

EMERGENCY ENGINE REQUIREMENTS

Emergency generator engines in Michigan are exempt if the heat input is less than 10 mmbtu/hr under Rule 285(2)(g). All emergency generator engine rules require proper operation and maintenance of the equipment and following manufacturer's recommendations when they are available. Operators should minimize emissions during engine startup and shutdown.

- Emergency generator engines are subject to specific requirements under USEPA regulations. First, to qualify as an emergency generator engine, a RICE must:
- Engine is run to provide electrical power during an emergency situation (i.e. when power from local utility is interrupted).
- Install a non-resettable hours meter.
- Restrict maintenance and testing of the engine to 100 hours per year. Though emergency operation is unlimited (Keep in mind when estimating potential emissions, 500 hours per year is usually used for emergency generator engines).

FEDERAL NESHAP (40 CFR PART 63, PART ZZZZ)

Keep in mind that aggregate storage facilities are likely an area source of hazardous air pollutants (HAPs) and only rules associated with areas sources are included below. Older emergency engines (before June 12, 2006, for spark ignition [SI] or natural gas-fired/gasoline engines or July 11, 2005, for compression ignition [CI] or diesel-fired engines) are subject to the ZZZZ regulations and require:

- Change oil and filter every 1,000 hours of operation or annually, whichever comes first
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary (CI); Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary (SI); and
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- An oil analysis program described at 40 CFR 63.6625 may be substituted for changing the oil.

FEDERAL NSPS (40 CFR PART 60)

Depending on the engine manufacture date, the engine may be subject to additional regulatory requirements:

- SI engines manufactured after June 12, 2006 are subject to 40 CFR Part 60, Subpart JJJJ
- CI engines manufactured after July 11, 2005 are subject to 40 CFR Part 60, Subpart IIII.

Emergency generator engines must meet certain emissions requirements based on the date of manufacture. Currently, emergency engines must meet the USEPA Tier 2 standards. The engine must be labeled and additional information is available from the engine manufacturer.

Diesel fuel must contain no more than 15 ppm sulfur and a minimum cetane index of 40 or a maximum aromatic content of 35% by volume. Purchasing ULSD will ensure compliance with these requirements.

An engine that is certified (for example, certified to the Tier 2 standard) is not required to perform emissions testing. But uncertified engines will require periodic stack testing if subject to emission requirements.

Mobile or portable engines are not subject to NSPS/NESHAP requirements though they cannot remain in place on one site for more than 12 months.



Prepared by Fishbeck for Use by Michigan Aggregate Association members. It is not meant to represent legal advice but an overview of emergency generator requirements.

ADDITIONAL INFORMATION: USEPA Engine Website | www.epa.gov/stationary-engines

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