

Welcome to the MOL Blitz webinar

Locking & Tagging in Mine Hoisting Plants

- Thank you for joining us!
- We will be getting started at 10:00 a.m. EST
- To access the audio portion of this webinar, please phone:
 - 1. 866. 613. 5223
 - Access code: 4 5 7 3 6 5 4
- We will have the phone lines on mute for the presentation.
- If you have any questions, please use the **Chat Box** in the top right corner of the screen.
- For assistance with the webinar, phone the WSN office at:
 - 1. 888. 730. 7821 ext.0

Locking and Tagging in Mine Hoisting Plants



Workplace
Safety North™

A Health & Safety Ontario Partner

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Housekeeping notes

- Please note the 'CHAT BOX' in the top right hand corner of your screen. At any time during the presentation, feel free to type in your questions. Alternatively, you may send an email to rickbanting@workplacesafetynorth.ca and he will respond at a later date. We may answer some questions as we go, but most will be answered after the presentation.
- During the webinar, the phone line is set up so that you're able to hear us, but we can't hear you. Please use the chat box for questions or assistance with the webinar.
- This presentation will be available on WSN's website soon after the webinar. We'll provide the link at the end of the presentation.

Agenda

- Introduction to Blitz
- Facts related to failure to lock-out
- Ontario requirements pertaining to Hoist Lock-out (Regulation 854)
- What Ministry of Labour Mining Health and Safety Inspectors will be looking for during the blitz
- WSN information and resources
- Q & A

Locking & Tagging in Mine Hoist Plants

- In January and February of 2014, the Mining Health and Safety Program (MHSP) will conduct a provincial Locking and Tagging in Mine Hoisting Plants Blitz.
- Raise awareness of proper lock-out.
- Monitor compliance.
- Prevent injuries.



Common Terms

- **Locking** refers to the lockout of any type of energy (electrical, hydraulic pressure or air pressure, etc.) in mine hoisting equipment.
- **Tagging** refers to the placing of a tag on a lockout device.
 - The tag contains specific information, including the name of the person who locked out the equipment, date and reason for lockout.

Facts Related to Failure to Lockout

From Jan. 1, 2000 to Oct. 31, 2013:

- There were **45** traumatic deaths in the mining and aggregates sector including **24** underground.
- **Three** workers died in incidents related to locking and tagging hazards in surface & underground mines.
- **One** of those fatalities occurred in a mine shaft.

Quick Facts

- During the 14 year period, 2000 to 2013, **29,390** orders were issued under the Regulations for Mines and Mining Plants
- Of those, **467** orders were related to Sections 160 and 185 (7-10) of Regulation 854

Regulation 854

Section 203-250:

- There are 47 sections devoted to Mine hoist operation and maintenance.
- Includes man travel, use of logbooks, inspection frequencies

Section 160 (1)

- All switches controlling electrical equipment or lines shall be locked and tagged in the open position while work is being done on the equipment or lines, but the locking device may be omitted where,
 - The locking device in itself creates a hazard due to a switch design, or
 - Circuit breakers or fuses for voltages of less than 150 volts to ground are not equipped with a means of locking

Regulation 854

Section 160 (2)

- Despite subsection (1) locking and tagging is not required where live work is permitted by Section 159

Section 159 (3)

- Precautions to guard workers against injury by moving or energized parts shall be taken before maintenance, repair or adjustment work is performed on a machine that is energized.

Regulation 854

Section 185 (7)

- If any work is done on a machine,
 - The moving parts shall be stopped
 - Any hydraulic pneumatic or gravity stored energy shall be dissipated or contained
 - Energy isolating devices shall be installed if the machine is not already equipped with them and
 - All energy isolating devices shall be properly engaged, locked and tagged

Regulation 854

Section 185 (10)

- If it is not practical to comply with subsection (7) or with subsection 160 (1), work to which those subsections apply may be done if while it is done barriers, shields, or other effective precautions are used or taken for the safety of a worker.

