

**Ministry of Northern Development  
and Mines**

**Provincial Emergency Plan  
for  
Abandoned Mines Hazards**

**Go Medium Sensitivity  
2018**

## **Table of Contents**

Introduction .....	1
Definitions .....	3
Emergencies .....	4
Roles & Responsibilities.....	5
Communications Plan .....	9
MNDM Mineral Development and Lands Branch (MDLB).....	9

Appendix 1 – Standard Operation Procedures

## Introduction

In Ontario, the Emergency Management and Civil Protection Act and accompanying Order in Council (OIC) assigns specific emergency responsibilities to designated ministries.

Within the Ministry of Community Safety and Correctional Services (MCSCS), the Office of the Fire Marshal and Emergency Management (OFMEM) has the overall responsibility for the coordination of emergency management in the province, including developing the Provincial Emergency Response Plan (PERP).

The PERP is an umbrella emergency response plan for the coordination of provincial response to any emergency.

Under the OIC, the Ministry of Northern Development and Mines (MNDM) has been assigned responsibility to develop emergency response plans for abandoned mine hazards.

Abandoned mine hazards include, but are not limited to:

- Unprotected and concealed shafts or pits, deteriorating structures, derelict mining-related equipment, destabilized and collapsing underground mine workings, contaminated mill tailings, stockpiled waste rock and surface/ground water, discarded tanks or drums of chemicals, toxic gases, unstable explosives, dust and/or uncontrolled surface drainage causing sedimentation damages.

Other types of hazards could cause further degradation of abandoned mine hazards or impact rehabilitation measures already in place. For example:

- Floods (could washout backfill/weaken ground, may cause the flooding of tailings impoundment areas, cause dam instability or erosion of unimpounded tailings);
- Wind storms (could down trees which could collapse fencing around hazards and/or collapse buildings or other structures);
- Power Outages (could affect acid mine drainage sites where rehabilitation treatment is required);
- Beavers (could plug up spillways on dams increasing the amount of water retained on tailings areas which could lead to dam overtopping, erosion or failure);
- Forest Fires (could cause environmental damage if hydrocarbons → fuels, solvents lubricants and/or hazardous substances → PCBs, cyanide, asbestos are stored on site).

The Provincial Emergency Plan for Abandoned Mine Hazards provides guidance for initiating extraordinary arrangements as a result of an abandoned mine hazard emergency.

This plan is supportive and complementary to the PERP. While the focus of this plan is on emergency response, it recognizes there are important linkages to prevention, mitigation, and preparedness, as proactive components that are critical elements in any emergency response.

To this end, before any advanced exploration or mine production project may proceed in Ontario, a certified Closure Plan must be filed, including sufficient financial assurance to rehabilitate the site. Owners of abandoned mine sites may be ordered to conduct rehabilitation activities or submit a Closure Plan for the site.

A Closure Plan for an abandoned mine is intended to remove and/or secure abandoned mine hazards in order to protect public health and safety, and/or the environment.

In addition, the Ontario Abandoned Mine Rehabilitation Program was established to rehabilitate Crown-held abandoned mine sites on a priority basis.

Due to these measures, it is expected that the number of future abandoned mine hazards will be greatly reduced.

The Provincial Emergency Plan for Abandoned Mine Hazards assumes that:

- Abandoned mine hazards that could cause dangers of major proportions will be responded to within municipal or community areas where the community infrastructure and planning exists to deal with such emergencies;
- Situations requiring a capability beyond a local community or that may occur in unorganized territories could require the activation of the Provincial Emergency Plan for Abandoned Mine Hazards;
- Issues related to abandoned mine hazards that do not pose any immediate threats, are referred to the MNDM Mineral Development and Lands Branch (MDLB) for normal day-to-day operational response activities.

## Definitions

### Abandoned Mine Hazard

- Abandoned mine hazard includes any feature of a mine, or any disturbance of the ground, that has not been rehabilitated to the prescribed standard.

### Abandoned Mine Site (as defined by the Ontario Mining Act)

- A site on which a mine hazard exists, as defined under S.1 of the Ontario Mining Act, that has not been rehabilitated to the prescribed standard, that may be held by the Crown or by a private owner.

### Mine (as defined by the Ontario Mining Act)

- (a) Any opening or excavation in, or working of, the ground for the purpose of mining and mineral or mineral bearing substance;
- (b) All ways, works, machinery, plant, buildings and premises below or above the ground relating to or used in connection with the activity referred to in clause (a);
- (c) Any roasting or smelting furnace, concentrator, mill, work or place used for or in connection with washing, crushing, grinding, sifting, reducing, leaching, roasting, smelting, refining or treating any mineral or mineral bearing substance, or conducting research on them;
- (d) Tailings, waste rock, stockpiles of ore or other material, or any other prescribed substances, or the lands related to any of them, and;
- (e) Mines that have been temporarily suspended rendered inactive, closed out or abandoned.

### Ministry Action Group (MAG)

- A group of MNDM senior staff responsible for all decisions, resource allocation and response/recovery actions, as necessitated by an emergency event.

