











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



40 CFR 63 Subpart ZZZZ

Major Source New Non-Emergency Spark Ignition 4-Stroke Lean Burn

Engine ≥250 and ≤500 Horsepower (Manufactured before 2008)



## To comply with this rule, you must:

- •At all times operate/maintain all equipment in a manner consistent with safety and good air pollution control practices 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.





## By when must I comply with the rule?

## **Upon startup**





#### You are subject to the SI NSPS (40 CFR 60 Subpart JJJJ) if:

-If your engine was modified or reconstructed after June 12, 2006







Photo credit: EPA

#### If you are subject to the SI NSPS, you must meet these requirements:

- •Emission and Operating Limits, Testing Requirements, Monitoring Requirements:
  - See Table
  - Must meet these standards for the life of the engine
- •Fuel Requirements:
  - •Gasoline engines must use gas that meets the sulfur limit: cap of 80 ppm/gal



#### If you are subject to the SI NSPS, you must meet these requirements:

#### •Compliance Requirements:

- •If you have a *certified* engine:
  - •Install, configure, operate and maintain engine according to manufacturer's instructions
  - •If you do not operate/maintain according to manufacturer's instructions:
    - -Keep maintenance plan and maintenance records, operate consistent with good air pollution control practices
    - -Initial performance test and retest if engine is rebuilt or undergoes major repair or maintenance
- •If you have a non-certified engine:
  - Maintenance plan
  - Initial performance test and retest if engine is rebuilt or undergoes major repair or maintenance

#### •Recordkeeping/Reporting:

- Documentation of certification (EPA Certificate of Conformity)
- •Records of engine maintenance
- •Initial notification for non-certified engines with HP=500
- Notification of Intent to Conduct Performance Testing 30 days prior to test
- •Results of performance testing within 60 days of test



## **Engine Certification**

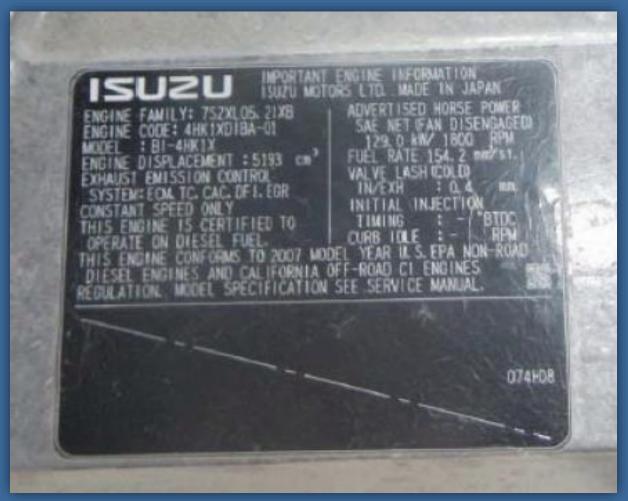


Photo credit: EPA



## **EPA Certificate of Conformity**



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 2012 MODEL YEAR CERTIFICATE OF CONFORMITY WITH THE CLEAN AIR ACT OF 1990

OFFICE OF TRANSPORTATION AND AIR QUALITY ANN ARBOR, MICHIGAN 48105

Certificate Issued To: Generac Power Systems, Inc.

(U.S. Manufacturer or importer)

Certificate Number: CGNXB06.82NN-012

Effective Date: 10/26/2011

Expiration Date: 12/31/2012 n J. Burker, Acting Division Director

Compliance Division

Issue Date: 10/26/2011

Revision Date:

Manufacturer: Generac Power Systems, Inc.

Engine Family: CGNXB06.82NN

Certificate Number: CGNXB06.82NN-012 Certification Type: Stationary (Part 60)

Fuel: Natural Gas (CNG/LNG)

Emission Standards: NMHC + NOx (g/kW-hr): 13.4

CO ( g/kW-hr ) : 519 HC + NOx ( g/kW-hr ) : 13.4

Emergency Use Only: Y

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 60, 1065, 1068, and 60 ( stationary only and combined stationary and mobile ) and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new nonroad spark-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068.20 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void ab initio for other reasons specified in 40 CFR Part 60.

This certificate does not cover large nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

Date Constructed/ Reconstructed/ Manufactured	Size/ Engine Type/ Fuel	Emission Standards	Compliance Requirements		Notification,	General
			Engines being operated and maintained in a certified manner <sup>2</sup>	Engines being operated and maintained in a non-certified manner <sup>3</sup>	Reports, and Records Requirements	Provisions (40 CFR part 60)
Modified or reconstructed after 6/12/2006	Gasoline	60.4233(f)(2)	If using AFRC: 60.4243(g) 60.4243(i)		60.4245(a),(d)	60.4246 Table 3
	Natural gas and lean burn LPG	60.4233(f)(4)				

Facilities with engines that are acting as temporary replacement units and that are located at a stationary source for <1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this rule with regard to such engines.



<sup>&</sup>lt;sup>2</sup>If you operate and maintain the certified engine and control device according to the manufacturer's emission-related instructions, you are operating in a certified manner.

<sup>&</sup>lt;sup>3</sup>If you do not operate and maintain the certified engine and control device according to manufacturer's emission-related instructions, your engine will be considered a non-certified engine.

## Where do I send notifications and reports?



#### **EPA REGION 1:**

US Environmental Protection Agency
5 Post Office Square, Suite 100, Mail code: OES04-2

Boston, MA 02109-3912

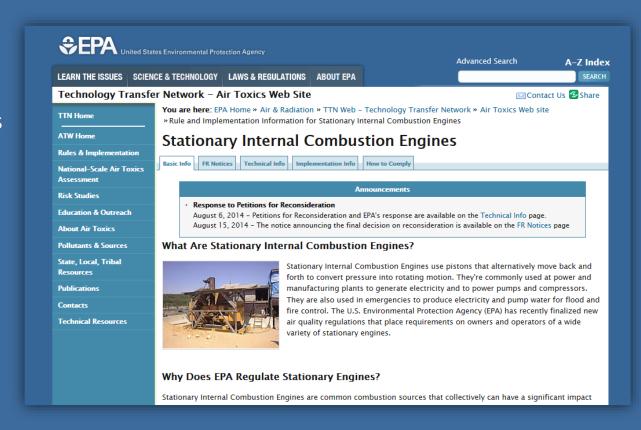
Attention: Air Clerk



# 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:**

•A new or reconstructed non-emergency spark ignition 4-stroke lean burn engine at a major source with a site rating of greater than or equal to 250 HP and less than or equal to 500 HP, manufactured on or after 6/12/2006 and before 1/1/2008

#### **Compliance Requirements:**

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

#### **Compliance Date:**

Upon startup

#### NSPS:

•Comply with all SI NSPS requirements, if applicable

