25.71	25.72	40.97	41.6
06/29/2023 16:58	0.06	25.68	32.94	59.73	60.9
06/29/2023 16:59	0.02	-99.99	54.98	80.79	82.4
06/29/2023 17:00	0.02	-99.99	55.10	81.08	82.8
06/29/2023 17:01	0.01	-99.99	55.05	81.18	82.8
06/29/2023 17:02	0.04	-99.99	55.07	81.24	83.0
06/29/2023 17:03	11.25	-99.99	41.36	148.95	191.9
06/29/2023 17:04	13.57	-99.99	36.88	-99.99	N/A
06/29/2023 17:05	13.00	32.23	41.31	161.35	322.7
06/29/2023 17:06	13.72	32.24	38.87	161.35	322.7
06/29/2023 17:07	13.52	32.24	37.76	161.27	322.6
06/29/2023 17:08	13.29	32.23	39.73	161.29	322.7
06/29/2023 17:09	13.37	32.23	38.36	161.33	322.6
06/29/2023 17:10	13.54	-77.95	37.86	-56.45	-779.5
06/29/2023 17:11	11.06	20.14	24.79	0.00	0.0
06/29/2023 17:12	13.71	32.24	36.65	161.37	322.8
06/29/2023 17:13	13.75	32.24	38.79	161.34	322.7
06/29/2023 17:14	14.02	32.24	37.47	161.35	322.7
06/29/2023 17:15	13.88	32.24	39.19	161.31	322.7
06/29/2023 17:16	13.55	-99.99	39.31	-99.99	N/A
06/29/2023 17:17	10.66	29.18	29.18	105.48	216.8
06/29/2023 17:18	6.54	-99.99	60.93	142.56	199.1
06/29/2023 17:19	13.78	32.24	35.01	161.33	322.7
06/29/2023 17:20	13.49	32.24	39.99	161.28	322.6
06/29/2023 17:21	14.08	32.23	36.57	161.29	322.6
06/29/2023 17:22	14.19	32.22	34.14	161.31	322.6
06/29/2023 17:23	14.06	32.23	35.71	161.33	322.6
06/29/2023 17:24	13.94	32.23	37.11	161.32	322.6
06/29/2023 17:25	13.83	32.23	38.43	161.31	322.6
06/29/2023 17:26	13.96	32.23	37.73	161.32	322.7
06/29/2023 17:27	14.11	32.24	37.69	161.26	322.6
06/29/2023 17:28	13.68	32.23	39.14	161.33	322.7
06/29/2023 17:29	13.46	32.24	42.30	161.32	322.6
06/29/2023 17:30	13.39	32.24	40.04	161.32	322.7
06/29/2023 17:31	14.24	32.23	42.70	161.35	322.7
06/29/2023 17:32	14.42	32.24	35.55	161.32	321.6
06/29/2023 17:33	13.92	32.23	40.21	161.32	322.7
06/29/2023 17:34	14.45	32.23	36.87	161.27	322.6

Period Start:	Average A1_O2 %	Average A1_NOxLo ppm	Average A1_NOxHi ppm	Average A1_COLo ppm	Average A1_COHi ppm
06/29/2023 17:35	14.43	32.23	37.89	161.29	322.6
06/29/2023 17:36	16.80	20.38	34.79	107.27	177.2
06/29/2023 17:37	14.01	14.26	35.71	-99.99	261.6
06/29/2023 17:38	14.05	32.23	36.54	161.31	322.7
06/29/2023 17:39	13.95	32.24	35.98	161.30	322.6
06/29/2023 17:40	13.65	32.24	36.83	161.32	322.7
06/29/2023 17:41	13.81	32.23	37.82	161.30	322.5
06/29/2023 17:42	13.85	32.23	40.27	161.27	322.6
06/29/2023 17:43	13.67	32.24	37.62	161.34	322.7
06/29/2023 17:44	14.10	32.23	36.40	161.32	322.5
06/29/2023 17:45	13.64	32.24	40.27	161.26	322.6
06/29/2023 17:46	13.86	32.24	38.88	161.37	322.6
06/29/2023 17:47	14.09	32.23	39.41	161.32	322.6
06/29/2023 17:48	13.92	32.23	38.40	161.30	322.6
06/29/2023 17:49	14.22	32.25	37.51	161.28	322.6
06/29/2023 17:50	14.14	32.24	36.58	161.34	322.7
06/29/2023 17:51	14.05	32.23	39.18	161.35	322.7
06/29/2023 17:52	14.21	32.24	37.47	161.30	322.6
06/29/2023 17:53	14.15	32.23	40.04	161.32	322.6
06/29/2023 17:54	14.24	32.23	40.27	161.37	322.7
06/29/2023 17:55	14.32	32.24	36.91	161.38	322.7
06/29/2023 17:56	14.42	32.24	36.32	161.33	322.6
06/29/2023 17:57	14.11	32.25	35.75	161.28	322.6
06/29/2023 17:58	14.07	32.24	36.10	161.30	322.6
06/29/2023 17:59	13.62	32.24	39.53	161.37	322.7
06/29/2023 18:00	13.63	32.24	41.69	161.34	322.6
Final Average*	**8.93**	**-6.80**	**27.60**	**93.67**	**153.7**
Maximum*	**20.89**	**32.25**	**90.35**	**161.38**	**322.8**
	06/29/2023 15:32	06/29/2023 17:57	06/29/2023 16:26	06/29/2023 17:55	06/29/2023 17:12
Minimum*	**0.00**	**-99.99**	**-99.99**	**-99.99**	**-779.5**
	06/29/2023 16:38	06/29/2023 17:18	06/29/2023 16:24	06/29/2023 17:37	06/29/2023 17:10

* Does not include Invalid Averaging Periods ("N/A")

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **06/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1302
Analyzer Range:	30
Test Date:	06/30/23

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	7.99	26.63	OK	DT0036234	04/15/24	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**07:48**	**8.30**	**07:53**	**16.90**
2	**07:57**	**7.81**	**08:01**	**16.77**
3	**08:05**	**7.76**	**08:09**	**16.66**
	Average Response (Cm)	7.96		16.78
	Difference (Cm-Ca)	-0.03		-0.42
Status (for alt. criteria of +/-3 ppm difference)		PASS		PASS
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-0.42**		**-2.46**
	Status (for primary criteria of 15%)	PASS		PASS

range >20 but ≤ 50 ppm

Cylinder Gas Audit - NOx High Range

Analyzer Range:	100
Test Date:	06/29/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	25.8	25.80	OK	CC324929	04/16/24	OK
Mid	55.5	55.50	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**16:32**	**27.75**	**16:36**	**56.34**
2	**16:40**	**27.25**	**16:45**	**56.15**
3	**16:57**	**27.18**	**17:01**	**56.22**
	Average Response (Cm)	27.39		56.24
	Difference (Cm-Ca)	1.59		0.74
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS
	Accuracy %, ((Cm-Ca)/Ca) * 100	**6.18**		**1.33**
	Status (for primary criteria of 15%)	PASS		PASS

range > than 50 ppm

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **06/30/23**

Manufacturer: TAPI
Model: T300M
Serial Number: 669
Analyzer Range: 150
Test Date: 06/29/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.3	26.87	OK	CC324929	04/16/24	OK
Mid	80.6	53.73	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**16:32**	**39.42**	**16:36**	**78.88**
2	**16:42**	**39.20**	**16:46**	**78.86**
3	**16:59**	**39.31**	**17:02**	**78.83**
Average Response (Cm)		39.31		78.86
Difference (Cm-Ca)		-0.99		-1.74
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS
Accuracy %, ((Cm-Ca)/Ca) * 100		**-2.46**		**-2.16**
Status (for primary criteria of 15%)		PASS		PASS

range > than 50 ppm

Cylinder Gas Audit - CO High Range

Analyzer Range: 300
Test Date: 06/29/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	80.4	26.80	OK	EB0012199	09/16/30	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**15:37**	**85.5**	**15:42**	**179.4**
2	**15:47**	**85.5**	**15:51**	**179.3**
3	**15:54**	**85.8**	**15:58**	**179.2**
Average Response (Cm)		85.60		179.30
Difference (Cm-Ca)		5.20		10.20
Status (for alt. criteria of +/-5 ppm difference)		**FAIL**		**FAIL**
Accuracy %, ((Cm-Ca)/Ca) * 100		**6.47**		**6.03**
Status (for primary criteria of 15%)		PASS		PASS

range > than 50 ppm

Note: passed by primary criteria

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **06/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1302
Analyzer Range:	25
Test Date:	06/29/23

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.02	OK	EB0012199	09/16/30	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**15:38**	**5.06**	**15:42**	**10.04**
2	**15:46**	**5.06**	**15:50**	**10.04**
3	**15:55**	**5.07**	**15:57**	**10.03**
Average Response (Cm)		5.06		10.04
Difference (Cm-Ca)		0.04		0.01
Accuracy %, ((Cm-Ca)/Ca) * 100		0.86		0.07
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Average Values Report
Generated: 6/30/2023 08:31

Company: ~~Cemtek KVB-Enertec~~ **Mustang Renewable Power Ventures**
Plant: **Tajiguas Landfill**
City/St: ~~Santa Ana, CA 92707~~ **Goleta, CA**
Source: ADF2

Period Start: 6/30/2023 07:30
Period End: 6/30/2023 08:30
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_O2 %	Average A2_NOxLo ppm	Average A2_NOxHi ppm	Average A2_COLo ppm	Average A2_COHi ppm
06/30/2023 07:30	0.00	11.22	11.80	10.87	11.9
06/30/2023 07:31	0.00	9.98	10.49	6.11	7.0
06/30/2023 07:32	0.18	9.72	10.20	12.62	13.8
06/30/2023 07:33	-0.01	15.92	16.73	9.50	10.6
06/30/2023 07:34	1.72	23.35	26.06	83.28	141.4
06/30/2023 07:35	-0.02	27.52	28.94	11.25	12.4
06/30/2023 07:36	-0.02	27.20	28.62	6.39	7.1
06/30/2023 07:37	-0.01	27.07	28.58	6.47	7.2
06/30/2023 07:38	8.22	22.90	24.28	39.36	69.8
06/30/2023 07:39	22.51	3.80	4.00	N/A	261.6
06/30/2023 07:40	22.53	1.01	1.05	N/A	269.9
06/30/2023 07:41	22.53	0.33	1.01	N/A	268.9
06/30/2023 07:42	7.40	14.56	15.88	59.12	149.0
06/30/2023 07:43	0.00	25.96	27.56	9.47	10.5
06/30/2023 07:44	1.27	26.13	27.73	8.49	50.5
06/30/2023 07:45	6.84	30.22	40.18	N/A	N/A
06/30/2023 07:46	0.05	21.37	22.86	46.54	78.2
06/30/2023 07:47	0.01	8.79	9.94	7.68	8.6
06/30/2023 07:48	0.00	8.30	9.49	6.37	7.3
06/30/2023 07:49	0.23	8.18	9.37	13.42	11.9
06/30/2023 07:50	0.11	13.26	14.56	23.62	24.5
06/30/2023 07:51	-0.01	16.93	18.29	6.76	7.6
06/30/2023 07:52	0.00	16.91	18.29	6.47	7.3
06/30/2023 07:53	-0.01	16.90	18.27	6.24	7.0
06/30/2023 07:54	0.11	12.46	13.72	15.49	16.9
06/30/2023 07:55	0.00	7.86	9.03	6.41	7.2
06/30/2023 07:56	0.00	7.82	8.99	6.11	6.9
06/30/2023 07:57	0.00	7.81	8.97	5.97	6.7
06/30/2023 07:58	0.00	10.01	11.21	6.25	7.0
06/30/2023 07:59	-0.02	16.72	18.11	6.07	7.0
06/30/2023 08:00	-0.01	16.76	18.12	5.96	6.8
06/30/2023 08:01	-0.01	16.77	18.11	5.97	6.9
06/30/2023 08:02	0.00	16.05	17.40	6.09	7.0
06/30/2023 08:03	0.00	7.84	9.00	6.05	6.9
06/30/2023 08:04	0.00	7.77	8.93	6.12	6.9
06/30/2023 08:05	0.00	7.76	8.92	6.11	6.8
06/30/2023 08:06	0.03	7.75	8.89	7.39	8.3
06/30/2023 08:07	0.07	14.42	15.72	14.73	16.1
06/30/2023 08:08	-0.01	16.68	18.03	6.23	7.1
06/30/2023 08:09	-0.01	16.66	18.02	5.96	6.8
06/30/2023 08:10	-0.01	16.65	18.00	5.99	6.7
06/30/2023 08:11	4.99	22.51	24.01	76.00	83.0
06/30/2023 08:12	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:13	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:14	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:15	5.43	0.00	39.56	0.00	0.0
06/30/2023 08:16	7.64	N/A	51.15	N/A	N/A
06/30/2023 08:17	7.63	N/A	57.14	N/A	N/A
06/30/2023 08:18	7.60	N/A	62.39	N/A	N/A
06/30/2023 08:19	7.66	N/A	55.97	N/A	N/A
06/30/2023 08:20	7.64	N/A	53.05	N/A	N/A
06/30/2023 08:21	7.63	N/A	54.68	N/A	N/A
06/30/2023 08:22	7.61	N/A	57.49	N/A	N/A
06/30/2023 08:23	7.59	N/A	63.40	N/A	N/A
06/30/2023 08:24	7.64	N/A	58.18	N/A	N/A
06/30/2023 08:25	7.67	N/A	51.61	N/A	N/A
06/30/2023 08:26	7.63	N/A	52.20	N/A	N/A
06/30/2023 08:27	7.62	N/A	57.21	N/A	N/A
06/30/2023 08:28	7.61	N/A	62.70	N/A	N/A
06/30/2023 08:29	7.68	N/A	53.81	N/A	N/A
06/30/2023 08:30	7.69	N/A	50.10	N/A	N/A
Final Average*	**3.85**	**13.43**	**27.49**	**13.78**	**37.0**
Maximum*	**22.53**	**30.22**	**63.40**	**83.28**	**269.9**
	06/30/2023 7:41	06/30/2023 7:45	06/30/2023 8:23	06/30/2023 7:34	06/30/2023 7:40
Minimum*	**-0.02**	**0.00**	**1.01**	**0.00**	**0.0**
	06/30/2023 7:59	06/30/2023 8:15	06/30/2023 7:41	06/30/2023 8:15	06/30/2023 8:15

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 6/30/2023 08:25

Company: ~~Cemtek KVB-Enertec~~ **Mustang Renewable Power Ventures**
Plant: **Tajiguas Landfill**
City/St: ~~Santa Ana, CA 92707~~ **Goleta, CA**
Source: ADF2

Period Start: 6/29/2023 15:20
Period End: 6/29/2023 18:00
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_O2 %	Average A2_NOxLo ppm	Average A2_NOxHi ppm	Average A2_COLo ppm	Average A2_COHi ppm
06/29/2023 15:20	7.68	N/A	65.90	N/A	N/A
06/29/2023 15:21	7.73	N/A	55.53	N/A	N/A
06/29/2023 15:22	7.66	N/A	58.27	N/A	N/A
06/29/2023 15:23	7.69	N/A	54.49	N/A	N/A
06/29/2023 15:24	7.68	N/A	53.95	N/A	N/A
06/29/2023 15:25	7.67	N/A	57.08	N/A	N/A
06/29/2023 15:26	7.65	N/A	59.66	N/A	N/A
06/29/2023 15:27	7.73	N/A	56.48	N/A	N/A
06/29/2023 15:28	7.73	N/A	56.14	N/A	N/A
06/29/2023 15:29	7.70	N/A	55.29	N/A	N/A
06/29/2023 15:30	7.70	N/A	54.10	N/A	N/A
06/29/2023 15:31	7.70	N/A	52.06	N/A	N/A
06/29/2023 15:32	7.68	N/A	57.52	N/A	N/A
06/29/2023 15:33	6.76	N/A	57.12	N/A	N/A
06/29/2023 15:34	5.04	14.57	22.05	102.68	138.2
06/29/2023 15:35	5.07	2.80	2.98	78.42	86.4
06/29/2023 15:36	5.06	2.19	2.27	77.65	85.5
06/29/2023 15:37	5.07	2.06	2.15	77.58	85.5
06/29/2023 15:38	5.06	1.87	1.95	77.55	85.5
06/29/2023 15:39	5.51	4.80	5.04	86.61	95.4
06/29/2023 15:40	9.53	12.97	13.57	N/A	219.1
06/29/2023 15:41	10.04	1.79	1.89	N/A	181.2
06/29/2023 15:42	10.04	1.46	1.53	N/A	179.4
06/29/2023 15:43	9.85	1.39	1.48	N/A	185.2
06/29/2023 15:44	5.30	1.70	1.79	97.97	122.5
06/29/2023 15:45	5.07	1.35	1.45	78.32	86.3
06/29/2023 15:46	5.06	1.30	1.40	77.68	85.5
06/29/2023 15:47	5.05	1.26	1.36	77.64	85.5
06/29/2023 15:48	8.03	1.32	1.37	122.68	150.1
06/29/2023 15:49	10.04	1.16	1.20	N/A	179.2
06/29/2023 15:50	10.04	1.12	1.17	N/A	179.3
06/29/2023 15:51	10.03	1.07	1.13	N/A	179.3
06/29/2023 15:52	7.87	1.08	1.15	122.52	171.3
06/29/2023 15:53	5.07	1.19	1.24	83.27	91.7
06/29/2023 15:54	5.06	1.10	1.15	77.85	85.8
06/29/2023 15:55	5.07	1.07	1.13	77.65	85.5
06/29/2023 15:56	9.02	1.54	1.77	140.12	173.6
06/29/2023 15:57	10.03	1.05	1.09	N/A	179.6
06/29/2023 15:58	10.02	0.99	1.04	N/A	179.2
06/29/2023 15:59	9.36	3.67	3.85	N/A	202.6
06/29/2023 16:00	7.72	16.94	40.73	N/A	N/A
06/29/2023 16:01	7.74	N/A	46.77	N/A	N/A
06/29/2023 16:02	7.72	N/A	49.82	N/A	N/A
06/29/2023 16:03	6.08	N/A	44.30	N/A	293.3
06/29/2023 16:04	0.92	28.75	39.83	87.64	131.6
06/29/2023 16:05	0.01	27.21	28.45	42.10	46.1
06/29/2023 16:06	0.01	26.61	27.85	38.93	42.6
06/29/2023 16:07	0.06	26.43	43.84	66.35	73.1
06/29/2023 16:08	1.26	N/A	62.89	123.40	192.4
06/29/2023 16:09	0.00	N/A	88.79	131.61	146.3
06/29/2023 16:10	0.08	N/A	89.01	130.68	145.1
06/29/2023 16:11	0.09	N/A	88.62	136.42	152.3
06/29/2023 16:12	0.10	N/A	88.64	135.21	149.6
06/29/2023 16:13	4.00	N/A	78.15	139.42	160.7
06/29/2023 16:14	7.66	N/A	53.76	N/A	N/A
06/29/2023 16:15	2.50	N/A	52.73	98.71	149.6
06/29/2023 16:16	0.02	27.73	29.01	50.12	53.7
06/29/2023 16:17	0.00	26.71	27.92	39.58	42.6
06/29/2023 16:18	2.33	26.62	27.82	64.15	115.3
06/29/2023 16:19	1.10	24.80	38.88	111.72	195.6
06/29/2023 16:20	0.00	N/A	56.38	82.85	89.6
06/29/2023 16:21	0.00	N/A	56.10	79.08	85.5
06/29/2023 16:22	-0.01	N/A	56.04	78.97	85.3

