MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

INACTIVE

B012854

Inactive type Permit has no description information.

EXPIRES LAST DAY OF: OCTOBER 2025

OWNER OF OPERATOR (Co.#31)

Southern California Gas Co. - MD
9400 Oakdale Avenue
Chatsworth, CA 91313

EQUIPMENT LOCATION (Fac.#1437)

SCG - Blythe
13100 W 14th Avenue
Blythe, CA 92225

Description:
TURBINE, CENTRIFUGAL NATURAL GAS COMPRESSOR 3, PLANT 4 consisting of: One Siemens-Dresser, natural gas-fired turbine, Model No. SGT-300 and Serial No. TBD, producing 7954 bhp at 12000 rpm while consuming a maximum of 71.83 MMBtu/hr. This turbine is equipped with Dry Low NOx Combustors (DLN), selective catalytic NOx reduction system (SCR) with valid District permit C012862, and VOC and CO oxidation catalyst system with valid District permit C012858. This turbine powers a Siemens-Dresser Compressor Model No. TBD with a mechanical rating of less than 10 MW. Turbine is Subject to the Emissions Limitations of 40 CFR 63, Subpart YYYY, Table 1. Equipment Elevation is 259 feet above sea level. Stack is 60 feet high and has a diameter of 7.5 ft. Stack exhausts at 160,000 acfm at a temperature of 780 Degrees F and at a velocity of 18.4 m/s. Note: This turbine compressor will become operational during Phase II of the BCS NSR Project. EMISSIONS RATES // Pollutant // Limit at Max Load // Oxygen Level Correction CO // 8 ppmvd // @15% O2 NOx // 8 ppmvd // @15% O2 (steady-state) NOx // 12 ppmvd // @15% O2 (transitional) VOC // 4.3 ppmvd // @15% O2 CH2O // 91 ppbvd // @15% O2 ===

CONDITIONS:

1. This equipment, and any associated air pollution control device(s), shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a), 40 CFR 63 Subpart YYYY]

2. This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 1.0 grains per 100 dscf on a rolling twelve month average basis. Compliance with this limit shall be demonstrated by providing evidence of a contract, tariff sheet or other approved documentation that shows that the fuel meets the definition of pipeline quality gas.
[District Rules 431-Sulfur Content of Fuel, and 1302 (C)(2)(a) - BACT]

Fee Schedule: 1 (d)	Rating: 7954 bhp	SIC: 4922	SCC: 20100201	Location/UTM(Km): 719E/3271N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

Southern California Gas Co. - MD
PO Box 2300, SC 9314
Chatsworth, CA 91313-2300

By: **COPY**
Eldon Heaston
Air Pollution Control Officer

UNOFFICIAL

3. The owner/operator shall maintain an operations log (in either electronic or hardcopy format) on a daily basis for this equipment, which contains at a minimum the following information. Log must be maintained on-site for a minimum of five (5) years and presented to District, State, or Federal personnel upon request.
a. Start-up and Stop time;
b. Time and duration of each steady state period and non-steady state (transitional) period and the quantity of fuel used during each period;
c. Total hours of operation per day, per month and per year;
d.Duration of all start-up and shutdown periods;
e. Daily, monthly and calendar year fuel consumption summary in cubic feet;
f. Annual average heating value of fuel (in accordance with District Rule 1159 or equivalent);
g. Monthly and calendar year totals for hours operated in each load type, Steady State and Transitional;
h. Record(s) of all maintenance, malfunction, repairs (eg. corrective action);
i. Results of most recent compliance test; and
j. Continuous emissions monitors records;
k. Monitor on continuous basis the catalyst inlet temperature, and
l. Monitor and record the distillate oil daily usage with a non-resettable hour meter.
[District Rules 1159, 1302, and 40 CFR 63 Subpart YYYY]

4. Emissions of NOx, CO, and oxygen shall be monitored using a Continuous Emissions Monitoring System (CEMS). Turbine fuel consumption shall be monitored using a continuous monitoring system. The operator shall install, calibrate, maintain and operate these monitoring systems according to a District-approved monitoring plan and Rule 218, and they shall be installed prior to initial equipment startup. Six (6) months prior to installation the operator shall submit a monitoring plan for District review and approval.

