



Proper Uses of Portable Equipment

Introduction

The San Diego County Air Pollution Control District (District) developed this advisory to provide guidance for allowable uses of portable equipment in San Diego County.

Due to a wide variety of sources and operating scenarios, rules and regulations governing existing portable equipment are open to interpretation and the inadvertent misuse of such equipment may have occurred. Consequently, the historical operation of some ineligible equipment as portable equipment may have occurred and such cases could result in circumvention of the New Source Review requirements and increased emissions.

Permitting Process

Portable engines rated at 50 hp or greater and portable equipment units that are not exempt from permitting requirements in accordance with District [Rule 11](#), must obtain one of the following authorizations prior to operating in San Diego County: (1) a registration from the California Air Resources Board, or (2) a registration from the District, or (3) a permit from the District.

For the purposes of this advisory, portable engines are spark ignition or diesel-fired piston-type internal combustion engines used in conjunction with the following types of operations: well drilling, service, or workover rigs; power generation; pumps; compressors; pile drivers; welding; cranes; or woodchippers. Additionally, portable equipment units include: confined and unconfined abrasive blasting; concrete batch plants; sand and gravel screening, rock crushing, asphalt cold planers, and unheated pavement crushing and recycling operations; rock drills; and cementitious mortar silos.

Registration Programs

There are two registrations programs available for portable equipment that operates in San Diego County: (1) the statewide Portable Equipment Registration Program ([PERP](#)) and the local registration program (District [Rule 12.1](#)).

The PERP was established by the California Air Resources Board (CARB) and provides a mechanism to allow owners and operators of portable engines and portable equipment units to operate at various locations throughout the state without obtaining individual operating permits in each local air district in which the unit may be operated. The District's local registration program was established under District Rule 12.1 and provides a mechanism to allow owners and operators of portable engines and portable equipment units to operate in San Diego County in lieu of obtaining a local Permit to Operate.

PERP or District registrations might be an acceptable and a lawful alternative to obtaining any applicable and required permits from the District for portable equipment used in various activities such as general construction, repair/maintenance, drilling, demolition/clean-up and unforeseen utility electrical power interruptions. However, there are some specific circumstances where the use of PERP- or District-registered equipment may not comply with PERP and District registration rules.

Determining Proper Uses of Portable Equipment Under Registrations

In general, the following are the main considerations used by the District in determining whether engines and equipment units may operate under registrations or permits.

1. Evaluating the definition of portable emission unit.

Equipment under registrations should meet the following definitions:

"Portable Emission Unit" means an emission unit that is designed to be and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer or platform. An emission unit is not portable if any of the following apply:

- (i) The unit, or its replacement, is attached to a foundation or, if not so attached, will reside at the same location for more than 12 consecutive months. Any portable emission unit such as a backup or standby unit that replaces a portable emission unit at a location and is intended to perform the same function as the unit being replaced will be included in calculating the consecutive time period. In that case, the cumulative time of all units, including the time between the removal of the original unit(s) and installation of the replacement unit(s), will be counted toward the consecutive time period; or*
- (ii) The emission unit remains or will reside at a location for less than 12 consecutive months if the unit is located at a seasonal source and operates during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and operates at that single location at least three months each year; or*
- (iii) The emission unit is moved from one location to another in an attempt to circumvent the portable emission unit residence time requirements.*

"Location" means one or more contiguous or adjacent properties which are under the same ownership or operation, or which are owned or operated by entities which are under common control. Contiguous or adjacent properties are properties with two or more parcels of land in actual physical contact, or separated solely by a public roadway or other public right-of-way.

In summary, to comply with the portable definition the equipment must be movable (i.e., not installed permanently to a foundation) and it cannot reside or be operated at one location/source for more than 12 months. For the purposes of determining compliance with the 12-month clock, the time replacement units reside or operate is added to the time the original

unit resided or operated at the location/source.