Period Start:	Average A2_O2 %	Average A2_NOxLo ppm	Average A2_NOxHi ppm	Average A2_COLo ppm	Average A2_COHi ppm
06/29/2023 16:23	1.25	N/A	59.39	83.99	187.6
06/29/2023 16:24	0.14	N/A	86.92	145.53	159.1
06/29/2023 16:25	0.06	N/A	89.48	138.95	151.9
06/29/2023 16:26	0.01	N/A	90.29	133.44	145.2
06/29/2023 16:27	3.51	N/A	79.43	131.70	143.2
06/29/2023 16:28	7.69	N/A	51.05	N/A	N/A
06/29/2023 16:29	1.10	29.33	46.25	85.48	152.4
06/29/2023 16:30	0.01	27.22	28.74	44.15	47.5
06/29/2023 16:31	0.00	26.53	27.94	39.46	42.5
06/29/2023 16:32	0.01	26.32	27.75	39.42	42.3
06/29/2023 16:33	0.05	26.10	48.72	73.03	78.8
06/29/2023 16:34	-0.01	N/A	56.20	78.77	85.2
06/29/2023 16:35	0.00	N/A	56.26	78.91	85.3
06/29/2023 16:36	-0.01	N/A	56.34	78.88	85.4
06/29/2023 16:37	-0.01	N/A	56.33	78.79	85.1
06/29/2023 16:38	0.07	26.99	42.87	65.26	70.4
06/29/2023 16:39	0.00	25.98	27.34	39.81	42.8
06/29/2023 16:40	0.00	25.87	27.25	39.22	42.3
06/29/2023 16:41	0.01	25.84	27.21	39.17	42.1
06/29/2023 16:42	0.00	25.81	27.18	39.20	42.2
06/29/2023 16:43	0.31	25.79	29.56	75.63	81.7
06/29/2023 16:44	-0.01	N/A	56.06	80.52	87.2
06/29/2023 16:45	0.00	N/A	56.15	78.82	85.2
06/29/2023 16:46	-0.01	N/A	56.13	78.86	85.3
06/29/2023 16:47	-0.01	N/A	56.13	78.78	85.2
06/29/2023 16:48	1.29	N/A	56.44	90.42	180.0
06/29/2023 16:49	-0.01	N/A	56.82	92.21	99.8
06/29/2023 16:50	-0.01	N/A	56.37	79.49	85.9
06/29/2023 16:51	1.61	N/A	53.20	129.53	204.3
06/29/2023 16:52	0.00	N/A	56.60	84.02	90.7
06/29/2023 16:53	0.00	N/A	56.30	79.23	85.7
06/29/2023 16:54	0.17	N/A	56.31	84.52	91.5
06/29/2023 16:55	0.00	26.01	29.87	46.19	49.8
06/29/2023 16:56	0.00	25.82	27.18	39.37	42.5
06/29/2023 16:57	0.00	25.78	27.18	39.12	42.1
06/29/2023 16:58	0.00	25.75	27.15	39.09	42.1
06/29/2023 16:59	0.01	25.70	27.08	39.31	42.2
06/29/2023 17:00	-0.01	25.67	48.44	66.70	72.1
06/29/2023 17:01	0.00	N/A	56.22	78.79	85.2
06/29/2023 17:02	-0.01	N/A	56.26	78.83	85.2
06/29/2023 17:03	7.04	N/A	52.40	N/A	196.3
06/29/2023 17:04	7.68	N/A	53.05	N/A	N/A
06/29/2023 17:05	7.67	N/A	55.74	N/A	N/A
06/29/2023 17:06	7.68	N/A	54.72	N/A	N/A
06/29/2023 17:07	7.69	N/A	52.82	N/A	N/A
06/29/2023 17:08	7.69	N/A	50.75	N/A	N/A
06/29/2023 17:09	7.67	N/A	54.27	N/A	N/A
06/29/2023 17:10	7.67	N/A	55.07	N/A	N/A
06/29/2023 17:11	7.66	N/A	56.04	N/A	N/A
06/29/2023 17:12	7.67	N/A	55.58	N/A	N/A
06/29/2023 17:13	7.68	N/A	53.73	N/A	N/A
06/29/2023 17:14	7.66	N/A	56.74	N/A	N/A
06/29/2023 17:15	7.67	N/A	58.27	N/A	N/A
06/29/2023 17:16	7.69	N/A	59.19	N/A	N/A
06/29/2023 17:17	7.71	N/A	56.80	N/A	N/A
06/29/2023 17:18	7.72	N/A	55.23	N/A	N/A
06/29/2023 17:19	7.74	N/A	57.00	N/A	N/A
06/29/2023 17:20	7.74	N/A	52.30	N/A	N/A
06/29/2023 17:21	7.72	N/A	53.15	N/A	N/A
06/29/2023 17:22	7.69	N/A	55.71	N/A	N/A
06/29/2023 17:23	7.70	N/A	54.78	N/A	N/A
06/29/2023 17:24	7.69	N/A	55.90	N/A	N/A
06/29/2023 17:25	7.70	N/A	53.06	N/A	N/A
06/29/2023 17:26	7.68	N/A	53.78	N/A	N/A
06/29/2023 17:27	7.65	N/A	61.42	N/A	N/A
06/29/2023 17:28	7.66	N/A	58.92	N/A	N/A
06/29/2023 17:29	7.67	N/A	56.73	N/A	N/A
06/29/2023 17:30	7.67	N/A	57.66	N/A	N/A
06/29/2023 17:31	7.67	N/A	58.26	N/A	N/A
06/29/2023 17:32	7.69	N/A	58.17	N/A	N/A
06/29/2023 17:33	7.68	N/A	58.56	N/A	N/A
06/29/2023 17:34	7.68	N/A	57.21	N/A	N/A

Period Start:	Average A2_O2 %	Average A2_NOxLo ppm	Average A2_NOxHi ppm	Average A2_COLo ppm	Average A2_COHi ppm
06/29/2023 17:35	7.66	N/A	60.49	N/A	N/A
06/29/2023 17:36	7.73	N/A	50.61	N/A	N/A
06/29/2023 17:37	7.68	N/A	50.21	N/A	N/A
06/29/2023 17:38	7.65	N/A	50.27	N/A	N/A
06/29/2023 17:39	7.62	N/A	57.72	N/A	N/A
06/29/2023 17:40	7.66	N/A	56.15	N/A	N/A
06/29/2023 17:41	7.67	N/A	52.33	N/A	N/A
06/29/2023 17:42	7.66	N/A	51.56	N/A	N/A
06/29/2023 17:43	7.63	N/A	54.00	N/A	N/A
06/29/2023 17:44	7.62	N/A	56.97	N/A	N/A
06/29/2023 17:45	7.65	N/A	53.78	N/A	N/A
06/29/2023 17:46	7.63	N/A	53.74	N/A	N/A
06/29/2023 17:47	7.64	N/A	52.46	N/A	N/A
06/29/2023 17:48	7.61	N/A	57.69	N/A	N/A
06/29/2023 17:49	7.63	N/A	61.23	N/A	N/A
06/29/2023 17:50	7.66	N/A	56.53	N/A	N/A
06/29/2023 17:51	7.66	N/A	59.63	N/A	N/A
06/29/2023 17:52	7.68	N/A	61.07	N/A	N/A
06/29/2023 17:53	7.74	N/A	54.44	N/A	N/A
06/29/2023 17:54	7.71	N/A	51.52	N/A	N/A
06/29/2023 17:55	7.68	N/A	52.43	N/A	N/A
06/29/2023 17:56	7.69	N/A	51.45	N/A	N/A
06/29/2023 17:57	7.66	N/A	54.84	N/A	N/A
06/29/2023 17:58	7.64	N/A	58.98	N/A	N/A
06/29/2023 17:59	7.65	N/A	58.61	N/A	N/A
06/29/2023 18:00	7.67	N/A	56.68	N/A	N/A
Final Average*	**5.02**	**14.35**	**45.12**	**82.27**	**112.7**
Maximum*	**10.04**	**29.33**	**90.29**	**145.53**	**293.3**
	06/29/2023 15:50	06/29/2023 16:29	06/29/2023 16:26	06/29/2023 16:24	06/29/2023 16:03
Minimum*	**-0.01**	**0.99**	**1.04**	**38.93**	**42.1**
	06/29/2023 17:02	06/29/2023 15:58	06/29/2023 15:58	06/29/2023 16:06	06/29/2023 16:58

* Does not include Invalid Averaging Periods ("N/A")

PRAXAIR
Making our planet more productive

DocNumber: 407481

SV7
CGA3

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123
Customer Reference: DIANI

Certificate Issuance Date: 04/15/2021
Praxair Order Number: 71636582
Part Number: NI NOBME-AS
Customer PO Number: 79633960

Fill Date: 03/24/2021
Lot Number: 700861083O9
Cylinder Style & Outlet: AS — CGA 660
Cylinder Pressure and Volume: 2000 psig — 140 f3

Certified Concentration

Expiration Date:	04/15/2024	NIST Traceable
Cylinder Number:	DT0036234	Expanded Uncertainty
7.99 ppm	Nitric oxide	± 0.04 ppm
Balance	Nitrogen	

ProSpec EZ Cert

For Reference Only: NOx 8.06 ppm

Certification Information: Certification Date: 04/15/2021 Term: 36 Months Expiration Date: 04/15/2024

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Nitric oxide

Requested Concentration: 8 ppm
Certified Concentration: 7.99 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 03/25/2021

First Analysis Data: Date 04/06/2021

Z: 0	R: 10.28	C: 7.96	Conc: 7.96		
R: 10.29	Z: 0	C: 7.98	Conc: 7.98		
Z: 0	C: 7.98	R: 10.27	Conc: 7.98		
UOM: ppm			Mean Test Assay: 7.97	ppm	

Reference Standard: Type / Cylinder #: GMIS / DT0036016
Concentration / Uncertainty: 10.28 ppm ±0.05 ppm
Expiration Date: 08/27/2023
Traceable to: SRM # / Sample # / Cylinder #: PRM / C183710.02 / APEX1324301
SRM Concentration (enter with units) / ±: 10.00 ppm / ±±0.05 ppm
SRM Expiration Date: 04/17/2022

Second Analysis Data: Date 04/15/2021

Z: 0	R: 10.28	C: 8.01	Conc: 8.02		
R: 10.25	Z: 0	C: 8.01	Conc: 8.02		
Z: 0	C: 8	R: 10.27	Conc: 8.01		
UOM: ppm			Mean Test Assay: 8.02	ppm	

Analyzed By: Henry Koung

Certified By: Lbeanna Flores

Making our world more productive

DocNumber: 477019

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22022

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA93455-1123
Customer Reference: MUSTANG

Certificate Issuance Date: 06/23/2022
Linde Order Number: 9903972087130
Part Number: NI NO17ME-AS
Customer PO Number: 80090728

Fill Date: 06/10/2022
Lot Number: 700856216106
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	06/23/2025	NIST Traceable
Cylinder Number:	CC499039	Expanded Uncertainty
17.2 ppm	Nitric oxide	± 0.2 ppm
Balance	Nitrogen	

For Reference Only: NOx 17.2 ppm

Certification Information: Certification Date: 06/23/2022 Term: 36 Months Expiration Date: 06/23/2025

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Nitric oxide

Requested Concentration: 17 ppm
Certified Concentration: 17.2 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 05/27/2022

Reference Standard: Type / Cylinder #: GMIS / DT0037183
Concentration / Uncertainty: 19.97 ppm ±0.20 ppm
Expiration Date: 04/12/2025
Traceable to: SRM # / Sample # / Cylinder #: 2629a / 50-G-17 / FF31691
SRM Concentration / Uncertainty: 18.99 ppm / ±0.19 ppm
SRM Expiration Date: 10/21/2023

First Analysis Data:						Date	06/16/2022
Z:	0	R:	20	C:	17.16	Conc:	17.1
R:	20	Z:	0	C:	17.19	Conc:	17.2
Z:	0	C:	17.18	R:	20	Conc:	17.2
UOM:	ppm			Mean Test Assay:		17.2	ppm

Second Analysis Data:						Date	06/23/2022
Z:	0	R:	20	C:	17.18	Conc:	17.2
R:	19.9	Z:	0	C:	17.18	Conc:	17.2
Z:	0	C:	17.2	R:	20	Conc:	17.2
UOM:	ppm			Mean Test Assay:		17.2	ppm

Analyzed By: Henry Koung

Certified By: Lissette Morales

SV9 CGA5

PRAXAIR
Making our planet more productive

DocNumber: 407533

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 04/16/2021
Praxair Order Number: 71635190
Part Number: NI CO40MN20E-AS
Customer PO Number: 79632556

Fill Date: 04/01/2021
Lot Number: 70086109106
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 04/16/2024		NIST Traceable
Cylinder Number: CC324929		Expanded Uncertainty
40.3 ppm	Carbon monoxide	± 0.2 ppm
25.8 ppm	Nitric oxide	± 0.1 ppm
Balance	Nitrogen	

For Reference Only: *NOx 25.9 ppm*

Certification Information: *Certification Date:* 04/16/2021 *Term:* 36 Months *Expiration Date:* 04/16/2024

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. **Component:** **Carbon monoxide**

Requested Concentration: 40 ppm
Certified Concentration: 40.3 ppm
Instrument Used: Horiba VIA-510 S/N 43627990042
Analytical Method: NDIR
Last Multipoint Calibration: 03/26/2021

First Analysis Data:						Date	04/09/2021
Z: 0	R: 98.1	C: 40.2	Conc: 40.2				
R: 98.2	Z: 0	C: 40.4	Conc: 40.4				
Z: 0	C: 40.3	R: 98.2	Conc: 40.3				
UOM: ppm			Mean Test Assay:	40.3	ppm		

Reference Standard: Type / Cylinder #: GMIS / DT0019705
Concentration / Uncertainty: 98.1 ppm ±0.4 ppm
Expiration Date: 01/23/2028
Traceable to: SRM # / Sample # / Cylinder #: SRM 1679c / 34-45 / FF28593
SRM Concentration (enter with units) / 98.40 ppm / ±0.40 ppm
SRM Expiration Date: 01/26/2020

Second Analysis Data:						Date	
Z: 0	R: 0	C: 0	Conc: 0				
R: 0	Z: 0	C: 0	Conc: 0				
Z: 0	C: 0	R: 0	Conc: 0				
UOM: ppm			Mean Test Assay:		ppm		

2. **Component:** **Nitric oxide**

Requested Concentration: 25 ppm
Certified Concentration: 25.8 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 03/25/2021

First Analysis Data:						Date	04/09/2021
Z: 0	R: 50	C: 25.7	Conc: 25.7				
R: 50	Z: 0	C: 25.8	Conc: 25.8				
Z: 0	C: 25.8	R: 49.9	Conc: 25.8				
UOM: ppm			Mean Test Assay:	25.8	ppm		

Reference Standard: Type / Cylinder #: PRM / APEX1324323
Concentration / Uncertainty: 50.04 ppm ±0.20 ppm
Expiration Date: 12/09/2022
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1765710.01 / APEX1324323
SRM Concentration (enter with units) / 50.04 ppm / ±0.20 ppm
SRM Expiration Date: 12/09/2022

Second Analysis Data:						Date	04/16/2021
Z: 0	R: 50	C: 25.8	Conc: 25.9				
R: 49.8	Z: 0	C: 25.7	Conc: 25.8				
Z: 0	C: 25.7	R: 49.8	Conc: 25.8				
UOM: ppm			Mean Test Assay:	25.8	ppm		

Analyzed By Henry Koung

Certified By Leeannar Flores

PRAXAIR
Making our planet more productive

DocNumber: 406357

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 03/29/2021
Praxair Order Number: 71635196
Part Number: NI CO80MN7E-AS
Customer PO Number: 79632562

Fill Date: 03/17/2021
Lot Number: 70086107611
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	03/29/2029	NIST Traceable
Cylinder Number:	DT0036914	Expanded Uncertainty
80.6 ppm	Carbon monoxide	± 0.3 ppm
55.5 ppm	Nitric oxide	± 0.3 ppm
Balance	Nitrogen	

For Reference Only: *NOx 55.8 ppm*

Certification Information: *Certification Date:* 03/29/2021 *Term:* 96 Months *Expiration Date:* 03/29/2029

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. ***Component:*** **Carbon monoxide**

Requested Concentration: 80 ppm
Certified Concentration: 80.6 ppm
Instrument Used: Horiba VIA-510 S/N 43627990042
Analytical Method: NDIR
Last Multipoint Calibration: 02/26/2021

First Analysis Data: **Date** 03/22/2021

Z: 0	R: 98.1	C: 80.6	Conc:	80.6	
R: 98	Z: 0	C: 80.5	Conc:	80.5	
Z: 0	C: 80.7	R: 98.2	Conc:	80.7	
UOM: ppm		Mean Test Assay:		80.6	ppm

Reference Standard: Type / Cylinder #: GMIS / DT0019705
Concentration / Uncertainty: 98.1 ppm ±0.4 ppm
Expiration Date: 01/23/2028
Traceable to: SRM # / Sample # / Cylinder #: SRM 1679c / 3-I-45 / FF28593
SRM Concentration (enter with units) / 98.40 ppm / ±0.40 ppm
SRM Expiration Date: 01/28/2020

Second Analysis Data: **Date**

Z: 0	R: 0	C: 0	Conc:	0	
R: 0	Z: 0	C: 0	Conc:	0	
Z: 0	C: 0	R: 0	Conc:	0	
UOM: ppm		Mean Test Assay:			ppm

2. ***Component:*** **Nitric oxide**

Requested Concentration: 55 ppm
Certified Concentration: 55.5 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 03/15/2021

First Analysis Data: **Date** 03/22/2021

Z: 0	R: 49	C: 55.4	Conc:	55.4	
R: 49	Z: 0	C: 55.5	Conc:	55.5	
Z: 0	C: 55.5	R: 48.9	Conc:	55.5	
UOM: ppm		Mean Test Assay:		55.5	ppm

Reference Standard: Type / Cylinder #: GMIS / DT0037649
Concentration / Uncertainty: 49.01 ppm ±0.21 ppm
Expiration Date: 01/07/2029
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1765710.01 / APEX1324323
SRM Concentration (enter with units) / 50.04 PPM / ±0.20 PPM
SRM Expiration Date: 12/05/2022

Second Analysis Data: **Date** 03/29/2021

Z: 0	R: 49	C: 55.4	Conc:	55.6	
R: 48.8	Z: 0	C: 55.4	Conc:	55.6	
Z: 0	C: 55.1	R: 48.8	Conc:	55.3	
UOM: ppm		Mean Test Assay:		55.5	ppm

Analyzed By: Henry Koung

Certified By: Leeanna Flores

Making our world more productive

DocNumber: 503350

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22022

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
918 W BETTERAVIA RD
SANTA MARIA CA93455-1123

Certificate Issuance Date: 09/16/2022
Linde Order Number: 72180572
Part Number: NI CO80MO14E-AS
Customer PO Number: 80185295

Fill Date: 09/06/2022
Lot Number: 70086224903
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	09/16/2030	NIST Traceable
Cylinder Number:	EB0012199	Expanded Uncertainty
80.4 ppm	Carbon monoxide	± 0.7 ppm
5.02 %	Oxygen	± 0.02 %
Balance	Nitrogen	

ProSpec EZ Cert

Certification Information:

Certification Date: 09/16/2022 Term: 96 Months Expiration Date: 09/16/2030

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Carbon monoxide

Requested Concentration: 80 ppm
Certified Concentration: 80.4 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 08/30/2022

First Analysis Data: Date 09/16/2022

Z:	0	R:	100.1	C:	80.5	Conc:	80.4
R:	100.2	Z:	0	C:	80.5	Conc:	80.4
Z:	0	C:	80.5	R:	100.2	Conc:	80.4

UOM: ppm Mean Test Assay: 80.4 ppm

Reference Standard: Type / Cylinder #: NTRM / CC105919
Concentration / Uncertainty: 100.1 ppm ±0.8 ppm
Expiration Date: 07/09/2027
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 190703 / CC8737
SRM Concentration / Uncertainty: 100.1 ppm / ±0.8 ppm
SRM Expiration Date: 07/09/2027

Second Analysis Data: Date

Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0

UOM: ppm Mean Test Assay: ppm

2. **Component:** Oxygen

Requested Concentration: 5 %
Certified Concentration: 5.02 %
Instrument Used: Siemens Oxymat 6E S/N 7M020211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 08/30/2022

First Analysis Data: Date 09/16/2022

Z:	0	R:	4.97	C:	5.02	Conc:	5.02
R:	4.97	Z:	0	C:	5.02	Conc:	5.02
Z:	0	C:	5.02	R:	4.97	Conc:	5.02

UOM: % Mean Test Assay: 5.02 %

Reference Standard: Type / Cylinder #: GMIS / CC163512
Concentration / Uncertainty: 4.97 % ±0.02 %
Expiration Date: 07/17/2029
Traceable to: SRM # / Sample # / Cylinder #: SRM 2658a / 72-D-28 / CAL016862
SRM Concentration / Uncertainty: 9.918% / ±0.022%
SRM Expiration Date: 02/03/2024

Second Analysis Data: Date

Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0

UOM: % Mean Test Assay: %

Analyzed By: Courtney Zierke

Certified By: Lissette Morales

PRAXAIR
Making our planet more productive

DocNumber: 406153

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 03/22/2021
Praxair Order Number: 71635262
Part Number: NI CO170O10E-AS
Customer PO Number: 79632626

Fill Date: 03/12/2021
Lot Number: 70086107102
Cylinder Style & Outlet: AS — CGA 590
Cylinder Pressure and Volume: 2000 psig — 140 ft3

Certified Concentration

ProSpec EZ Cert

		Expiration Date: 03/19/2029 / Cylinder Number: CC73183	NIST Traceable Expanded Uncertainty
169.1	ppm	Carbon monoxide	± 0.8 ppm
10.03	%	Oxygen	± 0.04 %
	Balance	Nitrogen	

Certification Information:

Certification Date: 03/19/2021 Term: 96 Months Expiration Date: 03/19/2029

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Carbon monoxide

Requested Concentration: 170 ppm
Certified Concentration: 169.1 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 03/01/2021

First Analysis Data:						Date	03/19/2021
Z:	0	R:	497.5	C:	169.1	Conc:	169.1
R:	497.6	Z:	0	C:	169.2	Conc:	169.2
Z:	0	C:	169.1	R:	497.6	Conc:	169.1
UOM:	ppm			Mean Test Assay:			169.1 ppm

Reference Standard: Type / Cylinder #: GMIS / CC319383
Concentration / Uncertainty: 497.5 ppm ±2.0 ppm
Expiration Date: 04/26/2025
Traceable to: SRM # / Sample # / Cylinder #: SRM 1680b / 2-J-15 / CAL018072
SRM Concentration (enter with units) / SRM Expiration Date: 490.4 ppm / ±2.0 ppm / 09/20/2021

Second Analysis Data:						Date	
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM:	ppm			Mean Test Assay:			ppm

2. **Component:** Oxygen

Requested Concentration: 10 %
Certified Concentration: 10.03 %
Instrument Used: 7MB20211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 03/18/2021

First Analysis Data:						Date	03/19/2021
Z:	0	R:	9.875	C:	10.02	Conc:	10.02
R:	9.875	Z:	0	C:	10.03	Conc:	10.03
Z:	0	C:	10.03	R:	9.876	Conc:	10.03
UOM:	%			Mean Test Assay:			10.03 %

Reference Standard: Type / Cylinder #: NTRM / DT0010287
Concentration / Uncertainty: 9.875 % ±0.040 %
Expiration Date: 11/18/2022
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 170701 / DT0010287
SRM Concentration (enter with units) / SRM Expiration Date: 9.875% / ±0.040% / 11/18/2022

Second Analysis Data:						Date	
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM:	%			Mean Test Assay:			%

Analyzed By: Amelia Real

Certified By: Jose Vasquez

Continuous Emissions Monitoring System (CEMS)

Third Quarter Test Report

Cylinder Gas Audit

Test Date(s): August 22, 2024
CEMTEK Project No.: SN00192

Prepared for:

Tajiguas Landfill
Anaerobic Digesting Facility (ADF), Units A and B
Goleta, CA

Prepared by:
CEMTEK KVB-Enertec

3041 S. Orange Avenue, Santa Ana, CA 92707 • Phone: 714-437-7100 • Fax: 714-437-7177 • Toll Free: 888-400-0200
2849 Sterling Drive, Hatfield, PA 19440 • Phone: 215-996-9200 • Fax: 330-860-8982 • Tech Support Phone: 800-582-1670
Houston, TX Office • Phone: 281-729-8228

Contents

1 Introduction

This quarterly audit report outlines the procedures and results of the Cylinder Gas Audit (CGA) check performed on the monitors at this facility. All testing was done in accordance with 40 CFR 60, Appendix F Procedure 1.