Note: The District has reviewed and approved the Quality Assurance Plan (QAP), dated July 2020; CEMTEK Project No.: 50691; EMTEK Document No.: 50691-QAP.
[District Rules 218 and 1302 and 40 CFR 60.334(b)]

5. The CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA.
[District Rule 1302 and 40 CFR 60.334(b)(1)]

6. Emissions of NOx, VOC, and CO from this turbine shall not exceed the following emission limits, verified by an initial and annual compliance source test.
a. Steady State NOx: 2.12 lb/hr (based on 8 ppmvd @ 15% oxygen, three hour average);
b. CO: 1.29 lb/hr (based on 8 ppmvd @ 15% oxygen);
c. VOC: 0.40 lb/hr (based on 4.3 ppmvd @ 15% oxygen);
d. NH4: 20 ppmvd (@ 15% oxygen), and
e. CH2O: 91 ppbvd or less (@ 15% oxygen)

Note: CO and VOC emission limits are BACT established levels. These concentrations limits are lower than the emission concentration limits of District Rule 1159.
[Regulation XIII-BACT requirement in the case of NOx, VOC, and CO]

7. Owner operator shall limit the concentration of formaldehyde to 91 ppbvd or less at 15-percent O2, except during turbine startup. The period of time for turbine startup is subject to the limits specified in the definition of startup in 63.6175.
[40 CFR 63 Subpart YYYY, Table 1]

8. The owner/operator must submit a compliance/source test protocol at least thirty (30) days prior to the compliance/source test date. The owner/operator must conduct all required compliance/source tests in accordance with a District-approved test protocol. The owner/operator must notify the District a minimum of ten (10) days prior to the compliance/source test date so that an observer may be present. The final compliance/source test results must be submitted to the District within forty-five (45) days of completion of the test. All compliance/source test notifications, protocols, and results may be submitted electronically to reporting@mdaqmd.ca.gov
[District Rule 1302 (C)(2)(a)]

9. The owner/operator shall conduct an initial compliance test with 180 days of date of initial operation, and annually thereafter on one of the four Turbine Compressors, permitted as B012852, B012853, B012854, and B012855. The compliance test must be carried out in accordance with a District-approved test plan and MDAQMD Compliance Test Procedural Manual. Only one turbine unit is required to be tested during each compliance test. Each subsequent compliance test report shall be submitted to the District no later than 45 days after completion of the test. The following compliance tests are required and must be conducted under conditions representative of normal operation:
a. NOx as NO2 in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Method 20).
b. VOC as CH4 in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 25A or 18).
c. CO in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Method 10).
d. Flue gas flow rate in dscfm (measured per USEPA Method 19).
e. O2, Stack Gas Oxygen (measured using EPA Method 3 or 3A or ARB Method 100).
f. NH4, Ammonia, in ppmvd at 15% oxygen and lb/hr, per SCAQMD Source Test Method 207-1 - Determination of Ammonia Emissions from Stationary Sources.
g CH2O in ppmvd at 15% oxygen, pursuant to the applicable requirements of 40 CFR 63 Subpart YYYY, Table 3.
h. The Natural Gas Higher Heating Value (HHV) and Lower Heating Value (LHV)shall be determined as indicated below:
(i) ASTM Test Method D 3588-91 (Standard Practice for Calculation Heat Value, Compressibility Factor, and Relative Density (Specific Gravity) of Gaseous Fuels); or
(ii) ASTM Test Method D 1826-88 (Standard test Method for Caloric (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter);
(iii) ASTM Test Method D 1945-81 (Standard Method for Analysis of Natural Gas by Gas Chromatography).
[District Rules 1159 and 1302]

