FEDERAL OPERATING PERMIT

Permit No.: **3100066**

Company: **Southern California Gas Company**

Facility: **Adelanto Compressor Station**

Issue date: **08-05-20**

Expiration date: **08-05-25**

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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Signed and issued by
BRAD POIRIEZ
EXECUTIVE DIRECTOR/
AIR POLLUTION CONTROL OFFICER

PERMIT REVISIONS

August 2020, Title V Renewal; (by: Samuel J Oktay, PE);

Page I-4; updated contact information.

Pages I-5 thru I-6; updated equipment descriptions.

Pages II-11 thru II-24; updated MDAQMD Rule summaries for District Rules 442, 1104, 1114, and 1115.

Pages III-28 thru III-36; updated permit description and conditions for equipment permitted under District Permit B000294, a Centrifugal Turbine Compressor, revised current condition number 5, regarding out-of-service source test requirements; revised current condition number 6, regarding missing fuel records and the use of substitute data to estimate missing fuel use; added new conditions as they relate to State Only Requirements, pursuant to 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.

Pages III-36 thru III-40; updated permit description and conditions for equipment permitted under District Permit B000295.

Page III-40; updated permit description and conditions for equipment permitted under District Permit T002279.

Pages III-40 thru III-47; State Only; added permit description and conditions for new Natural Gas-Powered Pneumatic Devices, operating under District Permit B013427. This equipment is permitted pursuant to 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.

Added CAM Plan to Title V, in new section VIII, for Emission Control Equipment related to the proper operation of an electrical Generator permitted as B000295.

2014 Administrative Permit Renewal (by: Samuel J Oktay, PE)**;** Revised Rule 1113 references, Page II-15 through II-16; all Rule SIP History and Status moved to Appendix VII page VII 38 to VII 41; Revised MDAQMD Permit B000294 equipment description, Pages I-5 and III-24. Added Permit Revision Summary, Page 2. Updated Permit B000295 equipment description and permit conditions, Pages III-26 through III-28. Added Rule 1211 Requirements regarding GHG emissions to Page II-18.

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PART I
INTRODUCTORY INFORMATION

A. FACILITY INFORMATION:

Owner/Company Name:	Southern California Gas Company
Facility Name:	Adelanto Compressor Station
Facility Location:	Koala and Rancho Roads Adelanto, CA 92301
Mailing Address:	P.O. Box 2300 Chatsworth CA 91313
Federal Operating Permit Number:	3100066
MDAQMD Company Number:	31
MDAQMD Facility Number:	66
Responsible Official:	Mr. Carlos Gaeta Field Operations Manager 760-243-6574
Facility Contact:	Alison Wong Senior Environmental Specialist 213-604-4534 AWong2@socalgas.com
Facility "Off Site" Contact(s):	Chanice Allen Environmental Team Lead 213-276-5047 CAllen2@socalgas.com
Nature of Business:	Natural Gas Compression and Transmission
SIC/NAICS Code:	4922/486210 – Pipeline Transportation of Natural Gas
Facility Coordinates:	UTM11 (km): 458.679E/3824.007N Decimal Coordinates: 34.55827, -117.44801

B. FACILITY DESCRIPTION

Federal Operating Permit (FOP number: 3100066) for Southern California Gas Company (SCG)**,** Adelanto Turbine/Compressor Station, located at Koala and Rancho Roads, in Adelanto, CA 92301.

The SCG**,** Adelanto Turbine/Compressor Station - is a natural gas compression and transmission pipeline facility located in Adelanto, California. Equipment consists of a Turbine Compressor, Spark-Ignited (SI) Natural Gas fired Generator, Natural Gas-Powered Pneumatic Devices and Pumps, and a Waste Oil Storage Tank, as described:

C. EQUIPMENT DESCRIPTION

District Permit No.	**Equipment Description**
B000294	TURBINE, CENTRIFUGAL NATURAL GAS COMPRESSOR
B000295	SPARK IGNITED (SI), NATURAL GAS IC ENGINE, GENERATOR
B013427	NATURAL GAS POWERED PNEUMATIC DEVICES AND PUMPS
T002279	WASTE OIL STORAGE TANK

PART II
FACILITYWIDE APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

A. REQUIREMENTS APPLICABLE TO ENTIRE FACILITY AND EQUIPMENT:

1. A permit to construct is required to build, erect, install, alter or replace any equipment, 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.
[District Rule 201 - *Permits to Construct*]

2. A permit is required to operate this facility. The equipment at this facility shall not be operated contrary to the conditions specified in the District permit to operate.
[District Rule 203 - *Permit to Operate*]

3. The Air Pollution Control Officer may impose written conditions on any permit to assure compliance with all applicable regulations.
[District Rule 204 - *Permit Conditions*]

4. Commencing work or operation under a permit shall be deemed acceptance of all the conditions so specified.
[District Rule 204 - *Permit Conditions*]

5. Posting of the Permit to Operate is required on or near the equipment or as otherwise approved by the APCO/District.
[District Rule 206 - *Posting of Permit to Operate*]

6. Owner/Operator shall not willfully deface, alter, forge, or falsify any permit issued under District rules.
[District Rule 207- *Altering or Falsifying of Permit*]

7. Permits are not transferable.
[District Rule 209 - *Transfer and Voiding of Permit*]

8. The Air Pollution Control Officer (APCO) may require the applicant or permittee to provide and maintain such facilities as are necessary for sampling and testing. In the event of such requirements, the Air Pollution Control Officer shall notify the applicant in writing of the required size, number and location of sampling ports; the size and location of the sampling platform: the access to the sampling platform, and the utilities for operating the sampling and testing equipment. The platform and access shall be constructed in accordance with the General Industry Safety Orders of the State of California.
[District Rule 217 - *Provision for Sampling And Testing Facilities*]

9. The equipment at this facility shall not require a District permit or be listed on the Title V permit if such equipment is listed in District Rule 219 and meets the applicable criteria contained in District Rule 219 (B). However, any exempted insignificant activities/equipment are still subject to all applicable facility-wide requirements.
[District Rule 219 - *Equipment Not Requiring a Written Permit*]

10. This Facility, which is subject to the provisions of District Regulation XII, shall obtain a Federal Operating Permit.
[District Rule 221 - *Federal Operating Permit Requirement*]

11. Owner/Operator shall pay all applicable MDAQMD permit fees.
[District Rule 301- *Permit Fees*]

12. Owner/Operator shall pay all applicable MDAQMD Title V Permit fees.
[District Rule 312 - *Fees for Federal Operating Permits*]

13. Any air contaminant from any emission source whatsoever located at this Facility, shall not be discharged into the Atmosphere for a period or periods aggregating more than three minutes in any one hour, which is as observed using EPA Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources). Visible emissions from this facility, of any air contaminant into the atmosphere, shall not equal or exceed Ringelmann No. 1 for a period or periods aggregating more than three minutes in any one hour:
    (a) While any unit is fired on Public Utilities Commission (PUC) grade natural gas, Periodic Monitoring for combustion equipment is not required to validate compliance with the Rule 401 Visible Emissions limit. However, the Owner/Operator shall comply with the recordkeeping requirements stipulated elsewhere in this permit regarding the logging of fuel type, amount and supplier's certification information.
    (b) While any unit is fired on diesel fuel, Periodic Monitoring, in addition to required recordkeeping, is required to validate compliance with Rule 401 Visible Emissions limit as indicated below:
        (i) Reciprocating engines equal or greater than 1000 horsepower, firing on

only diesel with no restrictions on operation, a visible emissions inspection is required every three (3) months or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3-month time frame.

(ii) Diesel Standby and emergency reciprocating engines using California low sulfur fuels require no additional monitoring for opacity.

(iii) Diesel/Distillate-Fueled Boilers firing on California low sulfur fuels require a visible emissions inspection after every 1 million gallons diesel combusted, to be counted cumulatively over a 5 year period.

(iv) On any of the above, if a visible emissions inspection documents opacity, an Environmental Protection Agency (EPA) Method 9 "Visible Emissions Evaluation" shall be completed within 3 working days, or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3 working day time frame.

[District Rule 204 - *Permit Conditions*]
[District Rule 401 - *Visible Emissions*]
[40 CFR 70.6 (a)(3)(i)(B) - *Periodic Monitoring Requirements*]

14. Owner/Operator shall not burn any gaseous fuel at this facility containing sulfur compounds in excess of 800 parts per million (ppm), calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having a sulfur content in excess of 0.5 percent by weight. Compliance with Rule 431 fuel sulfur limit for PUC quality natural gas fuel shall be by the exclusive use of utility grade/pipeline quality natural gas. Records of natural gas supplier fuel quality/sulfur content limit shall be kept on-site and available for review by District, state or federal personnel at any time. Compliance with Rule 431 fuel sulfur limit for diesel fuel is assumed for CARB certified diesel fuel. The sulfur content of non-CARB diesel fuel shall be determined by use of American Society for Testing and Materials (ASTM) method D 2622-82, or ASTM method D 2880-71, or equivalent.
[District Rule 431 - *Sulfur Content of Fuels*]
[40 CFR 70.6 (a)(3)(i)(B) - *Periodic Monitoring Requirements*]

15. Emissions of fugitive dust from any transport, handling, construction, or storage activity at this facility shall not be visible in the atmosphere beyond the property line of the facility.
[District Rule 403 - *Fugitive Dust*]

16. Owner/Operator shall comply with the applicable requirements of Rule 403.2 unless an "Alternative PM_{10} Control Plan" (ACP) pursuant to Rule 403.2(G) has been approved.
[District Rule 403.2 - *Fugitive Dust Control for the Mojave Desert Planning Area*]

17. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter (PM) except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in District Rule 404, Table 404 (a).

(a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.

(b) This condition shall not apply to emissions resulting from the combustion of liquid or

gaseous fuels in steam generators or gas turbines.

(c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

[District Rule 404 - *Particulate Matter Concentration*]

18. Owner/Operator shall not discharge into the atmosphere from this facility, solid PM including lead and lead compounds in excess of the rate shown in District Rule 405, Table 405(a).

(a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.

(b) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

[District Rule 405 - *Solid Particulate Matter - Weight*]

19. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, any one or more of the following contaminants in any state or combination thereof, exceeding in concentration:

(a) Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO_2), greater than or equal to 500 ppm by volume.

(b) The following elements and compounds which would exist as a liquid or gas at standard conditions:

Element or Compound	**Limitations (PPM by volume)**
Hydrogen Fluoride (HF)	400
Hydrogen Chloride (HCl)	800
Hydrogen Bromide (HBr)	50
Bromine (Br)	50
Chlorine (Cl_2)	450
Fluorine (F_2)	50

This rule does not apply to combine fluorides, chlorides or bromides, other than the acid version. With respect to fluorides, the rule applies only to the combustion of hydrogen-containing fuels and fluorine-containing oxidizers to form hydrogen fluoride.

[District Rule 406 - *Specific Contaminants*]
[40 CFR 70.6 (a)(3)(i)(B) - *Periodic Monitoring Requirements*]

20. Owner/Operator shall not discharge into the atmosphere from this facility, carbon monoxide (CO) exceeding 2000 ppm measured on a dry basis, averaged over a minimum of 15 consecutive minutes.

(a) The provisions of this condition shall not apply to emissions from internal combustion engines.

[District Rule 407 - *Liquid and Gaseous Air Contaminants*]

21. Owner/Operator shall not build, erect, install, or use any equipment at this facility, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the Health and

Safety Code or of District Rules.

(a) This condition shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code, or of District Rule 402.

[District Rule 408 - *Circumvention*]

22. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO_2) at standard conditions averaged over a minimum of 25 consecutive minutes.
[District Rule 409 - *Combustion Contaminants*]

23. APCO, at his/her discretion, may refrain from enforcement action against an Owner/Operator of any equipment that has violated a technology-based emission limitation, including but not limited to conditions contained in any permit issued by the District establishing such emission limitation, provided that a Breakdown has occurred and:

(a) Any breakdown that results in emissions exceeding a technology-based emission limitation is reported to the District within one hour of such breakdown or within one hour of the time a person knew or reasonably should have known of the occurrence of such breakdown; and

(b) An estimate of the repair time is provided to the District as soon as possible after the report of the breakdown; and

(c) All reasonable steps are immediately taken to minimize the levels of emissions and to correct the condition leading to the excess emissions.

(d) The equipment is operated only until the end of a cycle or twenty-four (24) hours, whichever is sooner, at which time it shall be shut down for repairs unless a petition for an emergency variance has been filed with the clerk of the Hearing Board in accordance with District Regulation V.

(e) If the breakdown occurs outside normal District working hours, the intent to file an emergency variance shall be transmitted to the District in a form and manner prescribed by the APCO.

[District Rule 430 - *Breakdown Provisions*]

24. Owner/Operator of this facility shall comply with all applicable requirements of District Rule 442 and must meet the following emission and operating requirements:

(a) Shall not discharge VOCs into the atmosphere from all VOC containing materials, Emissions Units, equipment or processes subject to this rule, in excess of 540 kilograms (1,190 pounds) per month at this Facility.

(i) Compliance with the VOC limit above may be obtained through use of any of the following or any combination thereof:

a. Product reformulation or substitution;

b. Process changes;

c. Improvement of operational efficiency;

d. Development of innovative technology;

e. Operation of emission collection and control system that reduces overall emissions by eighty-five percent (85%).

(b) Shall not discharge into the atmosphere a non-VOC organic solvent in excess of 272 kilograms (600 pounds) per day as calculated on a thirty (30) day rolling average. For purposes of VOC quantification, discharge shall include a drying period of 12 hours following the application of such non-VOC solvents.

(c) The provisions of this condition shall not apply to:
  (i) The manufacture, transport or storage of organic solvents, or the transport or storage of materials containing organic solvents.
  (ii) The emissions of VOCs from VOC-containing materials or equipment which are subject to District Regulation IV rules or which are exempt from air pollution control requirements by such rules.
  (iii) The use of pesticides including insecticides, rodenticides or herbicides.
  (iv) The use of 1,1,1 trichloroethane, methylene chloride and trichlorotrifluroethane.
  (v) Aerosol products.
  (vi) VOC containing materials or equipment which are not subject to VOC limits of any rule found in District Regulation XI – *Source Specific Standards*.

(d) Owner/operator shall maintain daily usage records for all VOC-containing materials subject to this condition. The records shall be retained for five years and be made available upon request. VOC records shall include but not be limited to:
  (i) The amount, type and VOC content of each solvent used; and
  (ii) The method of application and substrate type; and
  (iii) The permit units involved in the operation (if any).

