



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
Area Source New Spark Ignition 4-Stroke Lean Burn Engine
>500 Horsepower**



Connecticut Department of Energy and Environmental Protection

Compliance Requirements

You must comply with the Spark Ignition (SI) New Source Performance Standards (NSPS), as applicable, upon startup.



Photo credit: EPA



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Spark Ignition New Source Performance Standards (SI NSPS)

You are subject to the SI NSPS (40 CFR 60 subpart JJJJ) if your engine was:

–Constructed (**ordered***) after June 12, 2006 **AND** manufactured on/after: January 1, 2008 (if HP<1,350) or July 1, 2007 (if HP>1,350)

OR

–Modified/reconstructed after June 12, 2006

*NOTE: For the purposes of this rule, the date that construction commences is the date the engine is ordered by the owner or operator.



Spark Ignition New Source Performance Standards (SI NSPS)



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 fuel that meets the sulfur limit: cap of 80 ppm/gal



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Spark Ignition New Source Performance Standards (SI NSPS)

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

•Compliance Requirements:

- If you have a *certified* engine:
 - Install, 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 subsequent testing every 8,760 hours or 3 years, whichever is first
- If you have a *non-certified* engine:
 - Maintenance plan
 - Initial test and subsequent testing every 8,760 hours or 3 years, whichever is first
 - If engine was manufactured after July 1, 2007 and before July 1, 2008 you may do one of the following in lieu of testing:
 - Keep records of performance test results for each pollutant for a test conducted on a similar engine.
 - Keep records of engine manufacturer data indicating compliance with standards.
 - Keep records of control device vendor data indicating compliance with standards.

•Recordkeeping/Reporting:

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



Certified Engine



Photo credit: EPA



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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	 Byron J. Burkner, Acting Division Director Compliance Division	Issue Date: 10/26/2011 Revision Date: N/A
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			
<p>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.</p> <p>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.</p> <p>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 <i>ab initio</i> for other reasons specified in 40 CFR Part 60.</p> <p>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.</p>			

Photo credit: EPA

Engine Category	Date Constructed/Reconstructed/Manufactured	Size/Engine Type/Fuel	Emission Standards	Importing/Installing Requirements ⁴	Compliance Requirements				Notification, Reports, and Records Requirements	General Provisions (40 CFR part 60)
					Engines being operated and maintained in a certified manner ¹		Engines being operated and maintained in a non-certified manner ²			
					General Compliance	Performance Testing	General Compliance	Performance Testing		
Lean burn HP<1,350	Commenced construction after 6/12/2006 and manufactured on or after 1/1/2008	HP<1,350	60.4233(e)	60.4236(b)	60.4243(a)(1) If using AFRC: 60.4243(g) 40 CFR part 1068, subparts A-D	None	60.4243(a)(2)(iii) If using AFRC: 60.4243(g)	60.4243(a)(2)(iii) ³ 60.4244	All Engines: 60.4245(a),(d) Non-certified: 60.4245(c)	60.4246 Table 3
≥500 HP (except lean burn HP<1,350)	Commenced construction after 6/12/2006 and manufactured on or after 7/1/2007	≥500 HP Gasoline	60.4231(b) 60.4233(b)	60.4236(b),(d)	If using AFRC: 60.4243(g) <u>Manufactured before 7/1/2008:</u> 60.4243(h) <u>Manufactured after 7/1/2008:</u> 60.4243(a)(1) 40 CFR part 1068, subparts A-D		If using AFRC: 60.4243(g) <u>Manufactured before 7/1/2008:</u> 60.4243(h) <u>Manufactured after 7/1/2008:</u> 60.4243(a)(2)(iii) 60.4244	<u>Manufactured before 7/1/2008:</u> None required <u>Manufactured after 7/1/2008:</u> 60.4243(a)(2)(iii) ³ 60.4244		
		≥500 HP (except gasoline and rich burn LPG)	60.4233(e)	60.4236(b)	If using AFRC: 60.4243(g) <u>Certified:</u> 60.4243(b)(1) 60.4243(a)(1) <u>Non-certified:</u> 60.4243(b)(2)		<u>Non-Certified:</u> 60.4243(b)(2)(i), 60.4244 <u>Certified:</u> None	60.4243(a)(2)(iii) If using AFRC: 60.4243(g)		
Modified/Reconstructed	Modified or reconstructed after 6/12/2006	Gasoline Natural gas and lean burn LPG	60.4233(f)(2) 60.4233(f)(4)	None	If using AFRC: 60.4243(g) 60.4243(i)				60.4245(a),(d)	

¹ 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.

² 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.