10. Total emissions from this equipment shall not exceed the following in any consecutive 12 month period. Emissions shall be calculated using the most recent source test result and operational data as operated at each load type, Steady State and Transitional.
a. NOx: 20,840 lb/yr
b. VOC: 3,460 lb/yr
c. CO: 11,280 lb/yr
d. SOx: 380 lb/yr
e. PM10: 4,160 lb/yr
[District Rule 1302(C)(2)(a)]

11. The owner/operator must continuously monitor the duration, and load regimes', Steady State and Transitional, in which the Turbine operates using a data acquisition and handling system approved by the District. Each Steady State and Transitional load range that the unit operates must be recorded at least once every 15 minutes during operation. Collected operating data shall be paired with emission rate (from most recent source test) and the emissions calculated on an hourly, daily, monthly and annual basis. Data shall be quality assured and reported in accordance with 40 CFR Part 60 Appendix F (or District approved protocol). Malfunctions must be reported in accordance with District Rule 218.
[District Rule 1302]

12. The owner/operator must install, operate, and maintain in calibration:
a. non-resettable totalizing fuel meters; and
b. continuous measurement and recording of elapsed time of operation.
c. Catalyst Inlet Thermocouple;
d. Turbine Distillate Oil usage non-resettable hour meter.
[District Rule 1302, 40 CFR 63 Subpart YYYY]

13. Emissions from this turbine are affected by the Load type, Steady State and Transitional. The project emissions netting analysis includes these two emission profiles. Therefore, the owner/operator shall not operate this turbine is excess of 25% of total operating time in Load Transitional mode.
[District Rule 1302]

14. This turbine shall not exceed an annual fuel use of 154.22 MMscf/yr during transitional loads; and shall not exceed a total annual fuel use of 616.89 MMscf/yr. Once the BCS NSR Phase I and Phase II are complete and as a result of conditional operation of only three Turbines at any time, the maximum combined total fuel use for Turbines permitted as B012852, B012853, B012854, and B012855, in any consecutive 12 - month period, shall not exceed 3 X 616.89 MMscf = 1851 MMscf/Yr. To ensure compliance with this requirement, a log of the combined fuel use shall be kept, maintained and made available to District State, and Federal personal upon request.

[District Rule 1302]

15. The three-hour rolling average ammonia slip concentration in ppm shall be continuously calculated and recorded using the following formula:

NH3 (ppmv) = [a-b*c/1E-06]*1E+06/b

Where:
a = NH3 injection rate (lbs/hr)/17(lb/lb-mole)
b = dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mole, calculated using EPA Method 19
c = change in measured NOx across the SCR (ppmvd at 15% O2)

The operator shall install and maintain a process analyzer to measure the SCR inlet NOx. In the equation above, c is calculated by subtracting the CEMS NOx measurement from the process analyzer measurement.

The ammonia slip calculation procedures describe above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for the determination of ammonia.

The operator shall use the above described method, or another alternative method approved by the Executive Officer.
[District Rule 1302(C)(2)(a)]

16. Exhaust stack shall be equipped with permanent stack sampling provisions consistent with Rule 217, EPA reference methods 5 and 8, and OSHA requirements.
[District Rules 217, and 1302]

17. This gas turbine engine shall be equipped with a continuously recording process analyzer.
[District Rule 1302]

18. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA.
[District Rule 1302 and 40 CFR 60.334(b)(2)]

19. The owner/operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements.
[District Rule 1302 and 40 CFR 60.7(b)]

20. The owner/operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration is when no excess emissions occurred.
[District Rule 1302 and 40 CFR 60.334(j)]

21. The owner/operator shall check, record, and quantify the calibration drift (CD) of the continuously recording process analyzer (Process Analyzer) at two concentration values at least once daily (approximately 24 hours). The Process Analyzer's calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD of the Process Analyzer exceeds 5% for five consecutive daily periods, the Process Analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, the Process Analyzer shall be deemed out-of-control. If the Process Analyzer is out-of-control, the permittee shall take appropriate corrective action including repair of the Process Analyzer within 96 operating hours and then repeat the CD of the Process Analyzer.
[District Rule 1302]

