

Naval Facilities Engineering Command

Abstract of an Accident

97-1

ACCIDENT TYPE: Crushed
INJURY: Fatality
TYPE OF WORK: Underground Storage Tank Removal
EQUIPMENT: Heavy Equipment

DESCRIPTION OF MISHAP

The site consisted of 3 abandoned underground storage tanks (UST) slated for removal. Two of the three tanks had been removed from the excavation and had been placed “near the edge of the excavation.” At the time of the mishap the deceased was in the excavation when one of the 2 tanks fell back into the excavation crushing him against the bucket of the heavy equipment.

DIRECT CAUSE

- The tank weighed over 8,700 pounds. It fell because it was placed on unstable spoils too close to the excavation. The spoils collapsed and allowed the tank to fall. The crew had placed the tanks on the excavation edge to drain excess liquids back into the excavation to minimize the spread of contaminants.
- No daily inspection conducted by a competent person (trenching); no competent person on site.

INDIRECT CAUSES

- Site safety plan did not include a comprehensive work plan, site excavation plan, or address the actual site conditions.
- No comprehensive work plan prepared and approved.
- No specific safety related work practices or procedures developed for underground storage tanks removal or excavation work. Employees received no training in excavation safety. Employees received inadequate training for development of the site safety plan.
- Personnel operating construction equipment were not licensed IAW NAVFAC P-300.

LESSONS LEARNED

- Ensure all applicable requirements of 29 CFR 1910.120 and 29 CFR 1926.650-.652 are integrated into command operations and personnel responsible for implementing them are adequately trained.
- Identify all high hazard operations, develop job hazard analysis, and incorporate safe work practices and procedures throughout the command.
- Ensure the requirements of NAVFAC P-300 for licensing and authorizing personnel to operate equipment are implemented.
- Ensure rental equipment contracting policies include requirements for providing equipment best suited for the operation.
- Review UST removal procedures compared to contractor requirements of NFGS-02115A and ensure comparable requirements are accomplished.

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