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MIDWAY SUNSET COGENERATION COMPANY

4th QUARTER AIR QUALITY REPORT
2025

SUBMITTED: January 29, 2026

MIDWAY SUNSET
Cogeneration Company

January 28, 2026 CC- 2290

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*In support of conservation, MSCC is submitting the quarterly air quality report electronically (CD). A hard copy is available on request.

**Air Quality Compliance Manager report was submitted using PAS Facility Portal.

***Supplied on MSCC Portal for Retrieval.

Subject: **MIDWAY SUNSET COGENERATION COMPANY (MSCC)**
Quarterly Air Quality Compliance Report
Fourth Quarter 2025 (October, November & December)

Reference: **CEC Docket 85-AFC-3; Condition N. A 21**
SJVAPCD PTO's S-1135-0-5, S-1135-224-30, S-1135-225-29, S-1135-226-28, S-1135-230-5, S-1135-231-7, S-1135-235-5, and EPA PSD Permit SJ 87-01

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This report documents MSCC's air quality performance for the quarter ending December 31, 2025. The report includes data from the operation of Unit A, Unit B and Unit C as simple cycle/peaking units. MSCC is now a peaking power generation facility with three natural gas fired combustion turbine generators (CTGs) authorized under Permits to Operate S-1135-224 (Unit A), ' –225 (Unit B) and ' – 226 (Unit C). MSCC was originally designed and operated as a cogeneration facility with the CTGs producing steam and power for the adjacent oil field and power for the California grid operated by the California Independent System Operator (CAISO). Steam demand has decreased over the years and power demand has increased. In response to the lessened steam demand, MSCC, in 2013/14, applied for and received permission from the District and the California Energy Commission (CEC), to convert Units A and B to simple cycle/peaking units. The conversion to simple cycle/peaking units required each unit's exhaust stream to bypass the Heat Recovery Steam Generator (HRSG) which due to design also bypasses the Selective Catalytic Reduction (SCR) grid used to control NOx emissions. MSCC, at considerable expense, installed leading edge combustion technology to control Unit A and Unit B NOx emissions within permitted limits absent the aid of the SCR grid.

Steam demand continued to decrease to the point that MSCC no longer has a steam contract and Unit C, which was never converted to the leading edge combustion technology, could no longer supply power to the grid without exceeding permitted NOx limits. MSCC explored several options for a resolution to Unit C being forced offline (On December 9, 2021, MSCC filed at FERC a notice of relinquishment of Qualifying Facility (QF) status FERC Docket No. QF 86-433-008). The options ranged from complete mothballing/retirement of Unit C to a commitment of a large financial investment to convert Unit C to the latest combustion technology. Due to the anticipated shortfall of capacity on the electrical grid, CAISO denied the mothball request for Unit C and requested that Unit C along with Units A and B be available to operate commencing February 1, 2021 as a Reliability Must-Run (RMR) Unit. At the time and while coordinating with CAISO, MSCC determined that the most workable near term solution was to seek a variance for Unit C limiting operation to only those hours of the year when CAISO has declared an Exceptional Dispatch Emergency. The granting of this variance would allow MSCC to operate Unit C in bypass mode and continue supplying power to California's grid long enough for MSCC to determine a permanent fix to Unit C's operating challenge. MSCC was granted the requested Unit C variance (S-21-02R) by the District on March 11, 2021. Unit C would be able to respond to CAISO's requested run time under Variance S-21-02R until March 9, 2022. One of the conclusions and orders of the variance (condition #4), was to postpone Unit C annual source test until it could operate in compliance. MSCC continued to perform a CGA every Quarter on Unit C until Unit C was able to operate in compliance. CGA test reports are available on request. After receiving the variance, one of the owners of MSCC added an additional requirement that CAISO, obtain a Department of Energy (DOE), per the Federal Powers Act (FPA), 202(c) Emergency Order to provide MSCC the ability to operate Unit C outside of emissions compliance without risk of EPA enforcement action. On September 10, 2021, one such order was issued by the DOE and was in effect until November 9, 2021. Under the Order, MSCC performed one test run that lasted 1 hour and 7 minutes.

MSCC eventually committed to converting Unit C to the latest combustion technology and issued a purchase order to the original equipment manufacturer (OEM) to complete the conversion. To allow this conversion, MSCC received from the District, a "Notice of final decision for the issuance of an Authority to Construct and significant modification of federally mandated operating permit" for converting Unit C to the same combustion technology as that installed in Units A and B. Concurrently an application for a post Certification Amendment of MSCC's operating license was submitted to and approved by the CEC.

MSCC was unable to complete Unit C's combustion conversion within the time frame allowed by the regular variance. MSCC applied for an extension to the variance to cover the completion of Unit C's combustion upgrade and to offset Unit C's annual source test requirement until Unit C could operate within permitted limits. During the review of the information regarding the variance extension the district requested that Unit C be classified as a Dormant Emissions Unit (DEU). This classification would continue the postponement of Unit C's source test requirement and still allow MSCC to convert Unit C's combustion system. MSCC applied for an ATC classifying Unit C as a DEU.

MSCC Unit C was designated a Dormant Emissions Unit by the District on April 11, 2022, (S-1135-226-30). MSCC submitted to the District Unit C Title V Minor Modification Application to incorporate commissioning period in ATC S-1135-226-31. Following successful commissioning of Unit C, MSCC will be able to run Unit C within permitted limits and Unit C can be reclassified as active. The Unit C Conversion outage began on May 25, 2022.

MSCC successfully completed the combustion conversion of Unit C on July 13, 2022. Commissioning tests on the Unit commenced on July 14, with the Unit released for operation to service CAISO grid needs on July 17, 2022. CAISO immediately began dispatching Unit C for operation. Unit C successfully completed an Annual Source/RATA test on August 18, 2022. Since July 17, 2022, Unit C has been available to operate to support the CAISO grid needs. During the September 2022 heat wave all three MSCC Units reliably provided power to the CAISO grid.

MSCC completed RMR service to the CAISO on December 31, 2022. MSCC began market operations as a Resource Adequacy capacity simple cycle peaking facility on January 1, 2023.

Sincerely,

Lowell Pollema

Lowell Pollema
Executive Director

cc: File CC-2290
G. Jans
Compliance Office

AIR QUALITY COMPLIANCE SCHEDULE

TEST/DOCUMENTATION	PERIOD REQUIRED	NEXT DUE
Quarterly Report to EPA, APCD, CEC, CARB	Quarterly	April '26
Calibration Gas Audit	Quarterly	January '26
Annual Source Tests	Annually	April '26
CEM Re-Certification 1. Relative Accuracy Test Audit 2. Relative Accuracy Audit 3. System Appraisal (at CEM)	Annually	April '26
Daily Audit of CEM Reporting	Daily	Internal/records available on request
Calibration Drift Test	Daily	Internal/records Available on request

PTO S-1135-0-5

San Joaquin Valley
Air Pollution Control District

FACILITY: S-1135-0-5 **EXPIRATION DATE:** 05/31/2026

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring, where applicable, that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all e] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating not exempt as allowed by Sections 4.1 and 4.2 of Rule 4601 with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit

32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced) and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

42. Facilities S-1135 and S-1547 constitute one stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

43. On August 31, 2002, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin August 31 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

44. STEAM GENERATOR FUEL MONITORING CONDITION: For units equipped with post-combustion SO2 control equipment (e.g. SO2 scrubber), annual source testing shall be performed to measure SO2 concentration in the exhaust or SO2 control efficiency using EPA Methods 6, 6C, 8 or ARB Method 100. SOx control efficiency determination shall follow procedure in Section 6.2.8 of Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

45. STEAM GENERATOR FUEL MONITORING CONDITION: For units not equipped with post-combustion SO2 control equipment (e.g. SO2 scrubber), each fuel source shall be tested for sulfur annually using ASTM D 1072, D 3031, D 4084, or D 3246, D 6228, D 5504, EPA Method 11 or 15, or grab sample analysis by double GC for H2S and mercaptans. [District Rule 4320] Federally Enforceable Through Title V Permit

46. STEAM GENERATOR GENERAL CONDITION: Duration of startup and shutdown (as defined in Rule 4320) shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining of the unit, and shall not exceed 30 hours per occurrence. The operator shall maintain records of the duration of start-up, shutdown, and refractory curing periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

47. STEAM GENERATOR GENERAL CONDITION: Emission rates during startup, shutdown and refractory curing shall not exceed any of the following: particulate matter - 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2,000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 - 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, and 4406] Federally Enforceable Through Title V Permit

48. STEAM GENERATOR PERIODIC MONITORING CONDITION: The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. If the unit is equipped with flue gas recirculation (FGR), measurement shall be made with the FGR system in the mode of operation (closed or open) in which it was used in the preceding 30 days. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

49. STEAM GENERATOR PERIODIC MONITORING CONDITIONS: If the NOX and/or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

50. STEAM GENERATOR PERIODIC MONITORING CONDITION: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

51. STEAM GENERATOR PERIODIC MONITORING CONDITION: The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

52. STEAM GENERATOR PERIODIC MONITORING CONDITION: All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

53. STEAM GENERATOR SOURCE TESTING CONDITION: The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

54. STEAM GENERATOR SOURCE TESTING CONDITION: The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

55. STEAM GENERATOR SOURCE TESTING CONDITION: For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

56. STEAM GENERATOR SOURCE TESTING CONDITION: The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

57. STEAM GENERATOR SOURCE TESTING CONDITION: Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

58. STEAM GENERATOR GENERAL CONDITION: If the unit is equipped with flue gas recirculation (FGR), whenever the unit is switched to operate with the FGR system in the closed position, compliance source testing for NOx and CO shall be conducted within 60 days of cessation of FGR operation date unless source testing with FGR system in the closed position has occurred within the previous 36 months. [District Rule 1070] Federally Enforceable Through Title V Permit

59. TEOR SYSTEM CONDITION: The crude oil production from wells associated with this permit unit shall not lie within 1,000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit

60. TEOR SYSTEM CONDITION: The fugitive emissions component inspection and reinspection requirements of Section 5.4.1 through Section 5.4.6 of this rule shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight or less (£10 wt.%), as determined by the test methods in Section 6.3.4. [District Rule 4401] Federally Enforceable Through Title V Permit

61. TEOR SYSTEM CONDITION: During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the requirements of District Rule 4401. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit

62. TEOR SYSTEM CONDITION: The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit

63. TEOR SYSTEM CONDITION: An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: 1) The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emission to atmosphere, or 2) the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system. [District Rule 4401, 5.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

64. TEOR SYSTEM CONDITION: There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.1] Federally Enforceable Through Title V Permit

65. TEOR SYSTEM CONDITION: There shall be no components with a major liquid leak as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.2.2.2] Federally Enforceable Through Title V Permit

66. TEOR SYSTEM CONDITION: There shall be no components with a gas leak of greater than 50,000 ppmv. [District Rule 4401, 5.2.2.3] Federally Enforceable Through Title V Permit

67. TEOR SYSTEM CONDITION: An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 2 of Rule 4401. [District Rule 4401, 5.2] Federally Enforceable Through Title V Permit

68. TEOR SYSTEM CONDITION: No leaking components (as defined in Section 5.2.2 of Rule 4401) may be used unless they have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.5. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit

69. TEOR SYSTEM CONDITION: Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 at least once every year. [District Rule 4401, 5.4.1] Federally Enforceable Through Title V Permit

70. TEOR SYSTEM CONDITION: An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of this Rule. [District Rule 4401, 5.4.2] Federally Enforceable Through Title V Permit

71. TEOR SYSTEM CONDITION: An operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: 1) An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. 2) Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of this Rule. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit

72. TEOR SYSTEM CONDITION: The operator shall also perform the following inspections: 1) An operator shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. An operator shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. 2) An operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service, and 3) Except for PRDs subject to the requirements of Section 5.4.4.1 of this Rule, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit

73. TEOR SYSTEM CONDITION: Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround and inaccessible components shall be inspected at least annually. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

74. TEOR SYSTEM CONDITION: Upon detection of a leak, an operator shall affix a readily visible weatherproof tag to that leaking component that includes the following information: 1) The date and time of leak detection; 2) The date and time of the leak measurement; 3) For a gaseous leak, the leak concentration in ppmv; 4) For a liquid leak, whether it is a major or minor liquid leak; and 5) Whether the component is an essential component, and unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit

75. TEOR SYSTEM CONDITION: The tag shall remain affixed to the leaky component until all the following requirements are met: 1) The component is repaired or replaced, 2) The component is re-inspected as set forth in Section 6.3, and 3) The component is found to be in compliance with Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit

76. TEOR SYSTEM CONDITION: An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit

77. TEOR SYSTEM CONDITION: Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0, an operator shall comply with at least one of the following three requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) Repair or replace the leaking component, 2) Vent the leaking component to a VOC collection and control system as defined in Section 3.0, or 3) Remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit

78. TEOR SYSTEM CONDITION: The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 3. [District Rule 4401, 5.5.5] Federally Enforceable Through Title V Permit

79. TEOR SYSTEM CONDITION: The time of the initial leak detection shall be the start of the repair period specified in Table 3. [District Rule 4401, 5.5.6] Federally Enforceable Through Title V Permit

80. TEOR SYSTEM CONDITION: If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit

81. TEOR SYSTEM CONDITION: The operator of any steam-enhanced crude oil production well shall maintain records of 1) the date and well identification where steam injection or well stimulation occurs; and 2) a listing of all steam enhanced wells connected to this system (updated annually within 60 days of permit anniversary). [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit

82. TEOR SYSTEM CONDITION: An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 6.1.3] Federally Enforceable Through Title V Permit

83. TEOR SYSTEM CONDITION: Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit

84. TEOR SYSTEM CONDITION: The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401, 6.1.6 & 6.5] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

85. TEOR SYSTEM CONDITION: An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, and internal combustion engine, or in a smokeless flare. [District Rule 4401, 6.2.1 & 6.2.2] Federally Enforceable Through Title V Permit

86. TEOR SYSTEM CONDITION: The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit

87. TEOR SYSTEM CONDITION: VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit

88. TEOR SYSTEM CONDITION: Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit

89. TEOR SYSTEM CONDITION: The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.4] Federally Enforceable Through Title V Permit

90. TEOR SYSTEM CONDITION: The operator shall maintain an inspection log in which the operator records at least all of the following for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type, 2) The location, type and name or description of each leaking component and description of any unit where the leaking component is found, 3) The date of leak detection and the method of leak detection, 4) For gaseous leaks, the leak concentration in ppmv and, for liquids leaks, whether the leak is major or minor, 5) The date of repair, replacement or removal from operation of leaking components, 6) The identity and location of essential components and critical components as defined in this Rule, found leaking, that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than 1 year after detection, whichever comes earlier, 8) The date or re-inspection and the leak concentration in ppmv after the component is repaired or replaced, 9) The inspectors name, business mailing address, and business telephone number, and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4] Federally Enforceable Through Title V Permit

91. TEOR SYSTEM CONDITION: By January 30 of each year, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

92. TEOR SYSTEM CONDITION: Each hatch shall be closed at all times except during attended repair, replacement, or maintenance operations, providing such activities are done as expeditiously as possible with minimal spillage or material and VOC emissions into the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit

PTO S-1135-224-30

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1135-224-30 **EXPIRATION DATE:** 05/31/2026

SECTION: 17 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
78.2 MW COGENERATION UNIT A WITH GE MODEL G7111E FRAME 7E GAS TURBINE ENGINE WITH DRY LOW NOX COMBUSTORS (DLN1+ TURNDOWN ENHANCE), SELECTIVE CATALYTIC REDUCTION (SCR), AND UNFIRED HEAT RECOVERY STEAM GENERATOR (HRSG)

PERMIT UNIT REQUIREMENTS

1. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O2. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours) when SCR is operated. The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
3. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NOx and CO emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When SCR is operated, permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
6. When SCR is operated, ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Gas turbine engine shall be equipped with fuel consumption monitor recorder accurate to +/- 3%. [District Rule 2201] Federally Enforceable Through Title V Permit
8. CEM for NOx (as NO2) and CO shall conform to Rule 1080 specifications. [District Rules 1080 and 4703] Federally Enforceable Through Title V Permit
9. HRSG exhaust stack shall be equipped with permanent stack sampling provisions adequate to facilitate testing consistent with EPA test methods. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Flue gas ducting from engine to HRSG shall have no provisions for introduction of dilution air. [District Rule 1110] Federally Enforceable Through Title V Permit
11. Lube oil cooler/accumulation vent shall be equipped with control device(s) approved by the APCO sufficient to prevent emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Lube oil cooler/accumulator vent(s) shall not have detectable emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Natural gas sulfur content shall not exceed 0.31 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All CEM's shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
15. Quarterly CEM reports shall be submitted to the APCO according to EPA regulations as specified in 40 CFR 60 Appendix B. [District Rule 4001 and District rule 1080, 8.0] Federally Enforceable Through Title V Permit
16. Audits of all monitors shall be conducted by independent laboratory in accordance with EPA guidelines and witnessed by District. Reports shall be submitted to District within 60 days of audits. [District Rule 1080] Federally Enforceable Through Title V Permit
17. All notification, recordkeeping, performance tests, reporting requirements, and compliance testing requirements of Rule 4001 NSPS shall be satisfied. [District Rule 4001] Federally Enforceable Through Title V Permit
18. Operational records including fuel type, fuel characteristics, and consumption shall be maintained and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
19. Accurate records of NOx (as NO2) and CO flue gas concentration corrected to 15% O2 and fuel gas sulfur content shall be maintained and shall be reported as described in Rule 1080 upon request. [District Rule 1080] Federally Enforceable Through Title V Permit
20. Emission rates shall not exceed the following: PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu, VOC: 0.009 lb/MMBtu, CO: 0.057 lb/MMBtu, and ammonia - 10 ppmvd @ 15%O2. [District Rules 2201, 4201; and Kern County Rule 404] Federally Enforceable Through Title V Permit
21. Permittee shall comply with the following emission limit at all times except during periods of start-up, shutdown, or reduced load: NOx (as NO2): 5.0 ppmv, and CO: 25 ppmv, dry @ 15% O2 corrected to ISO conditions. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703] Federally Enforceable Through Title V Permit
22. Gas turbine engine start-up is that period of time not exceeding two hours in duration during which the unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
23. Gas turbine engine shutdown it that period of time not exceeding two hours in duration during which the unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
24. Gas turbine reduced load period is that period not exceeding one hour in duration during which the unit is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Compliance with NOx and CO emission limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory on an annual basis. Compliance with NOx, CO and ammonia emissions limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory within 60 days of any use of the SCR system, unless compliance with emissions limitations has been demonstrated with the SCR system in operation within the preceding 12 month period. [District Rule 4703 and 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

27. The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 (or 10B) or CARB Method 100, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rule 1081, 40 CFR 60.335 (b), and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit

28. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102] Federally Enforceable Through Title V Permit

29. Official test results and field data shall be submitted within 60 days after collection. [District Rule 4703 and District Rule 1081] Federally Enforceable Through Title V Permit

30. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit

31. CEC emission rates, except during periods of startup, shutdown, or reduced load shall not exceed PM10: 9.98 lb/hr, SOx (as SO2): 0.92 lb/hr, NOx (as NO2): 17.66 lb/hr, VOC: 9.00 lb/hr, and CO: 54.91 lb/hr. [District Rules 2080 and 4703, and 40 CFR 60] Federally Enforceable Through Title V Permit

32. For CEC purposes, emissions during periods of startup and shutdown shall not exceed the following values average over 2 hours: NOx: 140 lb/hr, and CO: 94 lb/hr. [District Rule 2080] Federally Enforceable Through Title V Permit

33. The CEC shall be notified of any changes to the combined annual emission limits for cogeneration units S-1135-224, -225, and -226, only to the extent to be informed of their impact on the Midway-Sunset Cogeneration Facility. [District Rule 2080] Federally Enforceable Through Title V Permit

34. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [Kern County Rule 108 and District Rule 1080] Federally Enforceable Through Title V Permit

35. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [Kern County Rule 108; District Rules 1080 and 4703; 40 CFR 60.7 (b)] Federally Enforceable Through Title V Permit

36. The permittee shall maintain hourly average records of NOx and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

37. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [Kern County Rule 108 and District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

38. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [Kern County Rule 108 and District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

39. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. Unit shall be fired on a natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333 (a) & (b); 40 CFR 60.334 (c)(2); Kern County Rule 407; and District Rule 4801] Federally Enforceable Through Title V Permit

41. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

42. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using method(s) specified on this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

43. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246, or double GC for H2S and mercaptans. [40 CFR 60.335 (d)] Federally Enforceable Through Title V Permit

44. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334 (b)(2)] Federally Enforceable Through Title V Permit

45. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(a)(2)] Federally Enforceable Through Title V Permit

46. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [40 CFR 60.332 (a),(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

47. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332 (a),(b) and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit

48. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334 (a),(b),(c) and District Rule 4703, 5.0] Federally Enforceable Through Title V Permit

49. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332 (a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

50. This unit is a simple combustion turbine as defined in 40 CFR 72.6 (b)(1) and shall not be subject to the requirements of 40 CFR Part 72. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

51. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rules 404, 108, and 108.1. A permit shield is granted from these requirements. [SJVUAPCD Rule 2520, 13.2] Federally Enforceable Through Title V Permit

52. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: Kern County Rule 407; District Rules 4801, 4201, 1081, and 1080, Sections 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332 (c) and (d); 60.334 (b), (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

53. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: District Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

54. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: District Rules 1080, 7.3 and 4703, 6.2.2; 40 CFR 60.332(a), (b); 60.333(a) and (b), 60.334(a), (b), and (c)(1); 60.335(a), (b) and (c)(2). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

55. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

56. The Permittee (MSCC) must notify EPA by telephone, facsimile, or electronic mail transmission within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in any conditions where PSD is cited as the basis of the condition. In addition, the Permittee (MSCC) must notify EPA in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in any conditions where PSD is cited as the basis of the condition, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in the conditions where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

57. A malfunction means a sudden and unavoidable breakdown of equipment or of a process beyond the reasonable control of the source. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

58. Emissions in excess of the limits specified in any conditions where PSD is cited as the basis of the condition shall constitute a violation of this permit and may be the subject of enforcement proceedings. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

59. Affirmative defense: In the context of an enforcement proceeding, emissions which are below the limits set forth in any condition where PSD is cited as the basis of the condition shall not be subject to penalty if the Permittee (MSCC) retains properly signed, contemporaneous operating logs or other relevant evidence and can demonstrate all of the following: i.) A malfunction caused the emissions in excess of the limits in any condition where PSD is cited as the basis of the condition; ii.) The permitted facility, including the air pollution control equipment and process equipment, was being properly operated at the time of the malfunction; iii.) Preventative maintenance was regularly performed in a manner consistent with good practice for minimizing emissions; iv.) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; v.) During the period of the malfunction, the permittee (MSCC) took all reasonable steps to minimize the amount and duration of emissions (including any bypass) that exceeded the emission limits provided in any condition where PSD is cited as the basis of the condition. Reasonable steps to minimize emissions could include, but are not limited to, reducing production to the lowest level practicable, reducing the material feed that results in the increased emissions, and switching to alternative, less polluting fuels. Where repairs were required, repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as possible; and vi.) The permittee (MSCC) complied with the malfunction reporting requirements as specified in the condition where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

60. All emissions, including those associated with a malfunction which may be eligible for an affirmative defense, must be included in all emissions calculations and demonstrations of compliance with mass emission limits (e.g., daily, monthly, and annual emission limits) specified in this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

61. This provision is in addition to any emergency or malfunction provision contained in any applicable requirement or elsewhere in this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

62. The EPA Regional Administrator, and/or their authorized representative, upon the presentation of credential, must be permitted: (1) to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of the PSD permit SJ-87-01; and (2) at reasonable times to have access to and copy any records required to be kept under the terms and conditions of PSD permit SJ 87-01; and (3) to inspect any equipment, operation, or method required in the PSD permit SJ-87-01; and (4) to sample emissions from source(s). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

63. In the event of any changes in control or ownership of facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The Permittee (MSCC) shall notify the succeeding owner and operator of the existence of the PSD permit SJ-87-01 and its conditions by letter, a copy of which shall be forwarded to the EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

64. The provisions of the PSD permit SJ-87-01 are severable, and , if any provisions of the permit is held invalid, the remainder of the permit must not be affected thereby. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

65. The permittee (MSCC) must construct and operate the proposed power plant in compliance with all other applicable provisions of 40 CFR Parts 52, 60, 62, and 63 and all other applicable Federal, State, and local air quality regulations. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

66. On or before the date of startup (as defined in 40 C.F.R. 60.2) of the Western Midway Sunset Cogeneration Project (WMSCP; PSD Permit No. SJ-00-01) and thereafter the Permittee (MSCC) must install, continuously operate, and maintain the Dry Low NOx (DLN) combustion systems to reduce NOx emissions from each of its three turbines. The Permittee (MSCC) shall also use proper combustion techniques for the control of CO emissions from the equipment at MSCP. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

67. Within 60 days after achieving the base load, but no later than 180 days after initial startup of all three modified turbines (as defined in 40 C.F.R. 60.2), and annually thereafter (at about the anniversary of the initial performance test), the Permittee (MSCC) must conduct performance tests (as described in 40 C.F.R. 60.8) for NOx, and CO on the exhaust stack gases. The Permittee (MSCC) must furnish the District, the California Air Resources Board (CARB), and the EPA a written report of the results of such tests. Upon written request from the Permittee (MSCC), and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 87-01] Federally Enforceable Through Title V Permit

68. Performance tests for the emissions of NOx, and CO must be conducted and the results reported in accordance with the test methods set forth in 40 C.F.R. 60.8 and 40 C.F.R. 60, Appendix A. The following test methods must be used: a.) Performance tests for the emissions of NOx must be conducted using EPA Method 1-4 and 7E. b.) Performance tests for the emissions of CO must be conducted using the EPA Methods 1-4 and 10. In lieu of the above-mentioned test methods, equivalent methods may be used with prior written approval from EPA. The Permittee (MSCC) must notify EPA in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. [PSD SJ 87-01] Federally Enforceable Through Title V Permit

