

EMISSIONS ACTIVITY CATEGORY FORM AGGREGATE PROCESSING PLANTS

This form is to be completed for each crushing operation, screening operation, and product loading operation. State/Federal regulations which may apply to aggregate processing 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 & parking areas, storage piles, & material handling operations [e.g., unloading, conveying, & handling of raw materials], or mineral extraction operations which may be associated with an aggregate processing 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? _____

3. Identify the types of processes at this facility:

Check Those Operations Present

Emissions Units

How many?

<input type="checkbox"/>	Primary crushing	_____
<input type="checkbox"/>	Primary screening	_____
<input type="checkbox"/>	Secondary crushing	_____
<input type="checkbox"/>	Secondary screening	_____
<input type="checkbox"/>	Tertiary crushing	_____
<input type="checkbox"/>	Tertiary screening	_____
<input type="checkbox"/>	Recrushing	_____
<input type="checkbox"/>	Rescreening	_____
<input type="checkbox"/>	Conveyors	_____
<input type="checkbox"/>	Product loading: Front-end loaders	_____
<input type="checkbox"/>	Product loading: Storage bins into trucks	_____
<input type="checkbox"/>	Other (describe):	_____
	_____	_____
	_____	_____

4. General process data:

Type of Aggregate Processed	Method of Transporting to the Processing Plant (see examples below)	Primary Process Operations	Total Plant Throughput (tons/year)
Sand and Gravel	<input type="checkbox"/> suction pumps <input type="checkbox"/> barges <input type="checkbox"/> earth movers <input type="checkbox"/> trucks <input type="checkbox"/> conveyors <input type="checkbox"/> other (describe)_____	<input type="checkbox"/> primary crushing <input type="checkbox"/> secondary crushing <input type="checkbox"/> screening <input type="checkbox"/> conveying <input type="checkbox"/> washing <input type="checkbox"/> heavy media cleaning <input type="checkbox"/> unloading <input type="checkbox"/> loading <input type="checkbox"/> other (describe)_____	
Crushed Stone	<input type="checkbox"/> trucks <input type="checkbox"/> conveyors <input type="checkbox"/> barge <input type="checkbox"/> other (describe)_____	<input type="checkbox"/> primary crushing <input type="checkbox"/> secondary crushing <input type="checkbox"/> tertiary crushing <input type="checkbox"/> screening <input type="checkbox"/> conveying <input type="checkbox"/> washing <input type="checkbox"/> unloading <input type="checkbox"/> loading <input type="checkbox"/> other (describe)_____	
Recycled Concrete/ Asphaltic Concrete		<input type="checkbox"/> primary crushing <input type="checkbox"/> secondary crushing <input type="checkbox"/> tertiary crushing <input type="checkbox"/> screening <input type="checkbox"/> conveying <input type="checkbox"/> washing <input type="checkbox"/> unloading <input type="checkbox"/> loading <input type="checkbox"/> other (describe)_____	
Other		<input type="checkbox"/> primary crushing <input type="checkbox"/> secondary crushing <input type="checkbox"/> tertiary crushing <input type="checkbox"/> screening <input type="checkbox"/> conveying <input type="checkbox"/> washing <input type="checkbox"/> unloading <input type="checkbox"/> loading <input type="checkbox"/> other (describe)_____	

5. Crushing and screening process data:

ID		Manufacturer	Date installed	Maximum design input capacity (tons/hour)	Maximum processing rate (tons/hour)	Maximum annual processing rate (tons/year)
A	Primary crushing and screening					
B	Primary crushing and screening					
C	Secondary crushing and screening					
D	Secondary crushing and screening					
E	Tertiary crushing and screening					
F	Additional crushing and screening					
G	Recrushing/ Rescreening					
H	Product loading: Front end loaders into trucks					
I	Product loading: Storage bins into trucks					

6. Dust control methods:

ID	Enclosure and/or Operating Practices (describe)	Chemical Stabilization (check one or more)	Application Frequency	Overall Control Eff. (%)	Basis for Overall Load-in Control Efficiency
A		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
B		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
C		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
D		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
E		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
F		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
G		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
H		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		
I		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other:	frequency: _____ application rate: _____ application points: _____		

7. Conveyor information:

ID	Conveyor	Conveyor ID	Belt width (ft)	Date Installed	Control Measure
A					
B					
C					
D					
E					
F					
G					
H					
I					

INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR AGGREGATE PROCESSING 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 aggregate processing 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)

3745-15-07 (Nuisances Prohibited)

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 Chapter 11 (Mineral Products Industry) 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 aggregate processing 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 of 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 in item #1 and do not have other applicable EAC forms, please identify such emissions unit(s) in the section marked "Other (describe)".
4. Complete the requested transportation, process operations, and total plant throughput for each of the types of aggregates in the table.
5. Complete the requested information for each type of crushing and screening performed at the subject facility.
6. Control Methods for Crushing and Screening, Recrushing, Rescreening, and Product Loading: For each type of activity listed in table #5, describe any enclosure and/or operating practice used to minimize fugitive dust emissions. Identify the appropriate control methods, control efficiencies and the basis (e.g., AP-42, Ohio EPA RACM guide, or other source) for the efficiencies. Complete the remainder of the control method section

with details of control methods used, as requested.

- Complete the necessary information for each conveyor involved in the processing plant, for each type of activity listed in table #5.

If further assistance in completing this form is needed, contact the Ohio EPA District Office or Local Air Agency with jurisdiction in the area the emissions unit will be or is operating.

A process flow diagram is to be included as part of this form and any Permit to Install/Operate application. The diagram should include:

- Entry and exit points of all raw materials, intermediate products, by-products, and finished products.
- Labeling of all materials (products, waste, and airborne contaminants).
- Labeling of process equipment, control equipment, and emission points.

SEE EXAMPLE BELOW

