



Shasta County Air Quality Management District
1855 Placer Street, Redding, CA 96001 530-225-5674

Advisory

Use of Back-up Generators During Public Safety Power Shutoff Events (PSPS)

The purpose of this advisory is to inform Shasta County residents of state and local requirements for the use and installation of generators at residential and commercial locations. This advisory has information that is meant to assist residents that are considering purchasing or installing a generator including those used during public safety power shutoff events.

Please remember: Generators produce carbon monoxide gas which is odorless and can cause death. Owners of generators should read their owner's manual to ensure safe operation.

If you plan to permanently install a generator, contact the Shasta County Building Division (530-225-5761) to inquire about permit requirements.

The Shasta County Air Quality Management District (District) is committed to reducing the health risks associated with the operation of generators during PSPS. If you are considering the purchase of a back-up power source, keep in mind there are many zero and near zero emission technologies available such as battery electric storage (which can be combined with solar electric generation) and fuel cells. Natural gas or propane powered generators are among the cleanest traditional options for back-up power.

Use of Small Engines (50 Horsepower/37.3 Kilowatts or less)

Small off-road engines, such as those used in small generators sold at retail stores, are required to be certified by the California Air Resources Board (CARB) to be able to be sold in California. CARB does not establish in-use restrictions for such certified engines, and small generators 50 brake horsepower (bhp) or less are exempt from District rules and therefore do not require a permit.

Requirements Applicable to Stationary Engines (over 50 Horsepower/37.3 Kilowatts)

Air District Permitting and Rule Requirements

Stationary back-up generators with engines over 50 bhp are subject to District requirements which include: permitting requirements, emission limits, and operational restrictions. Requirements vary depending on the size and fuel used to power the engine. Before purchasing a stationary emergency back-up generator, contact the District (530-225-5674) to ensure that the engine meets emission standards and is operated in accordance with applicable District rules and requirements.

Requirements Applicable to Portable Engines (over 50 Horsepower/37.3 Kilowatts)

Air District Permitting and Rule Requirements

Like stationary back-up generators, portable back-up generators with engines over 50 bhp are subject to District requirements which include: permitting requirements, emission limits and operational restrictions. Portable engines may be permitted by the District for use at multiple locations within a single facility or may be permitted for use in multiple locations within Shasta County.

Before purchasing a portable back-up, generator contact the District (530-225-5674) to ensure that the engine meets emission standards and is operated in accordance with applicable District rules and requirements.

Voluntary Portable Equipment Registration Program In Lieu of Air District Permits

To facilitate the use of portable engines, CARB's Portable Equipment Registration Program (PERP) allows an owner or operator of a portable engine to voluntarily apply for a statewide registration, allowing the engine to be operated anywhere in the state without the need for air district permits. PERP-registered engines are exempt from District permitting when operated in compliance with the PERP requirements which include the Air Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower or Greater (Portable Diesel Engine ATCM), discussed in a following section.

Statewide registration under PERP is not valid where engines are "used to provide primary or supplemental power to a building, facility, stationary source, or stationary equipment" except during, "unforeseen interruptions of electrical power from the serving utility." At this time, CARB staff and the District believe that PSPS events qualify as "unforeseen interruptions of electrical power" for purposes of PERP. Accordingly, PERP-registered engines may be used during a PSPS event by most owners or operators to provide primary or supplemental power.

It is important to note a significant caveat regarding the use of PERP. PERP registrations are not valid if the engine is part of a stationary source. If CARB or the District determine that an engine is used as part of a stationary source, the PERP registration is not valid at that location, and a District permit may be required. Engines that reside at the same location for 6 consecutive months are, by definition, not portable. Additionally, engines that routinely return to the same location to serve the same function may be considered by the District to be "part of a stationary source."

Use of Unregistered/Unpermitted Portable Engines Operated During Emergency Events

PERP allows for the temporary operation of otherwise unregistered and/or unpermitted engines during an "Emergency Event" so long as certain conditions are met. "Emergency Event" means a "situation arising from sudden and reasonably unforeseen natural disaster such as earthquake, flood, fire, or other unforeseen events beyond the control of the portable engine or equipment unit operator... that threatens public health and safety and that requires the immediate temporary operation of portable engines or equipment units to help alleviate the threat to public health and safety." CARB staff and the District believe that PSPS events generally qualify as unforeseen events for purposes of PERP, and therefore use

of unregistered portable engines may be allowed for the duration of a PSPS event – **but only if necessary to alleviate a threat to public health and safety.**

Under PERP, engines may be operated during an Emergency Event only if:

- The engine to be used is certified to meet a California or federal emission control standard, diesel engines must be Tier 1, Tier 2, Tier 3 or Tier 4;
- The owner or operator demonstrates that there is an immediate temporary need to operate the engine to help alleviate a threat to public health and safety that is the result of a reasonably unforeseen event, that is beyond the control of the owner or operator;
- The owner or operator notifies CARB within 24 hours of commencing operation; and
- The engine is operated only for duration of the Emergency Event, or up to 12 months, whichever comes first.

Notification to CARB is completed by submitting a [Form 40](#) “Notification of Operation in an Emergency Event.” In response to receiving a Form 40 submittal, CARB, in consultation with the District, may refute that an Emergency Event exists, in which case operation of the engine must cease immediately. Misrepresentation of an Emergency Event and failure to cease operation is a violation of PERP.

Airborne Toxic Control Measure for Stationary Compression Ignition Engines (Diesel Engines)

CARB’s Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Stationary Engine ATCM) establishes emission limits and operational restrictions for stationary compression-ignition engines (Diesel Engines) rated at greater than 50 (bhp). Portable engines, as defined by the Stationary Engine ATCM, and spark-ignition engines are not subject to the requirements of the Stationary Engine ATCM. To view the Stationary Compression Ignition Engines ATCM click [HERE](#).

CARB ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater

CARB’s Portable Diesel Engine ATCM establishes requirements for portable diesel engines, including “Emergency-use Engines.” Engines that comply with the Portable Diesel Engine ATCM may be used to provide back-up power during PSPS events, and are subject to the terms and conditions of the applicable District permit or PERP registration. To view the Portable Compression Ignition Engines ATCM click [HERE](#).