

State of New Jersey
Department of Environmental Protection
Air Quality Permitting
General Permit (GP-009B)

For

**Boiler(s) Each Greater than or Equal to 10
MMBTU/hr and Less than 50 MMBTU/hr**

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

- ◆ A single boiler with a maximum rated heat input to the burning chamber greater than or equal to 10 million BTU/hr and less than 50 million BTU/hr;

OR

- ◆ Multiple boilers with a maximum rated heat input to the burning chamber greater than or equal to 10 million BTU/hr and less than 50 million BTU/hr each.

The potential-to-emit (PTE) for the equipment covered under this general permit is established using State of the Art emission levels and USEPA AP-42 emission factors based on the maximum total fuel limit for all boiler(s).

Each facility may possess only one GP-009B at any time. If a facility wants to make an option change in their existing general permit or wants to add a new boiler, replace or make changes to an existing boiler that's already registered under GP-009B, then, a new general permit registration is required. The new general permit registration will supersede the existing general permit.

This General Permit is applicable to boiler(s) burning the following commercial fuels:

- Natural Gas (NG);
- No. 2 Fuel Oil* only during periods of gas curtailment, gas supply emergencies or periodic testing as listed in the **Facility Specific Requirements Item No. 15**.

*Note: No. 2 fuel oil can be a blend of up to 5% by volume biodiesel fuel.

I. DEFINITIONS

The terms used in this general permit shall have the same definitions in N.J.A.C. 7:27 et seq. NSPS and MACT or as defined below:

“Area Source of HAPS” 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

“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 manufacture 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.

“Fuel Totalizer” means a dedicated measuring and/or monitoring device that totalizes, or sums up, the amount of fuel consumed in a time period. Note: Other combustion sources (including insignificant sources) may be included on a fuel totalizer, but will count towards the amount of fuel consumed and/or any fuel limits a facility may have.

“Gaseous fuel” means natural gas (NG).

“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)

“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/commercial/institutional boiler” or “ICI boiler” means an indirect heat exchanger that generates steam to supply heat to an industrial, commercial, or institutional operation. This term does not include boilers that serve electric generating units.

“Insignificant Source” means any equipment or source operation that does not need a permit and certificate pursuant to N.J.A.C. 7:27-8.2.

“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.

“MMBTU/hr (HHV)” means a unit of measure of heat input rate expressed as Millions of British Thermal Units per hour, based on the higher heating value of the fuel.

“Maximum Rated Heat Input” means the maximum design capacity for the amount of fuel a combustion source is able to burn in a given period based on the manufacturer’s specifications. This term is expressed in MMBTU/hr, based on the higher heating value of the fuel.

“Modify” or “modification” means any physical change in, or change in the method of operation of, existing equipment or control apparatus that increases the amount of actual emissions of any air contaminant emitted by that equipment or control apparatus or that results in the emission of any air contaminant not previously emitted. This term shall not include normal repair and maintenance.

“NSPS Subpart Dc” means, a New Source Performance Standards Subpart applicable to steam generating equipment for which construction, modification, or reconstruction commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 million BTU per hour or less, but greater than or equal to 10 million BTU per hour. {40 CFR 60.40c et seq }

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.

“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 <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors>

II. AUTHORITY

This general permit is issued under the authority of N.J.S.A. 26:2C-9.2. This general permit shall allow for inspections and evaluations to assure conformance with all provisions of N.J.A.C. 7:27 et seq. An opportunity for public comment was provided on August 19, 2019.

III. APPLICABILITY

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

- ◆ A single boiler with a maximum rated heat input to the burning chamber greater than or equal to 10 million BTU/hr and less than 50 million BTU/hr;

OR

- ◆ Multiple boilers with a maximum rated heat input to the burning chamber greater than or equal to 10 million BTU/hr and less than 50 million BTU/hr each.

The potential-to-emit (PTE) for the equipment covered under this general permit is established using State of the Art emission levels and USEPA AP-42 emission factors based on the maximum total fuel limit for all boiler(s).

