***NSPS & NESHAP Applicability***
***Internal Combustion Engines***

***Frequently Asked Questions***
***November 5, 2009***

### *1) How does a facility determine if an internal combustion engine is subject to the NSPS or NESHAP?*

When considering applicability of these rules, engines can fall into three general classes:
1) Stationary (**subject** to the NSPS or NESHAP);
2) Mobile (**not** subject to the NSPS or NESHAP); or
3) Nonroad, including those engines that the DNR would consider to be "portable" (**may** be subject to the NSPS or NESHAP).

### *2) What is a stationary internal combustion engine?*

Both NSPS (40 CFR Part 60, Subpart IIII and Subpart JJJJ) define *stationary internal combustion engine* as follows:

*Means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition),* and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.*

**The parenthesis was not in either of the proposed rules. EPA added the parenthesis to the final rules by EPA based on comments.*

The NESHAP (40 CFR Part 63 Subpart ZZZZ, sometimes referred to as the "RICE MACT") contained this same definition of stationary ICE (without the parenthesis) when it was issued in June, 2004. EPA did not modify the definition of stationary ICE in January, 2008 when it modified the RICE MACT.

### *3) What is a nonroad engine?*

40 CFR Part 1068 is the General Compliance Provisions for Nonroad Programs. The same definition of "nonroad engine" appears in Part 89, Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines.

In 1068.*30 nonroad engine* is defined to be:

- *(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any internal combustion engine;*
  - *(i.) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or*
  - *(ii.) In or on a piece of equipment that is intended to be propelled while performing its function(such as lawnmowers and string trimmers); or*
  - *(iii.) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.*
- *(2) An internal combustion engine is not a nonroad engine if:*
  - *(i.) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition, or is subject to standards promulgated under section 202 of the Act (42 U.S.C. 7521); or*
  - ~~*(ii.) The engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act (42 U.S.C. 7411); or**~~
  - *(iii.) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar*

*function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e. at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph (2)(iii) does not apply to an engine after the engine is removed from the location.*

***Paragraph 2(ii) is struck here for illustrative purposes. EPA excluded this paragraph in the NSPS definition for "stationary internal combustion engine."**

Paragraph (1)(iii) describes an engine that would be portable or would be part of equipment that would be considered portable. In the exclusion outlined in paragraph 2(iii), EPA further explains what a nonroad engine is and is not. EPA would consider a portable engine to not be a nonroad engine (therefore, stationary and subject to the NSPS-NESHAP) if it:

1.) Remains at the same location for more than 12 consecutive month; or
2.) Remains at the same location for the entire operating season. The operating time of an engine located at a seasonal source is less than 12 months but more than 3 months per year.

An example of a portable engine described in #1 would be an engine used to generate electricity for the grid that is at a location for less than 12 months. This would be considered a nonroad engine and would **not** be subject to the NSPS or NESHAP. EPA stated (page 99, response to comments Subpart IIII), *"Portable electric generating engines that remain in one location for less than 12 consecutive months are considered nonroad engines and are subject to requirements for nonroad engines."* Alternatively, if the engine used to generate electricity remained at the location more than 12 months or was replaced by another engine that served the same purpose, the engine(s) would be stationary engine(s) and **would** be subject to the NSPS and NESHAP.

Examples of seasonal sources described in #2 (EPA does not give specific examples) would be: asphalt plants, concrete batch plants, or aggregate processing plants that typically can operate only for certain seasons. Engines associated with these types of operations would not be nonroad engines if they operated more than 3 months in a year. These engines **would** be subject to the NSPS and the NESHAP. EPA adds (page 241, response to comment Subpart JJJJ), *"However, portable engines that stay in one location for more than one year (or that meet the seasonal engine exclusion in (2)(iii)) are considered stationary engines under both EPA's nonroad and stationary regulations."*

The definition of seasonal source in paragraph (2)(iii), in general, seems to apply to portable plants that would set up for a job site for at least 2 years before re-locating to another job site. If the portable plant remained at the location for less than 2 years, it would not appear to be a seasonal source and the engines would be consider nonroad engines and **not** be subject to the NSPS or NESHAP.

Other portable engines that would appear to be nonroad engines and **not** subject to the NSPS or NESHAP include:

1. Engines used temporarily, either at stationary site or at a construction site.
2. Engines that are on the move all the time – again construction related activities, demolition activities, etc.

***4) What is the definition of "location?"***

As indicated in paragraph 2(iii) of the definition of "nonroad engine":
*A location is any single site at a building, structure, facility, or installation.*

Therefore, an engine that is designed to be moved around a building or around the facility grounds would meet the definition of "nonroad" as long as it also meets the other criteria for a nonroad engine. This is different than what EPA or Iowa DNR would typically consider to be a "location" under the NSPS or NESHAP General Conditions, which generally

looks at applicability on a facility-wide scale. The engine NSPS under Subparts IIII and JJJJ are unique in that they refer to the nonroad engine rules which have a specific definition for "location."

***5) What are some additional examples of nonroad engines?***

1. A 10 horsepower compressor that is wheeled or easily lifted by a person and is relocated throughout a facility.

Since the purpose of this engine is to be moved, it would be considered to be "nonroad," as long as the engine does not remain on one location in the facility or building for more than 12-months. If the engine is stored at a location for more than 12-months but does not operate during that time, that time does not need to be considered in the total time at one location.

2. A 500 horsepower compressor that is at a location for approximately one week and is wheeled or rented.

The size of the engine does not make a difference in determining if it is stationary or nonroad. If it is designed to be moved and does not stay in one location more than 12 months, it is a nonroad engine. The only exception would be if the rented or temporary engine is replacing another engine. See question 6 below.

***6) What about a temporary engine that is brought in to replace another engine?***

It depends on what type of engine the temporary engine is replacing.

The definition of a "nonroad engine" in 1068.30 includes the sentence: *"Any engine (or engines) that replaces an engine at a location and this is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period."*

The sentence does not differentiate between whether the engine being replaced is another nonroad engine or a stationary engine. Since the definition comes from nonroad engine rules, it would make some sense that it would only apply to replacement of nonroad engines.

The two NSPS (Subpart IIII and JJJJ) appear to be different regarding the temporary replacement question. The DNR believes, however, that EPA intends for CI and SI engines to be treated in the same way.

Subpart JJJJ does address this issue at 60.4230(f). Under that paragraph, temporary SI engines that replace another engine for less than one year are exempt from the NSPS as long as they are certified to meet appropriate nonroad engine standard.

Subpart IIII does not as clearly exempt these temporary engines. 60.4200(d) states that *"Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, Subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security."* The rules cited in this paragraph are for the following: Part 1068, Subpart C: Exemptions and Exclusions for Nonroad engines; Part 89, Subpart J: Exemption Provisions for nonroad CI engines; and Part 94, Subpart J: Exclusion and Exemption Provisions for Marine CI engines.

Therefore, if a temporary engine meets the definition of nonroad and is replacing a stationary engine, the temporary engine would be considered to be nonroad. However, if the temporary engine meets the definition of nonroad, but is replacing another nonroad engine, both engines must be considered for purposes of the 12-month consecutive time period. That is, if a nonroad engine stays in one location for 11 months and a temporary engine is brought in to replace it for 2 months, the original engine could be considered to be stationary and may be subject to NSPS (assuming that it is brought back into operation). The temporary engine could also be considered stationary and may be subject to the NSPS.