FOR OHIO EPA USE
FACILITY ID: _____

EMISSIONS ACTIVITY CATEGORY FORM
CEMENT MANUFACTURING PLANTS

This form is to be completed for each cement manufacturing plant. State/Federal regulations which may apply to cement manufacturing plant 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, storage piles, mineral extraction operations, and material handling operations (e.g., raw material unloading, raw material charging to crushers, transfer and conveying, unloading to storage) which may also be associated with a cement manufacturing plant. Therefore, additional EAC forms for these 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 fugitive dust emissions units:

Check Those Emissions Units Present	Fugitive Dust Emissions Units	How many?
❒	Primary crusher	_____
❒	Vibrating screen, secondary crushing	_____
❒	Raw material grinding and feed/discharge exhaust systems	_____
❒	Raw material blending and storage	_____
❒	Leakage from grinding (coal)	_____
❒	Cement kilns	_____
❒	Finish grinding with leaks from milling and feed/discharge exhaust systems	_____
❒	Clinker storage	_____
❒	Cement silo vents	_____
❒	Cement loading	_____
❒	Cement packaging	_____
❒	Other (describe):	
	_____	_____
	_____	_____

4. Cement kilns

Emissions Unit ID(s)	Number of identical kilns	Type of process (e.g. wet, dry, semidry)	Preheater? (yes/no)	Fuel(s) used	Capacity of each kiln (tons/hour)	Capacity of each kiln (tons/year)

5. Cement silo information:

Silo ID	Storage Capacity (tons)	Year Installed	Number of Silo Vents

6. Crushing and screening process data:

Process activity	Manufacturer	Date installed	Maximum design input capacity (tons/hour)	Maximum processing rate (tons/hour)	Maximum annual processing rate (tons/year)
Primary crushing and screening					
Secondary crushing and screening					
Raw material grinding					
Raw material blending and storage					
Coal grinding					
Cement kilns					
Finish grinding					
Cement silo vents					

Cement loading					
Cement packaging					

7. Control methods to be used for emissions from cement manufacturing and blending plants:

	Capture Method	Capture Efficiency	Control Method	Control Efficiency
Primary crushing and screening				
Secondary crushing and screening				
Raw material grinding				
Raw material blending and storage				
Coal grinding				
Cement kilns				
Finish grinding				
Clinker storage				

Cement silo vents				
Cement loading				
Cement packaging				

INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR CEMENT 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 cement manufacturing plants. 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 (General Provisions) and OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)

State: Ohio Administrative Code (OAC) Rules:
3745-31-02 (Permits to install)
3745-35-02 (Permits to operate)
3745-17-07 (Control of visible particulate emissions from stationary sources)
3745-17-08 (Restriction of emission of fugitive dust)
3745-17-11 (Restrictions on particulate emissions from industrial processes)

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 cement manufacturing operations may be estimated using the information from Chapter 11.6 (Portland Cement Plants) 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:

This emissions activity category (“EAC”) form is to be used for certain operations at cement manufacturing facilities which emit fugitive dust and/or particulate emissions from a stack or stacks. Typical emissions units to be included on this form are listed in item # 3. Please use the specific EAC forms for roadways and parking areas, storage piles, material handling operations (e.g., for unloading, conveying, and handling or raw materials) and mineral extraction for these emissions units. Any other emissions unit that does not have a specific EAC form should be entered on this form under "other (describe)."

Paragraph (B)(6) of OAC Rule 3745-17-01 defines "fugitive dust" as "...particulate matter which is, or was prior to the installation of control equipment, emitted from any source by means other than a stack." Aggregate processing facilities emit particulate matter in such fashion, and the requirements of OAC Rules 3745-17-07(B) (Visible particulate emission limitations for fugitive dust) and 3745-17-08 (Restriction of emissions of fugitive dust) may be applicable.

Particulate emissions that are exhausted through air pollution control equipment or an uncontrolled stack may be subject to OAC Rules 3745-17-07(A) (Visible particulate emission limitations for stack emissions) and 3745-17-11 (Restrictions on particulate emissions from industrial processes).

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 the maximum number of days per year the aggregate processing plant 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).
   - The plant is under union contract to operate only a certain amount of time.

3. Identify the types of processes at the facility by placing a check mark in the appropriate block adjacent to the respective emissions unit type. If there are other processes at the facility which were not specifically listed and do not have other applicable EAC forms, please identify such emissions unit(s) in the section marked "Other (describe)".

7. 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.