22. Steady state gas turbine engine operation shall commence after any two consecutive 15-minute periods in which the fuel rate to the turbine does not differ from the reference fuel rate by more than +/- 3900 scf/15-minute period.
[District Rules 1302]

23. Steady state gas turbine engine operation shall cease and transitional state begin if, during any single 15-minute period, the fuel rate differs from the reference fuel rate by more than +/- 3900 scf/1- minute period. The reference fuel rate is defined as the fuel rate measured during the preceding 15-minute period.
[District Rules 1302]

24. Gas turbine engine startup 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. NOx emissions will be monitored via the NOx Continuous Emissions Monitor during startup and shutdown and emissions during these periods will be maintained within the facility's annual emissions limits.
[District Rule 1302(C)(2)(a)]

25. 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. NOx emissions will be monitored via the NOx Continuous Emissions Monitor during startup and shutdown and emissions during these periods will be maintained within the facility's annual emissions limits.
[District Rule 1302(C)(2)(a)]

26. This equipment shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour that has visible emissions greater than or equal to 20% opacity.
[District Rule 401]

27. The operation of this equipment is contingent on simultaneous emission reductions from pre-existing equipment, therefore, the following sequence must occur to preclude excess emissions:

The modification of Engines' permitted as Clark Engines B013092 (Clark 11), B013093 (Clark 12), B013095 (Clark 14), and B013096 (Clark 15), shall occur during Phase I portion of the NSR project, and B013094 (Clark 13), during Phase II portion of the NSR project. These Modifications shall occur prior to the operation of this equipment.

Additionally, the termination and permit cancellation of the following equipment shall occur prior to operation of this equipment (notwithstanding overlap time for commissioning):
Clark 8, S/N 30129, Clark 9, S/N 30151, and Clark 10, S/N 30194, collectively permitted under B004154.

Plant 2 Generators: Permit Numbers; B008081, B008082, B008083, and B008084.
Plant 3 Compressors: Permit Numbers; B008079, and B008080

Note: Collective emission reductions are used as SERC's for the following new equipment: 4-New Turbine Driven Compressors; B012852, B012853, B01254, and B012855, 5-New Natural Gas fired Reciprocating Engines; B012864, B012865, B012866, B012867, B012868 and 1-New Emergency Fire Water Pump, E013097.
[District Rules; 1302(C)(2(a), Rule 204]

28. The owner or operator of this Stationary Gas Turbine is required to install Emissions Control Equipment for compliance with District Rule 1159, therefore the owner/operator shall:
(a) Install, operate, and maintain in calibration, the following monitoring equipment, as approved by the APCO:
(i) Continuous measurement and recording of Emissions Control System Operating Parameters;
(ii) Continuous measurement and recording of elapsed time of operation; and
(iii) An Enhanced Emissions Monitoring Device.
(b) Notify the APCO, in writing, before issuance of the Permit To Operate, such information which correlates the Emission Control System Operating Parameters, and PEMS if present, to the associated measured NOX emissions output. This information will be used to determine compliance with applicable provisions of this rule when the CEMS is not operating properly.
(c) Provide, on an annual basis, compliance testing data and information regarding NOX emissions. The data shall be corrected to ISO conditions and at 15 percent oxygen on a dry basis; and the percent efficiency (EFF) of each turbine unit.

[District Rule 1159]

29. The owner/operator shall not operate this equipment without the selective catalytic NOx reduction system with valid District permit C012862 and VOC and CO oxidation catalyst system with valid District permit C012858 installed and fully functional.
[District Rules 204 and 1302(C)(2(a)]

30. After completion of the BCS NSR project Phase I and Phase II, and to preclude exceeding the PSD threshold of 10 TPY for PM2.5, only three of the four Turbine Driven Compressors, permitted as B012852, B012853, B01254, and B012855, shall be operated simultaneously.
[District Rules 204 and 1302(C)(2(a)]

