



Emergency and Non-Emergency Engines

Overview

Frequent questions arise regarding reciprocating internal combustion engines, which are subject to [NESHAP ZZZZ](#), [NSPS IIII](#), and/or [NSPS JJJJ](#). These may include what requirements apply to which engines and what category B.27 has to do with them. ([OAR 340-216-8010](#) Table 1, Part B, #27)

Gathered here are the answers to the most frequently asked questions regarding the RICE regulations.

Are the RICE regulations in Division 238 and 244 different from other regulations adopted by reference?

Yes. DEQ adopted all three federal regulations by reference into [OAR 340-244](#) and [OAR 340-238](#). Adopting by reference means that DEQ has taken the regulations and added them as written into the Oregon Administrative Rules.

In this case, DEQ did not want to implement the federal regulations for all engines across the state, only for facilities that require an air permit. To achieve this, caveats were added to the adoption by reference. These can be seen in the figures below.

Note for clarity: Though a permit is not required in some cases, the Notice of Intent to Construct (NC) rules in OAR 340-210-0205 through -0250 still apply. These require the owner or operator of any equipment that emits air pollution to submit an NC.

[340-238-0060 \(1\)](#) – Federal Regulations Adopted by Reference states “... 40 C.F.R. Part 60 Subpart IIII and JJJJ are by this reference adopted and incorporated herein only for sources required to have a Title V or ACDP permit and excluding the requirements for engine manufacturers.”

[OAR 340-244-0220 \(1\)](#) - Emission Standards: Federal Regulations Adopted by Reference states “... 40 C.F.R. Part 63, Subparts ZZZZ and JJJJJ are by this reference adopted by reference and incorporated herein only for sources required to have a Title v or ACDP Permit.”

Both OAR 340-244-0220 and OAR 340-238-0060 indicate that DEQ only implements these regulations for facilities that require an air permit according to Table 1 in [OAR 340-216-8010](#).

Can an engine be enrolled in Portland General Electric’s Dispatchable Standby Generation (DSG) Program and still be an emergency engine?

Yes. However, this applies only if the facility is not a major source of hazardous air pollutant (HAP) emissions. Federal regulations provide area sources an option to remain an emergency engine while providing power to the grid if they comply with specific requirements.

One example is [NESHAP ZZZZ at 40 CFR 63.6640\(f\)](#) which states:

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“If you own or operate an emergency stationary RICE... any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited.”

This section continues to provide operational limits for the engine to remain classified as emergency. A quick overview:

- Major HAP sources have 50 hours of non-emergency use per year, but cannot use their engines for PGE’s DSG program, demand response, income generation, peak shaving, supplying power to the electric grid, or otherwise supply power as part of a financial arrangement.
- Area sources of HAPs (non-major sources) are approved to operate their emergency engines for up to 50 non-emergency hours, including peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid, or otherwise supply power as part of a financial arrangement if those 50 hours comply with [\(f\)\(4\)\(i\)](#) and [\(ii\)](#).

Enrolling in PGE’s DSG program does not change the classification of the engine from emergency to non-emergency. The engine will still require a permit per [OAR 340-216-8010 Table 1](#).

Further, 40 CFR 63.6640(f)(4)(ii) specifies all requirements for a facility engaged in the supply of power as part of a financial arrangement with another entity:

- Engine must be dispatched by the local balancing authority or local transmission and distribution system operator.
- The engine dispatch must be intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to the interruption of power supply.
- The engine dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC (North American Electric Reliability Corporation), regional, state, public utility commission or local standards or guidelines.
- The power is provided only to the facility itself or to support the local transmission and distribution system.
- The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine.
- The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

For engines enrolled with PGE’s DSG program the permit writer may need to ask specific questions regarding these requirements. Examples of these questions may include:

- How will the facility demonstrate compliance with the specific requirements?
- Is the local balancing authority keeping records on behalf of the owner/operator?
- If so, how much time should be provided for the permittee to obtain and submit information requested by DEQ?

Can an engine still be considered an “emergency engine” if used to provide power for use by the owner or operator when there is not a loss of utility power?

Yes. A source can use their engine for up to 100 hours in non-emergency situations and still be classified as “emergency.”

The source is still required to comply with all criteria for emergency engines. This includes up to 100 hours for maintenance checks and readiness testing. 50 of those 100 hours can be “discretionary” non-emergency hours.

The 100-hour limitation is based on calendar year, not a 12-month rolling year.

If a facility conducts additional maintenance and readiness testing that is not recommended by one of the listed entities, the engine would be deemed non-emergency.

Listed entities include NERC, regional, state, public utility commissions, or local authorities.

Using the engine for purposes other than emergencies or maintenance and readiness testing would trigger a permitting requirement in [OAR 340-216-8010 Table 1](#) Part B #27. Note that the engine would not immediately be changed to non-emergency unless the 100 hours was exceeded, or the facility did not comply with emergency engine requirements.

If a facility already has an air permit and Part B #27 category is triggered, the source may not need a separate permit. If the power production is supporting the main industrial group (SIC code), the emissions are considered a part of the same source. The current permit can be updated to reflect changes at the next permit renewal or permit modification.

Explain the 50- and 100-hour limits. What is the difference and what are they for?

