**Dust Collectors and Cyclones -- Permit Required Confined Space Entry Permit**

1. Dust Collectors Entry Procedure and Permit

   "All shaded areas must be completed by the Entry Supervisor or Entrant"

2. Work to be Performed and Location:

3. Date Issued: /  /

   Time Issued: :  a.m.  p.m.

4. Permit Space Hazards (X = Potential Hazard or Testing Requirement)

   - Oxygen - hazardous when less than or equal to 19.5% OR greater than or equal to 23.5%.
   - Flammable Gases or Vapors - hazardous when greater than 10% of LFL / LEL.
   - Hydrogen Sulfide - hazardous when greater than 10 PPM
   - Carbon Monoxide - hazardous when greater than 50 PPM (always look for when welding or near a fuel combustion source (cars, utility carts, etc.)

5. Additional Permits or Forms (Please attach if required)

   Hot Work Permit: □YES □NO □N/A  LOTO / Hazardous Energy Control Procedure: □YES □NO □N/A  Other:

6. Equipment Required for Entry & Work (Check box when complete)

   □ PPE  Eye protection, body harness, other PPE for heat if necessary (gloves, long sleeves, etc.)
   □ Atmospheric Testing  4-Gas Meter required for testing. Test atmosphere in the dust collector by using stratified method of checking atmosphere at different levels within the space.
   □ Respiratory Protection  1/2 face respirator with HEPA filters is required for entry into the dust collector. Contact EH&S.
   □ Ventilation Equipment  Full ventilation is required before and during entry unless the space is proven to be free of atmospheric hazards or no atmospheric changes will occur due to work operations within the dust collector.
   □ Rescue Equipment  Entrant will be rescued from horizontal entry by use of a lifeline that is directly connected to the full body harness. The attendant is ready to assist the entrant in an emergency.

7. Communication method used by attendants and entrants (Check all that apply)

   □ Radio
   □ Voice
   □ Other

8. Confined Space Rescue

   The assigned confined space attendant is responsible for evacuating entrants in the event of an emergency by means of vocal communication or retrieval equipment used for the entry. At no time will the attendant enter the confined space. In the event the attendant is unable to evacuate the entrant(s), the Charlotte Fire Department will be notified by UNC Charlotte Police Dispatch at 704-687-2200 to provide rescue assistance. Upon the arrival of rescue personnel, the attendant should brief the rescuers of any notable information.

9. Authorized Entrants (List by name)

10. Authorized Attendants (List by name)

11. Preparation for Entry (Check boxes when complete)

   □ Notify the affected departments of service interruption.
   □ Ensure that all required equipment, tools and PPE are present. Barricade the area to prevent unauthorized entry or access. Setup necessary equipment for entry operations.
   □ Ensure that all hazardous energy is isolated per the specific Hazardous Energy Control Procedure.
   □ Sign in Authorized Entrants in Step 9 and Sign in Attendants in Step 10.
   □ Take a preliminary atmospheric reading with approved 4-gas meter and record reading on Step 12. Atmosphere should be continuously tested during entry. Periodically record sample readings in Step 12.
   □ Upon eliminating or controlling all hazards and the Entry Supervisor signing Step 13, proceed to make entry.

12. Atmosphere Testing Record Acceptable Conditions

   Pre-Entry Results  Entry #1 Results  Entry #2 Results  Entry #3 Results  Entry #4 Results  Entry #5 Results

   - CH4 – Methane - Less than 10% of LEL / LFL
   - O2 – Oxygen Range - Minimum allowable = 19.6% to Maximum allowable = 23.4%
   - H2S - Hydrogen Sulfide - < than 10 PPM
   - CO - Carbon Monoxide - < than 35 PPM
   - Other Toxic:

13. Authorization by Entry Supervisors

   I certify that all required precautions have been taken and necessary equipment is provided for safe entry and work in this dust collector confined space.

   Printed Name  Signature  Date  Time  □a.m. □p.m.

14. Permit Cancellation (Complete at the end of job not to exceed 24 hours)

   Date  Time  □a.m. □p.m.