

EMISSIONS ACTIVITY CATEGORY FORM CARBON BLACK PLANTS

This form is to be completed for each carbon black manufacturing facility. State/Federal regulations which may apply to carbon black manufacturing facilities 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 fugitive dust emissions units that have a specific EAC form for such units. Therefore, additional EAC forms may need to be submitted for those emissions units.

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 Emissions Units Present</u>	<u>Emissions Units</u>	<u>How many?</u>
<input type="checkbox"/>	Vents on storage bins	_____
<input type="checkbox"/>	Carbon black bagging operation	_____
<input type="checkbox"/>	Bulk loading of carbon black	_____
<input type="checkbox"/>	Other (describe): _____ _____	_____ _____

4. General process data:

Emissions Unit ID(s)	Number of identical processes	Type of process (e.g. thermal, oil furnace)	Fuel(s) used	Maximum amount of fuel used (gal/hr or cf/hr)	Maximum capacity of process (tons/hour)	Maximum capacity of process (tons/year)	Control equipment ID

5. Carbon black storage bins:

Emissions Unit ID(s)	Number of identical processes	Maximum loading capacity (tons/hour)	Maximum loading capacity (tons/year)	Number of vents	Control equipment ID

6. Bulk loading of rail cars:

Emissions Unit ID(s)	Number of identical units	Type of loading (e.g. pneumatic)	Maximum loading capacity (tons/hour)	Maximum loading capacity (tons/year)	Control equipment ID

7. Carbon black bagging operations:

Emissions Unit ID(s)	Number of identical units	Maximum bagging capacity (tons/hour)	Maximum bagging capacity (tons/year)	Control equipment ID

8. Control methods to be used for emissions from carbon black equipment:

Operation	Pollutant emitted	Capture Method	Capture Efficiency	Control Method	Control Efficiency
Carbon black process ID:					
Carbon black process ID:					
Carbon black process ID:					
Carbon black storage bins					
Bulk loading of rail cars					
Carbon black bagging operation					
Other:					

INSTRUCTIONS FOR COMPLETION OF THE EMISSIONS ACTIVITY CATEGORY FORM FOR CARBON BLACK PLANTS

GENERAL INSTRUCTIONS:

Provide complete responses to all applicable questions. 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 carbon black manufacturing facilities. Note that there may be other regulations which apply to this emissions unit which are not included in this list.

Federal: 40 CFR Part 63, (MACT) Subparts A and YY (Carbon Black Production)

State: OAC rule 3745-31-02 (Permit to Install)
OAC rule 3745-35-02 (Permit to Operate)
OAC rule 3745-17-07 (Visible Emissions Standards)
OAC rule 3745-17-11 (Particulate Matter Standards)
OAC rule 3745-18 (Sulfur Dioxide Regulations)
OAC rule 3745-21 (Carbon Monoxide, Photochemically Reactive Materials, Hydrocarbons, and related Materials Standards)
OAC rule 3745-23 (Nitrogen Oxide Standards)

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 carbon black production operations may be estimated using the information from Chapter 6.1 (Carbon Black) 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 carbon black process 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 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 were not specifically listed and do not have other EAC forms prepared for them, please identify such emissions unit(s) in the section marked "Other (describe)".

This emissions activity category (EAC) form is to be used for certain operations at carbon black manufacturing facilities. Typical emissions units to be included on this form are listed. Please do not include on this form fugitive dust emissions units, such as roadways and parking areas, which have other EAC forms prepared for them.

- 4 - 7. Please complete the table for all listed processes at the facility. In the Emissions Unit ID(s) column, identify the emissions unit(s) to which this row refers, either with an OEPA ID (e.g. P001) or your ID (e.g. Line #1). "Number of identical processes" will identify the number of processes 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 process. Capacity refers to the manufacturer's design production capacity of the process and should reflect the maximum outputs which your operation is capable of achieving.
8. For each operation identified in this form, identify the pollutant(s) emitted, 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.