

Safety Alert

Issue # 01-2025

E N E R G Y
S A F E T Y
C A N A D A

Water Storage Reservoir Fatality

What Happened?

A worker lost his life while working around a water storage reservoir.

The worker was working alone at the time of the event.

It is believed that the worker was attempting to collect a water sample from a lined water storage reservoir when they fell into the water.

The worker was unable to exit the water and drowned as a result.



Typical Activities Working Around Water Sources

Over the past number of years the development of water transfer systems and the use of water storage reservoirs has grown significantly, introducing various risks into the work environment. These risks have the potential for serious outcomes.

Some typical activities associated with working around water storage reservoirs and other open water sources include:

- Water transfer operations, including the installation of submersible pumps or suction hoses and using heaters in open water for opening up ice.

- Taking water samples
- Repairing fencing or liners in and around water sources
- Using powered mobile equipment and ATVs/UTVs in close proximity to the water's edge
- Working in the water using boats

In addition to lined/unlined water storage reservoirs, there are other open water sources where work may be performed. These other open water sources include:

- Rivers and creeks
- Dugouts
- Borrow pits

Controls for Working Around Water

Organizations should consider implementing some or all of the following controls for working around open water sources:

- Prohibit "working alone" within proximity of the water's edge of any open water source that has a potential for drowning. Access to lined reservoirs, especially if work involves working near the water's edge, needs to be evaluated and controlled in the same manner as a Confined Space Entry.
- Evaluate all reservoirs currently utilized to determine the need for engineering controls and safety controls. This may include things such as fencing, access controls for water or ice, barriers, egress systems and signage.
- Determine the PPE requirements (life jackets, water rescue equipment, fall protection and restraint systems etc.) to be used when workers are near the water's edge of an open water source.

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Ask yourself or your crew:

- Could something like this happen at our work site and/or remote locations?
- How do you determine who can access your water storage reservoirs or other open water sources? What safety controls have been established?
- How do you know when someone is working near a water source?
- Do you ask people to work on or near water alone?
- Are your workers familiar with the hazards associated with water storage reservoirs and other open water sources?
- How do you manage the additional risks when the weather changes and the water sources freeze?
- How do you assess and control the risks associated with working on ice?
- Have you considered that water storage reservoirs or other open water sources could be a Confined Space? Have you also addressed the associated risks?
- What is your emergency response plan in case someone ends up in the water?



Example of personnel working as a team using life jackets and utilizing fall restraints.

Industry Resources

Life Saving Rule | Confined Space



- Obtain authorization before entering a Confined Space.
- Confirm energy sources are isolated.
- Confirm the atmosphere has been tested and is monitored.
- Check and use my breathing apparatus when required.
- Confirm there is an attendant standing by.
- Confirm a rescue plan is in place.

Life Saving Rule | Work Authorization



- Confirm if a permit is required.
- Confirm I am authorized to perform the work.
- Understand the permit.
- Confirm hazards are controlled and it is safe to start.
- Stop and reassess if conditions change.

Surface Water Transfer Video Series

The videos review the general hazards found in water transfer operations. Workers can review them at a tailgate meeting or before starting tasks they have not performed recently. [Learn more.](#)



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Submit Your Safety Alert

Help industry by sharing lessons learned from an incident. [Submit your Safety Alert.](#)

Share and Collaborate

Energy Safety Canada (ESC) works collaboratively with industry to share information aimed at helping companies of all sizes improve safe work performance.

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