Each facility may possess only one GP-009B at any time. If a facility wants to make an option change in their existing general permit or wants to add a new boiler, replace or make changes to an existing boiler that's already registered under GP-009B, then, a new general permit registration is required. The new general permit registration will supersede the existing general permit.

This General Permit is applicable to boiler(s) burning the following commercial fuels:

- Natural Gas;
- No. 2 Fuel Oil* only during periods of gas curtailment, gas supply emergencies or periodic testing as listed in the **Facility Specific Requirements Item No.15**.

*Note: No. 2 fuel oil can be a blend of up to 5% by volume biodiesel fuel.

IV. EXCLUSIONS

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

1. A boiler whose maximum rated heat input to the burning chamber is less than 10 MMBTU/hr;
2. A boiler whose maximum rated heat input to the burning chamber is 50 MMBTU/hr or greater;
3. Emergency generators, fire pumps, or any other internal combustion engines;
4. A boiler burning fuel other than natural gas or no.2 fuel during natural gas curtailment explained in reference item 15 in the compliance plan;
5. Direct-fired and Indirect-fired process heater;
6. Space heaters;
7. De-rated boiler;
8. A boiler sharing the same emission point(s) and/or control device(s) with other source(s) that are not registered under this general permit;
9. Limited-use Boilers;
10. Boilers serving electric generating units;
11. A boiler subject to MACT Subpart JJJJJ.

V. EQUIPMENT SPECIFICATIONS

- Each boiler registered under this general permit shall have a maximum rated heat input of greater than or equal to 10 MMBTU/hr and less than 50 MMBTU/hr based on manufacturer's specifications.
- Each boiler with a gross heat input greater than or equal to ten (10) million BTU per hour and less than fifty (50) million BTU per hour shall adjust the combustion process annually in the same quarter of each calendar year. The boiler is not required to adjust the combustion process, while no.2 fuel oil is burned during natural gas curtailment explained in reference item 15 in the compliance plan.
- Stack(s) height above ground for the boiler(s) should be 20 feet or greater.
- Each boiler registered under this general permit must meet the New Jersey State of the Art (SOTA) emission levels listed in Table 1 below:

Table 1: State of the Art (SOTA) Emission Standards for Natural Gas-Fired Boilers

Fuel Type	Pollutants	Emission Level (lb/MMBTU)
Natural Gas	NOx	0.035
	CO	0.050
	VOC	0.005

- An initial stack test is required for each boiler equal to or greater than 25 MMBTU per hour and combusting natural gas to demonstrate compliance with NO_x, CO, and VOC emission levels. If the Facility performed an initial stack test pursuant to N.J.A.C.7:27-19.7 after May 1, 2011 for a boiler, and the test results meet the State of the Art emission limits specified above and no modification to the boiler since the test, the boiler may be exempt from stack testing. The Department approved test results of the initial stack test shall be submitted with the GP registration under the attachment section.
- The boilers that use No.2 fuel oil as an emergency fuel must use 15 parts per million by weight (0.0015%) maximum sulfur content.
- The Permittee shall submit documentation for each boiler at the time of registration showing records of:
 1. The maximum rated heat input of the boiler, in millions of BTU per hour (HHV), per manufacturer's specifications, and
 2. Manufacturer's emission data; or one of the methods listed in the compliance plan, Monitoring Requirement in Ref # 12 to Ref # 14 to demonstrate compliance with the New Jersey State of the Art (SOTA) emission levels (lb/MMBTU) as specified in Table 1 above.

VI. POTENTIAL -TO - EMIT OPTIONS

The annual PTE is calculated by specifying the total combined maximum natural gas limit for all boilers registered under this general permit using state of the art emission levels for NO_x, CO and VOC and USEPA AP-42 Emission Factors for TSP, PM-10, PM2.5, SO₂ and HAPs emissions.

- o Compliance with the annual emission limit for each air contaminant shall be based on the maximum annual fuel consumption. Permittee shall comply with the fuel limit entered in the registration form. This GP doesn't allow more than 840 MMSCF/yr.
- o The annual PTE is calculated by specifying the total combined maximum natural gas limit for all boilers registered under this general permit.

