



Texas Commission on Environmental Quality Table 11 Instructions

1. **Emission Point Number and Name:** Identify the location that air contaminants enter the atmosphere. The emission point numbers (EPN) must be consistent with the emission point identification used on the plot plan, any previous permits, and the “Emissions Inventory Questionnaire.”
2. **Manufacturer and Model Number:** Enter the company brand name and model number. Include manufacturers specifications or brochure, if available.
3. **Name of Source(s) or Equipment Being Controlled:** Associate the EPN to the appropriate facility(ies) with facility identification number(s) (FIN), or a description of the process or equipment being controlled. If using FINs, these numbers can be alphanumeric and maximum of 10 characters.
4. **Type of Particulate Controlled:** List each component or air contaminant name. Examples of component names are; lead, sand, clay, iron dust, and cement dust.
5. **Gas Stream Characteristics**
 - A. Include the design maximum flow rate in units of actual cubic feet per minute (acfm), the average flow rate expected in acfm;
 - B. Enter the temperature of the exhaust gas stream from the baghouse;
 - C. Enter the amount of particulate matter in the inlet and outlet gas stream. The inlet and outlet particulate grain loading in grains per dry standard cubic foot (scf).
 - D. Enter the pressure drop across the baghouse measured in inches of water column.
 - E. Enter the water vapor content of the exhaust stream measured in pounds of water per pound of dry air.
 - F. Enter the fan motor requirements in horsepower and the fan capacity in actual cubic feet per minute (scfm).
6. **Particulate Distribution (By Weight):** Enter the particle size distribution as determined through laboratory analysis in units of microns (micrometers).
7. **Filter Characteristics**
 - A. Filtering velocity in units of actual cubic feet per minute (acfm) of air stream flow divided by the total surface area of the filtering media in square feet (ft²). The filtering velocity can also be expressed in units of feet per minute (fpm).
 - B. Enter the bag diameter expressed in units of inches.
 - C. Enter the length of the filter bags in units of feet.
 - D. Enter the quantity of bags used in the filtering of the air stream.
8. **Bag Rows:** Enter the pattern or arrangement of the baghouse bag filter rows. The arrangement may be staggered or straight.
9. **Walkways:** Specify whether there will be space available between the rows of bag filters to provide access for inspection and maintenance.
10. **Material:** Identify the filtering media and include any additional coating or treatment of the baghouse material.
11. **Cleaning:** Explain the method of bag filter cleaning. Typically, there are mechanical shakers or reverse pulse air jets.
12. **Cost**
 - A. Identify the capital cost of installation of the baghouse. This includes all engineering design costs and construction costs associated with the establishment of the control device.
 - B. Estimate the annual operating expenses for the baghouse, including utility expense and replacement bag costs.

NOTE: The Texas Commission on Environmental Quality standard conditions are 68° F and 14.7 PSIA (Title 30 Texas Administrative Code § 101.1).



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**Table 11
Fabric Filters**

Tables, checklists, and guidance documents pertaining to air quality permits are available from the Texas Commission on Environmental Quality (TCEQ) Air Permits Division (APD) Web site at www.tnrc.state.tx.us/permitting/airperm.

1. Emission Point Number and name (from Process Flow Diagram):			
2. Manufacturer and model number (if available):			
3. Name of source(s) or equipment being controlled:			
4. Type of particulate controlled:			
5. GAS STREAM CHARACTERISTICS			
Design Maximum Flow Rate (acfm)	Average Expected Flow Rate (acfm)	Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)
			Inlet: Outlet:
Pressure Drop (inches of H ₂ O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)		Fan Requirements
			hp: ft ³ /min:
6. PARTICULATE DISTRIBUTION (By Weight)			
Micron Range	Inlet (Percentage)	Outlet (Percentage)	
0.0-0.5			
0.5-1.0			
1.0-5.0			
5-10			
10-20			
over 20			
7. FILTER CHARACTERISTICS			
Filtering Velocity (acfm/ft ² of Cloth)	Bag Diameter (inches)	Bag Length (feet)	Total Number of Bags
8. Bag rows will be: " Staggered " Straight			
9. Will walkways be provided between banks of bags?: " YES " NO			
10. Filtering material:			
11. Describe bag cleaning method and cycle.:			
12. Capital installed cost \$ Annual operating cost \$			

Note: Attach the details regarding the principle of operation and an assembly drawing (front and top view) of the abatement device drawn to scale clearly showing the design, size and shape.

If the device has bypasses, safety valves, etc., include in the drawing and specify when such bypasses are to be used and under what conditions.