(e) Determination of VOC Content in Solvent-containing materials, Presence of VOC in Clean-up Materials, and/or Determination of Efficiency of Emission Control Systems must be made in accordance with methods and provisions of District Rule 442.

[District Rule 442 - *Usage of Solvents*]

25. Owner/Operator shall not set open outdoor fires unless in compliance with District Rule 444. Outdoor fires burned according to an existing District permit are not considered "open outdoor fires" for the purposes of Rule 444 (reference District Rule 444(B)(9)). [District Rule 444]

26. Owner/Operator of this facility shall comply with the Organic Solvent Degreasing Operations requirements of District Rule 1104 when engaged in wipe cleaning, cold solvent cleaning and/or vapor cleaning (degreasing) operations for metal/non-metal parts/products and which utilize volatile organic solvents. These requirements are listed as follows:
VOC Content:

(a) An Owner/Operator shall not use a solvent with a VOC content that exceeds 25 grams of VOC per liter, as applied, for cleaning or surface preparation in any operation subject to this Rule.

(b) As an alternative to, or in lieu of, the above VOC limits, an Owner/Operator may use cleaning materials with a VOC composite vapor pressure limit of 8 millimeters of mercury (mm Hg) or less at 20 degrees Celsius.

Control Equipment:

(a) Owner/Operator may comply with the VOC limits above by using approved air

pollution control equipment provided that the VOC emissions from such operations and/or materials are reduced in accordance with the following:

(i) The control equipment shall reduce emissions from an emission collection system by at least 95 percent (95%), by weight, or by reducing the output of the air pollution control equipment to less than 25 ppm calculated for carbon with no dilution; and

(ii) The Owner/Operator demonstrates that the system collects at least 90 percent (90%), by weight, of the emissions generated by the sources of emissions.

Cleaning Equipment and Method Requirements:

An Owner/Operator shall not perform solvent cleaning unless one of the cleaning devices or methods listed below are used, and the applicable requirements that follow are used:

(a) Wipe Cleaning;

(b) Closed containers or hand held spray bottles from which solvents are applied without a propellant-induced force;

(c) Cleaning equipment which has a solvent container that can be, and is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the equipment itself;

(d) Non-atomized solvent flow method where the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid pressure build-up inside the container; or

(e) Solvent flushing method where the cleaning solvent is discharged into a container which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping.

(f) All Degreasers shall be equipped with the following:

(i) An apparatus or cover(s) which reduces solvent evaporation, except for remote reservoirs.

(ii) A permanent, conspicuous label summarizing the applicable operating requirements. In lieu of a label, operating instructions may be posted near the degreaser where the Operators can access the proper operating requirements of this Rule.

(g) Remote Reservoirs shall be equipped with the following:

(i) A sink, platform or work area which is sloped sufficiently towards a drain to prevent pooling of solvent within the work area.

(ii) A single or total drain hole area, not larger than 100 square centimeters (15.5 square inches) in area, for the Solvent to flow from the sink (platform/work area) into the enclosed reservoir.

(iii) If high volatility solvent is used, a drain cover/plug/closure device or a cover for placement over the top of the sink (platform/work area), when the equipment is not being used, cleaned or repaired.

(iv) A minimum sink depth of six (6) inches, as measured from the top of the

drain to the top of the side of the sink.

(h) Cold Solvent Degreasers - Freeboard Requirements:

(i) Cold solvent degreasers using only low volatility solvents which are not agitated, shall operate with a freeboard height of not less than 6 inches.

(ii) Cold solvent degreasers using only low volatility solvents may operate with a freeboard ratio equal to or greater than 0.50 when the cold solvent degreaser has a cover, which remains closed during the cleaning operation.

(iii) Any cold solvent degreasers using solvent which is agitated, or heated above 50^{o}C (120^{o} F) shall operate with a freeboard ratio equal to or greater than 0.75.

(iv) A water cover may be used as an acceptable control method to meet the freeboard requirements, when the solvent is insoluble in water and has a specific gravity greater than one (1).

Cold Solvent Degreasers - Cover Requirements:

(v) Cold solvent degreasers using high volatility solvent shall have a cover that is a sliding, rolling or guillotine (bi-parting) type which is designed to easily open and close without disturbing the vapor zone.

Cold Solvent Degreasers - Solvent Level Identification:

(vi) A permanent, conspicuous mark locating the maximum allowable solvent level conforming to the applicable freeboard requirements.

All Degreasers shall comply with the following operating requirements:

(i) Any solvent cleaning equipment and any emission control device shall be operated and maintained in strict accord with the recommendations of the manufacturer.

(ii) Degreasers shall not be operating with any detectable solvent leaks.

(iii) All solvent, including waste solvent and waste solvent residues, shall be stored in closed containers at all times. All containers for any solvent(s) shall have a label indicating the name of the solvent/material they contain.

(iv) Waste solvent and any residues shall be disposed of by one of the following methods: a commercial waste solvent reclamation service licensed by the State of California; **or** a federally or state licensed facility to treat, store or dispose of such waste; **or** the originating facility may recycle the waste solvent and materials in conformance with requirements of Section 25143.2 of the California Health and Safety Code.

(v) Degreasers shall be covered to prevent fugitive leaks of vapors, except when processing work or to perform maintenance.

(vi) Solvent carry-out shall be minimized by the following methods:

a. Rack workload arranged to promote complete drainage.

b. Limit the vertical speed of the power hoist to 3.3 meters per minute (11 ft/min) or less when such a hoist is used.

c. Retain the workload inside of the vapor zone until condensation ceases.

d. Tip out any pools of solvent remaining on the cleaned parts before removing them from the degreaser if the degreasers are operated manually.

e. Do not remove parts from the degreaser until the parts are visually

dry and not dripping/leaking solvent. (This does not apply to an emulsion cleaner workload that is rinsed with water within the degreaser immediately after cleaning.)

(vii) The cleaning of porous or absorbent materials such as cloth, leather, wood or rope is prohibited.

(viii) Except for sealed chamber degreasers, all solvent agitation shall be by either pump recirculation, a mixer, or ultrasonics.

(ix) The solvent spray system shall be used in a manner such that liquid solvent does not splash outside of the container. The solvent spray shall be a continuous stream, not atomized or shower type, unless the spray is conducted in a totally enclosed space, separated from the environment.

(x) For those degreasers equipped with a water separator, no solvent shall be visually detectable in the water in the separator.

(xi) Wipe cleaning materials, including shop towels, containing solvent shall be kept in closed containers at all times, except during use.

(xii) Cleaning operations shall be located so as to minimize drafts being directed across the cleaning equipment, the exposed solvent surface, or the top surface of the vapor blanket.

(xiii) A method for draining cleaned material, such as a drying rack suspended above the solvent and within the freeboard area, shall be used so that the drained solvent is returned to the degreaser or container.

District Rule 442 Applicability:

Any solvent-using operation or facility which is not subject to the source-specific Rule 1104 shall comply with the provisions of Rule 442. Any solvent using operation or facility which is exempt from all or a portion of the VOC limits, equipment limits or the operational limits of Rule 1104 shall be subject to the applicable provisions of Rule 442.

Solvent Usage Records:

Owner/Operator subject to Rule 1104 or claiming any exemption under Rule 1104, shall comply with the following requirements:

(i) Maintain and have available during an inspection, a current list of solvents in use at the facility which provides all of the data necessary to evaluate compliance, including the following information separately for each degreaser, as applicable:

a. Product name(s) used in the degreaser;
b. The mix ratio of mixtures containing solvents as used;
c. VOC content of solvent or mixture of compounds as used;
d. The total volume of the solvent(s) used for the facility, on a monthly basis; and
e. The name and total volume applied of wipe cleaning solvent(s) used, on a monthly basis.

(ii) Additionally, for any degreaser utilizing an add-on emission control equipment/system as a means of complying with the provisions of Rule 1104 shall, maintain and produce daily records of key system operating parameters and maintenance procedure which will demonstrate continuous operating and compliance of the air pollution abatement during periods of emission

producing activities. Key system operating parameters are those necessary to ensure compliance with subsection (C)(2)(a), such as temperatures, pressures and flow rates.

(iii) Documentation shall be maintained on site of the disposal or on site recycling of any waste solvent or residues.

(iv) Records shall be retained on site and available for inspection by District, state or federal personnel for the previous 5 year period as required by this Title V / Federal Operating Permit.

[District Rule 1104 - *Organic Solvent Degreasing Operations*]

27. Owner/Operator's use of Architectural Coatings at this facility shall comply with the applicable requirements of District Rule 1113, including the VOC limits specified in District Rule 1113, Tables 1 and 2.
[District Rule 1113 - *Architectural Coatings*]

28. Owner/Operator's use of Wood Products Coatings at this facility shall comply with the applicable requirements of District Rule 1114, including, but not limited to, Application Methods, VOC Content of Coatings, and Strippers, Surface Preparation and Cleanup Solvent.
[District Rule 1114 - *Wood Products Coating Operations*]

29. Owner/Operator's use of Metal Parts and Products Coatings at this facility shall comply with the applicable requirements of District Rule 1115, including, but not limited to, Application Methods, VOC Content of Coatings, and Strippers, Surface Preparation and Cleanup Solvent.
[District Rule 1115 - *Metal Parts and Products Coatings Operations*]

30. Owner/operator must comply with the requirements of District Rule 1160 – Internal Combustion Engines, as applicable, including the Emission Limitations specified below; and, the Alternative Compliance Strategies, Emission Control Plan, and Monitoring and Recordkeeping Requirements specified in this rule.

(a) District Rule 1160 applies to any stationary Internal Combustion Engine rated at 50 or more brake horsepower (bhp), when located within the Federal Ozone Non-attainment Area, that does not meet the following:

(i) Any Internal Combustion Engine rated at less than 50 brake horsepower.

(ii) Any Internal Combustion Engine operated less than 100 hours in any rolling twelve (12) month period.

(iii) Any Internal Combustion Engine subject to the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines rated at 50 Horsepower and Greater, Title 17 CCR 93116, or otherwise classified as a Portable Internal Combustion Engine.

(iv) Any Internal Combustion Engine that is an Emergency Internal Combustion Engine provided that the Internal Combustion Engine does not operate more than 100 hours for non-emergency use in any rolling twelve (12) month period.

(v) Any Internal Combustion Engine operated on an engine test stand.

(vi) Any Internal Combustion Engine subject to District Rule 1160.1 – Internal Combustion Engines in Agricultural Operations.

(vii) Any Internal Combustion Engine located outside the Federal Ozone Non-attainment Area.

(viii) Any Internal Combustion Engine registered with a Statewide Portable Equipment Registration (PERP), provided that the Internal Combustion Engine is operating in compliance with the Regulation to Establish a Statewide Portable Equipment Registration Program, Title 13 CCR 2450, and for which the Internal Combustion Engine does not require a local District Permit.

(b) Emission Limits

(i) NO_X Emissions

a. Internal Combustion Engines subject to District Rule 1160 shall not exceed the following emission limits in Table 1, unless compliance is demonstrated using an Alternative Compliance Strategy pursuant to subsection (C)(2) of District Rule 1160.

Table 1
NO_X EMISSION LIMITS FOR INTERNAL COMBUSTION ENGINES
(ppmv limitations shall be referenced at 15 percent volume stack gas oxygen measured on a dry basis and averaged over 15 consecutive minutes)

Engine Type	**NO_X Limit**
Spark-Ignited Internal Combustion Engine, Rich Burn	50 ppmv
Spark-Ignited Internal Combustion Engine, Lean Burn	125 ppmv
Compression-Ignition Internal Combustion Engine	80 ppmv

(ii) VOC Emissions

a. Internal Combustion Engines subject to District Rule 1160 shall not exceed the following emission limits in Table 2, unless compliance is demonstrated using an Alternative Compliance Strategy pursuant to subsection (C)(2) of District Rule 1160.

Table 2
VOC EMISSION LIMITS FOR INTERNAL COMBUSTION ENGINES
(ppmv limitations shall be referenced at 15 percent volume stack gas oxygen measured on a dry basis and averaged over 15 consecutive minutes)

Engine Type	**NO_X Limit**
Spark-Ignited Internal Combustion Engine, Rich Burn	106 ppmv
Spark-Ignited Internal Combustion Engine, Lean Burn	106 ppmv
Compression-Ignition Internal Combustion Engine	106 ppmv

(iii) CO Emissions

a. Internal Combustion Engines subject to District Rule 1160 shall

not exceed the following emission limits in Table 3, unless compliance is demonstrated using an Alternative Compliance Strategy pursuant to subsection (C)(2) of District Rule 1160.

Table 3
CO EMISSION LIMITS FOR INTERNAL COMBUSTION ENGINES
(ppmv limitations shall be referenced at 15 percent volume stack gas oxygen measured on a dry basis and averaged over 15 consecutive minutes)

Engine Type	**NO_X Limit**
Spark-Ignited Internal Combustion Engine, Rich Burn	4500 ppmv
Spark-Ignited Internal Combustion Engine, Lean Burn	4500 ppmv
Compression-Ignition Internal Combustion Engine	4500 ppmv

[District Rule 1160 - *Internal Combustion Engines*]

31. Owner/Operator shall comply with all requirements of the District's Title V Program, MDAQMD Rules 1200 through 1210 (Regulation XII - *Federal Operating Permits*). [Applicable via Title V Program interim approval 02/05/96 61 FR 4217]

32. Owner/Operator shall comply with all requirements of District Rule 1211 – Greenhouse Gas Provisions of Federal Operating Permits. Specifically, the Owner/Operator shall include Greenhouse Gas (GHG) emission data and all applicable GHG requirements with any application, as specified in 1211(D)(1), for a Federal Operating Permit.
[District Rule 1211 - *Greenhouse Gas Provisions of Federal Operating Permits*]

33. The permit holder shall submit an application for renewal of this Title V Permit at least six (6) months, but no earlier than eighteen (18) months, prior to the expiration date of this Federal operating permit (FOP). If an application for renewal has not been submitted and deemed complete in accordance with this deadline, the facility may not operate under the (previously valid) FOP after this FOP expiration date. If the permit renewal has not been issued by this FOP expiration date, but a timely application for renewal has been submitted and deemed complete in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application.
[District Rule 1202(B)(3)(b)(i); District Rule 1202(E)(2)(a)]

B. FACILITY-WIDE MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS:

1. Any data and records generated and/or kept pursuant to the requirements in this federal operating permit (Title V Permit) shall be kept current and on site for a minimum of five (5) years from the date generated. Any records, data, or logs shall be supplied to District, state, or federal personnel upon request.
[District Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6(a)(3)(ii)(B)]

2. Any Compliance/Performance testing required by this Federal Operating Permit shall follow the administrative procedures contained in the District's Compliance Test Procedural Manual. Any required annual Compliance and/or Performance Testing shall be accomplished by obtaining advance written approval from the District pursuant to the District's Compliance Test Procedural Manual. All emission determinations shall be made as stipulated in the Written Test Protocol accepted by the District. When proposed testing involves the same procedures followed in prior District approved testing, then the previously approved Written Test Protocol may be used with District concurrence. [District Rule 204 – *Permit Conditions*]

3. Owner/Operator of permit units subject to Comprehensive Emissions Inventory Report/Annual Emissions Determinations for District, state, and federal required Emission Inventories shall monitor and record the following for each unit:
   (a) The cumulative annual usage of each fuel type. The cumulative annual usage of each fuel type shall be monitored from utility service meters, purchase or tank fill records.
   (b) Fuel suppliers' fuel analysis certification/guarantee including fuel sulfur content shall be kept on site and available for inspection by District, state or federal personnel upon request. The sulfur content of diesel fuel shall be determined by use of ASTM method D2622-82, or (ASTM method D 2880-71, or equivalent). Vendor data meeting this requirement are sufficient.