[NSPS IIII](#) and [JJJJ](#) and [NESHAP ZZZZ](#) are all similar, but can be summarized as follows:

- **Emergency use:** unlimited operation allowed
- **Non-emergency use:** 100-hour limit total
 - **Maintenance checks and readiness testing:** 100-hour limit
 - Must be recommended by federal, state, local government, the manufacturer, the vendor, the regional transmission organization, the equivalent balancing authority and transmission operator, or the insurance company associated with the engine
 - **Other uses:** 50-hour limit
 - Owners or operators may use the engine as they see fit for up to 50 hours.
 - This operation counts towards the 100-hour total limit for non-emergency use.

How do I determine which federal requirements apply to this specific engine? (Emergency vs. Non-emergency)

DEQ air quality permit writers can use the [EPA’s regulation navigation tools](#) for many NSPS and NESHAP regulations to determine classifications. The [NSPS Subpart JJJJ](#), [NSPS Subpart IIII](#), and [NESHAP ZZZZ](#) tools in particular, help determine which rules apply to the RICE. The tool helps to estimate specific requirements, but may not be comprehensive, so the permit writer will always examine the rules closely. Sources that comply with all applicable requirements for emergency engines will have emergency-only conditions written into their air permits.

If a facility starts operating an engine beyond the emergency-only limits, it is immediately reclassified as a non-emergency engine. Once reclassified, the facility must immediately comply with non-emergency requirements. If the non-emergency requirements aren’t already included in the facility’s air permit, they need to apply for a permit modification right away.

If the facility exceeds the allowed hours and becomes non-emergency without complying, it may face enforcement actions.

DEQ permit writers will review the relevant regulations and determine the requirements based on when the facility exceeded the hour limit or otherwise failed to comply with emergency engine requirements.

How does permit category B.27 affect regulations for RICE?

Permit category B.27 ([OAR 340-216-8010, Table 1](#), Part B, #27) does not affect RICE regulations ([NESHAP ZZZZ](#) and [NSPS IIII](#) and [JJJJ](#)).

Federal RICE regulations were adopted and delegated to DEQ as written by EPA, except that DEQ does not enforce requirements for facilities that do not require an air permit. DEQ also did not adopt any NSPS requirements applicable to engine manufacturers.

Category B.27 only determines which facility requires an air permit. DEQ's determination that the emergency engine is involved in activities that require a permit does not change whether the engine is classified as emergency or non-emergency. Only the source's activities will change that.

A General Permit (GP) air contaminant discharge permit (ACDP) for 'electric power generation from combustion' was created under [Table 1 Part B, #27](#). This permit was established in 2011 and expired in 2021.

Permit revisions were made in 2021 to fully incorporate the NSPS and NESHAP requirements for emergency engines. Some non-emergency engines may be eligible for assignment to this GP, but some technical assistance may be required regarding any applicable non-emergency requirements.

Each facility applying for assignment to a General ACDP must meet the following criteria:

- a. The source meets the qualifications specified in the General ACDP;
- b. DEQ determines that the source has not had ongoing, recurring, or serious compliance problems; and
- c. DEQ determines that a General ACDP would appropriately regulate the source.

If a facility is required to comply with applicable non-emergency requirements, DEQ staff will discuss the situation with their manager. In some cases, the facility may not be appropriately regulated by the General ACDP and a source specific ACDP would be required.

Are there any other nuances to the RICE regulations?

A vacatur was issued on May 1, 2015 by the U.S. Court of Appeals (District of Columbia), and [guidance for that vacatur was issued by EPA](#) on April 15, 2016.

The specific provisions that are vacated by the court are:

- [NESHAP ZZZZ: 63.6640\(f\)\(2\)\(ii\)-\(iii\)](#)
 - (f)(2)(ii): Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see [§ 63.14](#)), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (f)(2)(iii): Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- [NSPS IIII: 60.4211\(f\)\(2\)\(ii\)-\(iii\)](#)

- Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see [§ 60.17](#)), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- [NSPS JJJJ: 60.4243\(d\)\(2\)\(ii\)-\(iii\)](#)
 - Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see [§ 60.17](#)), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

RICE regulations and permitting can be complex and many facilities have engines. Additional questions about engines and how rules are incorporated into permits can be answered by your regional DEQ permit writer.

What do I do with engines that perform Categorically Insignificant Activities?

[OAR 340-200-0020\(uu\)](#) defines Categorically Insignificant Activities (CIA) as:

“Emergency generators and pumps used only during loss of primary equipment or utility service due to circumstances beyond the reasonable control of the owner or operator, or to address a power emergency, provided that the aggregate horsepower rating of all stationary emergency generator and pump engines is not more than 3,000 horsepower. If the aggregate horsepower rating of all stationary emergency generator and pump engines is more than 3,000 horsepower, then no emergency generators and pumps at the source may be considered categorically insignificant.”

Because DEQ has been delegated and adopted the RICE NESHAPs and NSPS regulations, they must be included in the permit regardless of CIA status.

Can a facility run their engines to power their plant during scheduled maintenance and remain emergency engines?

Yes. But there are stipulations.

Under both state and federal rule, a facility can operate their emergency engines for up to 50 total non-emergency hours per calendar year and remain an emergency engine. If the facility has planned maintenance or downtime during which they will disconnect from the grid or otherwise use emergency engines to power their operations, they may use each engine for this purpose for up to 50 hours per calendar year.

If 50 hours is not enough time to complete planned maintenance, the facility may submit a Notice of Intent to Construct (NIC) application to bring temporary engines on site to provide power. In this case, emissions must operate within the facility’s Plant Site Emission Limit (PSEL). Otherwise, by using the emergency engines for

more than 50 hours, they immediately become non-emergency engines and are subject to additional requirements.

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