

Category: Stationary Commercial Diesel Engines

Stationary commercial diesel engines include generators, pumps, air compressors, generators, pressure washers, pumps, and welders. They range in horsepower from less than 15 horsepower to over 750 horsepower. These engines function as either primary engines or as backup engines for emergencies.

The stationary engine population was estimated based on a 1996 vintage database of diesel engines developed by Power Systems Research (PSR), district permit files and Portable Equipment Database managed by the Stationary Source Division of the Air Resources Board. The OFFROAD model was used to grow the 1996 population to a 2002 base year. The table below shows the estimated number of stationary commercial engines.

Type	2002 Population
Prime Generators	626.8
Prime Pumps	407.9
Other	289
Backup Generators	11909.2
Backup Pumps	7750.1
Statewide Total	20983

Emissions Inventory:

The inventory for stationary commercial engines was revised in August, 2003 as part of the stationary commercial engine air toxics control measure (ATCM). The population was derived from the PSR database described above and grown with OFFROAD model growth factors. The population was split among the counties of the state using human population as a surrogate.

The horsepower of the engines was estimated using a composite of the PSR database for small engines (less than 750 horsepower) and district permit data for large engines (greater than 750 horsepower). The age distribution used for the engines was taken from the OFFROAD model

The load factor used and the emission factors used are from the OFFROAD model.

The methodology for stationary commercial engines is posted on the web as part of the stationary commercial engine ATCM at: <http://www.arb.ca.gov/regact/statde/appd.pdf>

Input Data Sources:

The input factors used for diesel irrigation engines come from various data sources:

Input Factor	Source of Data
Population (base year 2002)	Composite of Power Systems Research (1996) and OFFROAD Model
County Populations:	CA. Department of Finance Human Population
Engine Horsepower	Composite of District Permit data and Power Systems Research.
Engine Age	ARB OFFROAD Model
Load Factor	ARB OFFROAD Model
Emission Factors	ARB OFFROAD Model
Growth Factors	ARB OFFROAD Model

Adopted Regulations for Ocean Going Vessels:

2004: ARB adopted Air Toxics Control Measure for In-use Stationary Compression Ignition Engines.