Connecticut Department of Energy and Environmental Protection

Connecticut Department of
ENERGY & 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 Spark Ignition 4-Stroke Rich Burn Engine <100 Horsepower

Connecticut Department of Energy and Environmental Protection

To comply with this rule, you must meet the following standards:

Every 1,440 hours of operation or annually, whichever comes first, you must:

- Change oil and filter
  - Can utilize oil analysis program to extend specified oil change requirement
    - Analysis must be performed every 1,440 hours of operation or annually, whichever comes first.
    - Program must at a minimum analyze: Total Acid Number, viscosity, and percent water content.
    - Condemning limits for these parameters are: Total Acid Number increases by >3.0 mg KOH/g from Total Acid 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 condemning 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, the results, and the oil changes.
    - Analysis program must be part of the engine maintenance plan.

To comply with this rule, you must meet the following standards:

Every 1,440 hours of operation or annually, whichever comes first, you must:

- Inspect spark plugs
- Inspect all hoses and belts and replace as necessary.
  - You can petition EPA pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

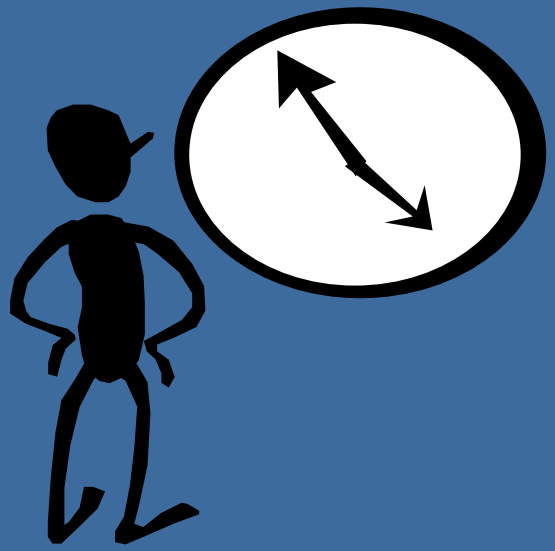
At all times you must operate/maintain all equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.

Monitoring Requirements

Operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related instructions or develop 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

Photo credit: EPA

Monitoring Requirements, continued



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.

To demonstrate compliance with all rule requirements, you must keep records of:

- Maintenance conducted on the engine to demonstrate that it was operated and maintained according to the maintenance plan
- Keep records for 5 years from the date of creation.

By when must I comply with the rule?

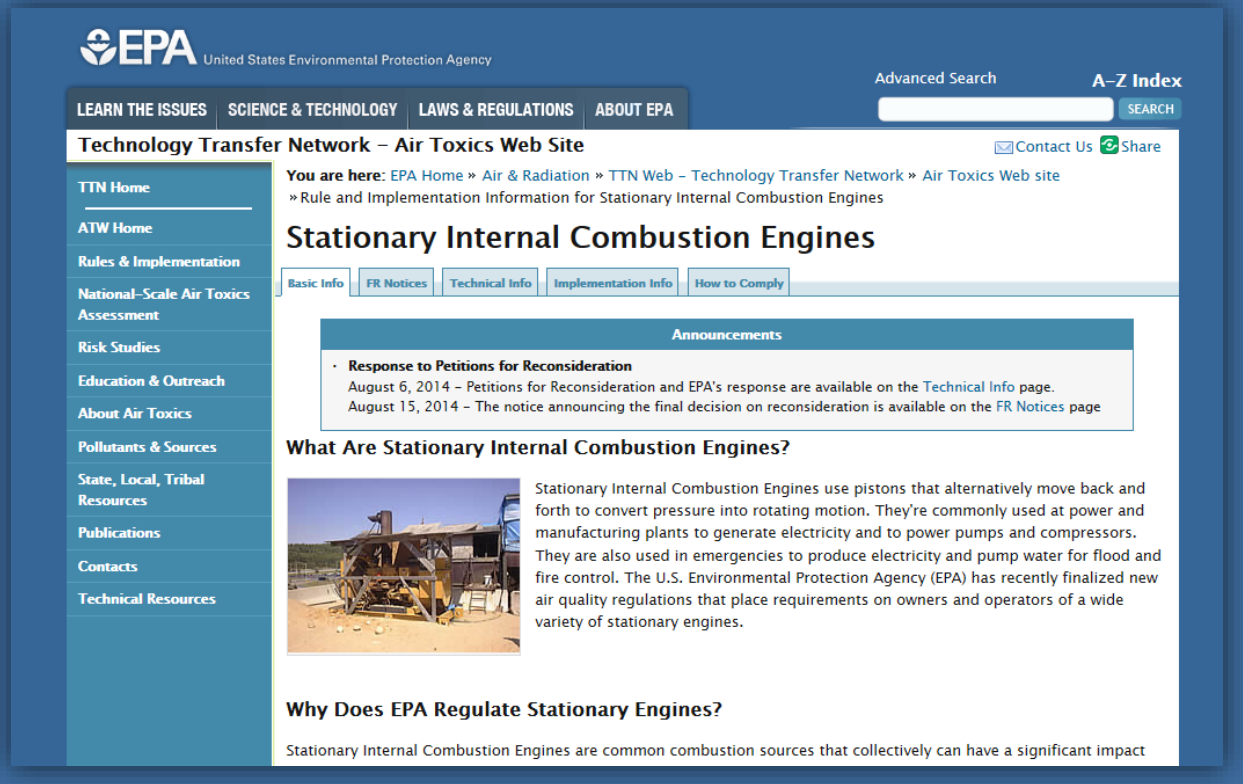
October 19, 2013

Photo credit: EPA

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!



Take Aways

Engine Type:

•You have an existing non-emergency spark ignition 4-stroke rich burn engine of less than 100 HP located at a major source.

Standards:

•Change oil and filter (can use oil analysis program) and inspect spark plugs, hoses, and belts every 1,440 hours or annually

Monitoring:

•Operate/maintain engine according to manufacturer's instructions or develop maintenance plan

Take Aways

Recordkeeping:

- Keep records of engine maintenance
- Retain records for 5 years

Testing and Reporting:

- None required

Compliance Date:

- October 19, 2013