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Registration Forms  
for  
Stationary Internal Combustion Engines (Linn County Forms 2009-III and 2009-JJJ)

Frequently Asked Questions  
October 1, 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 Air Quality Division of the Linn County Public Health Department (LCPH AQD) if the engine was installed after April 1, 2006. April 1, 2006 is the earliest date that all new compression ignition engines became subject to U.S. EPA requirements. The construction permit exemption for small engines (LCCO 10.5(9)“o”) was modified to include the registration requirement. See Question 2 for further clarification on why this registration requirement is occurring now rather than in 2006.

**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 LCPH AQD 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.

Furthermore, once U.S. EPA promulgated regulations pertaining to stationary internal combustion engines, the LCCO 10.5(9)“o” exemption doesn’t apply pursuant to LCCO 10.5(9):

9. **Exemptions from the Authorization to Install Permit and Permit to Operate Requirements.** The provisions of §10.5 shall not apply to the following equipment, except when Prevention of Significant Deterioration Standards (567 IAC 22.5); New Source Performance Standards (40 CFR Part 60 NSPS), (567 IAC 23.1(2), (§10.9(2)); Emission Standards for Hazardous Air Pollutants (40 CFR Part 61 NESHAP), (567 IAC 23.1(3), (§10.9(3)); or Emission Standards for Hazardous Air Pollutants for source categories (40 CFR Part 63 NESHAP), (567 IAC 23.1(4), (§10.9(4) are applicable)).

Rather than requiring facilities to apply for a standard air construction permit for these engines a registration permit will be less burdensome for the facility and the agency while still ensuring the facility meets its compliance requirements with the federal regulations.

**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 LCPH AQD prior to installing the engine at your facility.

**7. How does the LCPH AQD 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 LCPH AQD inspector. The Department will provide the owner confirmation the registration form has been received.

**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 compression ignition engines installed after April 1, 2006 which are subject to the federal New Source Performance Standards. Likewise, you are required to submit a registration form for spark ignition engines manufactured after July 1, 2009 which are subject to the federal New Source Performance Standards. For additional information see Question 12 below.

**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 LCPH AQD at (319) 892-6000 if you are unsure of your engine's status.

**12. If my engines were installed prior to April 1, 2006, 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. This proposed rule can be found here: <http://www.epa.gov/fedrgstr/EPA-AIR/2009/March/Day-05/>. 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 LCPH AQD will revise its exemption and registration requirements in the future to accommodate additional federal regulations.

**13. 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, each engine must have its own Emission Unit Number.

**14. Why must I submit a report on the annual usage by January 31 each year?**

A. The federal NSPS and NESHAP regulations limit how many hours an engine can operate depending on the type. These operating restrictions are identified in the registration permit. Submitting the reports annually helps the Department determine compliance with this applicable requirement. LCPH AQD may request copies of usage logs for engines less than 400 hp which have been installed between April 1, 2006 and October 1, 2009.

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

A. Send one copy of the registration form to the Air Quality Division, Linn County Public Health Department, 501 13<sup>th</sup> St. NW, Cedar Rapids, Iowa 52405. A copy does not need to be sent to the Iowa DNR or U.S. EPA. The form must be signed.

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

A. The Compliance Section will keep track of the registration of the engines. You will receive a formal confirmation from the LCPH AQD when the registration form is received within two (2) weeks of receipt. 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.