

# **SUBPART Q: STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES AND TURBINES**

**Draft Proposal**  
(November 14, 2005)

## **Applicability:**

### **Units covered:**

Engines rated at equal to or greater than 500 bhp output  
Turbines rated at equal to or greater than 3.5 MW output

### **Exempt units:**

Emergency standby units;  
Research or testing units;  
EGUs covered by the federal NO<sub>x</sub> Trading Program;  
Units used for agricultural purposes  
Certain portable units; and  
Certain smaller units.

## **Control and Averaging Plan Requirements:**

### **Affected units shall meet an emission limit:**

Engines – Rich-burn spark-ignited 150 ppmv  
– Lean-burn spark-ignited 210 ppmv  
– Diesel 660 ppmv  
Turbines – gas-fired 42 ppmv  
– oil-fired 96 ppmv

### **or Comply with an emissions averaging plan:**

Required to submit a plan that identifies the units included and the methodology used to determine compliance, where the total mass of actual NO<sub>x</sub> emissions must be equal to or less than the total mass of allowable NO<sub>x</sub> emissions for the units for both the ozone season and calendar year.

Required to submit by January 30 of each year a compliance demonstration for both the ozone season and the calendar year.

Required to notify by October 30 following each ozone season, if the affected units are not in compliance for the ozone season.

### **Inspection and Maintenance:**

Inspect and maintain affected units and air pollution control equipment pursuant to the manufacturer's recommended specifications or what is customary for the type of unit.

### **Compliance Requirements:**

NOx SIP call engines must comply by May 1, 2007.

All other affected engines and turbines must comply by the later of January 1, 2009, or when the unit starts-up.

Exempt units must submit a certificate of exemption by applicable compliance date.

### **Testing and Monitoring:**

**Compliance testing** required every 5 years, with the first test to be completed no later than May 1, 2007, for SIP Call engines, January 1, 2009, for existing units or within 180 days of start-up for new units. Engines use Method 7 or 7E, 40 CFR 60, Appendix A. Turbines use Methods 7E and 3A or Method 20 or ASTM D6522-00. Testing when required must be completed by May 1 of the applicable year. Testing for turbines and engines is at peak load.

**Monitoring** required annually using portable monitors and ASTM D6522-00. Monitoring must be completed between January 1 and May 1 of each year, except in years when testing. The average of three runs of monitoring is used to show compliance. If portable monitor shows non-compliance, then owner or operator must conduct a compliance test.

### **Recordkeeping and Reporting:**

#### **Recordkeeping**

Records must be kept for a minimum of 5 years and identify affected units, hours operated, type and quantity of fuel used, results of monitoring and testing, averaging plans, calculations used to support averaging plans, seasonal and annual averaging compliance reports, and an inspection and maintenance plan and log. Certain smaller units must only retain records of monthly hours of operation.

#### **Reporting requirements**

Reporting is required for pre- and post – testing, seasonal and annual averaging compliance, and exceedances of the applicable concentration level or averaging plan emission limits discovered through monitoring.

### **Appendix G:**

Lists NOx SIP Call engines.

### **Permit Exemptions:**

Amendments to Section 201.146 to require engines and turbines subject to the control requirements of Subpart Q to obtain a permit or electing a PTE limit.

### **Definitions:**

The applicable definitions and amendments to Part 211.