Spot The Safety Violation: Watch out for Thin Ice

What could've been done to prevent this all-terrain vehicle from ending up in this hazardous position'

In most cases, workers try to avoid ice while on the job. After all, they can slip on icy stairs or walkways or fall from snow and ice covered roofs. So clearing snow and ice is a priority in most workplaces in the winter.

But for some workers, ice-covered lakes, rivers and other bodies of water can't be avoided. For example, they may need to cross such ice to get to a worksite or even work on the ice itself. And if proper precautions aren't taken'especially when heavy equipment and vehicles are involved'workers could be at risk of not only falling *on* the ice but also falling *through* it.

That's what happened to the all-terrain vehicle (ATV) in this picture that fell through the ice on the Moose Jaw River in Saskatchewan. Fortunately, no one was injured and the occupants got out of the vehicle before it went partially underwater.

But other individuals using similar vehicles for their jobs haven't been as lucky:

- A 57-year-old Newfoundland fish and wildlife enforcement

officer was patrolling an area on a snowmobile when he fell through the ice and drowned. His employer was convicted of violating the *OHS Act* and fined it $70,000. The court also ordered it to conduct a safety audit and ice safety training for employees and to report on its progress implementing these measures [*Justice and Public Safety Department*, Govt. News Release, Dec. 30, 2015].

- A worker in Saskatchewan died after the bulldozer he was operating at a uranium mine plunged through the ice. He had been clearing the area for drilling. The ice had been tested before the incident.
- Another worker in Saskatchewan was clearing a drill pad with a crawler tractor at an exploration drilling site on Cree Lake when it broke through the ice. He died. The drilling company pleaded guilty to violating the *OHS Regulations* by failing to ensure that all work was sufficiently and competently supervised, resulting in a worker's death. It was fined $46,000 [*D.J. Drilling (2004) Ltd.*, Govt. News Release, July 8, 2012].

TAKE 8 STEPS TO PROTECT WORKERS

If your workers must cross the ice or work on, it's critical that you take appropriate steps to ensure their safety. In fact, some jurisdictions have specific requirements in their OHS laws for working on ice over water, such as a frozen lake or river. These requirements often cover:

- Working on ice
- Safe work procedures for using powered mobile equipment on ice
- Testing the ice to ensure that it can support the load placed on it.

Other jurisdictions, such as Alberta and Ontario, have released guidelines for building and working safely on ice covers.

To protect workers on ice covers, employers should generally take these eight steps:

1. Determine the likelihood of the ice cover failing and a person or vehicle breaking through it. (Use this ice cover inspection form.)
2. Assess the severity of the consequences, such as fatality, loss of property or short-term cover closure and repair, and the likelihood of such consequences (from likely to remote).
3. Classify the risk from low to substantial risk according to both severity and likelihood.
4. Choose a load capacity (and equivalent ice thickness) based on risk level and the hazard controls that'll be implemented during operations.
5. Eliminate the hazard, such as by choosing another route that doesn't require an ice cover.
6. If elimination isn't possible, implement engineering controls, such as designing lane widths, positioning snow banks and setting ice performance criteria.
7. Monitor and maintain those controls, such as by monitoring ice conditions and repairing damaged ice.
8. Implement administrative controls, such as developing an ice safety plan, setting safe work practices, establishing PPE requirements and training workers.

In addition, make sure you adequately train workers on the use of any specialized equipment they may work with on an ice cover. Insufficient training can result in injuries, fatalities and/or fines.

Example: A worker in the Northwest Territories was seriously injured in the operation of an ice auger during construction of an ice road. He didn't receive any training with respect to the safe use and operation of the machine or any specific safety procedures to follow when working in close proximity to an ice auger. The construction company pleaded guilty to failing to ensure the adequate instruction of each worker in

the safe performance of their duties. The court fined it $40,000 [*Rowe's Construction*, Govt. News Release, April 14, 2015].