

ICE ROADS

safety first for **workers** and **drivers**

As Canada's mining and oil companies look further afield for resources, they find themselves in ever more remote places, often far from paved roads. But thanks to the bitter winter weather in the north, it is possible to build seasonal ice roads across lakes and rivers and overland. Companies with remote work sites can use those ice roads to transport supplies that are too large or heavy to move economically by air.

The construction of these types of roads is not like building a rink in the backyard. In order to get through a season without lost goods or injured drivers, careful planning, building, and maintenance are essential, along with strict safety rules. The companies that build and maintain these roads have a responsibility to ensure that the roads are safe to use and that the rules are followed.

IHSA's Marc Faubert knows about ice roads. He spent time this past year in Northern Ontario driving materials over the James Bay winter road to a remote mine site near Attawapiskat. The 360-kilometre journey took about 12 hours. After making the trip, drivers would rest for 12 hours and then make the return trip to their base. There they would have another 12-hour rest and start the journey again.

Since ice roads can only be built and used safely in extremely cold weather, no one can be sure how long one will be open. Last year, the road that Marc Faubert was driving on was open for only about a month.

Ice roads must be flooded regularly to ensure the base is thick enough. Speed limits are strictly enforced

and are determined by whether they are on a lake or river, or simply icy land.

Marc says safety must be the top priority for drivers as well as maintenance crews. Drivers who use the ice roads have a responsibility to do their work safely and responsibly, to follow the rules that have been established to ensure their safety, to tell their supervisors about any unsafe practices or conditions, and to promote safety among their co-workers.

That includes clear communication with the drivers and workers about weather and ice conditions, as well as a thorough knowledge of the terrain. The following factors are just a few of the things that companies should consider when they are building or using ice roads.

Cold weather

Working in cold weather is nothing new to most of us, but it's always an important factor to consider. Frostbite and hypothermia can pose a threat to unprepared drivers. To prevent them, it's important to carry warm clothes and emergency supplies.

You should also take food with you. "It's better to throw food away at the end than not have enough to last through a breakdown. There is no service centre out there," says Marc. He remembers a nine-hour breakdown in a remote area where his supplies came in handy.

Communication with workers working alone

A person working alone or driving on a winter road must be able to contact another person by radio or

telephone on an open channel at all times. Before work begins, supervisors need to set up a plan for communication with the worker. The plan should also include emergency procedures. No one who works on river or lake ice should ever work alone.



Ice conditions

It is also important that no one be on the road unless it is safe to be there. Before going on any winter road or ice road, get approval from the work crew supervisor. Drivers must have a good understanding of the local conditions and know how thick the ice needs to be for his or her vehicle.

Ice is very easily affected by air temperature, sun, wind, water on the ice, and the driving of a truck on the ice—that shouldn't be forgotten by those who are building or driving on an ice road.

Ice roads are delicate and are easily damaged where the ice meets the land. Speed will create waves that can lift the ice, decreasing its integrity and strength.

Emergency procedures

Emergency procedures should be carefully outlined by supervisors and understood by employees. They should be reviewed regularly, and any new employees should be given the necessary training.

Other remote roads

It isn't just ice roads that can be dangerous, but remote winter roads in general. Many construction sites and hydroelectric dams can be reached only by remote roads that are not maintained or used regularly in the winter. A lot of the safety rules for ice roads also apply to these roads. It's

always important for drivers to have enough fuel, food, and emergency supplies, whether they are transporting goods or travelling in a pickup truck to visit a site. Just a reminder that even if the winter road is not an "ice road" does not mean it is any safer. Most incidents occur because of "going too fast for the conditions."

For more info...

IHSA provides a series of information pamphlets on driving on our website (www.ihsa.ca). For details, visit the Road Safety Program web page under Topics and Hazards.

To learn more about winter driving, visit the Ministry of Transportation website at <http://www.mto.gov.on.ca/english/safety/winterdrive/winterdrive.shtml>

For more information you can also read the *Best Practices for Building and Working Safely on Ice Covers in Alberta* (2009), http://employment.alberta.ca/documents/WHS/WHS-PUB_sh010.pdf