



UNC
ENVIRONMENT,
HEALTH & SAFETY

Job Safety Analysis

Safety Information for The University of North Carolina at Chapel Hill

JOB SAFETY ANALYSIS TOPIC:



Manual Flushing Dental Vacuum Tanks
(Without Vacuum System)

| Title | Work Task | Hazards | Controls |
|--------------------------|--|--|--|
| Preplan the work | <p>Gather proper tools (collection bucket, hose)</p> <p>Gather Proper PPE for the job and inspect it (safety glasses, gloves, possibly Tyvek suit)</p> <p>Notify EMCS of planned shut down</p> | <p>Improper tools</p> <p>Improper PPE inspection/selection</p> | <p>Using improper tools or parts can lead exposure or injury</p> <p>Improper PPE use and inspection can lead to unnecessary hazards created by wrong PPE or faulty PPE</p> |
| Before the job/Site prep | <p>Don necessary PPE</p> <p>Set up hose for testing solenoid valve</p> <p>Set up bucket before flushing</p> | <p>Improper Donning of PPE</p> <p>Trip Hazard</p> | <p>Improperly donning or not donning PPE can lead to an unnecessary exposure. Ensure all PPE is on correctly and has passed inspection</p> <p>Keep bucket under the collection point</p> <p>Keep hose flat</p> |

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| <p>Flush Tank</p> | <p>Open tank bypass valve</p> <p>Close isolation valves (inlet and outlet) of tank to be flushed</p> <p>Open breather valve to release the vacuum pressure</p> <p>Open the access hatch on the tank and verify contaminant levels</p> <p>Manually open the tank flush valves/hit the washdown button/or rinse with hose and nozzle until drain pipe is full</p> <p>Close flush valves prior to water level reaching hatch level</p> <p>Open ball valve at base of tank or pump flush water through the access hatch into the contamination drum provided by EHS</p> <p>Repeat flushing as needed</p> <p>Place all water collected in small collection bucket into the large properly labelled collection container</p> <p>EHS will test flush water to determine level of contaminants</p> <p>Properly mark waste for disposal and contact EHS for pick up</p> | <p>Slips, Trips, and Falls</p> <p>Potential Exposure</p> <p>Improper Collection</p> <p>Improper Storage and labeling</p> | <p>Keep an eye on the process to avoid having the contaminated water get on the floor. Make sure the hose is secure and there is a collection plan for the contaminated material</p> <p>Contact the UNC Hazardous Materials Manager (919-962-5509) to obtain the properly labelled container with date and fill out a hazardous waste pick up form. Once storage of material starts the container must be picked up within one year, even if the container is not at capacity.</p> |
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| Clean Up | <p>Close and secure access hatch</p> <p>Close breather valve to tank</p> <p>Open the tank inlet and outlet valves</p> <p>Close the tank bypass valves</p> <p>Unhook hose, roll up, and take back to store properly</p> <p>Doff PPE</p> <p>Store PPE</p> | <p>Trip Hazards</p> <p>Improper Doffing</p> <p>Improper PPE Storage</p> | <p>Proper housekeeping will help keep the threat of trip hazard down from unsuspecting ME room users and storing properly will increase the life of the hose</p> <p>Improper doffing can lead to exposure hazards if the employee comes in contact with certain materials</p> <p>Improper PPE storage can lead to a shorter PPE life span or PPE that is not as effective in the future</p> |
| Training | Employees must have hands on training in the proper use of this piece of equipment. | Supervisor is to fill out the turn in the form to UNC-CH 'Supervisor Led Training Form' and Environment, Health and Safety for documentation of proper training | |
| Created By | <p>Cory Kirkland, Facilities Safety Officer</p> <p>Kevin Sloan, HVAC Auxiliaries Supervisor</p> <p>David Catalano Updated July 2020</p> | | |

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| Referenced Material | | | |
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| Contact Info | 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 ☎ http://ehs.unc.edu |  The logo of the University of North Carolina, featuring a stylized classical building with columns and a pediment. |  The logo for UNC Environment, Health & Safety, consisting of the letters 'UNC' in a large serif font, with 'ENVIRONMENT, HEALTH & SAFETY' in a smaller sans-serif font below it. |