69. For performance test purposes, sampling ports, platforms, and access must be provided by the Permittee on the emission unit exhaust system in accordance with 40 C.F.R. 60.8(e). [PSD SJ 87-01] Federally Enforceable Through Title V Permit

70. On and after the date of startup of the WMSCP (PSD Permit No. SJ-00-01), the Permittee (MSCC) must not discharge or cause the discharge of CO into the atmosphere in excess of the following emission limits per turbine: The more stringent of 25 ppmvd @ 15% O2 or 55 pounds per hour, based on 3-hour rolling average. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

71. This condition applies prior to the startup of the WMSCP: On and after the date of start up any of the three turbines at MSCP must not discharge (per turbine, and based on 3-hour rolling average) into the atmosphere CO in excess of the following of any of: 1.) The more stringent of 52.0 ppmvd @ 15% O2 or 94 pounds for loads greater than or equal to 75%. 2.) The more stringent of 62.0 ppmvd @ 15% O2 or 94 pounds for loads greater than or equal to 35% but less than 75%. 3.) 94 pounds per hour for loads less than 35%. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

72. On and after the date of startup of the WMSCP (PSD Permit No. SJ-00-01), the Permittee (MSCC) must not discharge or cause the discharge of NOx into the atmosphere in excess of the following emission limits per turbine: The more stringent of 10 ppmvd @ 15% O2 or 36.1 pounds per hour, based on 3-hour rolling average. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

73. This condition applies prior to the startup of the WMSCP: On and after the date of start-up of any of the three turbines, MSCC must not discharge (per turbine, based on 3-hour rolling average) into the atmosphere NOx (as NO2) in excess of the following: 1.) The more stringent of 25.0 ppmvd @ 15% O2 or 85.0 pounds per hour for loads greater than or equal to 75%; 2.) The more stringent of 42.0 ppmvd @ 15% O2 or 85 pounds per hour for loads greater than or equal to 35% but less than 75%; 3.) 85 pounds per hour for loads less than 35%. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

74. The hourly (3-hour averaging) emissions must not exceed: 1.) 94 pounds of CO and 85 pounds of NOx; 2.) All CEMs must be operating during startups and shut downs; 3.) The time, date and duration of each startup and shutdown event must be recorded. The records must include the lbs/hour calculations based on the CEM data. These records must be kept for five years following the date of such events. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

75. Prior to the date of startup and thereafter, the Permittee (MSCC) must install, maintain and operate the following continuous monitoring systems (CEMs) in the exhaust stacks: a.) Continuous monitoring systems to measure stack gas NOx , CO and O2 concentrations. The systems must meet EPA monitoring performance specification (40 C.F.R. 60.13 and 40 C.F.R. 60, Appendix B, Performance Specifications 2, 3 and 4); b.) A continuous monitoring system to measure stack gas and natural gas volumetric flow rates. The stack gas flow measurement system must meet EPA Performance Specifications for (40 C.F.R. Part 52, Appendix E). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

76. The Permittee (MSCC) must maintain a file of all measurements, including continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; performance and all other information required by 40 C.F.R. 60 Appendices A-B recorded in a permanent form suitable for inspection. The file must be retained for five years following the date of such measurements, maintenance, reports and records. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

77. The Permittee (MSCC) must notify EPA of the date on which demonstration for the continuous monitoring system performance commences (40 C.F.R. 60.13). This date must be no later than 60 days after full load operation but not later than 180 days after startup. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

78. The Permittee (MSCC) must submit a written report of all excess emissions to EPA for every calendar quarter. The quarterly report must include the following: a.) The magnitude of the excess emissions computed in accordance with 40 C.F.R. 60.13(h), any conversion factors used, and the date and time of commencement and compilation of each time period of excess emissions; b.) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of any equipment. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted must also be reported; c.) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments; d.) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report; and e.) Excess emissions must be defined as any 3-hour period during which the average emissions of CO, as measured by the CEM exceeds the maximum emission limits set forth in the condition with a CO emission limit, where PSD is cited as the basis of the condition or any 3-hour period during which the average emissions of NOx exceed the maximum emission limits set forth in the condition with a NOx emission limit, where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

79. Excess emissions indicated by the CEM system must be considered violations of the applicable emission limit for the purpose of this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

80. The quality assurance project plan used by the Permittee (MSCC) for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 C.F.R. Part 60, Appendix F, must be available upon request to EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

81. The Permittee (MSCC) must keep a monthly record of all fuel uses. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

82. The proposed power plant is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 C.F.R. 60). The owner or operator must meet all applicable requirements of 40 C.F.R. 60 Subparts A and GG of this regulation. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

83. All three turbines will fire natural gas only. The Permittee (MSCC) must only combust pipeline quality natural gas with sulfur content (as S) below 0.75 grains per 100 dry standard cubic feet (dscf). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

84. MSCC shall have legal and operational responsibility and control of all air pollutant emitting activities of the MSCP. This responsibility shall include, but shall not be limited to the following: 1.) Operating and maintaining the project to comply with all federal, state, and local air pollution laws, regulations, orders, and other requirements; 2.) Ensuring the emissions offsets, tradeoffs, or other emission reductions required for this project under permits issued by the U.S. EPA, the District, and/or the California Energy Commission are obtained as required; or 3.) Any violations of any air pollution requirements are the legal responsibility of MSCC, in addition to any other legal responsible entity. Any proposed change to this condition shall require prior written concurrence of the US EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

85. The allowable incidental taking (killing, harming, or harassment) of San Joaquin kit foxes, blunt-nosed leopard lizards, and giant kangaroo rats is confined to the proposed cogeneration plant site one half mile radius around this site (on lands owned or leased by Aera Energy LLC), and associated subject cogeneration plant facilities (including pipelines, transmission lines, temporary equipment stockpiling areas, and access roads) as discussed in the project Application for Certification report (Sun Cogeneration Company and Southern Sierra Energy Company 1985). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

86. MSCC is required to implement the "Agreement on Conditions for Mitigation of the Biological Impacts of the Midway-Sunset Project" as required by the U.S. Fish and Wildlife Service (USFWS) (Memorandum dated March 16, 1987 from the USFWS to the US EPA). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

87. Any endangered species found dead should be turned in to the California Department of Fish and Game for Analysis. MSCC must also report this event to the USFWS. The USFWS may recommend amendment to the existing project actions pending results of the analysis. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

88. All correspondence as required by this permit shall be forwarded to: 1.) Director, Air Division (Attn: Air-3) EPA Region IX 75 Hawthorne Street San Francisco, CA 94105-3901 Tel: (415) 744-1291 Fax: (415) 744-1076; 2.) Chief, Stationary Source Division, California Air Resource Board P.O. Box 2815 Sacramento, CA 95812; and 3.) Air Pollution Control Officer, San Joaquin Valley Unified APCD 34946 Flyover Court Bakersfield, CA 93308. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

89. MSCC is jointly owned by Sun Cogeneration Limited Partnership (Sun Cogen LP) and San Joaquin Energy Company. Sun Cogen LP is managed and controlled by a wholly owned subsidiary of Aera Energy LLC. (See Condition 104) [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PTO S-1135-225-29

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1135-225-29 **EXPIRATION DATE:** 05/31/2026

SECTION: 17 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
78.2 MW COGENERATION UNIT B WITH GE MODEL G7111E FRAME 7E GAS TURBINE ENGINE WITH DRY LOW NOX COMBUSTORS (DLN1+ TURNDOWN ENHANCE), SELECTIVE CATALYTIC REDUCTION (SCR), AND UNFIRED HEAT RECOVERY STEAM GENERATOR (HRSG)

PERMIT UNIT REQUIREMENTS

1. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O2. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours) when SCR is operated. The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
3. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NOx and CO emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When SCR is operated, permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
6. When SCR is operated, ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Gas turbine engine shall be equipped with fuel consumption monitor recorder accurate to +/- 3%. [District Rule 2201] Federally Enforceable Through Title V Permit
8. CEM for NOx (as NO2) and CO shall conform to Rule 1080 specifications. [District Rules 1080 and 4703] Federally Enforceable Through Title V Permit
9. HRSG exhaust stack shall be equipped with permanent stack sampling provisions adequate to facilitate testing consistent with EPA test methods. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Flue gas ducting from engine to HRSG shall have no provisions for introduction of dilution air. [District Rule 1110] Federally Enforceable Through Title V Permit
11. Lube oil cooler/accumulation vent shall be equipped with control device(s) approved by the APCO sufficient to prevent emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Lube oil cooler/accumulator vent(s) shall not have detectable emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Natural gas sulfur content shall not exceed 0.31 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All CEM's shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
15. Quarterly CEM reports shall be submitted to the APCO according to EPA regulations as specified in 40 CFR 60 Appendix B. [District Rule 4001 and District rule 1080, 8.0] Federally Enforceable Through Title V Permit
16. Audits of all monitors shall be conducted by independent laboratory in accordance with EPA guidelines and witnessed by District. Reports shall be submitted to District within 60 days of audits. [District Rule 1080] Federally Enforceable Through Title V Permit
17. All notification, recordkeeping, performance tests, reporting requirements, and compliance testing requirements of Rule 4001 NSPS shall be satisfied. [District Rule 4001] Federally Enforceable Through Title V Permit
18. Operational records including fuel type, fuel characteristics, and consumption shall be maintained and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
19. Accurate records of NOx (as NO2) and CO flue gas concentration corrected to 15% O2 and fuel gas sulfur content shall be maintained and shall be reported as described in Rule 1080 upon request. [District Rule 1080] Federally Enforceable Through Title V Permit
20. Emission rates shall not exceed the following: PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu, VOC: 0.009 lb/MMBtu, CO: 0.057 lb/MMBtu, and ammonia - 10 ppmvd @ 15%O2. [District Rules 2201, 4201; and Kern County Rule 404] Federally Enforceable Through Title V Permit
21. Permittee shall comply with the following emission limit at all times except during periods of start-up, shutdown, or reduced load: NOx (as NO2): 5.0 ppmv, and CO: 25 ppmv, dry @ 15% O2 corrected to ISO conditions. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703] Federally Enforceable Through Title V Permit
22. Gas turbine engine start-up is that period of time not exceeding two hours in duration during which the unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
23. Gas turbine engine shutdown it that period of time not exceeding two hours in duration during which the unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
24. Gas turbine reduced load period is that period not exceeding one hour in duration during which the unit is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Compliance with NOx and CO emission limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory on an annual basis. Compliance with NOx, CO and ammonia emissions limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory within 60 days of any use of the SCR system, unless compliance with emissions limitations has been demonstrated with the SCR system in operation within the preceding 12 month period. [District Rule 4703 and 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

27. The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 (or 10B) or CARB Method 100, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rule 1081, 40 CFR 60.335 (b), and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit

28. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102] Federally Enforceable Through Title V Permit

29. Official test results and field data shall be submitted within 60 days after collection. [District Rule 4703 and District Rule 1081] Federally Enforceable Through Title V Permit

30. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit

31. CEC emission rates, except during periods of startup, shutdown, or reduced load shall not exceed PM10: 9.98 lb/hr, SOx (as SO2): 0.92 lb/hr, NOx (as NO2): 17.66 lb/hr, VOC: 9.00 lb/hr, and CO: 54.91 lb/hr. [District Rules 2080 and 4703, and 40 CFR 60] Federally Enforceable Through Title V Permit

32. For CEC purposes, emissions during periods of startup and shutdown shall not exceed the following values average over 2 hours: NOx: 140 lb/hr, and CO: 94 lb/hr. [District Rule 2080] Federally Enforceable Through Title V Permit

33. The CEC shall be notified of any changes to the combined annual emission limits for cogeneration units S-1135-224, -225, and -226, only to the extent to be informed of their impact on the Midway-Sunset Cogeneration Facility. [District Rule 2080] Federally Enforceable Through Title V Permit

34. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [Kern County Rule 108 and District Rule 1080] Federally Enforceable Through Title V Permit

35. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [Kern County Rule 108; District Rules 1080 and 4703; 40 CFR 60.7 (b)] Federally Enforceable Through Title V Permit

36. The permittee shall maintain hourly average records of NOx and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

37. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [Kern County Rule 108 and District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

38. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [Kern County Rule 108 and District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

39. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. Unit shall be fired on a natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333 (a) & (b); 40 CFR 60.334 (c)(2); Kern County Rule 407; and District Rule 4801] Federally Enforceable Through Title V Permit

41. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

42. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using method(s) specified on this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

43. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246, or double GC for H2S and mercaptans. [40 CFR 60.335 (d)] Federally Enforceable Through Title V Permit

44. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334 (b)(2)] Federally Enforceable Through Title V Permit

45. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(a)(2)] Federally Enforceable Through Title V Permit

46. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [40 CFR 60.332 (a),(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

47. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332 (a),(b) and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit

48. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334 (a),(b),(c) and District Rule 4703, 5.0] Federally Enforceable Through Title V Permit

49. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332 (a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

50. This unit is a simple combustion turbine as defined in 40 CFR 72.6 (b)(1) and shall not be subject to the requirements of 40 CFR Part 72. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

51. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rules 404, 108, and 108.1. A permit shield is granted from these requirements. [SJVUAPCD Rule 2520, 13.2] Federally Enforceable Through Title V Permit

52. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: Kern County Rule 407; District Rules 4801, 4201, 1081, and 1080, Sections 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332 (c) and (d); 60.334 (b), (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

53. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: District Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

54. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: District Rules 1080, 7.3 and 4703, 6.2.2; 40 CFR 60.332(a), (b); 60.333(a) and (b), 60.334(a), (b), and (c)(1); 60.335(a), (b) and (c)(2). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

55. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

56. The Permittee (MSCC) must notify EPA by telephone, facsimile, or electronic mail transmission within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in any conditions where PSD is cited as the basis of the condition. In addition, the Permittee (MSCC) must notify EPA in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in any conditions where PSD is cited as the basis of the condition, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in the conditions where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

57. A malfunction means a sudden and unavoidable breakdown of equipment or of a process beyond the reasonable control of the source. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

58. Emissions in excess of the limits specified in any conditions where PSD is cited as the basis of the condition shall constitute a violation of this permit and may be the subject of enforcement proceedings. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

59. Affirmative defense: In the context of an enforcement proceeding, emissions which are below the limits set forth in any condition where PSD is cited as the basis of the condition shall not be subject to penalty if the Permittee (MSCC) retains properly signed, contemporaneous operating logs or other relevant evidence and can demonstrate all of the following: i.) A malfunction caused the emissions in excess of the limits in any condition where PSD is cited as the basis of the condition; ii.) The permitted facility, including the air pollution control equipment and process equipment, was being properly operated at the time of the malfunction; iii.) Preventative maintenance was regularly performed in a manner consistent with good practice for minimizing emissions; iv.) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; v.) During the period of the malfunction, the permittee (MSCC) took all reasonable steps to minimize the amount and duration of emissions (including any bypass) that exceeded the emission limits provided in any condition where PSD is cited as the basis of the condition. Reasonable steps to minimize emissions could include, but are not limited to, reducing production to the lowest level practicable, reducing the material feed that results in the increased emissions, and switching to alternative, less polluting fuels. Where repairs were required, repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as possible; and vi.) The permittee (MSCC) complied with the malfunction reporting requirements as specified in the condition where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

60. All emissions, including those associated with a malfunction which may be eligible for an affirmative defense, must be included in all emissions calculations and demonstrations of compliance with mass emission limits (e.g., daily, monthly, and annual emission limits) specified in this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

61. This provision is in addition to any emergency or malfunction provision contained in any applicable requirement or elsewhere in this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

62. The EPA Regional Administrator, and/or their authorized representative, upon the presentation of credential, must be permitted: (1) to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of the PSD permit SJ-87-01; and (2) at reasonable times to have access to and copy any records required to be kept under the terms and conditions of PSD permit SJ 87-01; and (3) to inspect any equipment, operation, or method required in the PSD permit SJ-87-01; and (4) to sample emissions from source(s). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

63. In the event of any changes in control or ownership of facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The Permittee (MSCC) shall notify the succeeding owner and operator of the existence of the PSD permit SJ-87-01 and its conditions by letter, a copy of which shall be forwarded to the EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

64. The provisions of the PSD permit SJ-87-01 are severable, and , if any provisions of the permit is held invalid, the remainder of the permit must not be affected thereby. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

65. The permittee (MSCC) must construct and operate the proposed power plant in compliance with all other applicable provisions of 40 CFR Parts 52, 60, 62, and 63 and all other applicable Federal, State, and local air quality regulations. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

66. On or before the date of startup (as defined in 40 C.F.R. 60.2) of the Western Midway Sunset Cogeneration Project (WMSCP; PSD Permit No. SJ-00-01) and thereafter the Permittee (MSCC) must install, continuously operate, and maintain the Dry Low NOx (DLN) combustion systems to reduce NOx emissions from each of its three turbines. The Permittee (MSCC) shall also use proper combustion techniques for the control of CO emissions from the equipment at MSCP. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

67. Within 60 days after achieving the base load, but no later than 180 days after initial startup of all three modified turbines (as defined in 40 C.F.R. 60.2), and annually thereafter (at about the anniversary of the initial performance test), the Permittee (MSCC) must conduct performance tests (as described in 40 C.F.R. 60.8) for NOx, and CO on the exhaust stack gases. The Permittee (MSCC) must furnish the District, the California Air Resources Board (CARB), and the EPA a written report of the results of such tests. Upon written request from the Permittee (MSCC), and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 87-01] Federally Enforceable Through Title V Permit

68. Performance tests for the emissions of NOx, and CO must be conducted and the results reported in accordance with the test methods set forth in 40 C.F.R. 60.8 and 40 C.F.R. 60, Appendix A. The following test methods must be used: a.) Performance tests for the emissions of NOx must be conducted using EPA Method 1-4 and 7E. b.) Performance tests for the emissions of CO must be conducted using the EPA Methods 1-4 and 10. In lieu of the above-mentioned test methods, equivalent methods may be used with prior written approval from EPA. The Permittee (MSCC) must notify EPA in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. [PSD SJ 87-01] Federally Enforceable Through Title V Permit

69. For performance test purposes, sampling ports, platforms, and access must be provided by the Permittee on the emission unit exhaust system in accordance with 40 C.F.R. 60.8(e). [PSD SJ 87-01] Federally Enforceable Through Title V Permit

70. On and after the date of startup of the WMSCP (PSD Permit No. SJ-00-01), the Permittee (MSCC) must not discharge or cause the discharge of CO into the atmosphere in excess of the following emission limits per turbine: The more stringent of 25 ppmvd @ 15% O2 or 55 pounds per hour, based on 3-hour rolling average. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

71. This condition applies prior to the startup of the WMSCP: On and after the date of start up any of the three turbines at MSCP must not discharge (per turbine, and based on 3-hour rolling average) into the atmosphere CO in excess of the following of any of: 1.) The more stringent of 52.0 ppmvd @ 15% O2 or 94 pounds for loads greater than or equal to 75%. 2.) The more stringent of 62.0 ppmvd @ 15% O2 or 94 pounds for loads greater than or equal to 35% but less than 75%. 3.) 94 pounds per hour for loads less than 35%. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

72. On and after the date of startup of the WMSCP (PSD Permit No. SJ-00-01), the Permittee (MSCC) must not discharge or cause the discharge of NOx into the atmosphere in excess of the following emission limits per turbine: The more stringent of 10 ppmvd @ 15% O2 or 36.1 pounds per hour, based on 3-hour rolling average. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

73. This condition applies prior to the startup of the WMSCP: On and after the date of start-up of any of the three turbines, MSCC must not discharge (per turbine, based on 3-hour rolling average) into the atmosphere NOx (as NO2) in excess of the following: 1.) The more stringent of 25.0 ppmvd @ 15% O2 or 85.0 pounds per hour for loads greater than or equal to 75%; 2.) The more stringent of 42.0 ppmvd @ 15% O2 or 85 pounds per hour for loads greater than or equal to 35% but less than 75%; 3.) 85 pounds per hour for loads less than 35%. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

74. The hourly (3-hour averaging) emissions must not exceed: 1.) 94 pounds of CO and 85 pounds of NOx; 2.) All CEMs must be operating during startups and shut downs; 3.) The time, date and duration of each startup and shutdown event must be recorded. The records must include the lbs/hour calculations based on the CEM data. These records must be kept for five years following the date of such events. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

75. Prior to the date of startup and thereafter, the Permittee (MSCC) must install, maintain and operate the following continuous monitoring systems (CEMs) in the exhaust stacks: a.) Continuous monitoring systems to measure stack gas NOx , CO and O2 concentrations. The systems must meet EPA monitoring performance specification (40 C.F.R. 60.13 and 40 C.F.R. 60, Appendix B, Performance Specifications 2, 3 and 4); b.) A continuous monitoring system to measure stack gas and natural gas volumetric flow rates. The stack gas flow measurement system must meet EPA Performance Specifications for (40 C.F.R. Part 52, Appendix E). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

76. The Permittee (MSCC) must maintain a file of all measurements, including continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; performance and all other information required by 40 C.F.R. 60 Appendices A-B recorded in a permanent form suitable for inspection. The file must be retained for five years following the date of such measurements, maintenance, reports and records. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

77. The Permittee (MSCC) must notify EPA of the date on which demonstration for the continuous monitoring system performance commences (40 C.F.R. 60.13). This date must be no later than 60 days after full load operation but not later than 180 days after startup. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

78. The Permittee (MSCC) must submit a written report of all excess emissions to EPA for every calendar quarter. The quarterly report must include the following: a.) The magnitude of the excess emissions computed in accordance with 40 C.F.R. 60.13(h), any conversion factors used, and the date and time of commencement and compilation of each time period of excess emissions; b.) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of any equipment. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted must also be reported; c.) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments; d.) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report; and e.) Excess emissions must be defined as any 3-hour period during which the average emissions of CO, as measured by the CEM exceeds the maximum emission limits set forth in the condition with a CO emission limit, where PSD is cited as the basis of the condition or any 3-hour period during which the average emissions of NOx exceed the maximum emission limits set forth in the condition with a NOx emission limit, where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

79. Excess emissions indicated by the CEM system must be considered violations of the applicable emission limit for the purpose of this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

80. The quality assurance project plan used by the Permittee (MSCC) for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 C.F.R. Part 60, Appendix F, must be available upon request to EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

81. The Permittee (MSCC) must keep a monthly record of all fuel uses. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

82. The proposed power plant is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 C.F.R. 60). The owner or operator must meet all applicable requirements of 40 C.F.R. 60 Subparts A and GG of this regulation. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

83. All three turbines will fire natural gas only. The Permittee (MSCC) must only combust pipeline quality natural gas with sulfur content (as S) below 0.75 grains per 100 dry standard cubic feet (dscf). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

84. MSCC shall have legal and operational responsibility and control of all air pollutant emitting activities of the MSCP. This responsibility shall include, but shall not be limited to the following: 1.) Operating and maintaining the project to comply with all federal, state, and local air pollution laws, regulations, orders, and other requirements; 2.) Ensuring the emissions offsets, tradeoffs, or other emission reductions required for this project under permits issued by the U.S. EPA, the District, and/or the California Energy Commission are obtained as required; or 3.) Any violations of any air pollution requirements are the legal responsibility of MSCC, in addition to any other legal responsible entity. Any proposed change to this condition shall require prior written concurrence of the US EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

85. The allowable incidental taking (killing, harming, or harassment) of San Joaquin kit foxes, blunt-nosed leopard lizards, and giant kangaroo rats is confined to the proposed cogeneration plant site one half mile radius around this site (on lands owned or leased by Aera Energy LLC), and associated subject cogeneration plant facilities (including pipelines, transmission lines, temporary equipment stockpiling areas, and access roads) as discussed in the project Application for Certification report (Sun Cogeneration Company and Southern Sierra Energy Company 1985). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

86. MSCC is required to implement the "Agreement on Conditions for Mitigation of the Biological Impacts of the Midway-Sunset Project" as required by the U.S. Fish and Wildlife Service (USFWS) (Memorandum dated March 16, 1987 from the USFWS to the US EPA). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

87. Any endangered species found dead should be turned in to the California Department of Fish and Game for Analysis. MSCC must also report this event to the USFWS. The USFWS may recommend amendment to the existing project actions pending results of the analysis. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

88. All correspondence as required by this permit shall be forwarded to: 1.) Director, Air Division (Attn: Air-3) EPA Region IX 75 Hawthorne Street San Francisco, CA 94105-3901 Tel: (415) 744-1291 Fax: (415) 744-1076; 2.) Chief, Stationary Source Division, California Air Resource Board P.O. Box 2815 Sacramento, CA 95812; and 3.) Air Pollution Control Officer, San Joaquin Valley Unified APCD 34946 Flyover Court Bakersfield, CA 93308. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

89. MSCC is jointly owned by Sun Cogeneration Limited Partnership (Sun Cogen LP) and San Joaquin Energy Company. Sun Cogen LP is managed and controlled by a wholly owned subsidiary of Aera Energy LLC. (See Condition 104) [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PTO S-1135-226-28

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1135-226-28 **EXPIRATION DATE:** 05/31/2026

SECTION: 17 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
78.2 MW COGENERATION UNIT C WITH GE MODEL G7111E FRAME 7E GAS TURBINE ENGINE WITH DRY LOW NOX COMBUSTORS (DLN1+ TURNDOWN ENHANCE), SELECTIVE CATALYTIC REDUCTION (SCR), AND UNFIRED HEAT RECOVERY STEAM GENERATOR (HRSG)

