**Emergency Power Generators: Which Environmental Regulations Apply?**

Emergency power generators can be critical pieces of equipment for any facility, especially in the stormy seasons of spring or winter. If you have one in your facility now, or are thinking about getting one, you need to be aware of the environmental regulations which are triggered by having one onsite.

[EPA](https://www.epa.gov) defines emergency generators as “…stationary combustion devices, such as reciprocating internal combustion engine or turbines that serve solely as a secondary source of mechanical or electrical power whenever the primary energy supply is disrupted or discontinued during power outages or natural disasters that are beyond the control or operator of a facility.” There are no time limits to using emergency generators during an emergency, but there are limits to the number of hours a generator can be used in non-emergency situations such as maintenance, testing, and other occasions such as offsetting electrical demand or to reduce electrical costs.

The bigger the generator, and the older the generator, the more likely environmental regulations will be triggered. The type of fuel used to power the generator also affects compliance. Generators can run on diesel fuel, gasoline, propane or natural gas.

The following environmental regulations may be triggered by your emergency generator:

**Air Emissions**

Emergency generators can have the potential to emit various air pollutants such as carbon monoxide, volatile organic compounds, xylene, carbon dioxide, sulfur dioxide, and others.

Depending on your state or local environmental regulations and the type of generator you have, you may need to prepare and file for an air permit whether it be a general permit, an operating permit, or a construction permit.

There are specific rules which govern the various types of generator engines. 40 CFR 60, Subpart III is for stationary compression ignition generators, 40 CFR 60, Subpart JJJJ is for stationary spark generators, and 40 CFR 63, Subpart ZZZZ applies to reciprocating internal combustion engines (RICE). Each regulation has strict operating guidance and compliance obligations.

**Spill Prevention, Control and Countermeasures (SPCC)**

If the fuel which you store onsite is in a tank with storage above 600 gallons, you will need to prepare an SPCC plan. SPCC Plans identify discharge prevention potential, discharge prevention measures and tasks, training, and the procedures to be followed if a spill does occur.

**Emergency Planning and Community Right to Know Act (EPCRA)**

If your fuel storage is above certain amounts, you will be required to conduct EPCRA annual reporting, chemical inventorying, and notifications. ([For more information about EPCRA read our recent EPCRA blog article](https://isienvironmental.com/index.php/epcra-tier-ii-blog/).)

**Tank Certifications and Registrations**

Aboveground and belowground fuel storage tanks may need to be registered, permitted, inspected, and certified per state and local regulations. Tanks for emergency generators are required to have release detection devices and must be tested annually with regulatory reporting requirements in the event of a release.

**PCBs**

A potential for the presence of polychlorinated biphenyls (PCBs) can be found in any transformers, capacitors, electrical equipment, thermal insulation and motor/hydraulic oils. Cleanups, exposures and removals would need to be handled according to EPA’s PCB regulations.

**Employee Exposure Issues**

Though technically a safety issue, any backup generator which is brought into a facility could cause additional employee exposure issues. Before the use of generators, noise sampling would need to be conducted to determine the potential noise exposures to employees in the area. Exhausts emitted from indoor generators may cause additional issues with employee exposure to chemicals, causing the need for engineering controls or additional employee personal protective equipment use.

**Which Regulations Apply to Your Generator?**

The regulations which apply to emergency power generators can vary greatly depending on style, type, model, your location, facility setup and other factors. What are your specific permitting requirements? Let iSi figure this out for you. [Contact us for more information](https://isienvironmental.com/index.php/contact-us/) about environmental obligations, or [ask us for a pricing quote](https://isienvironmental.com/index.php/pricing/) to take a look at your situation.