

# **Explosive storage and security in Ontario mines**

# **Purpose and importance**

**Explosives are essential tools in Ontario's mining operations**, but they pose significant risks if not properly stored, secured, and monitored. This alert is intended to raise awareness among mine operators, supervisors, and workers about the critical importance of managing explosive materials responsibly. **Failure to do so can result in catastrophic incidents, including injury, death, property damage, and criminal activity** such as theft or tampering.

### Legal requirements

### Part VI of Regulation 854: Mines and Mining Plants under the Occupational Health and Safety

**Act** (OHSA) sets out requirements for explosive storage and security. Employers must also conduct risk assessments (sections 5.1–5.3 of the regulation) to identify and control hazards that may expose workers to injury or illness.

## Storage and security measures

### Regulation 854 requires written procedures for explosive management, including:

- Security protocols during transport, delivery, storage, and use.
- Access control to limit who can handle explosives.
- Inventory control, including return and temporary storage procedures.
- Explosives stored on surface must comply with the **Explosives Act** (Canada) and regulations including:
  - Proper magazine construction and maintenance.
  - Secure access and inventory logging.
  - Regular inspections and audits.

### Examples of best practices include:

- Physical observation and surveillance (e.g., cameras, entry monitors).
- Fencing and locked storage areas.
- Use of secure "day boxes" for temporary storage.
- Supplying only the required quantity for a blast.
- Accurate tracking of explosives from delivery to use and return.

# Contact your WSN Health and Safety Specialist for more information.





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## Hazards of inadequate storage and security

#### Improper handling, storage, or tracking of explosives can lead to:

- Accidental detonation due to environmental exposure or mishandling.
- Inventory discrepancies, leading to unaccounted explosives and increased risk of misuse or tampering.
- Risk of theft and other criminal activity.

Theft of explosives is a serious and growing concern in Ontario mines. Stolen explosives can be used in illegal mining, terrorism, or other criminal acts. Mines must implement robust security systems to prevent unauthorized access, which can include:

- Electronic access cards or biometric controls.
- Real-time inventory tracking systems.
- Immediate reporting and investigation of discrepancies.

## Training and communication

All workers handling explosives must be appropriately trained. Training should cover:

- Safe handling and storage techniques.
- Emergency response protocols including fire and lightning protection.
- Reporting procedures for missing or damaged explosives.

### Conclusion

Explosive storage and security are not just regulatory obligations—they are critical to protecting lives and property. **Neglecting these responsibilities can lead to devastating consequences.** Let's work together to ensure Ontario's mines remain safe, secure, and compliant.

# Additional information

The Ministry of Labour, Immigration, Training and Skills Development has <u>developed and published</u> <u>a comprehensive guideline</u> to assist workplace parties with understanding the requirements regarding explosives storage and security in Ontario mines.

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