PERMIT UNIT REQUIREMENTS

1. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O2. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
3. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NOx and CO emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
5. When SCR is operated, permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
6. When SCR is operate, ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Gas turbine engine shall be equipped with fuel consumption monitor recorder accurate to +/- 3%. [District Rule 2201] Federally Enforceable Through Title V Permit
8. CEM for NOx (as NO2) and CO shall conform to Rule 1080 specifications. [District Rules 1080 and 4703] Federally Enforceable Through Title V Permit
9. HRSG exhaust stack shall be equipped with permanent stack sampling provisions adequate to facilitate testing consistent with EPA test methods. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Flue gas ducting from engine to HRSG shall have no provisions for introduction of dilution air. [District Rule 1110] Federally Enforceable Through Title V Permit
11. Lube oil cooler/accumulation vent shall be equipped with control device(s) approved by the APCO sufficient to prevent emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Lube oil cooler/accumulator vent(s) shall not have detectable emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Natural gas sulfur content shall not exceed 0.31 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All CEM's shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
15. Quarterly CEM reports shall be submitted to the APCO according to EPA regulations as specified in 40 CFR 60 Appendix B. [District Rule 4001 and District rule 1080, 8.0] Federally Enforceable Through Title V Permit
16. Audits of all monitors shall be conducted by independent laboratory in accordance with EPA guidelines and witnessed by District. Reports shall be submitted to District within 60 days of audits. [District Rule 1080] Federally Enforceable Through Title V Permit
17. All notification, recordkeeping, performance tests, reporting requirements, and compliance testing requirements of Rule 4001 NSPS shall be satisfied. [District Rule 4001] Federally Enforceable Through Title V Permit
18. Operational records including fuel type, fuel characteristics, and consumption shall be maintained and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
19. Accurate records of NOx (as NO2) and CO flue gas concentration corrected to 15% O2 and fuel gas sulfur content shall be maintained and shall be reported as described in Rule 1080 upon request. [District Rule 1080] Federally Enforceable Through Title V Permit
20. Emission rates shall not exceed the following: PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu, VOC: 0.009 lb/MMBtu, CO: 0.057 lb/MMBtu, and ammonia - 10 ppmvd @ 15%O2. [District NSR Rule; District Rule 4201; and Kern County Rule 404] Federally Enforceable Through Title V Permit
21. Permittee shall comply with the following emission limit at all times except during periods of start-up, shutdown, or reduced load as defined in Rule 4703: NOx (as NO2): 5.0 ppmv, and CO: 25 ppmv, dry @ 15% O2 corrected to ISO conditions. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703] Federally Enforceable Through Title V Permit
22. Gas turbine engine start-up is that period of time not exceeding two hours in duration during which the unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
23. Gas turbine engine shutdown is that period of time not exceeding two hours in duration during which the unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
24. Gas turbine reduced load period is that period not exceeding one hour in duration during which the unit is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Compliance with NOx, CO and ammonia emission limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory annually. [District Rules 4703 and 1081] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 (or 10B) or CARB Method 100, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rule 1081, 40 CFR 60.335 (b), and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit

28. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102] Federally Enforceable Through Title V Permit

29. Official test results and field data shall be submitted within 60 days after collection. [District Rule 4703 and District Rule 1081] Federally Enforceable Through Title V Permit

30. Combined annual emissions from units S-1135-115, S-1135-119, S-1135-122, S1135-123, S-1135-224, S-1135-225, S-1135-226 shall not exceed any of the following: PM10 - 262,360 lb/yr, SOx (as SO2) - 24,200 lb/yr, NOx (as NO2) - 464,170 lb/yr, VOC - 236,520 lb/yr, or CO - 1,443,101 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

31. The permittee shall maintain records of fuel type, quantity, heating value of gas burned, permitted emission factors and annual emissions for each unit. For units equipped with continuous emissions monitors (CEMs), CEM data may be used in place of calculated emissions. If CEM shows a violation, CEM data shall be used. Records shall be updated at least monthly. Reports of annual emissions and fuel usage shall be submitted within 30 days after the end of the calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

32. If fuel use monitoring provisions fail, emissions shall be calculated based on operational data, or if not available, on set equal to the average of four days prior to failure. [District NSR Rule] Federally Enforceable Through Title V Permit

33. When three gas turbine engines S-1135-224, '-225, and '-226 are operating, four steam generators S-1135-115, '-119, '-122, and '-123 shall be shut down. [District NSR Rule] Federally Enforceable Through Title V Permit

34. When up to two gas turbine engines S-1135-224, '-225, or '-226 are operating, four steam generators S-1135-115, '-119, '-122, and '-123 may be operated. [District NSR Rule] Federally Enforceable Through Title V Permit

35. The permittee shall maintain records of operational status of units S-1135-115, S-1135-119, S-1135-122, S1135-123, S-1135-224, S-1135-225, and S-1135-226 on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit

36. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit

37. CEC emission rates, except during periods of startup, shutdown, or reduced load shall not exceed PM10: 9.98 lb/hr, SOx (as SO2): 0.92 lb/hr, NOx (as NO2): 17.66 lb/hr, VOC: 9.00 lb/hr, and CO: 54.91 lb/hr. [District Rules 2080 and 4703, and 40 CFR 60] Federally Enforceable Through Title V Permit

38. For CEC purposes, emissions during periods of startup and shutdown shall not exceed the following values average over 2 hours: NOx: 140 lb/hr, and CO: 94 lb/hr. [District Rule 2080] Federally Enforceable Through Title V Permit

39. The CEC shall be notified of any changes to the combined annual emission limits for cogeneration units S-1135-224, -225, and -226, only to the extent to be informed of their impact on the Midway-Sunset Cogeneration Facility. [District Rule 2080] Federally Enforceable Through Title V Permit

40. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [Kern County Rule 108 and District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

41. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [Kern County Rule 108; District Rules 1080 and 4703; 40 CFR 60.7 (b)] Federally Enforceable Through Title V Permit

42. The permittee shall maintain hourly average records of NOx and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

43. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [Kern County Rule 108 and District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

44. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [Kern County Rule 108 and District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

45. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 1081] Federally Enforceable Through Title V Permit

46. Unit shall be fired on a natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333 (a) & (b); 40 CFR 60.334 (c)(2); Kern County Rule 407; and District Rule 4801] Federally Enforceable Through Title V Permit

47. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

48. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using method(s) specified on this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

49. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246, or double GC for H2S and mercaptans. [40 CFR 60.335 (d)] Federally Enforceable Through Title V Permit

50. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334 (b)(2)] Federally Enforceable Through Title V Permit

51. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(a)(2)] Federally Enforceable Through Title V Permit

52. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [40 CFR 60.332 (a),(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

53. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332 (a),(b) and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit

54. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334 (a),(b),(c) and District Rule 4703, 5.0] Federally Enforceable Through Title V Permit

55. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332 (a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

56. This unit is a simple combustion turbine as defined in 40 CFR 72.6 (b)(1) and shall not be subject to the requirements of 40 CFR Part 72. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

57. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rules 404, 108, and 108.1. A permit shield is granted from these requirements. [SJVUAPCD Rule 2520, 13.2] Federally Enforceable Through Title V Permit

58. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: Kern County Rule 407; District Rules 4801, 4201, 1081, and 1080, Sections 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332 (c) and (d); 60.334 (b), (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

59. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: District Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: District Rules 1080, 7.3 and 4703, 6.2.2; 40 CFR 60.332(a), (b); 60.333(a) and (b), 60.334(a), (b), and (c)(1); 60.335(a), (b) and (c)(2). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

61. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

62. The Permittee (MSCC) must notify EPA by telephone, facsimile, or electronic mail transmission within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in any conditions where PSD is cited as the basis of the condition. In addition, the Permittee (MSCC) must notify EPA in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in any conditions where PSD is cited as the basis of the condition, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in the conditions where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

63. A malfunction means a sudden and unavoidable breakdown of equipment or of a process beyond the reasonable control of the source. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

64. Emissions in excess of the limits specified in any conditions where PSD is cited as the basis of the condition shall constitute a violation of this permit and may be the subject of enforcement proceedings. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

65. Affirmative defense: In the context of an enforcement proceeding, emissions which are below the limits set forth in any condition where PSD is cited as the basis of the condition shall not be subject to penalty if the Permittee (MSCC) retains properly signed, contemporaneous operating logs or other relevant evidence and can demonstrate all of the following: i.) A malfunction caused the emissions in excess of the limits in any condition where PSD is cited as the basis of the condition; ii.) The permitted facility, including the air pollution control equipment and process equipment, was being properly operated at the time of the malfunction; iii.) Preventative maintenance was regularly performed in a manner consistent with good practice for minimizing emissions; iv.) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; v.) During the period of the malfunction, the permittee (MSCC) took all reasonable steps to minimize the amount and duration of emissions (including any bypass) that exceeded the emission limits provided in any condition where PSD is cited as the basis of the condition. Reasonable steps to minimize emissions could include, but are not limited to, reducing production to the lowest level practicable, reducing the material feed that results in the increased emissions, and switching to alternative, less polluting fuels. Where repairs were required, repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as possible; and vi.) The permittee (MSCC) complied with the malfunction reporting requirements as specified in the condition where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

66. All emissions, including those associated with a malfunction which may be eligible for an affirmative defense, must be included in all emissions calculations and demonstrations of compliance with mass emission limits (e.g., daily, monthly, and annual emission limits) specified in this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

67. This provision is in addition to any emergency or malfunction provision contained in any applicable requirement or elsewhere in this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

68. The EPA Regional Administrator, and/or their authorized representative, upon the presentation of credential, must be permitted: (1) to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of the PSD permit SJ-87-01; and (2) at reasonable times to have access to and copy any records required to be kept under the terms and conditions of PSD permit SJ 87-01; and (3) to inspect any equipment, operation, or method required in the PSD permit SJ-87-01; and (4) to sample emissions from source(s). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

69. In the event of any changes in control or ownership of facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The Permittee (MSCC) shall notify the succeeding owner and operator of the existence of the PSD permit SJ-87-01 and its conditions by letter, a copy of which shall be forwarded to the EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

70. The provisions of the PSD permit SJ-87-01 are severable, and , if any provisions of the permit is held invalid, the remainder of the permit must not be affected thereby. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

71. The permittee (MSCC) must construct and operate the proposed power plant in compliance with all other applicable provisions of 40 CFR Parts 52, 60, 62, and 63 and all other applicable Federal, State, and local air quality regulations. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

72. On or before the date of startup (as defined in 40 C.F.R. 60.2) of the Western Midway Sunset Cogeneration Project (WMSCP; PSD Permit No. SJ-00-01) and thereafter the Permittee (MSCC) must install, continuously operate, and maintain the Dry Low NOx (DLN) combustion systems to reduce NOx emissions from each of its three turbines. The Permittee (MSCC) shall also use proper combustion techniques for the control of CO emissions from the equipment at MSCP. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

73. Within 60 days after achieving the base load, but no later than 180 days after initial startup of all three modified turbines (as defined in 40 C.F.R. 60.2), and annually thereafter (at about the anniversary of the initial performance test), the Permittee (MSCC) must conduct performance tests (as described in 40 C.F.R. 60.8) for NOx, and CO on the exhaust stack gases. The Permittee (MSCC) must furnish the District, the California Air Resources Board (CARB), and the EPA a written report of the results of such tests. Upon written request from the Permittee (MSCC), and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 87-01] Federally Enforceable Through Title V Permit

74. Performance tests for the emissions of NOx, and CO must be conducted and the results reported in accordance with the test methods set forth in 40 C.F.R. 60.8 and 40 C.F.R. 60, Appendix A. The following test methods must be used: a.) Performance tests for the emissions of NOx must be conducted using EPA Method 1-4 and 7E. b.) Performance tests for the emissions of CO must be conducted using the EPA Methods 1-4 and 10. In lieu of the above-mentioned test methods, equivalent methods may be used with prior written approval from EPA. The Permittee (MSCC) must notify EPA in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. [PSD SJ 87-01] Federally Enforceable Through Title V Permit

75. For performance test purposes, sampling ports, platforms, and access must be provided by the Permittee on the emission unit exhaust system in accordance with 40 C.F.R. 60.8(e). [PSD SJ 87-01] Federally Enforceable Through Title V Permit

76. On and after the date of startup of the WMSCP (PSD Permit No. SJ-00-01), the Permittee (MSCC) must not discharge or cause the discharge of CO into the atmosphere in excess of the following emission limits per turbine: The more stringent of 25 ppmvd @ 15% O2 or 55 pounds per hour, based on 3-hour rolling average. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

77. This condition applies prior to the startup of the WMSCP: On and after the date of start up any of the three turbines at MSCP must not discharge (per turbine, and based on 3-hour rolling average) into the atmosphere CO in excess of the following of any of: 1.) The more stringent of 52.0 ppmvd @ 15% O2 or 94 pounds for loads greater than or equal to 75%. 2.) The more stringent of 62.0 ppmvd @ 15% O2 or 94 pounds for loads greater than or equal to 35% but less than 75%. 3.) 94 pounds per hour for loads less than 35%. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

78. On and after the date of startup of the WMSCP (PSD Permit No. SJ-00-01), the Permittee (MSCC) must not discharge or cause the discharge of NOx into the atmosphere in excess of the following emission limits per turbine: The more stringent of 10 ppmvd @ 15% O2 or 36.1 pounds per hour, based on 3-hour rolling average. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

79. This condition applies prior to the startup of the WMSCP: On and after the date of start-up of any of the three turbines, MSCC must not discharge (per turbine, based on 3-hour rolling average) into the atmosphere NOx (as NO2) in excess of the following: 1.) The more stringent of 25.0 ppmvd @ 15% O2 or 85.0 pounds per hour for loads greater than or equal to 75%; 2.) The more stringent of 42.0 ppmvd @ 15% O2 or 85 pounds per hour for loads greater than or equal to 35% but less than 75%; 3.) 85 pounds per hour for loads less than 35%. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

80. The hourly (3-hour averaging) emissions must not exceed: 1.) 94 pounds of CO and 85 pounds of NOx; 2.) All CEMs must be operating during startups and shut downs; 3.) The time, date and duration of each startup and shutdown event must be recorded. The records must include the lbs/hour calculations based on the CEM data. These records must be kept for five years following the date of such events. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

81. Prior to the date of startup and thereafter, the Permittee (MSCC) must install, maintain and operate the following continuous monitoring systems (CEMs) in the exhaust stacks: a.) Continuous monitoring systems to measure stack gas NOx , CO and O2 concentrations. The systems must meet EPA monitoring performance specification (40 C.F.R. 60.13 and 40 C.F.R. 60, Appendix B, Performance Specifications 2, 3 and 4); b.) A continuous monitoring system to measure stack gas and natural gas volumetric flow rates. The stack gas flow measurement system must meet EPA Performance Specifications for (40 C.F.R. Part 52, Appendix E). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

82. The Permittee (MSCC) must maintain a file of all measurements, including continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; performance and all other information required by 40 C.F.R. 60 Appendices A-B recorded in a permanent form suitable for inspection. The file must be retained for five years following the date of such measurements, maintenance, reports and records. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

83. The Permittee (MSCC) must notify EPA of the date on which demonstration for the continuous monitoring system performance commences (40 C.F.R. 60.13). This date must be no later than 60 days after full load operation but not later than 180 days after startup. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

84. The Permittee (MSCC) must submit a written report of all excess emissions to EPA for every calendar quarter. The quarterly report must include the following: a.) The magnitude of the excess emissions computed in accordance with 40 C.F.R. 60.13(h), any conversion factors used, and the date and time of commencement and compilation of each time period of excess emissions; b.) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of any equipment. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted must also be reported; c.) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments; d.) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report; and e.) Excess emissions must be defined as any 3-hour period during which the average emissions of CO, as measured by the CEM exceeds the maximum emission limits set forth in the condition with a CO emission limit, where PSD is cited as the basis of the condition or any 3-hour period during which the average emissions of NOx exceed the maximum emission limits set forth in the condition with a NOx emission limit, where PSD is cited as the basis of the condition. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

85. Excess emissions indicated by the CEM system must be considered violations of the applicable emission limit for the purpose of this permit. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

86. The quality assurance project plan used by the Permittee (MSCC) for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 C.F.R. Part 60, Appendix F, must be available upon request to EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

87. The Permittee (MSCC) must keep a monthly record of all fuel uses. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

88. The proposed power plant is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 C.F.R. 60). The owner or operator must meet all applicable requirements of 40 C.F.R. 60 Subparts A and GG of this regulation. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

89. All three turbines will fire natural gas only. The Permittee (MSCC) must only combust pipeline quality natural gas with sulfur content (as S) below 0.75 grains per 100 dry standard cubic feet (dscf). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

90. MSCC shall have legal and operational responsibility and control of all air pollutant emitting activities of the MSCP. This responsibility shall include, but shall not be limited to the following: 1.) Operating and maintaining the project to comply with all federal, state, and local air pollution laws, regulations, orders, and other requirements; 2.) Ensuring the emissions offsets, tradeoffs, or other emission reductions required for this project under permits issued by the U.S. EPA, the District, and/or the California Energy Commission are obtained as required; or 3.) Any violations of any air pollution requirements are the legal responsibility of MSCC, in addition to any other legal responsible entity. Any proposed change to this condition shall require prior written concurrence of the US EPA. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

91. The allowable incidental taking (killing, harming, or harassment) of San Joaquin kit foxes, blunt-nosed leopard lizards, and giant kangaroo rats is confined to the proposed cogeneration plant site one half mile radius around this site (on lands owned or leased by Aera Energy LLC), and associated subject cogeneration plant facilities (including pipelines, transmission lines, temporary equipment stockpiling areas, and access roads) as discussed in the project Application for Certification report (Sun Cogeneration Company and Southern Sierra Energy Company 1985). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

92. MSCC is required to implement the "Agreement on Conditions for Mitigation of the Biological Impacts of the Midway-Sunset Project" as required by the U.S. Fish and Wildlife Service (USFWS) (Memorandum dated March 16, 1987 from the USFWS to the US EPA). [PSD SJ-87-01] Federally Enforceable Through Title V Permit

93. Any endangered species found dead should be turned in to the California Department of Fish and Game for Analysis. MSCC must also report this event to the USFWS. The USFWS may recommend amendment to the existing project actions pending results of the analysis. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

94. All correspondence as required by this permit shall be forwarded to: 1.) Director, Air Division (Attn: Air-3) EPA Region IX 75 Hawthorne Street San Francisco, CA 94105-3901 Tel: (415) 744-1291 Fax: (415) 744-1076; 2.) Chief, Stationary Source Division, California Air Resource Board P.O. Box 2815 Sacramento, CA 95812; and 3.) Air Pollution Control Officer, San Joaquin Valley Unified APCD 34946 Flyover Court Bakersfield, CA 93308. [PSD SJ-87-01] Federally Enforceable Through Title V Permit

95. MSCC is the legal owner of the gas turbine cogeneration facility. MSCC is jointly owned by Sun Cogeneration Limited Partnership (Sun Cogen LP) and San Joaquin Energy Company. Sun Cogen LP is managed and controlled by a wholly owned subsidiary of Aera Energy LLC. (See Condition 104) [PSD SJ-87-01] Federally Enforceable Through Title V Permit

PTO S-1135-230-5

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1135-230-5 **EXPIRATION DATE:** 05/31/2026

SECTION: 17 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
1 MISCELLANEOUS STEAM DUMPING-ROCK BED MUFFLER OPERATION FOR MIDWAY SUNSET COGENERATION BLOWDOWN

PERMIT UNIT REQUIREMENTS

1. Unit shall receive steam only from cogeneration units S-1135-224, '-225, & '-226. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Steam pit shall not be used for more than 6 hours in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only treated water shall be used as cogenerators steam generators feed water. [District Rule 2080] Federally Enforceable Through Title V Permit
4. This equipment shall not be used on any day when any of the 52 steam generators and heater treaters curtailed to provide cogeneration project offsets are operated unless these units are operated in accordance with District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall keep accurate daily records indicating hours of steam pit usage. Records shall be kept, maintained, and made readily available to District staff upon request. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
6. H2S emissions shall not exceed 19 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emission sampling limits for the following shall not exceed any of the following: PM-10 - 8.40 lb/hr, SOx (as SO2) - 42.24 lb/hr, or VOC - 1.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

PTO S-1135-231-7

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1135-231-7 **EXPIRATION DATE:** 05/31/2026

SECTION: 17 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
165 HP DIESEL-FIRED EMERGENCY I.C. ENGINE POWERING A FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize an oil analysis program, as specified in 40 CFR 63.6625(i), to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per year. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. On a monthly basis, the permittee shall calculate and record the hours of operation for the rolling 12 month period. The hours of operation shall be calculated by summing the hours of operation from the previous 12 months. [District Rule 2520] Federally Enforceable Through Title V Permit

13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PTO S-1135-235-5

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1135-235-5 **EXPIRATION DATE:** 05/31/2026

SECTION: 17 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
2,520 BHP DIESEL FIRED CATERPILLAR MODEL #3516STD EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Engine shall be equipped with a turbocharger. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Engine shall be equipped with an aftercooler or intercooler. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The sulfur content of the diesel fuel used shall not exceed 0.0015% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit
7. If the IC engine is fired on CARB regulated diesel fuel, with a supplier certified sulfur content less than 0.0015% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520] Federally Enforceable Through Title V Permit
8. If the IC engine is not fired on CARB regulated diesel fuel, with a supplier certified sulfur content less than 0.0015% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880-71. [District Rule 2520] Federally Enforceable Through Title V Permit
9. If the IC engine is not fired on CARB regulated diesel fuel and the sulfur content of the fuel is determined using the method specified on this permit, the records of fuel sulfur content testing results shall be kept, maintained, and made available to the district upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
10. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. Permittee may utilize an oil analysis program, as specified in 40 CFR 63.6625(i), to extend the oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

14. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

15. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

16. This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 6 hours per year. [District Rules 2201, 4701, and 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

17. On a monthly basis, the permittee shall calculate and record the hours of operation for the rolling 12 month period. The hours of operation shall be calculated by summing the hours of operation from the previous 12 months. [District Rule 2520] Federally Enforceable Through Title V Permit

18. The permittee shall maintain records of hours of non-emergency operation and of the sulfur content of the diesel fuel used. Such records shall be made available for District inspection upon request. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT
ISSUED PURSUANT TO
PREVENTION OF SIGNIFICANT DETERIORATION ("PSD")
REQUIREMENTS AT 40 C.F.R. § 52.21

PSD PERMIT NUMBER: SJ-87-01
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 9

PERMITTEE: Midway Sunset Cogeneration Company (MSCC)
FACILITY LOCATION: Fellows, California.
FACILITY NAME: Midway Sunset Cogeneration Plant (MSCP)

EPA is only modifying those portions of PSD Permit SJ-87-01 that relate to MSCC's installation of low NOx burners on three turbines.

This Authority to Construct (ATC) is revised pursuant to the Prevention of Significant Deterioration ("PSD") requirements of the Clean Air Act, as amended, 42 U.S.C. §§ 7401 - 7671 et seq. Midway Sunset Cogeneration Company (MSCC) is granted approval to modify a 225 MW cogeneration facility in the Midway Sunset Oil Field, at Fellows California, in accordance with the permit application (and plans submitted with the permit application), federal regulations governing the Prevention of Significant Deterioration of air quality (40 C.F.R. § 52.21), and other terms and conditions set forth in this permit.

Failure to comply with any condition or term set forth in this ATC is subject to enforcement pursuant to Section 113 of the Clean Air Act.

This revised ATC does not relieve the Permittee from the responsibility to comply with any other applicable provisions of the Clean Air Act (including 40 C.F.R. Parts 51, 52, 60, 61 and 63), other federal, Tribal or San Joaquin Valley Unified Air Pollution Control District (District) requirements.

This permit is effective immediately pursuant to 40 C.F.R. §124.15(b)(3).

Initial permit issued: January 27, 1988
Revisions issued: June 11, 1990
June 27, 1997

for Jack P. Broadbent
Director, Air Division

4/20/01
Date

BACKGROUND

The Midway Sunset Cogeneration Company (MSCC) received its initial PSD permit (Permit No SJ--87-01) to construct the Midway Sunset Cogeneration Project (MSCP) as a 225 MW power plant in 1988. The MSCP permit was later revised in 1990 and 1997. The present revisions in 2001 allow MSCC to upgrade its three existing General Electric Frame 7E gas turbines by installing dry low NOx (DLN) combustion technology. In addition, the permit eliminates distillate oil as a backup fuel for turbines, changes the ownership of the associated oilfield, and removes two associated oilfield steam generators. EPA is taking this opportunity to consolidate all revisions in one document. We are also reformatting the permit to create a single document that also conforms to Region 9's recent PSD permit format. These latter changes are administrative and do not constitute any substantive changes.

PERMIT CONDITIONS

I. Permit Expiration

This revision to the Authority to Construct (ATC) shall become invalid (1) if construction of the modification is not commenced (as defined in 40 C.F.R. 52.21(b)(8)) within 18 months after the approval takes effect, (2) if construction is discontinued for a period of 18 months or more, or (3) if construction of the modification is not completed within a reasonable time.

II. Notification of Commencement of Construction and Startup

The Permittee must notify EPA in writing of the anticipated date of initial startup (as defined in 40 C.F.R. 60.2) of the power plant not more than sixty (60) days nor less than thirty (30) days prior to such date and must notify EPA in writing of the actual data of commencement of construction and startup within fifteen (15) days after each date.

III. Facility Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this ATC must at all times be maintained in good working order and be operated as intended so as to minimize air pollutant emissions.

IV. Malfunction

A. Reporting

The Permittee must notify EPA by telephone, facsimile, or electronic mail transmission within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable

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emission limit stated in Section X this ATC. In addition, the Permittee must notify EPA in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section X, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in Condition IV-B of this permit.

B. Treatment of Emissions

1. Definition of malfunction: A malfunction means a sudden and unavoidable breakdown of equipment or of a process beyond the reasonable control of the source.

2. Emissions in excess of the limits specified in Section X of this permit shall constitute a violation and may be the subject of enforcement proceedings.