Tajiguas Landfill is located at 14470 Calle Real in Goleta, California that is approximately 26 miles west of the City of Santa Barbara. The landfill began receiving refuse in 1967 to serve the City of Santa Barbara, City of Goleta, unincorporated areas of Montecito and Summerland, rural areas of southern Santa Barbara County, the Santa Ynez Valley and Cuyama Valley. It is located in a canyon known as Cañada de la Pila. Immediately south of the landfill site are U.S. Highway 101, which provides access to the site, Union Pacific Railroad tracks, and the Pacific Ocean. The southern portion of the site is within the California Coastal Zone. For District regulatory purposes, the facility location is in the Southern Zone of Santa Barbara County.

Municipal solid waste (MSW) is delivered to a tipping area inside the Material Recovery Facility (MRF) building at Tajiguas. The material is subsequently sorted into organics, recyclables, and residue in the materials sorting area. Recyclables collected in the materials sorting area are sold to the market while waste residue is landfilled. The sorted organics are placed in the anaerobic digesters to generate biogas in the Anaerobic Digester Facility (ADF). The biogas is treated and combusted in combined heat and power (CHP) internal combustion (IC) engines for power generation, or an enclosed flare located at the ADF. Following biogas generation, the digestate is processed into soil amendments and compost at the Compost Management Unit (CMU). The MRF, ADF, and CMU are designed and constructed by MSB and owned by Santa Barbara County Public Works Department (SBCPWD).

The waste residue placed in the landfill generates LFG in the subsurface landfill through anaerobic biological decomposition. The LFG is collected onsite using a vapor extraction system and handled using a collection and transportation system. A leachate management system collects the groundwater found in the landfill subsurface. The LFG is scrubbed of moisture, particulates, and hydrogen sulfide. The landfill, LFG collection system, hydrogen sulfide scrubber system, and leachate management system are owned and operated by the SBCPWD and permitted separately under PT-70/Reeval 9788-R4.

Currently, treated LFG is combusted in an onsite enclosed flare or IC engine. The LFG treatment system, two LFG-fired CHP engines, and MRF enclosed flare subject to the ATC 14500-02 permit will replace the existing equipment.

Two of the processes involved at the stationary source are as follows:

Anaerobic Digestion Facility: The organic (food and green) waste from the MRF is placed into digesters. An anaerobic digestion process generates biogas. This biogas is sent to the ADF combustion equipment. After the anaerobic digestion process is complete, the residual organic waste is sent to the CMU.

Anaerobic Digestion Facility Combustion Equipment: Biogas from the ADF digesters is sent to two CHP engines to produce electricity to the grid and for onsite needs. Treated LFG is used as a supplemental fuel. If one of the engines is offline or if one of the ADF digesters is being purged, biogas is routed to the ADF enclosed flare.

2 Monitor Information

The following table provides information on the monitors that were subject to this test program.

ADF Unit A

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1301
CO	TAPI T300M	0-150/0-300 ppm	668

ADF Unit B

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1302
CO	TAPI T300M	0-150/0-300 ppm	669

3 Summary of Results

The results for the Cylinder Gas Audit (CGA) checks performed on the facility monitors are summarized in the following results table.

Table 1: Unit A CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = -10.45% Mid = -6.51%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
NO_X High range	Low = -1.40% Mid = -0.87%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
CO Low range	Low = -2.96% Mid = -2.17%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
CO High range	Low = 0.17% Mid = 0.75%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
O_2	Low = -1.50% Mid = -0.07%	≤15% (40 CFR 60, Appendix F)	Pass	8/22/24

Table 2: Unit B CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = -3.57% Mid = -5.14%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
NO_X High range	Low = -1.45% Mid = -1.65%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
CO Low range	Low = -2.26% Mid = -0.05%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
CO High range	Low = 4.48% Mid = 5.62%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	8/22/24
O_2	Low = 3.59% Mid = 1.30%	≤15% (40 CFR 60, Appendix F)	Pass	8/22/24

4 Cylinder Gas Audit Test Procedure

The Cylinder Gas Audit (CGA) is performed for each pollutant concentration monitor at least once during each unit operating quarter based on the requirements of 40 CFR 60, Appendix F. CGAs are conducted in three consecutive quarters. Separate calibration gas cylinders are used for each concentration during the audit.

1. All audit gas cylinders are connected to the proper transport lines. EPA Protocol certified gases are used. Cylinders are checked to ensure that each audit gas has at least 200 psi.
2. The analyzers are challenged with an audit gas of known concentration at two points within the following concentration ranges (40 CFR 60, Appendix F):

Audit Point	***Pollutant Monitors*** ***% of span***	***O_2*** ***% by volume***
Low level	20-30% of span	4-6% by volume
Mid Level	50-60% of span	8-12% by volume

3. The analyzers are challenged three times at each audit point. Calibration gas injections are done alternately between the two audit values. The average of the three responses for each audit point is used in determining accuracy. The monitor is challenged at each audit point for a sufficient time to assure that any absorption-desorption phenomena at the CEMS sample transport surfaces have stabilized. The injection time also takes into account the response time of the analyzers and sample system.

4. Each monitor is operated in its normal sampling mode, that is, the audit gas passes through all filters, scrubbers, conditioners, and other monitor components used during normal sampling, and through as much of the sampling probe as is practical.
5. The difference between the actual concentration of the audit gas and the concentration indicated by the monitor will determine the accuracy of the CEMS.

The accuracy values for each concentration should not exceed 15% of reference value as the primary pass/fail criteria. As of May 30, 2023, the EPA has implemented an alternate pass/fail for pollutant analyzers using a tiered approached based on analyzer range as follows (reference 40 CFR 60, Appendix F, Procedure 1, section 5.2.3):

Analyzer range	*Alternate criteria, ppm difference*
>50 ppm	±5 ppm
≤50 ppm but >20 ppm	±3 ppm
≤20 ppm	±2 ppm

Cylinder Gas Audit Accuracy 40 CFR 60, Appendix F, Section 6.3	
$A = \frac{C_m - C_a}{C_a}\ x100$	A = Percent accuracy of the CEM C_m = The average monitor response to the specific audit gas (high or low) in units of concentration C_a = Certified value of audit gas (value according to EPA Protocol certification) in units of concentration

5 Worksheets and Supporting Documentation

The attached pages contain worksheets and supporting documentation for the CGA checks.

Tajiguas Landfill Project# SN00192
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **09/30/24**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	30
Test Date:	08/22/24

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	8.04	26.80	OK	SA19336	08/29/25	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**10:57**	**6.97**	**11:02**	**15.96**	
2	**11:07**	**7.31**	**11:13**	**16.09**	
3	**11:22**	**7.32**	**11:29**	**16.19**	
	Average Response (Cm)	7.20		16.08	
	Difference (Cm-Ca)	-0.84		-1.12	
	Status (for alt. criteria of +/-3 ppm difference)	PASS		PASS	range >20 but ≤ 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-10.45**		**-6.51**	
	Status (for primary criteria of 15%)	PASS		PASS	

Cylinder Gas Audit - NOx High Range

Analyzer Range:	100
Test Date:	08/22/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	24.6	24.60	OK	CC748576	05/31/27	OK
Mid	54.5	54.50	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**11:33**	**24.10**	**11:37**	**53.87**	
2	**11:43**	**24.28**	**11:48**	**54.05**	
3	**11:53**	**24.39**	**11:58**	**54.15**	
	Average Response (Cm)	24.26		54.02	
	Difference (Cm-Ca)	-0.34		-0.48	
	Status (for alt. criteria of +/-5 ppm difference)	PASS		PASS	range > than 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-1.40**		**-0.87**	
	Status (for primary criteria of 15%)	PASS		PASS	

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00192
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **09/30/24**

Manufacturer:	TAPI
Model:	T300M
Serial Number:	668
Analyzer Range:	150
Test Date:	08/22/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.1	26.73	OK	CC748576	05/31/27	OK
Mid	82.8	55.20	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**11:32**	**38.92**	**11:39**	**80.98**	
2	**11:43**	**38.93**	**11:49**	**80.97**	
3	**11:54**	**38.89**	**11:59**	**81.05**	
	Average Response (Cm)	38.91		81.00	
	Difference (Cm-Ca)	-1.19		-1.80	
	Status (for alt. criteria of +/-5 ppm difference)	PASS		PASS	range > than 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-2.96**		**-2.17**	
	Status (for primary criteria of 15%)	PASS		PASS	

Cylinder Gas Audit - CO High Range

Analyzer Range:	300
Test Date:	08/22/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	79.7	26.57	OK	CC283311	01/13/31	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**10:25**	**79.9**	**10:31**	**170.5**	
2	**10:36**	**79.8**	**10:41**	**170.4**	
3	**10:46**	**79.8**	**10:51**	**170.2**	
	Average Response (Cm)	79.83		170.36	
	Difference (Cm-Ca)	0.13		1.26	
	Status (for alt. criteria of +/-5 ppm difference)	PASS		PASS	range > than 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**0.17**		**0.75**	
	Status (for primary criteria of 15%)	PASS		PASS	

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00192
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **09/30/24**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	25
Test Date:	08/22/24

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.10	OK	CC283311	01/13/31	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**10:25**	**5.03**	**10:30**	**10.03**
2	**10:35**	**5.02**	**10:40**	**10.02**
3	**10:46**	**5.02**	**10:51**	**10.02**
Average Response (Cm)		5.02		10.02
Difference (Cm-Ca)		-0.08		-0.01
Accuracy %, ((Cm-Ca)/Ca) * 100		-1.50		-0.07
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Average Values Report
Generated: 8/22/2024 12:04

Santa Barbara County Public Works
Company: ~~Cemtek KVB-Enertec~~
Plant: Tajiguas Landfill
City/St: ~~Santa Ana, CA 92707~~ Goleta, CA
Source: ADF1

Period Start: 8/22/2024 10:50
Period End: 8/22/2024 11:35
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_NOx ppm	Average A1_NOxLo ppm	Average A1_CO ppm	Average A1_COLo ppm
08/22/2024 10:50	-0.65	-0.65	170.23	161.27
08/22/2024 10:51	-0.67	-0.67	170.22	161.25
08/22/2024 10:52	-0.68	-0.68	170.30	161.28
08/22/2024 10:53	-0.67	-0.67	170.35	161.27
08/22/2024 10:54	1.51	1.51	103.50	65.04
08/22/2024 10:55	7.02	7.02	1.57	1.57
08/22/2024 10:56	6.96	6.96	-0.55	-0.55
08/22/2024 10:57	6.97	6.97	-0.58	-0.58
08/22/2024 10:58	7.00	7.00	-0.63	-0.63
08/22/2024 10:59	9.11	9.11	-0.55	-0.55
08/22/2024 11:00	15.81	15.81	-0.56	-0.56
08/22/2024 11:01	15.93	15.93	-0.63	-0.63
08/22/2024 11:02	15.96	15.96	-0.63	-0.63
08/22/2024 11:03	16.00	16.00	-0.56	-0.55
08/22/2024 11:04	15.47	15.47	-0.46	-0.46
08/22/2024 11:05	8.74	8.74	-0.39	-0.39
08/22/2024 11:06	7.35	7.36	-0.56	-0.56
08/22/2024 11:07	7.31	7.31	-0.55	-0.55
08/22/2024 11:08	7.26	7.26	-0.56	-0.56
08/22/2024 11:09	7.25	7.25	-0.54	-0.54
08/22/2024 11:10	14.27	14.27	-0.41	-0.41
08/22/2024 11:11	16.12	16.12	-0.60	-0.60
08/22/2024 11:12	16.10	16.10	-0.63	-0.63
08/22/2024 11:13	16.09	16.09	-0.66	-0.66
08/22/2024 11:14	16.11	16.11	-0.67	-0.68
08/22/2024 11:15	13.73	13.73	-0.68	-0.68
08/22/2024 11:16	18.59	18.59	-0.56	-0.56
08/22/2024 11:17	16.49	16.48	-0.43	-0.44
08/22/2024 11:18	16.41	16.41	-0.69	-0.69
08/22/2024 11:19	12.17	12.17	-0.51	-0.51
08/22/2024 11:20	7.44	7.44	-0.56	-0.56
08/22/2024 11:21	7.34	7.34	-0.65	-0.64
08/22/2024 11:22	7.32	7.32	-0.54	-0.56
08/22/2024 11:23	7.29	7.29	-0.61	-0.61
08/22/2024 11:24	7.97	7.97	-0.60	-0.60
08/22/2024 11:25	15.20	15.20	-0.61	-0.61
08/22/2024 11:26	16.09	16.09	-0.66	-0.67
08/22/2024 11:27	16.12	16.12	-0.62	-0.62
08/22/2024 11:28	16.18	16.18	-0.59	-0.59
08/22/2024 11:29	16.19	16.19	-0.40	-0.40
08/22/2024 11:30	23.81	23.81	32.87	32.88
08/22/2024 11:31	24.15	24.15	38.89	38.89
08/22/2024 11:32	24.05	24.05	38.92	38.92
08/22/2024 11:33	23.95	23.95	38.99	38.99
08/22/2024 11:34	23.88	23.88	39.02	39.02
08/22/2024 11:35	40.67	23.89	60.59	60.76
Final Average*	**12.75**	**12.39**	**22.09**	**20.47**
Maximum*	**40.67**	**24.15**	**170.35**	**161.28**
	08/22/2024 11:35	08/22/2024 11:31	08/22/2024 10:53	08/22/2024 10:52
Minimum*	**-0.68**	**-0.68**	**-0.69**	**-0.69**
	08/22/2024 10:52	08/22/2024 10:52	08/22/2024 11:18	08/22/2024 11:18

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 8/22/2024 12:02

Company: ~~Cemtek KVB-Enertec~~ Santa Barbara County Public Works
Plant: Tajiguas Landfill
City/St: ~~Santa Ana, CA 92707~~ Goleta, CA
Source: ADF1

Period Start: 8/22/2024 11:30
Period End: 8/22/2024 12:02
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_NOx ppm	Average A1_NOxHi ppm	Average A1_CO ppm	Average A1_COLo ppm
08/22/2024 11:30	23.81	23.93	32.87	32.88
08/22/2024 11:31	24.15	24.28	38.89	38.89
08/22/2024 11:32	24.05	24.19	38.92	38.92
08/22/2024 11:33	23.95	24.10	38.99	38.99
08/22/2024 11:34	23.88	24.02	39.02	39.02
08/22/2024 11:35	40.67	40.72	60.59	60.76
08/22/2024 11:36	53.85	53.85	80.85	80.84
08/22/2024 11:37	53.87	53.87	80.92	80.92
08/22/2024 11:38	53.99	53.99	80.98	80.98
08/22/2024 11:39	54.04	54.06	80.98	80.98
08/22/2024 11:40	42.63	42.64	64.23	64.23
08/22/2024 11:41	24.55	24.67	39.20	39.20
08/22/2024 11:42	24.23	24.36	38.94	38.94
08/22/2024 11:43	24.15	24.28	38.93	38.93
08/22/2024 11:44	24.07	24.20	38.97	38.97
08/22/2024 11:45	31.90	31.99	51.51	52.13
08/22/2024 11:46	54.18	54.18	80.40	80.40
08/22/2024 11:47	54.05	54.05	80.99	80.99
08/22/2024 11:48	54.05	54.05	81.13	81.13
08/22/2024 11:49	54.07	54.07	80.97	80.97
08/22/2024 11:50	51.79	51.79	69.91	69.91
08/22/2024 11:51	24.57	24.70	39.71	39.71
08/22/2024 11:52	24.30	24.42	39.04	39.04
08/22/2024 11:53	24.26	24.39	38.96	38.96
08/22/2024 11:54	24.20	24.30	38.90	38.89
08/22/2024 11:55	24.12	24.27	41.97	41.97
08/22/2024 11:56	52.21	52.21	77.82	77.82
08/22/2024 11:57	54.13	54.13	81.01	81.01
08/22/2024 11:58	54.16	54.15	81.08	81.08
08/22/2024 11:59	54.18	54.18	81.04	81.05
08/22/2024 12:00	54.21	54.21	71.49	71.49
08/22/2024 12:01	67.43	67.43	6.71	6.71
08/22/2024 12:02	N/A	N/A	N/A	N/A
Final Average*	**39.80**	**39.87**	**57.37**	**57.40**
Maximum*	**67.43**	**67.43**	**81.13**	**81.13**
	08/22/2024 12:01	08/22/2024 12:01	08/22/2024 11:48	08/22/2024 11:48
Minimum*	**23.81**	**23.93**	**6.71**	**6.71**
	08/22/2024 11:30	08/22/2024 11:30	08/22/2024 12:01	08/22/2024 12:01

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 8/22/2024 10:55

Santa Barbara County Public Works
Company: ~~Cemtek KVB-Enertec~~
Plant: Tajiguas Landfill
City/St: ~~Santa Ana, CA 92707~~ Goleta, CA
Source: ADF1

Period Start: 8/22/2024 10:20
Period End: 8/22/2024 10:55
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_COHi ppm	Average A1_CO ppm	Average A1_O2 %
08/22/2024 10:20	79.8	78.75	5.03
08/22/2024 10:21	34.2	33.66	6.53
08/22/2024 10:22	54.7	54.03	5.44
08/22/2024 10:23	78.8	77.77	5.03
08/22/2024 10:24	79.8	78.78	5.03
08/22/2024 10:25	79.9	78.77	5.03
08/22/2024 10:26	79.9	78.81	5.02
08/22/2024 10:27	103.3	102.21	7.00
08/22/2024 10:28	168.6	168.57	10.03
08/22/2024 10:29	170.4	170.38	10.03
08/22/2024 10:30	170.6	170.55	10.03
08/22/2024 10:31	170.5	170.47	10.03
08/22/2024 10:32	128.2	127.54	7.38
08/22/2024 10:33	80.8	79.73	5.03
08/22/2024 10:34	79.9	78.81	5.02
08/22/2024 10:35	79.8	78.72	5.02
08/22/2024 10:36	79.8	78.77	5.02
08/22/2024 10:37	92.9	91.73	6.27
08/22/2024 10:38	145.9	146.69	9.68
08/22/2024 10:39	170.3	170.30	10.03
08/22/2024 10:40	170.5	170.48	10.02
08/22/2024 10:41	170.4	170.42	10.02
08/22/2024 10:42	159.4	159.10	9.49
08/22/2024 10:43	88.0	85.58	5.18
08/22/2024 10:44	80.0	78.90	5.02
08/22/2024 10:45	79.9	78.82	5.03
08/22/2024 10:46	79.8	78.76	5.02
08/22/2024 10:47	79.7	78.71	5.01
08/22/2024 10:48	79.8	78.74	5.03
08/22/2024 10:49	144.3	143.83	9.11
08/22/2024 10:50	170.2	170.23	10.02
08/22/2024 10:51	170.2	170.22	10.02
08/22/2024 10:52	170.3	170.30	10.02
08/22/2024 10:53	170.3	170.35	10.03
08/22/2024 10:54	100.5	103.50	5.20
08/22/2024 10:55	N/A	N/A	N/A
Final Average*	**115.5**	**114.94**	**7.20**
Maximum*	**170.6**	**170.55**	**10.03**
	08/22/2024 10:30	08/22/2024 10:30	08/22/2024 10:53
Minimum*	**34.2**	**33.66**	**5.01**
	08/22/2024 10:21	08/22/2024 10:21	08/22/2024 10:47

* Does not include Invalid Averaging Periods ("N/A")

Tajiguas Landfill Project# SN00192
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **09/30/24**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1302
Analyzer Range:	30
Test Date:	08/22/24

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	8.04	26.80	OK	SA19336	08/29/25	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**08:07**	**7.74**	**08:12**	**16.39**	
2	**08:18**	**7.77**	**08:24**	**16.29**	
3	**08:30**	**7.75**	**08:34**	**16.27**	
Average Response (Cm)		7.75		16.32	
Difference (Cm-Ca)		-0.29		-0.88	
Status (for alt. criteria of +/-3 ppm difference)		PASS		PASS	range >20 but ≤ 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**-3.57**		**-5.14**	
Status (for primary criteria of 15%)		PASS		PASS	

Cylinder Gas Audit - NOx High Range

Analyzer Range:	100
Test Date:	08/22/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	24.6	24.60	OK	CC748576	05/31/27	OK
Mid	54.5	54.50	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**08:40**	**24.19**	**08:46**	**53.61**	
2	**08:51**	**24.31**	**08:57**	**53.61**	
3	**09:03**	**24.23**	**09:10**	**53.59**	
Average Response (Cm)		24.24		53.60	
Difference (Cm-Ca)		-0.36		-0.90	
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS	range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**-1.45**		**-1.65**	
Status (for primary criteria of 15%)		PASS		PASS	

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00192
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **09/30/24**

Manufacturer:	TAPI
Model:	T300M
Serial Number:	669
Analyzer Range:	150
Test Date:	08/22/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.1	26.73	OK	CC748576	05/31/27	OK
Mid	82.8	55.20	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**08:41**	**39.23**	**08:47**	**82.89**	
2	**08:51**	**39.15**	**08:57**	**82.77**	
3	**09:04**	**39.20**	**09:10**	**82.61**	
Average Response (Cm)		39.19		82.76	
Difference (Cm-Ca)		-0.91		-0.04	
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS	range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**-2.26**		**-0.05**	
Status (for primary criteria of 15%)		PASS		PASS	

Cylinder Gas Audit - CO High Range

Analyzer Range:	300
Test Date:	08/22/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	79.7	26.57	OK	CC283311	01/13/31	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**07:26**	**83.1**	**07:32**	**178.5**	
2	**07:38**	**83.3**	**07:43**	**178.6**	
3	**07:48**	**83.4**	**08:02**	**178.7**	
Average Response (Cm)		83.27		178.60	
Difference (Cm-Ca)		3.57		9.50	
Status (for alt. criteria of +/-5 ppm difference)		PASS		**FAIL**	range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**4.48**		**5.62**	
Status (for primary criteria of 15%)		PASS		PASS	

