REGULATION 9 INORGANIC GASEOUS POLLUTANTS RULE 7 NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL BOILERS, STEAM GENERATORS AND PROCESS HEATERS

INDEX

9-7-100 GENERAL

- 9-7-101 Description
- 9-7-110 Exemptions
- 9-7-111 Limited Exemption, Low Fuel Usage Section 9-7-301
- 9-7-112 Limited Exemption, Low Fuel Usage Section 9-7-307
- 9-7-113 Limited Exemption, Natural Gas Curtailment and Testing
- 9-7-114 Limited Exemption, Tune-up
- 9-7-115 Limited Exemption, Startup and Shutdown
- 9-7-116 Limited Exemption, Compliance Extension for Facilities Subject to Regulation 9, Rule 9
- 9-7-117 Limited Exemption, Devices Rated 75 MM BTU/hr and Higher Limited to 9 PPMV NOx

9-7-200 DEFINITIONS

- 9-7-201 Annual Heat Input
- 9-7-202 Annual Maximum Heat Capacity
- 9-7-203 Boiler or Steam Generator
- 9-7-204 British Thermal Unit (BTU)
- 9-7-205 Digester Gas
- 9-7-206 Digester Gas-Fired Device
- 9-7-207 Gaseous Fuel
- 9-7-208 Heat Input
- 9-7-209 Heat-Input Weighted Average Limit
- 9-7-210 Higher Heating Value (HHV)
- 9-7-211 Landfill Gas
- 9-7-212 Landfill Gas-Fired Device
- 9-7-213 Load-Following Unit
- 9-7-214 Natural Gas
- 9-7-215 Natural Gas Curtailment
- 9-7-216 Nitrogen Oxide (NOx) Emissions
- 9-7-217 Process Heater
- 9-7-218 Rated Heat Input
- 9-7-219 Shutdown Period
- 9-7-220 Startup Period
- 9-7-221 Therm

9-7-300 STANDARDS

- 9-7-301 Interim Emission Limits
- 9-7-302 Deleted
- 9-7-303 Deleted
- 9-7-304 Low Fuel Usage Requirements Section 9-7-301
- 9-7-305 Deleted
- 9-7-306 Deleted
- 9-7-307 Final Emission Limits
- 9-7-308 Compliance Schedule
- 9-7-309 Low Fuel Usage Requirements Section 9-7-307

- 9-7-310 Prohibition of Commerce in Uncertified Devices
- 9-7-311 Insulation Requirements
- 9-7-312 Stack Gas Temperature Limits
- 9-7-313 Deleted

9-7-400 ADMINISTRATIVE REQUIREMENTS

- 9-7-401 Deleted
- 9-7-402 Deleted
- 9-7-403 Initial Demonstration of Compliance
- 9-7-404 Registration
- 9-7-405 Deleted
- 9-7-406 Application for Certification
- 9-7-407 Deleted
- 9-7-408 Designation of Load-Following Units

9-7-500 MONITORING AND RECORDS

- 9-7-501 Combinations of Different Fuels
- 9-7-502 Deleted
- 9-7-503 Records
- 9-7-504 Low Fuel Usage Monitoring and Records
- 9-7-505 Original Manufacture Date
- 9-7-506 Periodic Testing

9-7-600 MANUAL OF PROCEDURES

- 9-7-601 Determination of Nitrogen Oxides
- 9-7-602 Determination of Carbon Monoxide and Stack-Gas Oxygen
- 9-7-603 Compliance Determination
- 9-7-604 Tune-Up Procedures
- 9-7-605 Determination of Higher Heating Value
- 9-7-606 Certification and Periodic Test Methods

ATTACHMENT 1 – DELETED

REGULATION 9 INORGANIC GASEOUS POLLUTANTS RULE 7 NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL BOILERS, STEAM GENERATORS AND PROCESS HEATERS

(Adopted September 16, 1992)

