

ETHYLENE OXIDE STERILIZERS

Air General Permit Example Registration Worksheet

The Florida Department of Environmental Protection (“Department” or “FDEP”) has established an air general permit under paragraph 62-210.310(5)(g), Florida Administrative Code (“F.A.C.”), for ethylene oxide sterilizers. An air general permit is an authorization by rule to construct or operate a specific type of air pollutant emitting facility. Use of such authorization by any individual facility does not require action by the Department. The terms and conditions of the air general permit are set forth in the rule, rather than in a separately issued air construction or air operation permit.

If you are the owner or operator of an eligible facility comprising one or more ethylene oxide sterilizers, you may register to use the air general permit under paragraph 62-210.310(5)(g), F.A.C., by following the general procedures and conditions given under subsections 62-210.310(2) and 62-210.310(3), F.A.C.

To register, you may use the Department’s new online Air General Permit Electronic Registration Submittal system (<http://www.dep.state.fl.us/air/permitting-compliance/content/air-general-permits>), or complete this registration worksheet and submit it to the address below, along with the air general permit registration processing fee (\$100.00), payable to FDEP.

Regular USPS Mail Delivery

Department of Environmental Protection
Receipts
Post Office Box 3070
Tallahassee, Florida 32315-3070

OR

Overnight Delivery (FedEx, UPS, DHL, etc.)

Department of Environmental Protection
3800 Commonwealth Blvd.
Mail Station 77
Tallahassee, Florida 32399

If you properly register to use an air general permit, and are not denied use of the air general permit by the Department, you are authorized to construct and operate the facility in accordance with the general terms and conditions of Rule 62-210.310, F.A.C., and the specific terms and conditions of paragraph 62-210.310(5)(g), F.A.C. Your facility may vary, so be sure your registration describes the operations at your facility in sufficient detail to demonstrate the facility’s eligibility for use of the air general permit and to provide a basis for tracking any future equipment or process changes. Your registration should describe all air pollutant-emitting processes and equipment at the facility, and it should identify any air pollution control measures or equipment used.

The rules do not require any specific format for the registration. This worksheet, however, has been designed to assist owners and operators. Using it as a template for a general permit registration will help ensure that all necessary information is submitted.

Additional information can be found on the Department’s air general permit program website listed above or by calling the Small Business Environmental Assistance Program Hotline at 1-800-722-7457.

**ETHYLENE OXIDE STERILIZERS
AIR GENERAL PERMIT EXAMPLE REGISTRATION WORKSHEET**

Facility Identification Number - If known (seven digit number)

Registration Type

Check one:

INITIAL REGISTRATION - Notification of intent to:

- Construct and operate a proposed new facility.
- Operate an existing permitted facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit). If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. (See "Surrender of Existing Air Operation Permit(s)" below.)
- Operates an existing facility not currently permitted or using an air general permit.

RE-REGISTRATION (for facilities currently using an air general permit) - Notification of intent to:

- Continue operating the facility after expiration of the current term of air general permit use.
- Continue operating the facility after a change of ownership.
- Make an equipment change requiring re-registration pursuant to paragraph 62-210.310(2)(e), F.A.C.
- Any other change not considered an administrative correction under paragraph 62-210.310(2)(d), F.A.C.

Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only, if Applicable

All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s):

General Facility Information

Facility Owner/Company Name (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.)

Site Name (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a complete registration must be submitted for each.)

Facility Location (Physical location of the facility, not necessarily the mailing address.)

Street Address: _____

City: _____

County: _____

Zip Code: _____

Facility Start-Up Date (Estimated start-up date of proposed **new** facility.)(N/A for existing facility.)

Facility Contact

<p><u>Name and Position Title</u> (Plant manager or person to be contacted regarding day-to-day operations at the facility.) Print Name and Title: _____</p>
<p><u>Facility Contact Telephone Numbers</u> Telephone: _____ Fax: _____ Cell phone: _____ E-mail: _____</p>
<p><u>Facility Contact Mailing Address</u> Organization/Firm: _____ Mailing Address: _____ City: _____ County: _____ Zip Code: _____</p>

Other Contact/Representative (to serve as additional Department contact)

<p><u>Name and Position Title</u> Print Name and Title: _____</p>
<p><u>Other Contact/Representative Telephone Numbers</u> Telephone: _____ Fax: _____ Cell phone: _____ E-mail: _____</p>
<p><u>Other Contact/Representative Mailing Address</u> Organization/Firm: _____ Mailing Address: _____ City: _____ County: _____ Zip Code: _____</p>

Facility Information

1. Ethylene oxide sterilization unit description.

(a) How many ethylene oxide sterilization units do you have on-site? []

(b) For each unit on-site, please provide the following information:

Vent Type*	Date Initially Purchased From Manufacturer	Status	Control Device Required	Date Control Installed (if same as purchase date, write "SAME")
<input type="checkbox"/> SC <input type="checkbox"/> CE <input type="checkbox"/> AR		<input type="checkbox"/> Existing <input type="checkbox"/> New	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<input type="checkbox"/> SC <input type="checkbox"/> CE <input type="checkbox"/> AR		<input type="checkbox"/> Existing <input type="checkbox"/> New	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<input type="checkbox"/> SC <input type="checkbox"/> CE <input type="checkbox"/> AR		<input type="checkbox"/> Existing <input type="checkbox"/> New	<input type="checkbox"/> YES <input type="checkbox"/> NO	