Note: passed by primary criteria

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00192
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **09/30/24**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1302
Analyzer Range:	25
Test Date:	08/22/24

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.10	OK	CC283311	01/13/31	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**07:26**	**5.29**	**07:32**	**10.15**
2	**07:38**	**5.28**	**07:43**	**10.16**
3	**07:47**	**5.28**	**08:01**	**10.17**
Average Response (Cm)		5.28		10.16
Difference (Cm-Ca)		0.18		0.13
Accuracy %, ((Cm-Ca)/Ca) * 100		3.59		1.30
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Average Values Report
Generated: 8/22/2024 11:07

Santa Barbara County Public Works
Company: ~~Cemtek KVB-Enertec~~
Plant: Tajiguas Landfill
City/St: ~~Santa Ana, CA 92707~~ Goleta, CA
Source: ADF2

Period Start: 8/22/2024 08:00
Period End: 8/22/2024 08:40
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_NOx ppm	Average A2_NOxLo ppm	Average A2_O2 %
08/22/2024 08:00	0.01	0.00	10.17
08/22/2024 08:01	0.00	-0.01	10.17
08/22/2024 08:02	0.00	-0.01	10.15
08/22/2024 08:03	0.00	-0.01	10.94
08/22/2024 08:04	1.80	1.79	11.47
08/22/2024 08:05	7.61	7.61	0.23
08/22/2024 08:06	7.73	7.73	0.21
08/22/2024 08:07	7.74	7.74	0.20
08/22/2024 08:08	7.75	7.75	0.19
08/22/2024 08:09	7.78	7.78	0.19
08/22/2024 08:10	11.16	11.16	0.31
08/22/2024 08:11	16.38	16.38	0.18
08/22/2024 08:12	16.39	16.39	0.18
08/22/2024 08:13	16.42	16.42	0.19
08/22/2024 08:14	16.42	16.42	0.19
08/22/2024 08:15	15.71	15.71	0.19
08/22/2024 08:16	7.85	7.85	0.20
08/22/2024 08:17	7.77	7.77	0.19
08/22/2024 08:18	7.77	7.77	0.19
08/22/2024 08:19	7.76	7.76	0.20
08/22/2024 08:20	7.74	7.74	0.20
08/22/2024 08:21	12.66	12.66	0.20
08/22/2024 08:22	16.27	16.27	0.19
08/22/2024 08:23	16.29	16.29	0.19
08/22/2024 08:24	16.29	16.29	0.17
08/22/2024 08:25	16.31	16.31	0.17
08/22/2024 08:26	14.23	14.23	0.19
08/22/2024 08:27	7.83	7.83	0.19
08/22/2024 08:28	7.77	7.77	0.20
08/22/2024 08:29	7.75	7.75	0.19
08/22/2024 08:30	7.75	7.75	0.20
08/22/2024 08:31	7.74	7.74	0.18
08/22/2024 08:32	14.08	14.08	0.19
08/22/2024 08:33	16.27	16.27	0.18
08/22/2024 08:34	16.27	16.27	0.18
08/22/2024 08:35	16.27	16.27	0.19
08/22/2024 08:36	16.28	16.28	0.18
08/22/2024 08:37	16.73	16.73	0.28
08/22/2024 08:38	23.31	23.31	0.19
08/22/2024 08:39	23.51	23.50	0.18
08/22/2024 08:40	23.50	23.50	0.18
Final Average*	**11.44**	**11.44**	**1.46**
Maximum*	**23.51**	**23.50**	**11.47**
	08/22/2024 8:39	08/22/2024 8:40	08/22/2024 8:04
Minimum*	**0.00**	**-0.01**	**0.17**
	08/22/2024 8:03	08/22/2024 8:03	08/22/2024 8:25

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 8/22/2024 11:09

Company: ~~Cemtek KVB-Enertec~~ Santa Barbara County Public Works
Plant: Tajiguas Landfill
City/St: ~~Santa Ana, CA 92707~~ Goleta, CA
Source: ADF2

Period Start: 8/22/2024 08:30
Period End: 8/22/2024 09:12
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_NOx ppm	Average A2_NOxHi ppm	Average A2_COLo ppm
08/22/2024 08:30	7.75	8.03	-0.42
08/22/2024 08:31	7.74	7.98	-0.45
08/22/2024 08:32	14.08	14.50	-0.40
08/22/2024 08:33	16.27	16.77	-0.47
08/22/2024 08:34	16.27	16.74	-0.51
08/22/2024 08:35	16.27	16.73	-0.44
08/22/2024 08:36	16.28	16.73	-0.51
08/22/2024 08:37	16.73	17.25	6.18
08/22/2024 08:38	23.31	24.01	37.18
08/22/2024 08:39	23.51	24.23	39.15
08/22/2024 08:40	23.50	24.19	39.25
08/22/2024 08:41	23.49	24.14	39.23
08/22/2024 08:42	23.51	24.19	39.41
08/22/2024 08:43	41.08	41.31	75.00
08/22/2024 08:44	53.62	53.62	82.83
08/22/2024 08:45	53.63	53.63	82.93
08/22/2024 08:46	53.62	53.61	83.01
08/22/2024 08:47	53.63	53.63	82.89
08/22/2024 08:48	41.32	41.56	60.72
08/22/2024 08:49	23.70	24.41	39.63
08/22/2024 08:50	23.63	24.31	39.16
08/22/2024 08:51	23.63	24.31	39.15
08/22/2024 08:52	23.58	24.28	39.17
08/22/2024 08:53	23.55	24.25	39.14
08/22/2024 08:54	23.55	24.22	41.73
08/22/2024 08:55	50.68	50.68	77.74
08/22/2024 08:56	53.58	53.58	82.79
08/22/2024 08:57	53.61	53.61	82.77
08/22/2024 08:58	53.63	53.63	77.96
08/22/2024 08:59	12.21	12.40	10.17
08/22/2024 09:00	4.09	4.26	16.31
08/22/2024 09:01	23.56	24.24	38.89
08/22/2024 09:02	23.54	24.27	39.30
08/22/2024 09:03	23.53	24.23	39.10
08/22/2024 09:04	23.51	24.21	39.20
08/22/2024 09:05	23.50	24.20	39.09
08/22/2024 09:06	30.99	31.44	56.20
08/22/2024 09:07	53.47	53.47	82.03
08/22/2024 09:08	53.57	53.57	82.61
08/22/2024 09:09	53.59	53.59	82.76
08/22/2024 09:10	53.59	53.59	82.61
08/22/2024 09:11	53.63	53.63	82.65
08/22/2024 09:12	45.12	45.12	53.68
Final Average*	**31.55**	**31.92**	**45.78**
Maximum*	**53.63**	**53.63**	**83.01**
	08/22/2024 9:11	08/22/2024 9:11	08/22/2024 8:46
Minimum*	**4.09**	**4.26**	**-0.51**
	08/22/2024 9:00	08/22/2024 9:00	08/22/2024 8:36

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 8/22/2024 10:57

Santa Barbara County Public Works
Company: ~~Cemtek KVB-Enertec~~
Plant: Tajiguas Landfill
City/St: ~~Santa Ana, CA 92707~~ Goleta, CA
Source: ADF2

Period Start: 8/22/2024 07:20
Period End: 8/22/2024 08:05
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_CO ppm	Average A2_COHi ppm	Average A2_O2 %
08/22/2024 07:20	0.00	-0.2	20.98
08/22/2024 07:21	0.00	-0.3	20.98
08/22/2024 07:22	0.00	-0.3	20.98
08/22/2024 07:23	7.66	7.6	17.65
08/22/2024 07:24	75.00	77.2	5.29
08/22/2024 07:25	80.64	83.0	5.29
08/22/2024 07:26	80.75	83.1	5.29
08/22/2024 07:27	80.84	83.2	5.28
08/22/2024 07:28	80.76	83.2	5.27
08/22/2024 07:29	118.75	120.8	8.31
08/22/2024 07:30	176.87	176.9	10.15
08/22/2024 07:31	178.53	178.5	10.15
08/22/2024 07:32	178.48	178.5	10.15
08/22/2024 07:33	178.45	178.4	10.14
08/22/2024 07:34	178.20	178.2	10.01
08/22/2024 07:35	101.99	103.6	5.38
08/22/2024 07:36	81.08	83.5	5.28
08/22/2024 07:37	80.86	83.3	5.28
08/22/2024 07:38	80.86	83.3	5.28
08/22/2024 07:39	86.37	89.0	6.05
08/22/2024 07:40	169.18	169.2	10.14
08/22/2024 07:41	178.45	178.5	10.15
08/22/2024 07:42	178.57	178.6	10.17
08/22/2024 07:43	178.60	178.6	10.16
08/22/2024 07:44	159.35	159.9	8.39
08/22/2024 07:45	85.00	87.5	5.28
08/22/2024 07:46	80.93	83.4	5.28
08/22/2024 07:47	80.96	83.4	5.28
08/22/2024 07:48	80.95	83.4	5.27
08/22/2024 07:49	80.94	83.4	5.29
08/22/2024 07:50	80.83	83.3	5.28
08/22/2024 07:51	80.92	83.3	5.29
08/22/2024 07:52	80.85	83.3	5.27
08/22/2024 07:53	80.91	83.4	5.27
08/22/2024 07:54	80.94	83.4	5.28
08/22/2024 07:55	80.92	83.3	5.27
08/22/2024 07:56	80.87	83.2	5.28
08/22/2024 07:57	63.88	65.7	11.20
08/22/2024 07:58	2.83	2.4	20.96
08/22/2024 07:59	105.43	108.8	11.64
08/22/2024 08:00	177.52	177.5	10.17
08/22/2024 08:01	178.57	178.6	10.17
08/22/2024 08:02	178.72	178.7	10.15
08/22/2024 08:03	172.60	172.6	10.94
08/22/2024 08:04	38.89	39.7	11.47
08/22/2024 08:05	2.57	2.8	0.23
Final Average*	**100.14**	**101.4**	**8.75**
Maximum*	**178.72**	**178.7**	**20.98**
	08/22/2024 8:02	08/22/2024 8:02	08/22/2024 7:22
Minimum*	**0.00**	**-0.3**	**0.23**
	08/22/2024 7:22	08/22/2024 7:22	08/22/2024 8:05

* Does not include Invalid Averaging Periods ("N/A")

Making our world more productive

DocNumber: 491479

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22022

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG BAKERSFIELD CA HPS
3505 BUCK OWENS BLVD
BAKERSFIELD CA 93308-4919

Certificate Issuance Date: 08/29/2022
Linde Order Number: 72163095
Pan Number: NI NO8ME-AS
Customer PO Number: 80167623

Fill Date: 08/12/2022
Lot Number: 700862224O5
Cylinder Style & Outlet: AS — CGA 660
Cylinder Pressure and Volume: 2000 psig — 140 ft3

Certified Concentration

ProSpec EZ Cert

		NIST Traceable Expanded Uncertainty
Expiration Date:	08/29/2025	
Cylinder Number:	SA19336	
8.04 ppm	Nitric oxide	± 0.04 ppm
Balance	Nitrogen	

For Reference Only: NOx 8.09 ppm

Certification Information: Certification Date: 08/29/202[illegible] Term: 36 Months Expiration Date: 08/29/2025

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EP[illegible]-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: (R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Nitric oxide

Requested Concentration: 8 ppm
Certified Concentration: 8.04 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/11/2022

Reference Standard: Type / Cylinder #: GMIS / DT0038022
Concentration / Uncertainty: 9.42 ppm ±0.05 ppm
Expiration Date: 04/08/2025
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1837210.02 / APEX1324301
SRM Concentration / Uncertainty: 10.00 ppm / ±0.05 ppm
SRM Expiration Date: 04/17/2022

First Analysis Data:						Date	08/22/2022
Z: 0	R: 9.42	C: 8.03	Conc: 8.03				
R: 9.42	Z: 0	C: 8.05	Conc: 8.05				
Z: 0	C: 8.04	R: 9.41	Conc: 8.04				
UOM: ppm		Mean Test Assay:	8.04	ppm			

Second Analysis Data:						Date	08/29/2022
Z: 0	R: 9.42	C: 8.05	Conc: 8.04				
R: 9.44	Z: 0	C: 8.06	Conc: 8.05				
Z: 0	C: 8.04	R: 9.43	Conc: 8.03				
UOM: ppm		Mean Test Assay:	8.04	ppm			

Analyzed By: Lissette Morales

Certified By: Henry Koung

IN CASE OF EMERGENCY: CALL 1-800-645-4633 SDS ID: P-18-1884-NI DO NOT REMOVE THIS LABEL

Lot No. 70086216106
Cylinder No. CC499039
Part No. NI NO17ME-AS
Volume: 140 ft3
Fill Date: 06/10/2022
Expiration Date: 06/23/2025
Cust. Ref. # MUSTANG

ProSpec
By Linde

Linde Gas & Equipment Inc.
5700 Alameda Street
Los Angeles, CA USA 90058

UN1956 Compressed gas, n.o.s. (Nitrogen, Nitric oxide)

EPA Protocol

Molar Concentration	Component	CAS
17.2 ppm	Nitric oxide	10102-43-9
Balance	Nitrogen	7727-37-9

Warning

CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

TLV:

Nitric oxide 25 ppm

Use and store only outdoors or in a well-ventilated place; Use a back flow preventive device in the piping; Use only with equipment rated for cylinder pressure; Close valve after each use and when empty; Protect from sunlight when ambient temperature exceeds 52°C (125°F); Do not handle until all safety precautions have been read and understood; IF INHALED: Remove person to fr[illegible] and keep [illegible] comfortable for breathing. Get medical advice/attention; Do not open valve [illegible] connecting to equi[illegible]

FIRST AID

[illegible] at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If [illegible] difficult, [illegible] trained personnel should give oxygen. Call a physician.
IF IN EYES: Immediately flush [illegible] thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the [illegible] Eyes must be flushed thoroughly. Contact an ophthalmologist immediately.

Making our world more productive

DocNumber: 573298

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22024

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 05/31/2024
Linde Order Number: 72814852
Part Number: NI CO40MN20E-AS
Customer PO Number: 80828173

Fill Date: 05/15/2024
Lot Number: 700864139603
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 05/31/2027		NIST Traceable Expanded Uncertainty
Cylinder Number: CC748576		
40.1 ppm	Carbon monoxide	± 0.2 ppm
24.6 ppm	Nitric oxide	± 0.1 ppm
Balance	Nitrogen	

For Reference Only: NOx 24.7 ppm

Certification Information: Certification Date: 05/31/2024 Term: 36 Months Expiration Date: 05/31/2027

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Carbon monoxide

Requested Concentration: 40 ppm
Certified Concentration: 40.1 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 04/30/2024

First Analysis Data:						Date	05/21/2024
Z: 0	R: 50.4	C: 40.1	Conc: 40.1				
R: 50.5	Z: 0	C: 40.2	Conc: 40.2				
Z: 0	C: 40.2	R: 50.4	Conc: 40.2				
UOM: ppm			Mean Test Assay:	40.1	ppm		

Reference Standard: Type / Cylinder #: GMIS / DT0013574
Concentration / Uncertainty: 50.4 ppm ±0.2 ppm
Expiration Date: 09/19/2031
Traceable to: SRM # / Sample # / Cylinder #: SRM 1678c / 4-L-41 / FF18402
SRM Concentration / Uncertainty: 49.136 PPM / ±0.065 PPM
SRM Expiration Date: 04/22/2029

Second Analysis Data:						Date	
Z: 0	R: 0	C: 0	Conc: 0				
R: 0	Z: 0	C: 0	Conc: 0				
Z: 0	C: 0	R: 0	Conc: 0				
UOM: ppm			Mean Test Assay:		ppm		

2. **Component:** Nitric oxide

Requested Concentration: 25 ppm
Certified Concentration: 24.6 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 05/09/2024

First Analysis Data:						Date	05/21/2024
Z: 0	R: 49.6	C: 24.5	Conc: 24.5				
R: 49.6	Z: 0	C: 24.6	Conc: 24.6				
Z: 0	C: 24.6	R: 49.5	Conc: 24.6				
UOM: ppm			Mean Test Assay:	24.6	ppm		

Reference Standard: Type / Cylinder #: GMIS / ND67519
Concentration / Uncertainty: 49.6 ppm ±0.2 ppm
Expiration Date: 02/09/2032
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2305301.04 / APE1516620
SRM Concentration / Uncertainty: 50.20 ppm / ±0.20 ppm
SRM Expiration Date: 02/22/2026

Second Analysis Data:						Date	05/31/2024
Z: 0	R: 49.6	C: 24.5	Conc: 24.5				
R: 49.7	Z: 0	C: 24.6	Conc: 24.6				
Z: 0	C: 24.6	R: 49.7	Conc: 24.6				
UOM: ppm			Mean Test Assay:	24.5	ppm		

Analyzed By: Henry Koung

Certified By: Lissette Morales

IN CASE OF EMERGENCY: CALL 1-800-645-4633 SDS ID: P-18-9003 DO NOT REMOVE THIS LABEL

Lot No. 70086129501
Cylinder No. CC3035
Part No. NI CO80MN7E-AS
Volume: 140 ft3
Fill Date: 10/22/2021
Expiration Date: 11/16/2029

ProSpec By Linde

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles, CA USA 90058

UN1956 Compressed gas, n.o.s. (Nitrogen, Carbon monoxide)

EPA Protocol

Molar Concentration	Component	CAS
82.8 ppm	Carbon monoxide	630-08-0
54.5 ppm	Nitric oxide	10102-43-9
Balance	Nitrogen	7727-37-9

Warning

CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

TLV:

Carbon monoxide 25 ppm
Nitric oxide 25 ppm

Do not handle until all safety precautions have been read and understood; Use and store only outdoors or in a well ventilated place; Use a back flow preventive device in the piping; Use only with equipment rated for cylinder pressure; Do not open valve until connected to equipment prepared for use; Close valve after each use and when empty; Protect from sunlight when ambient temperature exceeds 52°C (125°F); IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.

FIRST AID

Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should give oxygen. Call a physician.

In case of contact with eyes, immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately.

Making our world more productive

DocNumber: 531956

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22023

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 01/17/2023
Linde Order Number: 72303369
Part Number: NI CO80MO14E-AS
Customer PO Number: 80309977

Fill Date: 12/27/2022
Lot Number: 7508Z36102
Cylinder Style & Outlet: AS — CGA 350
Cylinder Pressure and Volume: 2000 psig — 140 ft3

Certified Concentration

ProSpec EZ Cert

		NIST Traceable Expanded Uncertainty
Expiration Date:	01/13/2031	
Cylinder Number:	CC283311	
79.7 ppm	Carbon monoxide	± 0.7 ppm
5.10 %	Oxygen	± 0.04 %
Balance	Nitrogen	

Certification Information:

Certification Date: 01/13/2023 Term: 96 Months Expiration Date: 01/13/2031

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Carbon monoxide

Requested Concentration: 80 ppm
Certified Concentration: 79.7 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 12/15/2022

First Analysis Data: Date 01/13/2023

Z: 0	R: 100.1	C: 79.8	Conc: 79.7		
R: 100.1	Z: 0	C: 79.7	Conc: 79.6		
Z: 0	C: 79.8	R: 100.4	Conc: 79.7		
UOM: ppm		Mean Test Assay:	79.7	ppm	

Reference Standard: Type / Cylinder #: NTRM / CC105919
Concentration / Uncertainty: 100.1 ppm ±0.8 ppm
Expiration Date: 07/09/2027
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 190703 / CC8737
SRM Concentration / Uncertainty: 100.1 ppm / ±0.8 ppm
SRM Expiration Date: 07/09/2027

Second Analysis Data: Date

Z: 0	R: 0	C: 0	Conc: 0		
R: 0	Z: 0	C: 0	Conc: 0		
Z: 0	C: 0	R: 0	Conc: 0		
UOM: ppm		Mean Test Assay:		ppm	

2. Component: Oxygen

Requested Concentration: 5 %
Certified Concentration: 5.10 %
Instrument Used: Siemens Oxymat 6E S/N 7MB20211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 12/15/2022

First Analysis Data: Date 01/13/2023

Z: 0	R: 9.978	C: 5.098	Conc: 5.09		
R: 9.988	Z: 0	C: 5.102	Conc: 5.1		
Z: 0	C: 5.105	R: 9.988	Conc: 5.1		
UOM: %		Mean Test Assay:	5.1	%	

Reference Standard: Type / Cylinder #: GMIS / DT0018893
Concentration / Uncertainty: 9.978 % ±0.024 %
Expiration Date: 12/20/2030
Traceable to: SRM # / Sample # / Cylinder #: SRM 2658a / 72-D-28 / CAL016862
SRM Concentration / Uncertainty: 9.918 % / ±0.022 %
SRM Expiration Date: 02/03/2024

Second Analysis Data: Date

Z: 0	R: 0	C: 0	Conc: 0		
R: 0	Z: 0	C: 0	Conc: 0		
Z: 0	C: 0	R: 0	Conc: 0		
UOM: %		Mean Test Assay:		%	

Analyzed By: Courtney Zielke

Certified By: Amalia Real

IN CASE OF EMERGENCY: CALL 1-800-645-4633 SDS ID: P-18-0267 DO NOT REMOVE THIS LABEL

Lot No. 70086107102
Cylinder No. CC73183
Part No. NI CO170O10E-AS
Volume : 140 ft3
Fill Date: 03/12/2021
Expiration Date: 03/19/2029

ProSpec by Praxair PRAXAIR

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles, CA USA 90058

UN1956 Compressed gas, n.o.s. (Nitrogen, Oxygen)

EPA Protocol

Molar Concentration	Component	CAS
169.1 ppm	Carbon monoxide	630-08-0
10.03 %	Oxygen	7782-44-7
Balance	Nitrogen	7727-37-9

Warning

CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

TLV: Carbon monoxide 25 ppm

Protect from sunlight when ambient temperature exceeds 52°C (125°F); Use and store only outdoors or in a well-ventilated place.

