

Watch Your Step.

Nova Scotia

Department of
Natural Resources

Information Circular 42

Nova Scotia's long history of mineral exploration and mining activity has resulted in a large number of abandoned mine sites throughout the Province. Many of these sites contain unsecured open holes and tunnels which present hazards to the public. Signs like the ones shown below, on Crown and private land, identify the locations of some open holes and hazards; however, many more of these abandoned mine openings have no warning signs posted.

#### Hazards are Real and Numerous

Hazards associated with abandoned mine sites include:

- Falling into deep vertical openings
- Drowning in flooded openings
- Collapse of near-surface underground workings
- Unstable explosives and blasting caps
- Unsafe and rotten structures and ladders

■ Yarmouth

 Hazardous materials and chemicals In addition, the hazards and dangers that exist in underground workings include:

- Rock falls and cave-ins
- Poisonous gases and oxygen deficiency
- Potentially explosive methane gas.

### Why Should I be Concerned?

Whether you are an experienced traveller through our woodlands or a weekend adventurer, the hazards associated with abandoned mine openings can be hidden and difficult to recognize. Often, all sur-

Amherst

face buildings and structures associated with a former mine are gone, and open holes can be encountered with little or no warning.

Do not venture near or into one of these openings; personal injury or death could result. If you come upon an unsecured mine opening, play it safe —

Department of Natural Resources

**HAZARDOUS AREA** 

**OPEN HOLES** 

Stay back and do not explore.

Map indicates known abandoned mine openings in Nova Scotia.

New Glasgow

Mine openings associated with former mining operations often remain as unsecured vertical shafts and horizontal or inclined tunnels. Mineral exploration activities, caving and collapse of mine workings and illegal mining operations

**Nature of Mine Openings** 

The Origin and

can also result in open holes, shafts and tunnels. As the map shows, mining activity has been carried out over a large area

of the Province, and more than 5,000 abandoned mine openings have been identified. These openings predate current legislation which

requires reclamation and rehabilitation of abandoned mine sites.

Mine openings are temporary features, not intended to remain open and stable forever. As a result, there are both visible and hidden hazards:

- Supports and roof spans weaken and deteriorate, and can fall without warning.
- The rock around vertical mine openings is often broken and unstable.
- Timber supports and covers around and over shafts can be weak and rotten.
- Underground workings close to the surface can collapse.
- Poisonous and potentially explosive gases can accumulate in the poorly ventilated openings.

PRIVATE LANDS **DANGER** 

HAZARDOUS AREA OPEN HOLES

Halifax Wiles

#### Crown and Private Landowner Responsibilities

Under the Criminal Code, "Every one who leaves an excavation on land that he owns or of which he has charge or supervision 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 excavation exists."

Landowners may also have additional Civil responsibilities respecting the protection of individuals on their lands. Private landowners should:

- Ensure that all persons entering their property, including trespassers, are made aware of the potential dangers of abandoned mine openings.
- Take reasonable measures to guard an open hole or related hazard to prevent individuals from personal injury.

As a minimum, warning signs should be posted around the perimeter of the opening. Better still, the opening should be capped or filled.

The Nova Scotia Department of Natural Resources is working to locate and identify all abandoned mine properties, and in the case of Crown land, to post warning signs on existing open holes and hazards.

The Nova Scotia Department of Natural Resources has also prepared a handbook that outlines methods and procedures for fencing, covering or filling open holes. Copies of this handbook and warning signs are available upon request from the Nova Scotia Department of Natural Resources.

# **Reporting of Open Holes and Hazardous Openings**

If you encounter an unprotected or unmarked open hole or hazardous opening associated with an abandoned mine site, keep these steps in mind.

- Note the location and record general site conditions and details. Be careful not to go too close to the opening.
- Be aware that there may be more than one opening in an area. If you find one, be alert for more.
- Flag or mark the area in some fashion so it can be relocated easily and serve to warn others who may be passing through the area.
- Report your discovery to your local Department of Natural Resources office.

Reporting the occurrence is important. Ignoring the hazard could result in injury to yourself or someone else.

## **Information and Reporting**

For more information or to report the discovery of any abandoned mine opening, please contact your local Nova Scotia Department of Natural Resources office or:

The Nova Scotia
Department of Natural Resources
Mining Engineering
3rd Floor, Founders Square
1701 Hollis Street
P.O. Box 698
Halifax, Nova Scotia
Telephone: 902-424-4049

Fax: 902-424-7735



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