   [District Rule 2014 – *Permit Conditions*]
   [*40 CFR 70.6(a)(3)(B) – Periodic Monitoring Requirements*; Rule 204; Federal Clean Air Act: §110(a)(2)(F, K & J); §112; §172(c)(3); §182(a)(3)(A & B); §187(a)(5); § 301(a)] and in California Clean Air Act, Health and Safety Code §§39607 and §§44300 et seq.]

4. Owner/Operator shall submit, annually, a Compliance Certification as prescribed by District Rule 1203(F)(1) and District Rule 1208, in a format approved by MDAQMD. Compliance Certifications by a Responsible Official shall certify the truth, accuracy and completeness of the document submitted and contain a statement to the effect that the certification is based upon information and belief, formed after a reasonable inquiry; the statements and information in the document are true, accurate, and complete.
   [District Rule 1203(D)(1)(g)(v-x)]
   [District Rule 1203(D)(1)(g)(v-x)]
   [40 CFR 72.90.a; 40 CFR 70.6(c)(5)(i)]
   (a) Owner/Operator shall include in any Compliance Certification the methods used for monitoring such compliance.
   [District Rule 1203(D)(1)(g)(viii)]
   [40 CFR 70.6(c)(5)(ii)]
   (b) Owner/Operator shall comply with any additional certification requirements as specified in 42 United States Code (U.S.C.) §7414(a)(3), Recordkeeping, Inspections, Monitoring and Entry (Federal Clean Air Act §114(a)(3)) and 42 U.S.C. §7661c(b), Permit Requirements and Conditions (Federal Clean Air Act §503(b)), or in regulations promulgated thereunder.
   [District Rule 1203(D)(1)(g)(x)]
   (c) Each report shall be certified to be true, accurate, and complete by "The

Responsible Official" and a copy of this annual report shall also be contemporaneously submitted to the EPA Region IX Administrator.
[District Rule 1203(D)(1)(g)(v - x)]
[40 CFR 72.90.a]

(d) The annual Compliance Certification shall be submitted as follows:

Report covering May 1 – April 30	Due by May 30

5. The owner/operator shall submit, semi-annually, a Monitoring Report to the APCO/District. The Monitoring Reports shall be certified to be true, accurate, and complete, signed by the Responsible Official, and shall include the following information and/or data:
   (a) Summary of deviations from any federally enforceable requirement in this permit.
   (b) Summary of all emissions monitoring and analysis methods required by any Applicable Requirement/federally - enforceable requirement.
   (c) Summary of all periodic monitoring, testing or record keeping (including test methods sufficient to yield reliable data) to determine compliance with any Applicable Requirement/federally enforceable requirement that does not directly require such monitoring.
   (d) Summary of necessary requirements concerning use and maintenance of equipment, including the installation and maintenance of monitoring equipment.
   (e) The semi-annual reporting periods shall be submitted as follows:

Report covering May 1 – October 31	Due by November 30
Report covering November 1 – April 30	Due by May 30

[District 1203(D)(1)(c)(i - iii); District 1203(D)(1)(d)(i); District Rule 1203(D)(1)(e)(i - ii); District Rule 1203(D)(1)(g)(v - x)]

6. Owner/Operator shall promptly report all deviations from Federal Operating Permit requirements including, but not limited to, any emissions in excess of permit conditions, deviations attributable to breakdown conditions, and any other deviations from permit conditions. Such reports shall include the probable cause of the deviation and any corrective action or preventative measures taken as a result of the deviation.
[District Rule 1203(D)(1)(e)(ii) and District Rule 430(C)]
Prompt reporting shall be determined as follows:
   (a) For deviations involving emissions of air contaminants in excess of permit conditions including but not limited to those caused by a breakdown, prompt reporting shall be within one hour of the occurrence of the excess emission or within one hour of the time a person knew or reasonably should have known of the excess emission. Documentation and other relevant evidence regarding the excess emission shall be submitted to the District within sixty (60) days of the date the excess emission was reported to the District.
   [SIP Pending: District Rule 430 - *Breakdown Provisions* as amended 12/21/94 and submitted 02/24/95]
   (b) For other deviations from permit conditions not involving excess emissions of air

contaminants shall be submitted to the District with any required monitoring reports at least every six (6) months.
[District Rule 1203(D)(1)(e)(i)]

7. If any facility unit(s) should be determined not to be in compliance with any federally enforceable requirement during the 5-year permit term, then Owner/Operator shall obtain a *Schedule of Compliance* approved by the District Hearing Board pursuant to the requirements of MDAQMD Regulation 5 (Rules 501 - 518). In addition, Owner/Operator shall submit a *Progress Report* on the implementation of the *Schedule of Compliance*. The *Schedule of Compliance* shall contain the information outlined in (b), below. The *Progress Report* shall contain the information outlined in (c), below. The *Schedule of Compliance* shall become a part of this Federal Operating Permit by administrative incorporation. The *Progress Report* and *Schedule of Compliance* shall comply with Rule 1201(I)(3)(iii) and shall include:
   (a) A narrative description of how the facility will achieve compliance with such requirements; and
   (b) A *Schedule of Compliance* which contains a list of remedial measures to be taken for the facility to come into compliance with such requirements, an enforceable sequence of actions, with milestones, leading to compliance with such requirements and provisions for the submission of *Progress Reports* at least every six (6) months. The *Schedule of Compliance* shall include any judicial order, administrative order, and/or increments of progress or any other schedule as issued by any appropriate judicial or administrative body or by the District Hearing Board pursuant to the provisions of Health & Safety Code §42350 et seq.; and
   (c) *Progress Reports* submitted under the provisions of a *Schedule of Compliance* shall include: Dates for achieving the activities, milestone, or compliance required in the schedule of compliance; and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not or will not be met; and any preventive or corrective measures adopted due to the failure to meet dates in the schedule of compliance.
   [Rule 1201 (I)(3)(iii); Rule 1203 (D)(1)(e)(ii); Rule 1203 (D)(1)(g)(v)]

C. FACILITY-WIDE COMPLIANCE CONDITIONS:

1. Owner/Operator shall allow an authorized representative of the MDAQMD to enter upon the permit holder's premises at reasonable times, with or without notice.

   [District Rule 1203(D)(1)(g)(i)]
   [40 CFR 70.6(c)(2)(i)]

2. Owner/Operator shall allow an authorized representative of the MDAQMD to have access to and copy any records that must be kept under condition(s) of this Federal Operating Permit.
   [District Rule 1203(D)(1)(g)(ii)]
   [40 CFR 70.6(c)(2)(ii)]

3. Owner/Operator shall allow an authorized representative of the MDAQMD to inspect any equipment, practice or operation contained in or required under this Federal Operating Permit.
[District Rule 1203(D)(1)(g)(iii)]
[40 CFR 70.6(c)(2)(iii)]

4. Owner/Operator shall allow an authorized representative of the MDAQMD to sample and/or otherwise monitor substances or parameters for the purpose of assuring compliance with this Federal Operating Permit or with any Applicable Requirement.
[District Rule 1203(D)(1)(g)(iv)]
[40 CFR 70.6(c)(2)(iv)]

5. Owner/Operator shall remain in compliance with all Applicable Requirements / federally enforceable requirements by complying with all compliance, monitoring, record-keeping, reporting, testing, and other operational conditions contained in this Federal Operating Permit. Any noncompliance constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; the termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal application.
[District Rule 1203(D)(1)(f)(ii)]

6. Owner/Operator shall comply in a timely manner with all applicable requirements / federally - enforceable requirements that become effective during the term of this permit.
[District Rule 1201(I)(2) and District Rule 1203(D)(1)(g)(v)]

7. Owner/Operator shall insure that all applicable subject processes comply with the provisions of 40 CFR 61, National Emission Standards for Hazardous Air Pollutants, subpart A, General Provisions, and subpart M, Asbestos.
[40 CFR 61, Subparts A and M]

8. Owner/Operator shall notify APCO/District at least 10 working days before any applicable asbestos stripping or removal work is to be performed as required by section 61.145.b of 40 CFR 61 subpart M, National Emission Standard for Asbestos.
[40 CFR 61.145.b]

9. Owner/Operator shall notify the APCO/District, on an annual basis, postmarked by December 17 of the calendar year, of the predicted asbestos renovations for the following year as required by section 61.145.b of 40 CFR 61, subpart M [see cite for threshold triggering and applicability].
[40 CFR 61.145.b]

PART III
EQUIPMENT SPECIFIC APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

A. MDAQMD PERMIT NUMBER B000294, TURBINE, CENTRIFUGAL NATURAL GAS COMPRESSOR consisting of: A model GE LM-1500 turbine, natural gas-fired, driving a single-stage compressor with a maximum heat input of 150 MMBtu/hr, includes, one Vapor Control System (VCS) for one Turbine Compressor. This VCS is comprised of pipes, fittings, and components.

Centrifugal compressor means equipment that increases the pressure of natural gas by centrifugal action through an impeller. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors for the purpose of the Oil and Gas Regulation. [17 CCR 95667 - Definitions]

Equipment elevation is 2957 feet above sea level.

Stack height is 30 feet, and is 13.3 feet in diameter. Flue gas exhausts at 336,539 cfm at a temperature of 850 deg F, and at a velocity of 2404 fpm.

OPERATING CONDITIONS APPLICABLE TO PERMIT NUMBER B000294:

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.
[40 CFR 63.6605(b) and District Rule 1302(C)(2)(a)]

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 Rule 1302(C)(2)(a)]

3. The owner/operator shall comply with MDAQMD Rule 1159 (D)(2)(b) and (F)(1)(e), by keeping the following operating records. The owner/operator shall maintain a continuous monitoring device that measures and records elapsed time of operation (Note that this turbine is not subject to District Rule 1159(F)(1)(a) as it is not equipped with an emissions control system):
   (a) The owner/operator shall keep daily operating logs for Turbine that includes, as a minimum, the following information: the total hours of operation per day; the

accumulated hours of operation per calendar month and calendar year; and the type and quantity of fuel used during each day and accumulative amounts per calendar month, quarter year and year.

[District Rules 204 and 1159]

4. This equipment shall not emit a measured NOx Emissions Concentration (as defined by Rule 1159) in excess of 90 ppmv. Compliance with this condition shall be established through periodic source testing as defined in Condition 5, below:

   (a) For the Southern California Gas Company Turbine Model GE LM-1500, the following alternative federal NO_X RACT limits apply: NO_X Limit: 90 ppmv when fired on PUC quality natural gas fuel.
   (b) NO_X ppmv emission limit is corrected to 15 percent oxygen and ISO standard conditions on a dry basis, averaged over any consecutive 15-minute period.

   [District Rules 204 and 1159]

5. This equipment is presently not operated; therefore, source testing shall occur according to the following schedule once operations commence, defined as operating 2000 hours in any 12-month period. Once operations commence, this unit shall be source tested in accordance with this condition at least once every twelve (12) month period in which the unit exceeds a run-time of 2000 hours. 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/certification 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-(45) days of completion of the test. All compliance/source test notifications, protocols, and results may be submitted electronically to reporting@mdaqmd.ca.gov.

   The following compliance tests are required:
   (a) NO_X as NO_2 in ppmvd at 15% oxygen (measured per USEPA Reference Method 20); and,
   (b) The Higher Heating Value (HHV) and the Lower Heating Value (LHV) shall be determined by the following method for gaseous fuels: ASTM Test Method D 3588-91; or ASTM Test Method D 1826-88; or ASTM Test Method D 1945-81. [District Rule 1159 and 40 CFR 70.6(a)(3)(i)(A)]

6. The owner/operator shall maintain current and on-site for a minimum of five (5) years a turbine operating log. This daily log shall be provided to District, State or Federal personnel upon request and shall include at a minimum the following information:
   (a) Date and nature of all repairs and maintenance;
   (b) Date of operation (startup and shutdown if necessary);
   (c) Duration of operational period (in hours);
   (d) Total calendar monthly operations (in hours); and,
   (e) Type and quantity of fuel consumed (in cubic feet or equivalent). Type and

quantity of fuel consumed (in cubic feet or equivalent).
[District Rules 204 and 1203(D)(1)(d)(ii)]

For missing records of fuel usage. the substitute data value shall be the best available estimate of the parameter, based on all available process data (e.g. load, operating hours, etc.). The procedure used to estimate the substitute data value shall be documented and records of the procedure used for such estimates shall be maintained.
[40 CFR 98.35(b)(2), District Rule 204]

7. Conditions 7 through 19 ARE DISTRICT AND STATE ENFORCEABLE ONLY REQUIREMENTS and 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 (d)(1)&(2)]

8. 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 13 through 19). [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)]

9. 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 20, 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)]

10. 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)]

11. 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)]

12. 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

13. The failure of an owner/operator to repair leaks within the timeframes specified, during any inspection period, shall constitute a violation. 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)]

14. 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)]

15. 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)]

16. 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)]

17. 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)]

18. 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.

19. 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

20. 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]

B. MDAQMD PERMIT NUMBER B000295; SPARK-IGNITED (SI) NATURAL GAS IC ENGINE, GENERATOR UNIT No. 1 consisting of: Year of Manufacture; Unknown; 4SRB; Woodward RELi E3 Air/Fuel Ratio Control; Engine is Subject to RICE NESHAP 40 CFR Part 63 Subpart ZZZZ and is Located at a HAP Area Source.

Equipment Elevation is 2960 feet above sea level.

Stack height is 22 feet, stack diameter is 0.8 feet, stack gas exhausts at 1556 cfm at 900 deg F and at a velocity of 3095 fpm.

