



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 New Landfill/Digester Gas 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: July 1, 2007 (if rich burn and HP=500), January 1, 2008 (if lean burn and HP=500), or July 1, 2008 (if HP<500)

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.



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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:

•Emission and Operating Limits, Testing Requirements, Monitoring Requirements:

- See Table
- Must meet these standards for the life of the engine



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 for engines ≥ 100 HP:

- 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 >25 HP:

- Maintenance plan

- Initial test and retest if engine is rebuilt or undergoes major repair or maintenance



Spark Ignition New Source Performance Standards (SI NSPS)

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

•**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

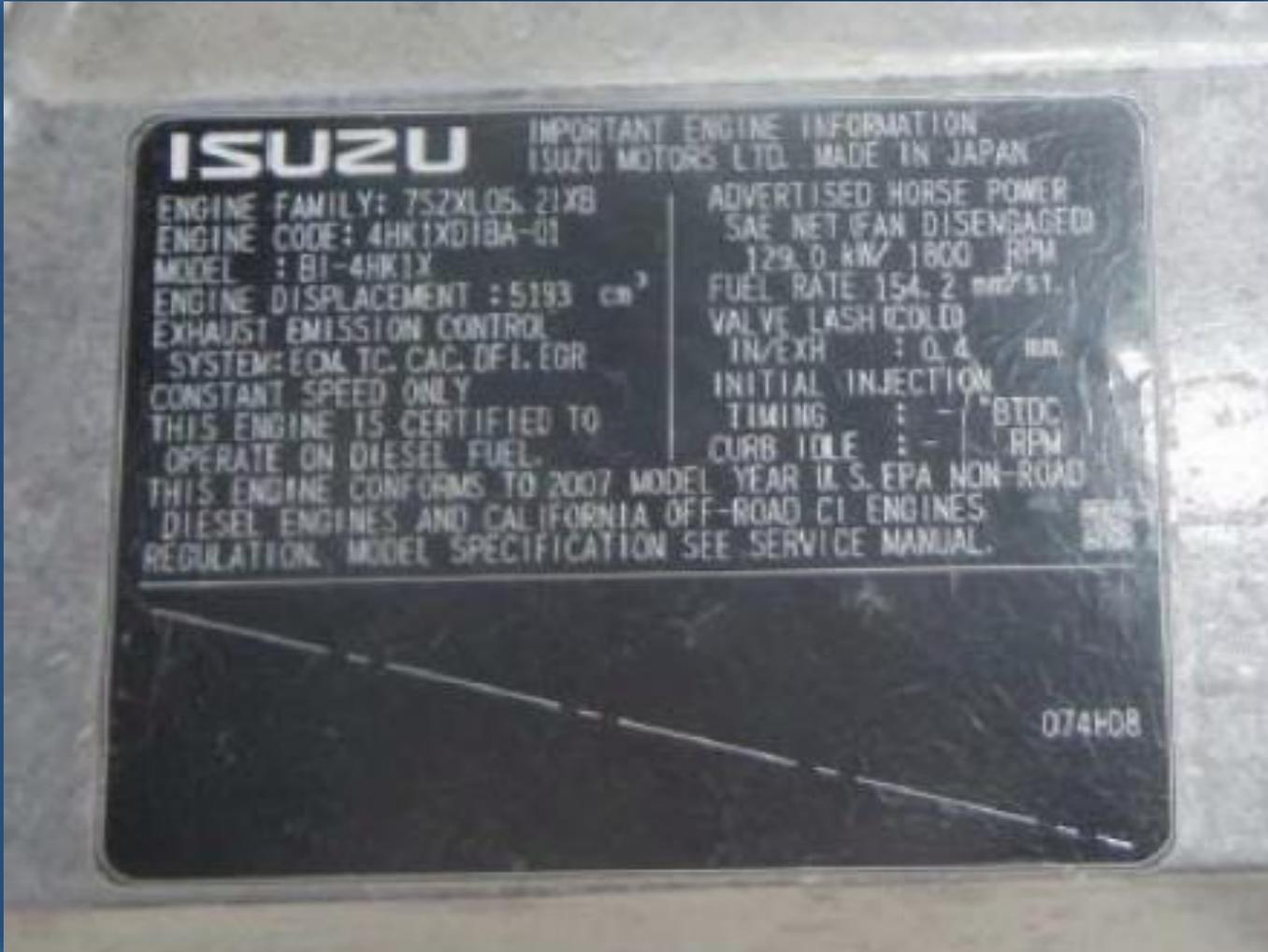


Photo credit: EPA



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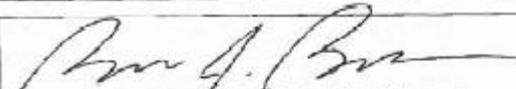


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2012 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT OF 1990

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. Burker, 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

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.

Engine Category	Date Constructed/Reconstructed/Manufactured	Size/Engine Type/Fuel	Emission Standards	Importing/Installing Requirements ⁶	Compliance Requirements				Notification, Reports, and Records Requirements	General Provisions (40 CFR part 60)
					Engines being operated and maintained in a certified manner ²		Engines being operated and maintained in a non-certified manner ³			
					General Compliance	Performance Testing	General Compliance	Performance Testing		