Operation of registered equipment is allowed provided the registered equipment is not used as part of a stationary source or becomes its own stationary source. Some examples of such uses are registered equipment used for construction, repair and/or maintenance activities. In these cases, registered equipment can be used provided the location is consistent with the functional use of the equipment and the equipment is not used at the same location for more than 12 consecutive months. The term functional is used in conjunction with location to ensure that there is a legitimate operational need to move the equipment, so as to not circumvent the definition of location just to restart the 12-month period. Also, the 12-month operational clock at a location starts from the time a piece of registered equipment is moved into a new location, if the equipment is moved and then brought back to the same location at a later time this period will be counted towards the 12-month period. Adequate logs and documents demonstrating the equipment's proper usage must be maintained by the owner or operator of the registered equipment.

2. Determining how the equipment is operated.

A fundamental component of registrations being a valid alternative to traditional district permitting is the requirement that the equipment not only be manufactured with indicia of portability (e.g., has wheels or it is on a skid or trailer, etc.), but that it actually be operated in a portable fashion and not operate as part of a stationary source or become its own stationary source. Under the PERP regulation and District Rule 12.1, an engine's and/or equipment unit's registration is deemed invalid when such equipment is used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

In addition, the definition of stationary source also specifies that the pollutant-emitting activities belong to the same industrial grouping, either by virtue of falling under the same two-digit Standard Industrial Classification (SIC) code, or by being part of a common industrial process, manufacturing process, or connected process involving a common raw material. It is important to note that the definition of stationary source includes all pollutant-emitting activities occurring "on one or more contiguous or adjacent properties," so moving it from one location to another location within a parcel does not make it a new or different and separate stationary source.

However, it should also be noted that if the District determines that the specific use of a registered engine or equipment unit at a particular stationary source requires a District permit, the registration for the engine or equipment unit is not void and the operator might still use the registration to operate the engine or equipment unit at another location or for an alternate use at the same facility where the stationary source is located, provided either practice is an authorized use of the registered equipment.

Storage of Registered Equipment

Registered equipment can be stored at a bona fide storage location at a facility without being subject to the 12-month residence time requirements. Also, as described above, when registered equipment is used for purposes such as construction, repair and/or maintenance at

a location, the 12-month clock stops when the registered equipment is moved to a bona fide storage location within that facility. The definition of storage is relatively broad, but if the equipment is stored within a facility where it potentially may be used, it should be in a storage location apart from the usage location and not set up in an operational configuration, regardless of the size of the facility. For larger facilities, the storage location must be a completely separate building or location sufficiently away from its potential use location. For smaller facilities the storage location must be a specified designated location and not be in an operational configuration. Adequate logs and documentation demonstrating the equipment's proper storage and use must be maintained by the owner or operator of the registered equipment.

Use of Registered Generators at a Stationary Source

Use of a registered portable generator is allowed as the primary or back up source of power to a stationary source, but only during the following situations:

1. unforeseen interruptions of electrical power from the serving utility; maintenance and repair operations, including maintenance of stationary backup generators that have not experienced an engine failure;
2. electrical upgrade operations including startup, shutdown, and testing that do not exceed 90 calendar days, or a longer period as authorized in writing by the District; or
3. upon approval from the District, engine failure of a stationary backup generator permitted by the District under the following conditions:
 - i. the holder of the permit for the stationary engine notifies the District of the engine failure within 72 hours from the time the engine failure is discovered;
 - ii. the temporary replacement engine has the same or lower mass per unit time emission rate;
 - iii. the temporary replacement engine complies with all applicable requirements on the permit for the existing stationary engine; and
 - iv. the temporary replacement engine operates for no more than 180 days, or a longer period as authorized in writing by the District.

These provisions are found in Subsection 2453(m)(4)(E)(4) of the PERP regulation and District Rule 12.1(b)(2)(iv). Requests to operate registered portable engines as described above may be submitted to the Compliance Division at apcdcomp@sdcounty.ca.gov.

Engines Used to Propel Mobile Equipment

Engines used primarily to provide propulsion are not eligible for District or PERP Registrations. The engines might be subject to CARB's Off-Road regulations. For more information on how to comply with these regulations please visit arb.ca.gov/offroadzone, or call the toll-free hotline at (877) 59DOORS (877-593-6677), or contact CARB via email at doors@arb.ca.gov.

Some engines serve a dual purpose by both propelling a vehicle or the equipment and performing another function (e.g., crushing, grinding, screening, etc.). As discussed above, engines that provide propulsion might be subject to CARB's Off-Road regulations. Additionally,

the activity that is being powered by the engine (e.g., crushing, grinding, screening, etc.) might require a permit or registration.

