State of New Jersey Department of Environmental Protection Division of Air Quality

General Operating Permit (GOP-008) Boiler or Heater Greater than or equal to 5 MMBTU/hr and less than 10 MMBTU/hr

This general operating permit allows for the construction, installation, modification and operation of:

• A single boiler or heater with a maximum rated heat input to the burning chamber of greater than or equal to 5 million BTU/hr and less than 10 million BTU/hr.

For a modification, the single boiler or heater must be currently permitted in a facility's approved Title V Operating Permit. The modification shall be for the installation of a replacement burner or fuel switch to a cleaner fuel burner, combusting natural gas, propane or No. 2 fuel oil.

This general operating permit is applicable to a boiler or heater combusting only the following commercial fuels: natural gas, propane, kerosene, or No. 2 fuel oil (Note: No. 2 fuel oil can be a blend of up to 5% by volume biodiesel fuel).

This general operating permit may only be used at facilities with an approved Title V Operating Permit. Facilities may obtain more than one GOP-008.

The potential to emit (PTE) for the equipment covered under this general operating permit are based on the maximum rated heat input of the boiler or heater, the maximum annual fuel usage limit of the boiler or heater, and USEPA AP-42 emission factors.

I. **DEFINITIONS**

The terms used in this general operating permit shall have the meanings given to them in N.J.A.C. 7:27 or as listed below:

"Area Source" means any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR 63.2.

"Biodiesel Fuel" means a commercial fuel that meets American Society for Testing and Materials (ASTM) 6751 Specification.

"Boiler" means fuel burning equipment used to produce hot water or steam.

"**Commercial boiler**" means a boiler used in commercial establishments such as hotels, restaurants, and laundries to provide electricity, steam, and/or hot water.

"Department" means the New Jersey Department of Environmental Protection.

"De-Rated Boiler" means any physical change or de-rate methods for limiting fuel and/or air flow (including, but not limited to, orifice plate restrictions, control valve limiting mechanisms, and reduction of fan impellers) used to lower the manufacturer's maximum design heat input rating.

"Direct-fired process heater" means any process heater in which the combustion gases mix with and exhaust to the atmosphere from the same stack(s), vent(s), etc. with gases originating with the process or material being processed.

"Emergency" means any situation that arises from sudden and reasonably unforeseeable events beyond the control of an owner or operator of a facility, such as an unforeseen system capacity shortage caused by an act of God, that requires immediate corrective action to prevent system collapse or to restore normal operations at the facility.

"Fuel Totalizer" means a non-resettable fuel meter that totalizes the amount of fuel consumed in a time period. Note: Fuel consumed by other combustion sources operating outside of this general operating permit but share the same fuel totalizer with a source permitted under this general operating permit will be counted as part of the total annual fuel limit selected by permittee under the applicable PTE Option Number.

"Gas-fired boiler" includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

"Hazardous Air Pollutants" or "HAP" means an air contaminant listed in or pursuant to 42 U.S.C. §7412(b).

"Heater" means a space heater and/or indirect fired process heater.

"ICI" means Industrial, Commercial, or Institutional boiler.

"Indirect-fired process heater" means any process heater in which the combustion gases is not mixed with and exhaust to the atmosphere from the same stack(s), vent(s), etc. with gases originating with the process or material being processed.

"Industrial boiler" means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

"Institutional boiler" means a boiler used in institutional establishments such as, but not limited to, medical centers, nursing homes, research centers, institutions of higher education, elementary and secondary schools, libraries, religious establishments, and governmental buildings to provide electricity, steam, and/or hot water.

"Limited-use boiler" means any boiler that burns any amount of solid or liquid fuels and has a federally enforceable average annual capacity factor of no more than 10 percent.

"MACT Subpart DDDDD" means National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, at a Major Hazardous Air Pollutant (HAP) facility.

"MACT Subpart JJJJJJ" or "National Emission Standards for Hazardous Air Pollutants" (also known as Maximum Achievable Control Technology, MACT) Subpart JJJJJJ means the federal National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources (NESHAP), Subpart JJJJJJ codified at 40 CFR 63.11193 seq.

"Major Hazardous Air Pollutant (HAP) facility" means a major facility, or part thereof, which emits or has the potential to emit:

- 1. Ten (10) tons or more per year of any HAP;
- 2. Twenty five (25) tons or more per year of any combination of HAPs; or
- 3. Such lesser quantity, or different criterion, as the EPA may establish by rule.

"Maximum gross heat input" or "Maximum rated heat input" means the maximum amount of fuel a combustion source is able to combust in a given period as stated by the manufacturer of the combustion source. This term is expressed in BTUs per hour, based on the higher heating value of the fuel.

"MMBTU/hr (HHV)" means a unit of heat input rate shown as millions of British Thermal Units per hour, based on the higher heating value of the fuel.

"Oxygen trim system" means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller.

"Period of gas curtailment or supply interruption" means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

"Residential boiler" means a boiler used to provide heat and/or hot water and/or as part of a residential combined heat and power system. This definition includes boilers located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm) used primarily to provide heat and/or hot water for:

(1) A dwelling containing four or fewer families, or

(2) A single unit residence dwelling that has since been converted or subdivided into condominiums or apartments.

"Seasonal boiler" means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory.

"Space heater" means a heating appliance used for warming the air of a designated area.

