

EMISSIONS ACTIVITY CATEGORY FORM PULP AND PAPER MILLS

This form is to be completed for each pulp and paper mill. State/Federal regulations which may apply to pulp and paper mills 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 pulp and paper mill. 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. 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:

<u>Check Those</u> <u>Emissions Units Present</u>	<u>Emissions Units</u>	<u>How many?</u>
<input type="checkbox"/>	Debarking	_____
<input type="checkbox"/>	Chipping	_____
<input type="checkbox"/>	Screening	_____
<input type="checkbox"/>	Digester	_____
<input type="checkbox"/>	Evaporator	_____
<input type="checkbox"/>	Paper machine	_____
<input type="checkbox"/>	Washing system	_____
<input type="checkbox"/>	Slaking	_____
<input type="checkbox"/>	Lime kiln	_____
<input type="checkbox"/>	Bleaching system	_____
<input type="checkbox"/>	Other (describe):	_____
	_____	_____
	_____	_____

4. Wood yard process data:

Process Operation	Maximum rate (tons/hour)	Maximum rate (tons/year)
Log debarking, describe: <input type="checkbox"/> wet <input type="checkbox"/> dry		
Chipping		
Screening		
Other:		

5. Digester data:

Emissions Unit ID(s)	Number of identical units	Type of pulping If sulfite, identify chemical base (e.g. Kraft, sulfite - MgO)	Capacity of each unit (tons/hour)	Capacity of each unit (tons/year)	Control equipment ID

6. Evaporator data:

Emissions Unit ID(s)	Number of identical units	Capacity of each unit (tons/hour)	Capacity of each unit (tons/year)	Control equipment ID

7. Paper machine data:

Emissions Unit ID(s)	Number of identical units	Capacity of each unit (tons/hour)	Capacity of each unit (tons/year)	Control equipment ID

8. Washing system data:

Emissions Unit ID(s)	Number of identical units	Capacity of each unit (tons/hour)	Capacity of each unit (tons/year)	Control equipment ID

9. Slaking data:

Emissions Unit ID(s)	Number of identical operations	Capacity of each unit (tons/hour)	Capacity of each unit (tons/year)	Control equipment ID

10. Lime kiln data:

Emissions Unit ID(s)	Number of identical units	Capacity of each unit (tons/hour)	Capacity of each unit (tons/year)	Control equipment ID

11. Bleaching system data:

Emissions Unit ID(s)	Chlorine or chlorinated compound used?	Capacity (tons/hour)	Capacity (tons/year)	Cycle time (hours)	Control equipment ID
	<input type="checkbox"/> yes <input type="checkbox"/> no				

12. Control methods to be used for emissions from pulp and paper mills:

	Capture Method	Capture Efficiency	Control Method	Control Efficiency
Debarking				
Chipping				
Screening				
Digester				
Evaporator				
Paper machine				
Washing system				
Slaking				
Lime kiln				
Bleaching system				
Other:				

INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR PULP AND PAPER MILLS

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 pulp and paper mills. Note that there may be other regulations which apply to this emissions unit which are not included in this list.

Federal: 40 CFR 60, (NSPS) Subparts A, BB (Kraft Paper Mills)
40 CFR 63, (MACT) Subparts A, S, MM (Pulp and Paper)

State: OAC rule 3745-31-02 (Permit to Install)
OAC rule 3745-31-05 (Best Available Technology)
OAC rule 3745-35-02 (Permit to Operate)
OAC rule 3745-17-07 (Visible Particulate Emissions)
OAC rule 3745-17-08 through -11 (Particulate Emissions)
OAC rule 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>.

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 pulp bleaching and paper making may be estimated using the information from section 10.3 and 10.4 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 [EAC CATEGORY] 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 form to be used for certain operations at pulp and paper mills. Typical emissions units to be included on this form are listed in item #3. Please use the specific emissions activity category forms for roadways and parking areas, storage piles, and material handling operations for such units.

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 and do not have other applicable emissions activity category forms, please identify such units in the section marked "Other (describe)".

5. Please complete the table for all digesters at the facility. "Number of identical units" will identify the number of digesters 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 digester.
6. Please complete the table for all evaporators at the facility. "Number of identical units" will identify the number of evaporators 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 evaporator.
7. Please complete the table for all paper machines at the facility. "Number of identical units" will identify the number of paper machines 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 paper machines.
8. Please complete the table for all washing systems at the facility. "Number of identical units" will identify the number of washing systems 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 washing system.
9. Please complete the table for all slakers at the facility. "Number of identical units" will identify the number of slakers 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 slaker.
10. Please complete the table for all lime kilns at the facility. "Number of identical units" will identify the number of lime kilns 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 lime kiln.

11. Please complete the table for all bleaching systems at the facility. “Number of identical units” will identify the number of bleaching systems 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 bleaching system.
12. 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.