# Utah Division of Air Quality
New Source Review Section

Company ________________________________  
Site/Source ________________________________  
Date ____________________________________  

## Form 6  
Cyclones

### Equipment Information

1. **Manufacturer:** ___________________________  
   **Model no.:** ___________________________

2. **Type of cyclone:**  
   - ☐ wet  
   - ☐ dry  
   - ☐ Single  
   - ☐ Multiple: number ________  
   - ☐ In series: number ________  

3. **Type of particulate:** ___________________________  
   **Particulate size:** ___________________________________________ microns  
   (mean geometric diameter)

4. **Efficiency of cyclone:**  
   - At design maximum: ________________ %  
   - At average operation: ________________ %

5. **Pressure drop through cyclone (inches water):**

6. **Method of handling material removed:**

### Gas Stream Characteristics

7. **Particulate grain loading:**  
   - **Inlet:** ___________________________  
   - **Outlet:** ___________________________

8. **Total flow rate (acfm):**  
   - **Design maximum:** ___________________________  
   - **Average expected:** ___________________________

9. **Gas stream temperature (°F):**

### Emissions Calculations (PTE)

10. **Calculated emissions for this device**  
    - **PM\textsubscript{10}** Lbs/hr ___________ Tons/yr  
    - **PM\textsubscript{2.5}** Lbs/hr ___________ Tons/yr  

   Submit calculations as an appendix.

## Instructions

1. **Submit this form in conjunction with Form 1 and Form 2.**  
2. **Call the Division of Air Quality (DAQ) at (801) 536-4000 if you have problems or questions in filling out this form. Ask to speak with a New Source Review engineer. We will be glad to help!**

1. **Fill in the cyclone manufacturer’s name and model number.**  
2. **Indicate the type of cyclone being used.**  
3. **Supply what the material is being controlled, and its mean geometric diameter in microns (μ).**  
4. **Fill in the efficiency of the cyclone at the maximum and average operating levels.**  
5. **Indicate the pressure drop through the cyclone (inches water).**  
6. **Describe the method of handling the material removed by the cyclone.**  
7. **Indicate the gas stream particulate grain loading at inlet and outlet.**  
8. **Specify the flow rate in actual cubic feet per minute at the design maximum and average.**  
9. **Specify the gas stream temperature as it goes through the cyclone.**  
10. **Supply calculations for all criteria pollutants. Use AP42 or Manufacturers data to complete your calculations.**