

Worker Receives Second Degree Burns

Safety Alert

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Enform

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Description of Incident:

A 3" water pump was set up on the edge of an excavation. Water was being pumped uphill at a 5 degree slope to the approved dewatering area.

After the excavation was dewatered, the worker shut off the pump and disconnected the discharge hose. Hot water ejected from the pump and scalded the workers hands. As a result, the worker received second-degree burns to both hands.



Second degree burn to the worker's hands



Excavation that was being dewatered. Water was being pumped up hill.



3" water (trash) pump

What Caused It?

The 3" water pump was run dry, causing the remaining water left in the pump housing to continue to recirculate inside the pump, which increased the water temperature.

Contributing Factors:

- The water was being pumped uphill, which generated head pressure on the discharge hose.
- The head pressure was not relieved prior to disconnecting the discharge hose, which caused the hot water to release onto the worker's hands.
- The worker's injuries were intensified by tight knit, cut resistant gloves. The gloves absorbed the hot water and held tight to the worker's hands, which increased the hot water exposure time and intensified the worker's injuries.

Corrective/Preventative Actions:

- When it is identified that a water pump has been running dry, shut down the pump and allow a cooling period prior to attempting to disconnect the discharge hose or handle the pump.
- When disconnecting the discharge hose, disconnect one length of hose away from the pump to eliminate the risk of being contacted with hot water generated from the water pump.
- Use impervious or full leather gloves when pumping water to protect hands.

By industry, for industry