One Waukesha, NG fired internal combustion engine Model No. L5790-GU and Serial No. 254301, Three-Way Catalyst (also NSCR), Four-Stroke Rich Burn, Air-To-Fuel Ratio Controller, producing 465 bhp with cylinders at 900 rpm while consuming a maximum of 5.92 MMBtu/hr. This equipment powers a Waukesha Generator Model No. P303391 and Serial No. 173-917911, rated at 400 KW.

OPERATING CONDITIONS APPLICABLE TO PERMIT NUMBER B000295:

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.
[40 CFR 63.6605(b) and District Rule 1302(C)(2)(a)]

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 Rule 1302(C)(2)(a)]

3. The engine shall only be used with a properly maintained and properly functioning RELi E3 Air Fuel Ratio Controller (AFRC) system and three-way catalysts/non-selective catalytic reduction (NSCR) device, with "Quick Lid" housing, manufactured by DCL. The AFRC must be maintained and operated appropriately in order to ensure proper operation of the engine and NSCR so as to minimize emissions at all times as required by 60.4243(g). The owner/operator shall only replace this catalyst and AFRC with the same manufacturers and model numbers unless otherwise approved by the MDAQMD.
[40 CFR 60.4243(g) and District Rule 1302]

4. This engine is located at an Area HAP Source and subject to the applicable requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements: The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
   (a) Change oil and oil filter every 1,440 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
   (b) Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and replace as necessary; c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
   [Table 2 d to Subpart ZZZZ of Part 63]

5. At least once every calendar quarter, or, after every 2,000 hours of engine operation, the Owner/Operator shall conduct an inspection, perform any required testing, maintenance, and/or other procedures that ensures the Internal Combustion Engine is operated in strict accordance with the manufacturer's specifications and in continual compliance with the provisions of District Rule 1160. To ensure ongoing compliance, the owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years [40 CFR 63.6660]. This log shall include, at a minimum, the information specified below, and shall be provided to District, State and/or Federal personnel, upon request:
   (a) Dates of operation;
   (b) Records of testing, as applicable;
   (c) Records of maintenance and inspections performed on this equipment, inclusive of the management practice requirements of condition 6 below [40 CFR

63.6655(a)(4)];
(d) Hours of operation;
(e) Fuel consumption in standard cubic feet per calendar month;
(f) Catalyst performance data (inlet temperature and inlet oxygen content, or as specified by the District-approved Parametric Monitoring Protocol);
(g) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6655(a)(2)]; and,
(h) Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions conducted to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655]

[District Rule 1160]

6. The owner/operator 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, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

7. This unit is subject to the requirements of 40 CFR 63 Subpart ZZZZ (RICE NESHAPs), District Rule 1160, and these permit conditions. In the event of conflict between conditions and the referenced regulatory citation, the more stringent requirements shall govern.
[District Rule 204]

8. The owner/operator shall not operate this engine without direct coupling to a generator and without the installed speed controller functioning properly and maintaining the rpm equal to 900. The engine shall be bhp restricted to a maximum load limit of 350 kW. The limit is approximately 465 bhp at 900 rpm.
[District Rule 1302]

9. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[District Rule 1302(C)(2)(a) and Rule 1160(E)(1)(b)(i)b]

10. The Air-to-Fuel Ratio Controller shall be used in conjunction with the control device, and shall be maintained and operated appropriately to ensure proper operation of the engine and control device.
[District Rule 1160(E)(1)(b)(i)(c)]

11. Pursuant to District Rule 1160, the owner/operator must comply with the ppmvd emission standards over the entire life of the engine; compliance shall be demonstrated through an emission compliance test. At a minimum, emissions compliance testing shall be conducted for NOX, VOC, CO and oxygen (O2) levels in compliance with the provisions of the District's Compliance Test Procedural Manual. Emissions

concentrations shall not exceed the following values:
(a) NO_X: 50 ppmvd at 15% O2 (Rule 1160 Table 1);
(b) VOC: 106 ppmvd at 15% O2 (Rule 1160 Table 2), and
(c) CO: 4,500 ppmvd at 15% O2 (Rule 1160 Table 3).
[Emission standards from District Rule 1160]

12. The owner/operator must conduct an initial performance test within 180 days of the modified engines startup, and conduct subsequent performance testing once every 12 months thereafter to demonstrate compliance with condition 11. If a compliance test demonstrates compliance with condition 11, the testing frequency may be extended to once every 24 months. Failure of a compliance test, or failure to complete the test within the required frequency, resets the compliance test frequency to once every 12 months. [District Rule 1160(E)(1)(d)]

13. Pursuant to District Rule 1160, the owner/operator shall perform compliance testing in accord with the following test procedures or any other method approved by USEPA and the APCO:
(a) Oxides of nitrogen - EPA Method 7E, or ARB Method 100.
(b) Carbon monoxide - EPA Method 10, or ARB Method 100.
(c) Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100.
(d) Volatile organic compounds - EPA Method 18, 25A or 25B, or ARB Method 100.
(e) Determination of the exempt compounds, shall be performed in accordance with ASTM Test Method D 4457-85 (Solvents and Coatings) and be consistent with the provisions set forth in the Federal Register (FR, Vol. 56, No. 52, March 18, 1991). Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or facility operator identifies a specific compound or compounds from the broad classes of perfluorocarbons listed in 40 CFR 51.100(s)(1) as being present in the product or process. When such compounds are identified, the facility shall provide the test method to determine the amount(s) of the specific compound(s).
[District Rule 1160]

14. The owner/operator must provide a written performance test plan or protocol at least thirty days prior to the test date. The owner/operator must conduct all required compliance/performance 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/performance test date so that an observer may be present. The final compliance/performance test results must be submitted to the District not later than forty-five (45) days after the source test date. All compliance/performance test notifications, protocols, and results may be submitted electronically to reporting@mdaqmd.ca.gov. [District Rule 1160(E)(1)(d)]

15. The owner/operator shall ensure the emission concentrations from this engine, as indicated in Condition 11 above, are achieved no later than January 22, 2019. [District Rule 1160]

16. The owner/operator shall operate this engine in accordance with the most recently approved Compliance Assurance Monitoring (CAM) plan. A copy of the plan is included in the facilities Federal Operating Permit, 3100066, Part VIII - CAM PLAN.

To achieve the required emission reductions, proper catalyst operating environment must be maintained as required by the catalyst manufacturer and 40 CFR 60, Subpart ZZZZ. The exhaust temperature; therefore, must be maintained within the effective operating range specified and oxygen content as specified by the manufacture for the associated NSCR.

The CAM plan provides an alternative method for temperature and oxygen content monitoring required for proper NSCR operation.

Key features of the plan include:

(a) Engine exhaust temperatures shall be maintained between 750F and 1350F.
(b) Oxygen levels shall be maintained below 0.5%.
(c) Proper operation of the AFRC and engine control system, which checks for open and out of range thermocouples (inlet and outlet temperatures).
(d) Thermocouples' Calibration shall be verified annually or replaced;
(e) Records of this activity shall be kept and made available to State, Federal or District Staff upon request.
(f) Records of out of range Alarms and corrective action shall be kept and made available to State, Federal and District Staff upon request.

[40 CFR Part 64.2 for NO_X]

17. 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]

C. MDAQMD PERMIT NUMBER T002279; WASTE OIL STORAGE TANK consisting of: a storage tank for waste oil that is aboveground, and of 3,000-Gallon capacity. Equipment elevation is 903 meters above sea level.

OPERATING CONDITIONS APPLICABLE TO PERMIT NUMBER T002279:

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)]

2. All of the components of this tank, including but not limited to tanks, flanges, seals,

pipes, pumps, valves, meters, connectors, shall be maintained and operated so as to prevent fugitive vapor leaks, fugitive liquid leaks, and excess organic liquid drainage during transfer, storage and handling operations.
[District Rule 1302(C)(2)(a)]

3. This petroleum product tank must be equipped with a permanent submerged fill pipe. A person shall not transfer or permit the transfer of petroleum products into this tank by any means other than the permanent submerged fill pipe.
[District Rule 1302(C)(2)(a)]

4. Owner/Operator shall log all shipments of oil to other parties and the hauler of said oil. Additionally, this log shall contain the mass (or volume) and the date of the oil shipment. Log must be kept on-site for a minimum of five (5) years and provided to District, state or federal personnel on request.
[District Rule 1302(C)(2)(a)]

5. These tanks are limited to storing waste oil generated on-site by So Cal Gas Co.
[District Rule 1302(C)(2)(a)]

6. 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]

D. MDAQMD PERMIT NUMBER B013427; NATURAL GAS-POWERED PNEUMATIC DEVICES AND PUMPS consisting of: twenty (20) – Intermittent Bleed Pneumatic Devices; and, one (1) – Exempted Separator on Blowdown Scrubber V-2.

Pneumatic Device means an automation device that uses natural gas, compressed air, or electricity to control a process.

Continuous Low Bleed Pneumatic Devices means the continuous venting of natural gas from a gas-powered pneumatic device to the atmosphere.

Continuous bleed pneumatic devices must vent continuously in order to operate.
Intermittent Bleed Pneumatic Devices means the intermittent venting of natural gas from a gas-powered pneumatic device to the atmosphere.

Intermittent bleed pneumatic devices may vent all or a portion of their supply gas when control action is necessary but do not vent continuously.

Pneumatic Pumps means a device that uses natural gas or compressed air to power a piston or diaphragm in order to circulate or pump liquids.

OPERATING CONDITIONS APPLICABLE TO PERMIT NUMBER B013427:

1. Conditions 1 through 15 are DISTRICT AND STATE ENFORCEABLE ONLY REQUIREMENTS and 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.
[17 CCR 95668 (e)(1)]

2. Beginning January 1, 2019, continuous bleed natural gas pneumatic devices shall not vent natural gas to the atmosphere and shall comply with the leak detection and repair requirements specified in 17 CCR 95669.
[17 CCR 95668(e)(2)]

   Continuous bleed natural gas-powered pneumatic devices installed prior to January 1, 2016 may be used provided they meet all of the following requirements as of January 1, 2019:
   (a) No device shall vent natural gas at a rate greater than six (6) standard cubic feet per hour (scfh) when the device is idle and not actuating.
   (b) All devices are clearly marked with a permanent tag that identifies the natural gas flow rate as less than or equal to six (6) scfh.
   (c) All devices are tested annually using a direct measurement method (high volume sampling, bagging, calibrated flow measuring instrument); and,
   (d) Any device with a measured emissions flow rate greater than six (6) scfh shall be successfully repaired within 14 calendar days from the date of the initial emission flow rate measurement.
   (e) The owner/operator shall maintain, and make available upon request by the ARB Executive Officer and/or District, 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(e)(2)(A)]

3. Beginning January 1, 2018, intermittent bleed natural gas-powered pneumatic devices shall comply with the leak detection and repair requirements specified in 17 CCR 95669 when the device is idle and not controlling.
[17 CCR 95668(e)(3)]

4. Beginning January 1, 2019, natural gas-powered pneumatic pumps shall not vent natural gas to the atmosphere and shall comply with the leak detection and repair requirements specified in 17 CCR 95669 when the device is idle and not controlling.
[17 CCR 95668(e)(4)]

5. Continuous bleed natural gas-powered pneumatic devices and pumps which need to be replaced or retrofitted to comply with the requirements specified shall do so by one of the following methods:
   (a) Collect all vented natural gas with the use of a vapor collection system as specified in 17 CCR 95671; or,
   (b) Use compressed air or electricity to operate. [17 CCR 95668(e)(5)]

(c) 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)]

7. 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)]

8. 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

9. The failure of an owner/operator to repair leaks within the timeframes specified, during any inspection period, shall constitute a violation. 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)]

10. 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)]

11. 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)]

10. 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)]

11. 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)]

12. 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)]

13. 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)]

14. 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 Natural Gas-Powered Pneumatic Devices [17 CCR 95672 (a)(12)]:

(a) Maintain, for at least five years from the date of each emissions flow rate measurement, a record of the emission flow rate measurement as specified in Appendix A, Table A7. For Leak Detection and Repair [17 CCR 95672 (a)(17-21)]:

(b) 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.

(c) 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.

(d) Maintain records that provide proof that parts or equipment required to make necessary repairs have been ordered.

(e) 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)]: f. Maintain records that provide proof that parts or equipment required to make necessary repairs have been ordered.

15. 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 Natural Gas-Powered Pneumatic Devices [17 CCR 95673 (a)(5)]:

(a) Annually, report the emission flow rate measurement for each pneumatic device with a designed emission flow rate of less than six (6) scfh 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.