9-7-100 GENERAL

- **9-7-101 Description:** This rule limits the emissions of nitrogen oxides (NOx) and carbon monoxide (CO) from industrial, institutional and commercial boilers, steam generators and process heaters.
- **9-7-110 Exemptions:** The requirements of this rule shall not apply to the following:
 - 110.1 Boilers, steam generators and process heaters with a rated heat input of 2 million BTU/hour or less, if fired exclusively with natural gas, liquefied petroleum gas (LPG), or any combination thereof;
 - 110.2 Boilers, steam generators and process heaters with a rated heat input less than 1 million BTU/hour fired with any fuel;
 - 110.3 Boilers, steam generators and process heaters that are used in petroleum refineries;
 - 110.4 Boilers used by public electric utilities or qualifying small power production facilities, as defined in Section 228.5 of the Public Utilities Code, to generate electricity;
 - 110.5 Waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines or reciprocating internal combustion engines;
 - 110.6 Kilns, ovens, and furnaces used for drying, baking, heat treating, cooking, calcining or vitrifying; or
 - 110.7 Process heaters used to heat thermal fluid for radiant comfort heating.
- (Amended 7/30/2008; 5/4/2011) 9-7-111 Limited Exemption, Low Fuel Usage - Section 9-7-301: The requirements of Section 9-7-301 shall not apply to the use of any boiler, steam generator, or process heater with an annual heat input less than 90,000 therms during each consecutive 12month period after July 1, 1993, or that accepts a limiting condition in their operating permit to limit the annual heat input to less than 90,000 therms, provided the requirements of Sections 9-7-304 and 504 are satisfied. This exemption is not valid for a boiler, steam generator, or process heater that is subject to the requirements of Section 9-7-307 after the effective date of the applicable standard in that section.

(Amended 7/30/2008; 5/4/2011)

- **9-7-112** Limited Exemption, Low Fuel Usage Section 9-7-307: The requirements of Sections 9-7-301, 307, 311 and 312 shall not apply to the use of any boiler, steam generator or process heater that was first operated prior to January 1, 2012 provided that all of the following conditions are met:
 - 112.1 For devices with a rated heat input less than 10 million BTU/hr, the device uses less than 10% of its annual maximum heat capacity in each consecutive 12-month period beginning January 1, 2012 and the requirements of Sections 9-7-309 and 504 are satisfied;
 - 112.2 For devices with a rated heat input of 10 million BTU/hr or more, the device uses less than 10% of its annual maximum heat capacity in each consecutive 12-month period beginning January 1, 2012 and the requirements of Section 9-7-504 are satisfied and the device does not exceed a NOx exhaust concentration of 30 ppmv or a CO exhaust concentration of 400 ppmv, both dry at 3 percent oxygen.

A boiler, steam generator or process heater that uses 10% of more of its annual maximum heat capacity in any consecutive 12-month period after the effective date specified in Section 9-7-112.1 or 112.2, as applicable, shall not thereafter be eligible for this exemption. An operator of a boiler, steam generator or process heater that loses eligibility for this exemption by using more than the specified amount of fuel in

any consecutive 12-month period shall comply with the applicable standards of Section 9-7-307 within 24 months.

(Adopted 7/30/2008; Amended 5/4/2011)

- **9-7-113** Limited Exemption, Natural Gas Curtailment and Testing: The requirements of Section 9-7-307 shall not apply to any boiler, steam generator or process heater while it burns non-gaseous fuel during a natural gas curtailment or during testing to verify readiness for such a curtailment, provided that all of the following conditions are met:
 - 113.1 The device does not burn non-gaseous fuel for more than 168 total hours in each consecutive 12-month period, plus 48 hours in each consecutive 12-month period for oil-burn readiness testing or state, federal or local agency-required performance testing,
 - 113.2 The device does not exceed a NOx exhaust concentration of 150 ppmv, dry at 3 percent oxygen, and
 - 113.3 The records specified in Section 9-7-503.3 are maintained.

