

Instruction Sheet
DEP7007EE Internal Combustion Engines

This form summarizes operation, design, fuel, and emission information for internal combustion engines. All facilities that have an engine complete this form.

Source Name: Enter the name of the facility.

KY EIS (AFS) #: Enter the Kentucky Emissions Inventory Section identification number of the facility. The KY EIS number follows the format: 21-____-_____. A new facility will not have a KY EIS number.

Permit #: Enter the permit number of the permitted facility. This number is found on the front page of the permit. A new facility will not have a permit number.

Agency Interest (AI) ID: Enter the agency interest number of the facility. This number is found on the front page of the permit. A new facility will not have an agency interest number.

Date: Enter the date the form was completed. If the form is being revised, enter the date the form was revised.

Section EE.1: General Information

Emission Unit #: Enter the unique number used to identify the emission unit. If the emission unit is currently permitted, use the existing identification number.

Emission Unit Name: Enter the name of the emission unit. Include the descriptor “fugitive” for processes that are fugitive emissions.

Control Device ID: Enter the control device ID. If there is not a control device, enter N/A.

Stack ID: Enter the number of the stack. A detailed description of the stack should be provided on DEP7007N. If the emission unit does not vent to a stack or other functionally equivalent opening, enter fugitive.

Manufacturer: Enter the name of the manufacturer of the engine.

Model Number: Enter the model of the engine.

Model Year: Enter the model year of the engine.

Date of Manufacture: Enter the month, day, and year the engine was manufactured.

Proposed/Actual Date of Construction Commencement: Enter the proposed or actual date of construction commencement for the engine.

Date Reconstructed/Modified: Enter the month, day, and year the engine was reconstructed or modified, if applicable.

List Applicable Regulations: List all applicable state and federal regulations.

Section EE.2: Operating Information

Emission Unit #: Enter the unique number used to identify the engine. If the engine is currently permitted, use the existing identification number.

Engine Purpose: Identify the purpose of the engine as one of the following: Non-emergency, Emergency, Fire/Water Pump, Black-start engine for combustion turbine, or Engine-testing.

Hours Operated: Enter the number of hours per year the engine is operated.

Is this engine a rental? Indicate whether the engine is a rental by writing “yes” or “no”.

Rental Time Period: Enter the number of hours that the engine will be rented. Enter “N/A” if the engine is not a rental.

Alternate Operating Scenarios: Describe any operating scenarios in which the engine may be used for a different purpose.

Section EE.3: Design Information

Emission Unit #: Enter the unique number used to identify the engine. If the engine is currently permitted, use the existing identification number.

Engine Type: Identify the type of engine from the following choices: Commercial, Institutional, Stationary, or Non-Road. If more than one type applies, list each type.

Ignition Type: Indicate whether the ignition is compression or spark ignition.

Engine Family: Identify all that apply from the following choices: 2-stroke, 4-stroke, Rich Burn, or Lean Burn.

Maximum Engine Power: Enter the maximum designed engine power in braking horsepower.

Maximum Engine Speed: Enter the maximum designed engine speed in revolutions per minute.

Total Displacement: Enter the total displacement of the engine cylinders in liters.

Number of Cylinders: Enter the number of cylinders in the engine.

Section EE.4: Fuel Information

Emission Unit #: Enter the unique number used to identify the engine. If the engine is currently permitted, use the existing identification number.

Identify if Primary, Secondary, or Tertiary Fuel: Identify the type of fuel used as “Primary,” “Secondary,” or “Tertiary”.

Fuel Type: Identify the fuel type as one of the following choices: Diesel, Gasoline, Natural Gas, Liquefied Petroleum Gas (LPG), Landfill/Digester Gas, or other.

Fuel Grade: Specify the fuel grade from the engine using diesel, gasoline, and LPG.

Percent Time Used: Enter the percentage of time for each fuel type. If more than one fuel type is used, the percent time used for one engine should add up to 100%.

Maximum Fuel Consumption: Enter the value for the maximum design value of the engine.

Heat Content: Enter the heat content of the fuel in British thermal units per pound (Btu/lb) or Btu per gallon (Btu/gal).

Sulfur Content: Record the sulfur content of the fuel burned as a percentage.

SCC Code: Enter the Source Classification Code (SCC).

SCC Units: Enter the SCC units.

Section EE.5: Emission Factor Information

Emission Unit #: Enter the unique number used to identify the engine. If the engine is currently permitted, use the existing identification number.

Fuel: Identify the fuel type using either primary, secondary, or tertiary.

Pollutant: Enter the name of the pollutant for each type of fuel. For all fuel types, provide emission factors for the following pollutants: PM, PM₁₀, PM_{2.5}, NO_x, SO₂, VOC, CO, CO₂, Nitrous Oxide (N₂O), and Methane (CH₄). In addition to the pollutants listed above, provide the emission factors for the following pollutants:

For diesel-fired engines only: benzene, toluene, xylene

For natural gas-fired engines only: ammonia, formaldehyde, lead

Emission Factor: Enter the emission factor of the fuel type for the pollutant. The emission factor should be expressed in units of pounds per SCC unit.

Source of Emission Factor: Provide the source of the emission factor completed with references, including AP-42 Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources. If other sources are used, identify as such.

Section EE.6: Notes, Comments, and Explanations

Use this sheet provide additional notes, comments, or explanations on the information provided in Sections EE.1, EE.2, EE.3, EE.4 and EE.5.