VII. SUBMITTAL / CONTACT INFORMATION:

For assistance or contact information please go to one of the following resources:

1. Air Compliance and Enforcement:
<http://www.nj.gov/dep/enforcement/air.html>
2. Small Business Assistance Program:
<http://www.nj.gov/dep/aqes/sbap/index.html>
3. Bureau of Stationary Sources:
<http://www.nj.gov/dep/aqpp/>
4. Bureau of Technical Services:
<https://www.nj.gov/dep/bts/>
5. USEPA Region 2
Director, Division of Enforcement & Compliance Assistance
290 Broadway
New York, New York 10007-1866
<https://www.epa.gov/aboutepa/epa-region-2>
6. Federal Requirements:
40 CFR Part 60 Subpart Dc Standards of Performance for Small
Industrial – Commercial – Institutional – Steam Generating Units
<http://www.ecfr.gov>
(Title 40; Part 60; Browse Parts: 60.1 – 60.496; Subpart Dc 60.40c)

VIII. COMPLIANCE PLAN

The equipment covered by this general permit is subject to the applicable requirements listed on the following pages.

**COMPLIANCE PLAN: Boiler(s) each greater than or equal to 10 MMBTU/hr and less than 50 MMBTU/hr:
burning Natural Gas based on annual fuel limit (no.2 Fuel oil during gas curtailment only)**

Ref #	Applicable Requirement	Monitoring Requirement	Record keeping Requirement	Submittal/ Action
1.	<p>In addition to this Compliance Plan, all conditions contained in the document “General Procedures for General Permits” posted at the web page address https://www.state.nj.us/dep/aqpp/genproc.htm, are enforceable.</p> <p>[N.J.A.C. 7:27-8.13(a)]</p>	None.	None.	None.
2.	<p>The Permittee shall ensure combustion equipment included in this General Permit is easily identifiable by clear and conspicuous labeling, including manufacturer name, model number, serial number, and maximum gross heat input rate to the burning chamber.</p> <p>[N.J.A.C. 7:27-8.13(a)]</p>	None.	None.	<p>Submit supporting documentation as Manufacturer’s specification as an attachment to the registration showing the maximum gross heat input rate to the burning chamber.</p> <p>[N.J.A.C. 7:27-8.13(d)]</p>
3	<p>Permittee shall not use the equipment in a manner which will cause visible emissions, exclusive of visible condensed water vapor, except for a period no more than 3 minutes in any consecutive 30-minute period.</p> <p>[N.J.A.C. 7:27-3.2 (a)]</p>	None.	None.	<p>If visible emissions are observed, refer to operator manual for corrective action. If corrective action fails to correct visible emissions within 24 hours of observation, the Permittee shall immediately report the incident to the Department by calling the Environmental Action Hotline at (877) 927-6337.</p> <p>[N.J.A.C. 7:27-8.13(d)]</p>

4	<p>Particulate emission limit from the combustion of fuel based on the rated heat input of source.</p> <p>[N.J.A.C. 7:27- 4.2(a)]</p>	None.	None.	None.
5	<p>This equipment shall not cause any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property, except in areas over which the Permittee has exclusive or occupancy.</p> <p>[N.J.A.C. 7:27-5]</p>	None.	None.	<p>Any operation of the equipment which may cause a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare, or the environment or which might reasonably result in citizen complaints shall be reported by the Permittee as required by the Air Pollution Control Act. The Permittee shall immediately notify the Department of any non-compliance by calling the Environmental Action Hotline at (877) 927-6337.</p> <p>[N.J.S.A. 26:2C-19(e)]</p>

6	<p>Maximum No. of Billable Compliance Inspections \leq 4 inspections. The equipment covered by this permit will be subject to inspection fees for the maximum periodic compliance inspections (as defined in N.J.A.C 7:27-8.1) over the life of the Certificate, after it receives final approval for a five year duration. The Permittee will be invoiced for a service fee per inspection pursuant to N.J.A.C. 7:27-8.6 after the periodic compliance inspection is conducted.</p> <p>[N.J.A.C. 7:27-8.13(e)]</p>	None.	None.	None.
7	<p>The stack height above ground for each boiler shall be 20 ft. or greater.</p> <p>[N.J.A.C.7:27-8.13(a)]</p>	None.	None.	None.