<500 HP	Commenced construction after 6/12/2006 and manufactured on or after 7/1/2008	≤25 HP	60.4231(a) 60.4233(a)	60.4236(a),(d)	60.4243(a)(1) If using AFRC: 60.4243(g) 40 CFR part 1068, subparts A-D.	None	60.4243(a)(2)(i) If using AFRC: 60.4243(g)	None	60.4245(a)	
		25<HP<100	60.4233(d) ⁴	60.4236(a)	If using AFRC: 60.4243(g) <u>Certified:</u> 60.4243(b)(1) <u>Non-certified:</u> 60.4243(b)(2)	<u>Certified:</u> None <u>Non-Certified:</u> 60.4243(b)(2)(i) ⁵ , 60.4244		<u>All:</u> 60.4244 <u>Certified:</u> ≥100 HP: 60.4243(a)(2)(ii) <u>Non-Certified:</u> 60.4243(b)(2)(i) ⁵	60.4245(a),(d)	
		100≤HP<500	60.4233(e) ⁵ Table 1				60.4243(a)(2)(ii) If using AFRC: 60.4243(g)	<u>All:</u> 60.4244 <u>Certified:</u> 60.4243(a)(2)(ii) <u>Non-Certified:</u> 60.4243(b)(2)(i) ⁵		
Lean burn 500 HP	Commenced construction after 6/12/2006 and manufactured on or after 1/1/2008	500 HP	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) ⁵ 60.4244	<u>All Engines:</u> 60.4245(a),(d) <u>Non-certified:</u> 60.4245(c)	
Rich burn 500 HP	Commenced construction after 6/12/2006 and manufactured on or after 7/1/2007	500 HP			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>Certified:</u> None <u>Non-Certified:</u> 60.4243(b)(2)(ii), 60.4244				
Modified/Reconstructed	Modified or reconstructed after 6/12/2006	≤25 HP	60.4233(f)(1)	None	If using AFRC: 60.4243(g) 60.4243(i)				60.4245(a)	
		>25 HP	60.4233(f)(5)						60.4245(a),(d)	

60.4246
Table 3

¹Facilities 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.

²If 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.

³If 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.

⁴Engines with a maximum power >19 KW (25 HP) and <75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 of the rule applicable to engines with a maximum engine power ≥100 HP and <500 HP, may optionally choose to meet those standards.

⁵If 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 written emission-related instructions, you are required to 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).