31. Conditions 31 through 43 are specific to the requirements California Code of Regulations Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4 - Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities. In the event of conflict between conditions the more stringent requirements shall govern. These do not apply to centrifugal natural gas compressors that operate less than 200 hours per calendar year provided that the owner or operator maintains, and makes available upon request by the ARB Executive Officer or District, a record of the operating hours per calendar year.
[17 CCR 95668 (c)(2)(A)]

32. Beginning January 1, 2018, components on driver engines and compressors that use a wet seal or a dry seal shall comply with the leak detection and repair requirements specified in 17 CCR section 95669 (as outlined in conditions 34 through 41).
[17 CCR 95668 (d)(3)]

Additionally, the compressor wet seal shall be measured annually by direct measurement (high volume sampling, bagging, calibrated flow measuring instrument) while the compressor is running at normal operating temperature in order to determine the wet seal emission flow rate using one of the following methods:
(a) Vent stacks shall be equipped with a meter or instrumentation to measure the wet seal emissions flow rate; or,
(b) Vent stacks shall be equipped with a clearly identified access port installed at a height of no more than six (6) feet above ground level or a permanent support surface for making wet seal emission flow rate measurements.
(c) If the measurement is not obtained because the compressor is not operating for the scheduled test date and the remainder of the inspection period, then testing shall be conducted within 7 calendar days of resumed operation. The owner or operator shall maintain, and make available upon request by the ARB Executive Officer, a copy of operating records that document the compressor hours of operation and run dates in order to demonstrate compliance with this requirement.
[17 CCR 95668 (d)(4)]

33. Beginning January 1, 2019, centrifugal compressors with wet seals shall control the wet seal vent gas with the use of a vapor collection system as described in section 17 CCR 95671 (as outlined by condition 41, below); or, a compressor with a wet seal emission flow rate greater than three (3) scfm, or a combined flow rate greater than the number of wet seals multiplied by three (3) scfm, shall be successfully repaired within 30 calendar days of the initial flow rate measurement. [17 CCR 95668(d)(5)]

A delay of repair may be granted by the ARB Executive Officer if the owner or operator can provide proof that the parts or equipment required to make necessary repairs have been ordered. A delay of repair to obtain parts or equipment shall not exceed 30 calendar days, or 60 days from the date from of the initial measurement, unless the owner or operator notifies the ARB Executive Officer to report the delay and provides an estimated time by which the repairs will be completed. [17 CCR 95668(d)(6)]

If parts are not available to make the repairs, the wet seal shall be replaced with a dry seal by no later than January 1, 2020. [17 CCR 95668(d)(7)]

The owner/operator shall maintain, and make available upon request by the ARB Executive Officer and the District staff, a record of the flow rate measurement as specified in Appendix A, Table A7 and shall report the result to ARB and the District once per calendar year as specified in section 95673 of this subarticle. [17 CCR 95668(d)(8)]

A centrifugal natural gas compressor with a wet seal emission flow rate measured above the standard specified in section 17 CCR 95668(d)(6) and which has been approved by the ARB Executive Officer as a critical component as specified in section 95670, shall be successfully repaired by the end of the next scheduled process shutdown or within 12 months from the date of the initial flow rate measurement, whichever is sooner. [17 CCR 95668(d)(9)]

34. Beginning January 1, 2018, all components, including components found on tanks, separators, wells, and pressure vessels not identified in 17 CCR 95669(b) shall be inspected and repaired as follows. The ARB Executive Officer may perform inspections at facilities at any time to determine compliance with the requirements specified. [17 CCR 95669(c)&(d)]

Except for inaccessible or unsafe to monitor components, the owner/operator shall audio-visually inspect (by hearing and by sight) all hatches, pressure-relief valves, well casings, stuffing boxes, and pump seals for leaks or indications of leaks at least once every 24 hours for facilities that are visited daily, or at least once per calendar week for facilities that are not visited at least once every 24 hours; and, the owner/operator shall audio-visually inspect all pipes for leaks or indications of leaks at least once every 12 months. [17 CCR 95669(e)]