<p>8</p>	<p>Each boiler with a gross heat input greater than or equal to ten (10) million BTU per hour and less than fifty (50) million BTU per hour shall adjust the combustion process annually in the same quarter of each calendar year.</p> <p>If the source is not operated during the quarter of the calendar year in which the annual adjustment is to be performed, the Permittee shall perform the adjustment within seven days after the boiler is next operated.</p> <p>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.</p> <p>[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)]</p>	<p>The Permittee shall perform the adjustment of the combustion process in accordance with the combustion adjustment monitoring procedures specified in NJDEP Technical Manual 1005 and the procedure at N.J.A.C. 7:27-19.16(a) as follows:</p> <ol style="list-style-type: none"> 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 NO_x and CO consistent with the manufacturer's specifications; 5. Measure the concentrations in the effluent stream of NO_x and CO in ppmvd and O₂ in percent, before and after the adjustment is made; and 6. Convert the measured emission values of NO_x, CO and O₂ concentrations to lb/MMBTU according to the following formula: Lb/MM BTU = 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 NO_x or CO; MW is the Molecular Weight for NO_x=46 lb/lb-mole, CO=28 lb/lb-mole; F Dry factor for: Natural Gas = 8,710 dscf/MMBTU; 	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon performing combustion adjustments. The Permittee shall record the following information for each adjustment:</p> <ol style="list-style-type: none"> 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 NO_x 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 NO_x 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 	<p>Submit a report annually. The Permittee shall submit an Annual Combustion Adjustment process report to the department within 45 days after the adjustment of the combustion process is completed. The report shall contain the following information:</p> <ol style="list-style-type: none"> (1) The concentrations of NO_x and CO in the effluent stream in ppmvd, and O₂ in percent dry basis, measured before and after the adjustment of the combustion process; (2) The converted emission values in lb/MMBTU for the measurements taken before and after the adjustment of the combustion process; (3) A description of any corrective actions taken as part of the combustion adjustment; and (4) The type and amount of fuel used over the 12 months prior to the annual adjustment. <p>The report shall be submitted electronically to: www.njdeponline.com</p>
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		<p>O₂ correction factor: $(20.9\%)/(20.9\% - O_2 \text{ measured})$, where O₂ measured is percent oxygen on a dry basis.</p> <p>[N.J.A.C. 7:27-19.16(a)]</p>	<p>operation. The records must be retained for a minimum of five years and to be made readily available to the Department upon request.</p> <p>[N.J.A.C. 7:27-19.16(b)]</p>	<p>Instructions for submitting this report online are specified at: http://www.nj.gov/dep/aqpp/adjustment.htm</p> <p>[N.J.A.C. 7:27-19.16(c)] and [N.J.A.C. 7:27-19.16(d)]</p>
9	<p>The Permittee shall ensure that the operating parameter settings of the adjusted equipment or source operation are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation be operated consistent with the settings during annual adjustment.</p> <p>[N.J.A.C. 7:27-19.16(e)]</p>	<p>Monitored by the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the settings during annual adjustment.</p> <p>[N.J.A.C. 7:27-19.16(e)]</p>	<p>The Permittee 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.</p> <p>[N.J.A.C. 7:27-19.16(e)]</p>	None.
10	<p>Compliance with the annual emission limit for each criteria air contaminant and each HAP contaminant emitted above the reporting threshold listed in Subchapter 17 shall be based on the maximum annual fuel consumption. Permittee shall comply with the fuel limit entered in the registration form.</p> <p>[N.J.A.C. 7:27-8.13(h)]</p>	<p>Fuel flow/firing rate instrument continuously on a consecutive 12-month period (rolling 1-month basis).</p> <p>The Permittee shall install and operate fuel totalizer(s) to monitor the total amount of fuel burned each 12 consecutive month period, based on a rolling 1-month basis.</p> <p>[N.J.A.C. 7:27-8.13(d)]</p>	<p>Each month during operation the Permittee shall record:</p> <ol style="list-style-type: none"> 1. Fuel type. 2. Current reading from the fuel totalizer(s). 3. Monthly fuel usage. 4. Sum and record the current monthly fuel usage with the previous eleven (11) month fuel usage totals to determine the consecutive twelve (12) month total. 	None.