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

16. 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]

PART IV
STANDARD FEDERAL OPERATING PERMIT CONDITIONS

A. STANDARD CONDITIONS:

1. If any portion of this Federal Operating Permit is found to be invalid by the final decision of a court of competent jurisdiction the remaining portion(s) of this Federal Operating Permit shall not be affected thereby.
[District Rule 1203(D)(1)(f)(i); 40 CFR 70.6(a)(5)]

2. Owner/Operator shall comply with all condition(s) contained herein. Noncompliance with any condition(s) contained herein constitutes a violation of the Federal Clean Air Act and of MDAQMD Regulation XII and is grounds for enforcement action; termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal of this Federal Operating Permit.
[District Rule 1203(D)(1)(f)(ii); 40 CFR 70.6(a)(6)(i)]

3. It shall not be a defense in an enforcement action brought for violation(s) of condition(s) contained in this Federal Operating Permit that it would have been necessary to halt or reduce activity to maintain compliance with those condition(s).
[District Rule 1203(D)(1)(f)(iii); 40 CFR 70.6(a)(6)(ii)]

4. This Federal Operating Permit may be modified, revoked, reopened or terminated for cause.
[District Rule 1203(D)(1)(f)(iv); 40 CFR 70.6(a)(6)(iii)]

5. The filing of an application for modification; a request for revocation and re-issuance; a request for termination; notifications of planned changes; or anticipated noncompliance with condition(s) does not stay the operation of any condition contained in this Federal Operating Permit.
[District Rule 1203(D)(1)(f)(v); 40 CFR 70.6(a)(6)(iii)]

6. The issuance of this Federal Operating Permit does not convey any property rights of any sort nor does it convey any exclusive privilege.
[District Rule 1203(D)(1)(f)(vi); 40 CFR 70.6(a)(6)(iv)]

7. Owner/Operator shall furnish to the MDAQMD, within a reasonable time as specified by the MDAQMD, any information that the MDAQMD may request in writing.
[District Rule 1203(D)(1)(f)(vii); 40 CFR 70.6(a)(6)(v)]

8. Owner/Operator shall furnish to District, state or federal personnel, upon request, copies of any records required to be kept pursuant to condition(s) of this Federal Operating Permit.
[District Rule 1203(D)(1)(f)(viii); 40 CFR 70.6(a)(6)(v)]

9. Any records required to be generated and/or kept by any portion of this Federal

Operating Permit shall be retained by the facility Owner/Operator for at least five (5) years from the date the records were created.
[District Rule 1203(D)(1)(d)(ii); 40 CFR 70.6(a)(3)(ii)(B)]

10. Owner/Operator shall pay all applicable fees as specified in MDAQMD Regulation III, including those fees related to permits as set forth in Rules 301 and 312.
[District Rule 1203(D)(1)(f)(ix); 40 CFR 70.6(a)(7)]

11. Owner/Operator shall not be required to revise this permit for approved economic incentives, marketable permits, emissions trading or other similar programs provided for in this permit.
[District Rule 1203(D)(1)(f)(x); 40 CFR 70.6(a)(8)]

12. Compliance with condition(s) contained in this Federal Operating Permit shall be deemed compliance with the Applicable Requirement underlying such condition(s). The District clarifies that "only" Applicable Requirements listed & identified elsewhere in this Title V Permit are covered by this Permit Shield and does not extend to any unlisted/unidentified conditions pursuant to the requirements of 40 CFR 70.6(f)(1)(i). [District Rule 1203(G)(1); 40 CFR 70.6(f)(1)(i)]

13. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the emergency powers of USEPA as set forth in 42 U.S.C. §7603.
[District Rule 1203(G)(3)(a); 40 CFR 70.6(f)(3)(i)]

14. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit liability for violations which occurred prior to the issuance of this Federal Operating Permit.
[District Rule 1203(G)(3)(b); 40 CFR 70.6(f)(3)(ii)]

15. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to alter any Applicable Requirement Contained in the Acid Rain Program.
[District Rule 1203(G)(3)(c); 40 CFR 70.6(f)(3)(iii)]

16. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the ability of USEPA or the MDAQMD to obtain information pursuant to other provisions of law including but not limited to 42 U.S.C. §7414.
[District Rule 1203(G)(3)(d); 40 CFR 70.6(f)(3)(iv)]

17. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to apply to emissions trading pursuant to provisions contained in an applicable State Implementation Plan.
[District Rule 1203(G)(3)(e); 40 CFR 70.4(b)(12)(ii)(B)]

18. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to apply to changes made which are not expressly allowed by this Federal Operating Permit.
[District Rule 1203(G)(3)(f); 40 CFR 70.4(b)(14)(iii)]

19. The Permit Shield set forth in Part IV, condition 12, shall not be construed to apply to changes made pursuant to the Significant Permit Modification provisions until such changes are included in this Federal Operating Permit.
[District Rule 1203 (G)(3)(g); 40 CFR 70.5(a)(1)(ii), 70.7(e)(2)(vi)]

20. If Owner/Operator performs maintenance on, or services, repairs, or disposes of appliances, Owner/Operator shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. These requirements are Federally Enforceable through this Title V Permit.
[40 CFR Part 82, Subpart F]

21. If Owner/Operator performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), Owner/Operator 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. These requirements are Federally Enforceable through this Title V Permit.
[40 CFR Part 82, Subpart B]

22. Notwithstanding the testing requirements contained elsewhere in this Title V Permit, any credible evidence may be used to establish violations, including but not limited to; reference test methods, engineering calculations, indirect estimates of emissions, CEMS data, and parametric monitoring data. Data need not be required to be collected in a Title V permit in order to be considered credible.
[Section 113(a) of the Clean Air Act]

PART V
OPERATIONAL FLEXIBILITY

A. ALTERNATIVE OPERATING SCENARIO(S):

B. OFF PERMIT CHANGES:

1. Permitee may make a proposed change to equipment covered by this permit that is not expressly allowed or prohibited by this permit if:
   (a) Permitee has applied for and obtained all permits and approvals required by MDAQMD Regulation II and Regulation XII unless the equipment involved in the change is exempt from obtaining such permits and approvals pursuant to the provisions of District Rule 219; and
      (i) The proposed change is-will not:
      a. Violate any Federal, State or Local requirement, including any Applicable Requirement, and the notice required under section (E)(1)(c)(ii)(c) indicates which term or condition contained in the FOP is no longer applicable; and
      b. Be subject to any requirement under Title IV of the Federal Clean Air Act (42 U.S.C. .S&7651-7651o) and is not a modification under Title I of the Federal Clean Air Act (42 U.S.C. 7401-7515); and

c. Result in the exceedance of the emissions allowable under the permit, whether expressed therein as a rate of emissions or in terms of total emissions.

2. Procedure for "Off Permit" Changes
   (a) If a proposed "Off Permit Change" qualifies under Part V, Section (B)(I)(A)(1) above, permitee shall implement the change as follows:
      (i) Permitee shall provide information sufficient to comply with the provisions of 40 CFR 70.4(b)(14)(ii) except for changes that qualify as insignificant pursuant to District Rule 219.
      (ii) In addition to the information required pursuant to the provisions of Regulation II and Regulation XIII such application shall include:
         a. A notification that this application is also an application for an "Off Permit" Change pursuant to this condition; and [District Rule 1203I(1)(c)(ii)(b)]
         b. A list of any new Applicable Requirements which would apply as a result of the change; and [District Rule 1203(E)(1)(c)(ii)(b)]
         c. A list of any existing Applicable Requirements, which would cease to apply as a result of the change. [District Rule 1203(E)(1)(c)(ii)(b)]
      3. Permitee shall forward a copy of the application and notification to USEPA upon submitting it to the District. [District Rule 1203(E)(1)(c)(ii)c]
   B. Permitee may make the proposed change upon receipt from the District of the Authority to Construct Permit or seven (7) days after forwarding the copy of the notice and application to USEPA whichever occurs later. [District Rule 1203(E)(1)(c)(ii)e]

C. Permitee shall attach a copy of the Authority to Construct Permit and any subsequent Permit to Operate, which evidences the Off-Permit Change to this Title V permit. [District Rule 1203(E)(1)(c)(ii)(d)(2)]

D. Permitee shall include each Off-Permit Change made during the term of the permit in any renewal application submitted pursuant to Rule 1202(B)(3)(b). [See 1203(E)(1)(c)(i)f]

3. Other Requirements:

(a) The provisions of District Rule 1205 – Modifications do not apply to an Off-Permit Change made pursuant to this condition.

(b) The provisions of Rule 1203(G) – Permit Shield do not apply to an Off-Permit Change made pursuant to this condition. [See 40 CFR 70.4(b)(i)(B)] [District Rule 1203(E)(1)(c)]

PART VI
CONVENTIONS, ABREVIATIONS, DEFINITIONS

A. CONVENTIONS:

The following referencing conventions are used in this federal operating permit:

40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS)
40 CFR Part 60, Appendix F, Quality Assurance Procedures
40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS)
40 CFR Part 61, Subpart M, National Emission Standards for Asbestos
40 CFR Part 63--National Emission Standards For Hazardous Air Pollutants For Affected Source Categories
40 CFR Part 72, Permits Regulation (Acid Rain Program)
40 CFR Part 73, Sulfur Dioxide Allowance System
40 CFR Part 75, Continuous Emission Monitoring
40 CFR Part 75, Subpart D, Missing Data Substitution Procedures
40 CFR Part 75, Appendix B, Quality Assurance and Quality Control Procedures
40 CFR Part 75, Appendix C, Missing Data Estimating Procedures
40 CFR Part 75, Appendix D, Optional SO_2 Emissions Data Protocol
40 CFR Part 75, Appendix F, Conversion Procedures
40 CFR Part 75, Appendix G, Determination of CO_2 Emissions

B. OTHER CONVENTIONS:

1. Unless otherwise noted, a "day" shall be considered a 24-hour period from midnight to midnight (i.e., calendar day).
2. The process unit identifications represent the District permit number designations. These numbers are not sequential. The use of District permit numbers provides continuity between the District and Federal Operating Permit systems.

C. ABBREVIATIONS

Abbreviations used in this permit are as follows:

APCO	Air Pollution Control Officer
bhp	brake horsepower
Btu	British thermal units
CCR	California Code of Regulations
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2	carbon dioxide
District	Mojave Desert Air Quality Management District (formed July 1993)
MDAQMD	Mojave Desert Air Quality Management District (formed July 1993)
MD	Mojave Desert Air Quality Management District (formed July 1993)

gr/dscf	grains per dry standard cubic foot
gpm	gallons per minute
gph	gallons per hour
hp	horse power
H&SC	California Health and Safety Code
lb	pounds
lb/hr	pounds per hour
lb/MM Btu	pounds per million British thermal units
MMBtu	million British thermal units
MMBtu/hr	million British thermal units per hour
MW	Megawatt electrical power
MW(e) net	net Megawatt electrical power
NH_3	ammonia
NMOC	non-methane organic compounds
NO_x	oxides of nitrogen
NO_2	nitrogen dioxide
O_2	oxygen
pH	pH (acidity measure of solution)
PM_{10}	particulate matter less than 10 microns aerodynamic diameter
ppmv	parts per million by volume
psig	pounds per square inch gauge pressure
QA	quality assurance
rpm	revolutions per minute
RVP	Reid vapor pressure
SB	San Bernardino County APCD (1975 to formation of MDAQMD)
SCAQMD	South Coast Air Quality Management District
scfm	standard cubic feet per minute
scfh	standard cubic feet per hour
SIC	Standard Industrial Classification
SIP	State of California Implementation Plan
SO_x	oxides of sulfur
SO_2	sulfur dioxide
tpy	tons per year
TVP	true vapor pressure
VCS	vapor control system

PART VII DISTRICT RULE SIP CITATIONS AND BASIS/AUTHORITY

Agency	Rule #	Rule Title	Effective Area	Rule Book Version	SIP Version	Submit Date	CFR	FR Date	FR Cite
Old SB	2	Definitions	SBC	MD 102	Bef 02/72	2/21/1972	40 CFR 52.2236(e)(4)(i)(A)	12/21/1978	43 FR 59489
Old SB	5 (a)	Public Availability of Emissions Data	SBC	None	Bef 02/73	7/25/1973	40 CFR 52.220(c)(21)(xv)(A)	6/14/1978	43 FR 25684
RC	51	Nuisance	RC	MD 402, 07/25/1977 via Res. 94-03	Bef 02/72	2/21/1971	40 CFR 52.220(c)(7)	5/31/1977	
RC	52	Particulate Matter - Concentration		MD 405, 07/25/1977 via Res. 94-03	Bef 06/72		40 CFR 52.228(b)(1)(iii)(A)	9/8/1978	43 FR 40011
RC	53	Specific Air Contaminants	RC	MD 406, 02/20/1979 via Res. 94-03	G-73	6/6/1977	40 CFR 52.240(a)(1)&(d)(1)(i)	1/16/1981	46 FR 3883
RC	54	Solid Particulate Matter, Weight	RC	MD 405, 07/25/1977 via Res. 94-03	Bef 06/72	6/30/1972	40 CFR 52.228(b)(1)(iii)(A)	9/8/1978	43 FR 4011
Old SB	54A	Solid Particulate Matter, Weight	SBC	MD 405, 07/25/1977	Unknown	6/30/1972	40 CFR 52.240(a)(1)&(d)(1)(i)	1/16/1981	46 FR 3883
RC	56	Scavenger Plants	RC	None	G-73	6/6/1977	40 CFR 52.220(c)(39)(iv)(C)	9/8/1978	43 FR 40011
RC	58	Disposal of Solid and Liquid Wastes	RC	MD 473, 7/25/77 via Reso 04-03	Bef 06/72		40 CFR 52.228(b)(1)(iii)(A)	9/8/1978	43 FR 40011
Old SB	58 A	Disposal of Solid and Liquid Wastes	SBC	MD 473, 07/25/77	Bef 02/72		40 CFR 52.240(a)(1) & (d)(1)(i)	1/16/1981	46 FR 3883
Old SB	62.1	Sulfur Content of Natural Gas	SBC	None but See MD 431	Bef 02/72	2/21/1972	40 CFR 52.240(a)(1) & (d)(1)(i)	1/16/1981	46 FR 3883
Old SB	67	Fuel Burning Equipment	SBC	None but See MD 474 and 476	Bef 02/72		40 CFR 52.280(b)(1)(ii)(C)	6/9/1982	47 FR 25013
RC	67	Fuel Burning Equipment	RC	None but See MD 474 and 476	Bef 11/79		40 CFR 52.280(c)(1)(i)	5/18/1981	46 FR 27116
Old SB	69	Vacuum Producing Devices or Systems	SBC	Fed Neg Dec. 12/21/1994	Bef 02/72	2/21/1972	40 CFR 52.240(a)(1) & (d)(1)(i)	1/16/1981	46 FR3886
Old SB	70	Asphalt Air Blowing	SBC	Fed Neg Dec. 10/26/1994	Bef 02/72	2/21/1972	40 CFR 52.240(a)(1) & (d)(1)(i)	1/16/1981	46 FR 3886
RC	72	Fuel Burning Equipment	RC	MD 474, 01/22/1996; MD 475 03/16/1981; and MD 476 01/22/1996 via Res. 94-03	Bef 11/79	11/19/1979	40 CFR 52.280(c)(1)(i)	5/18/1981	46 FR 27116
RC	73	Lead Content and Volatility of Gasoline	RC	None	G-73	6/6/1977	40 CFR 52.220(c)(39)(iv)(C)	9/8/1978	43 FR 4001
Old SB	73	Dry Sandblasting	SBC	None	Bef 02/72	4/10/1975	40 CFR 52.220(C)(27)(v)	6/14/1978	43 FR 25684
RC	74	Vacuum Producing Devices or Systems	RC	Fed Neg Dec12/21/1994	Bef 06/72	6/30/1972	40 CFR 52.269(b)(3)(ii)(A)		
SC	101	Title	RC	7/1/1993 via Res. 94-03	Bef 11/77	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	101	Title	SBC	7/1/1993	12/19/1998	3/26/1990	40 CFR 52.220(c)(179)(i)(B)	11/27/1990	55 FR 49281
MD	102	Definition of Terms			4/23/2018	8/17/2018	40 CFR 52.220(c)(520)(i)(A)(1)	7/2/2019	84 FR 31682
MD	102	Definition of Terms		8/26/2019	(SIP Sub)				
MD	103	Definition of District Boundaries	MD	6/28/1995	Current	8/10/1995	40 CFR 52.220(c)(224)(i)(C)(2)	6/3/1999	64 FR 29790
SB	103	Definition of Terms (Unknown rule - no record except in FR reference)	SBC	None	Bef 11/77	11/4/1977	40 CFR 52.236(e)(3)(i)	1/16/1981	46 FR 3883
SC	104	Reporting of Source Data Analysis	RC			8/11/1980	FR Text	6/9/1982	47 FR 25013
MD	104	Reporting of Source Data Analysis		12/19/1988	Current	3/26/1990	40 CFR 52.220(c)(179)(i)(B)(i)	11/27/1990	55 FR 49281
SC	106	Increments of Progress	RC	12/19/1988 via Res. 94-03	Bef 06/78	8/11/1980	FR Text	6/9/1982	47 FR 25013
MD	106	Increments of Progress		12/19/1988	Current	3/26/1990	40 CFR 52.220(c)(179)(i)(B)(i)	11/27/1990	55 FR 49281
MD	107	Certification and Emissions Statements	MD	9/14/1992	Current	11/12/1992	40 CFR 52.220(c)(190)(i)(F)(1)	5/26/2004	69 FR 29880
SC	107	Determination of Volatile Organic Compounds in Coating Material	RC		Bef 3/1/82	3/1/1982	40 CFR 52.220(c)(121)(c)(v)(B)	10/11/1983	48 FR 46046
SC	108	Alternate Emission Control Plans	RC	None	4/6/1990	12/31/1990	40 CFR 52.220(c)(182)(i)(A)(3)	8/30/1993	58 FR 45445
SC	109	Record keeping for Volatile Organic Compound Emissions	RC	None	Bef 09/92	9/14/1992	40 CFR 52.220(c)(189)(i)(A)(6)	4/13/1995	60 FR 18751
SC	201	Permit to Construct	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	201	Permit to Construct	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	202	Temporary Permit to Operate	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	202	Temporary Permit to Operate	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	203	Permit to Operate	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	203	Permit to Operate	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	204	Permit Conditions	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
MD	204	Permit Conditions	SBC	7/25/1977	G-73				
SC	205	Cancellation of Application	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	205	Cancellation of Application	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	206	Posting of Permit to Operate	RC	7/25/1977 via Res.94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	206	Posting of Permit to Operate	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	207	Altering or Falsifying of Permit	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	207	Altering or Falsifying of Permit	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	208	Permit for Open Burning	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	208	Permit for Open Burning	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
SC	209	Transfer and Voiding of Permit	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	209	Transfer and Voiding of Permit	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	212	Standards for Approving Permits	RC	7/25/1977 via Res. 94-03	5/1/1987	6/9/1987	40 CFR 52.220(c)(173)(i)(A)(1)	2/3/1989	54 FR 5448
SB	212	Standards for Approving Permits	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	217	Provision for Sampling and Testing Facilities	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	217	Provision for Sampling and Testing Facilities	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	218	Stack Monitoring	RC	7/25/1977 via Res. 94-03	Bef 10/81	10/23/1981	40 CFR 52.220(c)(103)(xviii)(A)	7/6/1982	47 FR 29231
SO	218	Stack Monitoring	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
SB	219	Equipment Not Requiring a Written Permit	SBC	1/28/2019	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	11/9/1978	43 FR 52237
SC	219	Equipment Not Requiring a Written Permit Pursuant to Regulation II	RC	1/28/2019	9/4/1981	10/23/1981	40 CFR 52.220(c)(103)(xviii)(A)	7/6/1982	47 FR 29231
MD	219	Equipment Not Requiring a Written Permit	MD	1/28/2019	(SIP Sub)				
SC	220	Exemption, Net Increase in Emissions	RC	11/25/1991 via Res. 94-03	8/7/1981	10/23/1981	40 CFR 52.220(c)(103)(xviii)(A)	7/6/1982	47 FR 29231

