

ATTACHMENT 7

**NEW SOURCE PERFORMANCE STANDARDS FOR POST-MODEL YEAR 2007
NON-EMERGENCY COMPRESSION IGNITION ENGINES**

I. APPLICABILITY

[40 CFR 60.4200(a)(1)(i)]

The standards contained in this Attachment apply to owners/operators of non-emergency stationary compression ignition engines (CI ICE) that are model year 2007 or later and are not emergency units. Specifically applicable units are identified as such in the Authorization to Operate (ATO). These standards are required in addition to those in the Specific Conditions and the Additional Permit Requirements.

II. OPERATIONAL LIMITATIONS

A. Emission Limits

[40 CFR 60.4203, 40 CFR 60.4204(b) & 4201(a)]

1. Certified Emission Limits

- a. New CI ICE subject to this Attachment shall be certified by the manufacturer at or below the applicable emission standards and shall continue to meet them for the certified emissions life of the engine.
- b. Modified or reconstructed CI ICE subject to this Attachment shall be certified by the entity that conducts the modification or reconstruction (via the appropriate testing according to 40 CFR 60.4212, if appropriate). This certification shall state that emissions will be at or below the applicable emission standards and the unit shall continue to meet them for the useful life of the engine.
- c. Applicable emission standards and the certified emissions life of the engine are identified in Section III of the ATO (Supplemental Requirements).
- d. The Permittee must operate and maintain applicable units according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60.4206]

2. Opacity Standards

[40 CFR 60.4201(a), 40 CFR 89.113 & 40 CFR 1039.105]

Except for constant-speed engines, opacity shall not exceed:

- a. 20 percent during the acceleration mode;
- b. 15 percent during the lugging mode; and
- c. 50 percent during the peaks in either the acceleration or lugging modes.

B. Fuel Requirements

[40 CFR 60.4207]

Beginning October 1, 2010, stationary CI ICE subject to this Attachment that use diesel fuel must use diesel fuel that meets the following requirements on a per-gallon basis:

[40 CFR 60.4207(b) & 80.510(b)]

- a. Sulfur content: 15 ppm maximum;
- b. Cetane index or aromatic content, as follows:

- i. A minimum cetane index of 40; or
- ii. A maximum aromatic content of 35 volume percent.

C. Installation Restrictions

[40 CFR 63.4208]

1. After December 31, 2008, the Permittee shall not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
[40 CFR 60.4208(a)]
2. After December 31, 2009, the Permittee shall not install stationary CI ICE with a maximum engine power of less than 25 HP (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.
[40 CFR 60.4208(b)]
3. After December 31, 2012, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 175 HP, including those above 750 HP, that do not meet the applicable requirements for 2011 model year non-emergency engines.
[40 CFR 60.4208(e)]
4. After December 31, 2013, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 75 HP and less than 175 HP that do not meet the applicable requirements for 2012 model year non-emergency engines.
[40 CFR 60.4208(d)]
5. After December 31, 2014, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 25 HP and less than 75 HP that do not meet the applicable requirements for 2013 model year non-emergency engines.
[40 CFR 60.4208(c)]
6. After December 31, 2016, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 750 HP that do not meet the applicable requirements for 2015 model year non-emergency engines.
[40 CFR 60.4208(f)]
7. After December 31, 2018, the Permittee may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 804 HP (600 KW) and less than 2,680 HP (2,000 KW) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.
[40 CFR 60.4208(g)]
8. The requirements of II.C.1 through 7 of this Attachment do not apply to stationary CI ICE that have been modified or reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. This provision does not extend to imported units which shall be treated as new sources.
[40 CFR 60.4208(h) & (i)]

D. Compliance

[40 CFR 60.4211]

1. The Permittee must operate and maintain the applicable stationary CI internal combustion engine according to the manufacturer's emission-related written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. In addition, the Permittee may only change those settings that are permitted by the manufacturer.
[40 CFR 60.4211(a)]

2. With respect to 2007 model year and later stationary CI internal combustion engines subject to this Attachment, the Permittee must demonstrate compliance with the emission standards specified in the ATO by purchasing an engine certified to those standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]

III. Monitoring Requirements [PCC 17.12.185.A.2]

A. Opacity [40 CFR 89.113(b)]

1. Opacity levels in II.A.2 of this attachment are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.
2. The following engines are exempt from the requirements of III.B.1 above of this attachment: [40 CFR 89.113 (e)(1) & (3)]
 - i. Single-cylinder engines;
 - ii. Constant-speed engines.

IV. Recordkeeping Requirements [PCC 17.12.185.A.4]

- A. The Permittee shall maintain records of manufacturer certifications that identify the applicable emission limits for the appropriate model year and maximum engine power and certify the applicable units to those standards.
- B. Diesel Fuel Recordkeeping
The Permittee shall maintain records that verify compliance with the diesel fuel requirements in II.B of this attachment.
- C. Opacity
The Permittee shall keep all records generated to show compliance with the opacity level measurement requirements of III.B of this attachment.

V. Reporting Requirements [40 CFR 60.7]

The Permittee shall submit an initial notification according to the requirements of 40 CFR 60.7.

VI. Testing Requirements [40 CFR 60.4212] [PCC 17.12.185.A.3.a]

Should the Permittee elect to or be required to conduct performance testing to demonstrate compliance with the applicable standards of this Attachment, the Permittee shall do so in accordance with 40 CFR 60.4212.

VII. Additional Requirements

[40 CFR 60.4218]

The General Provisions of 40 CFR 60.1 through 19 apply to applicable sources as indicated in Table 8 of 40 CFR Subpart III.

VIII Facility Recordkeeping

[PCC 17.12.185.A.4]

All records required by, or generated to verify compliance with this attachment shall be maintained for five years.