"USEPA AP-42 Emission Factors" means a compilation of air pollutant emissions factors by source category as the primary compilation of EPA's emission factors information. <u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors</u>

II. <u>AUTHORITY AND STATEMENT OF BASIS</u>

A. Applicability

1. This general operating permit is issued under the authority granted to Air Quality Permitting pursuant to N.J.S.A. 26:2C-9.2. This general operating permit shall allow for inspections and evaluations to assure compliance with all applicable provisions of N.J.A.C. 7:27, MACT Subpart A and MACT Subpart JJJJJJ.

- 2. This general operating permit consists of Sections I through VII and the completed Online Application. Each section of this general operating permit and completed Online Application are enforceable.
- 3. This general operating permit allows for the construction, installation, modification and operation of:
 - A single boiler or heater with a maximum rated heat input to the burning chamber of greater than or equal to 5 million BTU/hr and less than 10 million BTU/hr.

For a modification, the single boiler or heater must be currently permitted in a facility's approved Title V Operating Permit. The modification shall be for the installation of a replacement burner or fuel switch to a cleaner fuel burner, combusting natural gas, propane or No. 2 fuel oil.

- 4. This general operating permit is applicable to a boiler or heater combusting only the following commercial fuels: natural gas, propane, kerosene, or No. 2 fuel oil (Note: No. 2 fuel oil can be a blend of up to 5% by volume biodiesel fuel).
- 5. This general operating permit may only be used at facilities with an approved Title V Operating Permit. Facilities may obtain more than one GOP-008.
- 6. The potential to emit (PTE) for the equipment covered under this general operating permit are based on the maximum rated heat input of the boiler or heater, the maximum annual fuel usage limit of the boiler or heater, and USEPA AP-42 emission factors.
- 7. The Permittee shall comply with the General Procedures for General Operating Permits posted at the Department's website: <u>http://www.state.nj.us/dep/aqpp</u>.
- 8. This general operating permit allows for operation of the boiler or heater during one of the following options:
 - GOP-008-1 Natural Gas only, or Natural Gas with No. 2 fuel oil as emergency backup, based on 8,760 hours per year operation.
 - GOP-008-2 Propane only, or Propane with No. 2 fuel oil as emergency backup, based on 8,760 hours per year operation.
 - GOP-008-3 No. 2 fuel oil or Kerosene only based on 8,760 hours per year operation.
 - GOP-008-4 Natural Gas only, or Natural Gas with No. 2 fuel oil as emergency backup, based on an annual fuel limit.
 - GOP-008-5 Propane only, or Propane with No. 2 fuel oil as emergency

backup, based on an annual fuel limit.

- GOP-008-6 No. 2 fuel oil or Kerosene only based on an annual fuel limit.
- 9. The conditions of approval for this permit are based on applicability requirements in State and Federal air pollution control rules. Each condition in the permit includes the citation of the applicable requirement on which the condition is based.

B. Monitoring, Recordkeeping and Reporting

- 1. The general operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's compliance with the applicable requirements.
- 2. The owner or operator is required to maintain documentation onsite for the determination of a net emission increase or a significant net emission increase pursuant to N.J.A.C. 7:27-18.7 showing increases for each Boiler or Heater GOP that have been permitted in support of the provision in Section IV(6).
- 3. A fuel totalizer is required for all options to monitor and record the total amount of fuel burned each month during operation, for any 12 consecutive months.
- 4. The owner or operator shall perform, record and submit a report of the annual combustion process adjustment in the same quarter of each calendar year for all options in accordance with the procedure set forth at N.J.A.C. 7:27-19.16.
- 5. See compliance plan for specific requirements on monitoring, recordkeeping and reporting.

III. <u>EXCLUSIONS</u>

This general operating permit cannot be used to register the following equipment:

- 1. A boiler or heater whose maximum rated heat input is less than 5 MMBTU/hr;
- 2. A boiler or heater whose maximum rated heat input is greater than or equal to 10 MMBTU/hr;
- 3. An emergency generator, fire pump, or any other internal combustion engine;
- 4. A boiler or heater burning fuel other than natural gas, propane, No. 2 fuel oil or kerosene;
- 5. Direct-fired process heaters;
- 6. De-rated boiler or heater;

- 7. A boiler or heater sharing the same emission point(s) and/or control device(s) with other significant source(s) that are not registered under this general operating permit;
- 8. A boiler or heater located at a Major Hazardous Air Pollutant (HAP) facility subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (MACT Subpart DDDDD).
- 9. Seasonal and Limited-use boilers.
- 10. Boilers serving electric generating units.

IV. <u>LIMITATIONS AND REOUIREMENTS</u>

- 1. Pursuant to N.J.A.C. 7:27-22, any person who wishes to construct, install and operate equipment under the authority of the General Operating Permit may register for the General Operating Permit only if the piece of equipment meets the APPLICABILITY requirements listed in the General Operating Permit.
- 2. The conditions of a General Operating Permit cannot be changed. If a change to a source operation with a General Operating Permit is needed, then the Permittee must request the change through the Title V Operating Permit modification procedures in N.J.A.C. 7:27-22.
- 3. A facility with an expired Title V Operating Permit without an Application Shield pursuant to N.J.A.C. 7:27-22.7 may not register for the use of a General Operating Permit.
- 4. This General Operating Permit may only be used at facilities with an approved Title V Operating Permit and only if the equipment is not currently listed in an approved Title V Operating Permit, or for a modification as specified in this General Operating Permit. Facilities that will be getting a Title V Operating Permit in the future, or those that are in the process of getting a Title V Operating Permit, may use General Permits from N.J.A.C. 7:27-8 (Subchapter 8) until they obtain an approved Title V Operating Permit.
- 5. General Operating Permits may not be used where annual emissions of any air contaminant from the facility would increase by such amounts that would make the facility subject to the requirements of N.J.A.C. 7:27-18 (Emission Offset Rule), 40 CFR 51 Appendix S (Emission Offset Interpretative Ruling), 40 CFR 52.21 (PSD) or make the facility a major source for HAPs as defined in 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories).
- 6. Any facility with an approved Title V Operating Permit that obtains General Operating Permit(s) must determine based on its own evaluation that none of the