Agency	Rule #	Rule Title	Effective Area	Rule Book Version	SIP Version	Submit Date	CFR	FR Date	FR Cite
SC	221	Plans	RC	None	1/4/1985	11/12/1985	40 CFR 52.220(c)(165)(i)(B)(1)	4/17/1987	52 FR 12522
MD	221	Federal Operating Permit Requirement	MD	2/28/2011	2/21/1994	3/31/1995	40 CFR 52.220(c)(216)(i)(A)(2)	2/5/1996	61 FR 4217
MD	221	Federal Operating Permit Requirement	MD	2/28/2011	(SIP Sub)	6/21/2011			
MD	222	Limitation on Potential to Emit	MD	2/28/2011	7/31/1995	10/13/1995	40 CFR 52.220(c)(225)(i)(H)(1)	8/31/2004	69 FR 53005
MD	222	Limitation on Potential to Emit	MD	2/28/2011	(SIP Sub)	6/21/2011			
SC	301.2	Fee Schedules	RC	None	6/3/1983	7/19/1983	40 CFR 52.220(c)(137)(vii)(B)	10/19/1984	49 FR 41028
MD	315	Federal Clean Air Act Section 185 Penalty	MD	10/24/2011	(SIP Sub)	12/14/2011			
SC	401	Visible Emissions	RC	8/26/2019	4/7/1989	3/26/1990	40 CFR 52.220(c)(155)(iv)(B)	1/29/1985	50 FR 3906
MD	401	Visible Emissions	MD	8/26/2019	Sip Sub				
SC	403	Fugitive Dust		7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	403	Fugitive Dust	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	9/8/1978	43 FR 40011
MD	403.1	Respirable Particulate Matter in SVPA	MD	11/25/1996	11/25/1996	3/3/1997	40 CFR 52.220(c)(224)(i)(C)(2)	8/13/2009	74 FR 40750
MD	403.2	Fugitive Dust Control for MDPA	MD	7/22/1996	(SIP Sub)	10/18/1996			
SC	404	Particulate Matter, Concentration	RC	7/25/1977 via Res. 94-03	10/5/1979	8/11/1980	FR Text	6/9/1982	47 FR 25013
SC	404	Particulate Matter, Concentration	RC	7/25/1977 via Res. 94-03	10/5/1979	2/3/1983	40 CFR 52.220(c)(137)(vii)(B)	10/4/1984	49 FR 41028
SB	404	Particulate Matter - Concentration	SBC	7/25/1977	Current	11/4/1977	40 CFR 52.220(c)(42)(xiii)(A)	12/21/1978	43 FR 52489
SC	405	Solid Particulate Matter, Weight	RC	7/25/1977 via Res. 94-03	5/7/1976	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	405	Solid Particulate Matter, Weight	SBC	7/25/1977	Current	11/4/1977	40 CFR 52.220(c)(42)(xiii)(A)	12/21/1978	43 FR 52489
SB	406	Specific Contaminants	SBC	2/20/1979	7/25/1977	11/4/1977	40 CFR 52.220(c)(42)(xiii)(A)	12/21/1978	43 FR 59489
SC	407	Liquid and Gaseous Air Contaminants	RC	7/25/1977 via Res. 94-03	4/2/1982	8/6/1982	40 CFR 52.220(c)(124)(iv)(A)	11/10/1982	47 FR 50864
SB	407	Liquid and Gaseous Air Contaminants	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
SC	408	Circumvention	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	408	Circumvention	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
SC	409	Combustion Contaminants	RC	7/25/1977 via Res. 94-03	8/7/1981	10/23/1981	40 CFR 52.220(c)(103)(xviii)(A)	7/6/1982	47 FR 29231
SB	409	Combustion Contaminants	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
SB	431	Sulfur Content of Fuels	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	9/8/1978	43 FR 40011
SC	431.1	Sulfur Content of Gaseous Fuels	RC	See MD 431	5/6/1983	7/19/1983	40 CFR 52.220(c)(137)(vii)(B)	10/19/1984	49 FR 41028
SC	431.2	Sulfur Content of Liquid Fuels	RC	See MD 431	Bef 8/80	8/11/1980	FR Text	6/9/1982	47 FR 25013
SC	431.3	Sulfur Content of fossil Fuels	RC	See MD 431	Bef 8/80	8/11/1980	FR Text	6/9/1982	47 FR 25013
SC	432	Gasoline Specifications		7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	432	Gasoline Specifications	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(B)	9/8/1978	43 FR 40011
MD	442	Usage of Solvents	MD	2/27/2006	Current	10/5/2006	40 CFR 52.220(c)(347)(i)(C)(1)	9/17/2007	72 FR 52791
SC	443	Labeling of Solvents	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	443	Labeling of Solvents				6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
MD	444	Open Fires		9/25/2006	Current	5/8/2007	40 CFR 52.220(c)(350)(B)(1)	10/31/2007	72 FR 61525
SC	461	Gasoline Transfer and Dispensing	RC	1/22/2018	Bef 2/83	2/3/1983	40 CFR 52.220(c)(127)(vii)(B)	5/3/1984	49 FR 18829
MD	461	Gasoline Transfer and Dispensing	MD	1/22/2018	5/25/1994	7/13/1994	40 CFR 52.220(c)(198)(i)(E)(1)	5/3/1995	60 FR 21702
MD	461	Gasoline Transfer and Dispensing	MD	1/22/2018	(SIP Sub)	5/18/2018			
SC	462	Organic Liquid Loading	RC	1/22/2018	Bef 8/80	8/11/1980	FR Text	6/9/1982	47 FR 25013
MD	462	Organic Liquid Loading	MD	1/22/2018	5/24/1994	7/13/1994	40 CFR 52.220(c)(198)(i)(E)(1)	5/3/1995	60 FR 21702
MD	462	Organic Liquid Loading	MD	1/22/2018	(SIP Sub)	5/18/2018			
SC	463	Storage of Organic Liquids	RC	1/22/2018	Bef 10/84	10/19/1984	40 CFR 52.220(c)(156)(vii)(A)	1/15/1987	52 FR 1627
MD	463	Storage of Organic Liquids	MD	1/22/2018	11/2/1992	1/11/1993	40 CFR 52.220(c)(191)(i)(C)	5/3/1995	60 FR 21702
MD	463	Storage of Organic Liquids	MD	1/22/2018	(SIP Sub)	5/18/2018			
MD	464	Oil Water Separators		6/12/2014	Current	11/16/2014	40 CFR 52.220(c)(457)(i)(B)(1)	6/5/2015	80 FR 32026
SC	465	Vacuum Producing Devices orSystems	RC	Rescinded & Fed. Neg. Dec 12/21/1994	Bef 5/91	5/13/1991	40 CFR 52.220(c)(184)(i)(B)(2)	8/11/1992	57 FR 35759
MD	465	Vacuum Producing Devices or Systems (Rescinded)	MD	Rescinded & Fed. Neg. Dec 12/21/1994	Not SIP	12/29/1994	40 CFR 52.222(a)(1)(iii)	9/11/1995	60 FR 47074
SC	466	Pumps and Compressors	RC	Rescinded & See 1102 10/26/94	Bef 12/83	12/2/1983	40 CFR 52.220(c)(166)(i)(A)(1)	1/15/1987	52 FR 1627
MD	466	Pumps and Compressors (Rescinded)	MD	Rescinded & See 1102 10/26/94	Not SIP	11/30/1994	40 CFR 52.220(c)(39)(ii)(G)	8/19/1999	64 FR 45175
SC	466.1	Valves and Flanges	RC	None	5/2/1980	8/11/1980	FR Text	6/9/1982	47 FR 25013
SC	468	Sulfur Recovery Units	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	468	Sulfur Recovery Units	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
SC	469	Sulfuric Acid Units	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	469	Sulfuric Acid Units		7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
MD	471	Asphalt Roofing Operations		12/21/1994	Current	12/22/1994	40 CFR 52.220(c)(210)(i)(C)(2)	2/29/1996	61 FR 7706
SC	472	Reduction of Animal Matter	RC	7/25/1977 via Res. 94-03	G-73	8/11/1980	FR Text	6/9/1982	47 FR 25013
SB	472	Reduction of Animal Matter	SBC	7/21/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
MD	473	Disposal of Liquid and Solid Wastes	SBC	7/25/1977	G-73	6/6/1977	40 CFR 52.220(c)(39)(ii)(C)	9/8/1978	43 FR 40011
MD	474	Fuel Burning Equipment - Oxides of Nitrogen	MD	8/25/1997	Bef 11/96	11/26/1996	40 CFR 52.220(c)(254)(i)(H)(1)	1/11/1999	64 FR 1517
MD	474	Fuel Burning Equipment - Oxides of Nitrogen	MD	8/25 1997	Current	3/10/1998	??	??	??
MD	475	Electric Power Generating Equipment	MD	8/25/1997	Current	3/10/1998	40 CFR 52.220(c)(254)(i)(H)(1)	1/11/1999	64 FR 1517
MD	476	Steam Generating Equipment	MD	8/25/1997	Current	3/10/1998	40 CFR 52.220(c)(254)(i)(H)(1)	1/11/1999	64 FR 1517
SB	480	Natural Gas Fired Control Devices	SBC	2/20/1979	Current	5/23/1979	40 CFR 52.220(c)(51)(xii)(A)	1/27/1981	46 FR 8471

