

FATAL ALERT

February 10, 2010

On February 10, 2010, a construction foreman drowned when he became trapped under the ice as the excavator he was operating broke through the ice covered water retaining pond coming to rest on its side with the cab underwater. At the time of the accident the employee and a co-worker were performing the mechanical work for a retaining pond's drain pump. The edges of concrete blankets covering two recently poured concrete vaults containing the pump and mechanics were frozen in the ice of the pond. This interfered with the installation of the mechanical system between the two concrete vaults. The foreman decided to use an excavator to break the ice surrounding the concrete vaults to free the blankets from the ice. As the foreman attempted to drive the excavator down the access grade and onto the earthen dike, he failed to properly position the equipment within the safe limits of the access. The mis-positioning of the excavator along the access may have been due to accumulated snow. The left track of the excavator traversed onto the ice covered retaining pond breaking through the ice. The excavator tipped onto the operator's side and came to rest with the operator's cab completely submerged trapping the employee under the water and ice. The co-worker had to leave the construction site to an adjacent building to contact emergency services. Once emergency services were contacted, they arrived on site within 5 minutes with rescue operations commencing immediately upon their arrival. The emergency rescue team was unable to immediately locate the victim. The victim's body was later recovered from under the water and ice, outside of the cab of the excavator.

Significant Factors:

- The employee was not adequately trained in the recognition and avoidance of unsafe conditions associated to his work environment.
- Employees working over or near water, where the danger of drowning existed, were not provided appropriate protective equipment by way of Coast Guard-approved life jacket or buoyant work vests.
- A manual means of completing the task was available in that sledge hammers were available.
- The employees were returning to the worksite for the first time after a 55 day layoff.
- It is not known why the foreman decided to move the excavator out on the ice covered retaining pond.
- The ice thickness was not known or evaluated prior to the foreman's movement of the excavator out onto the ice covered surface of the retaining pond.
- No communications systems were in place to immediately contact emergency services

Recommendations:

- Brief all employees on the facts and circumstances of this fatal mishap.
- Evaluate safety program and incorporate specific training procedures emphasizing the importance of hazard recognition and avoidance specific to the workplace. These procedures should include, but not be limited to, conducting hazard evaluations before initiating work at a job site and implementing appropriate controls.
- The employer shall provide adequate personal protective equipment to employees specifically to the environment in which they are working.

- Ensure a communications system is in place on the construction location and available to all employees to assure minimal delay in contacting emergency services if necessary.
- Ensure that all employees are adequately trained to recognize the hazards of operating heavy equipment in cold weather conditions, working over or near water and the procedures to be followed in order to minimize these hazards.
- Ensure that pre-work safety meetings are conducted each day to discuss the work to be performed, identify the potential safety hazards, and implement safe work procedures to control the hazards.