General Operating Permit(s) it obtained individually or collectively would cause the facility to be subject to N.J.A.C. 7:27-18 (Emission Offset Rule), 40 CFR 51 Appendix S (Emission Offset Interpretative Ruling), 40 CFR 52.21 (PSD) or make the facility a major source for HAPs as defined in 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories). The basis for this determination must be kept on site and submitted with the next Title V Operating Permit modification application that increases actual emissions or Renewal Application, whichever occurs first. If found that the General Operating Permit has caused the facility to be subject to the above regulations, the authorization contained in the General Operating Permit is null and void and installation of equipment under this General Operating Permit will subject the facility to appropriate enforcement action.

- 7. The general requirements in the facility's Title V Operating Permit, such as those in the General Provisions and Authorities Section and Subject Item FC of the Compliance Plan, also apply to the source operation covered by this General Operating Permit. This includes, but is not limited to, the six month deviation report and annual compliance certification.
- 8. The expiration date of the General Operating Permit will be the expiration date of the facility's approved Title V Operating Permit. If the Title V Operating Permit has expired and has an application shield pursuant to N.J.A.C. 7:27-22.7, the conditions of the General Operating Permit remain enforceable until the Title V Operating Permit is renewed at which time this General Operating Permit will be incorporated into the renewal permit.
- 9. The General Operating Permit will be incorporated into the facility's Title V Operating Permit the first time the Title V Operating Permit is opened for a modification that proposes an increase in actual emissions, or at renewal, whichever occurs first. The General Operating Permit will be merged into the Title V Operating Permit at that time.

V. <u>EOUIPMENT SPECIFICATIONS</u>

The Permittee shall retain on site the following record for the boiler or heater: The maximum rated heat input to the burning chambers of the boiler or heater, measured in MMBTU/hr (HHV), per written manufacturer's specifications or the manufacturer's nameplate on the equipment.

VI. <u>POTENTIAL TO EMIT</u>

- 1. The Permittee shall select the boiler or heater option that is being permitted with this GOP in the Online Application. Only one general operating permit option can be selected.
- 2. For options based on 8,760 hr/yr operation, the Permittee will enter the maximum gross heat input rate per the boiler or heater nameplate in MMBTU/hr (HHV) in the online application. Based on the maximum gross heat input rate entered in the

online application and USEPA AP-42 emission factors, the potential to emit limits in pounds per hour and tons per year will be calculated automatically for VOC, NOx, CO, SO2, TSP and PM10. The completed online application is enforceable and is made a part of this general operating permit.

3. For options based on the annual fuel limit, the Permittee will enter the maximum gross heat input rate per the boiler or heater nameplate in MMBTU/hr (HHV) in the online application, the maximum natural gas annual usage in MMCF per year, the maximum No. 2 fuel oil usage in MGal per year, or the maximum propane annual usage in MGal per year, as applicable. Based on the maximum gross heat input rate, maximum annual fuel usage and USEPA AP-42 emission factors entered in the online application, the potential to emit limits in pounds per hour and tons per year will be calculated automatically for VOC, NOx, CO, SO2, TSP and PM10. The completed online application is enforceable and is made a part of this general operating permit.

VII. <u>COMPLIANCE PLAN</u>

The Boiler or Heater covered by this general operating permit is subject to the applicable requirements listed on the following pages.

Emission Unit: Boiler or Heater, greater than or equal to 5 MMBtu/hr and less than 10 MMBtu/hr

GOP-008-1 Natural Gas only, or Natural Gas with No. 2 Fuel Oil as emergency backup, based on 8,760 hours per year operation, GOP-008-4 Natural Gas only, or Natural Gas with No. 2 Fuel Oil as emergency backup, based on an annual fuel limit

