

Welcome to the Water Management Blitz Webinar

- 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: **3 7 5 5 2 0 0**
- 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.
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 - **1. 888. 730. 7821 ext.0**

Water Management



Webinar – December 10, 2014

Webinar co-hosts

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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 philipdirige@workplacesafetynorth.ca. We may answer some questions as we go, but most will be answered right 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

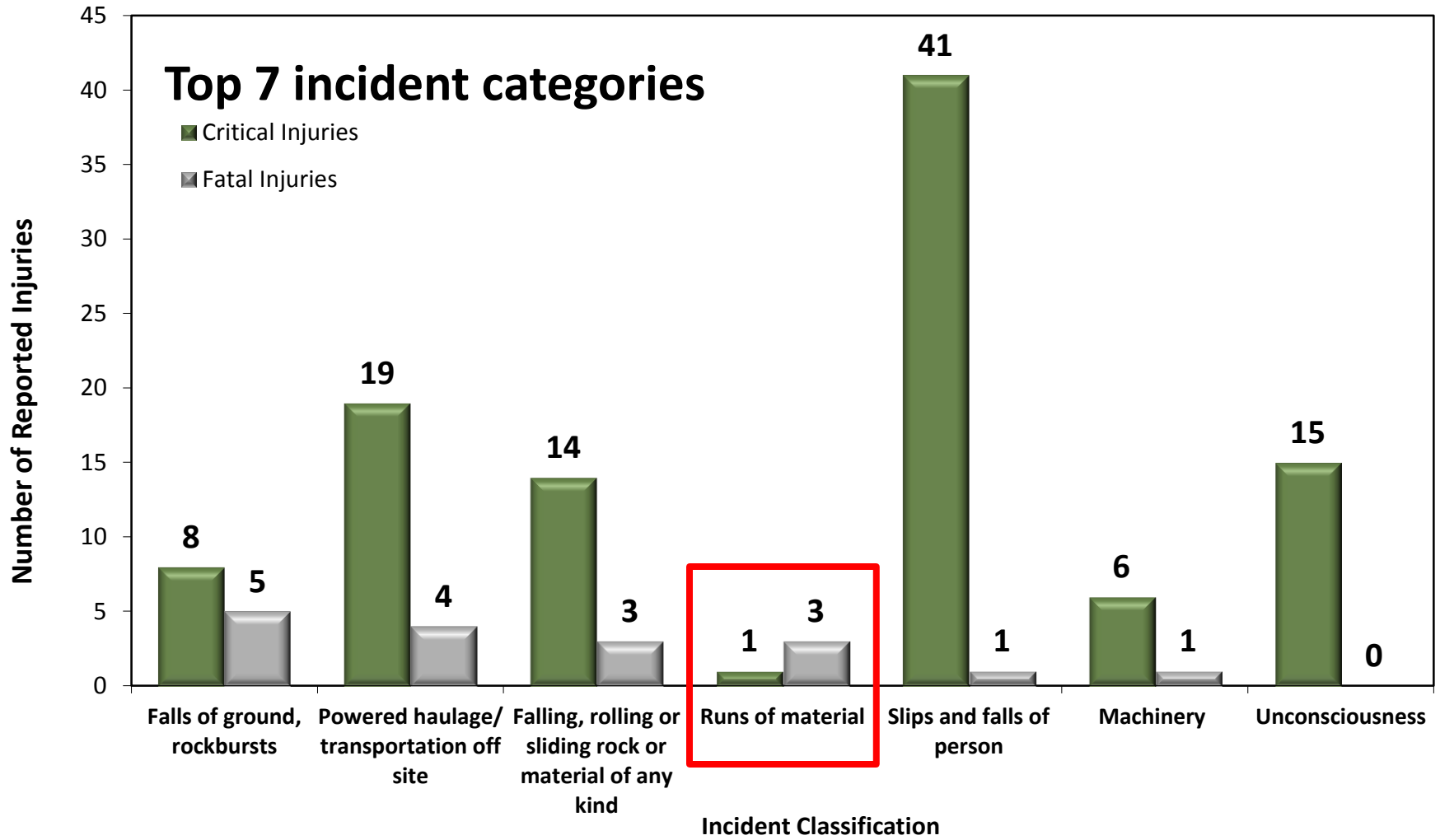
- Introduction and injury statistics
- Overview of pertinent Ontario legislation pertaining to water management in underground mines
- Workplace Safety North (WSN) information and resources
- Focus of water management blitz and what inspectors will be looking for during the blitz scheduled for February - March 2015
- Q and A

Water Management in Underground Mines

- Workplaces free from the accumulation or flow of water
- Managing the drainage of water from high risk areas in the underground environment
 - Loading pockets
 - Ore passes
 - Water inflow in unusual ground conditions
- Ensuring excess water is drained to a pumping system capable of handling water accumulation

Ontario Mining Industry

Fatal and Critical Injuries 2009 - Aug. 31, 2014



Sources: Ontario Ministry of Labour, MIS, ICE, 2009 - Aug. 31, 2014 as of Sept.15, 2014.
WSN, Mining Sector Fatality Database, as of Sept.15, 2014.

