

Safety Issues: Transient Non-Community Drinking Water Systems

The presence of electrical components and pressurized water, and the potential presence of confined spaces (e.g., tanks), chemicals (e.g., sodium hypochlorite), excavations (e.g., waterlines), or general construction activities on the water system can present significant safety risks. Regulations authorized by the Occupation Safety and Health Act (OSHA) contain requirements for proper work procedures; contact VOSHA (802 828 2765) with questions on how to comply with OSHA. In particular, work in confined spaces typically requires specially trained personnel and specialized equipment; see the following link for guidance on working in confined spaces (<http://www.dol.gov/elaws/osha/confined/menu.asp>). The following is a listing of the most common safety issues for TNC systems, and preventive steps to avoid accidents.

Issues	Preventive steps
Sprains/Strains	Clean, dry, uncluttered, well lit work area
Lifting injuries	Proper lifting technique Split up load into lighter amounts
Electrical shocks	Use qualified electrician or pump service technician Turn off circuit at circuit breaker prior to work Use non-conductive materials (e.g. clothing, floor mats) and tools
Pressurized water	Relieve system pressure prior to work; verify with gages Operate valves slowly Wear safety glasses
Confined spaces	Determine classification of confined space Verify air quality with meters (% oxygen, chlorine, carbon monoxide) Provide adequate air ventilation For tanks, turn off pumps to insure water does not enter tank Do not work alone Provide safety harness and hoist if space deeper than 5 feet
Chemicals	Read MSDS sheet, and keep copy of MSDS sheet in use area Properly store: covered, proper temperature, no sun, spill containment Label smaller quantity storage containers Wear protective equipment (safety glasses, gloves, apron) Provide adequate ventilation, particularly with chlorine Do not mix chemicals, particularly sodium hypochlorite (bleach) with either acids (e.g. muriatic/hydrochloric acid, vinegar) or ammonia
Excavations	Contact Dig-Safe at 888 344 7233 two or more days prior to excavation Use shoring/trench boxes for excavations 4 to 5 feet deep or greater

This fact sheet and related environmental information are available electronically via the internet. For information visit us through the Vermont Homepage at <http://www.vermont.gov> or visit VT WSD directly at <http://www.vermontdrinkingwater.org>

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