Any audio-visual inspection specified above that indicates a leak that cannot be repaired within 24 hours shall be tested using US EPA Reference Method 21 (October 1, 2017) within 24 hours after initial leak detection, and the leak shall be repaired in accordance with the repair timeframes specified:
(a) For leaks detected during normal business hours, the leak measurement shall be performed within 24 hours. For leaks detected after normal business hours or on a weekend or holiday, the deadline is shifted to the end of the next normal business day.
(b) Any leaks measured above the minimum leak threshold shall be successfully repaired within the timeframes specified.
[17 CCR 95669(f)]

35. At least once each calendar quarter, all components shall be tested for leaks of total hydrocarbons in units of parts per million volume (ppmv) calibrated as methane in accordance with US EPA Reference Method 21 (October 1, 2017) excluding the use of PID instruments.

Optical Gas Imaging (OGI) instruments may be used as a leak screening device, but may not be used in place of US EPA Reference Method 21 (October 1, 2017) during quarterly leak inspections, provided they are approved for use by the ARB Executive Officer and used by a technician with a certification or training in infrared theory, infrared inspections, and heat transfer principles (e.g., Level II Thermography or equivalent training); and, all leaks detected with the use of an OGI instrument shall be measured using US EPA Reference Method 21 (October 1, 2017) within two calendar days of initial OGI leak detection or within 14 calendar days of initial OGI leak detection of an inaccessible or unsafe to monitor component to determine compliance with the leak thresholds and repair timeframes specified in this subarticle.

All inaccessible or unsafe to monitor components shall be inspected at least once annually using US EPA Reference Method 21 (October 1, 2017).
[17 CCR 95669(g)]

36. On or after January 1, 2020, any component with a leak concentration measured above the following standards shall be repaired within the time period specified:
a. Leaks with measured total hydrocarbon concentrations greater than or equal to 1,000 ppmv but not greater than 9,999 ppmv shall be successfully repaired or removed from service within 14 calendar days of initial leak detection.
b. Leaks with measured total hydrocarbon concentrations greater than or equal to 10,000 ppmv but not greater than 49,999 ppmv shall be successfully repaired or removed from service within five (5) calendar days of initial leak detection.
c. Leaks with measured total hydrocarbon concentrations greater than or equal to 50,000 ppmv shall be successfully repaired or removed from service within two (2) calendar days of initial leak detection.
d. Critical components or critical process units shall be successfully repaired by the end of the next process shutdown or within 12 months from the date of initial leak detection, whichever is sooner.

A delay of repair may be granted by the ARB Executive Officer under the following conditions:
i. The owner or operator can provide proof that the parts or equipment required to make necessary repairs have been ordered. A delay of repair to obtain parts or equipment shall not exceed 30 calendar days from the dates specified above by which repairs must be made, unless the owner or operator notifies the ARB Executive Officer to report the delay and provides an estimated time by which the repairs will be completed.
ii. A gas service utility can provide documentation that a system has been temporarily classified as critical to reliable public gas system operation as ordered by the utility's gas control office.
[17 CCR 95669(i)]

On or after January 1, 2020, no facility shall exceed the number of allowable leaks listed below during an ARB Executive Officer or District inspection as determined in accordance with US EPA Reference Method 21 (October 1, 2017), excluding the use of PID instruments [17 CCR 95669(o)(2)&(3)]:

// Leak Threshold // 200 or Less Components // More than 200 Components

1,000-9,999 ppmv // 5 // 2% of total inspected
10,000-49,999 ppmv // 2 // 1% of total inspected
50,000 ppmv or greater // 0 // 0
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37. The failure of an owner/operator to repair leaks within the timeframes specified, during any inspection period, shall constitute a violation. Except for the fourth (4th) quarterly inspection of each calendar year, leaks discovered during an operator-conducted inspection shall not constitute a violation if the leaking components are repaired within the timeframes.
[17 CCR 95669(o)(4)&(5)]