3. Affirmative defense: In the context of an enforcement proceeding, emissions which are below the limits set forth in this Condition IV(B)(3)(i) shall not be subject to penalty if the Permittee retains properly signed, contemporaneous operating logs or other relevant evidence and can demonstrate all of the following:

   i. A malfunction caused the emissions in excess of the limits in Conditions X.D and X.E;

   ii. The permitted facility, including the air pollution control equipment and process equipment, was being properly operated at the time of the malfunction;

   iii. Preventative maintenance was regularly performed in a manner consistent with good practice for minimizing emissions;

   iv. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

   v. During the period of the malfunction the Permittee took all reasonable steps to minimize the amount and duration of emissions (including any bypass) that exceeded the emission limits provided in Section X. Reasonable steps to minimize emissions could include, but are not limited to, reducing production to the lowest

level practicable, reducing the material feed that results in the increased emissions, and switching to alternative, less polluting fuels. Where repairs were required, repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as possible; and

vi. The Permittee complied with the malfunction reporting requirements of Condition IV.A of this permit.

4. All emissions, including those associated with a malfunction which may be eligible for an affirmative defense, must be included in all emissions calculations and demonstrations of compliance with mass emission limits (e.g., daily, monthly, and annual emission limits) specified in this permit.

5. This provision is in addition to any emergency or malfunction provision contained in any applicable requirement or elsewhere in this permit.

V. Right of Entry

The EPA Regional Administrator, and/or their authorized representative, upon the presentation of credentials, must be permitted:

1. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this ATC; and

2. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this ATC; and

3. to inspect any equipment, operation, or method required in this ATC; and

4. to sample emissions from the source(s).

VI. Transfer of Ownership

In the event of any changes in control or ownership of the facilities to be constructed, the ATC must be binding on all subsequent owners and operators. The Permittee must notify the succeeding owner and operator of the existence of this ATC and its conditions by letter, a copy of which must be forwarded to the EPA.

VII. Severability

The provisions of this ATC are severable, and, if any provision of the ATC is held invalid, the remainder of this ATC must not be affected thereby.

VIII. Other Applicable Regulations

The Permittee must construct and operate the proposed power plant in compliance with all other applicable provisions of 40 C.F.R. Parts 52, 60, 62, 63, and all other applicable federal, state, and local air quality regulations.

IX. Paperwork Reduction Act

Any requirements established by this permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because this permit is not an "information collection request" within the meaning of 44 U.S.C. §§ 3502(4), 3502 (11), 3507, 3512, and 3518. Furthermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons, 44 U.S.C. § 3502(4) and § 3502(11); 5 C.F.R. Part 1320.5(a).

X. Special Conditions

A. Certification

The Permittee must notify the EPA in writing of compliance with Conditions X.B and X.G below, and must make such notification within fifteen (15) days of such compliance. The letter must be signed by a responsible official of the Permittee.

B. Air Pollution Control Equipment and Operation

On or before the date of startup (as defined in 40 C.F.R. 60.2) of the Western Midway Sunset Cogeneration Project (WMSCP; PSD Permit No. SJ--00-01) and thereafter the Permittee must install, continuously operate, and maintain the Dry Low NOx (DLN) combustion systems to reduce NOx emissions from each of its three turbines. The Permittee shall also use proper combustion techniques for the control of CO emissions from the equipment at MSCP.

C. Performance Tests

1. Within 60 days after achieving the base load, but no later than 180 days after initial startup of all three modified turbines (as defined in 40 C.F.R. 60.2), and annually thereafter (at about the anniversary of the initial

performance test), the Permittee must conduct performance tests (as described in 40 C.F.R. 60.8) for NOx, and CO on the exhaust stack gases. The Permittee must furnish the District, the California Air Resources Board (CARB), and the EPA a written report of the results of such tests. Upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity.

2. Performance tests for the emissions of NOx, and CO must be conducted and the results reported in accordance with the test methods set forth in 40 C.F.R. 60.8 and 40 C.F.R. 60, Appendix A. The following test methods must be used:

   a. Performance tests for the emissions of NOx must be conducted using EPA Methods 1-4 and 7E.

   b. Performance tests for the emissions of CO must be conducted using EPA Methods 1-4 and 10.

In lieu of the above-mentioned test methods, equivalent methods may be used with prior written approval from EPA.

The Permittee must notify EPA in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test.

3. For performance test purposes, sampling ports, platforms, and access must be provided by the Permittee on the emission unit exhaust system in accordance with 40 C.F.R. 60.8(e).

D. Emission Limits for Carbon Monoxide (CO)

On and after the date of startup of the WMSCP (PSD Permit No. SJ--00-01), the Permittee must not discharge or cause the discharge of CO into the atmosphere in excess of the following emission limits per turbine:

1. The more stringent of 25 ppmvd @ 15% O_2 or 55 pounds per hour, based on 3-hour rolling average.

The following conditions apply prior to the startup of the WMSCP:

On and after the date of start up any of the three turbines at MSCP must not discharge (per turbine, and based on 3-hour rolling average) into the atmosphere CO in excess of the following of any of :

1. The more stringent of 52.0 ppmvd @ 15% O_2 or 94 pounds for loads greater than or equal to 75%.

2. The more stringent of 62.0 ppmvd @ 15% O_2 or 94 pounds for loads greater than or equal to 35% but less than 75%.

3. 94 pounds per hour for loads less than 35%.

E. Emission Limits for Nitrogen Oxides (NOx)

On and after the date of startup of the WMSCP (PSD Permit No. SJ-- 00-01), the Permittee must not discharge or cause the discharge of NOx into the atmosphere in excess of the following emission limits per turbine:

1. The more stringent of 10 ppmvd @ 15% O_2 or 36.1 pounds per hour based on 3-hour rolling average.

The following conditions apply prior to the startup of the WMSCP:

On and after the date of start-up of any of the three turbines, MSCC must not discharge (per turbine, based on 3-hour rolling average) into the atmosphere NOx (as NO2) in excess of the following:

1. The more stringent of 25.0 ppmvd @ 15% O_2 or 85.0 pounds per hour for loads greater than or equal to 75%.

2. The more stringent of 42.0 ppmvd @ 15% O_2 or 85 pounds per hour for loads greater than or equal tp 35% but less than 75%.

3. 85 pounds per hour for loads less than 35%.

F. Emission Limits at Startups or Shutdowns

1. The hourly (3-hour averaging) emissions must not exceed:

   94 pounds of CO and 85 pounds of NOx

2. All CEMs must be operating during startups and shut downs.

3. The time, date and duration of each startup and shutdown event must be recorded. The records must include the lbs/hour calculations based on the CEM data. These records must be kept for five years following the date of such events.

G. Continuous Emissions Monitoring Systems

1. Prior to the date of startup and thereafter, the Permittee must install, maintain and operate the following continuous monitoring systems (CEMs) in the exhaust stacks:

   a. Continuous monitoring systems to measure stack gas NOx , CO and O_2 concentrations. The systems must meet EPA monitoring performance specification (40 C.F.R. 60.13 and 40 C.F.R. 60, Appendix B, Performance Specifications 2, 3 and 4).

   b. A continuous monitoring system to measure stack gas and natural gas volumetric flow rates. The stack gas flow measurement system must meet EPA Performance Specifications for (40 C.F.R. Part 52, Appendix E).

H. Reporting and Record Keeping

1. The Permittee must maintain a file of all measurements, including continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; performance and all other information required by 40 C.F.R. 60 Appendices A-B recorded in a permanent form suitable for inspection. The file must be retained for five years following the date of such measurements, maintenance, reports and records.

2. The Permittee must notify EPA of the date on which demonstration for the continuous monitoring system performance commences (40 C.F.R. 60.13). This date must be no later than 60 days after full load operation but not later than 180 days after startup.

3. In addition to reporting requirements under Condition IV.A of this permit, the Permittee must submit a written report of all excess emissions to EPA for every calendar quarter. The quarterly report must include the following:

   a. The magnitude of the excess emissions computed in accordance with 40 C.F.R. 60.13(h), any conversion factors used, and the date and time of commencement and compilation of each time period of excess emissions.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of any equipment. The nature and cause of any malfunction (if known) and the corrective

action taken or preventative measures adopted must also be reported.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report.

e. Excess emissions must be defined as any 3-hour period during which the average emissions of CO, as measured by the CEM exceeds the maximum emission limits set forth in Condition X.D or any 3-hour period during which the average emissions of NOx exceed the maximum emission limits set forth in Conditions X.E.

4. Excess emissions indicated by the CEM system must be considered violations of the applicable emission limit for the purpose of this permit.

5. The quality assurance project plan used by the Permittee for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 C.F.R. Part 60, Appendix F, must be available upon request to EPA.

6. The Permittee must keep a monthly record of all fuel uses.

I. New Source Performance Standards

The proposed power plant is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 C.F.R. 60). The owner or operator must meet all applicable requirements of 40 C.F.R. 60 Subparts A and GG of this regulation.

J. Fuel Use

All three turbines will fire natural gas only. The Permittee must only combust pipeline quality natural gas with sulfur content (as S) below 0.75 grains per 100 dry standard cubic feet (dscf).

K. Legal Responsibility

MSCC shall have legal and operational responsibility and control of all air pollutant emitting activities of the MSCP. This responsibility shall include, but shall not be limited to the following:

1. Operating and maintaining the project to comply with all federal, state, and local air pollution laws, regulations, orders, and other requirements.

2. Ensuring the emissions offsets, tradeoffs, or other emission reductions required for this project under permits issued by the U.S. EPA, the District, and/or the California Energy Commission are obtained as required.

3. Any violations of any air pollution requirements are the legal responsibility of MSCC, in addition to any other legal responsible entity.

Any proposed change to this condition shall require prior written concurrence of the US EPA.

L. Shutdown Requirements

1. In accordance with the emissions offset plan proposed by the applicant for the District (dated November 12, 1987) and the emissions offset plan for the U.S. EPA (dated July 21, 1987), Aera Energy LLC must not operate the following four steam generators[1] (listed by District permit numbers S-1135-119, S-1135-122, S-1135-123, and S-1135-115) simultaneously with the firing of the MSCP turbines unless one or more of the MSCP turbines is shutdown:

   Andersen-Goodwin Lease: S-1135-119, S-1135-122, S-1135-123

   Neely Lease: S-1135-115

2. MSCC shall maintain a record of the date(s), time(s), and duration(s) of the shutdown of any of the above mentioned steam generators.

3. Aera Energy LLC shall not lease or modify the permit conditions for any of the above generators for use in the Midway Sunset Oil field, unless creditable emissions reductions (as defined in 40 C.F.R. 52.21), at a ratio of at least 1:1, are provided for emissions from those generators.

4. Aera Energy LLC shall not modify any of the District Permit to Operate numbers. If any of the above steam generators are issued new Permit to Operate numbers by the District, Aera Energy LLC shall notify the U.S. EPA in writing of this action and shall make such notification upon issuance of a new Permit to Operate

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[1]Aera Energy LLC is the legal owner of the subject steam generators and of the leases on which the steam generators are located. MSCC is the legal owner of the gas turbine cogeneration facility. MSCC is jointly owned by Sun Cogeneration Limited Partnership (Sun Cogen LP) and San Joaquin Energy Company. Sun Cogen LP is managed and controlled by a wholly owned subsidiary of Aera Energy LLC. [See Special Condition X.K.]

number. This letter shall include the original District Permit to Operate number(s) of the subject generator(s) and a copy of the new Permit to Operate issued by the District.

5. Aera Energy LLC shall notify the U.S. EPA in writing of the intention to sell, or potential sale, of any of the above generators and shall make such notification prior to the District's final action of the re-permitting process associated with the sale of a generators. This letter shall include the following:

   a. The subject steam generator as identified by its District Permit to Operate number;

   b. The name of the buyer (as identified by the company name) of the steam generator; and

   c. An estimated date of the final action of the re-permitting process by the District.

B. Endangered Species Act Compliance

1 The allowable incidental taking (killing, harming, or harassment) of San Joaquin kit foxes, blunt-nosed leopard lizards, and giant kangaroo rats is confined to the proposed cogeneration plant site one half mile radius around this site (on lands owned or leased by Aera Energy LLC), and associated subject cogeneration plant facilities (including pipelines, transmission lines, temporary equipment stockpiling areas, and access roads) as discussed in the project Application for Certification report (Sun Cogeneration Company and Southern Sierra Energy Company 1985).

2. MSCC is required to implement the "Agreement on Conditions for Mitigation of the Biological Impacts of the Midway-Sunset Project" as required by the U.S. Fish and Wildlife Service (USFWS) (Memorandum dated March 16, 1987 from the USFWS to the US EPA).

3. Any endangered species found dead should be turned in to the California Department of Fish and Game for Analysis. MSCC must also report this event to the USFWS. The USFWS may recommend amendment to the existing project actions pending results of the analysis.

XI. Agency Notifications

All correspondence as required by this Approval to Construct/Modify must be forwarded to:

1 Director, Air Division (Attn: Air-3)
EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901
Tel: (415) 744-1291
Fax: (415) 744-1076

2. Chief, Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

3. Air Pollution Control Officer
San Joaquin Valley Unified APCD
2700 M Street, Suite 275
Bakersfield, CA 93301-2370

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

☐ Northern Region ☐ Central Region ☒ Southern Region

QUARTERLY CEMS EXCESS EMISSION AND DOWNTIME SUMMARY

1st ☐ JAN - MAR 20___ 3rd ☐ JUL - SEPT 20___

2nd ☐ APR - JUN 20___ 4th ☒ OCT - DEC 2025

Facility Name: MIDWAY SUNSET COGENERATION COMPANY Permit #: S-1135-224-30

Location: UNIT A; 3466 W. CROCKER SPRINGS ROAD City: FELLOWS

AIRS #: _____ NSPS Source?: ☐ Yes ☐ No

Process Equipment Description: 78.2 MW GAS FIRED TURBINE COGENERATION UNIT

Pollutants Monitored: ☒ NO_X ☐ SO_X ☒ CO ☐ Opacity ☒ O_2 ☐ CO_2 ☐ NH_3 ☐ Other: _____

Total Hours Process Equipment Operated During Quarter: 18

CEM Unit Information

Pollutant	Manufacturer / Model	Serial #	Date Installed	Total Hours CEMS Operated During Qtr
NO_X	HORIBA/CMA-EC662L1	43165430012	10/06	2208
SO_X				
CO	HORIBA/CMA-EC662L1	43165430012	10/06	2208
Opacity				
O_2	HORIBA/CMA-EC662L1	43165430012	10/06	2208
CO_2	HORIBA/CMA-EC662L1	43165430012	10/06	2208
NH_3				
Other				

Date of Last Performance Specification Test

Pollutant	NO_X	SO_X	CO	Opacity	O_2	CO_2	NH_3	Other
Date	11/18/25		11/18/25		11/18/25	11/18/25		
Type	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA
	☒ CGA	☐ CGA	☒ CGA	☐ CGA	☒ CGA	☒ CGA	☐ CGA	☐ CGA
	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity

UNIT A

Emission Limits (From Operating Permits)						
Pollutant	ppm @ O_2%	lb/MMBtu	lb/hr	lb/day	NSPS	ppm @ O_2
NO_X	5 @ 15%	.018	17.66			
SO_X		.001	.92			
CO	25 @ 15%	.057	54.91			
Opacity						
O_2						
CO_2						
NH_3	10 @ 15%					
VOC/PM10		.009/.010	9.00/9.98			

Excess Emissions Information (Report in Hours)								
Pollutant	Start-Up / Shutdown	Process Problems	Breakdown	Other Known	Other Unknown	Total Hrs Excess	Total Op Hrs for Qtr	% Excess
NO_X	6	0	0	0	0	6	18	33.3
SO_X								
CO	6	0	0	0	0	6	18	33.3
Opacity								
O_2								
CO_2								
NH_3								
Other								

INSPECTOR NOTE: Facility permit allows for startup and shutdown emissions. These are not permit exceedances.

Excess emissions caused by a startup after shutdown due to a malfunction should be reported as an excess emission due to an equipment breakdown. The source is not however, exempt from emission limits. All exceedances are to be reported in whole hour increments.

CEM Downtime Information (Report in Hours)								
Pollutant	Monitor Malfunction	Non-Monitor Malfunction	Q/A - Cal	Other	Unknown	Total Hrs Downtime	Total Hrs	% Downtime
NO_X	0	0	0	0	0	0	2208	0
SO_X								
CO	0	0	0	0	0	0	2208	0
Opacity								
O_2	0	0	0	0	0	0	2208	0
CO_2	0	0	0	0	0	0	2208	0
NH_3	0	0	0	0	0	0	2208	0
Other								

Include a summary of all downtime dates, times, duration, and activities that occurred during the reporting period or submit copies of all related breakdown reports and Title V deviations.

Non-CEM malfunctions are incidents that result in the CEM system being down but are not associated with a malfunction of the CEM system, i.e. plant power failure.

Reports must be submitted within 30 days of the end of the quarter for which the report was generated.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

☐ Northern Region ☐ Central Region ☒ Southern Region

QUARTERLY CEMS EXCESS EMISSION AND DOWNTIME SUMMARY

1st ☐ JAN - MAR 20___ 3rd ☐ JUL - SEPT 20___

2nd ☐ APR - JUN 20___ 4th ☒ OCT - DEC 2025

Facility Name: MIDWAY SUNSET COGENERATION COMPANY Permit #: S-1135-225-29

Location: UNIT B; 3466 W. CROCKER SPRINGS ROAD City: FELLOWS

AIRS #: _____ NSPS Source?: ☐ Yes ☐ No

Process Equipment Description: 78.2 MW GAS FIRED TURBINE COGENERATION UNIT

Pollutants Monitored: ☒ NO_X ☐ SO_X ☒ CO ☐ Opacity ☒ O_2 ☐ CO_2 ☐ NH_3 ☐ Other: _____

Total Hours Process Equipment Operated During Quarter: 0

CEM Unit Information

Pollutant	Manufacturer / Model	Serial #	Date Installed	Total Hours CEMS Operated During Qtr
NO_X	HORIBA/CMA-EC662L1	4326876010	11/06	2208
SO_X				
CO	HORIBA/CMA-EC662L1	4326876010	11/06	2208
Opacity				
O_2	HORIBA/CMA-EC662L1	4326876010	11/06	2208
CO_2	HORIBA/CMA-EC662L1	4326876010	11/06	2208
NH_3				
Other				

Date of Last Performance Specification Test

Pollutant	NO_X	SO_X	CO	Opacity	O_2	CO_2	NH_3	Other
Date	11/19/25		11/19/25		11/19/25	11/19/25		
Type	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA
	☒ CGA	☐ CGA	☒ CGA	☐ CGA	☒ CGA	☒ CGA	☐ CGA	☐ CGA
	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity

Unit B

Emission Limits (From Operating Permits)						
Pollutant	ppm @ O_2%	lb/MMBtu	lb/hr	lb/day	NSPS	ppm @ O_2
NO_X	5 @ 15%	.018	17.66			
SO_X		.001	.92			
CO	25 @ 15%	.057	54.91			
Opacity						
O_2						
CO_2						
NH_3	10 @ 15%					
VOC/PM10		.009/.010	9.00/9.98			

Excess Emissions Information (Report in Hours)								
Pollutant	Start-Up / Shutdown	Process Problems	Breakdown	Other Known	Other Unknown	Total Hrs Excess	Total Op Hrs for Qtr	% Excess
NO_X	0	0	0	0	0	0	0	0
SO_X								
CO	0	0	0	0	0	0	0	0
Opacity								
O_2								
CO_2								
NH_3								
Other								

INSPECTOR NOTE: Facility permit allows for startup and shutdown emissions. These are not permit exceedances.

Excess emissions caused by a startup after shutdown due to a malfunction should be reported as an excess emission due to an equipment breakdown. The source is not however, exempt from emission limits. All exceedances are to be reported in whole hour increments.

CEM Downtime Information (Report in Hours)								
Pollutant	Monitor Malfunction	Non-Monitor Malfunction	Q/A - Cal	Other	Unknown	Total Hrs Downtime	Total Hrs	% Downtime
NO_X	0	0	0	0	0	0	2208	0.00
SO_X								
CO	0	0	0	0	0	0	2208	0.00
Opacity								
O_2	0	0	0	0	0	0	2208	0.00
CO_2	0	0	0	0	0	0	2208	0.00
NH_3	0	0	0	0	0	0	2208	0.00
Other								

Include a summary of all downtime dates, times, duration, and activities that occurred during the reporting period or submit copies of all related breakdown reports and Title V deviations.

Non-CEM malfunctions are incidents that result in the CEM system being down but are not associated with a malfunction of the CEM system, i.e. plant power failure.

Reports must be submitted within 30 days of the end of the quarter for which the report was generated.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

☐ Northern Region ☐ Central Region ☒ Southern Region

QUARTERLY CEMS EXCESS EMISSION AND DOWNTIME SUMMARY

1st ☐ JAN - MAR 20___ 3rd ☐ JUL - SEPT 20___

2nd ☐ APR - JUN 20___ 4th ☒ OCT - DEC 2025

Facility Name: MIDWAY SUNSET COGENERATION COMPANY Permit #: S-1135-226-28

Location: UNIT C; 3466 W. CROCKER SPRINGS ROAD City: FELLOWS

AIRS #: _____ NSPS Source?: ☐ Yes ☐ No

Process Equipment Description: 78.2 MW GAS FIRED TURBINE COGENERATION UNIT

Pollutants Monitored: ☒ NO_X ☐ SO_X ☒ CO ☐ Opacity ☒ O_2 ☐ CO_2 ☐ NH_3 ☐ Other:

Total Hours Process Equipment Operated During Quarter: 0

CEM Unit Information

Pollutant	Manufacturer / Model	Serial #	Date Installed	Total Hours CEMS Operated During Qtr
NO_X	HORIBA/CMA-EC662L1	F0602X0R	11/06	2208
SO_X				
CO	HORIBA/CMA-EC662L1	F0602X0R	11/06	2208
Opacity				
O_2	HORIBA/CMA-EC662L1	F0602X0R	11/06	2208
CO_2	HORIBA/CMA-EC662L1	F0602X0R	11/06	2208
NH_3				
Other				

Date of Last Performance Specification Test

Pollutant	NO_X	SO_X	CO	Opacity	O_2	CO_2	NH_3	Other
Date	11/19/25		11/19/25		11/19/25	11/19/25		
Type	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA	☐ RATA
	☒ CGA	☐ CGA	☒ CGA	☐ CGA	☒ CGA	☒ CGA	☐ CGA	☐ CGA
	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity	☐ Linearity

Unit C

Emission Limits (From Operating Permits)						
Pollutant	ppm @ O_2%	lb/MMBtu	lb/hr	lb/day	NSPS	ppm @ O_2
NO_X	5 @ 15%	.018	17.66			
SO_X		.001	.92			
CO	25 @ 15%	.057	54.91			
Opacity						
O_2						
CO_2						
NH_3	10 @ 15%					
VOC/PM10		.009/.010	9.00/9.98			

Excess Emissions Information (Report in Hours)								
Pollutant	Start-Up / Shutdown	Process Problems	Breakdown	Other Known	Other Unknown	Total Hrs Excess	Total Op Hrs for Qtr	% Excess
NO_X	0	0	0	0	0	0	0	0
SO_X								
CO	0	0	0	0	0	0	0	0
Opacity								
O_2								
CO_2								
NH_3								
Other								

INSPECTOR NOTE: Facility permit allows for startup and shutdown emissions. These are not permit exceedances.

Excess emissions caused by a startup after shutdown due to a malfunction should be reported as an excess emission due to an equipment breakdown. The source is not however, exempt from emission limits. All exceedances are to be reported in whole hour increments.

CEM Downtime Information (Report in Hours)								
Pollutant	Monitor Malfunction	Non-Monitor Malfunction	Q/A - Cal	Other	Unknown	Total Hrs Downtime	Total Hrs	% Downtime
NO_X	0	0	0	0	0	0	2208	0
SO_X								
CO	0	0	0	0	0	0	2208	0
Opacity								
O_2	0	0	0	0	0	0	2208	0
CO_2	0	0	0	0	0	0	2208	0
NH_3	0	0	0	0	0	0	2208	0
Other								

Include a summary of all downtime dates, times, duration, and activities that occurred during the reporting period or submit copies of all related breakdown reports and Title V deviations.

Non-CEM malfunctions are incidents that result in the CEM system being down but are not associated with a malfunction of the CEM system, i.e. plant power failure.

Reports must be submitted within 30 days of the end of the quarter for which the report was generated.

Wasim Melek

From: Stephanie Urias on behalf of Ray Smith
Sent: Thursday, October 12, 2023 1:12 PM
To: Stephanie Urias
Subject: Midway Sunset AOR - AQ Request

Good morning, Dave:

Per my air quality staff, the cover letters for the Midway Sunset 2016 Quarterly Reports stated, "the numerous starts and shutdowns (transitions) dictated by CAISO are used as quick responses to electric grid variations and are reflected in this quarterly report's "Number of hours of excess emissions due to start-up/shutdown for Units A and B".

The CEMS Source Information spreadsheet also shows excess emission information for each pollutant. It is clear from the Quarterly Reports that all excess emissions are due to start-up and shutdown. It is staff's understanding that these "excess emissions" are actually just in excess of the steady state, routine operating emission rate (which is defined by **Condition of Certification AQ-18**), which are not applicable during a start-up/shutdown event. District Rule 4703 allows two hours for startup, at which time emissions will be elevated above the steady state, routine operation emission rate (defined by **AQ-18**). These emissions are then reported in the CEM Source Information spreadsheet as "Number of hours of excess emissions due to start-up/shutdown".

However, Energy Commission **Condition of Certification AQ-45**, and **PTO condition 39**, have established emission limits during startup and shutdown periods. For this reason, the information provided as "Number of hours of excess emissions due to start-up/shutdown" has led some reviewers to think that the facility had excess emissions above those allowed by **AQ-45** and **PTO condition 39**. The individual Unit CEMS Reports highlight each startup/shutdown event and provides the corresponding startup/shutdown emissions. These reports show that startup/shutdown emissions are in compliance with the startup/shutdown emission limits in **AQ-45** and **PTO condition 39**. To alleviate any potential future confusion, staff is requesting that you include a statement (as part of the CEMS Source Information spreadsheet) that the information provided as "Number of hours of excess emissions due to start-up/shutdown" represents only the excess of the steady state operating emission rate in **AQ-18** and is exempt during a startup condition per District Rule 4703, and that the facility continues to comply with the startup/shutdown emission limits in **AQ-45** and **PTO condition 39**.