Certain mobile equipment might have two engines, an engine to provide propulsion, which will be subject to CARB's Off-Road regulations, and an auxiliary engine, which might require a permit or registration. However, some auxiliary engines are not subject to the Portable Diesel Engine ATCM. Instead the auxiliary engine and the propulsion engine are subject to the appropriate reporting, labeling and performance requirements of the corresponding Off-Road regulation or On-Road regulation.

The following five categories of portable engines are examples of engines that are required to have a District or PERP registration. These engines are exempt from the Portable Diesel Engine ATCM but instead must comply with the requirements of the applicable Off-Road regulation or On-Road regulation:

- Auxiliary engines on **two-engine cranes**
- Auxiliary engines on privately-owned **street sweepers**
- Auxiliary engines on **water well drilling rigs**
- Auxiliary engines on **snow removal vehicles**
- Auxiliary engines on **two-engine vehicles**

Examples of Use of Registered Equipment

The following examples illustrate the application of the principles discussed above. In each of these examples where the use of registered equipment is considered appropriate, the equipment must be portable, and cannot be considered part of the stationary source. These examples are specific to each case in which the determination was made and are provided only as guidelines for future determinations. These examples are also not intended to be an exhaustive or inclusive list of all cases where portable equipment is used. For specific case-by-case questions not mentioned in this advisory, please contact the District at (858) 586-2650 or via email at apcdcomp@sdcounty.ca.gov.

Example 1

Location of Proposed Equipment/Operation: Stationary Concrete Batch Plant.

Proposed Equipment/Operation: Supplement operation by using registered crushing and screening equipment with associated hoppers and conveyors for a 3-month aggregate processing project.

In this case a permit from the District is required to operate at this facility and PERP /local registrations cannot be used for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 2

Location of Proposed Equipment/Operation: A mine producing rock, sand, and gravel for sale.

Proposed Equipment/Operation: The source holds stationary source permits for screens, crushers and conveyors. The stationary source plans to use registered equipment (additional crushers, screens, and conveyors) to expand their operations and increase capacity.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 3

Location of Proposed Equipment/Operation: A manufacturing facility uses electrically powered air compressors as part of their process.

Proposed Equipment/Operation: The facility needs to increase capacity. The utility company needs 9 months to provide additional electrical capacity. The facility proposes portable diesel-powered compressors to provide the needed capacity to operate their plant.

In this case permits from the District are required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 4

Location of Proposed Equipment/Operation: Local School.

Proposed Equipment/Operation: Registered air compressor and blasting pot to remove non-lead-based paint from a building at a local school.

In this case the work can be conducted under valid PERP or District Registrations as long as the equipment is used for 12 months or less.

Example 5

Location of Proposed Equipment/Operation: Concrete Batch Plant.

Proposed Equipment/Operation: Facility proposes to use registered screen and diesel engine owned and operated by a third party to recycle waste concrete in trucks returning from job sites. The recycled material is intended to be sold as road base. The recycling equipment may occasionally leave the stationary source for use in non-recurring jobs at other plants, but

will always return to this source.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 6

Location of Proposed Equipment/Operation: Stationary Concrete Batch Plant.

Proposed Equipment/Operation: Facility proposes to use registered screens, crushers, conveyors, and a diesel generator to process recycled concrete on-site for use as a raw material (aggregate) in the production of concrete.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 7

Location of Proposed Equipment/Operation: Construction Site.

Proposed Equipment/Operation: Runways at an abandoned airbase are to be demolished using registered crushing and screening equipment powered by diesel generator engines. The pavement to be removed will be recycled on-site and reused as building materials for the construction. The project is expected to operate for between 3 to 5 years.

District permits are required since the scope of this project does not meet the portable unit definition as it exceeds the 12-month period.

Example 8

Location of Proposed Equipment/Operation: Aggregate Facility.

Proposed Equipment/Operation: The aggregate facility is involved with residential and commercial construction and development projects. Their current project involves a 122-acre site that will be developed into a commercial shopping center. The project is anticipated to last 5 to 7 years. Their equipment is comprised of registered crushing, screening, and conveying equipment and diesel generator engines.