			<p>All records shall be maintained on site for a period of no less than five years and made readily accessible to the Department upon request.</p> <p>[N.J.A.C. 7:27-8.13]</p>	
<p>11</p>	<p>The permittee shall conduct an initial stack testing for each boiler equal to or greater than 25 MM BTU/hr combusting natural gas to demonstrate compliance with the VOC, CO and NOx emission levels.</p> <p>Testing must be conducted at worst-case permitted operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition.</p> <p>If a boiler has already conducted the initial stack test under the NOx RACT within the past five years and the test results meet the emission limits listed in this GP and no modification(s) to the boiler since the test, the boiler may be exempt from stack testing.</p> <p>[N.J.A.C. 7:27-19.7(i)].</p>	<p>Stack emission testing once initially, based on the average of three Department validated stack test runs.</p> <p>[N.J.A.C. 7:27-19.7(i)].</p>	<p>Other: The permittee shall keep the EMS memo demonstrating compliance with the emission limits, for the life of the boiler, and made it available to the Department upon request.</p> <p>[N.J.A.C. 7:27-19.7(i)].</p>	<p>Stack test: Submit protocol, conduct test and submit results. The permittee shall submit an initial stack test protocol to the Emission Measurement Section (EMS) at Mailing Address: Mail Code: 09-01 PO Box 420, Trenton, NJ 08625 within 60 days of the approved date of this permit.</p> <p>Within 30 days of initial stack test protocol approval, the permittee must contact EMS at (609) 984-3443 to schedule a mutually acceptable test date.</p> <p>The initial stack test must be conducted within 180 days from the date of the stack testing protocol approval.</p> <p>The complete initial stack test report must be submitted to the EMS within 45 days after completing the stack test. A summary of the initial stack test results must also be submitted to the appropriate</p>

