

Registration Forms  
for  
Stationary Internal Combustion Engines (DNR Forms 542-0590 and 542-0591)

Frequently Asked Questions  
July 2, 2009

**1. What are the registration requirements for a stationary internal combustion engine?**

A. An owner or operator of a stationary internal combustion engine that is rated at less than 400 brake horsepower may be required to register the engine with the Iowa DNR if the engine was installed after March 18, 2009. March 18, 2009 is the date that the construction permit exemption for small engines (567 IAC 22.1(2)”) was modified to include the registration requirement.

**2. Why was the exemption changed to include the registration requirement?**

A. U.S. EPA has issued three air regulations in recent years that contain substantial requirements for stationary internal combustion engines. These regulations cover engines of **all** sizes and have different requirements depending on fuel burned, engine use, and the status of the facility. The DNR determined that registration of new engines would help ensure that owners and operators are aware of the new regulations and that they are in compliance. The registration forms guide owners and operators through a brief series of questions to determine if the engine is affected by the federal regulations.

The federal regulations can be found at:

<http://www.epa.gov/ttn/atw/nsps/cinsps/cinspspg.html> New Source Performance Standard for Compression Ignition Engines, Subpart IIII.

<http://www.epa.gov/ttn/atw/area/fr18ja08.pdf> New Source Performance Standard for Spark Ignition Engines, Subpart JJJJ.

<http://www.epa.gov/ttn/atw/rice/ricepg.html> National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, Subpart ZZZZ.

**3. What is a stationary internal combustion engine?**

A. A stationary internal combustion engine is an internal combustion engine that is **not** mobile. This includes reciprocating engines and rotary engines. It does not include combustion turbines. A portable engine is different from a mobile engine in that it is designed to be carried or moved from one location to another. Some portable engines do meet the definition of a stationary internal combustion engine and are regulated by the federal rules. There are two general classifications for stationary internal combustion engines: compression ignition and spark ignition. Compression ignition (CI) engines are fueled by diesel

fuel oil. Spark ignition (SI) engines have spark plugs and usually burn gasoline. SI engines can also burn natural gas, propane or landfill/digester gas.

**4. My engine is rated in kilowatts, not horsepower. How do I determine the horsepower rating?**

A. First, you should note that engine horsepower is the output of the engine, not of any **generator** that may be connected to the engine. Second, to convert from kilowatts to horsepower, multiply by **1.34** (e.g. 300 kilowatts = 402 horsepower).

**5. Are engines rated at more than 400 brake horsepower required to be registered?**

A. No, only new engines that are less than 400 brake horsepower are required to be registered. However, engines rated at 400 HP or more must obtain a construction permit unless otherwise exempt.

**6. Can I order an engine before I send in the registration form?**

A. Yes, the registration form can be sent in after you order the engine. You should submit the registration form to the DNR prior to installing the engine at your facility.

**7. How does the DNR define installation of the engine?**

A. For the purposes of the engine registration, installation would be the actual on-site placement of the engine at your facility.

**8. Do we need to keep the registration form on-site with the engine or can we keep it at our central office? Some of our engines are located in remote locations.**

A. It is acceptable to keep the registration forms at a central location. It is important to keep a copy of the registration form so that you can produce a copy for a DNR inspector.

**9. Am I required to register all my existing engines that are less than 400 brake horsepower?**

A. No. You are only required to submit a registration form for engines installed after March 18, 2009. Please note that diesel engines manufactured after 2006 may be subject to the federal New Source Performance Standards and that spark ignition engines manufactured after July 1, 2008 may be subject to the federal New Source Performance Standards. See answer to question #2 above.

**10. I only use my engines for emergency back-up power or for fire protection. Am I required to register?**

A. Yes. The federal regulations include requirements for fire pumps and other emergency engines. The requirements for emergency engines are different than the requirements for non-emergency engines. The registration form will guide you through the requirements for emergency engines.

**11. Are portable engines rated at less than 400 HP required to be registered?**

A. It depends on how the engine is used. A portable engine is designed to be carried or moved from one location to another. The federal definition of a stationary internal combustion engine includes portable

engines that will remain at a single location more than 12 months or a shorter period of time for a seasonal source. If your portable engine will remain at a single location for more than 12 months or if you operate your engine as part of a seasonal source and the engine operates more than 3 months per year, your engine meets the definition of a stationary internal combustion engine and must be registered. Contact the Air Quality Bureau's Construction Permits Help Line at 1-877-AIR-IOWA if you are unsure of your engine's status.

**12. If my engines were installed prior to March 18, 2009, do I need to register?**

A. No, not at this time. However, the U.S. EPA has proposed standards for existing stationary internal combustion engines. EPA is expected to finalize these regulations sometime in late 2009. At such time, affected, existing engines will likely have three years to comply with the new federal requirements. The DNR may revise its exemption and registration requirements in the future to accommodate additional federal regulations.

**13. What if my engine is located in Polk or Linn counties? Are these engines required to be registered?**

A. The engine registration form cannot be used for engines located in Polk or Linn counties. Please contact the local air agencies for the requirements for engines in those counties.

**14. If I have several engines that need to be registered, can I use one registration form?**

A. No, a separate registration form is required for each engine. For engines that are similar, the information provided on the registration form will be similar. However, you should try to give each engine its own Emission Unit Number.

**15. Where do I send the registration form?**

A. Send one copy of the registration form to the NSPS/NESHAP Coordinator, DNR Air Quality Bureau, 7900 Hickman Road, Suite 1, Windsor Heights, Iowa 50324. A copy does not need to be sent to the U.S. EPA. The form must be signed.

**16. What happens after I submit the registration form to the Air Quality Bureau?**

A. The Compliance Section will keep track of the registration of the engines. You will not receive a formal confirmation from the DNR when the registration form is received. The DNR recommends that you send your registration by Certified Mail. If you have other air contaminant sources at your facility, you should remember to include **all** registered engines in your potential to emit calculations. Title V facilities will also have to include registered engines in their Title V applications. Because registered engines are subject to NSPS and/or NESHAP requirements, they cannot be considered insignificant units for Title V.