San Joaquin Valley Air Pollution Control District

# Supplemental Application Form

#### **Emergency/Low-Use IC Engines**

Please complete one form for each engine.

### This form must be accompanied by a completed Authority to Construct/Permit to Operate Application form

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| --- |
| Permit to be issued to: |
| Location where the equipment will be operated: |
| Installation date: |

## EQUIPMENT DESCRIPTION

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Engine Details | Engine Manufacturer: | | | | | | Engine Tier Rating: | | | | | | | | | | |
| Engine Model: | | | | | | Engine Year of Manufacture: | | | | | | | | | | |
| Engine Serial Number: | | | | | | | | | | | | | | | | |
| EPA Certification Family Number: | |  |  |  |  | |  |  | |  | **.** |  |  |  |  |  |
| Engine’s Type of Combustion:  Rich-Burn  Lean-Burn  4-Stroke  2-Stroke | | | | | | | | | | | | | | | | |
| Maximum Intermittent Brake Horsepower Rating of the Engine (per the Engine Data Plate): bhp | | | | | | | | | | | | | | | | |
| Engine’s Rated Power Output for the Process the Engine Serves:       bhp | | | | | | | | | | | | | | | | |
| Process Data | Process the Engine Serves: | | | | | | | | | | | | | | | | |
| Electrical Power Generation Only | Generator Manufacturer: | | | | | | | | Model: | | | | | | | |
| Power Output:       kW | | | | | | | | | | | | | | | |
| Will this equipment be used in an electric utility rate reduction program?  Yes  No | | | | | | | | | | | | | | | | |
| **Fuel Data** | Fuel Type:  Diesel  Natural Gas  LPG/Propane  Gasoline  Other: | | | | | | | | | | | | | | | | |
| For “Other” fuels only: Higher Heating Value:       Btu/scf, or       Btu/gal,  For “Other” fuels only: An Ultimate Fuel Analysis or the combustion F-Factor       dscf/MMBtu | | | | | | | | | | | | | | | | |
| Sulfur Content:       gr/100 scf (gaseous fuel) or       % by weight (liquid fuel) | | | | | | | | | | | | | | | | |
| Fuel Consumption at Maximum Rated Output:       gal/hr, or       scf/hr | | | | | | | | | | | | | | | | |
| **Rule 4702**  **Type of Use** | **Emergency Standby** - Limited exclusively to power primary mechanical or an electrical generator during periods of unscheduled power outages beyond the control of the operator, and limited to 20 - 100 hr/yr (depending on the engine’s PM10 emission factor) for maintenance and testing operation.  This engine is specifically used to power a pump for a municipal water supply.  I request the higher opacity limit of 40% with the corresponding operational limits of 30 minutes per week and 2 hours per month for maintenance and testing. (CH&SC 41701.6)  I request the lower opacity limit of 20%.  This engine is specifically used to provide power at a health care facility. (CH&SC 1250)  This engine is subject to Office of Statewide Health Planning and Development (OSHPD) requirements. | | | | | | | | | | | | | | | | |
| **Special Case Emergency** - Limited exclusively to preserve or protect property, human life, or public health during a disaster or a state emergency (e.g. fire or flood) and limited to 20 - 100 hr/yr (depending on the engine’s PM10 emission factor) for maintenance and testing operation.  This engine is specifically used to power a direct-drive firewater pump.  This firewater pump engine is subject to National Fire Protection Association (NFPA) requirements. | | | | | | | | | | | | | | | | |
| **Low Use** - Limited to ≤ 200 hr/yr of operation for **ALL** purposes combined, including maintenance and testing. | | | | | | | | | | | | | | | | |
| Hour Meter | Note: All engines are required to have either a nonresettable elapsed time meter or an alternate device, method, or technique, approved by the APCO, for determining elapsed operating time.  Equipped with a Nonresettable Elapsed Operating Time Meter  Alternate Method (please provide details): | | | | | | | | | | | | | | | | |

**EMISSIONS CONTROL**

|  |  |  |
| --- | --- | --- |
| **Emissions Control Equipment**  (Check all that apply) | Positive Crankcase Ventilation System | 90% Efficient crankcase emission control device |
| Turbocharger | Intercooler/Aftercooler |
| Automatic Air/Fuel Ratio or O2 Controller - Manufacturer: | |
| Non-Selective Catalytic Reduction: Manufacturer:       Model: | |
| Control Efficiencies: NOX       %, SOX       %, PM10       %, CO       %, VOC       % | |
| Particulate Filter - Manufacturer:       Model:  Control Efficiency:       % | |
| Other (please specify): | |

**EMISSIONS DATA**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Note: See District BACT and District Rule 4702 requirements for applicability to proposed engine at <http://www.valleyair.org/busind/pto/bact/chapter3.pdf> and <http://www.valleyair.org/rules/currntrules/r4702.pdf>. | | | | |
| **Emissions Data** | Pollutant | **(g/bhp-hr)** | **(g/kW-hr)** | **(ppmvd)** |
| Nitrogen Oxides (NOx) |  |  |  |
| Volatile Organic Compounds (VOC) |  |  |  |
| NOx + NMHC |  |  |  |
| Particulate Matter (PM10) |  |  |  |
| Carbon Monoxide |  |  |  |
| % O2, dry basis, if corrected to other than 15%:       % | | | |
| **Source of Data** | Manufacturer’s Specifications  Emissions Source Test  CARB/EPA Certification  Other       **Note: please provide copies of all sources of emissions data.** | | | |

## HEALTH RISK ASSESSMENT DATA

|  |  |  |  |
| --- | --- | --- | --- |
| Operating Hours | Maximum Operating Schedule:       hours per day, and       hours per year | | |
| **Receptor Data** | Distance to  nearest Residence | feet | Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc. |
| Direction to nearest Residence |  | Direction from the stack to the receptor, i.e. Northeast or South. |
| Distance to  nearest Business | feet | Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc. |
| Direction to nearest Business |  | Direction from the stack to the receptor, i.e. North or Southwest. |
| **Stack Parameters*****\*Note: Stack parameters may be listed on the permit as enforceable permit conditions*** | Release Height  *(See Note\*)* | feet above grade | |
| Stack Diameter  *(See Note\*)* | inches at point of release | |
| Rain Cap  *(See Note\*)* | Flapper-type  Fixed-type  None  Other: | |
| Stack Orientation  *(See Note\*)* | Vertical  Horizontal  Other:      ° from vert. or       ° from horiz. | |
| **Exhaust Data** | Flowrate:       acfm | | Temperature:       °F |
| **Transportable** | Is this engine transportable?  Yes  No | | |
| **Facility Location** | Urban (area of dense population)  Rural (area of sparse population) | | |