

## EMISSIONS ACTIVITY CATEGORY FORM LOADING RACK FOR LIQUID MATERIALS

*This form is to be completed for each loading rack for liquid materials. State/Federal regulations which may apply to loading racks for liquid materials are listed in the instructions. Note that there may be other regulations which apply to this emissions unit which are not included in this list.*

1. Reason this form is being submitted (Check one)

- New Permit       Renewal or Modification of Air Permit Number(s) (e.g. J001) \_\_\_\_\_

2. Maximum Operating Schedule: \_\_\_\_\_ hours per day; \_\_\_\_\_ days per year

If the schedule is less than 24 hours/day or 365 days/year, what limits the schedule to less than maximum? See instructions for examples. \_\_\_\_\_

3. Complete the following table for each bay:

Bay Identification	Number of Loading Arms	Type of Vehicle Loaded (check one or more)	Loading Method (check one or more)
		<input type="checkbox"/> Tank Truck <input type="checkbox"/> Barge <input type="checkbox"/> RR Car <input type="checkbox"/> Ship <input type="checkbox"/> Other (describe):	<input type="checkbox"/> Top Load, Splash Fill <input type="checkbox"/> Bottom Load <input type="checkbox"/> Top Load, fully Submerged <input type="checkbox"/> Top Load, Partial Submerged
		<input type="checkbox"/> Tank Truck <input type="checkbox"/> Barge <input type="checkbox"/> RR Car <input type="checkbox"/> Ship <input type="checkbox"/> Other (describe):	<input type="checkbox"/> Top Load, Splash Fill <input type="checkbox"/> Bottom Load <input type="checkbox"/> Top Load, fully Submerged <input type="checkbox"/> Top Load, Partial Submerged
		<input type="checkbox"/> Tank Truck <input type="checkbox"/> Barge <input type="checkbox"/> RR Car <input type="checkbox"/> Ship <input type="checkbox"/> Other (describe):	<input type="checkbox"/> Top Load, Splash Fill <input type="checkbox"/> Bottom Load <input type="checkbox"/> Top Load, fully Submerged <input type="checkbox"/> Top Load, Partial Submerged

4. Complete this section for each material loaded.

Liquid Material Loaded	Bay ID	Average Material Vapor Pressure at Loading Temperature (millimeters mercury)	Is liquid a photo-chemically reactive material?*	Maximum Daily Throughput (gallons)	Proposed Maximum Annual Throughput (gallons)
			<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No		

\* Photochemically reactive material is defined in OAC rule 3745-21-01(C)(5).

5. Complete this section for each vapor control system.

Type of Vapor Control System (check one):	Minimum Control Efficiency (% by weight):	Maximum Controlled Mass Emissions Rate (pounds/1,000 gallons):	Basis for Mass Emissions Rate Data (check one):
<input type="checkbox"/> Vapor Balance <input type="checkbox"/> Adsorption <input type="checkbox"/> Incineration <input type="checkbox"/> Condenser <input type="checkbox"/> None <input type="checkbox"/> Other (describe):			<input type="checkbox"/> Design criteria <input type="checkbox"/> Equipment vendor guarantee <input type="checkbox"/> Emissions test at this facility <input type="checkbox"/> Emissions test at another facility with similar vapor control system <input type="checkbox"/> Other (describe):
<input type="checkbox"/> Vapor Balance <input type="checkbox"/> Adsorption <input type="checkbox"/> Incineration <input type="checkbox"/> Condenser <input type="checkbox"/> None <input type="checkbox"/> Other (describe):			<input type="checkbox"/> Design criteria <input type="checkbox"/> Equipment vendor guarantee <input type="checkbox"/> Emissions test at this facility <input type="checkbox"/> Emissions test at another facility with similar vapor control system <input type="checkbox"/> Other (describe):
<input type="checkbox"/> Vapor Balance <input type="checkbox"/> Adsorption <input type="checkbox"/> Incineration <input type="checkbox"/> Condenser <input type="checkbox"/> None <input type="checkbox"/> Other (describe):			<input type="checkbox"/> Design criteria <input type="checkbox"/> Equipment vendor guarantee <input type="checkbox"/> Emissions test at this facility <input type="checkbox"/> Emissions test at another facility with similar vapor control system <input type="checkbox"/> Other (describe):
<input type="checkbox"/> Vapor Balance <input type="checkbox"/> Adsorption <input type="checkbox"/> Incineration <input type="checkbox"/> Condenser <input type="checkbox"/> None <input type="checkbox"/> Other (describe):			<input type="checkbox"/> Design criteria <input type="checkbox"/> Equipment vendor guarantee <input type="checkbox"/> Emissions test at this facility <input type="checkbox"/> Emissions test at another facility with similar vapor control system <input type="checkbox"/> Other (describe):

# INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR A LOADING RACK FOR LIQUID MATERIAL

## **GENERAL INSTRUCTIONS:**

Provide complete responses to all applicable questions. If an item does not apply to the emissions unit, write in "Not Applicable" or "NA." If the answer is not known, write in "Not Known" or "NK." If you need assistance in understanding a question after reading the instructions below, contact your Ohio EPA District Office or Local Air Agency for assistance. Submittal of an incomplete application will delay application review and processing. In addition, the application may be returned as incomplete if all applicable questions are not answered appropriately.

## **APPLICABLE REGULATIONS:**

*The following State and Federal Regulations may be applicable to loading racks for liquid materials. Note that there may be other regulations which apply to this emissions unit which are not included in this list.*

Federal: 40 CFR 60, (NSPS)  
40 CFR 61, (NESHAP)  
40 CFR 63, (MACT)

State: OAC rule 3745-31-02 (Permit to Install)  
OAC rule 3745-35-02 (Permit to Operate)  
OAC rule 3745-21-07(E) (Volatile photochemically reactive materials loading facilities)  
OAC rule 3745-21-09(P) and (Q) (Bulk gasoline plants and terminals)

If you would like a copy of these regulations, contact your Ohio EPA District Office or Local Air Agency. State regulations may also be viewed and downloaded from the Ohio EPA website at <http://www.epa.state.oh.us/dapc/regs/regs.html>. Federal regulations may be viewed and downloaded at <http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-C.htm>.

## **CALCULATING EMISSIONS:**

Manufacturers of some types of emissions units and most types of control equipment develop emissions estimates or have stack test data which you can request. Stack testing of the emissions may be done. Emissions unit sampling test data may be either for this emissions unit or a similar one located at the facility or elsewhere. You may develop your own emission factors by mass balance or other knowledge of your process, if you can quantify inputs and outputs accurately. You may be able to do this on a small scale or over a short period of time, if it is not practical during regular production. If you have control equipment, you may be able to quantify the amount of pollutants collected over a known time period or production amount. Any emission factor calculation should include a reference to the origin of the emission factor or control efficiency.

The emissions from aggregate processing operations may be estimated using the information from Section 5.2 (Transportation and marketing of petroleum liquids) of AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, Volume I, available from the following website:  
<http://www.epa.gov/ttn/chief/ap42/index.html>

## **SPECIFIC INSTRUCTIONS:**

1. Indicate whether this is an application for a new permit or an application for permit renewal. If applying for a permit renewal, provide the 4-character OEPA emissions unit identification number.

2. Provide the maximum number of hours per day and days per year the loading rack is expected to operate. The following are examples of why the maximum number of hours per day may be less than 24 or the maximum number of days per year may be less than 365 (this list is not all-inclusive):
- The facility can only operate during daylight hours.
  - The process can only operate within a certain range of ambient temperatures.
  - The process is limited by another operation (i.e., a bottleneck).

3. Provide the company identification for each bay as a separate line item and complete the remainder of the table with related information.

Indicate number of loading arms for the subject bay.

Identify the type(s) of vehicles loaded by checking one or more of the available options.

Identify the type(s) of loading methods by checking one or more of the available options.

Note: Fully submerged means that the discharge opening is within six inches of the bottom of the tank.

4. This section must be completed for each type of liquid material loaded.

Provide the name or identify the type of liquid material loaded (e.g., gasoline, No. 2 fuel oil, toluene, benzene, etc.).

Provide the bay identification as listed in item 1.

Provide the average vapor pressure of the material, in millimeters of mercury (mm Hg), at the average loading temperature.

Indicate whether or not the material meets the definition of photochemically reactive material in OAC rule 3745-21-01(C)(5). The definition of photochemically reactive materials is complex but the information is usually available on the MSDS or from the material supplier. If you have other questions, contact your Ohio EPA District Office or Local Air Agency.

State the proposed maximum daily throughput in gallons per day based upon actual records.

State the anticipated maximum annual throughput in gallons per year.

Identify the type of vapor control by checking the applicable method.

Provide the minimum control efficiency, in percent by weight, for the control system identified above.

Provide the maximum controlled mass emission rate in pounds of volatile organic compounds per 1,000 gallons loaded.

Check the basis for the reported mass emissions rate.