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall comply with all conditions contained in the document "General Procedures for General Operating Permits", posted at http://www.nj.gov/dep/aqpp. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period.[N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27- 3.2(c)]	None.	None.	None.
3	Particulate emission limit from the combustion of fuel based on the rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year. The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]	Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005 and the procedure set forth at N.J.A.C. 7:27-19.16(a) as follows: 1.Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx, CO and O2 in ppmvd, before and after the adjustment is made; and 6. Convert the emission values of NOx, CO and O2 concentrations measured in Ib/MMBTU according to the following formula: Lb/MMBTU = ppmvd * MW * F dry factor * O2 correction factor/387,000,000, where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 Ib/Ib-mole, CO=28 Ib/Ib-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU; O2 correction factor: (20.9%)/(20.9% - O2 measured), where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]	Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion processs report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: www.njdeponline.com. Instructions for submitting this report online are specified at: http://www.nj.gov/dep/aqpp/adjustment.htm. [N.J.A.C. 7:27-19.16(d)] and [N.J.A.C. 7:27-19.16(c)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(e)].	None.
6	Boiler or Heater fuel limited to natural gas or No. 2 fuel oil (emergency use only). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Maximum Gross Heat Input: MMBtu/hr (HHV) from general operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate.[N.J.A.C. 7:27-22.16(0)].	None.
8	Natural Gas Usage: The permitted maximum Natural Gas usage (MMCF) for any 12 consecutive months from the general operating permit application. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. The owner or operator shall install and operate a fuel totalizer to monitor the total amount of fuel burned for any 12 consecutive months. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Cubic feet for any 12 consecutive months shall be calculated by the sum of the cubic feet consumed during any one month added to the sum of the cubic feet consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
9	Hours of Operation While Firing Fuel Oil <= 48 hours. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year to qualify as a gas-fired boiler as defined in MACT Subpart JJJJJJ, 40 CFR 63.11237. [N.J.A.C. 7:27-22.16(a)]	None.	Hours of Operation While Firing Fuel Oil: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the number of hours the fuel oil is combusted for periodic testing, maintenance, or operator training and the calendar year total. Maintain records onsite and make them easily accessible for Department inspection. [N.J.A.C. 7:27-22.16(o)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	The owner or operator shall comply with the hourly and annual emission limits in the General Operating Permit application for the following air contaminants (VOC, NOx, CO, SO2, TSP and PM-10), except for emission rates that are below reporting threshold of 0.05 lb/hr in Appendix Table A to N.J.A.C. 7:27-22. The annual emission limits are based on the information entered by the owner or operator in the application, including maximum rated heat input (MMBtu/hr-HHV) and 8,760 hours per year operation or annual fuel limit. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The owner or operator shall keep the completed application showing the hourly and annual emission rates, for the duration of the General Operating Permit and make it available to the Department upon request.[N.J.A.C. 7:27-22.16(o)].	None.
11	The owner or operator shall submit an annual statement certified in accordance with N.J.A.C. 7:27-1.39 and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4. The Responsible Official shall certify annually that the boiler or heater is operated in compliance with all applicable requirements as defined in this permit. [N.J.A.C. 7:27-22]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	This boiler or heater shall only be operated on No. 2 Fuel Oil under these circumstances: 1. During the performance of normal testing and maintenance procedures (not exceeding a combined total of 48 hours during any calendar year), as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation; or 2. During a period of time in which the supply of gaseous fuel to the boiler or heater is restricted or halted for reasons beyond the control of the facility, such as a period of gas curtailment or supply interruption; The owner or operator shall stop using fuel oil in place of gas and resume using gas as soon as the circumstances described above cease. [N.J.A.C. 7:27-22.16(a)]	None.	 Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information: 1. For each time the boiler or heater is operated for an emergency: i. Document the emergency that occurred (i.e. gas curtailment); ii. The date(s) of operation and the start up and shut down time; iii. The total number of hours that fuel oil was combusted for the emergency; iv. The name of the operator. 2. For each time the boiler or heater is specifically operated for testing or maintenance: i. The total operation and the start up and shut down time; iii. The total operation is operation; iii. The total operation and the start up and shut down time; iv. The name of the operator. 	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	This boiler or heater shall not be operated on No. 2 Fuel Oil: For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at http://airnow.gov/, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at http://www.state.nj.us/dep/aqpp/aqforecast. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Maximum allowable sulfur content in No. 2 fuel oil or kerosene shall be no more than 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
15	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(0)]	None.
16	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.

Emission Unit: Boiler or Heater, greater than or equal to 5 MMBtu/hr and less than 10 MMBtu/hr

GOP-008-2 Propane only, or Propane with No. 2 Fuel Oil as emergency backup, based on 8,760 hours per year operation, GOP-008-5 Propane only, or Propane with No. 2 Fuel Oil as emergency backup, based on an annual fuel limit

