

EMISSIONS ACTIVITY CATEGORY FORM BRICK AND RELATED CLAY PRODUCT MANUFACTURING PLANTS

This form is to be completed for each brick or clay product manufacturing plant. State/Federal regulations which may apply to brick or clay product manufacturing plants 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 other dust emissions units that have a specific EAC form for such units. Therefore, additional EAC forms for those emissions units may need to be submitted.

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

- New Permit Renewal or Modification of Air Permit Number(s) (e.g. F001)_____

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:

<u>Check Those Emissions Units Present</u>	<u>Emissions Units</u>	<u>How many?</u>
<input type="checkbox"/>	Truck unloading	_____
<input type="checkbox"/>	Primary crushing	_____
<input type="checkbox"/>	Grinding and screening	_____
<input type="checkbox"/>	Material Handling	_____
<input type="checkbox"/>	Storage Bins	_____
<input type="checkbox"/>	Tunnel kilns	_____
<input type="checkbox"/>	Periodic kilns	_____
<input type="checkbox"/>	Scrap crushing	_____
<input type="checkbox"/>	Other (describe):	_____
<input type="checkbox"/>	_____	_____

4. General process data:

a. Type of manufacturing process:

- soft-mud dry-mud dry press semi-dry press
 other (describe): _____

Number of identical bins	Material stored	Capacity of bin (tons)

9. Kilns

Emissions Unit ID(s)	Number of identical kilns	Type of kiln (e.g. tunnel, periodic)	Fuel(s) used	Capacity of each kiln (tons/hour)	Capacity of each kiln (tons/year)

10. Scrap crushing process data:

- a. Manufacturer of scrap crushing equipment _____
- b. Maximum hourly production rate for the scrap crushing equipment _____ tons/hour
- c. Maximum annual production for the scrap crushing equipment _____ tons/year

11. Control methods to be used for emissions from brick and related clay product manufacturing plants:

	Capture Method	Capture Efficiency	Control Method	Control Efficiency
Truck unloading				
Primary crushing				
Grinding/screening				
Material transfer				
Storage Bins				
Kilns				
Scrap crushing				
Other				

12. Details for wet suppression systems

	Year Installed	Material Used (wetting agent)	Application Point(s)	Application Rate (gal./ton processed)
Truck unloading				
Primary crushing				
Grinding/screening				
Material transfer				
Storage Bins				
Scrap crushing				
Other				

INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR BRICK AND RELATED CLAY PRODUCT MANUFACTURING PLANTS

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 brick and clay product manufacturing. Note that there may be other regulations which apply to this emissions unit which are not included here.

Federal: 40 CFR 63, (MACT) Subparts A, JJJJJ (Brick and Structural Clay Products Manufacturing)

State: Ohio Administrative Code (OAC) 3745-31-02, -05 (Permit to Install)
3745-35-02 (Permit to Operate)
3745-17-07, -08, -11 (particulate emissions)
3745-18-06 (sulfur dioxide emissions)

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>.

SAMPLE EMISSIONS CALCULATION METHODS:

USEPA has developed emission factors for many types of emissions units and published them in a document titled "Compilation of Air Pollutant Emission Factors, AP-42", available from the following website: <http://www.epa.gov/ttn/chief/ap42/index.html> See Chapter 11.3. (Bricks and Related Clay Products)

In addition, 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.

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 pollution collected over a known time period or production amount.

SPECIFIC INSTRUCTIONS:

1. Indicate whether this is a previously unpermitted emissions unit (new permit) or a renewal application for a previously permitted emissions unit, listing the 4-character OEPA emissions unit identification number. Multiple emissions units may be described.
2. Enter the maximum operating schedule for the plant.

3. Identify the emissions units at the facility by placing a check mark in the appropriate block adjacent to the respective emissions unit type. If there are other emissions units at the facility which are not specifically listed in item #3 and do not have other applicable emission activity category forms, please identify such emissions unit(s) in the section marked "Other (describe)". The "OEPA Emissions Unit ID" column may be left blank if such information is not known.
4. Check all the processes used and products manufactured at this facility. Enter the maximum production rate in terms of the plant capacity of ware fired per year, in tons.
5. Enter the maximum rated hourly capacity of the crusher. The annual capacity should be based on the maximum production listed in 4.c.
6. Enter the maximum rated hourly capacity of the grinding and screening process. The annual capacity should be based on the maximum production listed in 4.c.
7. Identify all transfer points in the material handling system from receipt of raw materials until the processed raw materials are combined with water in a mixer or are pressed. Enter the material being transferred, where the transfer is taking place (e.g. From belt To belt, From screen To belt), and the annual maximum amount which may be transferred at that point, based on the maximum production listed in 4.c. There is no need to list multiple identical rows in the table; use the "Number of identical points" column to identify the number of identical transfer activities.
8. Identify all raw material storage bins and their capacities.
9. Identify all kilns. Each one will probably have a separate emissions unit ID (e.g. P001) assigned by OEPA. Enter the maximum hourly and annual production rates in terms of the kiln capacity of ware fired per hour and per year, in tons. If the kiln operates on a batch cycle, divide the maximum tonnage of product per cycle by the hours of firing for that cycle. If multiple products are fired, choose the product which results in the highest capacity. This hourly capacity should only be used to calculate hourly allowable emission rates since it is artificially high. Because compliance is demonstrated in terms of maximum hourly emissions under 'worst case' conditions, the allowable emission rate must be set under the same conditions.
10. If there is a crusher to process fired material, identify it here with its rated capacity.
11. For each operation identified elsewhere 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.
12. If any of the operations identified elsewhere in this form use wet suppression to control fugitive dust emissions, enter the requested data in the table.