*VENT TYPE KEY: SC = Sterilization Chamber CE = Chamber Exhaust AR = Aeration Room

(b) Control devices are required, but not yet installed []

2. **Ethylene Oxide Usage**

<p>If this is an initial registration for an ethylene oxide sterilizer, provide an estimate of the facility's expected ethylene oxide to be purchased over the next 12-month period.</p>
<p>If this is a re-registration for an ethylene oxide sterilizer, provide the highest total amount of ethylene oxide purchased in any consecutive 12 months, over the last 5 year period.</p> <p>Indicate the 12-month period over which this usage occurred.</p>

3. What control technology is required for sterilization units pursuant to this general permit?

(Indicate with an "X".)

- | | | | |
|--------------------------|--------------------------|---------------|--------------------------|
| Acid-water scrubber | <input type="checkbox"/> | Other | <input type="checkbox"/> |
| Catalytic oxidation unit | <input type="checkbox"/> | None required | <input type="checkbox"/> |
| Thermal oxidation unit | <input type="checkbox"/> | | |

Helpful Definitions

"Aeration Room" - Any vessel or room that is used to facilitate off-gassing of ethylene oxide at a sterilization facility.

"Aeration Room Vent" - The point(s) through which the ethylene oxide emissions from an aeration room occurs.

"Affected Source" - A facility using 1 or more tons but less than 10 tons of ethylene oxide within all consecutive 12-month periods after December 6, 1996.

"Baseline Temperature" - Any temperature at the outlet point of a catalytic oxidation unit control device or at the exhaust point from the combustion chamber for a thermal oxidation unit control device established during the performance test when the respective unit achieves at least 99 percent control of ethylene oxide emissions.

"Chamber Exhaust Vent" - The point(s) through which ethylene oxide emissions are removed from the sterilization chamber during chamber unloading following the completion of sterilization and associated air washes.

"Compliance Date" - The date by which a source subject to the emissions standard of this rule chapter is required to be in compliance with them.

"Construction" - The on-site fabrication, erection, or installation of an affected source.

"Effective Date" - For the purposes of this general permit, December 6, 1994.

"Emissions Unit" - Any part or activity of a facility that emits or has the potential to emit any air pollutant.

"Existing" - Any sterilization unit, the construction or reconstruction of which was commenced on or before March 7, 1994.

"Facility" - All of the emissions units which are located on one or more contiguous or adjacent properties, and which are under the control of the same person (or persons under common control).

"Initial Startup Date" - The date when a facility subject to the emissions standards in this general permit first begins operation of a sterilization process.

"Major Source" - Any affected source which uses 10 or more tons per year of ethylene oxide.

"Manifolding Emissions" - Combining ethylene oxide emissions from two or more different vent types for the purpose of controlling these emissions with a single control device.

"Maximum Ethylene Glycol Concentration" - Any concentration of ethylene glycol in the scrubber liquor of an acid-water scrubber control device established during a performance test when the scrubber achieves at least 99 percent control of ethylene oxide emissions.

"Maximum Liquor Tank Level" - Any level of scrubber liquor in the acid-water scrubber liquor recirculation tank established during a performance test when the scrubber achieves at least 99 percent control of ethylene oxide emissions.

"New" - Any sterilization unit, the construction or reconstruction of which commenced after March 7, 1994.

"Owner" or "Operator" - Any person or entity who or which owns, leases, operates, controls or supervises an emissions unit or facility.

"Oxidation Temperature" - The temperature at the outlet point of a catalytic oxidation unit control device or at the exhaust point from the combustion chamber for a thermal oxidation unit control device.

"Parametric Monitoring" - Monitoring of a specific operating parameter of the control device that demonstrates that the control device is operating under conditions that meet the requirements of this general permit.

"Reconstruction" - The replacement of any components of an ethylene oxide sterilization unit to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.

"Source Using Less Than 1 Ton" - A facility using less than 1 ton of ethylene oxide within all consecutive 12-month periods after December 6, 1996.

"Sterilization Chamber" - Any enclosed vessel or room that is filled with ethylene oxide gas, or an ethylene oxide/inert gas mixture, for the purpose of sterilizing and/or fumigating at a sterilization facility.

"Sterilization Chamber Vent" - The point (prior to the vacuum pump) through which the evacuation of ethylene oxide from the sterilization chamber occurs following sterilization or fumigation, including any subsequent air washes.

"Sterilization Facility" - Any stationary source where ethylene oxide is used in the sterilization or fumigation of materials.

"Sterilization Operation" - A process in which the ethylene oxide is removed from the sterilization chamber through the sterilization chamber vent or the chamber exhaust vent or when ethylene oxide is removed from the aeration room through the aeration room vent.

"Year or Yearly" - Any consecutive 12-month period of time.