(Adopted 7/30/2008; Amended 5/4/2011)

9-7-114 Limited Exemption, Tune-Up: The emission limits of Section 9-7-307 shall not apply during the tune-up of a boiler, steam generator or process heater required by Section 9-7-313.

(Adopted 7/30/2008; Amended 5/4/2011)

- **9-7-115** Limited Exemption, Startup and Shutdown: The emission limits of Section 9-7-307 shall not apply during startup and shutdown periods provided that all of the following conditions are met:
 - 115.1 Each startup and shutdown period shall not exceed two hours, unless otherwise allowed in a District Permit to Operate. In no case shall the startup period exceed 12 hours, or the shutdown period exceed 9 hours.
 - 115.2 All emission control systems shall be in operation and emissions shall be minimized, to the extent possible, during startup and shutdown periods.

(Adopted July 30, 2008)

9-7-116 Limited Exemption, Compliance Extension for Facilities Subject to Regulation **9**, Rule **9**: Boilers, steam generators or process heaters located at the same facility as a turbine that is subject to Regulation 9, Rule 9 and that is modified or replaced to comply with Section 9-9-301.2 of that regulation, shall comply with the requirements of Section 9-7-307 no later than 24 months after the date otherwise specified for compliance in Section 9-7-308.

(Adopted July 30, 2008)

9-7-117 Limited Exemption, Devices Rated 75 MM BTU/hr or Higher Limited to 9 PPMV NOx: The emission limits of Section 9-7-307.6 shall not apply to any boiler, steam generator or process heater that is limited to 9 ppmv NOx or less by a District Permit to Operate in effect on or before July 30, 2008 as long as that permit limit remains in effect.

(Adopted July 30, 2008)

9-7-200 DEFINITIONS

- **9-7-201 Annual Heat Input:** The total heat input of fuels burned by a combustion source during any consecutive 12-month period, as determined from the higher heating value and cumulative annual usage of each fuel.
- **9-7-202** Annual Maximum Heat Capacity: The amount of heat input that a device would have if it operated at its rated heat input continuously for 365 consecutive days.

(Adopted July 30, 2008)

- 9-7-203 Boiler or Steam Generator: Any combustion equipment used to produce steam. (*Renumbered 7/30/2008; Amended 5/4/2011*)
- **9-7-204** British Thermal Unit (BTU): The amount of heat required to raise the temperature of one pound of water from 59° to 60°F at one atmosphere.

(Renumbered July 30, 2008)

- **9-7-205** Digester Gas: Gas derived from the decomposition of organic matter in a digester. (Adopted July 30, 2008)
- **9-7-206** Digester Gas-Fired Device: A boiler, steam generator or process heater that fires or co-fires digester gas at least 90% of its operating time, on a calendar year basis.

(Adopted July 30, 2008)

- **9-7-207** Gaseous Fuel: Any fuel that is a gas at 68°F and one atmosphere.
 - (Adopted July 30, 2008)
- **9-7-208** Heat Input: The heat of combustion released due to burning a fuel in a source, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

(Renumbered July 30, 2008)

9-7-209 Heat-Input Weighted Average Limit: For devices using fuels with different NOx limits, the applicable limit is the heat-input weighted average of the limits for each fuel used, which is:

 Σ ((heat input for a fuel) x (NOx limit for that fuel)) for all fuels used, divided by: (total heat input for all fuels).

(Amended, Renumbered 7/30/2008; Amended 5/4/2011)
 9-7-210 Higher Heating Value (HHV): The total heat liberated per mass of fuel burned (BTU per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. The HHV is determined as specified in Section 9-7-605.

(Renumbered July 30, 2008)

- **9-7-211** Landfill Gas: Gas derived from the decomposition of waste in a landfill.
- (Adopted July 30, 2008) 9-7-212 Landfill Gas-Fired Device: A boiler, steam generator or process heater that fires or co-fires landfill gas at least 90% of its operating time, on a calendar year basis.

