



Introduction

This is an information sheet to assist owners and operators of stationary compression and spark ignition engines regarding applicability with 40 CFR Part 60 New Source Performance Standards (NSPS), Subparts IIII (4I) for compression ignition engines and JJJJ (4J) for spark ignition engines, and/or 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ (RICE MACT), and information related to the regulatory “gap” or “loophole” for certain engines. Non-road engines, as defined by the rules, are not stationary engines and are not subject to the requirements of these regulations, therefore they are not discussed in this document.

Stationary compression ignition and spark ignition engine compliance

The Kansas air quality regulations establish requirements for compression ignition and spark ignition engines operating in Kansas by adopting sections of 40 CFR Part 60 and 40 CFR Part 63 under Kansas Administrative Regulations (K.A.R.) 28-19-720 and 28-19-750, respectively. The applicability of the RICE MACT and/or the NSPS 4I and 4J regulations for any engine is based on several factors including, the source’s designation as a major or area source of HAPs, the rated horsepower of the engine, the engine class, the fuel fired, date the engine was ordered from the manufacturer, date the engine was manufactured and the date the engine was constructed or reconstructed.

Background and definitions

When the U.S. EPA promulgated the RICE MACT and the NSPS 4I and 4J rules, it did so in a manner that left a regulatory time gap or loophole between the RICE MACT construction/reconstruction date, which is based on undertaking a continuous program of construction or reconstruction or entered into a contractual obligation to undertake and complete construction, and the NSPS dates of applicability, which are based on the date the engine is ordered from the manufacturer and the date the engine was manufactured. For engines that are not otherwise exempt from the rules, understanding the definitions for *construction*, *reconstruction*, *date the engine is ordered* and *date of manufacture* as they are defined in these rules becomes important.

The term **construction** for the RICE MACT is defined at [40 CFR 63.2](#) as on-site fabrication, erection, or installation of an affected source. *Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location.* Removal and reinstallation of an affected source will be construed as **reconstruction** if it satisfies the criteria for reconstruction as also defined in §63.2. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

To commence construction (or reconstruction) under the RICE MACT, the owner or operator would have undertaken a continuous program of construction or reconstruction or entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

However, for the purposes of the NSPS [4I](#) and [4J](#) engine rules, **the date the engine is ordered by the owner or operator is the date that construction commences**, which is different from the MACT definition of commence construction [see §60.4200(a) or §60.4230(a)]

The term **reconstruction** for the RICE MACT is also defined at 40 CFR Part 63.2 as the replacement of components of an affected or a previously nonaffected source to such an extent that:

1. The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and
2. It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions hazardous air pollutants from that source.



Guidance on engines classified as “loophole” or “gap” engines

In the NSPS 4I and 4J regulations, *date of manufacture* means one of the following things:

1. For freshly manufactured engines and modified engines, *date of manufacture* means the date the engine is originally produced.
2. For reconstructed engines, *date of manufacture* means the date the engine was originally produced, except as specified in paragraph 3.
3. **Reconstructed engines are assigned a new date of manufacture** if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. In these cases, the *date of manufacture* is the date of reconstruction or the date the new engine is produced. [40 CFR 60.4219 and 60.4248]

Under the NSPS 4I and 4J rules, the date an engine is ordered, and the date of manufacture are both required to align with the effective dates specified in the regulation for the rule to apply.

“Loophole” or “gap” engines

Few engines fall into this regulatory “gap” or “loophole” between the RICE MACT and NSPS engine regulations but those that do would fall under the following criteria:

1. Must be located at an area source of HAPs, and
2. Must be constructed or reconstructed¹ after June 12, 2006, and
3. The engine is manufactured before the *date of manufacture*² in the applicable NSPS:
 - a. For NSPS IIII: ordered after July 11, 2005 AND manufactured after April 1, 2006
 - b. For NSPS JJJJ: ordered after June 12, 2006 AND dependent on engine type (July 1, 2007; January 1, 2008; July 1, 2008, January 1, 2009, etc.)

Engines located at an area source of HAPs and constructed after June 12, 2006 are considered to be “new” sources under the RICE MACT. In general, the RICE MACT directs owners and operators of new engines to comply with the applicable NSPS engine rule. However, “gap” or loophole” engines have no requirements under the NSPS rules or the RICE MACT.

Requirements for “gap” or “loophole” engines

Although any engine which falls into the regulatory loophole has no requirements under the EPA engine rules, other requirements under the Kansas air quality rules would apply. Those requirements include, but are not limited to, obtaining the appropriate construction approval or permit before installation, obtaining the appropriate operating permits, and complying with operational and/or fuel restrictions which may be imposed by those permits.

Additionally, it is important to remember that an engine modification or rebuild could be considered “reconstruction” and trigger a change in the regulatory requirements for the engine.

Finally, EPA may, in the future, revise the RICE MACT rule to align with the NSPS dates to close the loophole. If this were to occur, the engine would then have requirements under the rule.

Help available

If you have questions or need assistance with applicability determinations for your engine, contact the Kansas SBEAP at 800-578-8898 or sbeap@ksu.edu. This is a free and confidential program located at Kansas State University and funded in part by the Kansas Department of Health and Environment.

¹ MACT definition of constructed or reconstructed from 40 CFR 63.2.

² Date of manufacture as defined by 40 CFR 60.4219 or 40 CFR 60.4248