

FATALGRAM #11-06

Alaska Department of Labor & Workforce Development
Division of Labor & Safety Standards
Occupational Safety & Health

Date of incident: August 17, 2011

Industry: Construction

Location: Port of Anchorage North Extension, Anchorage, Alaska



Summary: On August 17, 2011, an employee drowned when the D-8 dozer he was operating slid into the water at the port expansion project in Anchorage, AK.

Description of incident: The victim was an operator/foreman using a D-8 dozer to backfill sheet piling cells after the cells had been excavated and inspected. Initially, the backfill had been started by a long reach excavator placing material in the water to straighten the sheet piling forming the walls of the cells. The dozer was then used to advance materials toward the cells and build a pad for the return of the excavator. As the dozer was drifting material on the slope toward the fill area, the material began to slide down the slope and the dozer slid with it. Apparently an impulse wave was created by the dozer and material sliding into the cell. It appeared that the wave reflected off of the tail wall at the end of the cell, rushed back, and engulfed the dozer and operator. When the dozer was discovered in the cell, it was upright and fairly level with the water level at the top of the operator's seat back. The operator ended up on the slope behind the dozer trapped by backfill material washed down the slope from the existing grade. The material buried the victim to his waist and he subsequently drowned. It was not clear whether the operator was swept away from the equipment due to a lack of seatbelt usage or due to an attempt to jump from the dozer as it slid into the cell.

No one witnessed the accident, and the dozer was quickly discovered in the water. Coworkers found the victim under the water and attempted to free him, however he was buried too deeply in the material to be pulled free. A witness at the site prior to the accident had seen the victim walking on the ground performing an inspection of the fill area.

Alaska Occupational Safety and Health investigated the accident. Based on the investigation it was determined that the grade that the dozer had been operating on was not sufficiently stable to allow safe movement of the dozer.

Accident Prevention Recommendations:

- Ensure that workers are trained in the hazards associated with backfilling in a tidal zone area.
- Ensure that the backfill area is inspected by a competent person to detect possible subsiding due to tidal factors, steep slopes, and vibrations caused by machinery working in the area.
- Ensure that employees wear seatbelts when operating equipment.
- Have an emergency plan for worst case scenarios.
- Train workers to assess dynamic situations and to be aware that secondary reactions may be more hazardous than the initial events.