### Provincial Emergency Operations Centre (PEOC)

- Located in Toronto and staffed at all times in order to continually monitor emerging and ongoing emergency situations inside/outside of Ontario;
- The key function of the PEOC is to coordinate the Ontario government's response to major emergencies.

### Unorganized Territories

- Unincorporated areas of Northern Ontario where there is no municipal structure.

## Emergencies

Local municipal governments and First Nation communities have primary responsibility for emergency event response.

Local authorities will respond to an emergency in accordance with the community plan, and if the circumstances warrant, may declare an emergency.

The provincial government acts in support of local government action.

The extent of the emergency response depends upon the nature and severity of the incident.

A provincial emergency does not need to be declared in order for the province to provide resources in support of an emergency declared by a community.

Provincial employees may take action where an emergency exists but has not yet been declared.

Health, safety, and security are the first and foremost considerations in any response to an emergency event. MNDM employees involved in emergency management activities shall do so in accordance with the MNDM Emergency Management Plan, and must adhere to all health, safety, and security advice, guidance, and precautions that may be provided and/or imposed by those with on-site operational authority.

### **Note - As per the PERP:**

**Coordination of provincial response to emergencies that occur in the North, including unorganized territories, is the responsibility of the ministry to which the type of emergency that has occurred has been assigned via the emergency management related OIC.**

**MNDM is responsible for abandoned mine emergencies and for providing support to the primary (lead) response ministry for all other types of emergencies.**

**If an emergency that has not been identified within the OIC occurs, MCSCS will be the primary (lead) ministry.**

## Roles & Responsibilities

### MAG

The MNDM MAG Chairperson (Incident Commander) may activate the following members of MAG:

- Director, Mineral Development and Lands Branch (MDLB);
- Senior Manager, Resident Geologist Program (RGP);
- Director - Communications Services Branch (CSB);
- Senior Manager, Controllership;
- Emergency Management & Security Coordinator (EMSC).

In the event of an abandoned mine hazard emergency, MAG responsibilities include:

- Notifying and deploying members of the Provincial Liaison Team (PLT);
- Developing an Incident Action Plan (IAP);
- Providing direction to PLT;
- Briefing MNDM executives and PEOC;
- Providing communications expertise to PLT and providing coordinated emergency communication action including preparing briefing notes and media/public information;
- Coordinating and authorizing any necessary expenditures, obtaining resources or external services, tracking expenditures;
- Providing a representative to the Joint Information Centre (JIC) involving external stakeholders such as affected local interests, the municipality, and other ministries, if required;
- Providing advice/information to local first responders;
- Providing a representative to the PEOC, if required.

## **PLT**

PLT is a group of provincial officials assembled to:

- Assess the situation;
- Provide advice/information to MAG and/or local officials;
- Make recommendations for a coordinated response;
- Monitor response/recovery activities.

The PLT location is determined by the locality of the emergency event.

### **a) Membership\***

#### **i. MNDM**

PLT leadership will be assigned to the Manager, Rehabilitation, Inspection and Compliance Section or the Manager of the Mineral Exploration and Development Section of MDLB.

Field support will be assigned as required from both groups comprising of:

Project Specialist; Mineral Development Officers;

Project Engineer; Resident Geologists;

Inspection/Compliance; District Geologists.

Abandoned Mines Coordinator;

As well PLT will contain a representative from the CSB.

MDLB is responsible for supplying information available for specific hazards and providing expertise relating to mine hazards and contact with specialized consultants.

RGP acts as a resource base supplying drawings, maps and information regarding mine workings and local geological expertise.

CSB will coordinate internal briefing notes and coordinate information to local public/media.

\*See Appendix 4 for a complete list of PLT members.

## **ii. Supporting Ministries**

When an emergency situation is pending or occurs, any ministry may be called on to provide assistance during emergency management operations.

The most basic form of assistance is the provision of advice. Assistance may expand to the provision of personnel, equipment and/or other resources to assist in dealing with the cause of the emergency.

If several ministries require a coordinated effort the PEOC will coordinate the joint response.

Ministries that could assist MNDM during an abandoned mine hazard emergency event include, but are not limited to:

### **Ministry of Community Safety & Correctional Services (MCSCS)**

#### **Office of the Fire Marshal & Emergency Management (OFMEM)**

OFMEM could be requested to:

- Activate required support ministries;
- Coordinate multi-ministry response, if required;
- Facilitate psychosocial intervention assistance;
- Aid in obtaining required support assistance for MNDM.

### **Ontario Provincial Police (OPP)**

OPP could be requested to:

- Manage traffic in and around the emergency site;
- Secure the emergency site perimeter.

### **Ministry of Community and Social Services (MCSS)**

MCSS could be requested to:

- Provide emergency social services (e.g. emergency shelters, clothing & food, victim registration, enquiry services and/or personal services);
- Coordinate partner agencies (e.g. Canadian Red Cross & Salvation Army) to assist affected local municipality and/or community social services.

## **Ministry of Transportation (MTO)**

MTO could be requested to:

- Provide traffic control and evacuation planning;
- Implement emergency traffic control measures in conjunction with the OPP;
- Coordinate the mobilization of contractor equipment/personnel and engineering expertise to keep provincial roadways open.