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SC	481	Spray Coating Operations	RC	1113, 1114, 1115 & 1116	5/5/1978	8/11/1980	FR Text	6/9/1982	47 FR 25013
SC	501	General	RC	6/10/2019	Bef 8/80	8/11/1980	FR Text	6/9/1982	47 FR 25013
MD	900	Standards of Performance for New Stationary Sources	MD	2/25/2019	Delegated				
MD	1000	National emissions Standards fro Hazardous Air Pollutants	MD	2/25/2019	Delegated				
SC	1101	Secondary Lead Smelters/Sulfur Oxides (SC Adopted 10/7/77)	RC	None	4/4/1980	8/11/1980	FR Text	6/9/1982	47 FR 25013
SC	1102	Petroleum Solvent Dry Cleaners (SC Amended 12/7/90)	RC	None	12/7/1990	5/13/1991	40 CFR 52.220(c)(184)(i)(B)(1)	3/24/1992	57 FR 10136
MD	1102	Fugitive Emissions of VOC's from Components at Pipeline Transfer Stations	MD	10/26/1994	Current	11/30/1994	40 CFR 52.220(c)(207)(i)(D)	9/27/1995	60 FR 49772
SC	1102.1	Perchloroethylene Dry Cleaning Systems	RC	None	12/7/1990	5/31/1991	40 CFR 52.220(c)(184)(i)(B)(1)	3/24/1992	57 FR 10136
SC	1103	Pharmaceuticals and Cosmetics Manufacturing Operation	RC	None	4/6/1980	4/23/1980	40 CFR 52.220(c)(69)(iii)	7/8/1982	47 FR 29668
MD	1103	Cutback and Emulsified Asphalt	MD	12/21/1994	Current	12/22/1994	40 CFR 52.220(c)(207)(i)(C)(1)	2/5/1996	61 FR 4215
SC	1104	Wood Flat Stock Coating Operations (SC Amended 8/2/91)		None	3/1/1991	10/25/1991	40 CFR 52.220(c)(186)(i)(C)(1)	6/23/1994	59 FR 32354
MD	1104	Organic Solvent Degreasing Operations	MD	4/23/2018	Current	7/16/2018	40 CFR 52.220(c)(519)(i)(A)(1)	7/2/2019	84 FR 31682
SC	1105	Fluid Catalytic Cracking Units Oxides of Nitrogen (SC Adopted 9/8/84)	R/	None	9/8/1984	2/6/1985	40 CFR 52.220(c)(159)(v)(C)	7/12/1990	55 FR 28625
MD	1106	Marine & Pleasure Craft Coating Operations	MD	10/24/2016	Current	Aft 10/2016	40 CFR 52.220(c)(498)(i)(B)(1)	2/12/2018	83 FR 5940
SC	1107	Miscellaneous Metal Parts, Products and Coatings Operations.	RC	None	9/6/1991	5/13/1993	40 CFR 52.220(c)(193)(i)(A)(1)	12/20/1993	58 FR 66285
SC	1108	Cutback Asphalt	RC	None	2/1/1985	4/12/1985	40 CFR 52.220(c)(160)(i)(E)(1)	7/12/1990	55 FR 28624
SC	1108.1	Emulsified Asphalt	RC	None	Bef 3/84	3/14/1984	40 CFR 52.220(c)(153)(vii)(A)	1/24/1985	50 FR 3339
SC	1110	Emissions from Stationary Internal Combustion Engines.	RC	None	Bef 3/82	3/1/1982	40 CFR 52.220(c)(121)(i)(C)	5/3/1984	47 FR 18822
SC	1111	NOx Emissions from Natural Gas Fired, Fan Type Central Furnaces	RC	None	Bef 10/83	10/27/1983	40 CFR 52.220(c)(148)(vi)(A)	5/3/1984	49 FR 18830
SC	1112	Emissions of Oxides of Nitrogen from Cement Kilns	RC	None	1/6/1984	4/12/1984	40 CFR 52.220(c)(154)(vii)(B)	1/7/1986	51 FR 600
SC	1113	Architectural Coatings	RC	4/23/2012	Bef 7/84	7/10/1984	40 CFR 52.220(c)(155)(iv)(A)	1/24/1985	50 FR 3339
MD	1113	Architectural Coatings	MD	4/23/2012	Current	2/6/2013	40 CFR 52.220(c)(428)(i)(C)(1)	1/3/2014	79 FR 365
MD	1114	Wood Products Coating Operations	MD	1/22/2018	Current	3/3/1997	40 CFR 52.220(c)(518)(i)(A)(1)	7/2/2019	84 FR 31682
SC	1115	Motor Vehicle Assembly and Component Coating Operations	RC	None	3/6/1992	9/14/1992	40 CFR 52.220(c)(189)(i)(A)(1)	12/20/1993	58 FR 66282
MD	1115	Metal Parts & Products Coating Operations	MD	1/22/2018	Current	5/23/2018	40 CFR 52.220(c)(518)(i)(A)(2)	2/27/2020	85 FR 11812
MD	1116	Automotive Refinishing Operations	MD	8/23/2010	Current	4/5/2011	40 CFR 52.220(c)(388)(i)(F)(1)	8/19/2012	77 FR 47536
SC	1117	Emissions of Oxides of Nitrogen from Glass Melting Furnaces	RC	None	SC 1/6/1984	12/3/1984	40 CFR 52.220(c)(159)(v)(D)	7/12/1990	55 FR 28624
MD	1117	Graphic Arts	MD	9/28/2009	Current	7/20/2010	40 CFR 52.220(c)(381)(i)(H)(1)	3/1/2012	77 FR 12495
MD	1118	Aerospace Vehicle Parts & Products Coating Operations	MD	10/26/2015	Current	4/21/2016	40 CFR 52.220(c)(485)(i)(B)(1)	6/21/2017	82 FR 28240
SC	1119	Petroleum Coke Calcining Operations Oxides of Sulfur	RC	None	3/2/1979	7/25/1980	40 CFR 52.220(c)(88)(iii)(A)	9/28/1981	46 FR 47451
SC	1120	Asphalt Pavement Heaters	RC	None	8/4/1978	7/25/1980	40 CFR 52.220(c)(65)(ii)	9/28/1981	46 FR 47451
SC	1121	Control of Nitrogen Oxides from Residential Type Natural Gas Fired Water Heaters	RC	None	12/1/1978	4/2/1980	40 CFR 52.220(c)(67)(i)(B)	9/28/1981	46 FR 47451
SC	1122	Solvent Metal Cleaners (Degreasers)		None	7/8/1983	10/27/1983	40 CFR 52.220(c)(148)(vi)(B)	10/3/1984	49 FR 39057
SC	1123	Refinery Process Turnaround	RC	None	SC 12/7/1990	5/13/1991	40 CFR 52.220(c)(184)(i)(B)(2)	8/11/1992	57 FR 35758
SC	1124	Aerospace Assembly and Component Coating Operations	RC	None	BEF 4/84	4/19/1984	40 CFR 52.220(c)(154)(vii)(A)	1/24/1985	50 FR 3339
SC	1125	Metal Container, Closure and Coil Coating Operations	RC	None	SC 8/2/1991	5/13/1993	40 CFR 52.220(c)(189)(i)(A)(4)	4/14/1994	59 FR 17898
SC	1126	Magnet Wire Coating Operations	RC	None	SC 3/6/1992	9/14/1992	40 CFR 52.220(c)(189)(i)(A)(2)	12/20/1993	58 FR 66286
MD	1126	Municipal Solid Waste Landfills	MD	8/28/2000	Not SIP	12/20/200	40 CFR 60.23		
SC	1128	Paper, Fabric and Film Coating Operations	RC	None	SC 2/7/1992	9/14/1992	40 CFR 52.220(c)(189)(i)(A)(3)	12/20/1993	58 FR 66287
SC	1130	Graphic Arts	RC	None	Bef 5/1993	5/13/1993	40 CFR 52.220(c)(193)(i)(A)(2)	4/14/1994	59 FR 17698
SC	1136	Wood Furniture and Cabinet Coatings	RC	None	Bef 5/92	5/13/1992	40 CFR 52.220(c)(189)(i)(A)(4)	4/14/1994	59 FR 17698
SC	1140	Abrasive Blasting	RC		2/1/1980	4/2/1980	40 CFR 52.220(c)(67)(i)(B)	9/28/1981	46 FR 47451
SC	1141	Control of Volatile Organic Compound Emissions from Resin Manufacturing	RC	None	SC 4/3/1992	9/19/1992	40 CFR 52.220(c)(189)(i)(A)(3)	12/20/1993	58 FR 66286
SC	1141.1	Coatings and Ink Manufacturing	RC	None	11/4/1983	3/14/1984	40 CFR 52.220(c)(153)(vii)(B)	1/24/1985	50 FR 3339
SC	1141.2	Surfactant Manufacturing	RC	None	SC 7/6/1984	10/19/1984	40 CFR 52.220(c)(156)(vii)(A)	1/15/1987	52 FR 1627
SC	1142	Marine Tank Vessel Operations	RC	None		1/28/1992	40 CFR 52.220(c)(187)(i)(C)(1)		
SC	1145	Plastic, Rubber and Glass Coatings	RC	None	SC 1/10/1992	1/11/1993	40 CFR 52.220(c)(191)(i)(A)(1)	12/20/1993	58 FR 66286
SC	1148	Thermally Enhanced Oil Recovery Wells	RC	None	Bef 10/1983	10/27/1983	40 CFR 52.220(c)(148)(vi)(B)	??	??
SC	1151	Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations	RC	None	Bef 5/13/1993	5/13/1993	40 CFR 52.220(c)(193)(i)(A)(1)	12/20/1993	58 FR 66286
SC	1153	Commercial Bakery Ovens	RC	None	SC 1/4/1991	5/13/1991	40 CFR 52.220(c)(184)(i)(B)(3)	9/29/1993	58 FR 50850
MD	1157	Boilers and Process Heaters	MD	1/22/2018	5/19/1997	8/1/1997	40 CFR 52.220(c)(248)(i)(D)	4/20/1999	64 FR 19277
MD	1157	Boilers and Process Heaters	MD	1/22/2018	(SIP Sub)	5/23/2018			
SC	1158	Storage, Handling and Transport of Petroleum Coke	RC	None	SC Bef 5/93	3/14/1984	40 CFR 52.220(c)(153)(vii)(B)	1/15/1987	52 FR 1627
MD	1158	Electric Power Generating Facilities	MD	6/26/2017	8/25/1997	3/10/1998	40 CFR 52.220(c)(254)(i)(H)(2)	7/20/1999	64 FR 38832
MD	1158	Electric Power Generating Facilities	MD	6/26/2017	(SIP Sub)	11/13/2017			
SC	1159	Nitric Acid Units - Oxides of Nitrogen	RC	None	SC 12/6/1985	2/10/1986	40 CFR 52.220(c)(168)(I)(H)	7/12/1990	55 FR 28622
MD	1159	Stationary Gas Turbines	MD	9/28/2009	Current	5/17/2010	40 CFR 52.220(c)(379)(i)(E)(1)	10/25/2012	77 FR 65133
MD	1160	Internal Combustion Engines	MD	1/22/2018	10/26/1994	11/30/1994	40 CFR 52.220(c)(207)(i)(D)(3)	11/1/1996	61 FR 56470
MD	1160	Internal Combustion Engines	MD	1/22/2018	(SIP Sub)	5/23/2018			
MD	1161	Portland Cement Kilns	MD	1/22/2018	3/25/2002	6/18/2002	40 CFR 52.220(c)(300)(i)(A)(1)	2/27/2003	68 FR 9015
MD	1161	Portland Cement Kilns	MD	1/22/2018	(SIP Sub)	5/23/2018			
MD	1162	Polyester Resin Operations	MD	1/22/2018	8/27/2007	3/7/2008	40 CFR 52.220(c)(354)(i)(B)(1)	11/24/2008	73 FR 70883

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MD	1162	Polyester Resin Operations	MD	1/22/2018	Current	5/23/2018	40 CFR 52.220(c)(519)(i)(A)(1)	2/27/2020	85 FR 11812
SC	1164	Semiconductor Manufacturing Operations	RC	None	Bef 10/1993			10/26/1993	58 FR 48459
MD	1165	Glass Melting Furnaces	MD	8/12/2008	Current	12/23/2008	40 CFR 52.220(c)(364)(i)(D)(1)	7/2/2012	77FR 39181
SC	1171	Solvent Cleaning	RC	None	SC 8/2/1991	6/19/1992	40 CFR 52.220(c)(188)(i)(C)(1)	12/20/1993	58 FR66285
SC	1173	Fugitive Emissions of Volatile Organic Compounds	RC	None	12/7/1990	6/18/1992	40 CFR 52.220(c)(188)(i)(c)(1)	12/20/1993	58 FR 66285
SC	1175	Control of Emissions from the Manufacture of Polymeric Cellular (Foam) Products	RC	None	SC Bef 5/91	??	40 CFR 52.220(c)(182)(8)(A)(1)	??	??
SC	1176	Sumps and Wastewater Separators	RC	None	Bef 12/1990	12/31/1990	40 CFR 52.220(c)(182)(i)(A)(1)	10/26/1992	57 FR 48459
MD	1200	General (Federal Operating Permit)	MD	2/28/2011					
MD	1201	Definitions (Federal Operating Permit)	MD	9/26/2005					
MD	1202	Applications	MD	9/26/2005					
MD	1203	Federal Operating Permits (Federal Operating Permit)	MD	9/26/2005					
MD	1205	Modifications of Federal Operating Permits (Federal Operating Permit)	MD	9/26/2005					
MD	1206	Reopening, Reissuance and Termination of Federal Operating Permits (Federal Operating Permit)	MD	9/26/2005					
MD	1207	Notice and Comment (Federal Operating Permit)	MD	9/26/2005					
MD	1208	Certification (Federal Operating Permit)	MD	9/26/2005					
MD	1209	Appeals (Federal Operating Permit)	MD	9/26/2005					
MD	1210	Acid Rain Provisions of Federal Operating Permits (Federal Operating Permit)	MD	9/26/2005					
MD	1211	Greenhouse Gas Provisions of Federal Operating Permits (Federal Operating Permit)	MD	2/28/2011					
MD	1300	General	MD		3/25/1996	7/23/1996	40 CFR 52.220(c)(239)(i)(A)(1)	11/13/1996	61 FR 58133
MD	1300	General	MD	8/22/2016	(SIP Sub)	1/24/2017			
MD	1301	Definitions	MD	9/24/2001	3/25/1996	7/23/1996	40 CFR 52.220(c)(239)(i)(A)(1)	11/13/1996	61 FR 58133
MD	1301	Definitions	MD	9/24/2001	(SIP Sub)	12/14/2001			
MD	1302	Procedure	MD	8/22/2016	3/25/1996	7/23/1996	40 CFR 52.220(c)(239)(i)(A)(1)	11/13/1996	61 FR 58133
MD	1302	Procedure	MD	8/22/2016	(SIP Sub)	1/24/2017			
MD	1303	Requirements	MD	9/24/2001	3/25/1996	7/23/1996	40 CFR 52.220(c)(239)(i)(A)(1)	11/13/1996	61 FR 58133
MD	1303	Requirements	MD	9/24/2001	(SIP Sub)	12/14/2001			
MD	1304	Emissions Calculations	MD	9/24/2001	3/25/1996	7/23/1996	40 CFR 52.220(c)(239)(i)(A)(1)	11/13/1996	61 FR 58133
MD	1303	Emissions Calculations	MD	9/24/2001	(SIP Sub)	12/14/2001			
MD	1305	Emissions Offsets	MD	8/28/2006	3/25/1996	7/23/1996	40 CFR 52.220(c)(239)(i)(A)(1)	11/13/1996	61 FR 58133
MD	1305	Emissions Offsets	MD	8/28/2006	(SIP Sub)	12/29/2006			
MD	1306	Electric Energy Generating Facilities			3/25/1996	7/23/1996	40 CFR 52.220(c)(239)(i)(A)(1)	11/13/1996	61 FR 58133
MD	1306	Electric Energy Generating Facilities		9/24/2001	(SIP Sub)	12/14/2001			
MD	1310	Federal Major Facilities and Federal Major Modifications		8/28/2006	(SIP Sub)	12/29/2006			
MD	1400	General (Emission Reduction Credits)	MD	6/28/1995	Current	8/10/1995	40 CFR 52.220(c)(224)(i)(C)	1/22/1997	62 FR 3215
MD	1401	Definitions (Emissions Reduction Credits)	MD	6/28/1995	Current	8/10/1995	40 CFR 52.220(c)(224)(i)(C)	1/22/1997	62 FR 3215
MD	1402	Emission Reduction Credits Registry	MD		6/28/1995	8/10/1995	40 CFR 52.220(c)(224)(i)(C)	1/22/1997	62 FR 3215
MD	1404	Emission Reduction Credit Calculations	MD	6/28/1995	Current	8/10/1995	40 CFR 52.220(c)(224)(i)(C)	1/22/1997	62 FR 3215
MD	1520	Control of Toxic Air Contaminants From Existing Sources	MD	3/25/2019	(SIP Sub)				
MD	1600	Prevention of Significant Deterioration	MD	8/22/2016	(SIP Sub)	1/24/2017			
MD	2001	Transportation Conformity	MD	2/22/1995	??				
MD	2002	General Federal Actions Conformity	MD	10/26/1994	Current	5/10/1996	40 CFR 52.220(c)(231)(i)(C)(1)	4/23/1999	64 FR 19916
MD	FND	Fed. Neg. Dec. - Asphalt Air Blowing	MD		Current	12/20/1994	40 CFR 52.222(a)(1)(ii)	9/11/1995	60 FR 47074
MD	FND	Fed. Neg. Dec. - Air Oxidation Process - SOCMI	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Chemical Processing & Manufacturing	RC	5/25/1994 via Res. 94-03	Unknown				
MD	FND	Fed. Neg. Dec. - Chemical Processing & Manufacturing	SBC	5/25/1994	Current	12/29/1994		1/31/1995	60 FR 38
MD	FND	Fed. Neg. Dec. - Equipment Leaks from Natural Gas/Gasoline Processing Plants	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Fugitive Emissions From Synthetic Organic chemical Polymer and Resin manufacturing Equipment	MD	8/23/2010	Current	10/22/2010	40 CFR 52.222(a)(1)(vi)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Industrial Wastewater	MD		Current	8/7/1995	40 CFR 52.222(A)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Large Petroleum Dry Cleaners	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Leaks from Petroleum Refinery Equipment	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins	MD	8/23/2010	Current	10/22/2010	40 CFR 52.222(a)(1)(vi)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Natural Gas/Gasoline Processing Equipment	RC	5/25/1994 via Res. 94-03	Unknown				
MD	FND	Fed. Neg. Dec. - Natural Gas/Gasoline Processing Equipment	SBC	5/25/1994	Current	7/13/1994	40 CFR 52.222(a)(1)(i)	1/31/1995	60 FR 38
MD	FND	Fed. Neg. Dec. - Offset Lithography	MD		Current	8/7/1995	40 CFR 52.222(A)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Orchard & Citrus Heaters	MD	6/24/1996	??				
MD	FND	Fed. Neg. Dec. - Petroleum Refinery Equipment	MD	8/23/2010	Current	10/22/2010	40 CFR 52.222(a)(1)(vi)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Plastic Parts Coating (Business Machines)	MD		Current	8/7/1995	40 CFR 52.222(A)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Plastic Parts Coating (other)	MD		Current	8/7/1995	40 CFR 52.222(A)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Pneumatic Rubber Tire Manufacturing	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153

