

EMISSIONS ACTIVITY CATEGORY FORM CONCRETE BATCHING PLANTS

This form is to be completed for each concrete batching plant. State/Federal regulations which may apply to concrete batching 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, storage piles and material handling operations which may be associated with a concrete batching plant. 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 activities:

Check Those Present

Emissions Activities

- Cement silo loading
- Transfer of sand and aggregate to elevated bins
- Weigh hopper loading of cement, sand and aggregate
- Mixer loading of cement, sand, and aggregate (central mix plant)
- Loading of transit-mix truck (batching)
- Loading of flat-bed truck (dry-batching)
- Other (describe): _____

4. General concrete batching plant process data:

- a. Type of concrete batching plant:
 - batching (transit-mix trucks)
 - dry-batch (into flat bed trucks only)
 - central-mix
 - other (describe): _____
- b. Manufacturer of concrete batch plant _____
- c. Make or model no. _____
- d. Maximum plant design production capacity _____ tons concrete/hour
- e. Maximum plant design production capacity _____ yd³ concrete/hour
- f. Maximum hourly production rate _____ tons concrete/hour
- g. Maximum hourly production rate _____ yd³ concrete/hour
- h. Maximum annual production rate _____ tons concrete/year
- i. Maximum annual production rate _____ yd³ concrete/year

5. Cement silo loading process data:

Cement silo ID	Manufacturer	Storage capacity (tons)	Method of loading silo	Maximum load rate (tons/hour)	Maximum load rate (tons/year)

6. Material handling capacities:

Material Handling Operation	Maximum rate (tons/hour)	Maximum rate (tons/year)
Transfer of sand to elevated bins		
Transfer of aggregate to elevated bins		
Weigh hopper loading		
Mixer loading process (central-mix plant)		
Transit-mix truck loading		
Flat-bed truck loading (dry-batching plant)		
Other:		

7. Control methods to be used for emissions from concrete batch plants:

	Capture Method	Capture Efficiency	Control Method	Control Efficiency
Cement silo loading			<input type="checkbox"/> vent to fabric filter <input type="checkbox"/> other, describe	
Transfer of sand and aggregate to elevated bins			<input type="checkbox"/> vent to fabric filter <input type="checkbox"/> other, describe	
Weigh hopper loading			<input type="checkbox"/> vent to fabric filter <input type="checkbox"/> vent to bins/silo <input type="checkbox"/> other, describe	
Mixer loading process (central-mix plant)			<input type="checkbox"/> vent to fabric filter <input type="checkbox"/> other, describe	
Transit-mix truck loading	<input type="checkbox"/> enclosure, describe <input type="checkbox"/> other, describe		<input type="checkbox"/> vent to fabric filter <input type="checkbox"/> choke feed <input type="checkbox"/> other, describe	
Flat-bed truck loading (dry-batching plant)	<input type="checkbox"/> enclosure, describe <input type="checkbox"/> other, describe			
Other:				

INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR CONCRETE BATCHING 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 concrete batching plants. Note that there may be other regulations which apply to this emissions unit which are not included in this list.

State: Ohio Administrative Code (OAC) 3745-31-02 (Permit to Install)
3745-35-02 (Permit to Operate)
3745-17-07 (Visible Particulate Emissions)
3745-17-08 (Emissions of Fugitive Dust)
3745-17-11 (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.

USEPA has developed emission factors for many types of emissions units and published them in a document entitled "Compilation of Air Pollutant Emissions Factors, AP-42", available from the following website: <http://www.epa.gov/ttn/chief/ap42/index.html> Concrete batching is contained in section 11.12.

SPECIFIC INSTRUCTIONS:

This emissions activity category (EAC) form is to be used for certain operations at concrete batching facilities which emit fugitive dust. Typical emissions units to be included on this form are listed in item #3. Please do not include on this form fugitive dust emissions units, such as roadways and parking areas, storage piles, and material handling operations which have other EAC forms prepared for them. Any other

fugitive dust emissions activity that does not have a specific EAC form should be entered on this form under "other (describe)."

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 concrete batch 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).
3. Identify the fugitive dust emissions activities at the facility by placing a check mark in the appropriate block adjacent to the respective emissions activity. If there are other fugitive dust emissions activities at the facility which were not specifically listed in item #3 and do not have other applicable emission activity category forms, please identify such emissions activities in the section marked "Other (describe)".
4. Complete the requested general concrete batching plant process data in items (a) through (f).
5. Complete the table for the silo vent process data section. Enter one silo per row.
6. Provide maximum hourly and annual loading rates for each activity listed.
7. Complete the table for each of the fugitive dust emissions activities identified. 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.