Additionally, there are several conditions of certification that require supporting information to be submitted as part of the Quarterly Reports to demonstrate compliance with the **Conditions of Certification (i.e. AQ-18, -21, -26, -39, -44, -45, -46, -47, -48, -49, -52, -53).** For future reports, staff is also requesting that you please address each of these conditions specifically, and provide the required information listed in the "Verification" of each of the conditions of certification. This can be done by creating a table that list each condition that is required to be addressed in the Quarterly Report, and by providing a brief description of the condition limit, or requirement, a brief discussion of whether or not the facility complied with this condition during the reporting requirement, and explain where the supporting information demonstrating compliance can be found. For example, compliance with **AQ-45** could be demonstrated as follows:

Condition of Certification	Description	Limit	Discussion of Compliance	Section
AQ-45	Startup/Shutdown Emissions	NOx - 140 lbm/hr averaged over 2 hours as NO2 CO - 94 lbm/hr averaged over 2 hours	Plant remains in compliance with this condition. Continuous Emissions Monitoring data has been collected and made available.	Section 5 – Unit CEMs Report

Please let me know if you have any questions regarding these requests.

Thank you,
Mary

MARY DYAS | Compliance Project Manager
Direct: (916) 651-8891 | Fax: (916) 654-3882
mary.dyas@energy.ca.gov
Regular Contact Hours: Monday-Thursday, 7:00 a.m. to 3:00 p.m.
CALIFORNIA ENERGY COMMISSION
Siting, Transmission, & Environmental Protection Division
1516 Ninth Street, Sacramento, CA 95814
www.energy.ca.gov

Energy Commission Quarterly Air Report Compliance Confirmation

UNIT A

4th Quarter 2025
December 31, 2025

Condition of Certification	Description	Limit	Discussion of Compliance	Documentation
AQ - 18	Routine operation emission limits	NOx - 17.66 lb/hr CO - 54.91 lb/ hr	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
PTO - 20	Routine operation emission limits	Nox - 0.018 lb/ Mmbtu CO - 0.057 lb/ Mmbtu Ammonia 10ppm	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO** Hours Excess Ammonia - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
PTO-21	Routine operation emission limits	Nox - 5.0 ppm CO - 25ppm	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
PTO -73 **PTO -71**	Routine operation emission limits Loads > 75%	Nox - 25.0 ppm or 85 lb/hr; averaged over 3 hours CO - 52.0 ppm or 94 lb/hr; averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
AQ - 21	CEMS Report Submission	Reports submitted Quarterly to SJVAPCD and Energy Commission	Quarterly Report (Also submitted to CARB and EPA)	Quarterly Report
AQ - 39	Steam Pit Emissions	Operation of steam pit shall not constitute a nuisance.	Provide, in Quarterly Report, any nuisance reports from the operation of the steam pit.	No Nuisance reports received.
AQ - 44	Start -ups / Shutdowns	Start - up: 2 hours Shutdown: 2 hours	Start-ups/Shutdowns notated in margins of CEMS reports	Quarterly Report Section 5 CEMS Report
AQ - 45	Start-up or shutdown emission limits	Nox - 140 lb/hr; 2 hour avg. CO - 94 lb/hr; 2 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
PTO - 73	Start-up or shutdown emission limits (loads < 35 %)	Nox - 85 lb/hr; 3 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO -**ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
PTO - 71	Start - up or shutdown emission limits (loads < 35%)	CO - 94 lb/hr; 3 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
AQ - 46	Reduced loads	Load reduced ≤ one hour in order to change the position of the exhaust gas diverter gate.	Reduced load periods are notated in the margins of CEMS reports	Quarterly Report Section 5, Unit A CEMS Reports
AQ - 47	Reduced load emission limits	Nox - 140 lb/hr CO - 94 lb/hr	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
PTO - 73 **PTO - 71**	Reduced load emission limits (loads < 35%)	Nox - 85 lb/hr; averaged over 3 hours CO - 94 lb/hr averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports

Energy Commission Quarterly Air Report Compliance Confirmation

UNIT A

4th Quarter 2025
December 31, 2025

Condition of Certification	Description	Limit	Discussion of Compliance	Documentation
PTO - 73 **PTO - 71**	Reduced load emission limits (loads ≥ 35% and < 75%)	Nox - 42.0 ppm or 85 lb/hr; averaged over 3 hours CO - 62.0 ppm or 94 lb/hr averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
AQ - 48	Emission of unreacted ammonia slip	10 ppm @ 15% O2 averaged over 24 hours	Hours of Excess NH3slip - **ZERO**	Quarterly Report Section 5, Unit A CEMS Reports
AQ -49	Calibration drift (CD) of CEMS	Recalibrate whenever daily zero or high-level exceeds 5% for 5 consecutive days or 10% during any CD check the analyzer is deemed out-of-control. If out-of-control, MSCC is to take appropriate corrective action and repeat the CD check.	Report CD checks for each day as part of the quarterly report. Calibration reports are available by request.	PTO 83 allows MSCC to record the monitoring device calibration checks in a permanent form suitable for inspection. The file is to be retained for five years following the date of such measurements.
AQ - 52	Exhaust gas temperature at SCR	When SCR is operated, MSCC shall monitor and record the exhaust gas temperature at the SCR.	Quarterly Report	Quarterly Report Section 5, Unit A CEMS Reports
AQ - 53	Ammonia injection	When SCR is operated, ammonia shall be injected whenever the SCR catalyst exceeds the manufacturer's minimum ammonia injection temperature.	Quarterly Report	Quarterly Report Section 5, Unit A CEMS Reports
AQ - 56	Start - up, shutdown, or reduced load	Nox - 5.0 ppm CO - 25.0 ppm Dry@15%O2	Quarterly Report	Quarterly Report Section 5, Unit A CEMS Reports

NOTE: AQ – Refers to a California Energy Commission Air Quality Condition.
NOTE: PTO – Refers to a San Joaquin Valley Air Pollution Control District Permit to Operate Condition.
NOTE: The information provided as "number of hours of excess emissions due to start-up/shutdown" represents only the excess of the steady state operation emission rate in AQ-18 and is exempt during a start-up condition per District Rule 4703, and the facility continues to comply with all start-up/shutdown emission limits in AQ-45 and PTO Conditions 32.

Energy Commission Quarterly Air Report Compliance Confirmation

UNIT B

4th Quarter 2025
December 31, 2025

Condition of Certification	Description	Limit	Discussion of Compliance	Documentation
AQ - 18	Routine operation emission limits	NOx - 17.66 lb/hr CO - 54.91 lb/ hr	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
PTO - 20	Routine operation emission limits	Nox - 0.018 lb/ Mmbtu CO - 0.057 lb/ Mmbtu Ammonia 10ppm	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO** Hours Excess Ammonia - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
PTO-21	Routine operation emission limits	Nox - 5.0 ppm CO - 25ppm	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
PTO -73 **PTO -71**	Routine operation emission limits Loads > 75%	Nox - 25.0 ppm or 85 lb/hr; averaged over 3 hours CO - 52.0 ppm or 94 lb/hr; averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
AQ - 21	CEMS Report Submission	Reports submitted Quarterly to SJVAPCD and Energy Commission	Quarterly Report (Also submitted to CARB and EPA)	Quarterly Report
AQ - 39	Steam Pit Emissions	Operation of steam pit shall not constitute a nuisance.	Provide, in Quarterly Report, any nuisance reports from the operation of the steam pit.	*Quarterly Report Section 9
AQ - 44	Start -ups / Shutdowns	Start - up: 2 hours Shutdown: 2 hours	Start-ups/Shutdowns notated in margins of CEMS reports	No Nuisance reports received.
AQ - 45	Start-up or shutdown emission limits	Nox - 140 lb/hr; 2 hour avg. CO - 94 lb/hr; 2 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5 CEMS Report
PTO - 73	Start-up or shutdown emission limits (loads < 35 %)	Nox - 85 lb/hr; 3 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO -**ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
PTO - 71	Start - up or shutdown emission limits (loads < 35%)	CO - 94 lb/hr; 3 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
AQ - 46	Reduced loads	Load reduced ≤ one hour in order to change the position of the exhaust gas diverter gate.	Reduced load periods are notated in the margins of CEMS reports	Quarterly Report Section 5, Unit B CEMS Reports
AQ - 47	Reduced load emission limits	Nox - 140 lb/hr CO - 94 lb/hr	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
PTO - 73 **PTO - 71**	Reduced load emission limits (loads < 35%)	Nox - 85 lb/hr; averaged over 3 hours CO - 94 lb/hr averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports

Energy Commission Quarterly Air Report Compliance Confirmation

UNIT B

4th Quarter 2025
December 31, 2025

Condition of Certification	Description	Limit	Discussion of Compliance	Documentation
PTO - 73 **PTO - 71**	Reduced load emission limits (loads ≥ 35% and < 75%)	Nox - 42.0 ppm or 85 lb/hr; averaged over 3 hours CO - 62.0 ppm or 94 lb/hr averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
AQ - 48	Emission of unreacted ammonia slip	10 ppm @ 15% O2 averaged over 24 hours	Hours of Excess NH3slip - **ZERO**	Quarterly Report Section 5, Unit B CEMS Reports
AQ -49	Calibration drift (CD) of CEMS	Recalibrate whenever daily zero or high-level exceeds 5% for 5 consecutive days or 10% during any CD check the analyzer is deemed out-of-control. If out-of-control, MSCC is to take appropriate corrective action and repeat the CD check.	as part of the quarterly report. Calibration	Quarterly Report Section 5, Unit B CEMS Reports
AQ - 52	Exhaust gas temperature at SCR	When SCR is operated, MSCC shall monitor and record the exhaust gas temperature at the SCR.	Quarterly Report	PTO 83 allows MSCC to record the monitoring device calibration checks in a permanent form suitable for inspection. The file is to be retained for five years following the date of such measurements.
AQ - 53	Ammonia injection	When SCR is operated, ammonia shall be injected whenever the SCR catalyst exceeds the manufacturer's minimum ammonia injection temperature.	Quarterly Report	Quarterly Report Section 5, Unit B CEMS Reports
AQ - 56	Start - up, shutdown, or reduced load	Nox - 5.0 ppm CO - 25.0 ppm Dry@15%O2	Quarterly Report	Quarterly Report Section 5, Unit B CEMS Reports

NOTE: AQ – Refers to a California Energy Commission Air Quality Condition.
NOTE: PTO – Refers to a San Joaquin Valley Air Pollution Control District Permit to Operate Condition.
NOTE: The information provided as "number of hours of excess emissions due to start-up/shutdown" represents only the excess of the steady state operation emission rate in AQ-18 and is exempt during a start-up condition per District Rule 4703, and the facility continues to comply with all start-up/shutdown emission limits in AQ-45 and PTO Conditions 32.

Energy Commission Quarterly Air Report Compliance Confirmation

UNIT C

4th Quarter 2025
December 31, 2025

Condition of Certification	Description	Limit	Discussion of Compliance	Documentation
AQ - 18	Routine operation emission limits	NOx - 17.66 lb/hr CO - 54.91 lb/ hr	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
PTO - 20	Routine operation emission limits	Nox - 0.018 lb/ Mmbtu CO - 0.057 lb/ Mmbtu Ammonia 10ppm	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO** Hours Excess Ammonia - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
PTO - 21	Routine operation emission limits	Nox - 5.0 ppm CO - 25ppm	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
PTO -79 **PTO -77**	Routine operation emission limits Loads > 75%	Nox - 25.0 ppm or 85 lb/hr; averaged over 3 hours CO - 52.0 ppm or 94 lb/hr; averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
AQ - 21	CEMS Report Submission	Reports submitted Quarterly to SJVAPCD and Energy Commission	Quarterly Report (Also submitted to CARB and EPA)	Quarterly Report
AQ - 39	Steam Pit Emissions	Operation of steam pit shall not constitute a nuisance.	Provide, in Quarterly Report, any nuisance reports from the operation of the steam pit.	No Nuisance report received.
AQ - 44	Start -ups / Shutdowns	Start - up: 2 hours Shutdown: 2 hours	Start-ups/Shutdowns notated in margins of CEMS reports	Quarterly Report Section 5 CEMS Report
AQ - 45	Start-up or shutdown emission limits	Nox - 140 lb/hr; 2 hour avg. CO - 94 lb/hr; 2 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
PTO -79	Start-up or shutdown emission limits (loads < 35 %)	Nox - 85 lb/hr; 3 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO -**ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
PTO -77	Start - up or shutdown emission limits (loads < 35%)	CO - 94 lb/hr; 3 hour avg.	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
AQ - 46	Reduced loads	Load reduced ≤ one hour in order to change the position of the exhaust gas diverter gate.	Reduced load periods are notated in the margins of CEMS reports	Quarterly Report Section 5, Unit C CEMS Reports
AQ - 47	Reduced load emission limits	Nox - 140 lb/hr CO - 94 lb/hr	Hours Excess Nox - **ZERO** Hours Excess CO -**ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
PTO -79 **PTO -77**	Reduced load emission limits (loads < 35%)	Nox - 85 lb/hr; averaged over 3 hours CO - 94 lb/hr averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO -**ZERO**	Quarterly Report Section 5, Unit C CEMS Reports

Energy Commission Quarterly Air Report Compliance Confirmation

UNIT C

4th Quarter 2025
December 31, 2025

Condition of Certification	Description	Limit	Discussion of Compliance	Documentation
PTO -79 **PTO -77**	Reduced load emission limits (loads ≥ 35% and < 75%)	Nox - 42.0 ppm or 85 lb/hr; averaged over 3 hours CO - 62.0 ppm or 94 lb/hr averaged over 3 hours	Hours Excess Nox - **ZERO** Hours Excess CO - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
AQ - 48	Emission of unreacted ammonia slip	10 ppm @ 15% O2 averaged over 24 hours	Hours of Excess NH3slip - **ZERO**	Quarterly Report Section 5, Unit C CEMS Reports
AQ -49	Calibration drift (CD) of CEMS	Recalibrate whenever daily zero or high-level exceeds 5% for 5 consecutive days or 10% during any CD check the analyzer is deemed out-of-control. If out-of-control, MSCC is to take appropriate corrective action and repeat the CD check.	Report CD checks for each day as part of the quarterly report. Calibration reports are available by request.	PTO 83 allows MSCC to record the monitoring device calibration checks in a permanent form suitable for inspection. The file is to be retained for five years following the date of such measurements.
AQ - 52	Exhaust gas temperature at SCR	When SCR is operated, MSCC shall monitor and record the exhaust gas temperature at the SCR.	Quarterly Report	Quarterly Report Section 5, Unit C CEMS Reports
AQ - 53	Ammonia injection	When SCR is operated, ammonia shall be injected whenever the SCR catalyst exceeds the manufacturer's minimum ammonia injection temperature.	Quarterly Report	Quarterly Report Section 5, Unit C CEMS Reports
AQ - 55	Annual Fuel Consumption	Not Exceed >1.617 MMscf	Quarterly Report	Quarterly Report Section 5, Unit C Fuel Report
AQ - 56	Start - up, shutdown, or reduced load	Nox - 5.0 ppm CO - 25.0 ppm Dry@15%O2	Quarterly Report	Quarterly Report Section 5, Unit C CEMS Reports

NOTE: AQ – Refers to a California Energy Commission Air Quality Condition.
NOTE: PTO – Refers to a San Joaquin Valley Air Pollution Control District Permit to Operate Condition.
NOTE: The information provided as "number of hours of excess emissions due to start-up/shutdown" represents only the excess of the steady state operation emission rate in AQ-18 and is exempt during a start-up condition per District Rule 4703, and the facility continues to comply with all start-up/shutdown emission limits in AQ-45 and PTO Conditions 33.

MIDWAY SUNSET
Cogeneration Company

CC: 2287

SAN JOAQUIN VALLEY
Air Pollution Control District
TITLE V
DEVIATION REPORTING

Company Name: Midway Sunset Cogeneration Company
Facility ID #: S-1135

DEVIATION

1. **Permit Unit and Condition No*:**

   Facility Permit S-1135-0-5 Condition 5.

   Unit A Permit S-1135-224-30 Condition 43.

   Unit B Permit S-1135-225-29 Condition 43.

   Unit C Permit S-1135-226-28 Condition 44.

   *All conditions and condition numbers are the same for current Unit permits and previous revision.

2. **Description of Permit Condition:**

   Facility Permit S-1135-0-5

   Condition 5. ... must comply with all conditions of the permit...

   Units A, B Permits (All conditions and condition numbers are the same for current Unit permits and previous revisions)

   Permit Condition 43. Shall be determined using ASTM Method D-1072, D-3031, D 4084 or D-3246 or double GC for H2S and mercaptans

   Unit C permit

   Permit Condition 44. Shall be determined using ASTM Method D-1072, D-3031, D 4084 or D-3246 or double GC for H2S and mercaptans

3. **Date, time and duration of deviation:**

   MSCC searched reports to find when ASTM testing method of lab changed

   The dates the deviations incorrect ASTM method used occurred are as follows:

Unit A	Unit B	Unit C
10/02/23	10/02/23	10/02/23
3/12/24	3/12/24	3/12/24
10/28/24	10/28/24	10/28/24

   The duration of the deviations is the length of time between the deviation occurrence and current date.

4. **Description of deviation: (Includes excess emissions if applicable)**

   Failure to use correct ASTM testing method for natural gas per permit.

5. **Date and time when deviation was discovered:**

   October 20, 2025 at 1315

6. **Probable cause of deviation:**

   Lab changed ASTM testing method to D5504 without notification to MSCC. Therefore, method was not verified to permit condition.

7. **Comments/corrective action taken:**

   Midway Sunset Cogeneration Company has retested gas samples using a different lab to test natural gas using method D3246 for the last half of 2025 for Units A, B, and C. A correct permit ASTM testing method for gas will be used from this date forward. During annual RATA testing in 2023, 2024, 2025 3rd party gas samples were taken and tested using ASTM method D 3246 complying with permit condition 43 for Units A/B and condition 44 for Unit C. After reviewing all tests for 2023 and 2024 only two tests did not meet the permit condition identified due to the lab using ASTM D 5504 instead of the authorized ASTM method per permit.

COMPLIANCE CERTIFICATION:

I declare, under penalty of perjury under the laws of the state of California, that, based on information and belief formed after reasonable inquiry, all information provided in the reporting package is true, accurate, and complete:

Sincerely,

Lowell Pollema
Executive Director

October 24, 2025
661-768-3000

cc: File CC: 2287
G. Jans
G. Davis
M. Williams
S. Urias
S. Parks (Aera)

Submitted using PAS Facility Portal:
SJVAPCD
34946 Flyover Court
Bakersfield, CA 93308

MIDWAY SUNSET
Cogeneration Company

November 17, 2025 CC-2288

Kobi Blomberg
Air Quality Inspector
SJVAPCD
34946 Flyover Court
Bakersfield, CA 93308

Subject: Rescind October 24, 2025, Unit A Permit S-1135-224-30, Unit B Permit S-1135-225-29, Unit C Permit S-1135-226-28 Notification Report

Dear Kobi,

On Monday, October 20, 2025, MSCC's Operations Supervisor, Mike Williams, was reviewing the lab report from the most recent natural gas samples. It was noticed that the Method for Total Sulphur, used by the lab,, was different from what was allowed within the permit.. Upon further investigation, it was found that the lab had changed Methods starting in October of 2023. The issue was brought to the attention of MSCC's management and the Aera Energy LLC Senior HSE Advisor, Sam Parks. The issue of if the natural gas that was being used met the definition of PUC-certified natural gas, as stated in unit permits S-1135-224, 225 and 226, would be investigated. While waiting for results of this investigation, the District advised that MSCC submit a deviation report for the change in lab testing methods.. This deviation notification was submitted to the District on October 24, 2025.

The ensuing investigation showed that Aera Energy LLC purchases PUC-certified Mojave natural gas via Kern River Transmission Company,, a third-party vendor. This natural gas meets the District's definition of Public Utility Commission (PUC) Quality Gas. The District Supervising Air Quality Inspector, Stephanie Stark, agreed with Aera Energy LLC's assessment of the issue and agreed with rescinding the MSCC deviation.

MSCC respectfully rescinds the October 24, 2025 Notification Report concerning the issue with the non-permitted ASTM Method used for measuring Total Sulphur and apologizes for any inconvenience this may have caused the District.

If you have any questions or comments, please contact Greg Jans at 661-768-3000.

I declare, that, based upon this aforementioned information and the belief formed after reasonable inquiry, the information provided in this letter is true, accurate and complete.

3466 W. Crocker Springs Road • P.O. Box 457 • Fellows, CA 93224-0457 • (661) 768-3000 • Fax (661) 768-4570

Sincerely,

Lowell Pollema
Executive Director

cc: File CC-2288
G. Jans
G. Davis
M. Williams
S. Urias
S. Parks

UNIT A
CEM MAINTENANCE LOG

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 167346

DATE: October 3, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Change bottle, NOx High

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance October 3, 2025 CEMS Time 07:02 PST
Clock Time 08:02 PST

Switched out of maintenance October 3, 2025 CEMS Time 07:08 PST
Clock Time 08:08 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
06:55PST	Obtain work authorization from control room, tailboard job and JSA
07:02PST	Put CEMS into maintenance
07:03PST	Change bottle NOx High
07:08PST	Took CEMS out of maintenance
07:09PST	Auto calibration started
07:34PST	Calibration completed and passed
07:45PST	Notified control room that job was complete

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DocNumber: 595202

UNIT A 10/3/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 05/16/2025
Linde Order Number: 73160062
Part Number: NI NO135E-AS
Customer PO Number: 81177719

Fill Date: 04/24/2025
Lot Number: 70086511415G
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	05/16/2033	NIST Traceable
Cylinder Number:	DT0048154	Expanded Uncertainty
136.6 ppm	Nitric oxide	± 0.5 ppm
Balance	Nitrogen	

For Reference Only: NOx 137.1 ppm

Certification Information: Certification Date: 05/16/2025 Term: 96 Months Expiration Date: 05/16/2033

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: 135 ppm
Certified Concentration: 136.6 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 04/21/2025

Reference Standard: Type / Cylinder #: GMIS / ND59338
Concentration / Uncertainty: 98.9 ppm ±0.3 ppm
Expiration Date: 04/17/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901.04 / APE 1933195
SRM Concentration / Uncertainty: 100.11 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

First Analysis Data:					Date	05/09/2025
Z: 0	R: 98.9	C: 136.8	Conc: 136.8			
R: 98.9	Z: 0	C: 137.1	Conc: 137.1			
Z: 0	C: 136.7	R: 98.9	Conc: 136.7			
UOM: ppm			Mean Test Assay:	136.9	ppm	

Second Analysis Data:					Date	05/16/2025
Z: 0	R: 98.9	C: 136.2	Conc: 136.2			
R: 98.9	Z: 0	C: 136.4	Conc: 136.4			
Z: 0	C: 136.2	R: 98.9	Conc: 136.2			
UOM: ppm			Mean Test Assay:	136.3	ppm	

Analyzed By Lissette Morales

Certified By Suchana Gurung

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 167696

DATE: November 4, 2025 Name: Bryan Taylor/ Greg T Davis

REASON FOR CEMS SERVICE: Change bottle, CO High

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 4, 2025 CEMS Time 06:03 PST
Clock Time 06:03 PST

Switched out of maintenance November 4, 2025 CEMS Time 06:09 PST
Clock Time 06:09 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:03PST	Put CEMS into maintenance
06:04PST	Change bottle CO High
06:09PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:42PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

DocNumber: 596397

UNIT A 11/4/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 05/27/2025
Linde Order Number: 73160062
Part Number: NI CO90ME-AS
Customer PO Number: 81177719

Fill Date: 05/20/2025
Lot Number: 700865140O3M
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 143 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	05/27/2033	NIST Traceable
Cylinder Number:	CC241174	Expanded Uncertainty
90.7 ppm	Carbon monoxide	± 0.7 ppm
Balance	Nitrogen	

Certification Information: Certification Date: 05/27/2025 Term: 96 Months Expiration Date: 05/27/2033

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: 90 ppm
Certified Concentration: 90.7 ppm
Instrument Used: Horiba VIA-510 S/N LVJJNDAG
Analytical Method: NDIR
Last Multipoint Calibration: 04/30/2025

Reference Standard: Type / Cylinder #: NTRM / CC12259
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 / ±0.8ppm
SRM Expiration Date: 07/09/2027

First Analysis Data:						Date 05/27/2025
Z: 0	R: 100.1	C: 90.7	Conc: 90.7			
R: 100.1	Z: 0	C: 90.8	Conc: 90.8			
Z: 0	C: 90.7	R: 100.1	Conc: 90.7			
UOM: ppm			Mean Test Assay:	90.7	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	

Analyzed By Miriam Bahena

Certified By Courtney Zielke

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 167713

DATE: November 17, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Change bottle, NOx Low and Nitrogen

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 17, 2025 CEMS Time 06:04 PST
Clock Time 06:04 PST

Switched out of maintenance November 17, 2025 CEMS Time 06:16 PST
Clock Time 06:16 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:04PST	Put CEMS into maintenance
06:06PST	Change bottle NOx Low and Nitrogen
06:16PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:42PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

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DocNumber: 602060

UNIT A 11/17/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 08/28/2025
Linde Order Number: 73259915
Part Number: NI NO9ME-AS
Customer PO Number: 81279133