38. Upon detection of a component with a leak concentration measured above the standards specified, the owner/operator shall affix to that component a weatherproof readily visible tag that identifies the date and time of leak detection measurement and the measured leak concentration. The tag shall remain affixed to the component until all of the following conditions are met:
a. The leaking component has been successfully repaired or replaced; and,
b. The component has been re-inspected and measured below the lowest standard specified for the inspection year when measured in accordance with US EPA Reference Method 21 (October 1, 2017), excluding the use of PID instruments.
c. Tags shall be removed from components following successful repair.
[17 CCR 95669(j)]

39. Owner/operator shall maintain, and make available upon request by the ARB Executive Officer or District, a record of all leaks found at the facility as specified in Appendix A, Tables A4 and A5, and shall report the results to ARB and the District once per calendar year as specified in section 17 CCR 95673.
[17 CCR 95669(k)]

40. Additional Leak Detection and Repair Requirements:

Hatches shall remain closed at all times except during sampling, adding process material, or attended maintenance operations.
[17 CCR 95669(l)]

Open-ended lines and valves located at the end of lines shall be sealed with a blind flange, plug, cap or a second closed valve, at all times except during operations requiring liquid or gaseous process fluid flow through the open-ended line. Open-ended lines do not include vent stacks used to vent natural gas from equipment and cannot be sealed for safety reasons. Open-ended lines shall be repaired as follows [17 CCR 95669(m)]:
a. Open-ended lines that are not capped or sealed shall be capped or sealed within 14 calendar days from the date of initial inspection.
b. Open-ended lines that are capped or sealed and found leaking shall be repaired in accordance with the timeframes specified in 17 CCR 95669(h) and 95669(i).

Components or component parts which incur five (5) repair actions within a continuous 12-month period shall be replaced with a compliant component in working order and must be re-measured using US EPA Reference Method 21 (October 1, 2017), to determine that the component is below the minimum leak threshold. A record of the replacement must be maintained in a log at the facility, and shall be made available upon request by the ARB Executive Officer or District.
[17 CCR 95669(n)]

41. Beginning January 1, 2019, the following requirements apply to equipment at facilities located in sectors listed in 17 CCR 95666 that must be controlled with the use of a vapor collection system and control device as a result of the requirements specified in section 95668 of this subarticle:

The vapor collection system shall direct the collected vapors to one of the following:
a. Sales gas system; or,
b. Fuel gas system; or,
c. Gas disposal well not currently under review by the Division of Oil and Gas and Geothermal Resources. [17 CCR 95671(b)]

If no sales gas system, fuel gas system, or gas disposal well specified above is available at the facility, the owner or operator must control the collected vapors with either:
a. A non-destructive vapor control device that achieves at least 95 percent vapor control efficiency of total emissions and does not result

in emissions of nitrogen oxides (NOx); or,
b. A vapor control device that achieves at least 95 percent vapor control efficiency of total emissions and does not generate more than 15 parts per million volume (ppmv) NOx when measured at 3 percent oxygen and does not require the use of supplemental fuel gas, other than gas required for a pilot burner, to operate. [17 CCR 95671(d)]

If the collected vapors cannot be controlled as specified in herein, the equipment subject to the vapor collection and control requirements may not be used or installed and must be removed from service by January 1, 2019, and circulation tanks may not be used and must be removed from service by January 1, 2020. [17 CCR 95671(e)]

Vapor collection systems and control devices are allowed to be taken out of service for up to 30 calendar days per calendar year for performing maintenance. A time extension to perform maintenance not to exceed 14 calendar days per calendar year may be granted by the ARB Executive Officer. The owner or operator is responsible for maintaining a record of the number of calendar days per calendar year that the vapor collection system or vapor control device is out of service and shall provide a record of such activity at the request of the ARB Executive Officer. If an alternate vapor control device compliant with this section is installed prior to conducting maintenance and the vapor collection and control system continues to collect and control vapors during the maintenance operation consistent with the applicable standards specified in section 95671, the event does not count towards the 30 calendar day limit. Vapor collection system and control device shutdowns that result from utility power outages are not subject to enforcement action provided the equipment resumes normal operation as soon as normal utility power is restored. Vapor collection system and control device shutdowns that result from utility power outages do not count towards the 30 calendar day limit for maintenance. [17 CCR 95671(f)]

42. The owner/operator shall maintain the following records for this equipment to comply with Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4 - Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities. These records must be made available to ARB or District staff upon request.

