

Safety Note

UNIVERSITY OF CALIFORNIA
AGRICULTURE AND NATURAL RESOURCES
ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #60

TRENCHER MACHINE SAFETY



Information available from the Census of Fatal Occupational Injuries indicates about 75 percent of the excavation and trenching fatalities are due to cave-ins. Other fatalities are caused by being struck by objects, entanglement with equipment, fires from damaged gas pipelines, and electrocution from cut power lines while performing excavation or trenching. Safety Note #49 Trenching and Excavation Requirements identifies California regulatory program elements established to prevent cave-in injuries and fatalities. This Safety Note focuses on prevention of injuries and fatalities associated with trencher machine operations.

Pre-Use Activities

- Thoroughly review and understand information provided in the trencher machine operator's manual with particular attention given to descriptions of safety procedures.
- Before using, always inspect the trencher machine for damage or disrepair including examining the tension and teeth of the trencher chain.
- If a trencher machine fails the pre-use inspection, notify your supervisor and remove the equipment from service by attaching a red tag that states "DO NOT USE." Complete red tag with appropriate information.

Operating Precautions

- Contact Underground Service Alert (USA) to locate underground public utilities at least two days prior to using a trencher machine. Accurately locate REC underground utilities before trenching.
- Always wear eye protection, steel-toed boots, long pants and shirt, hard hat, and hearing protection when operating a trencher machine. Do not wear loose clothing or jewelry.
- Trencher machines are designed to trench through soils. Never trench into asphalt pavement, rocks, or concrete.
- Prior to starting, inspect the area to be trenched for large rocks or foreign objects that could damage the trencher machine.
- To begin trenching, lower the trencher boom to within a couple of inches from the soil surface before engaging the trencher chain at a low engine speed.
- Keep hands and feet away from rotating equipment such as the trencher chain.
- Do not overload trencher machine engine capacity by trenching too deep or fast.
- Disengage the trencher chain when raising the trencher boom clear of the trench.
- Never fuel the trencher machine when the engine is hot. Use a rag to wipe up fuel spills.
- If an underground utility is struck, stop trenching and shut the trencher machine engine off.
 Immediately contact the utility company.
- Shut off the trencher machine engine and set the parking brake before performing mechanical adjustments, maintenance, or repairs or clearing/unclogging trencher teeth.
- Always shut off a trencher machine before leaving it unattended.