Reportable Occurrences: Runs of Material Incidents and Categories 2012-2013

Total Incidents - 22

- Runs of Muck Underground - 14 Incidents
- Incidents at Loading Pockets - 2 Incidents
- Muck Falling Down the Shaft - 6 Incidents

Pertinent Legislations

Regulation 854 - Mines and Mining Plants

- Section 21. (5) - notice in writing when an unexpected and uncontrolled run of material, water or slimes in excess of one cubic metre occurs that could have endangered a worker. - *required by sections 51 and 53 of the OHSA*
- Section 58. - plastic pipe and fittings used for water lines
- Section 62.1 - developing procedures for performing non-routine hazardous task in consultation with JHSC or the health and safety representative
- Section 64. - dangerous conditions that could cause potential or actual danger to the health or safety of a worker

Pertinent Legislations

Regulation 854 - Mines and Mining Plants

- Section 68. - workplace, travelway, manway or other area of an underground mine under repair or where there is a danger or hazard to a worker of impounded water
- Section 84. (1) & (2) - written procedures for precautions to be taken before, during and after removal of the material
- Section 84. (3) - exit access of worker during uncontrolled run of material when pulling chutes
- Section 84. (4) - mechanical locking device in chute gates
- Section 84. (5) - power-operated safety guard or gate during power failure

Pertinent Legislations

Regulation 854 - Mines and Mining Plants

- Section 87. (1 & 2) - water accumulation underground mine
- Section 87. (3) - water pump
- Section 87. (4) - guard against water accumulation in chutes

Prevention

- Raise hazards awareness due to the accumulation, inflow or flow of water in underground workplaces
- Promote the following:
 - Compliance with regulations and best work practices
 - Proper managing the drainage of water from high risk areas in the underground environment such as loading pockets, ore passes, and water inflow in unusual ground conditions
 - Ensure excess water is drained to a pumping system capable of pumping water to surface

Causes of Water Accumulation

- Broken water lines - ensure that CSA standard pipes and accessories are used (*Section 58 of Regulation 854*)
- Overflowing sumps - pump capacity should accommodate water accumulation (*Section 87. (1)b of Regulation 854*)
- Punctured fill fences/barricades - ensure well designed and constructed structures are used
- Excessive flushing of fill lines - control and manage fill line flushing (*Section 87. (1) of Regulation 854*)
- Leaking fill lines - ensure that CSA standard pipes and accessories are used (*Section 58 of Regulation 854*)

Causes of Water Accumulation (cont'd)

- Unplugged diamond drill holes - diamond drill holes should be plugged
- Dust suppression sprays - managed water spraying for dust control (*Section 87. (1) of Regulation 854*)
- Spring run off - manage surface water
- Cavity water flow in fractured rock masses - provide drainage (*Section 87. (1) of Regulation 854*)

Template for Developing Non-routine Hazardous Task (Section 62.1 (1) of Regulation 854)

- Objective
- Scope
- Introduction
- Responsibilities (management, Joint Health and Safety Committee, supervisor, Workers and contractors)
- Definitions
- Preparations (safety and health hazards, tools, others)
- Tasks (developing and revising procedure)
- Legal requirements
- Monitoring mechanisms

Checklist - Runs of Muck Hazards Associated with Loading Pockets and Passes

- Awareness & Compliance with OHSA and Regulations for Mines and Mining Plants
- Awareness & Compliance with Training - Common Core & Specialty Modules
- Mine Drainage - Drain Holes and Ditches
- Mine Drainage - Sumps
- Backfill System
- Loading Pockets and Ore Passes

Checklist - Runs of Muck Hazards Associated with Loading Pockets and Passes (cont'd)

- Chute Assemblies at Loading Pockets and Ore Passes
- Wet Muck Control in Underground Ore Transfer System
- Mucking From Draw Points
- Mucking Shaft Bottom

Available Information and Resources

- Safety focus - Runs of material a hazard in many locations - the bulletin is dated but the information contained in it are still relevant
- WSN's Checklist - Runs of Muck Hazards Associated with Loading Pockets and Passes
- Template for Developing Non-Routine Hazardous Task Procedure

Water Management Blitz

Focus of MOL Inspectors

Thank you

- This presentation and referenced documents can be found on our website at:

<http://www.workplacesafetynorth.ca/resources/mol-blitz-2014-2015-water-management>

- Please complete our Webinar Evaluation Form:

<https://adobeformscentral.com/?f=QHUquNXRg3NzSFVd81hFFQ>