Fill Date: 08/08/2025
Lot Number: 70086522002H
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	08/28/2028	NIST Traceable
Cylinder Number:	DT0010833	Expanded Uncertainty
8.91 ppm	Nitric oxide	± 0.05 ppm
9.10 ppm	Nitric oxide (as NOx)	± 0.06 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 08/28/2025 Term: 36 Months Expiration Date: 08/28/2028

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: 9 ppm
Certified Concentration: 8.91 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 07/30/2025

First Analysis Data:						Date	08/21/2025
Z:	0	R:	10.25	C:	8.92	Conc:	8.92
R:	10.26	Z:	0	C:	8.91	Conc:	8.91
Z:	0	C:	8.91	R:	10.24	Conc:	8.91
UOM:	ppm			Mean Test Assay:		8.91	ppm

Reference Standard: Type / Cylinder #: GMIS / ND7470
Concentration / Uncertainty: 10.25 ppm ±0.05 ppm
Expiration Date: 03/20/2028
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2456801.07 / APE1514052
SRM Concentration / Uncertainty: 1.001 ppm / ±0.050ppm
SRM Expiration Date: 06/05/2026

Second Analysis Data:						Date	08/28/2025
Z:	0	R:	10.25	C:	8.9	Conc:	8.89
R:	10.26	Z:	0	C:	8.92	Conc:	8.91
Z:	0	C:	8.94	R:	10.26	Conc:	8.93
UOM:	ppm			Mean Test Assay:		8.91	ppm

2. Component: Nitric oxide (as NOx)

Requested Concentration: 9 ppm
Certified Concentration: 9.10 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 07/30/2025

First Analysis Data:						Date	08/21/2025
Z:	0	R:	10.26	C:	9.09	Conc:	9.09
R:	10.27	Z:	0	C:	9.07	Conc:	9.07
Z:	0	C:	9.08	R:	10.25	Conc:	9.08
UOM:	ppm			Mean Test Assay:		9.08	ppm

Reference Standard: Type / Cylinder #: GMIS / ND7470
Concentration / Uncertainty: 10.26 ppm ±0.05 ppm
Expiration Date: 03/20/2028
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2456801.07 / APE1514052
SRM Concentration / Uncertainty: 10.005 ppm / ±0.050ppm
SRM Expiration Date: 06/05/2026

Second Analysis Data:						Date	08/28/2025
Z:	0	R:	10.26	C:	9.1	Conc:	9.09
R:	10.27	Z:	0	C:	9.12	Conc:	9.11
Z:	0	C:	9.13	R:	10.27	Conc:	9.12
UOM:	ppm			Mean Test Assay:		9.11	ppm

Analyzed By Henry Koung

Certified By Courtney Zielke

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

UNIT A 11/17/25

Customer & Order Information:

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

Linde Order Number: **73282031**
Customer PO Number: **81301416**

Certificate Issuance Date: **8/27/2025**
Revision Number: **0**
Certification Date: **8/26/2025**
Lot Number: **N70086523402F**
Part Number: **NI 5.5CE-AS**
DocNumber: **856050**

CERTIFICATE OF ANALYSIS

Nitrogen, 5.5 Continuous Emission Monitoring Zero

Analytes	Specification	Analytical Results	Analytical Reference	Analytical Uncertainty
Nitrogen	**≥ 99.9995 %**	**≥ 99.9995 %**	**5**	**N/A**
Carbon Dioxide	**≤ 1 ppm**	**≤ 0.1 ppm**	**3**	**± 10%**
Carbon Monoxide	**≤ 0.5 ppm**	**≤ 0.1 ppm**	**3**	**± 15%**
Total Hydrocarbons	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**6**	**± 15%**
Oxides of Nitrogen	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**4**	**± 15%**
Oxygen	**≤ 0.5 ppm**	**≤ 0.5 ppm**	**2**	**± 15%**
Sulfur Dioxide	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**1**	**± 15%**
Water	**≤ 2 ppm**	**≤ 0.5 ppm**	**7**	**± 10%**

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **142 ft3**
Valve Outlet Connection: **CGA 580**
Fill Date: **8/22/2025**
Analysis Date: **8/26/2025**
Filling Method: **Pressure/Temperature**
Cylinder Number(s): **DT0057735, CC14509, CC276023, CC301311, SG9133266**
Analyzed Cylinder Number(s): **DT0057735**

Analyst: **Nelson Ma**

Approved Signer: **Amalia Real**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	Ametek 921CE S/N AW-921-S321 - UV Spectrometry
2	Delta F DF-550 Nanotrace - Electrolytic Cell/Electrochemical
3	Horiba Instruments Inc. GA-360E - NDIR
4	HORIBA TRACE NO APNA-370 SN#PLOS4Y2K - Chemiluminescence
5	N/A - By Difference of Typical Impurities
6	Rosemount/Beckman 400A - FID Total Hydrocarbon Analyzer
7	Tiger Optics MTO-1000 - Cavity Ring-down Spectroscopy

This analysis of the product described herein was prepared by Linde Gas & Equipment Inc. using instruments whose calibration is certified using Linde Gas & Equipment Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by mole unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 166559

DATE: November 18, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Perform Calibrated Gas Audit

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 18, 2025 CEMS Time 10:15 PST
Clock Time 10:15 PST

Switched out of maintenance November 18, 2025 CEMS Time 11:53 PST
Clock Time 11:53 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done Time in CEMS time Pacific Standard Time

07:55PST Obtain work authorization from control room, tailboard job and JSA
10:15PST Put CEMS into maintenance
10:20PST Perform Calibrated Gas Audit
11:53PST Took CEMS out of maintenance
11:54PST Auto calibration started
12:18PST Calibration completed and passed
13:00PST Notified control room that job was complete

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 167717

DATE: November 20, 2025 Name: Bryan T, Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder O2

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 20, 2025 CEMS Time 06:07 PST
Clock Time 06:07 PST

Switched out of maintenance November 20, 2025 CEMS Time 06:13 PST
Clock Time 06:13 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:07PST	Put CEMS into maintenance
06:09PST	Replaced depleted gas cylinder O2
06:13PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

DocNumber: 601366

Unit A 11/20/25

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 08/11/2025
Linde Order Number: 73259915
Part Number: NI OX22.5E-AS
Customer PO Number: 81279133

Fill Date: 08/05/2025
Lot Number: 70086521703M
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 142 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	08/11/2033	NIST Traceable
Cylinder Number:	CC246480	Expanded Uncertainty
22.57 %	Oxygen	± 0.07 %
Balance	Nitrogen	

Certification Information: Certification Date: 08/11/2025 Term: 96 Months Expiration Date: 08/11/2033

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:** Oxygen

Requested Concentration: 22.5 %
Certified Concentration: 22.57 %
Instrument Used: Siemens Oxymat 6E S/N 7MB20211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 07/17/2025

Reference Standard: Type / Cylinder #: GMIS / DT0040804
Concentration / Uncertainty: 20.86 % ±0.05 %
Expiration Date: 09/09/2032
Traceable to: SRM # / Sample # / Cylinder #: 2659a / 71-D-23 / CAL015788
SRM Concentration / Uncertainty: 20.720 % / ±0.043%
SRM Expiration Date: 02/28/2026

First Analysis Data:						Date	08/11/2025
Z:	0	R:	20.86	C:	22.57	Conc:	22.56
R:	20.88	Z:	0	C:	22.58	Conc:	22.57
Z:	0	C:	22.58	R:	20.87	Conc:	22.57
UOM:	%			Mean Test Assay:			22.57 %

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 Miriam Bahena

Certified By Courtney Zielke

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 168034

DATE: November 26, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder NOx High

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 26, 2025 CEMS Time 06:03 PST
Clock Time 06:03 PST

Switched out of maintenance November 26, 2025 CEMS Time 06:12 PST
Clock Time 06:12 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
Obtain work authorization from control room, tailboard job and JSA	05:55PST
Put CEMS into maintenance	06:03PST
Replaced depleted gas cylinder NOx High	06:04PST
Took CEMS out of maintenance	06:12PST
Auto calibration started	07:17PST
Calibration completed and passed	07:41PST
Notified control room that job was complete	08:00PST

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UNIT A 11/26/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 09/11/2025
Linde Order Number: 73283793
Part Number: NI NO135E-AS
Customer PO Number: 81303175

Fill Date: 08/25/2025
Lot Number: 70086523702L
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	09/11/2033	NIST Traceable
Cylinder Number:	CC247821	Expanded Uncertainty
131.1 ppm	Nitric oxide	± 0.7 ppm
131.4 ppm	Nitric oxide (as NOx)	± 0.7 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 09/11/2025 Term: 96 Months Expiration Date: 09/11/2033

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: 135 ppm
Certified Concentration: 131.1 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/15/2025

First Analysis Data:						Date	09/04/2025
Z: 0	R: 100.5	C: 131.4	Conc: 131.4				
R: 100.5	Z: 0	C: 131.3	Conc: 131.3				
Z: 0	C: 131.3	R: 100.5	Conc: 131.3				
UOM: ppm			Mean Test Assay:	131.3	ppm		

Reference Standard: Type / Cylinder #: GMIS / GN0034458
Concentration / Uncertainty: 100.5 ppm ±0.3 ppm
Expiration Date: 08/12/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901 04 / APE 1933195
SRM Concentration / Uncertainty: 100.11 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

Second Analysis Data:						Date	09/11/2025
Z: 0	R: 100.5	C: 130.9	Conc: 130.8				
R: 100.5	Z: 0	C: 130.9	Conc: 130.9				
Z: 0	C: 131	R: 100.5	Conc: 131				
UOM: ppm			Mean Test Assay:	130.9	ppm		

2. Component: Nitric oxide (as NOx)

Requested Concentration: 135 ppm
Certified Concentration: 131.4 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/15/2025

First Analysis Data:						Date	09/04/2025
Z: 0	R: 100.7	C: 131.7	Conc: 131.7				
R: 100.7	Z: 0	C: 131.7	Conc: 131.7				
Z: 0	C: 131.7	R: 100.7	Conc: 131.7				
UOM: ppm			Mean Test Assay:	131.7	ppm		

Reference Standard: Type / Cylinder #: GMIS / GN0034458
Concentration / Uncertainty: 100.7 ppm ±0.3 ppm
Expiration Date: 08/12/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901 04 / APE 1933195
SRM Concentration / Uncertainty: 100.15 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

Second Analysis Data:						Date	09/11/2025
Z: 0	R: 100.7	C: 131.1	Conc: 131.1				
R: 100.7	Z: 0	C: 131.1	Conc: 131.1				
Z: 0	C: 131.3	R: 100.7	Conc: 131.3				
UOM: ppm			Mean Test Assay:	131.2	ppm		

Analyzed By: Lissette Morales

Certified By: Suchana Gurung

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 168060

DATE: December 5, 2025 Name: Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder CO2

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance December 5, 2025 CEMS Time 06:32 PST
Clock Time 06:32 PST

Switched out of maintenance December 5, 2025 CEMS Time 06:39 PST
Clock Time 06:39 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:32PST	Put CEMS into maintenance
06:35PST	Replaced depleted gas cylinder CO2
06:39PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

DocNumber: 602022 unit A 12/5/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 08/21/2025
Linde Order Number: 73259915
Part Number: NI CD18E-AS
Customer PO Number: 81279133

Fill Date: 08/08/2025
Lot Number: 70086522005M
Cylinder Style & Outlet: AS CGA 580
Cylinder Pressure and Volume: 2000 psig 152 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 08/21/2033		NIST Traceable
Cylinder Number: CC28870		Expanded Uncertainty
17.99 %	Carbon dioxide	± 0.17 %
Balance	Nitrogen	

Certification Information: Certification Date: 08/21/2025 Term: 96 Months Expiration Date: 08/21/2033

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 dioxide

Requested Concentration: 18 %
Certified Concentration: 17.99 %
Instrument Used: Horiba VIA-510 S/N 20C194WK
Analytical Method: NDIR
Last Multipoint Calibration: 07/31/2025

Reference Standard: Type / Cylinder #: GMIS / CC725967
Concentration / Uncertainty: 19.34 % ±0.16 %
Expiration Date 01/12/2027
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 190701 / CC725973
SRM Concentration / Uncertainty: 19.34 % / ±0.16%
SRM Expiration Date: 01/12/2027

First Analysis Data:						Date 08/21/2025
Z: 0	R: 19.34	C: 17.96	Conc: 17.96			
R: 19.32	Z: 0	C: 18.01	Conc: 18.01			
Z: 0	C: 17.99	R: 19.36	Conc: 17.99			
UOM: %		Mean Test Assay: 17.99 %				

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: Miriam Bahena

Certified By: Nelson Ma

UNIT A CEMS MAINTENANCE LOG

MSCC Work Number: 168069

DATE: December 15, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder CO Low

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance December 15, 2025 CEMS Time 06:02 PST
Clock Time 06:02 PST

Switched out of maintenance December 15, 2025 CEMS Time 06:08 PST
Clock Time 06:08 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:02PST	Put CEMS into maintenance
06:03PST	Replaced depleted gas cylinder CO Low
06:08PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

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DocNumber: 602270

UNIT A 12/15/25

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Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 08/26/2025
Linde Order Number: 73259915
Part Number: NI CO9ME-AS
Customer PO Number: 81279133

Fill Date: 08/18/2025
Lot Number: 70086523004M
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 142 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	08/26/2033	NIST Traceable
Cylinder Number:	CC2808	Expanded Uncertainty
8.46 ppm	Carbon monoxide	± 0.04 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 08/26/2025 Term: 96 Months Expiration Date: 08/26/2033

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: 9 ppm
Certified Concentration: 8.46 ppm
Instrument Used: Horiba VIA-510 S/N 43627990042
Analytical Method: NDIR
Last Multipoint Calibration: 07/30/2025

Reference Standard: Type / Cylinder #: GMIS / CC113540
Concentration / Uncertainty: 9.18 ppm ±0.04 ppm
Expiration Date: 03/18/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM#D245751 / C2456801.06 / D245751
SRM Concentration / Uncertainty: 9.954 ppm / ±0.03ppm
SRM Expiration Date: 05/30/2028

First Analysis Data:						Date	08/26/2025
Z:	0	R:	91.5	C:	84.6	Conc:	8.46
R:	91.7	Z:	0	C:	84.2	Conc:	8.44
Z:	0	C:	84.4	R:	91.4	Conc:	8.46
UOM:	mV			Mean Test Assay:		8.46	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:	mV			Mean Test Assay:			ppm

Analyzed By: Courtney Zielke

Certified By: Miriam Bahena

UNIT B
CEM MAINTENANCE LOG

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 167364

DATE: October 24, 2025 Name: Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinders CO Low & Nox Low

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance October 24, 2025 CEMS Time 05:32 PST
Clock Time 06:32 PST

Switched out of maintenance October 24, 2025 CEMS Time 05:47 PST
Clock Time 06:47 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
Obtain work authorization from control room, tailboard job and JSA	04:55PST
Put CEMS into maintenance	05:32PST
Replaced depleted gas cylinders CO Low & Nox Low	05:38PST
Took CEMS out of maintenance	05:47PST
Auto calibration started	06:17PST
Calibration completed and passed	06:41PST
Notified control room that job was complete	07:00PST

DocNumber: 581914 Unit B 10/24/25

Linde Gas & Equipment Inc.
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PGVP ID: F22024

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 10/10/2024
Linde Order Number: 72948560
Part Number: NI CO9ME-AS
Customer PO Number: 80963678

Fill Date: 10/03/2024
Lot Number: 70086427709
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 147 fl3

Certified Concentration

Expiration Date:	10/10/2032	NIST Traceable
Cylinder Number:	CC726037	Expanded Uncertainty
9.00 ppm	Carbon monoxide	± 0.05 ppm
Balance	Nitrogen	

ProSpec EZ Cert

Certification Information:

Certification Date: 10/10/2024 Term: 96 Months Expiration Date: 10/10/2032

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: 9 ppm
Certified Concentration: 9.00 ppm
Instrument Used: Horiba VIA-510 S/N 43627990042
Analytical Method: NDIR
Last Multipoint Calibration: 09/27/2024

Reference Standard: Type / Cylinder #: GMIS / DT0014643
Concentration / Uncertainty: 10.04 ppm ±0.05 ppm
Expiration Date: 08/16/2030
Traceable to: SRM # / Sample # / Cylinder #: 1677C / 5-J-42 / CAL015337
SRM Concentration / Uncertainty: 9.825 / ±0.047
SRM Expiration Date: 06/24/2024

First Analysis Data:						Date	10/10/2024
Z:	3.7	R:	204.2	C:	183.9	Conc:	9.01
R:	204.9	Z:	3.6	C:	183.5	Conc:	8.99
Z:	3.6	C:	183.8	R:	204.5	Conc:	9
UOM:	mV				Mean Test Assay:		9 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:	mV				Mean Test Assay:		ppm

Analyzed By: Miriam Bahena

Certified By: Nelson Ma

DocNumber: 596281 Unit B 10/24/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 05/29/2025
Linde Order Number: 73182407
Part Number: NI NO9ME-AS
Customer PO Number: 81200388

Fill Date: 05/17/2025
Lot Number: 70086513709G
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	05/29/2028	NIST Traceable
Cylinder Number:	DT0008044	Expanded Uncertainty
9.10 ppm	Nitric oxide	± 0.05 ppm
Balance	Nitrogen	

For Reference Only: NOx 9.16 ppm

Certification Information: Certification Date: 05/29/2025 Term: 36 Months Expiration Date: 05/29/2028

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: 9 ppm
Certified Concentration: 9.10 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 05/16/2025

First Analysis Data: Date 05/22/2025

Z:	0	R:	10.45	C:	9.09	Conc:	9.09
R:	10.46	Z:	0	C:	9.11	Conc:	9.11
Z:	0	C:	9.1	R:	10.44	Conc:	9.1

UOM: ppm Mean Test Assay: 9.1 ppm

Second Analysis Data: Date 05/29/2025

Z:	0	R:	10.45	C:	9.1	Conc:	9.11
R:	10.44	Z:	0	C:	9.1	Conc:	9.11
Z:	0	C:	9.07	R:	10.44	Conc:	9.08

UOM: ppm Mean Test Assay: 9.1 ppm

Reference Standard: Type / Cylinder #: GMIS / ND7404
Concentration / Uncertainty: 10.45 ppm ±0.05 ppm
Expiration Date: 04/15/2027
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2268801 / APEX1429266
SRM Concentration / Uncertainty: 10.01 ppm / ±0.05ppm
SRM Expiration Date: 09/30/2024

Analyzed By: Henry Koung

Certified By: Courtney Zielke

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 167693

DATE: October 30, 2025 Name: Bryan Taylor/Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinders Nitrogen, O2 & NOx High

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance October 30, 2025 CEMS Time 05:02 PST
Clock Time 06:02 PST

Switched out of maintenance October 30, 2025 CEMS Time 05:24 PST
Clock Time 06:24 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
04:55PST	Obtain work authorization from control room, tailboard job and JSA
05:02PST	Put CEMS into maintenance
05:03PST	Replaced depleted gas cylinders Nitrogen, O2 & NOx High
05:24PST	Took CEMS out of maintenance
06:17PST	Auto calibration started
06:41PST	Calibration completed and passed
07:00PST	Notified control room that job was complete

Making our world more productive

DocNumber: 599893

UNIT B 10/30/25

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5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 07/30/2025
Linde Order Number: 73229278
Part Number: NI NO135E-AS
Customer PO Number: 81248011

Fill Date: 07/07/2025
Lot Number: 700865188031
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	07/30/2033	NIST Traceable
Cylinder Number:	CC72597	Expanded Uncertainty
133.8 ppm	Nitric oxide	± 0.6 ppm
134.0 ppm	Nitric oxide (as NOx)	± 0.7 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 07/30/2025 Term: 96 Months Expiration Date: 07/30/2033

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: 135 ppm
Certified Concentration: 133.8 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 07/02/2025

Reference Standard: Type / Cylinder #: GMIS / ND59338
Concentration / Uncertainty: 98.9 ppm ±0.3 ppm
Expiration Date: 04/17/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901.04 / APE 1933195
SRM Concentration / Uncertainty: 100.11 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

First Analysis Data:						Date	07/23/2025
Z:	0	R:	98.9	C:	134.1	Conc:	134.1
R:	98.9	Z:	0	C:	134	Conc:	134
Z:	0	C:	134.1	R:	98.9	Conc:	134.1
UOM:	ppm			Mean Test Assay:			134.1 ppm

Second Analysis Data:						Date	07/30/2025
Z:	0	R:	98.9	C:	133.6	Conc:	133.6
R:	98.9	Z:	0	C:	133.6	Conc:	133.6
Z:	0	C:	133.6	R:	98.9	Conc:	133.6
UOM:	ppm			Mean Test Assay:			133.6 ppm

2. Component: Nitric oxide (as NOx)

Requested Concentration: 135 ppm
Certified Concentration: 134.0 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 07/02/2025

Reference Standard: Type / Cylinder #: GMIS / ND59338
Concentration / Uncertainty: 99.9 ppm ±0.3 ppm
Expiration Date: 04/17/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901.04 / APE 1933195
SRM Concentration / Uncertainty: 100.11 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

First Analysis Data:						Date	07/23/2025
Z:	0	R:	99.9	C:	134.3	Conc:	134.3
R:	99.9	Z:	0	C:	134.3	Conc:	134.3
Z.	0	C:	134.3	R:	99.9	Conc:	134.3
UOM:	ppm			Mean Test Assay:			134.3 ppm

Second Analysis Data:						Date	07/30/2025
Z:	0	R:	99.9	C:	133.7	Conc:	133.7
R:	99.9	Z:	0	C:	133.8	Conc:	133.8
Z:	0	C:	133.9	R:	99.9	Conc:	133.9
UOM:	ppm			Mean Test Assay:			133.8 ppm

Analyzed By: Lissette Morales

Certified By: Suchana Gurung

DocNumber: 599683

UNIT B
10/30/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 07/18/2025
Linde Order Number: 73229278
Part Number: NI OX22.5E-AS
Customer PO Number: 81248011

Fill Date: 07/14/2025
Lot Number: 700839513505M
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 143 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	07/18/2033	NIST Traceable
Cylinder Number:	EB0179927	Expanded Uncertainty
22.49 %	Oxygen	± 0.07 %
Balance	Nitrogen	

Certification Information: Certification Date: 07/18/2025 Term: 96 Months Expiration Date: 07/18/2033

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: Oxygen

Requested Concentration: 22.5 %
Certified Concentration: 22.49 %
Instrument Used: Siemens Oxymat 6E S/N 7MB20211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 07/17/2025

Reference Standard: Type / Cylinder #: GMIS / DT0040804
Concentration / Uncertainty: 20.86 % ±0.05 %
Expiration Date: 09/09/2032
Traceable to: SRM # / Sample # / Cylinder #: 2659a / 71-D-23 / CAL015788
SRM Concentration / Uncertainty: 20.720 % / ±0.043%
SRM Expiration Date: 02/28/2026

First Analysis Data:						Date	07/18/2025
Z:	0	R:	20.86	C:	22.5	Conc:	22.48
R:	20.88	Z:	0	C:	22.5	Conc:	22.48
Z:	0	C:	22.52	R:	20.89	Conc:	22.5
UOM:	%			Mean Test Assay:			22.49 %

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: Miriam Bahena

Certified By: Nelson Ma

10/30/25
UNIT B

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

Customer & Order Information:

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

Linde Order Number: **73114194**
Customer PO Number: **81131299**

Certificate Issuance Date: **3/21/2025**
Revision Number: **0**
Certification Date: **3/21/2025**
Lot Number: **N70086507601F**
Part Number: **NI 5.5CE-AS**
DocNumber: **822923**

CERTIFICATE OF ANALYSIS

Nitrogen, 5.5 Continuous Emission Monitoring Zero

Analytes	Specification	Analytical Results	Analytical Reference	Analytical Uncertainty
Nitrogen	**≥ 99.9995 %**	**≥ 99.9995 %**	**6**	**N/A**
Carbon Dioxide	**≤ 1 ppm**	**≤ 0.5 ppm**	**4**	**± 10%**
Carbon Monoxide	**≤ 0.5 ppm**	**≤ 0.5 ppm**	**4**	**± 15%**
Total Hydrocarbons	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**3**	**± 15%**
Oxides of Nitrogen	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**7**	**± 15%**
Oxygen	**≤ 0.5 ppm**	**≤ 0.5 ppm**	**2**	**± 15%**
Sulfur Dioxide	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**1**	**± 15%**
Water	**≤ 2 ppm**	**≤ 1.5 ppm**	**5**	**± 10%**

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **142 ft3**
Valve Outlet Connection: **CGA 580**
Fill Date: **3/17/2025**
Analysis Date: **3/20/2025**
Filling Method: **Pressure/Temperature**
Cylinder Number(s): **CC113608, DT0048325, CC17390, EB0166575, ALM-0117581, CC97873, DT0054555, CC83358, DT0054612, DT0058283**
Analyzed Cylinder Number(s): **CC113608**

Analyst: **Amalia Real**

Approved Signer: **Ying Yu**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	Ametek 921CE S/N AW-921-S321 - UV Spectrometry
2	Delta F DF-550 Nanotrace - Electrolytic Cell/Electrochemical
3	Horiba FIA MEXA-1170HFID, S/N S210337836900001 - FID Total Hydrocarbon Analyzer
4	Horiba Instruments Inc. GA-360E - NDIR
5	Meeco Aquavolt PLUS - Specific Water Analyzer
6	N/A - By Difference of Typical Impurities
7	Thermo Electron 42i-LS S/N 1030645077 - Chemiluminescence

This analysis of the product described herein was prepared by Linde Gas & Equipment Inc. using instruments whose calibration is certified using Linde Gas & Equipment Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by mole unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 167697

DATE: November 4, 2025 Name: Bryan Taylor/ Greg T Davis

REASON FOR CEMS SERVICE: Bottle change, CO2

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 4, 2025 CEMS Time 06:11 PST
Clock Time 06:11 PST

