

Safety Alert

Dangers of unguarded machinery and plant

The purpose of this Safety Alert is to highlight the risk of serious or fatal injuries when working on or near unguarded machinery.

Background

In late December 2020, a Territory cattle station worker failed to return after checking bores on the property. The worker was later found entangled in a bore pump with fatal injuries.

Preliminary findings indicate the workers clothing got caught in the bore pump's moving parts.

Possible contributing factors

- The pump's pulley's and belt were unguarded exposing the worker to a number of hazards including entanglement, friction and abrasion hazards, when the pump was running.



Image 1: The pump's moving pulleys and belt unguarded, are a hazard for nearby workers. (Source: NT Police)

Action required

- Owners and operators of machinery or items of plant must manage the hazards associated with a person coming into contact with the machine's moving parts.
- Isolating a machine's moving parts using guards is an option to reduce the risk of accidental contact.
- Guards are covers, casing or shields that create a physical barrier preventing a worker (or others), their clothing, personal protective equipment or other accessories from making contact with any moving part.
- Guards should be fitted to prevent contact with:
 - Rotating or moving parts;
 - Potential crush, shear or nip points on the machine; or

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- Parts of the machine which become very hot during normal operations.
- Guards should:
 - be of solid construction and securely mounted so as to resist impact or shock;
 - be difficult to by-passing or disable, whether deliberate or accidental;
 - only be altered or removed by the use of tools;
 - not create additional risks such as obstruct an operator visibility or reduce ventilation and cause overheating.
- If the guarded area needs access for maintenance or cleaning, install an interlocked physical barrier that allows access.
- Ensure safety procedures are in place, and understood, when workers have to conduct maintenance of the plant; and
- Ensure workers operating, or working near machines do not have ripped or loose items of clothing, hair, personal protective equipment or jewellery that may get caught.



Image 2: Two examples of bore pumps fitted with guards. (Source: Dept. of Environment Parks and Water Security)

Further information

For further information, please refer to the following:

Safety Alerts

- [Preventing contact or entanglement with machinery or plant with moving parts](#)
- [Unguarded grain and fertiliser auger causes serious injury](#) (WorkSafe WA)
- [Fatality from entanglement in plant](#) (WorkSafe Victoria)

Incident Alert

- [Workers caught in conveyor belt system](#) (WorkSafe QLD)

Codes of Practice

- [Managing risks of plant in the workplace](#) (Section 4.1)

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