FIRST AID

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should give oxygen. Call a physician.

IF IN EYES: Immediately flush eyes thoroughly with water for at least 15 minutes, Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately.

Continuous Emissions Monitoring System (CEMS)

Third Quarter Test Report

Cylinder Gas Audit

Test Date(s): September 26 and 27, 2023
CEMTEK Project No.: SN00170A

Prepared for:

Tajiguas Resource Recovery Project
Anaerobic Digesting Facility (ADF), Units A and B
Goleta, CA

Prepared by:

CEMTEK KVB-Enertec

3041 S. Orange Avenue, Santa Ana, CA 92707 • Phone: 714-437-7100 • Fax: 714-437-7177 • Toll Free: 888-400-0200
2849 Sterling Drive, Hatfield, PA 19440 • Phone: 215-996-9200 • Fax: 330-860-8982 • Tech Support Phone: 800-582-1670
Houston, TX Office • Phone: 281-729-8228

Contents

1 Introduction

This quarterly audit report outlines the procedures and results of the Cylinder Gas Audit (CGA) check performed on the monitors at this facility. All testing was done in accordance with 40 CFR 60, Appendix F Procedure 1.

Tajiguas Landfill is located at 14470 Calle Real in Goleta, California that is approximately 26 miles west of the City of Santa Barbara. The landfill began receiving refuse in 1967 to serve the City of Santa Barbara, City of Goleta, unincorporated areas of Montecito and Summerland, rural areas of southern Santa Barbara County, the Santa Ynez Valley and Cuyama Valley. It is located in a canyon known as Cañada de la Pila. Immediately south of the landfill site are U.S. Highway 101, which provides access to the site, Union Pacific Railroad tracks, and the Pacific Ocean. The southern portion of the site is within the California Coastal Zone. For District regulatory purposes, the facility location is in the Southern Zone of Santa Barbara County.

Municipal solid waste (MSW) is delivered to a tipping area inside the Material Recovery Facility (MRF) building at Tajiguas. The material is subsequently sorted into organics, recyclables, and residue in the materials sorting area. Recyclables collected in the materials sorting area are sold to the market while waste residue is landfilled. The sorted organics are placed in the anaerobic digesters to generate biogas in the Anaerobic Digester Facility (ADF). The biogas is treated and combusted in combined heat and power (CHP) internal combustion (IC) engines for power generation, or an enclosed flare located at the ADF. Following biogas generation, the digestate is processed into soil amendments and compost at the Compost Management Unit (CMU). The MRF, ADF, and CMU are designed and constructed by MSB and owned by Santa Barbara County Public Works Department (SBCPWD). The MRF is operated by MarBorg Industries.

The ADF and CMU are operated by Mustang and Bekon. The waste residue placed in the landfill generates LFG in the subsurface landfill through anaerobic biological decomposition. The LFG is collected onsite using a vapor extraction system and handled using a collection and transportation system. A leachate management system collects the groundwater found in the landfill subsurface. The LFG is scrubbed of moisture, particulates, and hydrogen sulfide. The landfill, LFG collection system, hydrogen sulfide scrubber system, and leachate management system are owned and operated by the SBCPWD and permitted separately under PT-70/Reeval 9788-R4.

Currently, treated LFG is combusted an onsite enclosed flare or IC engine that are respectively owned and operated by NEO Tajiguas LLC (NEOT) and MM Tajiguas Energy LLC (MMTE). The LFG treatment system, two LFG-fired CHP engines, and MRF enclosed flare subject to the ATC 14500-02 permit will replace the existing equipment.

Two of the processes involved at the stationary source are as follows:

Anaerobic Digestion Facility: The organic (food and green) waste from the MRF is placed into digesters. An anaerobic digestion process generates biogas. This biogas is sent to the ADF combustion equipment. After the anaerobic digestion process is complete, the residual organic waste is sent to the CMU.

Anaerobic Digestion Facility Combustion Equipment: Biogas from the ADF digesters is sent to two CHP engines to produce electricity to the grid and for onsite needs. Treated LFG is used as a supplemental fuel. If one of the engines is offline or if one of the ADF digesters is being purged, biogas is routed to the ADF enclosed flare.

2 Monitor Information

The following table provides information on the monitors that were subject to this test program.

ADF Unit A

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1301
CO	TAPI T300M	0-150/0-300 ppm	668

ADF Unit B

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1302
CO	TAPI T300M	0-150/0-300 ppm	669

3 Summary of Results

The results for the Cylinder Gas Audit (CGA) checks performed on the facility monitors are summarized in the following results table.

Table 1: Unit A CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = -3.44% Mid = -5.10%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/26/23
NO_X High range	Low = -0.78% Mid = -2.39%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/27/23
CO Low range	Low = 0.70% Mid = 0.58%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/27/23
CO High range	Low = 2.78% Mid = 2.47%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/26/23
O_2	Low = 1.66% Mid = -0.56%	≤15% (40 CFR 60, Appendix F)	Pass	9/26/23

Table 2: Unit B CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = -8.71% Mid = -6.26%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/26/23
NO_X High range	Low = -4.60% Mid = -3.84%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/27/23
CO Low range	Low = -2.21% Mid = 0.70%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/27/23
CO High range	Low = 6.18% Mid = 5.95%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	9/26/23
O_2	Low = 1.73% Mid = 0.47%	≤15% (40 CFR 60, Appendix F)	Pass	9/26/23

4 Cylinder Gas Audit Test Procedure

The Cylinder Gas Audit (CGA) is performed for each pollutant concentration monitor at least once during each unit operating quarter based on the requirements of 40 CFR 60, Appendix F. CGAs are conducted in three consecutive quarters. Separate calibration gas cylinders are used for each concentration during the audit.

1. All audit gas cylinders are connected to the proper transport lines. EPA Protocol certified gases are used. Cylinders are checked to ensure that each audit gas has at least 200 psi.
2. The analyzers are challenged with an audit gas of known concentration at two points within the following concentration ranges (40 CFR 60, Appendix F):

Audit Point	***Pollutant Monitors*** ***% of span***	***O_2*** ***% by volume***
Low level	20-30% of span	4-6% by volume
Mid Level	50-60% of span	8-12% by volume

3. The analyzers are challenged three times at each audit point. Calibration gas injections are done alternately between the two audit values. The average of the three responses for each audit point is used in determining accuracy. The monitor is challenged at each audit point for a sufficient time to assure that any absorption-desorption phenomena at the CEMS sample transport surfaces have stabilized. The injection time also takes into account the response time of the analyzers and sample system.

4. Each monitor is operated in its normal sampling mode, that is, the audit gas passes through all filters, scrubbers, conditioners, and other monitor components used during normal sampling, and through as much of the sampling probe as is practical.
5. The difference between the actual concentration of the audit gas and the concentration indicated by the monitor will determine the accuracy of the CEMS.

The accuracy values for each concentration should not exceed 15% of reference value as the primary pass/fail criteria. As of May 30, 2023, the EPA has implemented an alternate pass/fail for pollutant analyzers using a tiered approached based on analyzer range as follows (reference 40 CFR 60, Appendix F, Procedure 1, section 5.2.3):

Analyzer range	*Alternate criteria, ppm difference*
>50 ppm	±5 ppm
≤50 ppm but >20 ppm	±3 ppm
≤20 ppm	±2 ppm

Cylinder Gas Audit Accuracy 40 CFR 60, Appendix F, Section 6.3	
$A = \frac{C_m - C_a}{C_a}\ x100$	A = Percent accuracy of the CEM C_m = The average monitor response to the specific audit gas (high or low) in units of concentration C_a = Certified value of audit gas (value according to EPA Protocol certification) in units of concentration

5 Worksheets and Supporting Documentation

The attached pages contain worksheets and supporting documentation for the CGA checks.

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **09/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	30
Test Date:	09/26/23

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	8.04	26.80	OK	SA19336	08/29/25	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**14:47**	**8.49**	**14:51**	**16.58**
2	**14:56**	**7.50**	**15:01**	**16.23**
3	**15:06**	**7.30**	**15:12**	**16.16**
	Average Response (Cm)	7.76		16.32
	Difference (Cm-Ca)	-0.28		-0.88
Status (for alt. criteria of +/-3 ppm difference)		PASS		PASS
Accuracy %, ((Cm-Ca)/Ca) * 100		**-3.44**		**-5.10**
Status (for primary criteria of 15%)		PASS		PASS

range >20 but ≤ 50 ppm

Cylinder Gas Audit - NOx High Range

Analyzer Range:	100
Test Date:	09/27/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	25.8	25.80	OK	CC324929	04/16/24	OK
Mid	55.5	55.50	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**08:19**	**26.38**	**08:23**	**54.20**
2	**08:30**	**25.21**	**08:33**	**54.15**
3	**08:38**	**25.21**	**08:43**	**54.17**
	Average Response (Cm)	25.60		54.17
	Difference (Cm-Ca)	-0.20		-1.33
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS
Accuracy %, ((Cm-Ca)/Ca) * 100		**-0.78**		**-2.39**
Status (for primary criteria of 15%)		PASS		PASS

range > than 50 ppm

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **09/30/23**

Manufacturer: TAPI
Model: T300M
Serial Number: 668
Analyzer Range: 150
Test Date: 09/27/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.3	26.87	OK	CC324929	04/16/24	OK
Mid	80.6	53.73	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**08:20**	**40.71**	**08:23**	**81.07**
2	**08:28**	**40.52**	**08:33**	**81.07**
3	**08:39**	**40.52**	**08:43**	**81.07**
	Average Response (Cm)	40.58		81.07
	Difference (Cm-Ca)	0.28		0.47
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**0.70**		**0.58**
Status (for primary criteria of 15%)		PASS		PASS

Cylinder Gas Audit - CO High Range

Analyzer Range: 300
Test Date: 09/26/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	80.4	26.80	OK	EB0012199	09/16/30	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**13:57**	**82.8**	**14:03**	**173.3**
2	**14:07**	**82.4**	**14:12**	**173.3**
3	**14:16**	**82.7**	**14:21**	**173.3**
	Average Response (Cm)	82.63		173.28
	Difference (Cm-Ca)	2.23		4.18
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**2.78**		**2.47**
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **09/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	25
Test Date:	09/26/23

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.02	OK	EB0012199	09/16/30	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**13:56**	**5.10**	**14:02**	**10.08**
2	**14:07**	**5.10**	**14:11**	**10.09**
3	**14:16**	**5.11**	**14:21**	**10.09**
Average Response (Cm)		5.10		10.09
Difference (Cm-Ca)		0.08		0.06
Accuracy %, ((Cm-Ca)/Ca) * 100		1.66		0.56
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **09/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1302
Analyzer Range:	30
Test Date:	09/26/23

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	8.04	26.80	OK	SA19336	08/29/25	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**14:47**	**7.44**	**14:52**	**16.18**
2	**14:57**	**7.34**	**15:02**	**16.12**
3	**15:06**	**7.24**	**15:11**	**16.07**
	Average Response (Cm)	7.34		16.12
	Difference (Cm-Ca)	-0.70		-1.08
Status (for alt. criteria of +/-3 ppm difference)		PASS		PASS
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-8.71**		**-6.26**
	Status (for primary criteria of 15%)	PASS		PASS

range >20 but ≤ 50 ppm

Cylinder Gas Audit - NOx High Range

Analyzer Range:	100
Test Date:	09/27/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	25.8	25.80	OK	CC324929	04/16/24	OK
Mid	55.5	55.50	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**08:19**	**24.68**	**08:24**	**52.99**
2	**08:28**	**24.53**	**08:33**	**53.45**
3	**08:40**	**24.63**	**08:43**	**53.66**
	Average Response (Cm)	24.61		53.37
	Difference (Cm-Ca)	-1.19		-2.13
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-4.60**		**-3.84**
	Status (for primary criteria of 15%)	PASS		PASS

range > than 50 ppm

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **09/30/23**

Manufacturer: TAPI
Model: T300M
Serial Number: 669
Analyzer Range: 150
Test Date: 09/27/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.3	26.87	OK	CC324929	04/16/24	OK
Mid	80.6	53.73	OK	DT0036914	03/29/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**08:19**	**39.43**	**08:24**	**80.82**
2	**08:29**	**39.34**	**08:35**	**81.02**
3	**08:39**	**39.46**	**08:44**	**81.66**
Average Response (Cm)		39.41		81.17
Difference (Cm-Ca)		-0.89		0.57
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS
Accuracy %, ((Cm-Ca)/Ca) * 100		**-2.21**		**0.70**
Status (for primary criteria of 15%)		PASS		PASS

range > than 50 ppm

Cylinder Gas Audit - CO High Range

Analyzer Range: 300
Test Date: 09/26/23

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	80.4	26.80	OK	EB0012199	09/16/30	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**13:57**	**84.5**	**14:03**	**178.5**
2	**14:07**	**85.5**	**14:13**	**179.3**
3	**14:17**	**86.1**	**14:21**	**179.7**
Average Response (Cm)		85.37		179.17
Difference (Cm-Ca)		4.97		10.07
Status (for alt. criteria of +/-5 ppm difference)		PASS		**FAIL**
Accuracy %, ((Cm-Ca)/Ca) * 100		**6.18**		**5.95**
Status (for primary criteria of 15%)		PASS		PASS

range > than 50 ppm

Note: passed by primary criteria

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **09/30/23**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1302
Analyzer Range:	25
Test Date:	09/26/23

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.02	OK	EB0012199	09/16/30	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**13:57**	**5.11**	**14:02**	**10.08**
2	**14:07**	**5.11**	**14:11**	**10.07**
3	**14:17**	**5.10**	**14:21**	**10.08**
Average Response (Cm)		5.11		10.08
Difference (Cm-Ca)		0.09		0.05
Accuracy %, ((Cm-Ca)/Ca) * 100		1.73		0.47
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Average Values Report
Generated: 9/26/2023 15:45

Company: ~~Cemtek KVB-Enertec~~ **Mustang Renewable Power Ventures**
Plant: **Tajiguas Landfill**
City/St: ~~Santa Ana, CA 92707~~ **Goleta, CA**
Source: ADF1, ADF2

Period Start: 9/26/2023 14:44
Period End: 9/26/2023 15:15
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_NOxLo ppm	Average A2_NOxLo ppm	Average A1_CO ppm
09/26/2023 14:44	N/A	31.10	149.51
09/26/2023 14:45	13.96	11.16	11.46
09/26/2023 14:46	9.06	7.48	0.65
09/26/2023 14:47	8.49	7.44	0.46
09/26/2023 14:48	8.31	7.42	0.29
09/26/2023 14:49	10.07	9.37	0.16
09/26/2023 14:50	16.56	16.13	0.04
09/26/2023 14:51	16.58	16.18	0.03
09/26/2023 14:52	16.55	16.18	0.10
09/26/2023 14:53	16.50	16.19	0.04
09/26/2023 14:54	14.22	16.17	-0.02
09/26/2023 14:55	7.52	8.12	0.06
09/26/2023 14:56	7.50	7.32	0.06
09/26/2023 14:57	7.48	7.34	0.06
09/26/2023 14:58	7.42	7.33	0.08
09/26/2023 14:59	11.78	8.04	0.11
09/26/2023 15:00	16.26	15.37	0.04
09/26/2023 15:01	16.23	16.11	0.03
09/26/2023 15:02	16.24	16.12	0.01
09/26/2023 15:03	15.51	16.10	0.00
09/26/2023 15:04	8.10	8.28	0.02
09/26/2023 15:05	7.32	7.24	0.02
09/26/2023 15:06	7.30	7.24	0.06
09/26/2023 15:07	7.29	7.25	0.02
09/26/2023 15:08	7.28	7.23	0.01
09/26/2023 15:09	15.35	10.91	0.03
09/26/2023 15:10	16.14	16.07	0.00
09/26/2023 15:11	16.16	16.07	0.07
09/26/2023 15:12	16.16	16.06	-0.02
09/26/2023 15:13	16.16	16.08	61.66
09/26/2023 15:14	N/A	16.11	N/A
09/26/2023 15:15	N/A	7.05	N/A
Final Average*	**12.19**	**12.26**	**7.50**
Maximum*	**16.58**	**31.10**	**149.51**
	09/26/2023 14:51	09/26/2023 14:44	09/26/2023 14:44
Minimum*	**7.28**	**7.05**	**-0.02**
	09/26/2023 15:08	09/26/2023 15:15	09/26/2023 15:12

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 9/27/2023 08:55

Company: ~~Cemtek KVB-Enertec~~ **Mustang Renewable Power Ventures**
Plant: **Tajiguas Landfill**
City/St: ~~Santa Ana, CA 92707~~ **Goleta, CA**
Source: ADF1, ADF2

Period Start: 9/27/2023 08:16
Period End: 9/27/2023 08:48
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_COLo ppm	Average A1_NOxHi ppm	Average A2_COLo ppm	Average A2_NOxHi ppm
09/27/2023 08:16	81.49	39.99	118.86	54.56
09/27/2023 08:17	46.07	30.03	48.26	27.82
09/27/2023 08:18	40.97	26.93	39.43	24.79
09/27/2023 08:19	40.79	26.38	39.43	24.68
09/27/2023 08:20	40.71	26.02	39.60	24.55
09/27/2023 08:21	63.88	41.70	54.72	31.52
09/27/2023 08:22	80.88	54.16	80.13	52.93
09/27/2023 08:23	81.07	54.20	80.77	52.99
09/27/2023 08:24	81.13	54.13	80.82	52.99
09/27/2023 08:25	80.77	54.06	80.94	53.10
09/27/2023 08:26	49.17	32.70	60.22	41.31
09/27/2023 08:27	40.56	25.30	40.05	24.52
09/27/2023 08:28	40.52	25.21	39.49	24.53
09/27/2023 08:29	40.47	25.23	39.34	24.52
09/27/2023 08:30	41.13	25.21	39.31	24.54
09/27/2023 08:31	75.96	51.52	68.47	45.84
09/27/2023 08:32	81.00	54.15	80.46	53.46
09/27/2023 08:33	81.07	54.15	80.89	53.45
09/27/2023 08:34	81.05	54.19	81.03	53.49
09/27/2023 08:35	75.77	51.86	81.02	53.52
09/27/2023 08:36	42.22	27.71	61.27	39.26
09/27/2023 08:37	40.60	25.26	39.72	24.73
09/27/2023 08:38	40.52	25.21	39.28	24.66
09/27/2023 08:39	40.52	25.15	39.46	24.62
09/27/2023 08:40	44.62	25.11	39.86	24.63
09/27/2023 08:41	78.84	51.65	74.68	51.07
09/27/2023 08:42	81.10	54.19	81.50	53.65
09/27/2023 08:43	81.07	54.17	81.61	53.66
09/27/2023 08:44	81.02	54.24	81.66	53.68
09/27/2023 08:45	81.06	54.18	88.89	53.69
09/27/2023 08:46	N/A	N/A	139.21	43.17
09/27/2023 08:47	N/A	N/A	140.56	44.79
09/27/2023 08:48	N/A	N/A	129.40	38.77
Final Average*	**61.87**	**40.13**	**70.01**	**40.29**
Maximum*	**81.49**	**54.24**	**140.56**	**54.56**
	09/27/2023 8:16	09/27/2023 8:44	09/27/2023 8:47	09/27/2023 8:16
Minimum*	**40.47**	**25.11**	**39.28**	**24.52**
	09/27/2023 8:29	09/27/2023 8:40	09/27/2023 8:38	09/27/2023 8:29

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 9/26/2023 14:25

Company: ~~Cemtek KVB-Enertec~~ **Mustang Renewable Power Ventures**
Plant: **Tajiguas Landfill**
City/St: ~~Santa Ana, CA 92707~~ **Goleta, CA**
Source: ADF1, ADF2

Period Start: 9/26/2023 13:54
Period End: 9/26/2023 14:23
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_O2 %	Average A1_CO ppm	Average A1_COHi ppm	Average A2_CO ppm	Average A2_COHi ppm	Average A2_O2 %
09/26/2023 13:54	5.09	83.66	84.7	132.43	133.7	11.71
09/26/2023 13:55	5.10	81.89	83.0	88.20	91.1	5.12
09/26/2023 13:56	5.10	81.81	82.9	81.77	84.5	5.11
09/26/2023 13:57	5.11	81.74	82.8	81.66	84.5	5.11
09/26/2023 13:58	5.10	81.55	82.6	81.60	84.4	5.11
09/26/2023 13:59	5.09	81.59	82.6	81.06	83.8	5.10
09/26/2023 14:00	8.04	122.39	123.2	112.46	114.5	8.26
09/26/2023 14:01	10.08	172.82	172.8	176.28	176.3	10.08
09/26/2023 14:02	10.08	173.30	173.3	179.07	179.1	10.08
09/26/2023 14:03	10.09	173.28	173.3	178.47	178.5	10.09
09/26/2023 14:04	8.68	156.13	153.9	170.72	170.7	9.17
09/26/2023 14:05	5.12	84.38	85.4	91.45	94.7	5.12
09/26/2023 14:06	5.10	81.52	82.6	82.15	85.0	5.11
09/26/2023 14:07	5.10	81.45	82.4	82.57	85.5	5.11
09/26/2023 14:08	5.09	81.45	82.5	82.84	85.7	5.11
09/26/2023 14:09	8.86	139.99	142.8	119.53	122.2	7.87
09/26/2023 14:10	10.09	173.07	173.0	176.65	176.6	10.07
09/26/2023 14:11	10.09	173.25	173.3	179.30	179.3	10.07
09/26/2023 14:12	10.09	173.27	173.3	179.75	179.8	10.08
09/26/2023 14:13	9.59	169.40	169.4	179.30	179.3	10.08
09/26/2023 14:14	5.22	91.04	91.9	120.58	120.6	6.01
09/26/2023 14:15	5.10	81.54	82.7	83.94	86.9	5.11
09/26/2023 14:16	5.11	81.56	82.7	83.25	86.1	5.10
09/26/2023 14:17	5.10	81.53	82.5	83.19	86.1	5.10
09/26/2023 14:18	7.82	123.00	123.8	98.57	101.2	6.86
09/26/2023 14:19	10.09	172.68	172.7	174.73	175.5	10.07
09/26/2023 14:20	10.09	173.28	173.3	179.57	179.6	10.09
09/26/2023 14:21	10.09	173.28	173.3	179.67	179.7	10.08
09/26/2023 14:22	10.09	173.40	173.4	179.30	179.3	10.09
09/26/2023 14:23	9.44	219.17	219.2	161.37	162.1	13.20
Final Average*	**7.49**	**127.28**	**127.8**	**129.38**	**130.9**	**7.84**
Maximum*	**10.09**	**219.17**	**219.2**	**179.75**	**179.8**	**13.20**
	09/26/2023 14:22	09/26/2023 14:23	09/26/2023 14:23	09/26/2023 14:12	09/26/2023 14:12	09/26/2023 14:23
Minimum*	**5.09**	**81.45**	**82.4**	**81.06**	**83.8**	**5.10**
	09/26/2023 14:08	09/26/2023 14:08	09/26/2023 14:07	09/26/2023 13:59	09/26/2023 13:59	09/26/2023 14:17

