Safe Operating Practice

Culvert Steaming

Workers must be trained/competent and aware of associated hazards. Use the "Take Ten" tool if needed. Trainees must work under supervision.

This SOP describes the steaming of culverts

Potential Injuries:  Drowning, asphyxiation, bumps, bruises, eyes, burns, foot, hand, hearing, loss of limb, muscle pull/strain, pinch points, puncture, slip/trip/fall, fatigue, weather, exposure, biological (Hanta Virus, Tularaemia, Beaver Fever, H2S)

Potential P&E Incidents:  Equipment accidents/incidents, struck-by, equipment failure

Mandatory PPE:  CSA approved footwear, hard hat, high visibility apparel, eye protection, protective hand wear

Recommended PPE:  Personal flotation device hearing protection, coveralls

Tools & Equipment:  Appropriate transportation, communication, steamer and attachments, traffic accommodation devices and hand tools

Best Practice

1. Pre-project planning
2. Conduct vehicle pre trip inspection
3. Culvert steaming must involve two employees who are trained and competent on the steamer/equipment being utilized
4. When transporting portable steamer ensure that steamer is secured to truck/trailer with proper tie down procedures
5. Inspect nozzle, hose and rods for cracks or damage before commencing task
6. Maintain care and control of the wand at all times (both under pressure and not under pressure)
7. Ensure stable footing, be aware of muddy and slippery conditions when working around water, work from the downstream end if possible, and do not over exert yourself in awkward position
8. Never remove the wand from culvert while under pressure
9. When blockage is open:
   - Turn off burner as per steamer operator’s manual instructions
   - Shut down steamer
   - Remove hose and nozzle from culvert and vacate the flow area as quickly as possible

Related SOP’s, Training & Manuals

- TCDM Manual
- WHMIS Manual
- Safe Use of Hand/Power Tools SOP
- Manufacturers Operating Manual for Steamer
- Safe Lifting Procedures
- Communication While Driving SOP
- Workzone Traffic Accommodation Training
- Safety Handbook / Manual