



Connecticut Department of Energy and Environmental Protection



National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE Rule)



40 CFR 63 Subpart ZZZZ
Major Source Existing Non-Emergency Compression Ignition Engine
<100 Horsepower



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What emission standards/work practice standards apply?

There are no emission standards. You must comply with these work practice standards:

Every 1,000 hours of operation or annually, whichever comes first:

- Inspect air cleaner and replace as necessary
- Change oil and filter
 - You can utilize an oil analysis program in order to extend the specified oil change requirement:
 - Oil analysis must be performed every 1,000 hours or annually, whichever comes first.
 - Analysis must at a minimum analyze: Total Base Number, viscosity, and percent water content.
 - Condemning limits for these parameters are: Total Base Number is <30% of the Total Base Number of the oil when new; viscosity of the oil has changed by >20% from the viscosity of the oil when new; or percent water content (by volume) is >0.5.
 - If all limits are not exceeded, you are not required to change the oil.
 - If any limits are exceeded, change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results are received, change the oil within 2 days or before commencing operation, whichever is later.
 - Keep records of parameters analyzed, analysis results, and oil changes.
 - Program must be part of the engine maintenance plan.



Emission standards/work practice standards, continued

You must comply with these work practice standards:

Every 500 hours of operation or annually, whichever comes first:

- Inspect all hoses and belts and replace as necessary.
 - You can petition the EPA for alternative work practices

Every 1,000 hours of operation or annually, whichever comes first:

- Inspect air cleaner and replace as necessary.
- At all times you must operate/maintain all equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.



Monitoring Requirements



Photo credit: EPA

- Operate/maintain the engine and any after-treatment control device according to the manufacturer's instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions
- Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.



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What records must I keep?

- Keep records of the maintenance conducted on the engine in order to demonstrate that you operated/maintained the engine and after-treatment control device (if any) according to your maintenance plan.
- Keep records for 5 years from the date of creation.



By when must I comply with the rule?

Your compliance date is: **May 3, 2013**



Photo credit: EPA

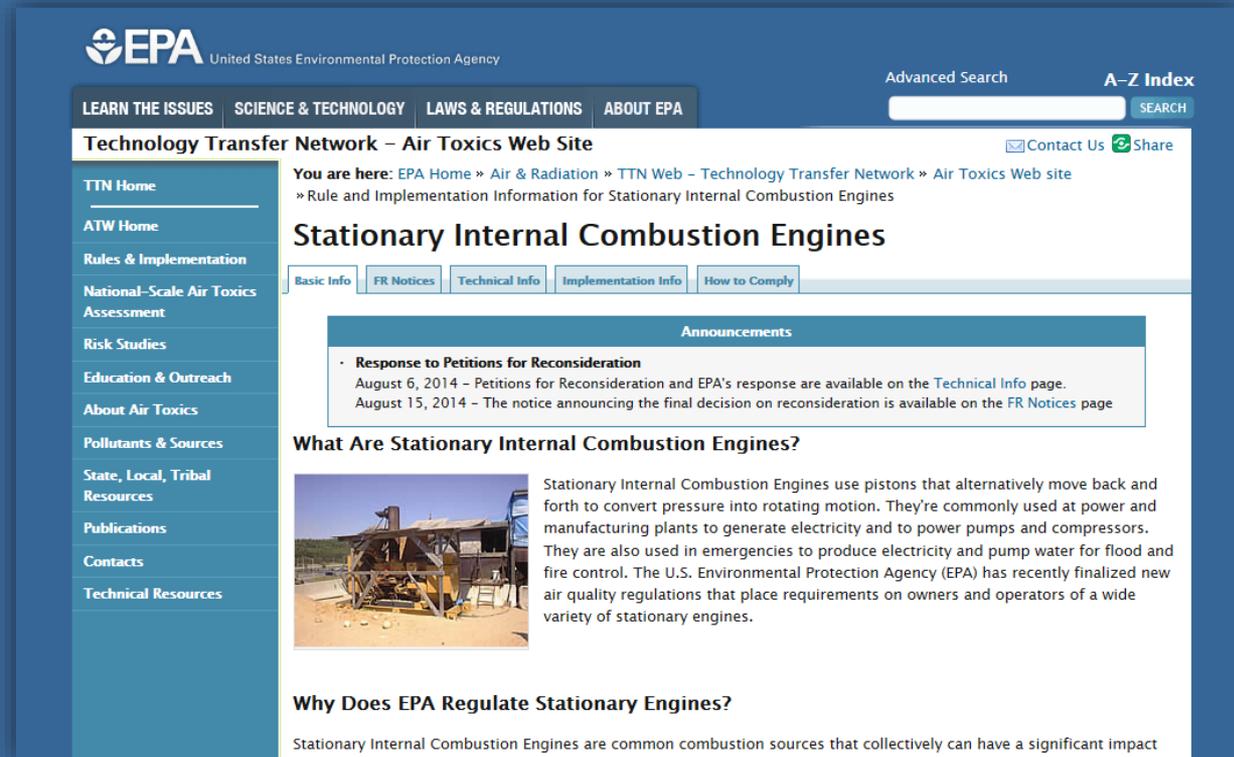


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Visit the EPA RICE Compliance Page

www.epa.gov/ttn/atw/icengines

- ▶ Fact sheets
- ▶ Regulations
- ▶ Example notifications
- ▶ Announcements
- ▶ Q & A documents
- ▶ Testing advice
- ▶ Recorded webinars
- ▶ ...and more!



The screenshot shows the EPA website's navigation and content for Stationary Internal Combustion Engines. The top navigation bar includes 'LEARN THE ISSUES', 'SCIENCE & TECHNOLOGY', 'LAWS & REGULATIONS', and 'ABOUT EPA'. A search bar and 'Advanced Search' link are on the right. The main content area is titled 'Technology Transfer Network – Air Toxics Web Site' and features a breadcrumb trail: 'You are here: EPA Home » Air & Radiation » TTN Web – Technology Transfer Network » Air Toxics Web site » Rule and Implementation Information for Stationary Internal Combustion Engines'. The main heading is 'Stationary Internal Combustion Engines'. Below this are tabs for 'Basic Info', 'FR Notices', 'Technical Info', 'Implementation Info', and 'How to Comply'. An 'Announcements' section highlights a 'Response to Petitions for Reconsideration' with dates and links to 'Technical Info' and 'FR Notices' pages. A section titled 'What Are Stationary Internal Combustion Engines?' includes a photo of a large industrial engine and a text description. Another section, 'Why Does EPA Regulate Stationary Engines?', begins with the text: 'Stationary Internal Combustion Engines are common combustion sources that collectively can have a significant impact'.



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Take Aways

Engine Type:

- An existing non-emergency compression ignition engine at a major source with a site rating of less than 100 HP

Work Practice Standards:

- Every 1,000 hours:
 - Inspect air cleaner and replace as necessary
 - Change oil and filter
- Every 500 hours:
 - Inspect all hoses and belts and replace as necessary



Take Aways

Monitoring/Recordkeeping:

- Minimize time spent at idle during startup and minimize startup time, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
- Keep records of maintenance for 5 years

Reporting:

- None

Compliance Date:

- May 3, 2013

