FOR OHIO EPA USE
FACILITY ID: _____

EMISSIONS ACTIVITY CATEGORY FORM
GLASS MANUFACTURING FACILITIES

This form is to be completed for each glass manufacturing facility. State/Federal regulations which may apply to glass manufacturing facilities 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.

Note: This emissions activity category (EAC) form does not include roadways and parking areas and material handling operations which may also be associated with glass manufacturing processes. Therefore, additional EAC forms may need to be submitted for these emissions units.

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

❒ New Permit ❒ Renewal or Modification of Air Permit Number(s) (e.g. P001)_____

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. Identification of emissions units:

Check (✓) Those Emissions Units Present	Description of Emissions Units	How many?
❒	Feed materials batch weighing	_____
❒	Feed materials mixing	_____
❒	Melting and refining furnace	_____
❒	Forming line	_____
❒	Other, describe: _____	_____
	_____	_____

4. Type(s) of glass manufactured: _____

5. Type(s) of product manufactured: _____

6. Glass furnace process data:

Emissions Unit ID(s)	Number of identical furnaces	Type of furnace (e.g. induction)	Fuel(s) used	Furnace rated capacity (tons/hour)	Maximum glass pull rate (tons/hour)	Maximum annual production (tons/year)	Control equipment ID

7. Control methods to be used for emissions from glass manufacturing processes:

Operation	Capture Method	Capture Efficiency	Control Method	Control Efficiency
Feed materials batch weighing				
Feed materials mixing				
Melting and refining furnace				
Forming line				
Other:				

INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR GLASS MANUFACTURING PROCESSES

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 glass manufacturing facilities. Note that there may be other regulations which apply to this emissions unit which are not included in this list.

Federal: 40 CFR Part 60, (NSPS) Subparts A and CC (Glass Manufacturing Plants)

State: OAC rule 3745-31-02 (Permit to Install)
OAC rule 3745-35-02 (Permit to Operate)
OAC rule 3745-17-07 (Visible particulate emission limitations)
OAC rule 3745-17-08 (Restriction of emission of fugitive dust)
OAC rule 3745-17-11 (Particulate emission limitations)
OAC rule 3745-18 (Sulfur Dioxide Regulations)
OAC rule 3745-21 (Carbon Monoxide, Photochemically Reactive Materials, Hydrocarbons, and related Materials Standards)
OAC rule 3745-23 (Nitrogen Oxide Standards)

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 glass manufacturing operations may be estimated using the information from Chapter 11.15 (Glass Manufacturing) 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 glass manufacturing process 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. This emissions activity category (EAC) form is to be used for operations at glass manufacturing facilities. Typical emissions units to be included on this form are listed Other EAC forms may need to be completed for other emissions units at glass manufacturing facilities. For example, the following EAC forms must be completed if any of the following fugitive emissions units are located at the facility:

EAC Form	Emissions Units
roadways and parking areas	all paved and unpaved roadways and parking areas
material handling	feed materials receiving
	feed materials transfer to storage

   Identify the emission units at the facility by placing a check mark in the appropriate block adjacent to the respective emissions unit type. If there are other emission units at the facility which were not specifically listed and do not have other EAC forms prepared for them, please identify such unit(s) in the section marked “Other (describe).”

6. Please complete the table for all glass furnaces at the facility. In the Emissions Unit ID(s) column, identify the emissions unit(s) to which this row refers, either with an OEPA ID (e.g. P001) or your ID (e.g. Furnace #1). “Number of identical furnaces” will identify the number of furnaces for which all information in the row is the same. “Control equipment ID” should be used to identify which control equipment, detailed in the permit application form, is used to control emissions from this furnace. Furnace rated capacity refers to the manufacturer’s design production capacity of the furnace. Maximum glass pull rate and maximum annual production should reflect the maximum outputs which your operation is capable of achieving.

7. For each operation identified in this form, describe how the emissions are captured and estimate the percentage of emissions which are captured. Also describe how the emissions are controlled and estimate the percentage of reduction attained. Efficiencies may be determined, in order of preference, by testing, design, published estimation methods or best engineering judgement. For multiple methods, enter them in the blank separated by a slash (/) and do the same for the efficiency.