(Adopted July 30, 2008)

9-7-213 Load-Following Unit: A unit that cannot be operated in a base-loaded mode, and that has normal operational load fluctuations and requirements, imposed by fluctuations in the process(es) served by the unit, that exceed the operational response range of a Ultra-Low NOx burner system operating at 9 ppmv NOx, as determined by the District and indicated on the device's permit to operate.

(Adopted July 30, 2008)

9-7-214 Natural Gas: Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.

(Renumbered July 30, 2008)

9-7-215 Natural Gas Curtailment: A shortage in the supply of pipeline natural gas, due solely to supply limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas.

(Adopted July 30, 2008)

9-7-216 Nitrogen Oxide (NOx) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.

(Renumbered July 30, 2008)

9-7-217 Process Heater: Any combustion equipment that transfers heat from combustion gases to water or process streams.

(Amended, Renumbered 7/30/2008; Amended 5/4/2011)

9-7-218 Rated Heat Input: The heat input capacity specified on the nameplate of the boiler, steam generator or process heater, or the sum of the capacities on the nameplates of the burners in the boiler, steam generator or process heater, whichever is greater.

(Amended, Renumbered July 30, 2008)

9-7-219 Shutdown Period: The period of time during which a unit is taken from an operational to a non-operational status.

(Adopted July 30, 2008)

9-7-220 Startup Period: The period of time during which a unit is brought from a nonoperational status to operating temperature, including the time required for the unit's emission control system to reach full operation.

(Adopted July 30, 2008)

9-7-221 Therm: One hundred thousand (100,000) BTU's.

(Renumbered July 30, 2008)

9-7-300 STANDARDS

9-7-301 Interim Emission Limits: No person shall operate a boiler, steam generator or process heater with a rated heat input greater than or equal to 10 million BTU per hour unless the following emission limits are met:

- 301.1 Nitrogen oxide (NOx) emissions shall not exceed 30 ppmv, dry at 3 percent oxygen when gaseous fuel is used;
- 301.2 Nitrogen oxide (NOx) emissions shall not exceed 40 ppmv, dry at 3 percent oxygen when non-gaseous fuel is used;
- 301.3 Nitrogen oxide (NOx) emissions shall not exceed the heat-input weighted average of the limits in Sections 9-7-301.1 and 301.2 when a combination of gaseous and non-gaseous fuel is used;
- 301.4 Carbon monoxide (CO) emissions shall not exceed 400 ppmv, dry at 3 percent oxygen.

This section shall not apply to any boiler, steam generator or process heater subject to a NOx or CO emission limit in Section 9-7-307.

(Amended July 30, 2008)

9-7-302 Deleted July 30, 2008

9-7-303 Deleted July 30, 2008

- **9-7-304** Low Fuel Usage Requirements Section 9-7-301: No person shall operate any boiler, steam generator or process heater under the limited exemption in Section 9-7-111, or with rated heat input less than 10 million BTU per hour with the capability of firing any non-gaseous fuel, without doing at least one of the following:
 - 304.1 Operate in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3 percent by volume on a dry basis; or
 - 304.2 Perform an inspection and tune-up at least once every 12 months by a technician in accordance with the procedure specified in Section 9-7-604; or
 - 304.3 Meet the emission limits specified in Sections 9-7-301.

(Amended 7/30/2008; 5/4/2011)

9-7-305 Deleted July 30, 2008

9-7-306 Deleted July 30, 2008

9-7-307 Final Emission Limits: No person shall operate a boiler, steam generator or process heater with a rated heat input listed in the table below that exceeds the corresponding NOx and CO emission limits on or after the corresponding effective date specified in Section 9-7-308.

