



UNC
ENVIRONMENT,
HEALTH & SAFETY

Job Safety Analysis

Safety Information for The University of North Carolina at Chapel Hill

JOB SAFETY ANALYSIS TOPIC:

Conducting Permit Required Confined Space Entry at Genomics Reclaimed Water Cistern



Title	Work Task	Hazards	Controls
Preplan the work	Gather proper tools for job Gather confined space entry equipment	Improper tool selection can lead to injury Atmospheric Hazard <ul style="list-style-type: none"> • Trichloramine exposure Standing Water Restricted Entry/Exit	Proper tool selection Proper use of entry equipment: <ul style="list-style-type: none"> • Tripod • Retrieval device • 2 Gas Monitors • Ventilation (air blower)
Before entry	Submit online confined space entry notification form Set-up entry equipment, conduct air monitoring and fill out entry permit	Delayed emergency response Injury to employee due to hazards in the permit- required confined space	Submit form prior to entry to notify emergency responders of entry and location Proper equipment set-up and pre-entry air monitoring. Ventilate space for at least 5 minutes prior to entry. Complete entry permit.

Conducting Entry	Ventilate space with air blower	Rash and inhalation effects from trichloramine exposure	Continuously ventilate space during entry to reduce trichloramine concentration and to provide cooling to entrant during hot weather
After Entry	Prepare confined space for normal operation	Damage to cistern components by leaving tools and equipment in space. Unauthorized entry by untrained persons	Remove all tools and entry equipment from space. Cancel (close-out) permit. Close and secure entry hatch.
Clean up	Properly clean up area around cistern Remove residual trichloramine on skin	None Rash from trichloramine exposure	Remove all tools and entry equipment from work area. Entrants should shower immediately after entry and don fresh clothes
Training	Employees must take the online Confined Space Entry Course annually. Employees must have Advanced Confined Space Entry training every 3 years. Employees must have Hazard Communication training on trichloramine.	Confined Space Program Coordinator must fill out the training form and submit form to UNC-CH Environment, Health and Safety for documentation of proper training Supervisor must fill out the HazCom training form and submit form to UNC-CH Environment, Health and Safety for documentation of proper training	

Created By	Kim Haley, Industrial Hygienist 10/1/19		
Contact Info	<p>For more information about this JSA and other JSAs, contact: <i>UNC-CH Department of Environment, Health and Safety</i> 1120 Estes Drive Extension, Chapel Hill NC 27599 CB# 1650 (919) 962-5507 ☎ https://ehs.unc.edu/</p>		