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall comply with all conditions contained in the document "General Procedures for General Operating Permits", posted at http://www.nj.gov/dep/aqpp. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27- 3.2(c)]	None.	None.	None.
3	Particulate emission limit from the combustion of fuel based on the rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year. The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]	Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005 and the procedure set forth at N.J.A.C. 7:27-19.16(a) as follows: 1.Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx, CO and O2 in ppmvd, before and after the adjustment is made; and 6. Convert the emission values of NOx, CO and O2 concentrations measured in Ib/MMBTU according to the following formula: Lb/MMBTU = ppmvd * MW * F dry factor * O2 correction factor/387,000,000, where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 Ib/Ib-mole, CO=28 Ib/Ib-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU; O2 correction factor: (20.9%)/(20.9% - O2 measured), where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]	Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion processs report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: www.njdeponline.com. Instructions for submitting this report online are specified at: http://www.nj.gov/dep/aqpp/adjustment.htm. [N.J.A.C. 7:27-19.16(d)] and [N.J.A.C. 7:27-19.16(c)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(e)].	None.
6	Boiler or Heater fuel limited to propane or No. 2 fuel oil (emergency use only). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Maximum Gross Heat Input: MMBtu/hr (HHV) from general operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.
8	Propane: The permitted maximum Propane usage (MGal) for any 12 consecutive months from the general operating permit application. [N.J.A.C. 7:27-22.16(a)]	Propane: Monitored by fuel flow/firing rate instrument continuously. The owner or operator shall install and operate a fuel totalizer to monitor the total amount of fuel burned for any 12 consecutive months. [N.J.A.C. 7:27-22.16(o)]	Propane: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Gallons for any 12 consecutive months shall be calculated by the sum of the gallons consumed during any one month added to the sum of the gallons consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
9	Hours of Operation While Firing Fuel Oil <= 48 hours. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year to qualify as a gas-fired boiler as defined in MACT Subpart JJJJJJ, 40 CFR 63.11237. [N.J.A.C. 7:27-22.16(a)]	None.	Hours of Operation While Firing Fuel Oil: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record the number of hours the fuel oil is combusted for periodic testing, maintenance, or operator training and the calendar year total. Maintain records onsite and make them easily accessible for Department inspection. [N.J.A.C. 7:27-22.16(o)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	The owner or operator shall comply with the hourly and annual emission limits in the General Operating Permit application for the following air contaminants (VOC, NOx, CO, SO2, TSP and PM-10), except for emission rates that are below reporting threshold of 0.05 lb/hr in Appendix Table A to N.J.A.C. 7:27-22. The annual emission limits are based on the information entered by the owner or operator in the application, including maximum rated heat input (MMBtu/hr-HHV) and 8,760 hours per year operation or annual fuel limit. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The owner or operator shall keep the completed application showing the hourly and annual emission rates, for the duration of the General Operating Permit and make it available to the Department upon request.[N.J.A.C. 7:27-22.16(o)].	None.
11	The owner or operator shall submit an annual statement certified in accordance with N.J.A.C. 7:27-1.39 and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4. The Responsible Official shall certify annually that the boiler or heater is operated in compliance with all applicable requirements as defined in this permit. [N.J.A.C. 7:27-22]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	This boiler or heater shall only be operated on No. 2 Fuel Oil under these circumstances: 1. During the performance of normal testing and maintenance procedures (not exceeding a combined total of 48 hours during any calendar year), as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation; or 2. During a period of time in which the supply of gaseous fuel to the boiler or heater is restricted or halted for reasons beyond the control of the facility, such as a period of gas curtailment or supply interruption; The owner or operator shall stop using fuel oil in place of gas and resume using gas as soon as the circumstances described above cease. [N.J.A.C. 7:27-22.16(a)]	None.	 Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain on site and record the following information: 1. For each time the boiler or heater is operated for an emergency: i. Document the emergency that occurred (i.e. gas curtailment); ii. The date(s) of operation and the start up and shut down time; iii. The total number of hours that fuel oil was combusted for the emergency; iv. The name of the operator. 2. For each time the boiler or heater is specifically operated for testing or maintenance: i. The total operation and the start up and shut down time; iii. The total operation and the start up and shut down time; iv. The name of the operator. 2. For each time the boiler or heater is specifically operated for testing or maintenance: i. The total operation and the start up and shut down time; iii. The total operation and the start up and shut down time; and maintenance; and iv. The name of the operator. The owner or operator shall maintain the above records for a period no less than 5 years after the record was made and shall make the records readily available to the Department or the EPA upon request. [N.J.A.C. 7:27-22.16(o)] 	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	This boiler or heater shall not be operated on No. 2 Fuel Oil: For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at http://airnow.gov/, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at http://www.state.nj.us/dep/aqpp/aqforecast. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Maximum allowable sulfur content in No. 2 fuel oil or kerosene shall be no more than 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
15	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(0)]	None.
16	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.

Emission Unit: Boiler or Heater, greater than or equal to 5 MMBtu/hr and less than 10 MMBtu/hr

GOP-008-3 No. 2 Fuel Oil or Kerosene only based on 8,760 hours per year operation, GOP-008-6 No. 2 Fuel Oil or Kerosene only based on an annual fuel limit