* Does not include Invalid Averaging Periods ("N/A")

Making our world more productive

DocNumber: 491479

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22022

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG BAKERSFIELD CA HPS
3505 BUCK OWENS BLVD
BAKERSFIELD CA 93308-4919

Certificate Issuance Date: 08/29/2022
Linde Order Number: 72163095
Part Number: NI NO8ME-AS
Customer PO Number: 80167623

Fill Date: 08/12/2022
Lot Number: 70086222405
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	08/29/2025	NIST Traceable
Cylinder Number:	SA19336	Expanded Uncertainty
8.04 ppm	Nitric oxide	± 0.04 ppm
Balance	Nitrogen	

For Reference Only: NOx 8.09 ppm

Certification Information: Certification Date: 08/29/2022 Term: 36 Months Expiration Date: 08/29/2025

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Nitric oxide

Requested Concentration: 8 ppm
Certified Concentration: 8.04 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/11/2022

Reference Standard: Type / Cylinder #: GMIS / DT0038022
Concentration / Uncertainty: 9.42 ppm ±0.05 ppm
Expiration Date: 04/08/2025
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1837210.02 / APEX1324301
SRM Concentration / Uncertainty: 10.00 ppm / ±0.05 ppm
SRM Expiration Date: 04/17/2022

First Analysis Data:					Date 08/22/2022
Z: 0	R: 9.42	C: 8.03	Conc: 8.03		
R: 9.42	Z: 0	C: 8.05	Conc: 8.05		
Z: 0	C: 8.04	R: 9.41	Conc: 8.04		
UOM: ppm		Mean Test Assay:	8.04	ppm	

Second Analysis Data:					Date 08/29/2022
Z: 0	R: 9.42	C: 8.05	Conc: 8.04		
R: 9.44	Z: 0	C: 8.06	Conc: 8.05		
Z: 0	C: 8.04	R: 9.43	Conc: 8.03		
UOM: ppm		Mean Test Assay:	8.04	ppm	

Analyzed By Lissette Morales

Certified By Henry Koung

Making our world more productive

DocNumber: 477019

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22022

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA93455-1123
Customer Reference: MUSTANG

Certificate Issuance Date: 06/23/2022
Linde Order Number: 9903972087130
Part Number: NI NO17ME-AS
Customer PO Number: 80090728

Fill Date: 06/10/2022
Lot Number: 700856216106
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	06/23/2025	NIST Traceable
Cylinder Number:	CC499039	Expanded Uncertainty
17.2 ppm	Nitric oxide	± 0.2 ppm
Balance	Nitrogen	

For Reference Only: NOx 17.2 ppm

Certification Information: Certification Date: 06/23/2022 Term: 36 Months Expiration Date: 06/23/2025

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: (R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Nitric oxide

Requested Concentration: 17 ppm
Certified Concentration: 17.2 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 05/27/2022

First Analysis Data:						Date	06/16/2022
Z:	0	R:	20	C:	17.16	Conc:	17.1
R:	20	Z:	0	C:	17.19	Conc:	17.2
Z:	0	C:	17.18	R:	20	Conc:	17.2
UOM:	ppm			Mean Test Assay:			17.2 ppm

Reference Standard: Type / Cylinder # GMIS / DT0037183
Concentration / Uncertainty: 19.97 ppm ±0.20 ppm
Expiration Date: 04/12/2025
Traceable to: SRM # / Sample # / Cylinder #: 2629a / 50-G-17 / FF31691
SRM Concentration / Uncertainty: 18.99 ppm / ±0.19 ppm
SRM Expiration Date: 10/21/2023

Second Analysis Data:						Date	06/23/2022
Z:	0	R:	20	C:	17.18	Conc:	17.2
R:	19.9	Z:	0	C:	17.18	Conc:	17.2
Z:	0	C:	17.2	R:	20	Conc:	17.2
UOM:	ppm			Mean Test Assay:			17.2 ppm

Analyzed By: Henry Koung

Certified By: Elisette Morales

SV9 CGA 5

PRAXAIR
Making our planet more productive

DocNumber: 407533

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 04/16/2021
Praxair Order Number: 71635190
Part Number: NI CO40MN20E-AS
Customer PO Number: 79632556

Fill Date: 04/01/2021
Lot Number: 70086109106
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	04/16/2024	NIST Traceable
Cylinder Number:	CC324929	Expanded Uncertainty
40.3 ppm	Carbon monoxide	± 0.2 ppm
25.8 ppm	Nitric oxide	± 0.1 ppm
Balance	Nitrogen	

For Reference Only: NOx 25.9 ppm

Certification Information: Certification Date: 04/16/2021 Term: 36 Months Expiration Date: 04/16/2024

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Carbon monoxide

Requested Concentration: 40 ppm
Certified Concentration: 40.3 ppm
Instrument Used: Horiba VIA-510 S/N 43627990042
Analytical Method: NDIR
Last Multipoint Calibration: 03/26/2021

First Analysis Data: Date 04/09/2021

Z:	0	R:	98.1	C:	40.2	Conc:	40.2
R:	98.2	Z:	0	C:	40.4	Conc:	40.4
Z:	0	C:	40.3	R:	98.2	Conc:	40.3

UOM: ppm Mean Test Assay: 40.3 ppm

Reference Standard: Type / Cylinder #: GMIS / DT0019705
Concentration / Uncertainty: 98.1 ppm ±0.4 ppm
Expiration Date: 01/23/2028
Traceable to: SRM # / Sample # / Cylinder #: SRM 1679c / 34-45 / FF28593
SRM Concentration (enter with units) / 98.40 ppm / ±0.40 ppm
SRM Expiration Date: 01/28/2020

Second Analysis Data: Date

Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0

UOM: ppm Mean Test Assay: ppm

2. **Component:** Nitric oxide

Requested Concentration: 25 ppm
Certified Concentration: 25.8 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 03/25/2021

First Analysis Data: Date 04/09/2021

Z:	0	R:	50	C:	25.7	Conc:	25.7
R:	50	Z:	0	C:	25.8	Conc:	25.8
Z:	0	C:	25.8	R:	49.9	Conc:	25.8

UOM: ppm Mean Test Assay: 25.8 ppm

Reference Standard: Type / Cylinder #: PRM / APEX1324323
Concentration / Uncertainty: 50.04 ppm ±0.20 ppm
Expiration Date: 12/09/2022
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1765710.01 / APEX1324323
SRM Concentration (enter with units) / 50.04 ppm / ±0.20 ppm
SRM Expiration Date: 12/09/2022

Second Analysis Data: Date 04/16/2021

Z:	0	R:	50	C:	25.8	Conc:	25.9
R:	49.8	Z:	0	C:	25.7	Conc:	25.8
Z:	0	C:	25.7	R:	49.8	Conc:	25.8

UOM: ppm Mean Test Assay: 25.8 ppm

Analyzed By: Henry Koung

Certified By: Leeannar Flores

PRAXAIR
Making our planet more productive

DocNumber: 406357

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 03/29/2021
Praxair Order Number: 71635196
Part Number: NI CO80MN7E-AS
Customer PO Number: 79632562

Fill Date: 03/17/2021
Lot Number: 70086107611
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 03/29/2029		NIST Traceable
Cylinder Number: DT0036914		Expanded Uncertainty
80.6 ppm	Carbon monoxide	± 0.3 ppm
55.5 ppm	Nitric oxide	± 0.3 ppm
Balance	Nitrogen	

For Reference Only: NOx 55.8 ppm

Certification Information: Certification Date: 03/29/2021 Term: 96 Months Expiration Date: 03/29/2029

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Carbon monoxide

Requested Concentration: 80 ppm
Certified Concentration: 80.6 ppm
Instrument Used: Horiba VIA-510 S/N 43627990042
Analytical Method: NDIR
Last Multipoint Calibration: 02/26/2021

First Analysis Data:						Date 03/22/2021	
Z: 0	R: 98.1	C: 80.6	Conc: 80.6				
R: 98	Z: 0	C: 80.5	Conc: 80.5				
Z: 0	C: 80.7	R: 98.2	Conc: 80.7				
UOM: ppm			Mean Test Assay:	80.6	ppm		

Reference Standard: Type / Cylinder #: GMIS / DT0019705
Concentration / Uncertainty: 98.1 ppm ±0.4 ppm
Expiration Date: 01/23/2028
Traceable to: SRM # / Sample # / Cylinder #: SRM 1679c / 3-8-45 / FF28593
SRM Concentration (enter with units) / SRM Expiration Date: 98.40 ppm / ±0.40 ppm / 01/28/2020

Second Analysis Data:						Date	
Z: 0	R: 0	C: 0	Conc: 0				
R: 0	Z: 0	C: 0	Conc: 0				
Z: 0	C: 0	R: 0	Conc: 0				
UOM: ppm			Mean Test Assay:		ppm		

2. **Component:** Nitric oxide

Requested Concentration: 55 ppm
Certified Concentration: 55.5 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 03/15/2021

First Analysis Data:						Date 03/22/2021	
Z: 0	R: 49	C: 55.4	Conc: 55.4				
R: 49	Z: 0	C: 55.5	Conc: 55.5				
Z: 0	C: 55.5	R: 48.9	Conc: 55.5				
UOM: ppm			Mean Test Assay:	55.5	ppm		

Reference Standard: Type / Cylinder #: GMIS / DT0037649
Concentration / Uncertainty: 49.01 ppm ±0.21 ppm
Expiration Date: 01/07/2029
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1765710.01 / APEX1324323
SRM Concentration (enter with units) / SRM Expiration Date: 50.04 PPM / ±± 0.20 PPM / 12/05/2022

Second Analysis Data:						Date 03/29/2021	
Z: 0	R: 49	C: 55.4	Conc: 55.6				
R: 48.8	Z: 0	C: 55.4	Conc: 55.6				
Z: 0	C: 55.1	R: 48.8	Conc: 55.3				
UOM: ppm			Mean Test Assay:	55.5	ppm		

Analyzed By: Henry Koung

Certified By: Leeanna Flores

Making our world more productive

DocNumber: 503350

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22022

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA93455-1123

Certificate Issuance Date: 09/16/2022
Linde Order Number: 72180572
Part Number: NI CO80MO14E-AS
Customer PO Number: 80185295

Fill Date: 09/06/2022
Lot Number: 70086224903
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	09/16/2030	
Cylinder Number:	EB0012199	NIST Traceable Expanded Uncertainty
80.4 ppm	Carbon monoxide	± 0.7 ppm
5.02 %	Oxygen	± 0.02 %
Balance	Nitrogen	

ProSpec EZ Cert

Certification Information:

Certification Date: 09/16/2022 Term: 96 Months Expiration Date: 09/16/2030

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Carbon monoxide

Requested Concentration: 80 ppm
Certified Concentration: 80.4 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 08/30/2022

First Analysis Data: Date 09/16/2022

Z: 0	R: 100.1	C: 80.5	Conc:	80.4	
R: 100.2	Z: 0	C: 80.5	Conc:	80.4	
Z: 0	C: 80.5	R: 100.2	Conc:	80.4	

UOM: ppm Mean Test Assay: 80.4 ppm

Reference Standard: Type / Cylinder #: NTRM / CC105919
Concentration / Uncertainty: 100.1 ppm ±0.8 ppm
Expiration Date: 07/09/2027
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 190703 / CC8737
SRM Concentration / Uncertainty: 100.1 ppm / ±0.8 ppm
SRM Expiration Date: 07/09/2027

Second Analysis Data: Date

Z: 0	R: 0	C: 0	Conc:	0	
R: 0	Z: 0	C: 0	Conc:	0	
Z: 0	C: 0	R: 0	Conc:	0	

UOM: ppm Mean Test Assay: ppm

2. **Component:** Oxygen

Requested Concentration: 5 %
Certified Concentration: 5.02 %
Instrument Used: Siemens Oxymat 6E S/N 7M820211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 08/30/2022

First Analysis Data: Date 09/16/2022

Z: 0	R: 4.97	C: 5.02	Conc:	5.02	
R: 4.97	Z: 0	C: 5.02	Conc:	5.02	
Z: 0	C: 5.02	R: 4.97	Conc:	5.02	

UOM: % Mean Test Assay: 5.02 %

Reference Standard: Type / Cylinder #: GMIS / CC163512
Concentration / Uncertainty: 4.97 % ±0.02 %
Expiration Date: 07/17/2029
Traceable to: SRM # / Sample # / Cylinder #: SRM 2658a / 72-D-28 / CAL016862
SRM Concentration / Uncertainty: 9.918% / ±0.022%
SRM Expiration Date: 02/03/2024

Second Analysis Data: Date

Z: 0	R: 0	C: 0	Conc:	0	
R: 0	Z: 0	C: 0	Conc:	0	
Z: 0	C: 0	R: 0	Conc:	0	

UOM: % Mean Test Assay: %

Analyzed By: Courtney Zigler

Certified By: Lissette Morales

PRAXAIR
Making our planet more productive

DocNumber: 406153

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 03/22/2021
Praxair Order Number: 71635262
Part Number: NI CO170O10E-AS
Customer PO Number: 70632626

Fill Date: 03/12/2021
Lot Number: 70066107102
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	03/19/2029	NIST Traceable
Cylinder Number:	CC73183	Expanded Uncertainty
169.1 ppm	Carbon monoxide	± 0.8 ppm
10.03 %	Oxygen	± 0.04 %
Balance	Nitrogen	

Certification Information:

Certification Date: 03/19/2021 Term: 96 Months Expiration Date: 03/19/2029

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Carbon monoxide

Requested Concentration: 170 ppm
Certified Concentration: 169.1 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 03/01/2021

First Analysis Data:					Date	03/19/2021
Z: 0	R: 497.5	C: 169.1		Conc:	169.1	
R: 497.6	Z: 0	C: 169.2		Conc:	169.2	
Z: 0	C: 169.1	R: 497.6		Conc:	169.1	
UOM: ppm			Mean Test Assay:		169.1	ppm

Reference Standard: Type / Cylinder #: GMIS / CC319383
Concentration / Uncertainty: 497.5 ppm ±2.0 ppm
Expiration Date: 04/26/2025
Traceable to: SRM # / Sample # / Cylinder #: SRM 1660b / 2-J-15 / CAL018072
SRM Concentration (enter with units) / 490.4 ppm / ±2.0 ppm
SRM Expiration Date: 09/20/2021

Second Analysis Data:					Date	
Z: 0	R: 0	C: 0		Conc:	0	
R: 0	Z: 0	C: 0		Conc:	0	
Z: 0	C: 0	R: 0		Conc:	0	
UOM: ppm			Mean Test Assay:			ppm

2. **Component:** Oxygen

Requested Concentration: 10 %
Certified Concentration: 10.03 %
Instrument Used: 7MB20211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 03/18/2021

First Analysis Data:					Date	03/19/2021
Z: 0	R: 9.875	C: 10.02		Conc:	10.02	
R: 9.875	Z: 0	C: 10.03		Conc:	10.03	
Z: 0	C: 10.03	R: 9.876		Conc:	10.03	
UOM: %			Mean Test Assay:		10.03	%

Reference Standard: Type / Cylinder #: NTRM / DT0010287
Concentration / Uncertainty: 9.875 % ±0.040 %
Expiration Date: 11/18/2022
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 170701 / DT0010287
SRM Concentration (enter with units) / 9.875% / ±0.040%
SRM Expiration Date: 11/18/2022

Second Analysis Data:					Date	
Z: 0	R: 0	C: 0		Conc:	0	
R: 0	Z: 0	C: 0		Conc:	0	
Z: 0	C: 0	R: 0		Conc:	0	
UOM: %			Mean Test Assay:			%

Analyzed By: Amelia Real

Certified By: Jose Vasquez

Continuous Emissions Monitoring System (CEMS)

Fourth Quarter Test Report

Cylinder Gas Audit

Test Date(s): November 26 and 27, 2024
CEMTEK Project No.: SN00192

Prepared for:

Tajiguas Landfill
Anaerobic Digesting Facility (ADF), Units A and B
Goleta, CA

Prepared by:
CEMTEK KVB-Enertec

3041 S. Orange Avenue, Santa Ana, CA 92707 • Phone: 714-437-7100 • Fax: 714-437-7177 • Toll Free: 888-400-0200
2849 Sterling Drive, Hatfield, PA 19440 • Phone: 215-996-9200 • Fax: 330-860-8982 • Tech Support Phone: 800-582-1670
Houston, TX Office • Phone: 281-729-8228

Contents

1 Introduction

This quarterly audit report outlines the procedures and results of the Cylinder Gas Audit (CGA) check performed on the monitors at this facility. All testing was done in accordance with 40 CFR 60, Appendix F Procedure 1.

Tajiguas Landfill is located at 14470 Calle Real in Goleta, California that is approximately 26 miles west of the City of Santa Barbara. The landfill began receiving refuse in 1967 to serve the City of Santa Barbara, City of Goleta, unincorporated areas of Montecito and Summerland, rural areas of southern Santa Barbara County, the Santa Ynez Valley and Cuyama Valley. It is located in a canyon known as Cañada de la Pila. Immediately south of the landfill site are U.S. Highway 101, which provides access to the site, Union Pacific Railroad tracks, and the Pacific Ocean. The southern portion of the site is within the California Coastal Zone. For District regulatory purposes, the facility location is in the Southern Zone of Santa Barbara County.

Municipal solid waste (MSW) is delivered to a tipping area inside the Material Recovery Facility (MRF) building at Tajiguas. The material is subsequently sorted into organics, recyclables, and residue in the materials sorting area. Recyclables collected in the materials sorting area are sold to the market while waste residue is landfilled. The sorted organics are placed in the anaerobic digesters to generate biogas in the Anaerobic Digester Facility (ADF). The biogas is treated and combusted in combined heat and power (CHP) internal combustion (IC) engines for power generation, or an enclosed flare located at the ADF. Following biogas generation, the digestate is processed into soil amendments and compost at the Compost Management Unit (CMU). The MRF, ADF, and CMU are designed and constructed by MSB and owned by Santa Barbara County Public Works Department (SBCPWD).

The waste residue placed in the landfill generates LFG in the subsurface landfill through anaerobic biological decomposition. The LFG is collected onsite using a vapor extraction system and handled using a collection and transportation system. A leachate management system collects the groundwater found in the landfill subsurface. The LFG is scrubbed of moisture, particulates, and hydrogen sulfide. The landfill, LFG collection system, hydrogen sulfide scrubber system, and leachate management system are owned and operated by the SBCPWD and permitted separately under PT-70/Reeval 9788-R4.

Currently, treated LFG is combusted in an onsite enclosed flare or IC engine. The LFG treatment system, two LFG-fired CHP engines, and MRF enclosed flare subject to the ATC 14500-02 permit will replace the existing equipment.

Two of the processes involved at the stationary source are as follows:

Anaerobic Digestion Facility: The organic (food and green) waste from the MRF is placed into digesters. An anaerobic digestion process generates biogas. This biogas is sent to the ADF combustion equipment. After the anaerobic digestion process is complete, the residual organic waste is sent to the CMU.

Anaerobic Digestion Facility Combustion Equipment: Biogas from the ADF digesters is sent to two CHP engines to produce electricity to the grid and for onsite needs. Treated LFG is used as a supplemental fuel. If one of the engines is offline or if one of the ADF digesters is being purged, biogas is routed to the ADF enclosed flare.

2 Monitor Information

The following table provides information on the monitors that were subject to this test program.

ADF Unit A

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1301
CO	TAPI T300M	0-150/0-300 ppm	668

ADF Unit B

Analyzer	Manufacturer/Model	Range(s)	Serial Number
Stack NO_X/O_2	TAPI T200M	NO_X: 0-30/0-100 ppm O_2: 0-25%	1302
CO	TAPI T300M	0-150/0-300 ppm	669

3 Summary of Results

The results for the Cylinder Gas Audit (CGA) checks performed on the facility monitors are summarized in the following results table.

Table 1: Unit A CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = -4.85% Mid = -5.62%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/26/24
NO_X High range	Low = -2.28% Mid = -2.31%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/26/24
CO Low range	Low = -0.31% Mid = -0.56%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/26/24
CO High range	Low = 1.30% Mid = 1.20%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/26/24
O_2	Low = 2.03% Mid = 0.56%	≤15% (40 CFR 60, Appendix F)	Pass	11/26/24

Table 2: Unit B CGA Test Results Summary

Analyzer	Results	Criteria	Status	Test Date
NO_X Low range	Low = -6.38% Mid = -5.33%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/27/24
NO_X High range	Low = 2.82% Mid = 1.41%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/27/24
CO Low range	Low = 2.81% Mid = 0.48%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/27/24
CO High range	Low = -0.08% Mid = 0.61%	≤15% or alternately based on a range based tiered difference (refer to section 4)	Pass	11/27/24
O_2	Low = 1.24% Mid = 0.70%	≤15% (40 CFR 60, Appendix F)	Pass	11/27/24

4 Cylinder Gas Audit Test Procedure

The Cylinder Gas Audit (CGA) is performed for each pollutant concentration monitor at least once during each unit operating quarter based on the requirements of 40 CFR 60, Appendix F. CGAs are conducted in three consecutive quarters. Separate calibration gas cylinders are used for each concentration during the audit.