³ If you own/operate an engine that is ≤500 HP and you purchase a non-certified engine or you do not operate and maintain your certified engine and control device according to the manufacturer's emission-related instructions, you must perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the engine is rebuilt or undergoes major repair or maintenance. A rebuilt ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

⁴ The requirements of this section do not apply to ICE that have been modified or reconstructed, and they do not apply to ICE that were removed from one existing location and reinstalled at a new location.



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

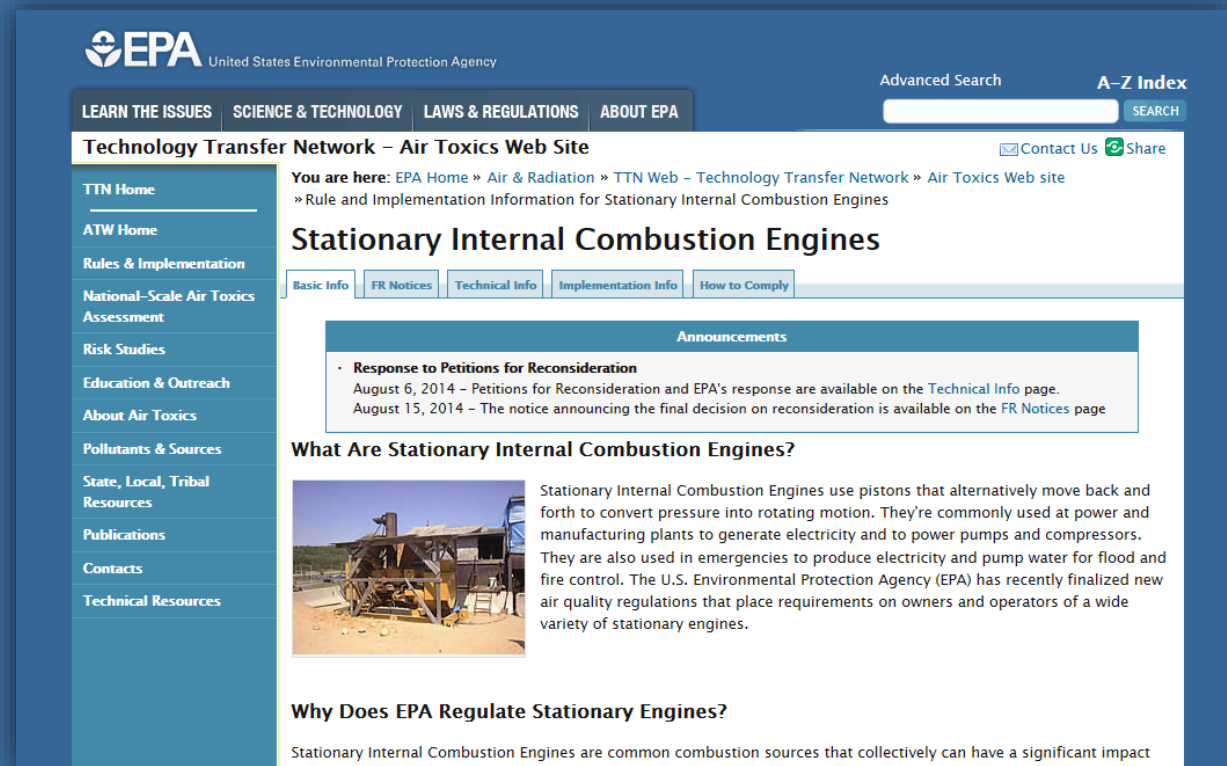


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Visit the EPA RICE Compliance Page

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 Technology Transfer Network (TTN) page for Air Toxics Web Site. The page is titled "Stationary Internal Combustion Engines" and includes a navigation menu with options like "Basic Info", "FR Notices", "Technical Info", "Implementation Info", and "How to Comply". A section titled "Announcements" features a "Response to Petitions for Reconsideration" dated August 6, 2014, and August 15, 2014. Below this, there is a section titled "What Are Stationary Internal Combustion Engines?" with a photograph of a large industrial engine and a brief description. The text explains that these engines use pistons to convert pressure into rotating motion and are commonly used in power and manufacturing plants. It also mentions that the EPA has recently finalized new air quality regulations for these engines. A section titled "Why Does EPA Regulate Stationary Engines?" is partially visible at the bottom.



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Take Aways

Engine Type:

- A new or reconstructed non-emergency spark ignition 4-stroke lean burn engine at an area source with a site rating of greater than 500 horsepower

Compliance Date:

- Upon startup

Compliance Requirements:

- Comply with all SI NSPS requirements, if applicable