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Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall comply with all conditions contained in the document "General Procedures for General Operating Permits", posted at http://www.nj.gov/dep/aqpp. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	No visible emissions exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-3.2(a)] and [N.J.A.C. 7:27- 3.2(c)]	Monitored by visual determination each month during operation. Conduct visual opacity inspections during daylight hours to identify if the stack has visible emissions, other than condensed water vapor. Select an observation position enabling clear view of emission point(s), minimum 15 feet away without sunlight shining directly into the eyes. Observe for a minimum duration of 30 minutes. Clock observation with two stopwatches starting the 1st watch at the commencement of the 30-minute observation period and starting and stopping the 2nd watch every time visible emissions are first seen and when they cease, and record the observation. If visible emissions are observed for more than 3 minutes in the 30-consecutive minutes: (1) Verify the equipment and/or control device causing visible emissions is operating according to manufacturer's specifications. If it is not operating properly, take corrective action immediately to eliminate the excess emissions. (2) If the opacity problem is not corrected within 24 hours, perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Conduct such test each day until the opacity problem is successfully corrected. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Record and retain the following: (1) Date and time of inspection; (2) Emission Point number; (3) Operational status of equipment: (4) Observed results and conclusions: (5) Description of corrective action taken if needed; (6) Date and time opacity problem was solved, if applicable; (7) Required observation data according to N.J.A.C. 7:27B-2.5, if conducted; and (8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Particulate emission limit from the combustion of fuel based on the rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Maximum allowable sulfur content in No. 2 fuel oil or kerosene shall be no more than 15 ppmw (0.0015% by weight). [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
5	Sulfur Content in Fuel <= 15 ppmw (0.0015% by weight). Effective July 1, 2016. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
6	Fuel stored in New Jersey that met the applicable maximum sulfur content standard of Tables 1A or 1B of N.J.A.C. 7:27-9.2 at the time it was stored in New Jersey may be used in New Jersey after the operative date of the applicable standard in Table 1B. [N.J.A.C. 7:27-9.2(b)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The owner or operator of an industrial/commercial/institutional boiler or other indirect heat exchanger with a gross heat input of at least five million BTU per hour or more shall adjust the combustion process annually in the same quarter of each calendar year. The adjustment of the combustion process shall be done in accordance with the procedure set forth at N.J.A.C. 7:27-19.16. [N.J.A.C. 7:27-16.8(b)], [N.J.A.C. 7:27-16.8(c)] and [N.J.A.C. 7:27-19.7(g)]	Monitored by periodic emission monitoring annually. The owner or operator shall perform the adjustment of the combustion process in accordance with the specific procedures for combustion adjustment monitoring specified in NJDEP Technical Manual 1005 and the procedure set forth at N.J.A.C. 7:27-19.16(a) as follows: 1.Inspect the burner, and clean or replace any components of the burner as necessary; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications; 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly; 4. Minimize the total emissions of NOx and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NOx, CO and O2 in ppmvd, before and after the adjustment is made; and 6. Convert the emission values of NOx, CO and O2 concentrations measured in Ib/MMBTU according to the following formula: Lb/MMBTU = ppmvd * MW * F dry factor * O2 correction factor/387,000,000, where: ppmvd is the concentration in parts per million by volume, dry basis, of NOx or CO; MW is the Molecular Weight for NOx=46 Ib/Ib-mole, CO=28 Ib/Ib-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU; O2 correction factor: (20.9%)/(20.9% - O2 measured), where O2 measured is percent oxygen on a dry basis. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustment of the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured; 5. A description of any corrective action taken; 6. Results from any subsequent test performed after taking any corrective action, including concentrations and converted emission values in (lb/MMBTU); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the source operation. The records must be retained for a minimum of five years and to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(b)]	Submit a report: Annually. The owner or operator shall submit an annual adjustment combustion process report to the department within 45 days after the adjustment of the combustion process is completed. The report shall be submitted electronically to: www.njdeponline.com. Instructions for submitting this report online are specified at: http://www.nj.gov/dep/aqpp/adjustment.htm. [N.J.A.C. 7:27-19.16(d)] and [N.J.A.C. 7:27-19.16(c)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	The owner or operator of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted and retain until the next annual adjustment, to be made readily accessible to the Department upon request. [N.J.A.C. 7:27-19.16(e)].	None.
9	Boiler or Heater fuel limited to No. 2 fuel oil or kerosene. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Maximum Gross Heat Input: (HHV) from general operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing maximum heat input rate.[N.J.A.C. 7:27-22.16(o)].	None.
11	No. 2 Fuel Oil or Kerosene Usage: The permitted maximum No. 2 Fuel Oil or Kerosene usage (MGal) for any 12 consecutive months from the general operating permit application. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously. The owner or operator shall install and operate a fuel totalizer to monitor the total amount of fuel burned for any 12 consecutive months. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Gallons for any 12 consecutive months shall be calculated by the sum of the gallons consumed during any one month added to the sum of the gallons consumed during the preceding 11 months. [N.J.A.C. 7:27-22.16(o)]	None.