Emission Limit	Rated Heat Input (million BTU/hr)	Fuel	NOx Limit (ppmv, dry at 3% oxygen)	CO Limit (ppmv, dry at 3% oxygen)
307.1	>2 to 5	gaseous, except landfill or digester gas	30	400
307.2	>5 to <10		15	400
307.3	10 to <20		15	400
307.4	20 or more, load-following unit		15	400
307.5	20 to <75		9	400
307.6	75 or more		5	400
307.7	1 or more	landfill or digester gas	30	400
307.8	1 or more	non- gaseous	40	400
307.9	1 or more	multiple fuels	heat-input weighted average limit	400
(Adopted 7/30/2008; Amended 5/4/2011)			nded 5/4/2011)	

9-7-308 Compliance Schedule: Boilers, steam generators and process heaters subject to the requirements of Section 9-7-307 shall comply with those requirements in accordance with the schedule in the table below.

Applicable NOx Limit	At least 33% of devices at a single facility	At least 66% of devices at a single facility	100% of devices at a single facility
9-7-307.1 9-7-307.2	Effective Date: January 1, 2013	One year after Effective Date	Two years after Effective Date
9-7-307.3 9-7-307.4 9-7-307.5 9-7-307.6	Effective Date: January 1, 2012	One year after Effective Date	Two years after Effective Date
9-7-307.7 9-7-307.8 9-7-307.9	Effective Date: January 1, 2013 for devices with rated input <10 MM BTU/hr; July 30, 2008 for devices with rated input ≥10 MM BTU/hr	One year after Effective Date	Two years after Effective Date

For the purpose of complying with the required minimum percentages shown in this table, all boilers, steam generators and process heaters at a single facility with rated heat inputs less than 10 MM BTU/hr, including those subject to Section 9-7-112, may be grouped. All other boilers, steam generators and process heaters at a single facility, including those subject to Section 9-7-112, may be grouped, except for those that are subject to Sections 307.7, 307.8 or 307.9 that also have an effective date of July 30, 2008.

- 308.1 Notwithstanding the indicated minimum percentages, boilers, steam generators and process heaters rated >2 to 5 MM BTU/hr shall have an effective date 10 years after original manufacture date if manufactured prior to January 1, 2011, IF this is later than the normal effective date.
- 308.2 Notwithstanding the indicated minimum percentages, boilers, steam generators and process heaters rated >5 to <20 MM BTU/hr shall have an effective date 10 years after original manufacture date if manufactured prior to January 1, 2012, IF this is later than the normal effective date.
- 308.3 Notwithstanding the indicated minimum percentages, boilers, steam generators and process heaters rated 20 MM BTU/hr or higher shall have an effective date 5 years after original manufacture date if manufactured prior to January 1, 2012, IF this is later than the normal effective date.

(Adopted 7/30/2008; Amended 5/4/2011)

- **9-7-309** Low Fuel Usage Requirements Section 9-7-307: No person shall operate any boiler, steam generator or process heater under the limited exemption in Section 9-7-112.1 without doing at least one of the following:
 - 309.1 Deleted May 4, 2011
 - 309.2 Perform an inspection and tune-up at least once per calendar year by a technician in accordance with the procedure specified in Section 9-7-604; or
 309.3 Meet the applicable emission limits in Section 9-7-307.

(Adopted 7/30/2008; Amended 5/4/2011)

9-7-310 Prohibition of Commerce in Uncertified Devices: Effective January 1, 2012, no person shall sell, offer for sale, or install any boiler, steam generator or process heater subject to Section 9-7-307.1 or 307.2 unless the device is certified to comply with the applicable standards of these sections by the APCO. This certification requirement shall not apply to burner assembly retrofit packages, or to devices installed in accordance with a District Permit to Operate.

(Adopted 7/30/2008; Amended 5/4/2011)

- **9-7-311 Insulation Requirements:** No person shall operate a boiler or steam generator unless the exposed, external surface of the device, including all pipes and ducts heated by the device, does not exceed a temperature of 120°F. This requirement shall not apply to any of the following:
 - 311.1 Any device that meets the definition of a high-temperature water boiler in California Code of Regulations, Title 8.
 - 311.2 Any surface or appurtenance that must remain un-insulated for safety or operational reasons.
 - 311.3 Any surface that has at least one inch of insulation.

