1. **Cooling Towers ENTRY PROCEDURE AND PERMIT**

Cooling Towers are a permit required confined space if atmosphere inside Cooling Tower is changed by welding, cutting, burning or the use of solvents or cleaners that cause vapors or fumes within the tower. "All Shaded areas must be completed by Entry Supervisor or Entrant**

2. **Work to be Performed:**

3. **Date Issued:**

4. **Permit Space Hazards**

   - 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.
   - Other Toxics:
   - Mechanical Hazards (Pneumatic, Hydraulic, Electrical, Chemical, Steaming, Falling Objects, Etc.)
   - Engulfment Potential
   - Physical Hazards - (bees, insects, spiders, heat during summer).
   - Confined Space Configuration, Layout or Arrangement

5. **Additional Permits or Forms**

   - Hot Work Permit: YES
   - LOTO / Hazardous Energy Control Procedure: YES
   - Other:

6. **Equipment Required for Entry & Work**

   - PPE: Safety glasses/goggles to prevent splashes of water and dirt/sediment into eyes while working in wet areas, such as cooling tower sump. Tower cleaning chemicals/solvents require specialized gloves.
   - Atmospheric Testing: 4 Gas Meter is required in cooling towers when the atmosphere will be changed by welding, cutting, burning or solvent/chemical use that will cause fumes/vapors. Continuous monitoring is required throughout the duration of the entry.
   - Respiratory Protection: Not required under normal operation. If 4 gas meter indicates that atmospheric conditions are not safe do not enter space without additional ventilation.
   - Ventilation Equipment: Welding, cutting, brazing, solvent/chemical usage can cause a change in atmospheric conditions. Monitor space continuously with a 4 gas meter.
   - Rescue Equipment: Not required under normal conditions. Attendant should be ready to call for help in the event that the entrant is injured or becomes incapacitated.

7. **Communication method used by attendants and entrants**

   - 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 personal the attendant should brief the rescuers of any notable information.

9. **Authorized Entrants**

10. **Authorized Attendants**

11. **Preparation for Entry**

12. **Atmosphere Testing Record Acceptable Conditions**

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 cooling tower confined space.

14. **Permit Cancellation**

   - Complete at the end of job not to exceed 24 hours

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