#### GOP-004 Emergency Generator Burning Gaseous Fue

Please note that the system will log you out after 15 minutes of inactivity. If entering a large amount of data, please click on the Save button periodically to save data and reset the 15 minute timer. From the Ceritification page, you can use the menu on the left-hand side of the page to return to this screen and add additional data if necessary.

#### Section B: Reason for Applying

Click one of the following buttons to confirm that the proposed equipment meets the requirements of GOP-004 and is currently not permitted in a facility's approved Title V Operating Permit:

- 1. a single emergency generator, where the date of manufacture is on or after January 1, 2009 with a Certificate of Conformity and certified to conform with the emissions standards of the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (NSPS Subpart JJJJ) for the equipment manufacture date, maximum engine power, engine type and fuel;
- 2. O A single emergency generator, constructed or reconstructed before June 12, 2006, and subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (MACT Subpart ZZZZ); or
- 3. O A single emergency generator, constructed on or after June 12, 2006 and before January 1, 2009, including a Commercial, Institutional or Residential Emergency Stationary RICE.

#### Section C: Inventories

The Applicant may review the current list of Equipment (E) Numbers, Emission Unit (U) Numbers and Emission Point (PT) Numbers, on record for the Facility and input a unique Number. Note that you may leave these fields blank and the Department will automatically assign the next available number for these items.

Note: The Applicant does not need to complete the NJID fields but must fill out all required facility designations and descriptions. Required fields are indicated by an asterisk (\*).

Please note that numbers should not contain any characters other than a decimal point (i.e., 1000.0 not 1,000.0). Failure to do so could result in an errored submission.

#### Equipment Associated with this General Operating Permit

| E NJID # | *Facility Designation | *Install. Date<br>(mm/dd/yyyy) | Last Mod. Date<br>(mm/dd/yyyy) | Equipment Type     | *Equipment Make | *Equipment Manufac. | *Equipment Model | *Manufac. Date<br>(mm/dd/yyyy) | *Max Rated<br>Heat Input<br>(MMBTU/hr (HHV)) | *Max<br>Engine<br>Power,kW | *Max<br>Engine<br>Power,HP |
|----------|-----------------------|--------------------------------|--------------------------------|--------------------|-----------------|---------------------|------------------|--------------------------------|--|----------------------------|----------------------------|
|          |                       |                                |                                | Emergency Generato |                 |                     |                  |                                |  |                            |                            |

#### Review Equipment

## \*Fuel Type Select the Fuel Type associated with this piece of equipment from the options below.

#### Emission Unit Associated with this General Operating Permit

| U NJID # | *Facility Designation |
|----------|-----------------------|
|          |                       |

#### Review Emission Units

#### Emission Point Associated with this General Operating Permit

|   | PT NJID # | *Facility Designation | *Configuration | ^*PT Equiv.<br>Diam. (in.) | *Height (ft.) | *Distance to<br>Property Line<br>(ft.) | *Exhaust<br>Temp. (deg. F) | *Exhaust Vol.<br>(acfm) | *Discharge<br>Direction |
|---|-----------|-----------------------|----------------|----------------------------|---------------|--|----------------------------|-------------------------|-------------------------|
| Y |           |                       | ~              |                            |               |  |                            |                         | ~                       |

^PT Equivalent Diameter Calculator
Use the calculator below to determine the
PT Equivalent Diameter above from length
and width measurements.

| Length | Width | PT Equivalent  |
|--------|-------|----------------|
| (in.)  | (in.) | Diameter (in.) |
|        |       |                |