⁶The requirements of this section do not apply to engines that have been modified or reconstructed, and they do not apply to engines 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

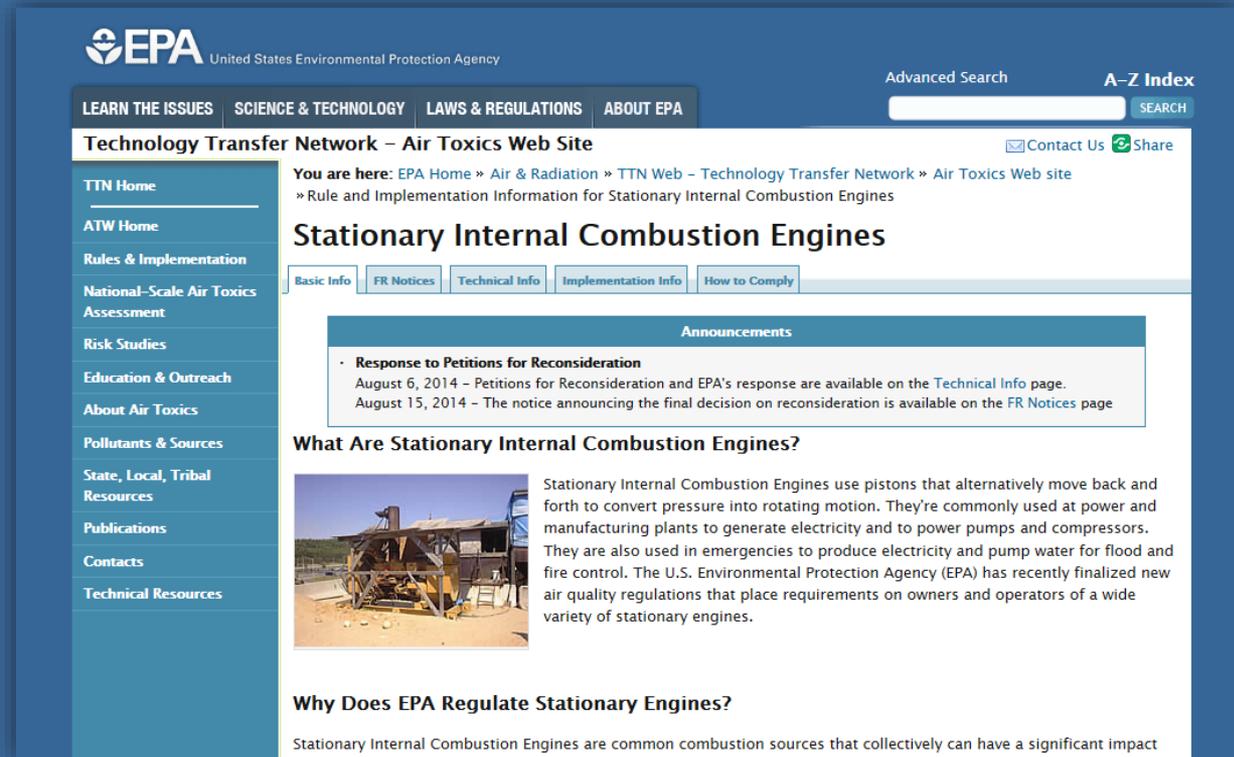


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Visit the EPA RICE Compliance Page

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) Air Toxics Web Site. The page is titled "Stationary Internal Combustion Engines" and is part of the "Rule and Implementation Information for Stationary Internal Combustion Engines". The page features a navigation menu on the left with links to TTN Home, ATW Home, Rules & Implementation, National-Scale Air Toxics Assessment, Risk Studies, Education & Outreach, About Air Toxics, Pollutants & Sources, State, Local, Tribal Resources, Publications, Contacts, and Technical Resources. The main content area includes an "Announcements" section with a link to "Response to Petitions for Reconsideration" and a section titled "What Are Stationary Internal Combustion Engines?" which includes a photograph of a stationary internal combustion engine and a brief description of its function. Below this is a section titled "Why Does EPA Regulate Stationary Engines?" with a brief explanation of their impact.



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Take Aways

Engine Type:

- An new or reconstructed non-emergency spark ignition landfill/digester gas engine at a major source with a site rating of less than or equal to 500 horsepower

Compliance Date:

- Upon startup

Compliance Requirements:

- Comply with all SI NSPS requirements, if applicable

