



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 Non-Emergency Compression Ignition Engine
>500 Horsepower



Connecticut Department of Energy and Environmental Protection

Compliance Requirements

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



Photo credit: EPA



Connecticut Department of Energy and Environmental Protection

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

–Constructed (**ordered***) after July 11, 2005 **AND** manufactured after April 1, 2006 (July 1, 2006 for fire pump engines)

OR

–Modified/reconstructed after July 11, 2005

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



Compression Ignition New Source Performance Standards (CI NSPS)

If you are subject to the CI 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:

- As of October 1, 2007 – 500 ppm sulfur diesel (LSD)
- As of October 1, 2010 – 15 ppm sulfur diesel (ULSD) for engines <30 l/cyl displacement
 - You may use up any diesel fuel acquired prior to October 1, 2010 that does not meet the requirements for nonroad diesel fuel.
- As of June 1, 2012 – 1,000 ppm sulfur diesel for engines ≥ 30 l/cyl displacement



Photo credit: EPA



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Compression Ignition New Source Performance Standards (CI NSPS)

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

Compliance Requirements:

- If you have 2007 model year or later engine with displacement <30 l/cyl, or a fire pump engine that is a 2008-2011 model year or later, depending on engine size, you must:
 - Purchase certified engine
 - Install, configure, operate and maintain engine per manufacturer's instructions/procedures
 - Performance testing not required
 - Can operate differently than manufacturer's recommendations, but must then do performance test to show compliance
- Engines not required to be certified (Choose **one** of the following to demonstrate compliance):
 - Purchase certified engine
 - Keep records of performance test conducted on similar engine
 - Keep records of engine manufacturer data indicating compliance
 - Keep records of control device vendor data indicating compliance
 - Conduct initial performance test
- Engines ≥ 30 l/cyl displacement:
 - Initial performance test
 - Annual performance test
 - Continuously monitor operating parameters



Proof of 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. 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

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.

Compression Ignition New Source Performance Standards (CI NSPS)



Recordkeeping/Reporting:

- Engine equipped with diesel particulate filter (DPF)
 - Backpressure monitor and records of corrective actions
- If $>3,000$ HP or having displacement >10 l/cyl, and pre-2007 model year non-certified
 - Submit initial notification
 - Keep records of notifications and maintenance
 - If certified, keep engine certification records
 - If not certified, keep records of compliance demonstrations



Engine Category	Date Constructed/ Reconstructed/ Manufactured	Emission Standards ^{a,b,c,d}	Importing/ Installing Reqs	Compliance Reqs	Testing Reqs	Notification, Reports, and Records Reqs	General Reqs (40 CFR 60)
Pre-2007 model year <10 l/cyl	Commenced construction after 7/11/2005 and manufactured after 4/1/2006	60.4204(a) Table 1	60.4208(a)-(f), (i)	60.4211(a), (b), (g)	60.4212 60.4204(d)	If >3,000 HP <u>or</u> >175 HP <u>and</u> not certified: 60.4214(a)	Table 8
Pre-2007 model year 10 l/cyl ≤displacement<30 l/cyl		60.4204(a) 40 CFR 94.8(a)(1)	60.4208(a)-(i)			60.4214(a)	
2007 model year and later <30 l/cyl		60.4204(b) 60.4201		60.4211(a), (c), (g)		If >3,000 HP <u>or</u> >10 l/cyl: 60.4214(a)	
≥30 l/cyl		60.4204(c)(1)-(4)	60.4208(a)-(f), (h), (i)	60.4211(a), (d), (g)		60.4213	
Modified/Reconstructed <30 l/cyl	Modified or reconstructed after 7/11/2005	<u>Pre-2007 Model Year:</u> 60.4204(a) <u>2007 Model Year and Later:</u> 60.4204(b)	60.4208(i)	60.4211(a), (e), (g)	60.4212 60.4204(d)	If >3,000 HP <u>or</u> >10 l/cyl <u>or</u> pre-2007 model year and >175 HP <u>and</u> not certified: 60.4214(a)	
Modified/Reconstructed ≥30 l/cyl		60.4204(c)(1) -(4)				60.4213	60.4214(a)

^aPer 60.4200(e), facilities with ICE 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 engine requirements in 40 CFR 60.4207.