				<p>Regional Enforcement Office at the address available at https://www.nj.gov/dep/enforcement/air.html</p> <p>The initial stack test results must be certified by a licensed professional engineer or certified industrial hygienist.</p> <p>If a boiler has already conducted the initial stack test, as it is specified in this applicable requirement, Permittee shall submit the DEP approved stack test results of the initial test at the time of registration in the attachment list.</p> <p>[N.J.A.C. 7:27-19.7(i)].</p>
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<p>12</p>	<p>NO_x ≤ 0.035 lb/MMBTU while combusting Natural Gas</p> <p>[N.J.A.C. 7:27-8.13(h)].</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>The permittee shall demonstrate compliance with the NO_x lb/MMBTU emission limit using one or more of the following methods:</p> <ul style="list-style-type: none"> • stack test data validated by the Emission Measurement Section (EMS); • Manufacturer’s emission data; • Annual Combustion Adjustment portable monitoring results conducted in accordance with Technical Manual 1005; and/or • Continuous Emission Monitoring System (CEMS) data certified by EMS. <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Stack emission testing once initially, based on the average of three Department validated stack test runs.</p> <p>[N.J.A.C. 7:27-8.13(d)]</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>Permittee shall keep records of documentation showing compliance with emission levels. Records must be retained for the life of this General Permit and be made readily available to the Department upon request.</p> <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Stack test results, once initially. See Reference #11 Recordkeeping Requirement.</p> <p>[N.J.A.C. 7:27-8.13]</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>Submit supporting documentation as Manufacturer’s specification at the time of registration in the attachment list.</p> <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Submit supporting documentation as Manufacturer’s specification at the time of registration in the attachment list.</p> <p>See Reference #11 Submittal/ Action Requirement.</p> <p>[N.J.A.C. 7:27-8.13]</p>
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<p>13</p>	<p>CO ≤ 0.050 lb/MMBTU while combusting Natural Gas</p> <p>[N.J.A.C. 7:27-8.13(h)].</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>The permittee shall demonstrate compliance with the CO lb/MMBTU emission limit using one or more of the following methods:</p> <ul style="list-style-type: none"> • stack test data validated by the Emission Measurement Section (EMS); • Manufacturer’s emission data; • Annual Combustion Adjustment portable monitoring results conducted in accordance with Technical Manual 1005; and/or • Continuous Emission Monitoring System (CEMS) data certified by EMS. <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Stack emission testing once initially, based on the average of three Department validated stack test runs.</p> <p>[N.J.A.C. 7:27-8.13(d)]</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>Permittee shall keep records of documentation showing compliance with emission levels. Records must be retained for the life of this General Permit and be made readily available to the Department upon request.</p> <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Stack test results, once initially. See Reference #11 Recordkeeping Requirement.</p> <p>[N.J.A.C. 7:27-8.13]</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>Submit supporting documentation as Manufacturer’s specification at the time of registration in the attachment list.</p> <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Submit supporting documentation as Manufacturer’s specification at the time of registration in the attachment list.</p> <p>See Reference #11 Submittal/ Action Requirement.</p> <p>[N.J.A.C. 7:27-8.13]</p>
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<p>14</p>	<p>VOC <= 0.005 lb/MMBTU while combusting Natural Gas</p> <p>[N.J.A.C. 7:27-8.13(h)].</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>The permittee shall demonstrate compliance with the VOC lb/MMBTU emission limit using one or more of the following methods:</p> <ul style="list-style-type: none"> • stack test data validated by the Emission Measurement Section (EMS); • Manufacturer’s emission data; • Periodic VOC monitor in accordance with “Guidance Document for the Use of Periodic Volatile Organic Compound (VOC) Monitors at Small NJ Sources” found in Emission Measurements Section website at https://www.state.nj.us/dep/bts/prot o.html; and/or • Continuous Emission Monitoring System (CEMS) data certified by EMS. <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Stack emission testing once initially, based on the average of three Department validated stack test runs.</p> <p>[N.J.A.C. 7:27-8.13(d)]</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>Permittee shall keep records of documentation showing compliance with emission levels. Records must be retained for the life of this General Permit and be made readily available to the Department upon request.</p> <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Stack test results, once initially. See Reference #11 Recordkeeping Requirement.</p> <p>[N.J.A.C. 7:27-8.13]</p>	<p>For boilers greater than or equal to 10 MMBTU/hr and less than 25 MMBTU/hr:</p> <p>Submit supporting documentation as Manufacturer’s specification at the time of registration in the attachment list.</p> <p>For boilers equal to or greater than 25 MMBTU/hr:</p> <p>Submit supporting documentation as Manufacturer’s specification at the time of registration in the attachment list.</p> <p>See Reference #11 Submittal/ Action Requirement.</p> <p>[N.J.A.C. 7:27-8.13]</p>