## **Ministry of Labour (MOL)**

MOL could be requested to:

- Provide advice and direction on safe workplace practices and occupational health and safety support for workers deployed to emergency sites;
- Make referrals to the appropriate Health and Safety Association(s), such as Workplace Safety North, for advice.

## **Ministry of the Environment and Climate Change (MOECC)**

MOECC could be requested to:

- Assist in the response for environmental issues including pollutant spills and drinking water concerns resulting from abandoned mine sites.

## **Ministry of Natural Resources and Forestry (MNRF)**

MNRF could be requested to:

- Assist in the response for abandoned mine site dam failures;
- Provide aircraft, telecommunications and other equipment;
- Make available facilities for emergency response operations assembly/dispatch areas and/or temporary emergency care/accommodations;
- Assist in the coordination of resource acquisition (e.g. base camp service providers).

**A Cooperation Agreement has been entered into by and between MNDM, MOECC, and MNRF to provide a framework of cooperation to clarify how each party shall execute its respective assigned OIC responsibilities during an abandoned mine hazard emergency.**

## Communications Plan

The aim of the abandoned mines emergency communications plan is to coordinate the release of accurate information to news media, issue authoritative instructions to public and respond to or redirect requests for reports.

The Director of CSB, who is a member of MAG, is designated as the Ministry Emergency Information Officer (MEIO).

The MEIO is the focal point for the preparation and dissemination of ministry emergency information and serves as the primary media contact for the ministry in an emergency.

The MEIO will:

- Establish communication links with local and other media and prepare press releases in conjunction with PLT;
- Liaise with community officials;
- Set up media center/calls;
- Respond to inquiries or redirect them to PLT leader, as appropriate;
- Provide briefing notes for PLT members, MAG, Minister and Deputy Minister's Offices and PEOC/JIC;
- Coordinate on-scene interviews between emergency personnel and media.

The MEIO may, as required, make arrangements for an emergency event spokesperson to provide public information or act as an on-scene media coordinator.

## MNDM Mineral Development and Lands Branch (MDLB)

The MNDM MAG may not be activated, for an abandoned mine hazard emergency, as the emergency may be addressed through normal day-to-day operations of the MNDM MDLB or as the result of the Minister's Directions.

In order to provide MDLB operational guidance, prevent the loss of unwritten information, minimize the commission of errors, and/or avoid the omission of essential steps, once MDLB is notified of a potential and/or emergency situation, standard operating procedures have been developed to use as a guideline.

**The Minister may trigger a provision of emergency access by MNDM employees and agents of the Ministry to an abandoned mine site in order to take action in the event an owner/proponent does not remediate any immediate and dangerous effect of an abandoned mine hazard either voluntarily or pursuant to a Minister's Order.**

# Appendix 1 – Standard Operation Procedures

## MDLB Abandoned Mine Hazards

**The carrying out of these standard operating procedures does not mean that “thought” is not required when responding to an emergency situation. As the operational environment changes, the implementation of the standard operating procedures may require adjustment.**

### Action

1. Initiate and maintain an Incident Log and create and IAP:
  - a. Record all incident information including notifications and related conversations;
  - b. The party entering the information will include their initials immediately following the log entry for identification purposes.
2. Determine type of emergency (e.g. dam failure, subsidence, building collapse, etc.).
3. Evaluate risk to the public and property:
  - a. Contact OPP, municipality, fire department, First Nation community, as required.
4. Determine ownership of property and if it is a site with a Closure Plan or if it is an Abandoned Mines Information System (AMIS) site:
  - a. Make owner aware of responsibilities.
5. Notifications:
  - a. Mandatory:
    - ADM, Mines and Minerals Division (to advise Deputy Minister Office);
    - MDLB Director;
    - Manager, Rehabilitation, Inspection and Compliance Section (depends on who received the initial notification);
    - Abandoned Mines Project Coordinator;
    - EMSC (24/7 on-call);
    - Rehabilitation Specialist.
  - b. As required:

- MOECC; (including MOECC EA regarding emergency)
- MNRF;
- MTO (if roads impacted);
- MOL (if workers on site);
- MNDM legal services/controllership/communications.

Whenever a “grey area” for notification is encountered, MDLB will err on the side of making the notification.

6. Initiate site visit to assess damage:
  - a. Utilize Rehabilitation Specialist and/or consultant (access Contractor List);
  - b. Initiate field log book to record notes;
  - c. The party entering the information will include their initials immediately following the log entry for identification purposes;
  - d. Obtain pictures.
7. Arrange a teleconference with other ministries to determine action and delegate duties.
8. Make preliminary arrangements for contactor/consultant to conduct site rehabilitation depending on situation and information available.
9. Establish update teleconferences:
  - a. Hold daily teleconferences with involved ministries and contractors/consultants;
  - b. Update municipality and/or First Nation community regularly or as needed;
  - c. Take minutes at all meeting and log all calls.
10. Post information notice on the Environmental Registry to indicate that there was an emergency.
11. Conduct a debrief at conclusion of emergency.