BLITZ

LOCKING & TAGGING IN Mine Hoisting Plants

January & February, 2014

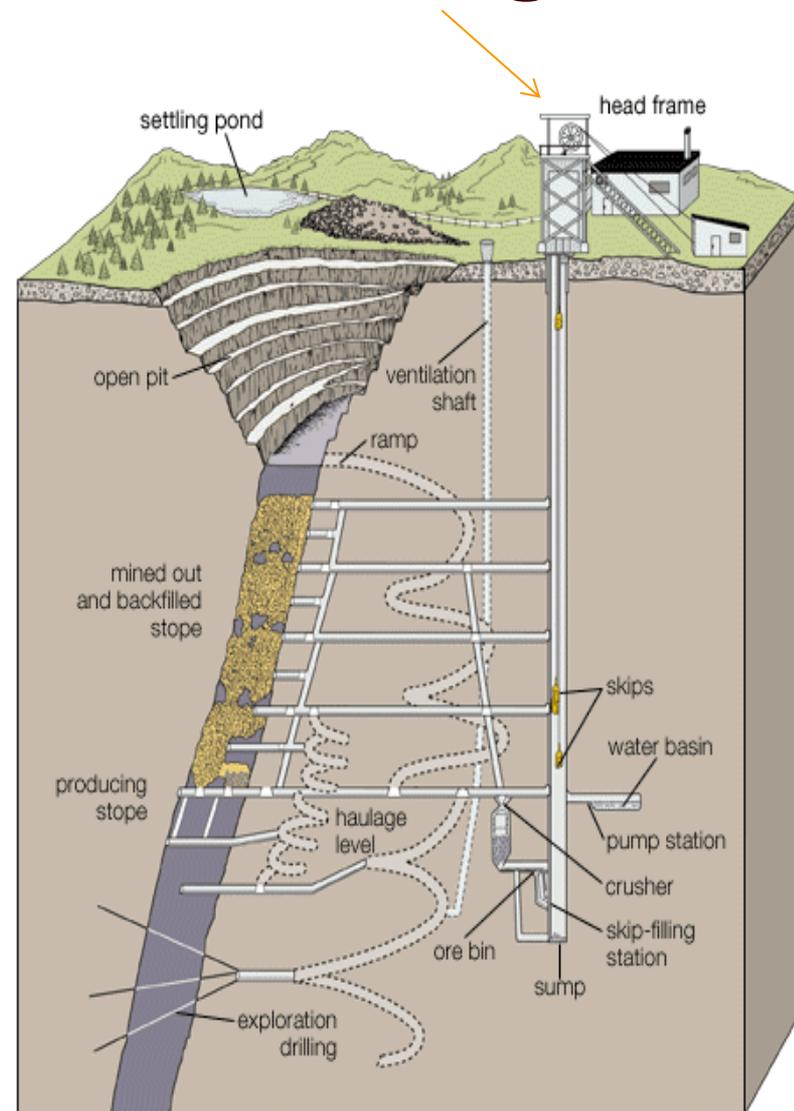
General Information

- A **mine hoisting plant** houses equipment used to raise and lower people or materials between the surface and underground in a mine.
- The **mine hoisting plant** includes all equipment used in connection with a hoist.



Mine hoisting plant is defined in Regulation 854 to mean “a hoist for an underground mine and includes the prime mover, transmission equipment, head-frame, sheaves, ropes, shaft, shaft conveyances, shaft sinking equipment, shaft furnishings, hoist controls, counterweight, signalling and communications equipment and any other equipment used in connection with a hoist;”

Mine Hoisting Plant



Blitz Rationale

- Locking and tagging of mine hoisting equipment can be more complicated than other mine equipment due to large number of components and distance between them;
- Improper locking and tagging of mine hoisting plants could endanger workers and;
- It may not be practical to perform all hoist work at zero energy state.

Blitz Focus

Protective Equipment

- Inspector may check that the employer understands what is needed to adequately protect workers
 - This may include checking for the understanding of various methods of risk reduction that may be used in lieu of lockout devices such as a barrier, shields, or other effective precautions

Blitz Focus

Lock-out

- Inspectors may review practices for locking and tagging, including for situations that require:
 - Safety measures to minimize risk to workers when hoists are **not locked out**;
 - Hoist movement when maintenance work in shaft
 - Effective use of communication and logbooks

Hoist Operation Compliance

- Safety measures are in place to minimize risk to workers when working on or near the hoist plant
 - Electrical, mechanical
 - Inspections, testing
 - Shaft activities
- Workers trained on related lock-out devices
- Competent people conducting maintenance
- Logbooks are properly maintained
- Hoist movement meets regulations, communication
- Certifications of conveyances, ropes, sheaves, brakes
- Access to Programmable Logic Controls (PLC) are authorized

Information and Resources

OMA – Hoist Plant Committee

Best Practice: Special instructions to Hoist Operators

<http://www.workplacesafetynorth.ca/resources>

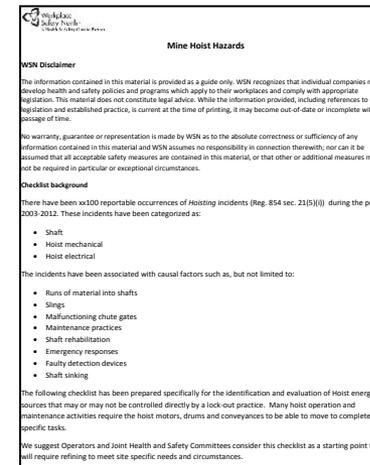
2012, free download



Workplace Safety North

Mine Hoist Hazards Checklist

<http://www.workplacesafetynorth.ca/resources>

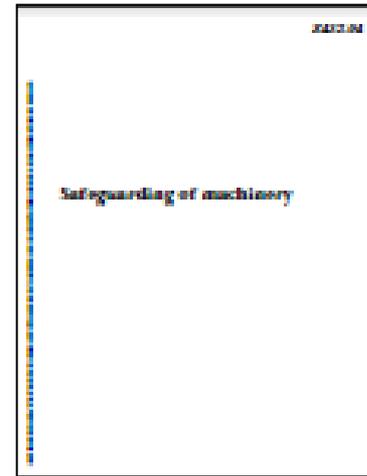


Information and Resources

CSA –Z432-04

Safeguarding of Machinery

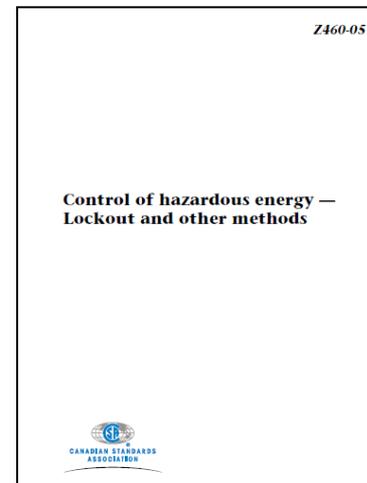
(reaffirmed in 2009)



CSA – Z460-05

Control of Hazardous Energy – Lock-out and other Methods

(reaffirmed in 2010)



Questions?

Please use the CHAT BOX in the top right hand corner of your screen or send an e-mail to

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