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<p>15</p>	<p>The Permittee is allowed to use No. 2 fuel oil if all the following requirements are met:</p> <p>1) the Permittee is practicably not able to obtain a sufficient supply of natural gas;</p> <p>2) the Permittee is not able to obtain natural gas due to circumstances beyond the control of the Permittee, such as a natural gas curtailment; and</p> <p>3) the combustion source ceases using fuel oil in place of natural gas as soon as a sufficient supply of natural gas becomes practicably available.</p> <p>N.J.A.C. 7:27-8.13(a), [N.J.A.C. 7:27-19.25(a)] and [N.J.A.C. 7:27-19.25(c)]</p>	<p>None.</p>	<p>The Permittee that is combusting No. 2 fuel oil in place of natural gas shall maintain the following records:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the date the fuel oil was used; <input type="checkbox"/> the reason for use (i.e. natural gas curtailment); <input type="checkbox"/> the number of hours such fuel oil has been combusted; <input type="checkbox"/> Quantity in gallons of No2. Fuel oil used each day; AND <input type="checkbox"/> the same items to be included in the annual report to be submitted to the Regional Enforcement Office: Items 1) through 4) specified under the Submittal Action. <p>All records shall be maintained on site for a period of no less than five years and made readily accessible to the Department upon request.</p> <p>[N.J.A.C. 7:27-8.13(d)] and [N.J.A.C. 7:27-19.25(d)]</p>	<p>Submit a report: Annually by March 1 of each year for the preceding calendar year to the Regional Enforcement Office. The annual report shall include:</p> <p>1) information sufficient to identify each combustion source for which the owner or operator claims an exemption, including a brief description of the source, its location, its permit number and other identifying numbers, and any other information necessary to distinguish it from other equipment owned and operated by the facility;</p> <p>2) a statement that the owner or operator is not practicably able to obtain a sufficient supply of natural gas;</p> <p>3) the date and time at which the owner or operator first became practicably unable to obtain natural gas; and</p> <p>4) a description of the circumstances causing the owner or operator's inability to obtain natural gas.</p>
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				<p>The annual report shall also include any violations which occurred during the previous year. If no violations occurred during the year, the Permittee shall provide certification that no violations occurred and that the records are maintained at the facility.</p> <p>If no fuel oil or other liquid fuel was combusted under the N.J.A.C. 7:27-19.25 exemption during the reporting period, the Permittee is not required to submit an annual report to the Regional Enforcement Office and shall keep on-site certification in accordance with N.J.A.C.7:27-1.39 that no fuel oil or other liquid fuel was combusted and that the records are maintained at the facility.</p> <p>[N.J.A.C. 7:27-19.19(g)(2)] and [N.J.A.C. 7:27-19.25(d)]</p>
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<p>16</p>	<p>The Permittee may periodically fire No. 2 fuel oil for periodic testing, maintenance, or operator training events if the following requirements are met: Periodic testing, maintenance, or operator training per boiler on liquid fuel shall not exceed a combined total of 48 hours per boiler during any calendar year to qualify as a gas-fired boiler as defined in MACT Subpart JJJJJ, 40 CFR 63.11237.</p> <p>However, Permittee shall not fire fuel oil for 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 shown at the Department's air quality permitting web site at https://www.state.nj.us/dep/aqpp/aqforecast/</p> <p>[N.J.A.C.7:27-8.13(a)]</p>	<p>None.</p>	<p>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. For testing and maintenance, or operator training periods, record the date, number of hours, and gallons per day that No. 2 fuel oil has been combusted.</p> <p>All records shall be maintained on site for a period of no less than five years and made readily accessible to the Department upon request.</p> <p>[N.J.A.C7:27-8.13(d)]</p>	<p>None</p>
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17	<p>The maximum allowable sulfur content in No. 2 fuel oil shall be ≤ 15 ppmw (parts per million by weight) (0.0015%).</p> <p>[N.J.A.C. 7:27-9.2(b)]</p>	<p>Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery showing fuel sulfur content.</p> <p>[N.J.A.C. 7:27-8.13(d)]</p>	<p>Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading / certificate of analysis per delivery showing fuel sulfur content.</p> <p>[N.J.A.C.7:27-8.13(d)3]</p>	None.
18	<p>NSPS, Subpart Dc</p> <p>The owner or operator of a boiler ≥ 10 MMBTU/hr constructed /reconstructed after June 8, 1989, shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7.</p> <p>This notification shall include information specified in 40 CFR 60.48c(a)1:</p> <p>The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.</p> <p>[40 CFR 60.48c(a)]</p>	None.	<p>Keep copy of the initial notification and make it available to the Department, upon request.</p> <p>[40 CFR 60.48c(a)]</p>	<p>The owner or operator shall submit the initial notification to the following agencies:</p> <p>US EPA Region 2 Division of Enforcement & Compliance Assistance – Air Branch 290 Broadway New York, NY 10007-1866</p> <p>And</p> <p>To the appropriate NJDEP Air Compliance & Enforcement Office at the address available at https://www.nj.gov/dep/enforcement/air.html</p> <p>[40 CFR 60.48c(a)]</p>