- 311.4 Any surface heated by a source other than the boiler or steam generator, including sunlight.
- 311.5 Any exhaust stack surface.
- (Adopted 7/30/2008; Amended 5/4/2011) **9-7-312** Stack Gas Temperature Limits: Effective January 1, 2013, no person shall operate a boiler or steam generator with a stack gas temperature (downstream of any economizer) that exceeds the indicated maximum temperature unless the device is certified by the Air-Conditioning, Heating and Refrigeration Institute (AHRI) as having a thermal efficiency of 80% or more:

Heater	Maximum Temperature (ºF)		
Design	Gaseous Fuel	Non-Gaseous Fuel	
firetube	100°F over saturated steam temperature for steam boiler, 100°F over hot water temperature for hot water boiler OR 250 °F greater than combustion air temperature, whichever is higher	100°F over saturated steam temperature for steam boiler, 100°F over hot water temperature for hot water boiler OR 300 °F greater than combustion air temperature, whichever is higher	
watertube	150°F over saturated steam temperature for steam boiler, 150°F over hot water temperature for hot water boiler OR 250 °F greater than combustion air temperature, whichever is higher	150°F over saturated steam temperature for steam boiler, 150°F over hot water temperature for hot water boiler OR 300 °F greater than combustion air temperature, whichever is higher	

9-7-313 Deleted May 4, 2011

9-7-400 ADMINISTRATIVE REQUIREMENTS

9-7-401 Deleted July 30, 2008

9-7-402 Deleted July 30, 2008

- 9-7-403 Initial Demonstration of Compliance: No person shall operate a boiler, steam generator or process heater that is subject to the requirements of Sections 9-7-307.1 through 307.6, or a boiler, steam generator or process heater with a rated heat input less than 10 MM BTU/hr that is subject to the requirements of Sections 9-7-307.7 though 9-7-307.9 unless compliance with these requirements is verified in accordance with Sections 9-7-601 or 602 within 1 year of the date on which these requirements become effective. However, devices with a rated heat input <10 MM BTU/hr may be tested using a portable analyzer in accordance with Section 9-7-606. This section does not apply to any device required to perform verification testing to establish compliance with applicable requirements of Sections 9-7-307 in accordance with a District Authority to Construct issued on or after January 1, 2013, or to any device that has had a previous source test performed in accordance with Sections 9-7-601 and 602 that verifies compliance with the applicable requirements of Section 9-7-307, or to any device certified in accordance with Section 9-7-310. The requirements of this section may be satisfied by monitoring emissions with a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522.
- (Amended 7/30/2008; 5/4/2011) **9-7-404 Registration:** Effective January 1, 2011, no person shall operate any boiler, steam generator or process heater with a rated heat input greater than 2 and less than 10 million BTU/hr unless the device is registered with the District. Any person registering a device shall pay the fees specified in Regulation 3. This registration requirement shall not apply to any device for which the operator holds a District Permit to Operate. (Adopted 7/30/2008; Amended 5/4/2011)

9-7-405 Deleted May 4, 2011

9-7-406 Application for Certification: A manufacturer may submit an application to certify compliance with the requirements of Section 9-7-307.1 or 9.7-307.2 for a boiler, steam generator or process heater model that is subject to these requirements. The application shall be made on forms specified by the APCO. The certification application shall include a demonstration that the boiler, steam generator or process heater model was tested in accordance with Section 9-7-606 and found to comply with the requirements of Sections 9-7-307.1 or 9.7-307.2. A portable analyzer may not be used for this testing. After completing review of the application for certification and source test report, the APCO will approve the certification and include the subject model on the list of certified devices, or will deny the certification.