Switched out of maintenance November 4, 2025 CEMS Time 06:18PST
Clock Time 06:18 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:11PST	Put CEMS into maintenance
06:13PST	Changed depleted cylinder CO2
06:18PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
11711 S. Alameda Street
Los Angeles, CA 90059
Airgas.com

UNIT B 11/4/25

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI82E15A0105	Reference Number:	48-403384795-1
Cylinder Number:	CC274169	Cylinder Volume:	146.0 CF
Laboratory:	124 - Los Angeles - CA	Cylinder Pressure:	2015 PSIG
PGVP Number:	B32025	Valve Outlet:	580
Gas Code:	CO2,BALN	Certification Date:	Jul 10, 2025

Expiration Date: Jul 10, 2033

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
CARBON DIOXIDE	18.00 %	18.18 %	G1	+/- 0.6% NIST Traceable	07/10/2025
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	13060724	CC413734	16.939 % CARBON DIOXIDE/NITROGEN	+/- 0.6%	Mar 20, 2031

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
SIEMENS 6E CO2	NDIR	Jul 02, 2025

Triad Data Available Upon Request

Approved for Release

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 167710

DATE: November 14, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Bottle change, CO High

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 14, 2025 CEMS Time 06:01 PST
Clock Time 06:01 PST

Switched out of maintenance November 14, 2025 CEMS Time 06:08PST
Clock Time 06:08 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done Time in CEMS time Pacific Standard Time

05:55PST Obtain work authorization from control room, tailboard job and JSA
06:01PST Put CEMS into maintenance
06:03PST Changed depleted cylinder CO High
06:08PST Took CEMS out of maintenance
07:17PST Auto calibration started
07:41PST Calibration completed and passed
08:00PST Notified control room that job was complete

DocNumber: 599486

UNIT B 11/14/25

Linde Gas & Equipment Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 07/16/2025
Linde Order Number: 73229278
Part Number: NI CO90ME-AS
Customer PO Number: 81248011

Fill Date: 07/08/2025
Lot Number: 70086518907M
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 142 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	07/16/2033	NIST Traceable
Cylinder Number:	EB0099131	Expanded Uncertainty
89.5 ppm	Carbon monoxide	± 0.4 ppm
Balance	Nitrogen	

Certification Information: *Certification Date:* 07/16/2025 *Term:* 96 Months *Expiration Date:* 07/16/2033

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: 90 ppm
Certified Concentration: 89.5 ppm
Instrument Used: Horiba VIA-510 S/N LVJJNDAG
Analytical Method: NDIR
Last Multipoint Calibration: 06/30/2025

Reference Standard: Type / Cylinder #: GMIS / DT0019721
Concentration / Uncertainty: 252.5 ppm ±0.6 ppm
Expiration Date: 09/10/2032
Traceable to: SRM # / Sample # / Cylinder #: 2636a / 57-G-06 / FF55714
SRM Concentration / Uncertainty: 248.87 ppm / ±0.54ppm
SRM Expiration Date: 03/15/2031

First Analysis Data:						Date	07/16/2025
Z: 0	R: 252.6	C: 89.4	Conc: 89.3				
R: 252.9	Z: 0	C: 89.6	Conc: 89.5				
Z: 0	C: 89.6	R: 252.6	Conc: 89.5				
UOM: ppm			Mean Test Assay:	89.5	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		

Analyzed By Miriam Bahena

Certified By Nelson Ma

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 166559

DATE: November 19, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Perform Calibration Gas Audit

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 19, 2025 CEMS Time 08:00 PST
Clock Time 08:00 PST

Switched out of maintenance November 19, 2025 CEMS Time 09:32 PST
Clock Time 09:32 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
07:50PST	Obtain work authorization from control room, tailboard job and JSA
08:00PST	Put CEMS into maintenance
08:10PST	Performed Calibration Gas Audit
09:32PST	Took CEMS out of maintenance
09:34PST	Auto calibration started
09:59PST	Calibration completed and passed
10:30PST	Notified control room that job was complete

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 168064

DATE: December 9, 2025 Name: Greg T Davis/ Bryan Taylor/Greg Davis

REASON FOR CEMS SERVICE: Troubleshoot O2 analyzer and replaced depleted gas cylinder O2

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance December 9, 2025 CEMS Time 10:06 PST
Clock Time 10:06 PST

Switched out of maintenance December 9, 2025 CEMS Time 12:43 PST
Clock Time 12:43 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done Time in CEMS time Pacific Standard Time

09:55PST Obtain work authorization from control room, tailboard job and JSA
10:06PST Put CEMS into maintenance
10:15PST Troubleshoot O2 analyzer and replaced depleted gas cylinder O2
12:42PST Took CEMS out of maintenance
12:43PST Auto calibration started
13:08PST Calibration completed and passed
13:30PST Notified control room that job was complete

Linde Gas & Equipment Inc.
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Fax: 714-542-6689
PGVP ID: F22025

DocNumber: 603937

UNIT B 12/9/25

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 09/22/2025
Linde Order Number: 73297561
Part Number: NI OX22.5E-AS
Customer PO Number: 81317153

Fill Date: 09/09/2025
Lot Number: 70086525209M
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 143 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 09/22/2033		NIST Traceable
Cylinder Number: SA3214		Expanded Uncertainty
22.55 %	Oxygen	± 0.05 %
Balance	Nitrogen	

Certification Information:

Certification Date: 09/22/2025 Term: 96 Months Expiration Date: 09/22/2033

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: Oxygen

Requested Concentration: 22.5 %
Certified Concentration: 22.55 %
Instrument Used: Siemens Oxymat 6E S/N 7MB20211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 08/29/2025

Reference Standard: Type / Cylinder #: GMIS / GN0018787
Concentration / Uncertainty: 20.92 % ±0.03 %
Expiration Date: 08/12/2033
Traceable to: SRM # / Sample # / Cylinder #: SRM#2659a / 71-E-19 / FF22331
SRM Concentration / Uncertainty: 20.863% / ±0.021%
SRM Expiration Date: 02/27/2026

First Analysis Data:						Date	09/22/2025
Z: 0	R: 20.92	C: 22.55	Conc: 22.55				
R: 20.93	Z: 0	C: 22.56	Conc: 22.56				
Z: 0	C: 22.55	R: 20.92	Conc: 22.55				
UOM: %			Mean Test Assay:	22.55 %			

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: Miriam Bahena

Certified By: Nelson Ma

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 168061

DATE: December 9, 2025 Name: Greg T Davis, Bryan Taylor

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder Nitrogen

Was the maintenance scheduled or unscheduled? Unscheduled

Switched into maintenance December 9, 2025 CEMS Time 06:56 PST
Clock Time 06:56 PST

Switched out of maintenance December 9, 2025 CEMS Time 07:10 PST
Clock Time 07:10 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:56PST	Put CEMS into maintenance
07:00PST	Replaced depleted gas cylinder Nitrogen
07:10PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

UNIT B
12/9/25

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

Customer & Order Information:

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

Linde Order Number: **73357610**
Customer PO Number: **81378451**

Certificate Issuance Date: **11/17/2025**
Revision Number: **0**
Certification Date: **11/17/2025**
Lot Number: **N70086530709F**
Part Number: **NI 5.5CE-AS**
DocNumber: **874125**

CERTIFICATE OF ANALYSIS

Nitrogen, 5.5 Continuous Emission Monitoring Zero

Analytes	Specification	Analytical Results	Analytical Reference	Analytical Uncertainty
Nitrogen	**≥ 99.9995 %**	**≥ 99.9995 %**	**5**	**N/A**
Carbon Dioxide	**≤ 1 ppm**	**≤ 0.5 ppm**	**2**	**± 10%**
Carbon Monoxide	**≤ 0.5 ppm**	**≤ 0.5 ppm**	**2**	**± 15%**
Total Hydrocarbons	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**6**	**± 15%**
Oxides of Nitrogen	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**3**	**± 15%**
Oxygen	**≤ 0.5 ppm**	**≤ 0.5 ppm**	**1**	**± 15%**
Sulfur Dioxide	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**7**	**± 15%**
Water	**≤ 2 ppm**	**≤ 2.0 ppm**	**4**	**± 10%**

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **142 ft3**
Valve Outlet Connection: **CGA 580**
Fill Date: **11/3/2025**
Analysis Date: **11/17/2025**
Filling Method: **Pressure/Temperature**
Cylinder Number(s): **CC16154, DT0028883, SA19120, DT0054620**
Analyzed Cylinder Number(s): **CC16154**

Analyst: **Amalia Real**

Approved Signer: **Muneeb Abdelrahman-Chemist**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	Delta F DF-550 Nanotrace - Electrolytic Cell/Electrochemical
2	Horiba Instruments Inc. GA-360E - NDIR
3	HORIBA TRACE NO APNA-370 SN#PLOS4Y2K - Chemiluminescence
4	Meeco Aquavolt PLUS - Specific Water Analyzer
5	N/A - By Difference of Typical Impurities
6	Rosemount/Beckman 400A - FID Total Hydrocarbon Analyzer
7	Thermo 43I-AKSCA S/N 1420962322 - UV Spectrometry

This analysis of the product described herein was prepared by Linde Gas & Equipment Inc. using instruments whose calibration is certified using Linde Gas & Equipment Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by mole unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 168067

DATE: December 12, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder NOx Low

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance December 12, 2025 CEMS Time 06:02 PST
Clock Time 06:02 PST

Switched out of maintenance December 12, 2025 CEMS Time 06:10 PST
Clock Time 06:10 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:02PST	Put CEMS into maintenance
06:04PST	Replaced depleted gas cylinder NOx Low
06:10PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

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UNIT B 12/12/25

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Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 09/23/2025
Linde Order Number: 73259915
Part Number: NI NO9ME-AS
Customer PO Number: 81279133

Fill Date: 09/05/2025
Lot Number: 70086524804L
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 09/18/2028		NIST Traceable
Cylinder Number: CC120081		Expanded Uncertainty
8.98 ppm	Nitric oxide	± 0.05 ppm
9.01 ppm	Nitric oxide (as NOx)	± 0.05 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 09/18/2025 Term: 36 Months Expiration Date: 09/18/2028

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: 9 ppm
Certified Concentration: 8.98 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/29/2025

First Analysis Data:						Date 09/10/2025
Z: 0	R: 10.25	C: 8.96	Conc: 8.96			
R: 10.26	Z: 0	C: 8.97	Conc: 8.97			
Z: 0	C: 8.95	R: 10.24	Conc: 8.95			
UOM: ppm			Mean Test Assay:	8.96	ppm	

Reference Standard: Type / Cylinder #: GMIS / ND7470
Concentration / Uncertainty: 10.25 ppm ±0.05 ppm
Expiration Date: 03/20/2028
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2456801.07 / APE1514052
SRM Concentration / Uncertainty: 1.001 ppm / ±0.050ppm
SRM Expiration Date: 06/05/2026

Second Analysis Data:						Date 09/18/2025
Z: 0	R: 10.25	C: 9.01	Conc: 9.01			
R: 10.26	Z: 0	C: 9	Conc: 9			
Z: 0	C: 8.99	R: 10.24	Conc: 8.99			
UOM: ppm			Mean Test Assay:	9	ppm	

2. Component: Nitric oxide (as NOx)

Requested Concentration: 9 ppm
Certified Concentration: 9.01 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/29/2025

First Analysis Data:						Date 09/10/2025
Z: 0	R: 10.26	C: 8.98	Conc: 8.98			
R: 10.27	Z: 0	C: 8.99	Conc: 8.99			
Z: 0	C: 8.97	R: 10.25	Conc: 8.97			
UOM: ppm			Mean Test Assay:	8.98	ppm	

Reference Standard: Type / Cylinder #: GMIS / ND7470
Concentration / Uncertainty: 10.26 ppm ±0.05 ppm
Expiration Date: 03/20/2028
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2456801.07 / APE1514052
SRM Concentration / Uncertainty: 10.005 ppm / ±0.050ppm
SRM Expiration Date: 06/05/2026

Second Analysis Data:						Date 09/18/2025
Z: 0	R: 10.26	C: 9.05	Conc: 9.05			
R: 10.27	Z: 0	C: 9.03	Conc: 9.03			
Z: 0	C: 9.04	R: 10.25	Conc: 9.04			
UOM: ppm			Mean Test Assay:	9.04	ppm	

Analyzed By Henry Koung

Certified By Courtney Zielke

UNIT B CEMS MAINTENANCE LOG

MSCC Work Number: 168595

DATE: December 19, 2025 Name: Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder Nox Hi

Was the maintenance scheduled or unscheduled? Unscheduled

Switched into maintenance December 19, 2025 CEMS Time 06:08 PST
Clock Time 06:08 PST

Switched out of maintenance December 19, 2025 CEMS Time 06:17 PST
Clock Time 06:17 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
05:55PST	Obtain work authorization from control room, tailboard job and JSA
06:08PST	Put CEMS into maintenance
06:10PST	Replaced depleted gas cylinder Nox Hi
06:17PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

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Unit B 12/19/25

Linde Gas & Equipment Inc.
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Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 09/11/2025
Linde Order Number: 73283793
Part Number: NI NO135E-AS
Customer PO Number: 81303175

Fill Date: 08/25/2025
Lot Number: 70086523702L
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	09/11/2033	NIST Traceable
Cylinder Number:	SA7841	Expanded Uncertainty
131.0 ppm	Nitric oxide	± 0.7 ppm
131.3 ppm	Nitric oxide (as NOx)	± 0.7 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 09/11/2025 Term: 96 Months Expiration Date: 09/11/2033

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: 135 ppm
Certified Concentration: 131.0 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/15/2025

First Analysis Data:						Date	09/04/2025
Z:	0	R:	100.5	C:	131.3	Conc:	131.3
R:	100.5	Z:	0	C:	131.2	Conc:	131.2
Z:	0	C:	131.3	R:	100.5	Conc:	131.3
UOM:	ppm				Mean Test Assay:		131.3 ppm

Reference Standard: Type / Cylinder #: GMIS / GN0034458
Concentration / Uncertainty: 100.5 ppm ±0.3 ppm
Expiration Date: 08/12/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901.04 / APE 1933195
SRM Concentration / Uncertainty: 100.11 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

Second Analysis Data:						Date	09/11/2025
Z:	0	R:	100.5	C:	130.7	Conc:	130.7
R:	100.5	Z:	0	C:	130.8	Conc:	130.8
Z:	0	C:	131	R:	100.5	Conc:	131
UOM:	ppm				Mean Test Assay:		130.8 ppm

2. Component: Nitric oxide (as NOx)

Requested Concentration: 135 ppm
Certified Concentration: 131.3 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/15/2025

First Analysis Data:						Date	09/04/2025
Z:	0	R:	100.7	C:	131.5	Conc:	131.5
R:	100.7	Z:	0	C:	131.5	Conc:	131.5
Z:	0	C:	131.6	R:	100.7	Conc:	131.6
UOM:	ppm				Mean Test Assay:		131.5 ppm

Reference Standard: Type / Cylinder #: GMIS / GN0034458
Concentration / Uncertainty: 100.7 ppm ±0.3 ppm
Expiration Date: 08/12/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901.04 / APE 1933195
SRM Concentration / Uncertainty: 100.15 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

Second Analysis Data:						Date	09/11/2025
Z:	0	R:	100.7	C:	131.1	Conc:	131.1
R:	100.7	Z:	0	C:	131.1	Conc:	131.1
Z:	0	C:	131.3	R:	100.7	Conc:	131.3
UOM:	ppm				Mean Test Assay:		131.2 ppm

Analyzed By Lissette Morales

Certified By Suchana Gurung

UNIT C
CEM MAINTENANCE LOG

UNIT C CEMS MAINTENANCE LOG

MSCC Work Number: 167345

DATE: October 2, 2025 Name: Bryan T, Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder CO2

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance October 2, 2025 CEMS Time 05:09 PST
Clock Time 06:09 PST

Switched out of maintenance October 2, 2025 CEMS Time 05:16 PST
Clock Time 06:16 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
04:55PST	Obtain work authorization from control room, tailboard job and JSA
05:09PST	Put CEMS into maintenance
05:12PST	Replaced depleted gas cylinder CO2
05:16PST	Took CEMS out of maintenance
06:17PST	Auto calibration started
06:41PST	Calibration completed and passed
07:00PST	Notified control room that job was complete

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
11711 S. Alameda Street
Los Angeles, CA 90059
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI82E15A0105	Reference Number:	48-403421679-1
Cylinder Number:	SG9140299BAL	Cylinder Volume:	146.0 CF
Laboratory:	124 - Los Angeles - CA	Cylinder Pressure:	2015 PSIG
PGVP Number:	B32025	Valve Outlet:	580
Gas Code:	CO2,BALN	Certification Date:	Aug 28, 2025

Expiration Date: Aug 28, 2033

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
CARBON DIOXIDE	18.00 %	18.20 %	G1	+/- 0.6% NIST Traceable	08/28/2025
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	06011816	K026476	23.04 % CARBON DIOXIDE/NITROGEN	+/-0.5%	Apr 19, 2028

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
SIEMENS 6E CO2	NDIR	Aug 10, 2025

Triad Data Available Upon Request

Approved for Release

UNIT C CEMS MAINTENANCE LOG

MSCC Work Number: 167694

DATE: October 31, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Replaced depleted gas cylinders CO High, NOx Low and Nitrogen

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance October 31, 2025 CEMS Time 05:08 PST
Clock Time 06:08 PST

Switched out of maintenance October 31, 2025 CEMS Time 05:23 PST
Clock Time 06:23 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
04:55PST	Obtain work authorization from control room, tailboard job and JSA
05:08PST	Put CEMS into maintenance
05:10PST	Replaced depleted gas cylinders CO High, NOx Low and Nitrogen
05:23PST	Took CEMS out of maintenance
06:17PST	Auto calibration started
06:41PST	Calibration completed and passed
07:00PST	Notified control room that job was complete

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

UNITC 10/31/25

Customer & Order Information:

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

Linde Order Number: **73152298**
Customer PO Number: **81169909**

Certificate Issuance Date: **4/23/2025**
Revision Number: **0**
Certification Date: **4/22/2025**
Lot Number: **N70086510705F**
Part Number: **NI 5.5CE-AS**
DocNumber: **829632**

CERTIFICATE OF ANALYSIS

Nitrogen, 5.5 Continuous Emission Monitoring Zero

Analytes	Specification	Analytical Results	Analytical Reference	Analytical Uncertainty
Nitrogen	**≥ 99.9995 %**	**≥ 99.9995 %**	**5**	**N/A**
Carbon Dioxide	**≤ 1 ppm**	**≤ 1.0 ppm**	**3**	**± 10%**
Carbon Monoxide	**≤ 0.5 ppm**	**≤ 0.5 ppm**	**3**	**± 15%**
Total Hydrocarbons	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**2**	**± 15%**
Oxides of Nitrogen	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**4**	**± 15%**
Oxygen	**≤ 0.5 ppm**	**≤ 0.5 ppm**	**1**	**± 15%**
Sulfur Dioxide	**≤ 0.1 ppm**	**≤ 0.1 ppm**	**4**	**± 15%**
Water	**≤ 2 ppm**	**≤ 2.0 ppm**	**6**	**± 10%**

Cylinder Style: **AS**
Fill Date: **4/17/2025**
Filling Method: **Pressure/Temperature**
Cylinder Pressure @ 70 F: **2000 psig**
Analysis Date: **4/22/2025**
Cylinder Volume: **142 ft3**
Valve Outlet Connection: **CGA 580**
Cylinder Number(s): **DT0057736, CC122809, DT0057734**
Analyzed Cylinder Number(s): **DT0057736**

Analyst: **Muneeb Abdelrahman-Chemist**
Approved Signer: **Amalia Real**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	Delta F DF-550 Nanotrace - Electrolytic Cell/Electrochemical
2	Horiba FIA MEXA-1170HFID, S/N S210337836900001 - FID Total Hydrocarbon Analyzer
3	Horiba Instruments Inc. GA-360E - NDIR
4	MKS 2 MultiGas 2031 FTIR - FTIR
5	N/A - By Difference of Typical Impurities
6	Tiger Optics MTO-1000 - Cavity Ring-down Spectroscopy

This analysis of the product described herein was prepared by Linde Gas & Equipment Inc. using instruments whose calibration is certified using Linde Gas & Equipment Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by mole unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

DocNumber: 596398

UNIT C 10/31/25

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Fax: 714-542-6689
PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 05/27/2025
Linde Order Number: 73160062
Part Number: NI CO90ME-AS
Customer PO Number: 81177719

Fill Date: 05/20/2025
Lot Number: 70086514003M
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 143 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	05/27/2033	NIST Traceable
Cylinder Number:	CC103408	Expanded Uncertainty
90.6 ppm	Carbon monoxide	± 0.7 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 05/27/2025 Term: 96 Months Expiration Date: 05/27/2033

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: 90 ppm
Certified Concentration: 90.6 ppm
Instrument Used: Horiba VIA-510 S/N LVJJNDAG
Analytical Method: NDIR
Last Multipoint Calibration: 04/30/2025

Reference Standard: Type / Cylinder #: NTRM / CC12259
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 / ±0.8ppm
SRM Expiration Date: 07/09/2027

First Analysis Data:						Date	05/27/2025
Z:	0	R:	100.1	C:	90.6	Conc:	90.6
R:	100.1	Z:	0	C:	90.7	Conc:	90.7
Z:	0	C:	90.6	R:	100.1	Conc:	90.6
UOM:	ppm			Mean Test Assay:		90.6	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

Analyzed By: Miriam Bahena

Certified By: Courtney Zielke

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DocNumber: 598474

UNIT C 10/31/25

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CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 07/10/2025
Linde Order Number: 73193410
Part Number: NI NO9ME-AS
Customer PO Number: 81211552

Fill Date: 06/14/2025
Lot Number: 70086516506H
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	07/10/2028	NIST Traceable
Cylinder Number:	CC36923	Expanded Uncertainty
8.58 ppm	Nitric oxide	± 0.05 ppm
Balance	Nitrogen	

For Reference Only: NOx 8.64 ppm

Certification Information: Certification Date: 07/10/2025 Term: 36 Months Expiration Date: 07/10/2028

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: 9 ppm
Certified Concentration: 8.58 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 06/25/2025

Reference Standard: Type / Cylinder #: GMIS / ND7404
Concentration / Uncertainty: 10.45 ppm ±0.05 ppm
Expiration Date: 04/15/2027
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2268801 / APEX1429266
SRM Concentration / Uncertainty: 10.01 ppm / ±0.05ppm
SRM Expiration Date: 09/30/2024

First Analysis Data:						Date	06/27/2025
Z:	0	R:	10.45	C:	8.57	Conc:	8.57
R:	10.46	Z:	0	C:	8.6	Conc:	8.6
Z:	0	C:	8.59	R:	10.44	Conc:	8.59
UOM:	ppm			Mean Test Assay:			8.59 ppm

Second Analysis Data:						Date	07/10/2025
Z:	0	R:	10.45	C:	8.56	Conc:	8.57
R:	10.44	Z:	0	C:	8.59	Conc:	8.6
Z:	0	C:	8.58	R:	10.44	Conc:	8.59
UOM:	ppm			Mean Test Assay:			8.58 ppm

Analyzed By: Henry Koung

Certified By: Courtney Zielke

UNIT C CEMS MAINTENANCE LOG

MSCC Work Number: 167707

DATE: November 11, 2025 Name: Bryan Taylor/Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinder O2

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 11, 2025 CEMS Time 07:00 PST
Clock Time 07:00 PST

Switched out of maintenance November 11, 2025 CEMS Time 07:03 PST
Clock Time 07:03 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
06:15PST	Obtain work authorization from control room, tailboard job and JSA
07:00PST	Put CEMS into maintenance
07:01PST	Replaced depleted gas cylinder O2
07:03PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

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PGVP ID: F22025

DocNumber: 601367

Unit C 11/11/25

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 08/11/2025
Linde Order Number: 73259915
Part Number: NI OX22.5E-AS
Customer PO Number: 81279133

Fill Date: 08/05/2025
Lot Number: 70086521703M
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 142 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date: 08/11/2033		NIST Traceable
Cylinder Number: CC341120		Expanded Uncertainty
22.61 %	Oxygen	± 0.07 %
Balance	Nitrogen	

Certification Information:

Certification Date: 08/11/2025 Term: 96 Months Expiration Date: 08/11/2033

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:** Oxygen

Requested Concentration: 22.5 %
Certified Concentration: 22.61 %
Instrument Used: Siemens Oxymat 6E S/N 7MB20211AA000CA1
Analytical Method: Paramagnetic
Last Multipoint Calibration: 07/17/2025

Reference Standard: Type / Cylinder #: GMIS / DT0040804
Concentration / Uncertainty: 20.86 % ±0.05 %
Expiration Date: 09/09/2032
Traceable to: SRM # / Sample # / Cylinder #: 2659a / 71-D-23 / CAL015788
SRM Concentration / Uncertainty: 20.720 % / ±0.043%
SRM Expiration Date: 02/28/2026

First Analysis Data:						Date 08/11/2025
Z: 0	R: 20.86	C: 22.62	Conc: 22.61			
R: 20.88	Z: 0	C: 22.63	Conc: 22.62			
Z: 0	C: 22.62	R: 20.87	Conc: 22.61			
UOM: %			Mean Test Assay: 22.61 %			

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 Miriam Bahena

Certified By Courtney Zielke

UNIT C CEMS MAINTENANCE LOG

MSCC Work Number: 166559

DATE: November 19, 2025 Name: Bryan Taylor

REASON FOR CEMS SERVICE: Perform Calibration Gas Audit

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 19, 2025 CEMS Time 09:41 PST
Clock Time 09:41 PST

Switched out of maintenance November 19, 2025 CEMS Time 11:51 PST
Clock Time 11:51 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
07:50PST	Obtain work authorization from control room, tailboard job and JSA
09:41PST	Put CEMS into maintenance
09:45PST	Performed Calibration Gas Audit
11:51PST	Took CEMS out of maintenance
11:55PST	Auto calibration started
12:19PST	Calibration completed and passed
13:00PST	Notified control room that job was complete