<p>19</p>	<p>NSPS, Subpart Dc</p> <p>Opacity <= 20% except for one 6-minute period per hour of not more than 27% opacity for owner or operator of a boiler >= 30 MMBTU/hr constructed after June 8, 1989 during combusting #2 fuel oil during emergency use. This opacity standard does not apply during periods of startup, shutdown or malfunction.</p> <p>[40 CFR 60.43c(c)]</p>	<p>Other: An initial performance test shall be conducted as required at 40 CFR 60.11 using test Method 9 specified at 40 CFR 60.45c(a)(8). The subsequent performance tests shall be conducted according to the applicable schedule in 40 CFR 60.47c(a)(1) as follows: per (a)(1)(i), if no visible emissions are observed during the most recent test, a subsequent Method 9 performance test shall be completed within 12 calendar months from the date that the most recent test was conducted or, per (a)(1)(ii through iv), if visible emissions are observed during the most recent test, the frequency of subsequent testing shall be either 6 calendar months, 3 calendar months, or 45 calendar days depending on the results of the most recent test.</p> <p>Per 40 CFR 60.47c(a)2, if the maximum 6-min opacity is less than 10 percent during the most recent Method 9 test, the subsequent performance tests may be conducted, as an alternative to Method 9, by Method 22 on operating days the boiler fires fuel oil for which an opacity standard is applicable.</p> <p>[40 CFR 60.47c(a)].</p>	<p>Other: The owner or operator shall keep records of the initial and all subsequent performance tests.</p> <p>[40 CFR 60.48c(i)]</p>	<p>Comply with the requirement: Upon occurrence of event.</p> <p>The owner or operator shall submit to the Administrator of EPA the data from the initial and all subsequent performance tests.</p> <p>US EPA Region 2 Division of Enforcement & Compliance Assistance – Air Branch 290 Broadway New York, NY 10007-1866</p> <p>[40 CFR 60.48c(b)]</p>
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20	<p>NSPS, Subpart Dc</p> <p>Sulfur Content in Fuel \leq 0.5 weight % for a boiler with a maximum rated heat input of \geq10 MMBTU/hr, constructed after June 8, 1989, combusting No. 2 Fuel oil during emergency.</p> <p>[40 CFR 60.42c (d)]</p>	<p>Other: Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels (natural gas) shall follow the applicable procedures in 40 CFR 60.48c(f) for fuel certification.</p> <p>[40 CFR 60.48c(f)]</p>	<p>Other: The owner of operator shall comply with the recordkeeping requirements for fuel oil certification.</p> <p>[40 CFR 60.48c(f)]</p>	<p>The owner or operator shall submit fuel supplier certifications, and the owner/operator certification that the fuel supplier's certifications submitted represent all of the fuel combusted during the reporting period.</p> <p>[40 CFR 60.48c(e)(11)]</p>
21	<p>NSPS, Subpart Dc</p> <p>The owner or operator of a boiler \geq10 MMBTU/hr constructed /reconstructed after June 8, 1989, shall record and maintain records of the amount of each fuel combusted in the unit during each calendar month.</p> <p>[40 CFR 60.48c(g)2]</p>	<p>Monitored by fuel flow/ firing rate instrument, continuously, a consecutive 12-month period (rolling 1 month basis).</p> <p>[40 CFR 60.48c(g)2]</p>	<p>Recording by manual logging of parameter or storing data in a computer data system each month during operation.</p> <p>Owner or operator shall maintain all required records for a period of two years following the date of such record.</p> <p>[40 CFR 60.48c(g)2]</p>	None.