Agency	Rule #	Rule Title	Effective Area	Rule Book Version	SIP Version	Submit Date	CFR	FR Date	FR Cite
MD	FND	Fed. Neg. Dec - Polymer Manufacturing SOCMI and Polymer manufacturing Equipment Leaks	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Process Unit Turnarounds	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Reactor Processes and Distillation Operations in SOCMI	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Ship Building	MD		Current	8/7/1995	40 CFR 52.222(A)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Surface Coating of Cans	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Surface Coating of Coils	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Surface Coating of Fabrics	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Surface Coating of Large Appliances	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Surface Coating of Magnet Wire	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed Neg. Dec. - Surface Coating Operations at Automotive and Light Duty Truck Assembly Plants	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Synthesized Pharmaceutical Products	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Synthetic Organic Chemical Manufacturing Batch Processing	MD		Current	8/7/1995	40 CFR 52.222(a)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Synthetic Organic Chemical Manufacturing Industry	MD		Current	8/7/1995	40 CFR 52.222(a)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Synthetic Organic Chemical Manufacturing Reactors	MD		Current	8/7/1995	40 CFR 52.222(A)(1)(iv)	11/1/1996	61 FR 56474
MD	FND	Fed. Neg. Dec. - Synthetic Organic Chemical Polymer and Resin Manufacturing	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed. Neg. Dec. - Vacuum Producing Devices	MD	1/22/2007	Current	7/11/2007	40 CFR 52.222(a)(1)(v)	5/20/2011	76 FR 29153
MD	FND	Fed Neg. Dec - 2 CTGs for Miscellaneous Metal and Plastic Parts Coatings, Table 3—Plastic Parts and Products, and Table 4—Automotive/Transportation and Business Machine Plastic Parts	MD	4/23/2018	Current	7/16/2018	40 CFR 52.220(c)(519)(ii)(A)(1) and 52.222(a)(1)(viii)	2/27/2020	85 FR 11812
MD	FND	Fed Neg Dec - 1 CTG for Miscellaneous Metal and Plastic Parts Coatings (EPA–453/R–08–003), Table 6—Motor Vehicle Materials.	MD	10/22/2018	Current	12/7/2018	40 CFR 52.220(c)(531)(ii)(A)(1) and 52.222(a)(1)(ix)	2/27/2020	85 FR 11812
MD	Title V	Program - Federal Operation Permits: Title V					40 CFR 70 Apx. A California (q)(2)	12/17/2001	66 FR 63503
MD	Title V	Program - Federal Operation Permits: Title V			Unknown		40 CFR 70 Apx. A California (q)(3)	10/15/2002	67 FR 63551
MD	MACT	MACT Delegation (Sections A, F, G, H, I, J, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ KK, LL, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT,UUUU, VVVV, WWWW, XXXX, YYYY, ZZZZ,AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG,HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN,PPPPP,QQQQQ, RRRRR, SSSSS,TTTTT,WWWWW,YYYYY, ZZZZZ, BBBBBB, CCCCCC, DDDDDD, EEEEEE, FFFFFF, GGGGGG, HHHHHH, JJJJJJ, LLLLLL, MMMMMM, NNNNNN, OOOOOO, PPPPPP, QQQQQQ, RRRRRR, SSSSSS, TTTTTT, VVVVVV, WWWWWW, XXXXXX, YYYYYY, ZZZZZZ, AAAAAAA, BBBBBBB, CCCCCCC, DDDDDDD, EEEEEEE.	MD		Current				
MD	NESHAP	NESHAPS Delegation (Sections A, C, D, E and M)	SB		N/A				
MD	NSPS	NSPS Delegation (Sections A, D, Da, Db, Dc, E, Ea, Eb, Ec, F, G, H, I, J, Ja, K, Ka, Kb, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, DD, EE, GG, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, VVa, WW, AAA, BBB, DDD, FFF,GGG,GGGa, III, JJJ, KKK, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, WWW, AAAA, CCCC, EEEE, IIII, JJJJ, KKKK)	MD		Current			4/30/2013	78 FR 25185
MD	FND	19 Source Category FNDs (including Oil & Gas)	MD	10/28/2019	(SIP Sub)	12/20/2019			

PART VIII CAM PLAN

Compliance Assurance Monitoring (CAM) Plan
Southern California Gas Company
Adelanto Compressor Station
Generator
January 2020

I. Applicability

This Compliance Assurance Monitoring (CAM) Plan is applicable to one rich burn engines equipped with Non-Selective Catalytic Reduction (NSCR) systems used to generate electric power at Southern California Gas Company Adelanto Compressor Station.

A. Emission Units

Facility: Southern California Gas Company
Adelanto Compressor Station
Koala/Rancho Roads
Adelanto, CA 92301

MDAQMD Federal Operating Permit No.:	3100066
MDAQMD Company No.:	0031
MDAQMD Facility No.:	0066
MDAQMD Permit No.:	B000295

Description: Generator
Waukesha Model L5790-GU, 465 BHP @ 900 rpm, 350 kW generator

B. Control Technology

This rich burn and equipped with Non-Selective Catalytic Reduction (NSCR) system, also known as 3-way catalyst, for reduction of NOx, CO, and VOC emissions.

C. Applicable Emission Limits, and Monitoring Requirements

Compliance Assurance Monitoring

The generator engine is subject to CAM as described in 40 CFR Part 64.2 for NOx because the engine is subject to a federally enforceable emission limit, uses an active control device as defined by the regulation to meet those limits, and has a pre-controlled Potential to Emit (PTE) that exceeds the Major Source Threshold (MST). The exhaust temperature will be maintained within the effective operating range specified and oxygen content specified by the manufacture for the NSCR. This plan provides an alternative method for oxygen content monitoring. The pollutants controlled by the NSCR and corresponding permit emission limits are:

NOx: 50 ppm @ 15% oxygen
VOC: 106 ppm @ 15% oxygen

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II. Monitoring Approach

Indicator	Air Fuel Ratio Controller (AFRC) Alarm Status	Catalyst Inlet Exhaust Temperature & Alarm	Catalyst Outlet Exhaust Temperature Shutdown
Measurement Approach	The AFRC provides an alarm when it is not working properly including inability to achieve oxygen sensor set point.	Thermocouple	Thermocouple
Indicator Range	Discrete alarm. Excludes periods of start-up not to exceed 30 minutes.	750°F ≤ exhaust ≤ 1350°F Excludes periods of start-up not to exceed 30 minutes.	exhaust ≤ 1350°F
Performance Criteria *Data Representative-ness*	The AFRC is designed to keep oxygen concentration below 0.5% as specified by the catalyst manufacturer.	Specified by catalyst manufacturer.	Specified by catalyst manufacturer.
QA/QC Practices and Criteria	Alarm is part of AFRC firmware; no QA/QC is specified by AFRC manufacture.	Engine control system checks for open and out of range thermocouple. Calibration verified annual or replaced.	Engine control system checks for open and out of range thermocouple. Calibration verified annual or replaced.
Monitoring Frequency	Daily check.	Check every 15-minutes.	The shutdown is triggered by the station control system.
Data Collection Procedures	Station control system alarm log.	Station control system alarm and data log.	Station control system alarm log.
Averaging Period	Not applicable for discrete event.	4-hour rolling average.	Not applicable for discrete event.

III. Justification

The rational for selection of each performance indicator, and its corresponding range, is given in the section. However, information for the fuel meter is not included since standard industry and Southern California Gas Company practices are being followed, and this methodology is routinely used for emission reporting.

A. *Rationale for Selection of Performance Indicators*

Air Fuel Ratio Controller Alarm

The catalyst manufacturer specifies that engine exhaust oxygen concentration must be less than 0.5% because a reducing exhaust chemistry is needed for proper NSCR system operation. An AFRC is used to keep the engine operating below 0.5% oxygen through a feedback control of an oxygen sensor. Due to the high levels of carbon monoxide (CO) and unburned hydrocarbons (HC) upstream of the catalyst, the oxygen sensor does not provide a true oxygen concentration measurement. CO and HC oxidize on the sensor's platinum anode, which results in a net rather than total oxygen measurement. However, this interference improves the control because it makes the sensor extremely sensitive to small changes in AFR. Therefore, the AFRC keeps the engine running at a specific AFR where the oxygen concentration is less than 0.5%. If the AFRC cannot maintain the oxygen sensor set point, an alarm is triggered.

Inlet Catalyst Temperature

A minimum inlet temperature is needed for proper catalyst operation.

Outlet Catalyst Temperature

Elevated temperatures can cause catalyst degradation or damage. As a monitoring parameter, the catalyst outlet rather than inlet is preferred because it not only will in indicate high engine exhaust temperature, but also excessive heating of the catalyst.

B. *Rationale for Selection of Indicator Range or Level*

Air Fuel Ratio Controller Alarm

The AFRC firmware logic can readily indicate its inability to control AFR through an alarm. Therefore, there is no range for this indicator, rather a discrete indication: either the controller is in alarm, or not. The controller alarms whenever one of the following conditions exists:

The AFRC cannot reach the oxygen sensor set point because the fuel control valve reaches its maximum or minimum position. If the engine is running too lean, and the controller cannot open the valve any further to richen the mixture, the controller has hit its rich limit warning. Similarly, if the engine is running too rich, and the controller cannot close the valve any further to lean the mixture, the controller has hit its lean limit warning.

The AFRC senses a cold, disconnected, or failed sensor when the inlet catalyst thermocouple indicates adequate exhaust temperature.

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Southern California Gas Company
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The AFRC senses a shorted or failed sensor. The firmware checks to make sure the sensor output voltage is within the usable range.

Inlet Catalyst Temperature

In accordance with catalyst specifications the minimum temperature required to meet the permit limits is 750°F. Lower temperatures may provide acceptable pollutant reduction if verified through emission testing. This value is also specified in the NESHAP regulations.

Outlet Catalyst Temperature

In accordance with the catalyst specifications, the catalyst may be damaged if the exhaust temperature goes over 1350°F. However, the value specified by NESHAP, 1250°F, is more stringent than the manufacturer's recommendation. To make sure the catalyst is protected, the station is warned of a pending problem if the temperature goes above 1000°F, and typically the engine is shut down at 1100°F before ever reaching the maximum temperature.

III. Calibration

Calibrations are verified at least annually, with records of the calibration kept on file.

A. Thermocouples

Accuracy is verified annually using a temperature calibration device, or by validating the thermocouple against a second temperature sensor installed in the exhaust system by reading within 16.7°C or 30°F of the exhaust thermocouple. Alternatively, the thermocouple may simply be replaced.

IV. Missing Data Procedures

Data can be substituted as described below if monitored data is missing.

A. Air Fuel Ratio Controller Alarm

If the absence of an AFRC alarm cannot be verified for a given day, actual operating data can be used to demonstrate that the AFRC was working properly, for example, comparison of oxygen sensor setpoint and output within 20%, confirmation that AFRC is in closed loop control, etc.

B. Catalyst Inlet or Outlet Temperature

Catalyst inlet or outlet temperatures can be used interchangeably to assure operation within the range specified by the regulations and manufacturer. For example, inlet temperature can be used if outlet temperature is missing, and vice versa.