UNIT C CEMS MAINTENANCE LOG

MSCC Work Number: 167718

DATE: November 21, 2025 Name: Greg T Davis

REASON FOR CEMS SERVICE: Replaced depleted gas cylinders CO Low & Nox Hi

Was the maintenance scheduled or unscheduled? Scheduled

Switched into maintenance November 21, 2025 CEMS Time 06:12 PST
Clock Time 06:12 PST

Switched out of maintenance November 21, 2025 CEMS Time 06:31 PST
Clock Time 06:31 PST

Did the CEMS record an exceedance? NO
Was the exceedance actual? N/A

Was any hourly data lost? No data was lost. Unit was offline

Corrective action taken and work done	Time in CEMS time Pacific Standard Time
06:05PST	Obtain work authorization from control room, tailboard job and JSA
06:12PST	Put CEMS into maintenance
06:15PST	Replaced depleted gas cylinders CO Low & Nox Hi
06:31PST	Took CEMS out of maintenance
07:17PST	Auto calibration started
07:41PST	Calibration completed and passed
08:00PST	Notified control room that job was complete

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PGVP ID: F22025

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 05/06/2025
Linde Order Number: 73160062
Part Number: NI CO9ME-AS
Customer PO Number: 81177719

Fill Date: 05/02/2025
Lot Number: 70086512201L
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 144 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	05/06/2033	NIST Traceable
Cylinder Number:	CC73060	Expanded Uncertainty
9.06 ppm	Carbon monoxide	± 0.04 ppm
Balance	Nitrogen	

Certification Information: Certification Date: 05/06/2025 Term: 96 Months Expiration Date: 05/06/2033

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: 9 ppm
Certified Concentration: 9.06 ppm
Instrument Used: Horiba VIA-510 S/N 43627990042
Analytical Method: NDIR
Last Multipoint Calibration: 04/15/2025

Reference Standard: Type / Cylinder #: GMIS / CC113540
Concentration / Uncertainty: 9.18 ppm ±0.04 ppm
Expiration Date: 03/18/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM#D245751 / C2456801.06 / D245751
SRM Concentration / Uncertainty: 9.954 ppm / ±0.03ppm
SRM Expiration Date: 05/30/2028

First Analysis Data:						Date	05/06/2025
Z: 0	R: 91.5	C: 90.4	Conc: 9.06				
R: 91.7	Z: 0	C: 90.5	Conc: 9.07				
Z: 0	C: 90.4	R: 91.7	Conc: 9.06				
UOM: mV			Mean Test Assay:	9.06	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: mV			Mean Test Assay:		ppm		

Analyzed By: Miriam Bahena

Certified By: Nelson Ma

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CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

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

Certificate Issuance Date: 08/27/2025
Linde Order Number: 73259915
Part Number: NI NO135E-AS
Customer PO Number: 81279133

Fill Date: 08/09/2025
Lot Number: 70086522102H
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	08/27/2033	NIST Traceable
Cylinder Number:	DT0022816	Expanded Uncertainty
137.8 ppm	Nitric oxide	± 0.8 ppm
138.1 ppm	Nitric oxide (as NOx)	± 0.8 ppm
Balance	Nitrogen	

Certification Information:

Certification Date: 08/27/2025 Term: 96 Months Expiration Date: 08/27/2033

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: 135 ppm
Certified Concentration: 137.8 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/15/2025

Reference Standard: Type / Cylinder #: GMIS / GN0034458
Concentration / Uncertainty: 100.5 ppm ±0.3 ppm
Expiration Date: 08/12/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901.04 / APE 1933195
SRM Concentration / Uncertainty: 100.11 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

First Analysis Data:						Date	08/20/2025
Z:	0	R:	100.5	C:	137.7	Conc:	137.7
R:	100.5	Z:	0	C:	137.7	Conc:	137.7
Z:	0	C:	137.7	R:	100.5	Conc:	137.7
UOM:	ppm			Mean Test Assay:			137.7 ppm

Second Analysis Data:						Date	08/27/2025
Z:	0	R:	100.5	C:	138	Conc:	138
R:	100.5	Z:	0	C:	137.8	Conc:	137.8
Z:	0	C:	137.9	R:	100.4	Conc:	137.9
UOM:	ppm			Mean Test Assay:			137.9 ppm

2. Component: Nitric oxide (as NOx)

Requested Concentration: 135 ppm
Certified Concentration: 138.1 ppm
Instrument Used: Thermo Electron 42i S/N 0726024326
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 08/15/2025

Reference Standard: Type / Cylinder #: GMIS / GN0034458
Concentration / Uncertainty: 100.7 ppm ±0.3 ppm
Expiration Date: 08/12/2033
Traceable to: SRM # / Sample # / Cylinder #: PRM / C2515901.04 / APE 1933195
SRM Concentration / Uncertainty: 100.15 ppm / ±0.30ppm
SRM Expiration Date: 01/22/2028

First Analysis Data:						Date	08/20/2025
Z:	0	R:	100.7	C:	138	Conc:	138
R:	100.7	Z:	0	C:	137.9	Conc:	137.9
Z:	0	C:	137.9	R:	100.7	Conc:	137.9
UOM:	ppm			Mean Test Assay:			137.9 ppm

Second Analysis Data:						Date	08/27/2025
Z:	0	R:	100.7	C:	138.4	Conc:	138.4
R:	100.7	Z:	0	C:	138.1	Conc:	138.1
Z:	0	C:	138.3	R:	100.7	Conc:	138.3
UOM:	ppm			Mean Test Assay:			138.3 ppm

Analyzed By: Lissette Morales

Certified By: Suchana Gurung

Midway Sunset Cogeneration Company

CEM System
Calibration Gas Audit
Fourth Quarter 2025

Prepared for:

Midway Sunset Cogeneration Company

Conducted by:

RAP Services, Inc.
1400 Easton Drive, Suite 111
Bakersfield, CA 93309

January 2026

CEM System
Calibration Gas Audit

At the request of Midway Sunset Cogeneration Company, **RAP Services, Inc.** performed a Calibration Gas Audit (CGA) on the Continuous Emission Monitor (CEM) systems in service at the Midway Sunset Cogeneration facility. The purpose of this test was to satisfy CEM Quality Assurance (QA) requirements for this quarter by verifying CEM system accuracy and linearity.

The CGA tests of the CEM systems serving Units A, B and C exhaust stacks were conducted by **RAP Services, Inc.** using procedures set forth in 40 CFR, Part 60, Appendix F, Calibration Gas Audit Procedures. All the analyzers subject to this CGA were found to be in compliance with the Appendix F requirements.

Pollutant audit gases are approximately 25 percent and 55 percent of the normal analyzer range. Oxygen audit gases are approximately 5 percent and 10 percent oxygen by concentration. Carbon dioxide audit gases are approximately 6.5 percent and 12 percent carbon dioxide by concentration.

40 CFR, PART 60, APPENDIX F CALIBRATION GAS AUDIT PROCEDURE

Low-range and mid-range calibration gases were introduced to the analyzers via the sample handling system through a tee connection located at the sample probe. The first leg of the tee was open to the atmosphere to prevent pressurizing the sample system with calibration gas, masking potential leaks. The gas was allowed to flow through the sample handling system (i.e. filters, moisture removal system and flow restrictions) until a stable reading at each monitor was obtained. This procedure was then repeated for each gas and each analyzer in triplicate.

The audit is based on the average analyzer response to each level of gas, then expressed as a percent of the actual gas value. A limit of ± 15 percent of the audit gas value is allowed, or alternatively ± 5 ppm for pollutants. Although zero drift is not a requirement of Appendix F QA Protocol, one measurement is included for reference.

Midway Sunset Cogeneration
Unit A
CGA Results - 4th Quarter 2025

Date: 11/18/2025
Technician(s): Kevin Sanchez

Instrument & Audit Point	Test Run	Audit Gas	Instrument Response	Difference	% Accuracy	Exp Date
Low Range NOx	Zero	0.00	-0.05	-0.05	N/A	
Audit Point 1	1	2.53	2.58	0.05	1.98	
Cylinder # CC336063	2	2.53	2.60	0.07	2.77	
Inst Make: Horiba	3	2.53	2.59	0.06	2.37	
Model: CMA-EC662L1	**Avg**	**2.53**	**2.59**	**0.06**	**2.37**	**3/28/2026**
Low Range NOx	1	5.45	5.48	0.03	0.55	
Audit Point 2	2	5.45	5.50	0.05	0.92	
Cylinder # DT0018167	3	5.45	5.53	0.08	1.47	
Range 0-10 ppm	**Avg**	**5.45**	**5.50**	**0.05**	**0.98**	**3/27/2026**
Low Range CO	Zero	0.00	-0.01	-0.01	N/A	
Audit Point 1	1	2.59	2.54	-0.05	-1.93	
Cylinder # CC336063	2	2.59	2.60	0.01	0.39	
Inst Make: Horiba	3	2.59	2.56	-0.03	-1.16	
Model: CMA-EC662L1	**Avg**	**2.59**	**2.57**	**-0.02**	**-0.90**	**3/28/2026**
Low Range CO	1	5.51	5.62	0.11	2.00	
Audit Point 2	2	5.51	5.69	0.18	3.27	
Cylinder # DT0018167	3	5.51	5.61	0.10	1.81	
Range 0-10 ppm	**Avg**	**5.51**	**5.64**	**0.13**	**2.36**	**3/27/2026**
O2	Zero	0.00	-0.01	-0.01	N/A	
Audit Point 1	1	5.03	5.03	0.00	0.00	
Cylinder # ALM-022903	2	5.03	5.00	-0.03	-0.60	
Inst Make: Horiba	3	5.03	5.08	0.05	0.99	
Model: CMA-EC662L1	**Avg**	**5.03**	**5.04**	**0.01**	**0.13**	**4/27/2028**
O2	1	10.18	10.19	0.01	0.10	
Audit Point 2	2	10.18	10.27	0.09	0.88	
Cylinder # EB0092992	3	10.18	10.20	0.02	0.20	
Range: 0-25 %	**Avg**	**10.18**	**10.22**	**0.04**	**0.39**	**4/15/2030**

Limit: The greater of ± 15% average accuracy, or (applicable to pollutants only) ± 5 ppm average difference.

Midway Sunset Cogeneration
Unit A
CGA Results - 4th Quarter 2025

Date: 11/18/2025
Technician(s): Kevin Sanchez

Instrument & Audit Point	Test Run	Audit Gas	Instrument Response	Difference	% Accuracy	Exp Date
High Range NOx	Zero	0.00	-0.05	-0.05	N/A	
Audit Point 1	1	37.0	36.16	-0.84	-2.27	
Cylinder # CC443985	2	37.0	36.15	-0.85	-2.30	
Inst Make: Horiba	3	37.0	36.24	-0.76	-2.05	
Model: CMA-EC662L1	**Avg**	**37.0**	**36.18**	**-0.82**	**-2.21**	**2/27/2026**
High Range NOx	1	81.3	81.49	0.19	0.23	
Audit Point 2	2	81.3	81.50	0.20	0.25	
Cylinder # DT0037105	3	81.3	81.65	0.35	0.43	
Range 0-150 ppm	**Avg**	**81.3**	**81.55**	**0.25**	**0.30**	**3/1/2031**
High Range CO	Zero	0.00	-0.01	-0.01	N/A	
Audit Point 1	1	25.1	25.43	0.33	1.31	
Cylinder # CC443985	2	25.1	25.38	0.28	1.12	
Inst Make: Horiba	3	25.1	25.36	0.26	1.04	
Model: CMA-EC662L1	**Avg**	**25.1**	**25.39**	**0.29**	**1.16**	**2/27/2026**
High Range CO	1	55.2	55.14	-0.06	-0.11	
Audit Point 2	2	55.2	55.26	0.06	0.11	
Cylinder # DT0037105	3	55.2	55.21	0.01	0.02	
Range 0-100 ppm	**Avg**	**55.2**	**55.20**	**0.00**	**0.01**	**3/1/2031**
CO2	Zero	0.00	0.00	0.00	N/A	
CO2 Audit Point 1	1	6.50	6.86	0.36	5.54	
Cylinder # DT0011118	2	6.50	6.89	0.39	6.00	
Inst Make: Horiba	3	6.50	6.88	0.38	5.85	
Model: CMA-EC662L1	**Avg**	**6.50**	**6.88**	**0.38**	**5.79**	**6/3/2028**
CO2	1	12.03	12.34	0.31	2.58	
CO2 Audit Point 2	2	12.03	12.36	0.33	2.74	
Cylinder # CC101959	3	12.03	12.34	0.31	2.58	
Range: 0-20 %	**Avg**	**12.03**	**12.35**	**0.32**	**2.63**	**6/3/2028**

Limit: The greater of ± 15% average accuracy, or (applicable to pollutants only) ± 5 ppm average difference.

Midway Sunset Cogeneration
Unit B
CGA Results - 4th Quarter 2025

Date: 11/19/2025
Technician(s): Kevin Sanchez

Instrument & Audit Point	Test Run	Audit Gas	Instrument Response	Difference	% Accuracy	Exp Date
Low Range NOx	Zero	0.00	0.00	0.00	N/A	
Audit Point 1	1	2.53	2.55	0.02	0.79	
Cylinder # CC336063	2	2.53	2.51	-0.02	-0.79	
Inst Make: Horiba	3	2.53	2.56	0.03	1.19	
Model: CMA-EC662L1	**Avg**	**2.53**	**2.54**	**0.01**	**0.40**	**3/28/2026**
Low Range NOx	1	5.45	5.42	-0.03	-0.55	
Audit Point 2	2	5.45	5.44	-0.01	-0.18	
Cylinder # DT0018167	3	5.45	5.48	0.03	0.55	
Range 0-10 ppm	**Avg**	**5.45**	**5.45**	**0.00**	**-0.06**	**3/27/2026**
Low Range CO	Zero	0.00	-0.03	-0.03	N/A	
Audit Point 1	1	2.59	2.74	0.15	5.79	
Cylinder # CC336063	2	2.59	2.83	0.24	9.27	
Inst Make: Horiba	3	2.59	2.92	0.33	12.74	
Model: CMA-EC662L1	**Avg**	**2.59**	**2.83**	**0.24**	**9.27**	**3/28/2026**
Low Range CO	1	5.51	5.59	0.08	1.45	
Audit Point 2	2	5.51	5.78	0.27	4.90	
Cylinder # DT0018167	3	5.51	5.87	0.36	6.53	
Range 0-10 ppm	**Avg**	**5.51**	**5.75**	**0.24**	**4.30**	**3/27/2026**
O2	Zero	0.00	-0.02	-0.02	N/A	
Audit Point 1	1	5.03	5.06	0.03	0.60	
Cylinder # ALM-022903	2	5.03	5.08	0.05	0.99	
Inst Make: Horiba	3	5.03	5.08	0.05	0.99	
Model: CMA-EC662L1	**Avg**	**5.03**	**5.07**	**0.04**	**0.86**	**4/27/2028**
O2	1	10.18	10.22	0.04	0.39	
Audit Point 2	2	10.18	10.22	0.04	0.39	
Cylinder # EB0092992	3	10.18	10.14	-0.04	-0.39	
Range: 0-25 %	**Avg**	**10.18**	**10.19**	**0.01**	**0.13**	**4/15/2030**

Limit: The greater of ± 15% average accuracy, or (applicable to pollutants only) ± 5 ppm average difference.

Midway Sunset Cogeneration
Unit B
CGA Results - 4th Quarter 2025

Date: 11/19/2025
Technician(s): Kevin Sanchez

Instrument & Audit Point	Test Run	Audit Gas	Instrument Response	Difference	% Accuracy	Exp Date
High Range NOx	Zero	0.00	0.00	0.00	N/A	
Audit Point 1	1	37.0	36.13	-0.87	-2.35	
Cylinder # CC443985	2	37.0	36.11	-0.89	-2.41	
Inst Make: Horiba	3	37.0	36.20	-0.80	-2.16	
Model: CMA-EC662L1	**Avg**	**37.0**	**36.15**	**-0.85**	**-2.31**	**2/27/2026**
High Range NOx	1	81.3	81.47	0.17	0.21	
Audit Point 2	2	81.3	81.52	0.22	0.27	
Cylinder # DT0037105	3	81.3	81.60	0.30	0.37	
Range 0-150 ppm	**Avg**	**81.3**	**81.53**	**0.23**	**0.28**	**3/1/2031**
High Range CO	Zero	0.00	-0.03	-0.03	N/A	
Audit Point 1	1	25.1	25.18	0.08	0.32	
Cylinder # CC443985	2	25.1	25.19	0.09	0.36	
Inst Make: Horiba	3	25.1	25.31	0.21	0.84	
Model: CMA-EC662L1	**Avg**	**25.1**	**25.23**	**0.13**	**0.50**	**2/27/2026**
High Range CO	1	55.2	55.09	-0.11	-0.20	
Audit Point 2	2	55.2	55.10	-0.10	-0.18	
Cylinder # DT0037105	3	55.2	55.11	-0.09	-0.16	
Range 0-100 ppm	**Avg**	**55.2**	**55.10**	**-0.10**	**-0.18**	**3/1/2031**
CO2	Zero	0.00	-0.02	-0.02	N/A	
CO2 Audit Point 1	1	6.50	6.69	0.19	2.92	
Cylinder # DT0011118	2	6.50	6.70	0.20	3.08	
Inst Make: Horiba	3	6.50	6.70	0.20	3.08	
Model: CMA-EC662L1	**Avg**	**6.50**	**6.70**	**0.20**	**3.03**	**6/3/2028**
CO2	1	12.03	12.19	0.16	1.33	
CO2 Audit Point 2	2	12.03	12.18	0.15	1.25	
Cylinder # CC101959	3	12.03	12.21	0.18	1.50	
Range: 0-20 %	**Avg**	**12.03**	**12.19**	**0.16**	**1.36**	**6/3/2028**

Limit: The greater of ± 15% average accuracy, or (applicable to pollutants only) ± 5 ppm average difference.

Midway Sunset Cogeneration
Unit C
CGA Results - 4th Quarter 2025

Date: 11/19/2025
Technician(s): Kevin Sanchez

Instrument & Audit Point	Test Run	Audit Gas	Instrument Response	Difference	% Accuracy	Exp Date
Low Range NOx	Zero	0.00	-0.02	-0.02	N/A	
Audit Point 1	1	2.53	2.60	0.07	2.77	
Cylinder # CC336063	2	2.53	2.62	0.09	3.56	
Inst Make: Horiba	3	2.53	2.63	0.10	3.95	
Model: CMA-EC662L1	**Avg**	**2.53**	**2.62**	**0.09**	**3.43**	**3/28/2026**
Low Range NOx	1	5.45	5.54	0.09	1.65	
Audit Point 2	2	5.45	5.56	0.11	2.02	
Cylinder # DT0018167	3	5.45	5.51	0.06	1.10	
Range 0-10 ppm	**Avg**	**5.45**	**5.54**	**0.09**	**1.59**	**3/27/2026**
Low Range CO	Zero	0.00	-0.02	-0.02	N/A	
Audit Point 1	1	2.59	2.83	0.24	9.27	
Cylinder # CC336063	2	2.59	2.82	0.23	8.88	
Inst Make: Horiba	3	2.59	2.83	0.24	9.27	
Model: CMA-EC662L1	**Avg**	**2.59**	**2.83**	**0.24**	**9.14**	**3/28/2026**
Low Range CO	1	5.51	5.83	0.32	5.81	
Audit Point 2	2	5.51	5.93	0.42	7.62	
Cylinder # DT0018167	3	5.51	6.02	0.51	9.26	
Range 0-10 ppm	**Avg**	**5.51**	**5.93**	**0.42**	**7.56**	**3/27/2026**
O2	Zero	0.00	0.01	0.01	N/A	
Audit Point 1	1	5.03	5.01	-0.02	-0.40	
Cylinder # ALM-022903	2	5.03	5.00	-0.03	-0.60	
Inst Make: Horiba	3	5.03	5.01	-0.02	-0.40	
Model: CMA-EC662L1	**Avg**	**5.03**	**5.01**	**-0.02**	**-0.46**	**4/27/2028**
O2	1	10.18	10.12	-0.06	-0.59	
Audit Point 2	2	10.18	10.17	-0.01	-0.10	
Cylinder # EB0092992	3	10.18	10.19	0.01	0.10	
Range: 0-25 %	**Avg**	**10.18**	**10.16**	**-0.02**	**-0.20**	**4/15/2030**

Limit: The greater of ± 15% average accuracy, or (applicable to pollutants only) ± 5 ppm average difference.

Midway Sunset Cogeneration
Unit C
CGA Results - 4th Quarter 2025

Date: 11/19/2025
Technician(s): Kevin Sanchez

Instrument & Audit Point	Test Run	Audit Gas	Instrument Response	Difference	% Accuracy	Exp Date
High Range NOx	Zero	0.00	-0.02	-0.02	N/A	
Audit Point 1	1	37.0	36.22	-0.78	-2.11	
Cylinder # CC443985	2	37.0	36.20	-0.80	-2.16	
Inst Make: Horiba	3	37.0	36.24	-0.76	-2.05	
Model: CMA-EC662L1	**Avg**	**37.0**	**36.22**	**-0.78**	**-2.11**	**2/27/2026**
High Range NOx	1	81.3	81.88	0.58	0.71	
Audit Point 2	2	81.3	81.94	0.64	0.79	
Cylinder # DT0037105	3	81.3	81.97	0.67	0.82	
Range 0-150 ppm	**Avg**	**81.3**	**81.93**	**0.63**	**0.77**	**3/1/2031**
High Range CO	Zero	0.00	-0.02	-0.02	N/A	
Audit Point 1	1	25.1	25.09	-0.01	-0.04	
Cylinder # CC443985	2	25.1	25.18	0.08	0.32	
Inst Make: Horiba	3	25.1	25.14	0.04	0.16	
Model: CMA-EC662L1	**Avg**	**25.1**	**25.14**	**0.04**	**0.15**	**2/27/2026**
High Range CO	1	55.2	55.08	-0.12	-0.22	
Audit Point 2	2	55.2	55.00	-0.20	-0.36	
Cylinder # DT0037105	3	55.2	55.19	-0.01	-0.02	
Range 0-100 ppm	**Avg**	**55.2**	**55.09**	**-0.11**	**-0.20**	**3/1/2031**
CO2	Zero	0.00	0.00	0.00	N/A	
CO2 Audit Point 1	1	6.50	6.46	-0.04	-0.62	
Cylinder # DT0011118	2	6.50	6.47	-0.03	-0.46	
Inst Make: Horiba	3	6.50	6.46	-0.04	-0.62	
Model: CMA-EC662L1	**Avg**	**6.50**	**6.46**	**-0.04**	**-0.56**	**6/3/2028**
CO2	1	12.03	12.05	0.02	0.17	
CO2 Audit Point 2	2	12.03	12.06	0.03	0.25	
Cylinder # CC101959	3	12.03	12.05	0.02	0.17	
Range: 0-20 %	**Avg**	**12.03**	**12.05**	**0.02**	**0.19**	**6/3/2028**

Limit: The greater of ± 15% average accuracy, or (applicable to pollutants only) ± 5 ppm average difference.

Midway Sunset Cogeneration
Original Horiba CEMS
CGA Results - 4th Quarter 2025

Date: **11/18/2025**
Technician(s): **Kevin Sanchez**

Instrument & Audit Point	Test Run	Audit Gas	Instrument Response	Difference	% Accuracy	Exp Date
Low Range NOx	**Zero**	0.00	0.06	0.06	N/A	
Audit Point 1	**1**	5.45	5.11	-0.34	-6.24	
Cylinder # DT0018167	**2**	5.45	5.10	-0.35	-6.42	
Inst Make: Horiba	**3**	5.45	5.10	-0.35	-6.42	
Model: ENDA	**Avg**	**5.45**	**5.10**	**-0.35**	**-6.36**	**3/27/2026**
Low Range NOx	**1**	13.58	12.54	-1.04	-7.66	
Audit Point 2	**2**	13.58	12.53	-1.05	-7.73	
Cylinder # CC423137	**3**	13.58	12.52	-1.06	-7.81	
Range 0-25 ppm	**Avg**	**13.58**	**12.53**	**-1.05**	**-7.73**	**12/28/2025**
Low Range CO	**Zero**	0.00	0.07	0.07	N/A	
Audit Point 1	**1**	25.1	24.71	-0.39	-1.55	
Cylinder # CC443985	**2**	25.1	24.70	-0.40	-1.59	
Inst Make: Horiba	**3**	25.1	24.73	-0.37	-1.47	
Model: ENDA	**Avg**	**25.1**	**24.71**	**-0.39**	**-1.54**	**2/27/2026**
Low Range CO	**1**	55.2	53.71	-1.49	-2.70	
Audit Point 2	**2**	55.2	53.81	-1.39	-2.52	
Cylinder # DT0037105	**3**	55.2	53.85	-1.35	-2.45	
Range 0-100 ppm	**Avg**	**55.2**	**53.79**	**-1.41**	**-2.55**	**3/1/2031**
O2	**Zero**	0.00	0.35	0.35	N/A	
Audit Point 1	**1**	5.03	5.35	0.32	6.36	
Cylinder # ALM-022903	**2**	5.03	5.36	0.33	6.56	
Inst Make: Horiba	**3**	5.03	5.34	0.31	6.16	
Model: ENDA	**Avg**	**5.03**	**5.35**	**0.32**	**6.36**	**4/27/2028**
O2	**1**	10.18	10.39	0.21	2.06	
Audit Point 2	**2**	10.18	10.40	0.22	2.16	
Cylinder # EB0092992	**3**	10.18	10.42	0.24	2.36	
Range: 0-25 %	**Avg**	**10.18**	**10.40**	**0.22**	**2.19**	**4/15/2030**

Limit: The greater of ± 15% average accuracy, or (applicable to pollutants only) ± 5 ppm average difference.

The SLC Conditions have been removed, and Aera has surrendered the permit associated with the steam generator that is no longer applied.

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