District permits are required since the scope of this project does not meet the portable unit definition as it exceeds the 12-month period.

Example 9

Location of Proposed Equipment/Operation: Construction project of less than 12 months duration at an existing stationary source.

Proposed Equipment/Operation: Various registered IC engine/generators to power construction equipment, lasting no more than 12 consecutive months.

In this case the work can be conducted under valid PERP or District Registrations as long as the equipment is used for 12 months or less.

Example 10

Location of Proposed Equipment/Operation: Road Construction.

Proposed Equipment/Operation: A 3-year project to refurbish and realign a 10-mile segment of the freeway will involve the removal of existing pavement, on/off ramps, bridges, and cut and fill of adjacent hillside. Proposal includes the use of registered crushing and screening equipment and engines to be used in three phases to recycle the pavement as well as provide backfill materials for engineered slopes and foundations. The equipment needs to be relocated as the project progresses along the freeway.

In this case the work can be conducted under valid PERP or District Registrations as long as the equipment is used at each location for 12 months or less.

Example 11

Location of Proposed Equipment/Operation: Bridge Construction.

Proposed Equipment/Operation: A company is constructing a bridge overpass on a local freeway. Several subcontractors will be involved in various aspects of the construction project to operate registered air compressors, welders, generators, and related construction equipment for different reasons during construction.

In this case the work can be conducted under valid PERP or District Registrations as long as the equipment is used for 12 months or less.

Example 12

Location of Proposed Equipment/Operation: Recycling Business.

Proposed Equipment/Operation: A recycling business at a port operates a transfer and production of biomass. The operation includes collection and processing of construction and demolition debris, green waste, and clean lumber products. The source is proposing to operate registered screens, engines, an air compressor, a shredder, a wood grinder, and a trommel screen to support the transfer and production operations.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 13

Location of Proposed Equipment/Operation: Wood Recycling.

Proposed Equipment/Operation: Registered diesel-powered grinder.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 14

Location of Proposed Equipment/Operation: Composting Facility.

Proposed Equipment/Operation: A green waste composting stationary source has an existing woodchipper permitted by the District to grind wood waste. The source has received a large quantity of wood waste, which must be processed, and is proposing to bring in a registered portable woodchipper to temporarily operate at their source.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 15

Location of Proposed Equipment/Operation: Composting Facility.

Proposed Equipment/Operation: Proposal includes registered diesel engines to power grinders and screens to convert green waste into manufactured mulch products. The equipment will be used primarily at a single stationary source, but also may be used at other customer locations off-site as needed.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 16

Location of Proposed Equipment/Operation: Composting facility that grinds a wide range of green waste and wood materials.

Proposed Equipment/Operation: Use of registered grinder powered by a 60 BHP diesel engine. The equipment is used primarily at the stationary source and occasionally elsewhere.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 17

Location of Proposed Equipment/Operation: Orchard Removal.

Proposed Equipment/Operation: Registered tub grinder for green waste at various locations. The equipment is usually only at a specific site for a few weeks.

In this case the work can be conducted under a valid PERP or District Registration as long as the equipment is used at each location for 12 months or less.

Example 18

Location of Proposed Equipment/Operation: A pharmaceutical facility.

Proposed Equipment/Operation: Two large registered portable diesel-fired engines to be used as standby electrical generators in case of a power outage. There are no upgrade, maintenance, or repair operations going on. The facility does not currently have stationary standby generators.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The installation of the PERP-registered engines **before** an electrical interruption of power from the serving utility would not be considered "unforeseen."

Example 19

Location of Proposed Equipment/Operation: A contaminated soil site.

Proposed Equipment/Operation: Site has proposed to use either a truck-mounted or fixed vapor extraction system using registered portable diesel generators. The operation is expected to last less than one continuous year.

In this case a permit from the District is required to operate at this facility and PERP /local

registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 20

Location of Proposed Equipment/Operation: Business.

Proposed Equipment/Operation: Use of a registered natural gas-fired generator engine to supply variable output electrical power for cold-ironing purposes for ships while at berth at port.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 21

Location of Proposed Equipment/Operation: Business.

