

# FORM ICE100 INTERNAL COMBUSTION ENGINES

Engine Manufacturer: \_\_\_\_\_ Brake Horsepower: \_\_\_\_\_ @ \_\_\_\_\_ RPM  
 Model Number: \_\_\_\_\_ Identification/Serial Number (if known): \_\_\_\_\_  
 Engine Family \_\_\_\_\_  
 Date of Installation \_\_\_\_\_ Date Engine was Manufactured \_\_\_\_\_ Cubic Inch Displacement: \_\_\_\_\_

Engine Type:       4-Cycle                       2-Cycle

Aspiration Type:     Turbo Charged       Normal                       After Cooled

Fuel Type: <input type="checkbox"/> CARB Diesel <input type="checkbox"/> Gasoline <input type="checkbox"/> Natural Gas <input type="checkbox"/> Alternative Diesel (specify) _____ <input type="checkbox"/> Other(specify) _____ Fuel Usage Rate (if known) _____	If Gaseous Fueled: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn
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Is engine used for:                       Prime Power                       Emergency Standby Exclusively\*

\*Emergency standby exclusively allows operation when there is an actual interruption of power by the serving utility, emergency water pumping for flood control, fire fighting or water pressure. Operation allows up to **50 hours/year** of operation for maintenance purposes and **200 total hours/year** of operation for emergency and maintenance purposes combined (The Diesel Air Toxics Control Measure may restrict the engines maintenance hours further) .

Maximum number of hours of operation for which the permit is being requested (see note above):  
 \_\_\_\_\_ hours/day                      \_\_\_\_\_ hours/quarter                      \_\_\_\_\_ hours/year

Typical Load (% of hp) \_\_\_\_\_                      Typical Hours of Operation \_\_\_\_\_

Which of the following (if any) will be used to control emissions?

Fuel injection timing retard \_\_\_\_\_ degrees retarded from normal

Selective Catalytic Reduction

Non-Selective Catalytic Reduction/3 Way Catalysts

Other(specify) \_\_\_\_\_

Equipment Driven by this Engine:

Generator    KW rating \_\_\_\_\_                       Compressor                       Pump    Specify Use \_\_\_\_\_

Generator that drives a pump

Other (specify) \_\_\_\_\_

Emission Factors: Complete the Table below

Pollutant	Emission factor	Units <sup>1</sup>	Basis <sup>2</sup>
NOx			
ROC			
NOx+ROC			
CO			
SOx			
PM			

<sup>1</sup>Emission factors may be reported in g/bhp-hr, lb/gal, lb/mmbtu or lb/scf  
<sup>2</sup>Such as, Manufacturer Data, Source Test, CARB/EPA Certification, EPA Document AP 42, etc...

Exhaust Stack Parameters:

Stack Height: \_\_\_\_\_ ft. above ground      Stack Inner Diameter: \_\_\_\_\_ in.      Stack Flow Rate: \_\_\_\_\_ cfm

Stack Temperature \_\_\_\_\_ °F

- Exhaust stack location:     Stack on building roof. Height of roof \_\_\_\_\_ ft. above ground  
                                   Stack attached to side of building. Height of building \_\_\_\_\_ ft. above ground  
                                   Stack is not connected to building. Distance to nearest building \_\_\_\_\_ ft

**Important Note: Exhaust stack must vent upward (not to the side) and cannot be equipped with a rain cap that would restrict vertical flow of exhaust gases.**

Receptor Information:

Distance from engine to the property line of the nearest residence \_\_\_\_\_(ft)

Distance from engine to the property line of the nearest K-12 school \_\_\_\_\_(ft)

Distance from engine to the property line of the nearest non-residential, non- school site \_\_\_\_\_(ft)

**BEST AVAILABLE CONTROL TECHNOLOGY REQUIREMENTS:** Please refer to SMAQMD's IC Engine Manual for BACT and T-BACT applicability and standards. A copy of the SMAQMD's IC Engine Manual can be obtained by visiting the District's web site ([www.airquality.org](http://www.airquality.org)) or by contacting the District at (916) 874-4800.

**DRAWINGS REQUIRED:** Drawings should be submitted on 8-1/2" X 11" sheets or larger. Drawings must clearly show the required information but do not need to be professionally drawn. All drawings should be drawn with north facing up and to scale.

Nearby Buildings:

Submit a drawing showing all buildings affecting the exhaust stack or point of release. The area of influence for a building is defined as the area within 5 times the lesser of the height or width of a building. For each building, the drawing must show length, width, and height of the building, and distance to exhaust stack or point of release.

Property Line:

Submit a drawing showing the exhaust stack in relation to the property line. The drawing must be drawn to scale, with North facing up, and must show the entire property.

Receptors:

Submit a drawing showing residential and commercial buildings surrounding the property. Indicate the distance from the stack/point of release to the residential/commercial buildings.