9-7-407 Deleted May 4, 2011

- **9-7-408 Designation of Load-Following Units:** To be eligible for the load-following emission standard in section 9-7-307, a unit must be designated a load-following unit by the APCO on the unit Permit to Operate. In order to support this designation, the unit operator shall include the following information with an application for an Authority to Construct or an application for a modification to a Permit to Operate, as specified in Regulation 2:
 - 408.1 A description of the processes the unit serves and the normal operational load fluctuations and load requirements imposed on the unit, verifying that the unit cannot be operated in a base-loaded mode.
 - 408.2 A detailed report on the design and condition of the unit, burner(s), burner controls, and any other subsystem that may affect the ability of the unit to comply with a 9 ppmv NOx limit, including a verification that the unit is free of air leaks, and is operated within normal design parameters, and is otherwise free of significant design defects and physical defects and is operated within reasonable parameters. This report shall verify that the inability of the unit to comply with a 9 ppmv NOx limit is substantially caused by the system load fluctuations and the limitations of state-of-the-art, commercially-available, 9 ppmv burners and burner controls, rather than any other factor.
 - 408.3 Technical data such as steam demand charts or other information to support the description and report described above.

(Adopted July 30, 2008)

(Adopted 7/30/08; Amended 5/4/2011)

9-7-500 MONITORING AND RECORDS

9-7-501 Combinations of Different Fuels: No person shall simultaneously fire combinations of different fuels in a device subject to the requirements of Sections 9-7-301.3 or 307.9 without first installing a non-resettable totalizing fuel meter in each fuel line for each source.

(Amended July 30, 2008)

9-7-502 Deleted July 30, 2008

9-7-503 Records: Any person subject to the requirements of this rule shall keep records of the following:

- 503.1 Documentation verifying tune-ups performed in accordance with Sections 9-7-304.2, or 309.2.
- 503.2 In the event that the limited exemption in Section 9-7-113 is invoked, documentation from the natural gas supplier verifying that natural gas was unavailable due to a natural gas curtailment.
- 503.3 Documentation verifying the hours of equipment testing using non-gaseous fuel, and of total operating hours using non-gaseous fuel during each calendar month.
- 503.4 The results of any testing required by Sections 9-7-403 or 506.
- 503.5 Digester gas-fired and landfill gas-fired devices operating under Section 9-7-307.7 shall maintain records of total operating hours and operating hours firing or co-firing digester or landfill gas.

Such records shall be retained for a minimum of 24 months from date of entry and be made available to District staff upon request.

(Amended 7/30/2008; 5/4/2011)

- **9-7-504** Low Fuel Usage Monitoring and Records: Any person who operates a boiler, steam generator or process heater under the limited exemption of Section 9-7-111 or 112 shall comply with the following requirements:
 - 504.1 Operate a non-resettable totalizing meter for each fuel that demonstrates that the source operated at or below the applicable heat input level, or receive APCO approval for using utility service meters, purchase or tank fill records, or any other acceptable methods for measuring the cumulative annual usage of each fuel; and
 - 504.2 Have available for inspection by the APCO annual fuel use data and the Higher Heating Value of each fuel used, for the prior consecutive 12-month period. Records shall be maintained and made accessible to the APCO for a period of 24 months from the date the record is made.

An operator of a boiler, steam generator or process heater who claims eligibility for the limited exemption in Section 9-7-111 or 112, but who fails to maintain records to allow verification of fuel usage shall have the burden of proof to establish eligibility for the limited exemption.

(Amended July 30, 2008)

9-7-505 Original Manufacture Date: Any person who operates a boiler, steam generator or process heater that is subject to a standard in Sections 9-7-307.1 through 307.6 and that elects to use an effective date for this standard that is based on the original manufacture date of the device shall make available the original manufacture date of the device on the original manufacturer's identification or rating plate permanently fixed to the device, or else on a copy of the manufacturer's invoice.

