

SERIOUS EVENT REVIEW

Event date: January 2016

Worker Falls Under Icy Conditions

At a remote hydro electrical power construction site workers were preparing for 2 days of high volume concrete pours. Two additional workers were brought into the camp from other locations for the duration of the pours. The batch plant is a portable plant with a narrow access route for mixers to back under and is lined by lock blocks, one row high, on the driver's side.

A safety meeting was held at 0700 hours on January 13th where icy conditions and general site conditions were discussed. A daily hazard assessment was completed at that time.

Later that day a worker backed a mixer truck under the plant to be batched and before leaving from under the plant the worker was asked to check the slump / wetness of the concrete. When the worker was descending the ladder and stepping from the mixer's ladder onto an ice covered lock block, from approximately 1.0 meter (39 in.) high the worker slipped and was not able to hold on due to icy ladder side rails. The worker struck the edge of the lock block with the left side of the body. (Normally, drivers pull ahead from under the plant, drop down the mixer's ladder, climb up and check the load.)

When the worker fell from the ladder two other workers came to the injured workers aid and called for the camp medic. While waiting for the medic the injured worker was taken into the batch office. The injured worker was checked and treated for a musculoskeletal injury (MSI) by the camp medic and released back to work. Later that day the injured worker expressed concern to the supervisory staff that he was in pain and should see a doctor.

At that time because the nearest doctor was located in a town several hours drive away, the medic should have been called to see the worker for a follow up but because the following day was the injured worker's regular scheduled day to leave camp for a ten day cycle, and the medic's original assessment was only soft tissue damage, the worker decided not to see a doctor until he arrived home so that he wouldn't miss his flight. The day after arriving home the worker went for medical aid and was diagnosed with 3 broken ribs and fractured lumbar vertebrae. The worker has since returned to full duties.

Immediate Cause:

UNSAFE ACT:

Unsafe Operating procedures; the worker was instructed to check the load while under the plant; by not allowing the worker to pull ahead this put the worker in an unsafe position. The normal procedure was to check the load after the mixer pulled ahead, allowing the mixer's ladder to be fully extended in the down position.

UNSAFE CONDITIONS:

Congested work space; the worker was unable to drop down the mixer ladder to safely climb up, due to the proximity of the mixer to the lock block. These blocks were set in place at the time of plant installation.

Contributing Factors:

UNSAFE ACTS:

Inadequate emergency response; the injured worker was moved from the fall location to the batch office by untrained personnel. The worker should not have been moved until the medic arrived and completed an assessment. Later when the worker complained of pain he should have been re-examined by the medic.

UNSAFE CONDITIONS:

Inadequate housekeeping practices; although icy conditions were discussed at a safety meeting and an assessment was conducted, there is no evidence that any hierarchy of hazard controls were implemented at the immediate work area.

Weather conditions; Due to cold atmospheric conditions snow and ice were present on the ground, top of lock blocks, and side rails of the mixer's ladder. Slippery conditions on top of the block and icy side rails on the ladder contributed to the accident.

Recommendations:

- Discuss and review safe operating procedures for checking slump under and around the plant including the company's code of practice for ascending and descending while maintain 3 point contact.
- Conduct field level hazard assessment prior to commencing a task and when conditions change. Implement hazard controls before work is started
- Pre-plan job-site layout when or wherever possible to allow for the mixer's ladder to be unfolded should it be required to access the top of the mixer and, if not, develop safe work procedures
- Train supervisory staff and workers in hazard assessment, hierarchy of controls and how to implement them
- Ensure that all workers receive a safety orientation upon initial arrival at a facility and that First Aid Attendants are identified and site specific emergency response procedures are understood.
- Conduct site specific emergency response assessments to determine number of trained First Aid Personnel, first aid supplies and transport vehicle requirements as per provincial or state jurisdictions
- Review and discuss this SER at next safety meeting.