

Great Western Painting

Hydro-Vac Excavation Operations Policy

Hydro-vacuum excavation utilizes the kinetic energy in a high velocity water stream to penetrate, expand and break up soil. The loosened soil and rocks are then removed from the hole through the use of a powerful vacuum. The hole created is typically one to two feet square and as deep as required to expose the buried utility.

Essentially hydro-vac excavation is a non-destructive method of excavation that uses water and vacuum power to quickly and safely expose underground infrastructure.

During the hydro-vac process, pressurized water is injected into the ground through a handheld wand. As the soil cover is liquefied, the resulting slurry is simultaneously extracted by a powerful vacuum and stored in a debris tank onboard the hydro-vac.

Hydro-vacs can dig effectively in all soil types, including clay, and with the aid of onboard heaters hydro-vacs provide a safe means of digging in frozen ground.

The primary benefit of hydro vacuum excavation is the relative ease and speed of excavating. The higher density of water produces a powerful stream which penetrates and pulverizes virtually all types of soil. Water acts as a lubricant during excavation, helps control static electricity, and can be heated for excavating in frozen ground. Some hydro vacuum excavations can be performed in less than 15 minutes.

Our hydro vacuum excavation units are larger trucks or trailers of sufficient capacity to handle the volume and weight of water. Our units have a tank for "clean" water and another in which to store the slurry.

Use of hydro-vac excavation procedures is a time efficient and cost effective way of exposing buried utility lines that may not be revealed on a photo schematic of the area. This process is faster and safer than using any other type of excavation equipment including hand digging.

All of our hydro-vacuum truck operators will be trained and properly licensed in accordance with applicable regulations. Trucks will be inspected in accordance with the manufacturer's owner/operator manuals by the operator before use and all safety deficiencies corrected before movement.

All vacuum trucks will be maintained in accordance with the manufacturer's owner/operator manuals which will be kept with the vehicles.

Operation of vacuum trucks, as well as all items of machinery, requires, constant vigilance and safety awareness.

Truck operators, hose operators, and other involved employees will use appropriate PPE including hard hat, hearing protection, safety glasses, and gloves. Specific training will address electrical hazards and grounding and bonding; falls; and traffic control. If possible exposure to electricity exists, the mats(s), the gun/wand, the dig tube and the hydro-vac truck should be bonded and grounded.

Those working on the vacuum truck and/or maintaining the trucks will have had training in control of hazardous energy as well as permit-required confined space.

During off loading, operators will leave the vacuum truck cab. Vacuum truck operators will monitor the transfer operation and be ready to quickly close the product valve and stop the pump in the even of a blocked line or release of material through a broken hose or connection.

Our vacuum truck operators will follow our standard operating procedures for handling and mishaps, incidents, or accidents.

This Policy Statement will be conspicuously posted.

Patrick Evje
Safety Director