Proposed Equipment/Operation: Business accumulates concrete and other materials on site for crushing and recycling as Class II road base. In lieu of using grid power, the source proposes to power the equipment using a registered diesel-fueled generator. This equipment is also used on a circuit, where they accumulate material and return to their stationary source periodically to conduct crushing operations.

In this case a permit from the District is required to operate at this facility and PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source or to supplement or expand the stationary source's operation.

Example 22

Location of Proposed Equipment/Operation: Business.

Proposed Equipment/Operation: A facility is completing an expansion and needs to use a generator on a temporary basis (less than 90 calendar days) to provide prime power while electrical upgrades are being completed.

In this case the work can be conducted under a valid PERP or District Registration as long as the equipment is used less than 90 calendar days.

Example 23

Location of Proposed Equipment/Operation: Aggregate Facility.

Proposed Equipment/Operation: Utilize heavy duty registered welders to conduct maintenance and repair activities on equipment and facilities. The welder is mounted on a vehicle to move around the facility

In this case the work can be conducted under a valid PERP or District Registration as long as the equipment is used for 12 months or less.

Example 24

Location of Proposed Equipment/Operation: Gasoline bulk storage facility.

Proposed Equipment/Operation: A gasoline bulk storage facility needs to prepare its tanks to be repainted. Facility is proposing to use registered unconfined abrasive blasting equipment and associated compressors to prepare aboveground storage tanks for repainting.

In this case the work can be conducted under valid PERP or District Registrations as long as the equipment is used for 12 months or less.

Example 25

Location of Proposed Equipment/Operation: Manufacturing Facility.

Proposed Equipment/Operation: A manufacturing facility is expanding and will have a large amount of concrete work performed on-site. The facility is proposing to use a registered concrete batch plant and associated generator(s) on-site for less than 12 months.

In this case the work can be conducted under valid PERP or District Registrations as long as the equipment is used for 12 months or less.

Example 26

Location of Proposed Equipment/Operation: Manufacturing Facility

Proposed Equipment/Operation: The facility operates a process that has compressors. The compressors are down for maintenance and the facility proposes to bring registered compressors and associated engines to replace its compressors during the maintenance period.

In this case PERP /local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source.

Example 27

Location of Proposed Equipment/Operation: Wastewater pump station.

Proposed Equipment/Operation: Registered pump and associated engine that would replace

the permitted pump station only upon both an interruption of grid power and a failure of the stationary permitted backup generator.

In this case PERP/local registrations are not valid for this activity at this facility. The proposed equipment would be used as an integral part of the operation of a stationary source.

Example 28

Location of Proposed Equipment/Operation: Wastewater treatment facility.

Proposed Equipment/Operation: Once every four to five years, the facility needs to conduct maintenance on its tanks by emptying them and cleaning them up. Facility proposes to bring registered pumps and associated engines to empty the tanks.

In this case the work can be conducted under valid PERP or District Registrations as long as the equipment is used for 12 months or less. The maintenance activities are not considered to be an integral part of the operation of a stationary source.

Example 29

Location of Proposed Equipment/Operation: A shooting range.

Proposed Equipment/Operation: A shooting range requires the periodic use of sand screens and associated engines to remove spent rounds from berms.

In this case both District rules and PERP do not allow registered equipment therefore a District Permit to Operate is required. District Rule 11(d)(20)(i) excludes contaminated soil screening from operating under a registration. PERP § 2457(e) invalidates registrations if by virtue of the activity to be performed hazardous air pollutants will be emitted. In this case lead compounds would be expected in the particulate emissions from the screening operation.

Example 30

Proposed Equipment/Operation: Engines that are primarily used for propulsion. Engines used primarily to provide propulsion are not eligible for District or PERP Registrations. The engines might be subject to CARB's Off-Road regulations. For more information on how to comply with these regulations please visit arb.ca.gov/offroadzone, or call the toll-free hotline at (877) 59DOORS (877-593-6677), or contact CARB via email at doors@arb.ca.gov.

Some engines serve a dual purpose by both propelling a vehicle or the equipment and performing another function (e.g., crushing, grinding, screening, etc.). As discussed above, engines that provide propulsion might be subject to CARB's Off-Road regulations. Additionally, the activity that is being powered by the engine (e.g., crushing, grinding, screening, etc.) might require a permit or registration.