For Centrifugal Natural Compressors [17 CCR 95672 (a)(9-11)]:
a. Maintain, for at least five years from the date of each emissions flow rate measurement, a record of each wet seal emission flow rate measurement as specified in Appendix A, Table A7.
b. Maintain, for at least one calendar year, a record that documents the date(s) and hours of operation a compressor is operated in order to demonstrate compliance with the wet seal emission flow rate measurement in the event that the compressor is not operating during a scheduled inspection.
c. Maintain records that provide proof that parts or equipment required to make necessary repairs have been ordered.

For Leak Detection and Repair [17 CCR 95672 (a)(17-21)]:
d. Maintain, for at least five years from each inspection, a record of each leak detection and repair inspection as specified in Appendix A Table A4.
e. Maintain, for at least five years from the date of each inspection, a component leak concentration and repair form for each inspection as specified in Appendix A Table A5.
f. Maintain records that provide proof that parts or equipment required to make necessary repairs have been ordered.
g. Maintain gas service utility records that demonstrate that a system has been temporarily classified as critical to reliable public gas operation throughout the duration of the classification period.

For Vapor Collection System and Vapor Controls [17 CCR 95672 (a)(22)]:
h. Maintain records that provide proof that parts or equipment required to make necessary repairs have been ordered.

43. Beginning January 1, 2018, the owner/operator shall report the following information to ARB and the District by July 1st of each calendar year unless otherwise specified:

For Centrifugal Natural Gas Compressors [17 CCR 95673 (a)(4)]:
a. Annually, report the emission flow rate measurement for each wet seal as specified in Appendix A, Table A7.

For Leak Detection and Repair [17 CCR 95673 (a)(12-13)]:
b. Annually, report the results of each leak detection and repair inspection conducted during the calendar year as specified in Appendix A, Table A4.
c. Annually, report the initial and final leak concentration measurements for components measured above the minimum allowable leak threshold as specified in Appendix A Table A5.

Reports shall be submitted as follows:
1. Reports made to the California Air Resources Board (CARB) shall be submitted electronically through their Cal e-GGRT Reporting Portal.

2. Submissions to the District may be submitted electronically to reporting@mdaqmd.ca.gov with the subject line "O&G GHG Regulation Reporting", or mailed to:
Mojave Desert AQMD
Attention: O&G GHG Regulation Reporting
14306 Park Avenue
Victorville, CA 92392

Note: It is anticipated that Districts will be able to retrieve Reports through the Cal-eGGRT portal sometime in 2020. Once that functionality is available, report submittals to the District will no longer be required.

44. This Lean Pre-Mix Gas-fired Stationary Combustion Turbine is subject to the requirements of 40 CFR 63 Subpart YYYY, therefore the owner operator shall:
a. Conduct Initial and Subsequent performance tests in accordance with 63.6110 and 63.6115;
b. Conduct performance tests and other procedures in accordance with 63.6120;
c. Conduct monitor installation, operation, and maintenance requirements in accordance with 63.6125;
d. Demonstrate initial compliance with emission and operating limitations in accordance with 63.6130;
e. Monitor and collect data to demonstrate continuous compliance in accordance with 63.6135;
f. Demonstrate continuous compliance with emission and operating limitations in accordance with 63.6140;
g. Provide Notifications in accordance with 63.6145;
h. Provide Reports in accordance with 63.6150;
i. Keep Reports in accordance with 63.6155 and 63.6160, and
k. Operate this Turbine in accordance with General Provisions in accordance with 63.6165.
[40 CFR 63 Subpart YYYY]

45. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]