



# Risk Management Considerations for Dock Bubbler Systems

Over the winter months, lake front property owners can suffer severe and costly damage to permanently attached dock structures from the impact of large drifting sheets of ice. Dock bubbler systems create an “ice free” zone by constantly moving the water around, similar to the effect of a flowing stream. A dock bubbler is a device that releases small air bubbles from a perforated hose or air diffusion tubing placed at or near the lake bottom. The hose is attached to an air compressor that would typically be located in a specially made enclosure on the dock or in a boathouse or other similar type of structure.

## What’s the Risk?

If dock bubblers are not properly installed and managed, large areas of open water can be created. There is also a risk of dangerous thin ice conditions being created. Throughout the winter season, this poses an especially serious threat to recreationists such as snowmobilers, ice fishers or cross country skiers. The areas of thin ice created by dock bubblers can often be difficult to see.

Dock bubbler locations are often marked with a red light. In areas of low visibility, snowmobilers often follow each other’s tail-lights which could easily be confused with the light projected from a dock bubbler, leading the rider directly into the areas of unfrozen water.

## The Law

*The Criminal Code of Canada, S. 263(1) states:*

“Everyone who makes or causes to be made an opening in ice that is open to or frequented by the public is under a legal duty to guard it in a manner that is adequate to prevent persons from falling in by accident and is adequate to warn them that the opening exists.”

It is the owner’s responsibility to make sure that no one is harmed due to the opening in the ice created by their dock bubbler system. Failure to warn and protect others from the danger of a dock bubbler system is a criminal offence punishable by up to 10 years’ imprisonment should bodily injury occur to another person. Should this failure to warn or protect result in death, the owner of the dock bubbler could be charged with manslaughter.

## Tips for Safe and Responsible Use of Dock Bubblers

If people in your community are using dock bubblers, below are some tips that they can be provided with to encourage safe and responsible use:

1. Encourage dock bubbler owners to post signage that will be visible to outdoor enthusiasts, warning them of the danger of open water and thin ice conditions when the bubbler is in use.

2. When purchasing a dock bubbler, select the smallest size required to maintain an ice free zone around the dock.
3. The Algonquin Snowmobile Club recommends that dock bubbler locations be marked with a flashing amber light to indicate caution, rather than a red light. The flashing amber light is also recognized by the Ministry of Transportation as a sign to proceed with caution.
4. When the time comes for a dock to be replaced, consideration should be given to installing a dock that can be removed from the water, thus eliminating the need for a dock bubbler system.

For more information regarding the roles and responsibilities of dock bubbler owners, please contact Transport Canada.