

## SUPPLEMENTAL INFORMATION: CYCLONES

Submit the following information with your application for an Authority to Construct:

1. EQUIPMENT LOCATION DRAWING - The drawing or sketch submitted must show the following:
  - a. The property involved, with outlines and heights of all buildings. Identify property lines plainly.
  - b. Location and identification of each piece of equipment the exhaust system is to serve.
  - c. Location of the cyclone and associated ductwork. Use lines to show ducts and include the outlines of the cyclone and any pre-cleaners.
  
2. DESCRIPTION OF EQUIPMENT - The following information must be submitted:
  - a. Make, model, size, type, and capacity of the cyclone.
  - b. For the fan, state the make, model, power rating, size and volume of air (cubic feet per minute) to be handled.
  - c. Describe the means of disposal of the collected air contaminants.
  - d. State pressure drop across the cyclone at design specifications.
  - e. State the efficiency of the cyclone.
  - f. Submit the manufacturer's brochure describing the equipment installed.
  
3. DRAWING OF CYCLONE Complete the attached cyclone specification form which includes the following:
  - a. Overall width, height and shape of the cyclone
  - b. Sizes and shape of all connected ductwork and hoppers or other parts used to contain the collected materials.
  
4. ESTIMATE OF EMISSIONS
  - a. Provide estimates of pollutant concentrations and mass emission rates for pollutants listed in b. below, from each emissions unit or air pollution control device. Fugitive emissions from uncontrolled sources should also be quantified.
  - b. Best Available Control Technology (BACT) is required if the potential to emit exceeds one or more of the following limitations on a daily basis:

Particulate Matter (PM-10)	80	lb/day
Nitrogen Oxides	25	lb/day
Sulfur Oxides	80	lb/day
Reactive Organic Compounds	25	lb/day
Carbon Monoxide	500	lb/day
  
5. DESCRIPTION OF PROCESS
  - a. Specify the materials processed through this cyclone.
  - b. Specify process rate of materials entering the cyclone (lbs/hr or grains/dscf).
  - c. Specify the hours per day, days per week and weeks per year the cyclone is to be used.
  - d. Show the flow of materials either on a separate flow diagram or on the drawings accompanying the application.

After an Authority to Construct is granted for any equipment, alterations from the approved plans are not permissible without first securing additional approval for the changes from the Air Pollution Control Officer.

Further information or clarification concerning permits can be obtained by calling (530) 891-2882.



## CYCLONE INFORMATION/SPECIFICATION FORM

SPECS/ CYCL #				
CFM				
Hc				
Hb				
Hg				
Ht				
Db				
Dc				
De				
Di				
Effic. Rating				
Waste From				
Df				
RMPf				
PDf				
HPm				
RPMm				
PDm				
Make				
Model				

**LEGEND:**

H = Height  
 D = Diameter  
 RPM = Rev/min  
 HP = Horsepower  
 PD = Pulley Diameter

b = bottom                      g = ground  
 c = cyclone                      i = intake  
 e = exit                            m = motor  
 f = fan                              t = top