

Category: Military Tactical Support Equipment

California's Military Tactical Support Equipment emissions inventory is an estimate of the amount and types of pollutants emitted from off-road equipment used on military bases. The equipment that make up this category are from California's Portable Equipment Registration Program and currently only includes diesel engines.

The following equipment types are included in this category:

Equipment Type	Fuel Type	2000 Population
A/C unit	D	163
Aircraft Support	D	68
Cart	D	25
Communications	D	10
Compressor (Military)	D	195
Crane	D	21
Deicer	D	4
Generator (Military)	D	1443
Hydraulic unit	D	67
Lift (Military)	D	2
Light	D	5
Other tactical support equipment	D	42
Pressure Washers	D	3
Pump (Military)	D	103
Start Cart	D	2
Test Stand	D	78
Welder	D	79

All equipment in this category have an annual activity of 300 hr/yr.

Emissions Inventory:

As with other OFFROAD equipment types, the emissions inventory for the military tactical support equipment is calculated as the product of the emission rate (in grams per horsepower-hour), engine population, and activity (hours per year) in annual average use hours.

[Calculating Emissions Inventory \(PDF Format\)](#)

For the current emissions inventory (tons/day):

[Air Resources Board Almanac](#)

Input Data Sources:

The input factors used by the OFFROAD Model are obtained from various data sources listed below:

Input Factor	Source of Data
Population (base year 2000)	Statewide Portable Engine Registration Program (2004)
Useful Life	Power Systems Research (1996)
Activity (hr/yr)	Power Systems Research (1996)
Average horsepower	Power Systems Research (1996)
Load factor	Power Systems Research (1996)
Allocation factor	Energy & Environmental Analysis (EEA) document (1995)
Growth factor	DRI/McGraw-Hill employment data (1994)
Survival rate	Power Systems Research (1996)

For more additional background information on the input factors used by the OFFROAD Model: [\(Document Link\)](#)

For tables of input data for Military Portable Equipment: [\(Document Link\)](#)

Adopted Regulations for Entertainment Equipment:

2005: *(Reflected in OFFROAD Model)* Board approved a regulation to establish a Statewide Portable Equipment Registration Program. [\(Document Link\)](#)

2004: *(Reflected in OFFROAD Model)* Board approved amendment to California's existing off-road diesel regulations to harmonize with USEPA Tier 4 regulation (40 CFR 1039). [\(Document Link\)](#)

2000: *(Reflected in OFFROAD Model)* Board approved the emissions inventory for off-road large CI engines (≥ 25 hp) from the OFFROAD Model. [\(Document Link\)](#)

Future Improvements to the Military Tactical Support Equipment Category:

The emissions inventory from the OFFROAD Model strives to accurately represent the 'real-world' as accurately as possible. Therefore, the methodologies and data sources are constantly re-evaluated and updated where applicable. The following items are future improvements for the military tactical support equipment category:

- Update population and activity values as new data becomes available
- Revise growth factors using REMI employment data (2001)
- Allocate equipment from the county down to the neighborhood level (GIS)