1. All audit gas cylinders are connected to the proper transport lines. EPA Protocol certified gases are used. Cylinders are checked to ensure that each audit gas has at least 200 psi.
2. The analyzers are challenged with an audit gas of known concentration at two points within the following concentration ranges (40 CFR 60, Appendix F):

Audit Point	***Pollutant Monitors*** ***% of span***	***O_2*** ***% by volume***
Low level	20-30% of span	4-6% by volume
Mid Level	50-60% of span	8-12% by volume

3. The analyzers are challenged three times at each audit point. Calibration gas injections are done alternately between the two audit values. The average of the three responses for each audit point is used in determining accuracy. The monitor is challenged at each audit point for a sufficient time to assure that any absorption-desorption phenomena at the CEMS sample transport surfaces have stabilized. The injection time also takes into account the response time of the analyzers and sample system.

4. Each monitor is operated in its normal sampling mode, that is, the audit gas passes through all filters, scrubbers, conditioners, and other monitor components used during normal sampling, and through as much of the sampling probe as is practical.
5. The difference between the actual concentration of the audit gas and the concentration indicated by the monitor will determine the accuracy of the CEMS.

The accuracy values for each concentration should not exceed 15% of reference value as the primary pass/fail criteria. As of May 30, 2023, the EPA has implemented an alternate pass/fail for pollutant analyzers using a tiered approached based on analyzer range as follows (reference 40 CFR 60, Appendix F, Procedure 1, section 5.2.3):

Analyzer range	*Alternate criteria, ppm difference*
>50 ppm	±5 ppm
≤50 ppm but >20 ppm	±3 ppm
≤20 ppm	±2 ppm

Cylinder Gas Audit Accuracy 40 CFR 60, Appendix F, Section 6.3	
$A = \frac{C_m - C_a}{C_a}\ x100$	A = Percent accuracy of the CEM C_m = The average monitor response to the specific audit gas (high or low) in units of concentration C_a = Certified value of audit gas (value according to EPA Protocol certification) in units of concentration

5 Worksheets and Supporting Documentation

The attached pages contain worksheets and supporting documentation for the CGA checks.

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **12/31/24**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	30
Test Date:	11/26/24

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	8.04	26.80	OK	SA19336	08/29/25	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**13:18**	**7.57**	**13:23**	**16.17**	
2	**13:28**	**7.66**	**13:33**	**16.24**	
3	**13:38**	**7.72**	**13:43**	**16.29**	
Average Response (Cm)		7.65		16.23	
Difference (Cm-Ca)		-0.39		-0.97	
Status (for alt. criteria of +/-3 ppm difference)		PASS		PASS	range >20 but ≤ 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**-4.85**		**-5.62**	
Status (for primary criteria of 15%)		PASS		PASS	

Cylinder Gas Audit - NOx High Range

Analyzer Range:	100
Test Date:	11/26/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	24.6	24.60	OK	CC748576	05/31/27	OK
Mid	54.5	54.50	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**13:53**	**23.91**	**13:58**	**53.20**	
2	**14:04**	**24.09**	**14:09**	**53.20**	
3	**14:13**	**24.12**	**14:19**	**53.32**	
Average Response (Cm)		24.04		53.24	
Difference (Cm-Ca)		-0.56		-1.26	
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS	range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**-2.28**		**-2.31**	
Status (for primary criteria of 15%)		PASS		PASS	

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **12/31/24**

Manufacturer:	TAPI
Model:	T300M
Serial Number:	668
Analyzer Range:	150
Test Date:	11/26/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.1	26.73	OK	CC748576	05/31/27	OK
Mid	82.8	55.20	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**13:53**	**39.91**	**13:59**	**82.34**	
2	**14:03**	**40.04**	**14:09**	**82.37**	
3	**14:14**	**39.98**	**14:18**	**82.29**	
	Average Response (Cm)	39.98		82.33	
	Difference (Cm-Ca)	-0.12		-0.47	
	Status (for alt. criteria of +/-5 ppm difference)	PASS		PASS	range > than 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-0.31**		**-0.56**	
	Status (for primary criteria of 15%)	PASS		PASS	

Cylinder Gas Audit - CO High Range

Analyzer Range:	300
Test Date:	11/26/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	79.7	26.57	OK	CC283311	01/13/31	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**12:34**	**80.7**	**12:39**	**171.2**	
2	**12:43**	**80.8**	**12:47**	**171.2**	
3	**12:54**	**80.7**	**12:58**	**171.0**	
	Average Response (Cm)	80.73		171.13	
	Difference (Cm-Ca)	1.03		2.03	
	Status (for alt. criteria of +/-5 ppm difference)	PASS		PASS	range > than 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**1.30**		**1.20**	
	Status (for primary criteria of 15%)	PASS		PASS	

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit A
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **12/31/24**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1301
Analyzer Range:	25
Test Date:	11/26/24

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.10	OK	CC283311	01/13/31	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**12:32**	**5.21**	**12:38**	**10.08**
2	**12:43**	**5.20**	**12:47**	**10.09**
3	**12:54**	**5.20**	**12:58**	**10.09**
Average Response (Cm)		5.20		10.09
Difference (Cm-Ca)		0.10		0.06
Accuracy %, ((Cm-Ca)/Ca) * 100		2.03		0.56
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Average Values Report
Generated: 11/26/2024 14:35

Company: SB County Public Works
Plant: 14470 Calle Real
City/St: Goleta, CA 93101
Source: ADF1

Period Start: 11/26/2024 13:13
Period End: 11/26/2024 13:47
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_NOxLo ppm
11/26/2024 13:13	-0.02
11/26/2024 13:14	-0.01
11/26/2024 13:15	1.84
11/26/2024 13:16	7.52
11/26/2024 13:17	7.58
11/26/2024 13:18	7.57
11/26/2024 13:19	7.59
11/26/2024 13:20	8.30
11/26/2024 13:21	15.41
11/26/2024 13:22	16.16
11/26/2024 13:23	16.17
11/26/2024 13:24	16.20
11/26/2024 13:25	14.80
11/26/2024 13:26	7.70
11/26/2024 13:27	7.67
11/26/2024 13:28	7.66
11/26/2024 13:29	7.66
11/26/2024 13:30	8.36
11/26/2024 13:31	16.19
11/26/2024 13:32	16.25
11/26/2024 13:33	16.24
11/26/2024 13:34	16.28
11/26/2024 13:35	14.31
11/26/2024 13:36	7.78
11/26/2024 13:37	7.72
11/26/2024 13:38	7.72
11/26/2024 13:39	7.71
11/26/2024 13:40	9.78
11/26/2024 13:41	16.24
11/26/2024 13:42	16.29
11/26/2024 13:43	16.29
11/26/2024 13:44	16.31
11/26/2024 13:45	12.40
11/26/2024 13:46	0.25
11/26/2024 13:47	0.13
Final Average*	**10.17**
Maximum*	**16.31**
11/26/2024 13:44	
Minimum*	**-0.02**
11/26/2024 13:13	

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/26/2024 14:37

Company: SB County Public Works
Plant: 14470 Calle Real
City/St: Goleta, CA 93101
Source: ADF1

Period Start: 11/26/2024 13:48
Period End: 11/26/2024 14:22
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_NOxHi ppm	Average A1_COLo ppm
11/26/2024 13:48	0.35	0.55
11/26/2024 13:49	0.30	0.50
11/26/2024 13:50	3.73	11.39
11/26/2024 13:51	21.64	39.20
11/26/2024 13:52	23.85	39.92
11/26/2024 13:53	23.91	39.91
11/26/2024 13:54	23.95	39.99
11/26/2024 13:55	25.88	44.20
11/26/2024 13:56	46.90	80.57
11/26/2024 13:57	53.23	82.33
11/26/2024 13:58	53.20	82.39
11/26/2024 13:59	53.21	82.34
11/26/2024 14:00	50.86	77.31
11/26/2024 14:01	26.67	42.19
11/26/2024 14:02	24.09	40.03
11/26/2024 14:03	24.08	40.04
11/26/2024 14:04	24.09	40.06
11/26/2024 14:05	26.46	44.75
11/26/2024 14:06	50.57	79.92
11/26/2024 14:07	53.20	82.32
11/26/2024 14:08	53.22	82.36
11/26/2024 14:09	53.20	82.37
11/26/2024 14:10	51.06	75.57
11/26/2024 14:11	24.49	42.25
11/26/2024 14:12	24.13	40.07
11/26/2024 14:13	24.12	39.93
11/26/2024 14:14	24.07	39.98
11/26/2024 14:15	26.17	47.05
11/26/2024 14:16	52.79	80.13
11/26/2024 14:17	53.25	82.21
11/26/2024 14:18	53.31	82.29
11/26/2024 14:19	53.32	82.40
11/26/2024 14:20	49.13	67.92
11/26/2024 14:21	5.45	3.95
11/26/2024 14:22	0.54	0.43
Final Average*	**33.10**	**52.54**
Maximum*	**53.32**	**82.40**
	11/26/2024 14:19	11/26/2024 14:19
Minimum*	**0.30**	**0.43**
	11/26/2024 13:49	11/26/2024 14:22

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/26/2024 14:31

Company: SB County Public Works
Plant: 14470 Calle Real
City/St: Goleta, CA 93101
Source: ADF1

Period Start: 11/26/2024 12:28
Period End: 11/26/2024 13:02
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A1_COHi ppm	Average A1_O2 %
11/26/2024 12:28	0.6	21.00
11/26/2024 12:29	12.8	20.35
11/26/2024 12:30	52.7	6.53
11/26/2024 12:31	79.0	5.21
11/26/2024 12:32	80.7	5.21
11/26/2024 12:33	80.6	5.20
11/26/2024 12:34	80.7	5.20
11/26/2024 12:35	95.8	6.33
11/26/2024 12:36	167.4	10.03
11/26/2024 12:37	170.9	10.09
11/26/2024 12:38	171.1	10.08
11/26/2024 12:39	171.2	10.10
11/26/2024 12:40	145.6	9.41
11/26/2024 12:41	82.6	5.30
11/26/2024 12:42	80.8	5.19
11/26/2024 12:43	80.8	5.20
11/26/2024 12:44	80.8	5.19
11/26/2024 12:45	100.4	6.83
11/26/2024 12:46	168.8	10.04
11/26/2024 12:47	171.2	10.09
11/26/2024 12:48	114.4	13.43
11/26/2024 12:49	158.0	10.90
11/26/2024 12:50	152.9	10.67
11/26/2024 12:51	55.5	14.55
11/26/2024 12:52	80.3	5.29
11/26/2024 12:53	80.8	5.21
11/26/2024 12:54	80.7	5.20
11/26/2024 12:55	84.0	5.75
11/26/2024 12:56	163.2	9.93
11/26/2024 12:57	171.0	10.09
11/26/2024 12:58	171.0	10.09
11/26/2024 12:59	171.1	10.09
11/26/2024 13:00	104.8	13.25
11/26/2024 13:01	2.7	20.85
11/26/2024 13:02	0.8	20.96
Final Average*	**104.7**	**9.68**
Maximum*	**171.2**	**21.00**
	11/26/2024 12:47	11/26/2024 12:28
Minimum*	**0.6**	**5.19**
	11/26/2024 12:28	11/26/2024 12:44

* Does not include Invalid Averaging Periods ("N/A")

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - NOx Low Range

For quarter ending: **12/31/24**

Manufacturer: TAPI
Model: T200M
Serial Number: 1302
Analyzer Range: 30
Test Date: 11/27/24

Reference Gas Value (C)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	8.04	26.80	OK	SA19336	08/29/25	OK
Mid	17.2	57.33	OK	CC499039	06/23/25	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**11:33**	**7.78**	**11:39**	**16.53**	
2	**11:43**	**7.47**	**11:48**	**16.18**	
3	**11:53**	**7.33**	**11:58**	**16.14**	
Average Response (Cm)		7.53		16.28	
Difference (Cm-Ca)		-0.51		-0.92	
Status (for alt. criteria of +/-3 ppm difference)		PASS		PASS	range >20 but ≤ 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**-6.38**		**-5.33**	
Status (for primary criteria of 15%)		PASS		PASS	

Cylinder Gas Audit - NOx High Range

Analyzer Range: 100
Test Date: 11/27/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	24.6	24.60	OK	CC748576	05/31/27	OK
Mid	54.5	54.50	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**12:23**	**26.26**	**12:29**	**55.49**	
2	**12:34**	**24.90**	**12:38**	**55.15**	
3	**12:43**	**24.72**	**12:48**	**55.16**	
Average Response (Cm)		25.29		55.27	
Difference (Cm-Ca)		0.69		0.77	
Status (for alt. criteria of +/-5 ppm difference)		PASS		PASS	range > than 50 ppm
Accuracy %, ((Cm-Ca)/Ca) * 100		**2.82**		**1.41**	
Status (for primary criteria of 15%)		PASS		PASS	

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - CO Low Range

For quarter ending: **12/31/24**

Manufacturer:	TAPI
Model:	T300M
Serial Number:	669
Analyzer Range:	150
Test Date:	11/27/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	40.1	26.73	OK	CC748576	05/31/27	OK
Mid	82.8	55.20	OK	CC3035	11/16/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**12:22**	**41.32**	**12:29**	**83.32**	
2	**12:34**	**41.15**	**12:38**	**83.23**	
3	**12:42**	**41.21**	**12:48**	**83.03**	
	Average Response (Cm)	41.23		83.19	
	Difference (Cm-Ca)	1.13		0.39	
	Status (for alt. criteria of +/-5 ppm difference)	PASS		PASS	range > than 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**2.81**		**0.48**	
	Status (for primary criteria of 15%)	PASS		PASS	

Cylinder Gas Audit - CO High Range

Analyzer Range:	300
Test Date:	11/27/24

Reference Gas Value (Ca)		% of Span	Status	Bottle #	Exp. Date	Exp. Date Status
Low	79.7	26.57	OK	CC283311	01/13/31	OK
Mid	169.1	56.37	OK	CC73183	03/19/29	OK

Note: Cal gas values must be between 20-30% of span value for low and 50-60% of span value for mid

Run Number	Run Time	Low Response	Run Time	Mid Response	
1	**10:29**	**79.7**	**10:33**	**170.1**	
2	**10:39**	**79.6**	**10:44**	**170.1**	
3	**10:48**	**79.6**	**10:54**	**170.2**	
	Average Response (Cm)	79.63		170.13	
	Difference (Cm-Ca)	-0.07		1.03	
	Status (for alt. criteria of +/-5 ppm difference)	PASS		PASS	range > than 50 ppm
	Accuracy %, ((Cm-Ca)/Ca) * 100	**-0.08**		**0.61**	
	Status (for primary criteria of 15%)	PASS		PASS	

Notes:
Pass/Fail Criteria: +/- 15% of reference value

Tiered alternate based on analyzer range:
>50 ppm: +/- 5 ppm difference
>20 ppm and ≤ 50 ppm: +/- 3 ppm difference
</= 20 ppm: +/- 2 ppm difference

Tajiguas Landfill Project# SN00170A
Anaerobic Digesting Facility (ADF), Unit B
Goleta, CA

Cylinder Gas Audit - O2

For quarter ending: **12/31/24**

Manufacturer:	TAPI
Model:	T200M
Serial Number:	1302
Analyzer Range:	25
Test Date:	11/27/24

Reference Gas Value (Ca)		Status	Bottle #	Exp. Date	Exp. Date Status
Low	5.10	OK	CC283311	01/13/31	OK
Mid	10.03	OK	CC73183	03/19/29	OK

Cal gas values must be between 4-6% by volume for low and 8-12% by volume for mid

Run Number	Run Time	Low Response	Run Time	Mid Response
1	**10:29**	**5.16**	**10:33**	**10.10**
2	**10:39**	**5.16**	**10:43**	**10.10**
3	**10:48**	**5.17**	**10:53**	**10.10**
Average Response (Cm)		5.16		10.10
Difference (Cm-Ca)		0.06		0.07
Accuracy %, ((Cm-Ca)/Ca) * 100		1.24		0.70
Status (for primary criteria of 15%)		PASS		PASS

Notes:
Pass/Fail Criteria: +/- 15% of reference value (no alternate)
(40 CFR 60, Appendix F)

Average Values Report
Generated: 11/27/2024 12:52

Company: SB County Public Works
Plant: 14470 Calle Real
City/St: Goleta, CA 93101
Source: ADF2

Period Start: 11/27/2024 11:28
Period End: 11/27/2024 12:02
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_NOxLo ppm
11/27/2024 11:28	9.00
11/27/2024 11:29	8.48
11/27/2024 11:30	8.28
11/27/2024 11:31	8.08
11/27/2024 11:32	7.88
11/27/2024 11:33	7.78
11/27/2024 11:34	7.71
11/27/2024 11:35	9.76
11/27/2024 11:36	16.31
11/27/2024 11:37	16.50
11/27/2024 11:38	16.56
11/27/2024 11:39	16.53
11/27/2024 11:40	15.69
11/27/2024 11:41	7.61
11/27/2024 11:42	7.49
11/27/2024 11:43	7.47
11/27/2024 11:44	7.42
11/27/2024 11:45	9.42
11/27/2024 11:46	16.08
11/27/2024 11:47	16.18
11/27/2024 11:48	16.18
11/27/2024 11:49	16.20
11/27/2024 11:50	16.22
11/27/2024 11:51	8.87
11/27/2024 11:52	7.34
11/27/2024 11:53	7.33
11/27/2024 11:54	7.29
11/27/2024 11:55	7.99
11/27/2024 11:56	16.04
11/27/2024 11:57	16.11
11/27/2024 11:58	16.14
11/27/2024 11:59	16.15
11/27/2024 12:00	16.17
11/27/2024 12:01	N/A
11/27/2024 12:02	N/A
Final Average*	**11.77**
Maximum*	**16.56**
	11/27/2024 11:38
Minimum*	**7.29**
	11/27/2024 11:54

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/27/2024 12:54

Company: SB County Public Works
Plant: 14470 Calle Real
City/St: Goleta, CA 93101
Source: ADF2

Period Start: 11/27/2024 12:18
Period End: 11/27/2024 12:52
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_NOxHi ppm	Average A2_COLo ppm
11/27/2024 12:18	36.41	65.65
11/27/2024 12:19	30.24	41.73
11/27/2024 12:20	29.02	41.44
11/27/2024 12:21	27.76	41.33
11/27/2024 12:22	26.94	41.32
11/27/2024 12:23	26.26	41.38
11/27/2024 12:24	25.97	41.29
11/27/2024 12:25	25.81	48.74
11/27/2024 12:26	45.61	80.88
11/27/2024 12:27	55.46	83.46
11/27/2024 12:28	55.51	83.19
11/27/2024 12:29	55.49	83.32
11/27/2024 12:30	55.54	74.20
11/27/2024 12:31	27.76	42.92
11/27/2024 12:32	25.03	41.22
11/27/2024 12:33	24.96	41.02
11/27/2024 12:34	24.90	41.15
11/27/2024 12:35	29.27	49.32
11/27/2024 12:36	54.90	81.27
11/27/2024 12:37	55.14	83.25
11/27/2024 12:38	55.15	83.23
11/27/2024 12:39	55.20	83.22
11/27/2024 12:40	47.91	74.37
11/27/2024 12:41	25.04	42.96
11/27/2024 12:42	24.70	41.21
11/27/2024 12:43	24.72	41.01
11/27/2024 12:44	24.65	40.95
11/27/2024 12:45	31.44	49.75
11/27/2024 12:46	54.88	80.94
11/27/2024 12:47	55.14	83.21
11/27/2024 12:48	55.16	83.03
11/27/2024 12:49	55.17	83.00
11/27/2024 12:50	55.15	82.99
11/27/2024 12:51	N/A	N/A
11/27/2024 12:52	N/A	N/A
Final Average*	**39.46**	**61.15**
Maximum*	**55.54**	**83.46**
	11/27/2024 12:30	11/27/2024 12:27
Minimum*	**24.65**	**40.95**
	11/27/2024 12:44	11/27/2024 12:44

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/27/2024 12:50

Company: SB County Public Works
Plant: 14470 Calle Real
City/St: Goleta, CA 93101
Source: ADF2

Period Start: 11/27/2024 10:23
Period End: 11/27/2024 10:57
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average A2_COHi ppm	Average A2_O2 %
11/27/2024 10:23	N/A	7.80
11/27/2024 10:24	N/A	7.79
11/27/2024 10:25	N/A	6.63
11/27/2024 10:26	113.0	5.14
11/27/2024 10:27	80.3	5.15
11/27/2024 10:28	79.6	5.16
11/27/2024 10:29	79.7	5.16
11/27/2024 10:30	132.4	6.37
11/27/2024 10:31	182.8	10.07
11/27/2024 10:32	170.1	10.10
11/27/2024 10:33	170.1	10.10
11/27/2024 10:34	170.1	10.09
11/27/2024 10:35	183.6	10.03
11/27/2024 10:36	172.4	5.55
11/27/2024 10:37	81.0	5.17
11/27/2024 10:38	79.6	5.16
11/27/2024 10:39	79.6	5.16
11/27/2024 10:40	87.8	6.21
11/27/2024 10:41	200.0	10.06
11/27/2024 10:42	170.6	10.10
11/27/2024 10:43	170.0	10.10
11/27/2024 10:44	170.1	10.10
11/27/2024 10:45	190.6	8.79
11/27/2024 10:46	93.7	5.17
11/27/2024 10:47	79.8	5.16
11/27/2024 10:48	79.6	5.17
11/27/2024 10:49	79.4	5.17
11/27/2024 10:50	150.2	6.60
11/27/2024 10:51	178.6	10.07
11/27/2024 10:52	170.2	10.10
11/27/2024 10:53	170.0	10.10
11/27/2024 10:54	170.2	10.09
11/27/2024 10:55	173.2	9.56
11/27/2024 10:56	N/A	7.86
11/27/2024 10:57	N/A	7.87
Final Average*	**136.9**	**7.68**
Maximum*	**200.0**	**10.10**
	11/27/2024 10:41	11/27/2024 10:53
Minimum*	**79.4**	**5.14**
	11/27/2024 10:49	11/27/2024 10:26

