

Emissions Inventory Request Form Instructions

ETHYLENE OXIDE STERILIZATION

Please refer to the general instructions for guidance regarding the following sections: Reporting Year, Facility Identification, Permit Information, Device Information, Stack / Ducted Emissions and Fugitive Release Emissions.

MATERIAL/ PROCESS INFORMATION

Fill in all the data fields. Complete all blanks using the specified units.

CALCULATION METHOD SELECTION

C01-A01 - Sterilizer-100% ETO-Catalytic Oxidizer (99% Efficiency)

C01-A02 - Sterilizer-10% ETO + 90% HCFC-Catalytic Oxidizer (99% Efficiency)

C01-A03 - Sterilizer-8.6% ETO + 91.4% HCFC-Catalytic Oxidizer (99% Efficiency)

C01-A04 - Sterilizer-8.6% ETO + 91.4% CO₂-Catalytic Oxidizer (99% Efficiency)

C01-A05 - Sterilizer-10% ETO + 90% HCFC-Childrens Hospital-Acidic Scrubber (99% Ef

Sterilant Name: The sterilant gas may be comprised of 100% ethylene oxide (EtO), or EtO mixed with a diluent gas. Please provide the name of the sterilant gas used at this facility.

Sterilant Manufacturer: Please provide the name of the manufacturer of the gas used.

Annual Gas Usage (lbs/yr): Report the total number of pounds of sterilant gas used.

Gas Usage per Load (lbs/load): Report the pounds of sterilant gas used for one load of sterilizing.

Loads per Year (loads/yr): Report the number of the loads conducted by each sterilizer during the reporting year.

Material Information – Ethlene Oxide (wt %): Report the weight percent of the EtO in the sterilant gas.

Material Information – Diluent Gas Name: Provide the name of the diluent gas(es) in the sterilant gas (i.e., carbon dioxide, chlorofluorocarbons, etc.).

Material Information – Diluent Gas (wt %): Report the weight percent of the diluent gas in the sterilant gas.

Capture and Control Equipment: Identify any control systems used and cite control/control efficiencies. Unless previously supplied for emissions inventory or listed in the permit description, all efficiencies must be justified with supporting documentation. Upload supporting documentation to EIS before submittal.

Device Operating Schedule:

Daily Operation (hours/day): Report the average amount of hours the device operates in a typical day.

Weekly Operation (days/week): Report the average number of days the device operates in a typical week.

Annual Operation (days/year): Report the number of days the device operated during the Reporting Year.

POLLUTANT NAME (lbs emitted/lb sterilant used)

The District uses mass balance to determine the emissions factors for ducted emissions. Control devices are assumed to meet Rule 1203 control efficiency requirements. Site-specific emission factors must incorporate the device control efficiency, be reported in units of pounds of pollutant released per pound of sterilant gas used, and include supporting documentation.

FUGITIVE EMISSIONS

EIS is not currently set up to calculate fugitive emissions. Please submit a second set of data for fugitive emissions, including the upload of EtO indoor concentrations for each process (pre-, post treatment), fugitive emission controls, and exhaust flow rates (if any) to calculate fugitive emission rates.