

Stationary Reciprocating Internal Combustion Engines (RICE)

Most stationary engines are now subject to at least one federal regulation and must comply with new requirements. These federal regulations include:

- EPA's National Emission Standard for Hazardous Air Pollutants (NESHAP) rule for reciprocating internal combustion engines (RICE) at 40 CFR 63, Subpart ZZZZ (aka RICE MACT) [embed link to http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=59a90b3aa02f6d8a04e860a0354600d5&tpl=/ecfrbrowse/Title40/40cfr63e_main_02.tpl].
 - This federal rule now affects RICE engines located at both major and area sources of hazardous air pollutants (HAPS). A major source of HAPs is one in which the maximum plantwide potential to emit of all HAPs (including fugitive emissions) is greater to or equal to 10 tpy of a single HAP or HAP compound category, or is greater than or equal to 25 tpy of aggregated HAPs or HAP compound categories. An area source of HAPs is one that is not a major source of HAPs (that is, one that is a minor source of HAPs).
- EPA's New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines at 40 CFR Part 60 Subpart JJJJ [embed link to http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr60_main_02.tpl] (scroll to reach the subpart.).
- EPA's New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines at 40 CFR Part 60 Subpart IIII [embed link to http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr60_main_02.tpl] (scroll to reach the subpart.).

Certain engines were required to test emissions by October 19, 2013, and most engines have work practice requirements.

The oil and natural gas industry sector has a unique definition of major source of HAPs under Section 112(n)(4) of the 1990 Clean Air Act amendments. For oil and gas sources, HAP PTE may be aggregated with respect to each surface site for determination of major HAP source status instead of plantwide (and as consistent with the definition of major source in the rule). However, for permitting purposes, all emissions continue to be on a plantwide basis regardless of the number of surface sites.

Existing, Emergency Institutional, Commercial, and Residential RICE [embed link to DAQ content] located at an area source may have reduced requirements.

EPA's website contains a wealth of information for determining applicability and compliance requirements: <http://www.epa.gov/ttn/atw/icengines/> as well as example forms, rule summaries and webinars.

- Within the tab for Implementation Info [embed link to <http://www.epa.gov/ttn/atw/icengines/imp.html>], scroll to the "Summary of Requirements" section downloadable spreadsheets summarizing the requirements of the NESHAP and NSPS for subcategories of engines.

EPA Regulation Navigation Interactive Tools:

<http://www.epa.gov/ttn/atw/icengines/imp.html#regnav>

- 40 CFR 63, Subpart ZZZZ RICE NESHAP (RICE MACT)
- 40 CFR 60, Subparts IIII and JJJJ NSPS

EPA Example Forms such as for Notification of Compliance Status, etc.:

<http://www.epa.gov/ttn/atw/icengines/imp.html#forms>

EPA Region I's RICE website also contains implementation guidance:

<http://www.epa.gov/region1/rice/>

The San Diego APCD developed useful "Cheat Sheets" for the RICE NESHAP:

- Existing, Area Source Stationary Engine Requirements
[http://www.sdapcd.org/homepage/public_part/neshap/Existing_Area.pdf]
- Existing, Major Source Stationary Engine Requirements
[http://www.sdapcd.org/homepage/public_part/neshap/Existing_Major.pdf]
- New, Major Stationary Source Engine Requirements
[http://www.sdapcd.org/homepage/public_part/neshap/New_Major.pdf]
- NSPS JJJJ, Spark Ignition Engine Requirements
[http://www.sdapcd.org/homepage/public_part/neshap/NSPS_JJJJ.pdf]

DAQ June 25, 2013 mailing on RICE MACT changes, including the new remote area definition.