12	The owner or operator shall comply with the hourly and annual emission limits in the General Operating Permit application for the following air contaminants (VOC, NOx, CO, SO2, TSP and PM10), except for emission rates that are below reporting threshold of 0.05 lb/hr in Appendix Table A to N.J.A.C. 7:27-22. The annual emission limits are based on the information entered by the owner or operator in the application, including maximum rated heat input (MMBtu/hr-HHV) and 8,760 hours per year operation or annual fuel limit. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The owner or operator shall keep the completed application showing the hourly and annual emission rates, for the duration of the General Operating Permit and make it available to the Department upon request.[N.J.A.C. 7:27-22.16(o)].	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	The owner or operator shall submit an annual statement certified in accordance with N.J.A.C. 7:27-1.39 and signed by the responsible official, as defined at N.J.A.C. 7:27-1.4. The Responsible Official shall certify annually that the boiler or heater is operated in compliance with all applicable requirements as defined in this permit. [N.J.A.C. 7:27-22]	None.	None.	None.
14	No owner or operator of an affected boiler subject to the provisions of MACT Subpart A in 40 CFR 63 shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to: (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere; (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions. (MACT Subpart A) [40 CFR 63.4(b)]	None.	None.	None.
15	The owner and operator of an affected boiler must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements. (MACT Subpart A) [40 CFR 63.4(c)]	None.	None.	None.
16	The owner or operator of an affected boiler shall conduct monitoring as specified in the relevant standard, unless otherwise specified by the Administrator. (MACT Subpart A) [40 CFR 63.8(b)(1)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	The owner or operator of an affected boiler shall notify the Administrator that the source becomes subject to a relevant standard. The notification shall include the information as specified in 40 CFR 63.9(b)(2). (MACT Subpart A) [40 CFR 63.9(b)(2)]	None.	Other: The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.[40 CFR 63.10(b)(1)].	Submit notification: As per the approved schedule. Within 120 calendar days after the source becomes subject to the relevant standard, if initial startup of the affected source is before the effective date of the standard. [40 CFR 63.9(b)(2)]
18	After a title V permit has been issued, the owner or operator shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under 40 CFR 63. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard. (MACT Subpart A) [40 CFR 63.9(h)(3)]	None.	Other: The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.[40 CFR 63.10(b)(1)].	Submit notification: As per the approved schedule. The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration to NJDEP. [40 CFR 63.9(h)(3)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	The owner or operator of an affected boiler shall submit all information required under 40 CFR 63 to the Regional Enforcement Office of NJDEP. In addition, per 40 CFR 63.9(a)(4)(ii), the owner or operator shall send a copy of each report submitted to NJDEP under 40 CFR 63 to Director, Division of Enforcement and Compliance Assistance, USEPA Region 2, 290 Broadway, New York, NY 10007-1866. (MACT Subpart A) [40 CFR 63.10(a)(4)(ii)]	None.	Other: The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.[40 CFR 63.10(b)(1)].	Other (provide description): As per the approved schedule. Submit reports and notifications as required by 40 CFR 63 to EPA Region 2 and NJDEP. [40 CFR 63.13(b)]
20	The owner or operator at all times must operate and maintain an affected boiler, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (MACT Subpart JJJJJJ) [40 CFR 63.11205(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall keep records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. The owner or operator shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11225(c)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	The owner or operator of an affected boiler must submit the Initial Notification of Applicability:	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain a copy of the Initial Notification and all supporting	Submit notification: Once initially by January 20, 2014 if constructed on or before June 4, 2010, or within 120 days after startup of a new source if constructed after
	1. If constructed on or before June 4, 2010, submit no later than January 20, 2014; or		documentation for a period of 5 years. [40 CFR 63.11225(c)] and. [40 CFR 63.11225(d)]	June 4, 2010, to the Administrator, EPA Region 2, certified by the responsible official. The Initial Notification shall also
	2. If constructed after June 4, 2010, submit within 120 days after startup of new source.			be submitted to NJDEP, per 40 CFR 63.13.
	(MACT Subpart JJJJJJ) [40 CFR 63.11225(a)(2)]			The owner or operator may use instructions and the forms provided on the EPA website. https://www.epa.gov/
				stationary-sources-air-pollution/ compliance-industrial-commercial-and
				-institutional-area-source . [40 CFR 63.11225]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	For a boiler equal to 5 MMBTU/hr, or > 5 MMBTU/hr and < 10 MMBTU/hr equipped with an oxygen trim system that maintains an optimum air-to-fuel ratio, and constructed on or before June 4, 2010, the owner or operator shall conduct the initial tune-up no later than March 21, 2014. Subsequent tune-ups must be conducted no more than 61 months after the previous tune-up. The tune-ups shall be conducted, as required in Table 2 to 40 CFR Part 63, Subpart JJJJJJ, and in accordance with 40 CFR 63.11223(b) as follows: (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The burner inspection may be delayed until the next scheduled unit shutdown, but at least once every 72 months. (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The inspection may be delayed until the next scheduled unit shutdown, but at least once every 72 months. (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. (MACT Subpart JJJJJJ) [40 CFR 63.11214(b)] and [40 CFR 63.11223(e)]	Monitored by periodic emission monitoring once initially and once every 5 years. Measure the concentrations in the effluent stream of carbon monoxide (CO) in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. Per 40 CFR 63.11223(c), if an oxygen trim system is utilized on a boiler to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. As per 40 CFR 63.11223(b)(7), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. [40 CFR 63.11223(b)(5)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and once every 5 years. The owner or operator shall keep the following records for a period of 5 years following the date of each recorded action: Per 40 CFR 63.11225(c)(2)(i) records identifying each boiler, the date of tune-up, the procedures followed for tune-ups and the manufacturer's specifications to which the boiler was tuned. Per 40 CFR 63.11223(b)(6), the owner or operator must maintain a report containing the following information on site: (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. (ii) A description of any corrective actions taken as a part of the tune-up of the boiler. (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11225(c)(2)]	Submit notification: Once initially. Submit a Notification of Compliance status by July 19, 2014 electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). [40 CFR 63.11225(a)(4)]