* Does not include Invalid Averaging Periods ("N/A")

Making the world more productive

DocNumber: 491479

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22022

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG BAKERSFIELD CA HPS
3505 BUCK OWENS BLVD
BAKERSFIELD CA 93308-4919

Certificate Issuance Date: 08/29/2022
Linde Order Number: 72183095
Part Number: HI NOSME-AS
Customer PO Number: 80187623

Fill Date: 08/12/2022
Lot Number: 700086222405
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	08/29/2025	NIST Traceable
Cylinder Number:	SA10330	Expanded Uncertainty
8.04 ppm	Nitric oxide	± 0.04 ppm
Balance	Nitrogen	

For Reference Only: NOx 8.09 ppm

Certification Information: Certification Date: 08/29/2022 Term: 36 Months Expiration Date: 08/29/2025

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Nitric oxide

Requested Concentration: 8 ppm
Certified Concentration: 8.04 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/11/2022

Reference Standard: Type / Cylinder #: GMIS / DT0038022
Concentration / Uncertainty: 9.42 ppm ±0.05 ppm
Expiration Date: 04/06/2025
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1837210.02 / APEX1324301
SRM Concentration / Uncertainty: 10.00 ppm / ±0.05 ppm
SRM Expiration Date: 04/17/2022

First Analysis Data:					Date 08/22/2022
Z: 0	R: 9.42	C: 8.03	Conc: 8.03		
R: 9.42	Z: 0	C: 8.05	Conc: 8.05		
Z: 0	C: 8.04	R: 9.41	Conc: 8.04		
UOM: ppm		Mean Test Assay:	8.04	ppm	

Second Analysis Data:					Date 08/29/2022
Z: 0	R: 9.42	C: 8.05	Conc: 8.04		
R: 9.44	Z: 0	C: 8.06	Conc: 8.05		
Z: 0	C: 8.04	R: 9.43	Conc: 8.03		
UOM: ppm		Mean Test Assay:	8.04	ppm	

Analyzed By: Lissette Morales

Certified By: Henry Koung

IN CASE OF EMERGENCY: CALL 1-800-645-4633 SDS ID: P-18-1884-NI DO NOT REMOVE THIS LABEL

Lot No. 70086216106
Cylinder No.: CC499039
Part No. NI NO17ME-AS
Volume: 140 ft3
Fill Date: 06/10/2022
Expiration Date: 06/23/2025
Cust. Ref. #: MUSTANG

ProSpec By Linde

Linde Gas & Equipment Inc.
5700 Alameda Street
Los Angeles, CA USA 90058

UN1956 Compressed gas, n.o.s. (Nitrogen, Nitric oxide)

EPA Protocol

Molar Concentration	Component	CAS
17.2 ppm	Nitric oxide	10102-43-9
Balance	Nitrogen	7727-37-9

Warning

CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

TLV:

Nitric oxide 25 ppm

Use and store only outdoors or in a well-ventilated place; Use a back flow preventive device in the piping; Use only with equipment rated for cylinder pressure; Close valve after each use and when empty; Protect from sunlight when ambient temperature exceeds 52°C (125°F); Do not handle until all safety precautions have been read and understood; If [illegible] Remove person to fr[illegible] and [illegible] comfortable for breathing. Get medical advice/attention; Do not [illegible] connecting to equip[illegible]

FIRST AID

[illegible] at rest in a position comfortable for breathing. If not breathing, give artificial [illegible] personnel should give oxygen. Call a physician.

[illegible] thoroughly with water for at least 15 minutes. Hold the eyelids open and away from [illegible] be flushed thoroughly. Contact an ophthalmologist immediately.

Making our world more productive

DocNumber: 573298

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22024

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 05/31/2024
Linde Order Number: 72814852
Part Number: NI CO40MI20E-AS
Customer PO Number: 80828173

Fill Date: 05/15/2024
Lot Number: 70086413603
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

ProSpec EZ Cert

Certified Concentration

		NIST Traceable Expanded Uncertainty
Expiration Date:	05/31/2027	
Cylinder Number:	CC748576	
40.1 ppm	Carbon monoxide	± 0.2 ppm
24.6 ppm	Nitric oxide	± 0.1 ppm
Balance	Nitrogen	

For Reference Only: NOx 24.7 ppm

Certification Information: Certification Date: 05/31/2024 Term: 36 Months Expiration Date: 05/31/2027

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Carbon monoxide

Requested Concentration: 40 ppm
Certified Concentration: 40.1 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 04/30/2024

Reference Standard: Type / Cylinder #: GMIS / DT0013574
Concentration / Uncertainty: 50.4 ppm ±0.2 ppm
Expiration Date: 09/19/2031
Traceable to: SRM # / Sample # / Cylinder #: SRM 1678c / 4-L-41 / FF18402
SRM Concentration / Uncertainty: 49.136 PPM / ±0.065 PPM
SRM Expiration Date: 04/22/2029

First Analysis Data:					Date 05/21/2024
Z: 0	R: 50.4	C: 40.1	Conc: 40.1		
R: 50.5	Z: 0	C: 40.2	Conc: 40.2		
Z: 0	C: 40.2	R: 50.4	Conc: 40.2		
UOM: ppm		Mean Test Assay:	40.1	ppm	

Second Analysis Data:					Date
Z: 0	R: 0	C: 0	Conc: 0		
R: 0	Z: 0	C: 0	Conc: 0		
Z: 0	C: 0	R: 0	Conc: 0		
UOM: ppm		Mean Test Assay:		ppm	

2. Component: Nitric oxide

Requested Concentration: 25 ppm
Certified Concentration: 24.6 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 05/09/2024

Reference Standard: Type / Cylinder #: GMIS / ND67519
Concentration / Uncertainty: 49.6 ppm ±0.2 ppm
Expiration Date: 02/09/2032
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2305301.04 / APE1516620
SRM Concentration / Uncertainty: 50.20 ppm / ±0.20 ppm
SRM Expiration Date: 02/22/2026

First Analysis Data:					Date 05/21/2024
Z: 0	R: 49.6	C: 24.5	Conc: 24.5		
R: 49.6	Z: 0	C: 24.6	Conc: 24.6		
Z: 0	C: 24.6	R: 49.5	Conc: 24.6		
UOM: ppm		Mean Test Assay:	24.6	ppm	

Second Analysis Data:					Date 05/31/2024
Z: 0	R: 49.6	C: 24.5	Conc: 24.5		
R: 49.7	Z: 0	C: 24.6	Conc: 24.6		
Z: 0	C: 24.6	R: 49.7	Conc: 24.6		
UOM: ppm		Mean Test Assay:	24.5	ppm	

Analyzed By: Henry Koung

Certified By: Lissette Morales

Making our world more productive

DocNumber: 441718

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22021

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 11/16/2021
Linde Order Number: 71855448
Part Number: HI CO80M/NTE-AS
Customer PO Number: 79855521

Fill Date: 10/22/2021
Lot Number: 70056129501
Cylinder Style & Outlet: AS — CGA 660
Cylinder Pressure and Volume: 2000 psig — 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 11/16/2029		NIST Traceable
Cylinder Number: CC3035		Expanded Uncertainty
82.8 ppm	Carbon monoxide	± 0.4 ppm
54.5 ppm	Nitric oxide	± 0.3 ppm
Balance	Nitrogen	

For Reference Only: NOx 54.7 ppm

Certification Information: Certification Date: 11/16/2021 Term: 96 Months Expiration Date: 11/16/2029

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Carbon monoxide

Requested Concentration: 80 ppm
Certified Concentration: 82.8 ppm
Instrument Used: Horiba VIA-510 S/N 43627890042
Analytical Method: NDIR
Last Multipoint Calibration: 10/18/2021

First Analysis Data:						Date	11/09/2021
Z: 0	R: 98.1	C: 82.7	Conc: 82.7				
R: 98.2	Z: 0	C: 82.9	Conc: 82.9				
Z: 0	C: 82.8	R: 98.1	Conc: 82.8				
UOM: ppm			Mean Test Assay:	82.8	ppm		

Reference Standard: Type / Cylinder #: GMIS / DT0019705
Concentration / Uncertainty: 98.1 ppm ±0.4 ppm
Expiration Date: 01/23/2028
Traceable to: SRM # / Sample # / Cylinder #: SRM 1679c / 3-I-45 / FF28593
SRM Concentration / Uncertainty: 98.40 ppm / ±0.40 ppm
SRM Expiration Date: 01/28/2020

Second Analysis Data:						Date	
Z: 0	R: 0	C: 0	Conc: 0				
R: 0	Z: 0	C: 0	Conc: 0				
Z: 0	C: 0	R: 0	Conc: 0				
UOM: ppm			Mean Test Assay:		ppm		

2. Component: Nitric oxide

Requested Concentration: 55 ppm
Certified Concentration: 54.5 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030845077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 10/25/2021

First Analysis Data:						Date	11/09/2021
Z: 0	R: 48.8	C: 54.3	Conc: 54.4				
R: 48.8	Z: 0	C: 54.4	Conc: 54.5				
Z: 0	C: 54.4	R: 48.7	Conc: 54.5				
UOM: ppm			Mean Test Assay:	54.4	ppm		

Reference Standard: Type / Cylinder #: GMIS / DT0037980
Concentration / Uncertainty: 48.83 ppm ±0.22 ppm
Expiration Date: 09/22/2024
Traceable to: SRM # / Sample # / Cylinder #: PRM / C1765710.01 / APEX1324323
SRM Concentration / Uncertainty: 50.04 ppm / ±0.20 ppm
SRM Expiration Date: 12/09/2022

Second Analysis Data:						Date	11/16/2021
Z: 0	R: 48.8	C: 54.5	Conc: 54.6				
R: 48.7	Z: 0	C: 54.4	Conc: 54.5				
Z: 0	C: 54.4	R: 48.7	Conc: 54.5				
UOM: ppm			Mean Test Assay:	54.5	ppm		

Analyzed By: Henry Koung

Certified By: Lissette Morales

Making our world more productive

DocNumber: 531956

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22023

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

LGEPKG SANTA MARIA CA HPS
916 W BETTERAVIA RD
SANTA MARIA CA 93455-1123

Certificate Issuance Date: 01/17/2023
Linde Order Number: 72303369
Part Number: NI CO80MO14E-AS
Customer PO Number: 80309977

Fill Date: 12/27/2022
Lot Number: 70086236102
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 140 ft3

ProSpec EZ Cert

Certified Concentration

		NIST Traceable Expanded Uncertainty
Expiration Date:	01/13/2031	
Cylinder Number:	CC283311	
79.7 ppm	Carbon monoxide	± 0.7 ppm
5.10 %	Oxygen	± 0.04 %
Balance	Nitrogen	

Certification Information: Certification Date: 01/13/2023 Term: 96 Months Expiration Date: 01/13/2031

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Uncertainty above is expressed as absolute expanded uncertainty at a level of confidence of approximately 95% with a coverage factor k = 2. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Carbon monoxide
   Requested Concentration: 80 ppm
   Certified Concentration: 79.7 ppm
   Instrument Used: Horiba VIA-510 S/N 576876015
   Analytical Method: NDIR
   Last Multipoint Calibration: 12/15/2022

First Analysis Data:					Date	01/13/2023
Z: 0	R: 100.1	C: 79.8	R: 100.4	C: 79.7	Conc:	79.7
R: 100.1	Z: 0	C: 79.8	R: 100.4	C: 79.7	Conc:	79.6
Z: 0	C: 79.8	R: 100.4	C: 79.7	R: 100.4	Conc:	79.7
UOM: ppm			Mean Test Assay:			79.7 ppm

Reference Standard: Type / Cylinder #: NTRM / CC105072
Concentration / Uncertainty: 100.1 ppm ±0.7 ppm
Expiration Date: 07/09/2027
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 190703 / CC873
SRM Concentration / Uncertainty: 100.1 ppm / ±0.8 ppm
SRM Expiration Date: 07/09/2027

Second Analysis Data:					Date	
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: ppm		Mean Test Assay:				ppm

2. Component: Oxygen
   Requested Concentration: 5 %
   Certified Concentration: 5.10 %
   Instrument Used: Siemens Oxymat 6E S/N 7MB20211AA000CA1
   Analytical Method: Paramagnetic
   Last Multipoint Calibration: 12/15/2022

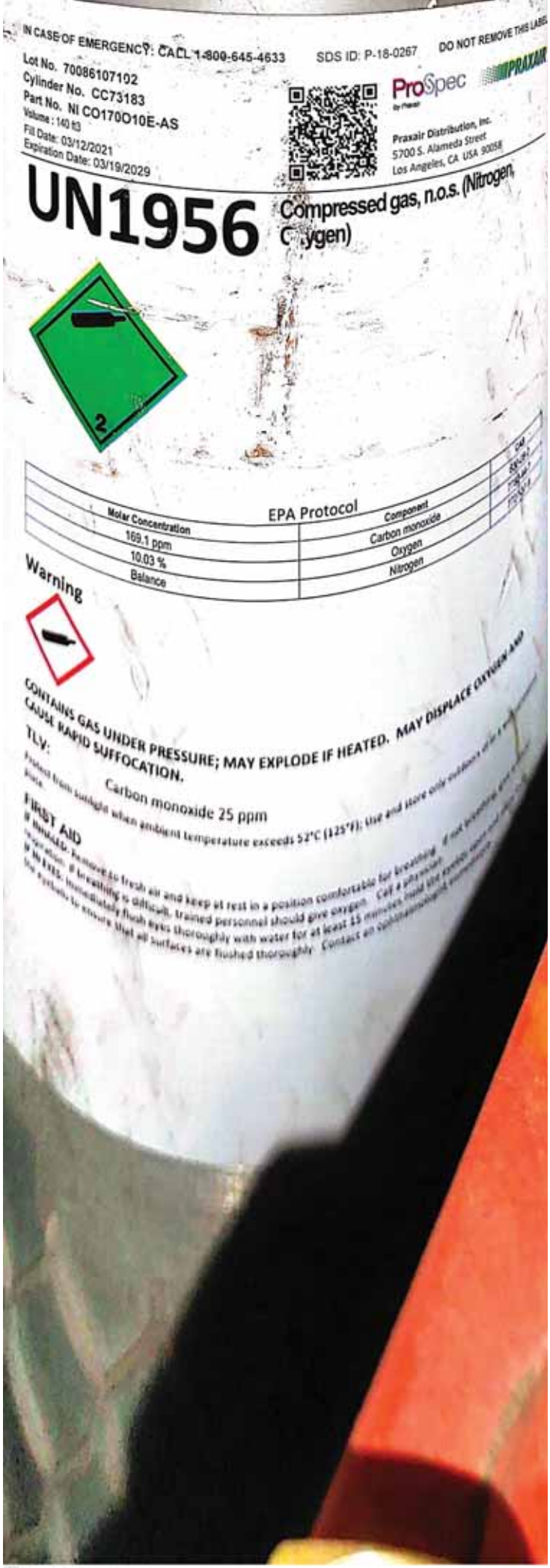
First Analysis Data:					Date	01/13/2023
Z: 0	R: 9.978	C: 5.098	Conc:	5.09		
R: 9.988	Z: 0	C: 5.102	Conc:	5.1		
Z: 0	C: 5.105	R: 9.988	Conc:	5.1		
UOM: %		Mean Test Assay:		5.1 %		

Reference Standard: Type / Cylinder #: GMIS / DT0018893
Concentration / Uncertainty: 9.978 % ±0.024 %
Expiration Date: 12/20/2030
Traceable to: SRM # / Sample # / Cylinder #: SRM 2658a / 72-D-28 / CAL016862
SRM Concentration / Uncertainty: 9.918 % / ±0.022 %
SRM Expiration Date: 02/03/2024

Second Analysis Data:					Date	
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: %		Mean Test Assay:				%

Analyzed By: Courtney Zielke

Certified By: Amalia Real


IN CASE OF EMERGENCY: CALL 1-800-645-4633
SDS ID: P-18-0267
DO NOT REMOVE THIS LABEL
Lot No. 70086107102
Cylinder No. CC73183
Part No. NI CO170O10E-AS
Volume : 140 ft3
Fill Date: 03/12/2021
Expiration Date: 03/19/2029
ProSpec
PRAXAIR
Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles, CA USA 90058
UN1956
Compressed gas, n.o.s. (Nitrogen, Oxygen)
2
EPA Protocol
Component
Molar Concentration
Carbon monoxide
169.1 ppm
Oxygen
10.03 %
Nitrogen
Balance
Warning
CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.
TLV:
Carbon monoxide 25 ppm
FIRST AID

apcd air pollution control district
SANTA BARBARA COUNTY

January 9, 2024

Kevin Brown
County of Santa Barbara - Public Works Dpt
130 E. Victoria Street, Suite 100
Santa Barbara, CA 93101

FID: 11480
Permit: P 14500
SSID: 03707

Re: Incomplete Permit to Operate Application 14500

Dear Kevin Brown:

On June 30, 2023, the Santa Barbara County Air Pollution Control District (District) received your application for Permit to Operate (PTO) No. 14500 for the Tajiguas ReSource Center project at Tajiguas Landfill. Additional information and/or clarification of information already submitted is required. In order to complete the application, please respond to each of the items listed in the attachment. After we receive the requested information, we will inform you within 30 days if the application is complete.

According to Rule 208.D.4, the application will be denied 120 days after the date of filing if sufficient information needed to deem the application complete has not been submitted, unless the District has, in writing, extended the time.

Please include the Facility Identification (FID) and Permit numbers shown above on all correspondence regarding this permit application. If you have any questions, please contact me at (805) 979-8314 or MountainC@sbcapcd.org. Thank you for your cooperation.

Sincerely,

Charlotte Mountain, Air Quality Engineer III
Engineering Division

Attachment: Incompleteness Items

cc: County of Santa Barbara - Tajiguas Anaerobic Digestion 11480 Project File
Engr Chron File
Noah Dooley
William Sarraf

\\sbcapcd.org\shares\Groups\ENGR\WP\Landfills & WWT\03707 Tajiguas\FID 11480 Tajiguas Anaerobic Digestion\PTOs\PTO 14500\PTO 14500 - PTO Incompleteness – 1-9-2024.docx

ATTACHMENT

PTO NO. 14500 INCOMPLETENESS ITEM LIST

1. ATC Mod 14500-05 Condition C.21.b.

   This permit condition requires submission of data for CEMS downtime and CEMS detected excess emissions on a quarterly basis. The District has not received this data since issuance of the ATC. Please submit a downtime report and an excess emissions report.

2. ADF Ammonia CEMS Report

   On 9/12/2023, an Ammonia CEMS report was submitted by John Dewey in response to an incompleteness letter issued on 7/26/2023. This report shows exceedances in Ammonia (ppmv) per Table 4.5 of ATC Mod 14500-05. Please submit an ATC to increase the Ammonia limit or to install Ammonia controls.

   In addition, this report only includes data for the ADF facility. Please include the Ammonia CEMS report for the MRF facility.

3. CEMS Plan

   3.a – Section 4.7.1 Calibration Procedures

   Calibration of the analyzer is required on a monthly basis. Please provide calibration records.

   3.b – Section 6.2.3 Cylinder Gas Audit

   Cylinder Gas Audit (CGA) Reports are required to be conducted on concentration analyzers for three out of four quarters. The following reports have been received by the District:

   Q2 2022 CEMS CGA Report
   Q3 2022 CEMS CGA Report
   Q4 2022 CEMS CGA Report
   Q1 2023 CEMS CGA Report

   However, each of these reports are missing measurements for Ammonia in [lb/hr] and [ppmv]. Please provide the Ammonia measurements for each of these reports, and also the CGA Reports for Q2 – Q4 of 2023.

   In addition, these reports only include data for the ADF Engines. Please include the CGA Reports for concentration analyzers on the MRF Engines.

   3.c – Section 7 Data Acquisition and Reporting

   Please submit all required reports per Section 7 of the CEMS Plan, including a quarterly written summary report, quarterly emission totals, data recovery efficiency, and audit reports.

apcd air pollution control district
SANTA BARBARA COUNTY

Kevin Brown
County of Santa Barbara - Public Works Dpt
130 E. Victoria Street, Suite 100
Santa Barbara, CA 93101

FID: 11480
Permit: P 14500
SSID: 03707

Re: Incomplete Permit to Operate Application 14500

Dear Kevin Brown:

On June 30, 2023, the Santa Barbara County Air Pollution Control District (District) received your application for Permit to Operate (PTO) No. 14500 for the Tajiguas ReSource Center project at Tajiguas Landfill. Additional information and/or clarification of information already submitted is required. In order to complete the application, please respond to each of the items listed in the attachment. After we receive the requested information, we will inform you within 30 days if the application is complete.

According to Rule 208.D.4, the application will be denied 120 days after the date of filing if sufficient information needed to deem the application complete has not been submitted, unless the District has, in writing, extended the time.

Please include the Facility Identification (FID) and Permit numbers shown above on all correspondence regarding this permit application. If you have any questions, please contact me at (805) 979-8314 or MountainC@sbcapcd.org. Thank you for your cooperation.

Sincerely,

Charlotte Mountain, Air Quality Engineer III
Engineering Division

Attachment: Incompleteness Items

cc: County of Santa Barbara - Tajiguas Anaerobic Digestion 11480 Project File
John Dewey
Engr Chron File

\\sbcapcd.org\shares\Groups\ENGR\WP\Landfills & WWT\03707 Tajiguas\FID 11480 Tajiguas Anaerobic Digestion\PTOs\PTO 14500\PTO 14500 - PTO Incompleteness - 7-26-2023.docx

ATTACHMENT

PTO NO. 14500 INCOMPLETENESS ITEM LIST

1. Ammonia CEMS: Table 3-1 of the approved *Continuous Emissions Monitoring System Plan* dated November 2019 indicates that ammonia will be monitored in the exhaust stacks for each CHP engine. As requested by Noah Dooley via email on July 11, 2023, submit the monitored ammonia data.