#### Potential to Emit (PTE) Calculations

ENTER ALL INFORMATION IN THE TABLE BELOW, FOR AN NSPS SUBPART JJJJ EMERGENCY GENERATOR (MANUFACTURED ON OR AFTER JANUARY 1, 2009): VOC, NOX, CO G/HP-HR EMISSION FACTORS MUST BE FROM THE SPECIFICATION SHEETS PROVIDED BY THE EQUIPMENT MANUFACTURER OR AS CALCULATED IN THE TABLES BELOW, AS APPLICABLE, USEPA AP42 ENISSION FACTORS WILL BE USED FOR TSP AND PM10 (TSP 0.0091 LEJ/MBTU JAI) DPM10 0.0384 LEJ/MBTU JAIN DPM10 DPM1

| kW | НР | *Hours/<br>Year | *VOC<br>g/HP-hr | *NOx<br>g/HP-hr | *CO<br>g/HP-hr | TSP<br>lb/MMBTU | PM-10<br>lb/MMBTU |
|----|----|-----------------|-----------------|-----------------|----------------|-----------------|-------------------|
|    |    |                 |                 |                 | 1              | 0.0091          | 0.0384            |

Hours/Year must be based on hours for testing and maintenance only and must not exceed 100 hours per year, as recommended in writing by the manufacturer or the requirements of a federal or state law or regulation.

If g/HP-hr are not available from the manufacturer, the permitee may use the tables below for conversion.

Use the table below to convert manufacturer's emission rates from g/kW per hour to g/HP per hour.

|         | VOC | NOx | co | NOx+NMHC |
|---------|-----|-----|----|----------|
| g/kW-hr |     |     |    |          |
| g/HP-hr |     |     |    |          |

Use the table below to convert manufacturer's emission rate of NOx+NMHC to NOx and VOC if NOx and VOC emission rates are not available from the manufacturer.

|         | NOx+NMHC | voc | NOx |
|---------|----------|-----|-----|
| g/HP-hr |          |     |     |

#### PTE Calculation Results

For an NSPS Subpart JJJJ Emergency Generator (Manufactured on or after January 1, 2009), PTE will be calculated automatically using the data entered above for HP, g/HP-hr, MMBTU/hr and hours of testing and maintenance.

For an Emergency Generator constructed before January 1, 2009, PTE will be calculated automatically using the data entered above for MMBTU/hr and hours of testing and maintenance.

|       | VOC | NOx | co | TSP | PM-10 |
|-------|-----|-----|----|-----|-------|
| lb/hr | 0   | 0   | 0  | 0   | 0     |
| tpy   | 0   | 0   | 0  | 0   | 0     |

### Section D: Permitting Options

This General Operating Permit covers a single Emergency Generator.

The table below lists the appropriate Permitting Options based upon type of engine, size, fuel, manufacture date, and your selection in Section B. The appropriate option will be selected once the corresponding values in the Equipment table above are entered.

If you do not see a check mark under the "Selected" column for any single row below, please review the entries in the Equipment table and Section B to ensure they are correct.

| Selected | Permitting Option | Type of Engine      | Fuel  | Max Engine Power                      | Manufacture Date  |
|----------|-------------------|---------------------|---|---------------------------------------|---|
|          | EG-004-1          | Emergency Generator | Natural Gas or<br>Lean Burn Propane           | 25 < HP < 130<br>(19 < kW < 100)      | January 1, 2009 or Later  |
|          | EG-004-2          | Emergency Generator | Natural Gas or<br>Lean Burn Propane           | HP >= 130<br>(kW >= 100)              | January 1, 2009 or Later  |
|          | EG-004-3          | Emergency Generator | Rich Burn Propane                             | 25 < HP < 130<br>(19 < kW < 100)      | January 1, 2009 or Later  |
|          | EG-004-4          | Emergency Generator | Rich Burn Propane                             | HP >= 130<br>(kW >= 100)              | January 1, 2009 or Later  |
|          | EG-004-5          | Emergency Generator | Natural Gas or<br>Propane (Lean or Rich Burn) | >= 1 MMBTU/hr (HHV)<br>Max Heat Input | Constructed or Reconstructed Before June 12, 2006   |
|          | EG-004-6          | Emergency Generator | Natural Gas or<br>Propane (Lean or Rich Burn) | >= 1 MMBTU/hr (HHV)<br>Max Heat Input | Constructed On or After June 12, 2006 and Before January 1, 2009, Incl. A Commercial Institutional or Residential Emergency Stationary Rice |

# SUBMIT