(Adopted July 30, 2008)

9-7-506 Periodic Testing: No person shall operate a boiler, steam generator or process heater subject to an emission limit specified in the table below unless they verify compliance with the limit at the specified intervals. Testing shall be performed in accordance with Sections 9-7-601 and 602. Alternatively, devices may be tested using a portable analyzer in accordance with Section 9-7-606. No person shall operate a device that uses non-gaseous fuel unless they perform testing using non-gaseous fuel to verify compliance with Section 9-7-307.8 or 307.9, in addition to testing to verify compliance with any other applicable standard in Section 9-7-307. This section does not apply to any device required to perform periodic testing in accordance with a District Permit to Operate or to any device that verifies compliance with an emission limit with a continuous emission monitor that meets the requirements of Regulation 1-522.

Emission Limit	Testing Interval
9-7-307.1 9-7-307.2 9-7-307.3	Every calendar year, beginning with the first complete year after the effective date in Section 9-7-308.
9-7-307.4 9-7-307.5 9-7-307.6	Every calendar year, beginning with the first complete year after the effective date in Section 9-7-308.
9-7-307.8 9-7-307.9 Within 60 days of the first use of non-gaseous fuel in calendar year in which non-gaseous fuel is used. Use of n gaseous fuel under limited exemption in Section 9-7-113 s not trigger this requirement.	

(Adopted 7/30/2008; Amended 5/4/2011)

9-7-600 MANUAL OF PROCEDURES

9-7-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District Manual of Procedures, Volume IV, ST-13A.

(Amended May 4, 2011)

9-7-602 Determination of Carbon Monoxide and Stack-Gas Oxygen: Compliance with the carbon monoxide emission requirements of Sections 9-7-301 and 307 and the stack-

gas oxygen concentration requirement of Section 9-7-304.1 shall be determined as set forth in the District Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).

(Amended July 30, 2008)

9-7-603 Compliance Determination: All emission determinations shall be made in the asfound operating condition, except that no compliance determination shall be established during startup or shutdown.

(Amended July 30, 2008)

9-7-604 Tune-Up Procedures: The tune-up procedure required by Sections 9-7-304.2 and 309.2 shall be performed in accordance with the procedure set forth in the District Manual of Procedures, Volume I, Chapter 5.

. (Adopted 9/15/1993; Amended 7/30/2008; 5/4/2011)

- **9-7-605** Determination of Higher Heating Value: If certification of the Higher Heating Value is not provided by the third-party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88, or ASTM D1945-81 in conjunction with ASTM D3588-89, for gaseous fuels.
- **9-7-606 Certification, Initial Demonstration of Compliance and Periodic Test Methods**: The test methods specified in the following table may be used to perform an initial demonstration of compliance in accordance with Section 9-7-403, establish equipment certification in accordance with Section 9-7-406, and also to perform periodic monitoring in accordance with Section 9-7-506. Portable analyzers may only be used where explicitly allowed in Sections 9-7-403 and 506. In addition, any other test method approved for this purpose by the Air Pollution Control Officer of the District and by the regional administrator of the United States Environmental Protection Agency may also be used.

Emission Limit or Parameter	Test Method	
NOx (ppmv)	 BAAQMD Manual of Procedures, Volume IV, ST-13 A California Air Resources Board Method 100 U.S. EPA Method 7E U.S. EPA Method CTM-030 (if portable analyzer use is allowed) 	
CO (ppmv)	 BAAQMD Manual of Procedures, Volume IV, ST-6 California Air Resources Board Method 100 U.S. EPA Method 10 U.S. EPA Method CTM-030 (if portable analyzer use is allowed) 	
oxygen (%)	 BAAQMD Manual of Procedures, Volume IV, ST-14 California Air Resources Board Method 100 U.S. EPA Method 3 or 3A U.S. EPA Method CTM-030 (if portable analyzer use is allowed) 	

(Adopted May 4, 2011)

ATTACHMENT 1 DELETED MAY 4, 2011