

Monthly periodical

Queensland Mineral Mines & Quarries Inspectorate
July 2021

Mineral Mines & Quarries Inspectorate



Resources Safety & Health
Queensland

Serious Accidents.

While operating a scraper, the operator has lost their grip on the steering wheel after hitting a bump and they hit their head on the steering wheel.

While attaching a shade sail to trees, a branch broke off, knocking off the worker's safety glasses and injuring their eye.

A snort pump on a jumbo was not working, so the operator disconnected the discharge hose and then the relief hose which ejected hot water causing first degree burns to approximately 3% of their face and 4% to their forearm.

High Potential Incidents.

There were 35 High Potential Incidents, ten of these involved vehicles.

Uncontrolled movement of roller.

On 4 July 2021 a padfoot roller was reversing along the top of the tailings dam wall when it got too close to the embankment crest which moved under the weight of the machine.

The operator exited the plant without injury.



Uncontrolled movement of roller

Causes

The operator was reversing near the edge and was intent on finishing the task in a limited timeframe.

The operator had attained the Resources and Infrastructure Industry Training Package RII MPO 317F for a roller in March 2021.

The Verification of Competency (VOC) was completed in April 2021 and was relevant for the construction of dam walls. However the contractor's Safe Work Method Statement was generic for all powered plant likely to be used during the project and the hazard of working close to the crest of the embankment was not addressed.

The operator was inexperienced at the time and not under direct supervision.

Uncontrolled movement of roller.

Recommendations

- The VOC should include the scope of work specifically for the type of plant to be used, as was done in this case. However the VOC should also include : (Administration)
 - Project hazards, such as working on an embankment, are to be kept under control and
 - The understanding of safety critical features of the plant, such as how to test the braking systems.
- The following records must be kept:(Administration)
 - The training undertaken and time spent demonstrating the skills and knowledge to carry out the task safely.
 - The name of the supervisor who supervised workers during this training and their qualifications.
- Tasks should be scheduled as part of project management in order to avoid perceived time pressures on workers. (Administration)

Structure supporting cement silo fails

On 26 July 2021 the elevated structure that supported a cement silo failed without any warning and, as it fell it, struck the side of the control room.

The silo contained approximately 30 tonne of cement.

No workers were in the area at the time.



Structure supporting cement silo fails.

Causes

24 tonne of cement had been delivered into the silo some three hours prior to the incident.

The structure failed in an area that was concealed by a cable tray and was not identified as a problem during the annual visual structural inspections by on-site management.

Corrosion in several other areas was identified in the 2020 visual structural inspection but this did not trigger a follow up external audit.

The last structural audit occurred in 2016 but did not include the support structure for the pug mill.

The design of the support structure was not available for reference during any structural audit.

Structure supporting cement silo fails.

Recommendations

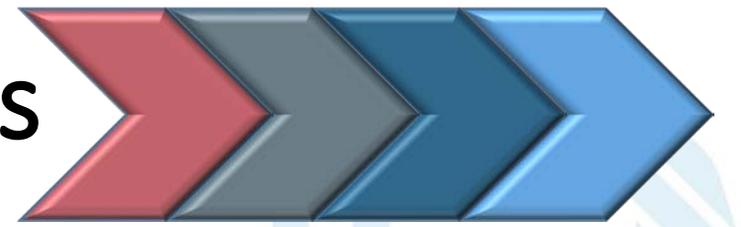
- Inspections and audits must be scheduled and carried out at a frequency that will ensure the integrity of the plant. (Administration)
- The frequency of inspections and audits must be altered if environmental conditions change. (Administration)
- On-site workers carrying out structural inspections must have the skills and knowledge required. (Administration)
- Structural integrity audits must be carried out by internal or external parties who have recognised qualifications and expertise in this field. (Administration)
- Remedial actions stated in the reports generated by inspections and audits must be carried out within the recommended timeframe. (Administration)
- The design of the structures should be available on site in case anyone has a need to check the structure is being used in accordance with its design.(Administration)

Learnings.

On many recent occasions an incident, including a fatality, has occurred during the last load of the day or last task before a delayed smoko. The reasons for this may be an intent to fit in extra load in a hurry or a lapse in concentration thinking about the next activity.

A variation from the routine can create additional hazards but on the other hand routine activities can allow complacency to creep in. Awareness of both these scenarios should be incorporated into training and assessment packages.

Contact us



Mineral Mines and Quarries Inspectorate

General enquiries:

- [Contact your regional inspectorate staff](#)

Report emergencies, incidents or illness:

- Townsville: (07) 4447 9282
- Mt Isa: (07) 4745 4117
- Brisbane: (07) 3330 4273

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