Ref.# Ap	plicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
MMBTU/ł with an oxy an optimur constructed operator sh 5-years. Th no later tha initial start conducted, Part 63, Su with 40 CF (1) As appl clean or rep burner as n may be del shutdown, (2) Inspect and adjust optimize th should be of specification (3) Inspect air-to-fuel that it is co properly. T until the ne at least ond (4) Optimiz monoxide. consistent specification nitrogen ow is subject. (MACT S	er equal to 5 MMBTU/hr, or > 5 hr and < 10 MMBTU/hr equipped sygen trim system that maintains m air-to-fuel ratio, and d after June 4, 2010, the owner or hall conduct tune-up once in he first tune-up shall be conducted an 61 months after the boiler tup. The tune-ups shall be , as required in Table 2 to 40 CFR abpart JJJJJJ, and in accordance FR 63.11223(b) as follows: dicable, inspect the burner, and eplace any components of the necessary. The burner inspection layed until the next scheduled unit but at least once every 72 months. t the flame pattern, as applicable, the burner as necessary to he flame pattern. The adjustment consistent with the manufacturer's ons, if available. t the system controlling the ratio, as applicable, and ensure prectly calibrated and functioning The inspection may be delayed ext scheduled unit shutdown, but ce every 72 months. ize total emissions of carbon . This optimization should be with the manufacturer's ons, if available, and with any xide requirement to which the unit Subpart JJJJJJ][40 CFR b)] and [40 CFR 63.11223(e)]	Other: Monitored by periodic emission monitoring once every 5 years. Measure the concentrations in the effluent stream of carbon monoxide (CO) in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. Per 40 CFR 63.11223(c), if an oxygen trim system is utilized on a boiler to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. As per 40 CFR 63.11223(b)(7), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.[40 CFR 63.11223(b)(5)].	Other: Recordkeeping by manual logging of parameter or storing data in a computer data system once every 5 years. The owner or operator shall keep the following records for a period of 5 years following the date of each recorded action: Per 40 CFR 63.11225(c)(2)(i) records identifying each boiler, the date of tune-up, the procedures followed for tune-ups and the manufacturer's specifications to which the boiler was tuned. Per 40 CFR 63.11223(b)(6), the owner or operator must maintain a report containing the following information on site: (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. (ii) A description of any corrective actions taken as a part of the tune-up of the boiler. (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11225(c)(2)].	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	For a boiler equal to 5 MMBTU/hr, or > 5 MMBTU/hr and < 10 MMBTU/hr equipped with an oxygen trim system that maintains an optimum air-to-fuel ratio: Prepare a 5-year compliance certification report by March 1 of the applicable year and submit to the delegated authority upon request, a compliance certification report for the previous calendar years containing the following information: (1) Company name and address. (2) Statement by responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The notification must include the following certification(s) of compliance and signed by a responsible official: (i) "This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." (MACT Subpart JJJJJJ) [40 CFR 63.11225(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The owner or operator shall keep the records prescribed at 40 CFR 63.11225(b)(1) through (b)(2). [40 CFR 63.11225(b)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
25	For a boiler > 5 MMBtu/hr and < 10 MMBtu/hr, constructed on or before June 4, 2010, the permittee shall conduct an initial tune-up no later than March 21, 2014 and subsequent biennial tune-ups no later than 25 months after the previous tune-up. The tune-ups shall be conducted as required in Table 2 to 40 CFR Part 63, Subpart JJJJJJ, and in accordance with 40 CFR 63.11223(b) as follows: (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (the inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. As per 40 CFR 63.11223(b)(7), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. (MACT Subpart JJJJJJ)[40CFR63.11214(b)]& [40 CFR 63.11223(e)]	Monitored by periodic emission monitoring once initially and biennially. Measure the concentrations in the effluent stream of carbon monoxide (CO) in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.11223(b)(5)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and biennially. The permittee shall keep the following records for a period of 5 years following the date of each recorded action as per 40 CFR 63.11225(d) to document conformance with the tune-up: Records identifying each boiler, the date of tune-up, the procedures followed for tune-ups and the manufacturer's specifications to which the boiler was tuned. Per 40 CFR 63.11223(b)(6), the permittee must maintain a report containing the following information on site: (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. (ii) A description of any corrective actions taken as a part of the tune-up of the boiler. (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11225(c)(2)]	Submit notification: Once initially. Submit a Notification of Compliance status by July 19, 2014 electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). [40 CFR 63.11225(a)(4)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	For a boiler greater than 5 MMBtu/hr and less than 10 MMBtu/hr and constructed after June 4, 2010, the permittee shall conduct tune-up biennially. The first biennial tune-up must be no later than 25 months after the boiler initial startup. The tune-ups shall be conducted as required in Table 2 to 40 CFR Part 63, Subpart JJJJJ, and in accordance with 40 CFR 63.11223(b) as follows: (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and functioning properly. (the inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. As per 40 CFR 63.11223(b)(7), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.[40 CFR 63.11223(e)] and [40 CFR 63.11214(b)]	Monitored by periodic emission monitoring once initially and biennially. Measure the concentrations in the effluent stream of carbon monoxide (CO) in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.11223(b)(5)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and biennially. The permittee shall keep the following records for a period of 5 years following the date of each recorded action as per 40 CFR 63.11225(d) to document conformance with the tune-up: Records identifying each boiler, the date of tune-up, the procedures followed for tune-ups and the manufacturer's specifications to which the boiler was tuned. Per 40 CFR 63.11223(b)(6), the permittee must maintain a report containing the following information on site: (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. (ii) A description of any corrective actions taken as a part of the tune-up of the boiler. (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11225(c)(2)]	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	For a boiler greater than 5 and less than 10 MMBTU/hr: Prepare a biennial compliance certification report by March 1 of the applicable year and submit to the delegated authority upon request, a compliance certification report for the previous calendar years containing the following information: (1) Company name and address. (2) Statement by responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The notification must include the following certification(s) of compliance and signed by a responsible official: (i) "This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." (MACT Subpart JJJJJJ) [40 CFR 63.11225(b)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The permittee shall keep the records prescribed at 40 CFR 63.11225(b)(1) through (b)(2). [40 CFR 63.11225(b)]	None.
28	The owner or operator of an affected boiler must provide notice of the date upon which the owner or operator switched fuels, made the physical change, or took a permit limit that may result in the applicability of a different subcategory or switch out of 40 CFR Part 63, Subpart JJJJJJ due to a fuel change that results in the boiler meeting the definition of gas-fired boiler as defined in 40 CFR 63.11237, or taking a permit limit. The notice must be provided within 30 days of the change. (MACT Subpart JJJJJJ) [40 CFR 63.11225(g)]	None.	None.	Submit notification: Upon occurrence of event. Submit a written notification to the Administrator, EPA Region 2. The notification must identify: (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. (2) The date upon which the fuel switch, physical change, or permit limit occurred. [40 CFR 63.11225(g)]