^bPer 60.4215(a), ICE with a displacement of <30 l/cyl that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the emission standards in §60.4202 and §60.4205.

^c ICE with a displacement ≥30 l/cyl that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the emission standards in 60.4215(c).

^dSpecial requirements apply to engines used in Alaska. Please refer to 60.4216 for the specific requirements and provisions that apply.

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

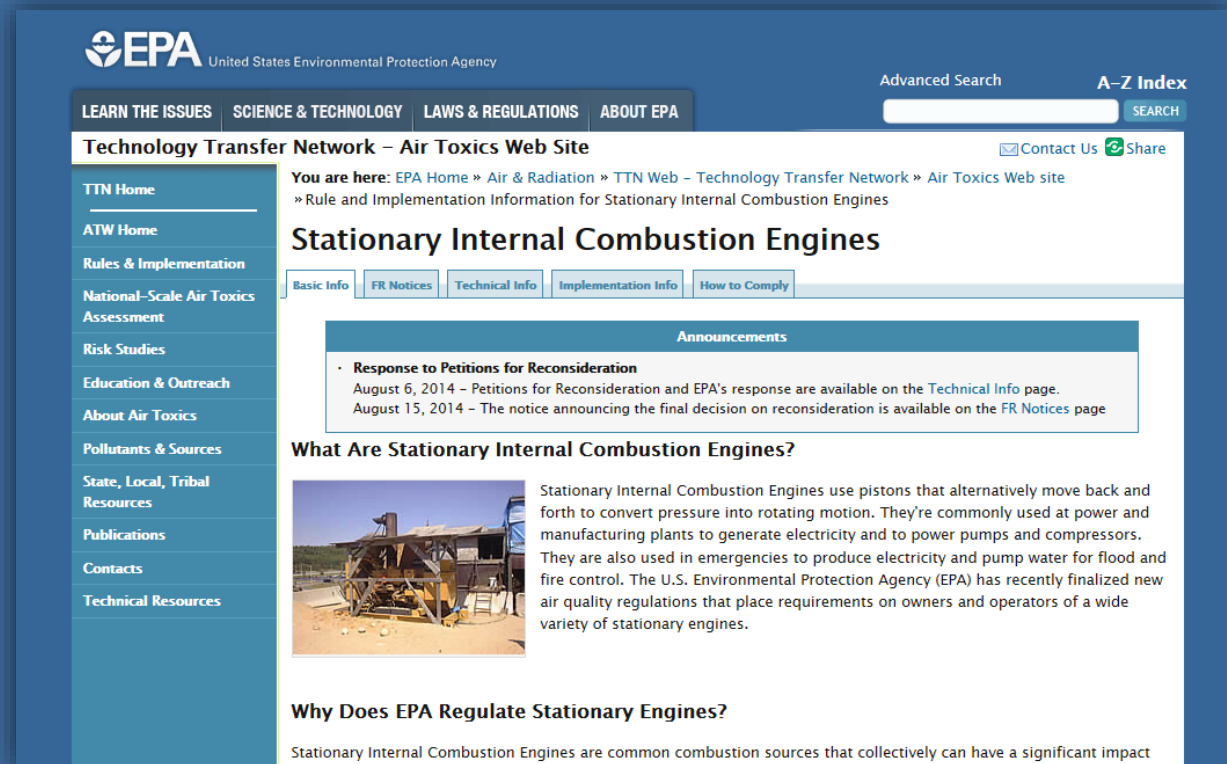


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Visit the EPA RICE Compliance Page

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:

- A new or reconstructed non-emergency compression ignition engine at an area source with a site rating of greater than 500 horsepower

Compliance Date:

- Upon startup

Compliance Requirements:

- Comply with all CI NSPS requirements, if applicable

