



Mining webinar: Be prepared for Ministry of Labour inspection blitz on PPE and high visibility clothing

1.888.730.7821 (Toll free Ontario)
workplacesafetynorth.ca



Welcome to the webinar: Be prepared for MOL inspection blitz on personal protective equipment and high visibility clothing

- Thank you for joining us!
- We will be getting started at **10:00 am ET**
- To access the audio portion of this webinar, please phone:
 - **1-866-613-5223**
 - Access code: **3755200** #
- 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**

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. We will try to 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.
- For your reference, this presentation will be available for download at workplacesafetynorth.ca under the 'Resources' tab the day after the webinar.

Agenda

- Introduction and injury statistics
- Hazards, categories and controls
- WSN information and resources
- What Ministry of Labour Mining Health and Safety Inspectors will be looking for during the PPE blitz
- Ontario requirements related to PPE in mines and mining plants (Occupational Health and Safety Act, Regulation 854)
- Q & A

MOL Blitz Overview

The purpose of the inspection blitz:

- Raise awareness among workers, supervisors and employers of health and safety issues involving the use, maintenance and duties related to PPE in mines and mining plants
- Raise awareness of the importance of having a program dealing with hazards in mines and mining plants
- Promote awareness and compliance of mines and mining plants to regulatory requirements
- Ensure the workplace parties are complying with the OHSA and its regulations

MOL Blitz Overview

MOL health and safety inspection blitz will occur from February 1, 2018 – March 31, 2018:

- Review the correct personal protective equipment selection to protect workers from dust and fumes
- Compliance on personal protective equipment and high visibility clothing, surface and underground
- Distracted drivers at surface mines and traffic management plans

Workplace Health and Safety Snapshot for Ontario Mining Sector in 2016



20,932

Full-time employees

0 13
Injury Disease*
Work-related fatalities

858
Total
Injuries

110
Lost-time
Injuries

4.10
Total Injury rate
per 100 workers

-1.2%
Change in Injury rate
from previous year

Events resulting in lost-time injury or illness

Injury or illness severe enough to require one or more days lost from work



37%

Bodily Reaction & Exertion
(excessive physical effort, free bodily motion that results in stress or strain on the body, assuming an unnatural position, and repetitive motion)



35%

Contact with objects or equipment
(struck by or against object, caught in, crushed or compressed by equipment, objects or collapsing materials and rubbed, abraded)



17%

All others
(highway/non-highway/railway incident, exposure to caustic, noxious or allergenic substance, explosions, contact with temperature extremes, N/A and pending)



11%

Falls
(falls/jumps to lower level and falls on same level)

Most common lost-time Injuries

41

Bodily reaction and exertion, includes injuries and illnesses resulting from repetitive motion, bending, climbing, crawling, reaching, twisting, slipping, tripping, overexertion in lifting, pulling, pushing, carrying or turning objects.

38

Contact with objects and equipment, includes struck by falling or flying object, struck by discharged object or substance, struck by or against object, stepped on object, struck by rolling, sliding object on floor, compressed or pinched by rolling, sliding or shifting object, caught in or compressed by equipment or object, rubbed, abraded or jammed by vehicle or mobile equipment vibration, rubbed or abraded by foreign matter and other cave-in.

12

Falls, includes falls to floor, walkway or other surface, falls onto or against object, falls to lower level and falls/jumps from ladder, scaffold, platform or loading dock.

Top 3 Occupational Diseases

Based on approved WSIB claims for healthcare, being off work, loss of wages, or permanent disability.

91

Noise-induced hearing loss

21

Hand-arm vibration syndrome

14

Exposures, includes exposure to chemical agent, dust and other communicable diseases

Pertinent Legislation

OHSA

Section 25 (1) An employer shall ensure that,

- (a) the equipment, materials and protective devices as prescribed are provided;
- (b) the equipment, materials and protective devices provided by the employer are maintained in good condition;

Section 27 (1) A supervisor shall ensure that a worker,

- (a) works in the manner and with the protective devices, measures and procedures required by this Act and the regulations; and
- (b) uses or wears the equipment, protective devices or clothing that the worker's employer requires to be used or worn.

Section 28 (1) A worker shall,

- (b) use or wear the equipment, protective devices or clothing that the worker's employer requires to be used or worn;



Pertinent Legislation (continued)

Regulation 854 (Mines and Mining Plants)

Section 5.1 (1) - Risk assessment and risk register, with the involvement of the JHSC

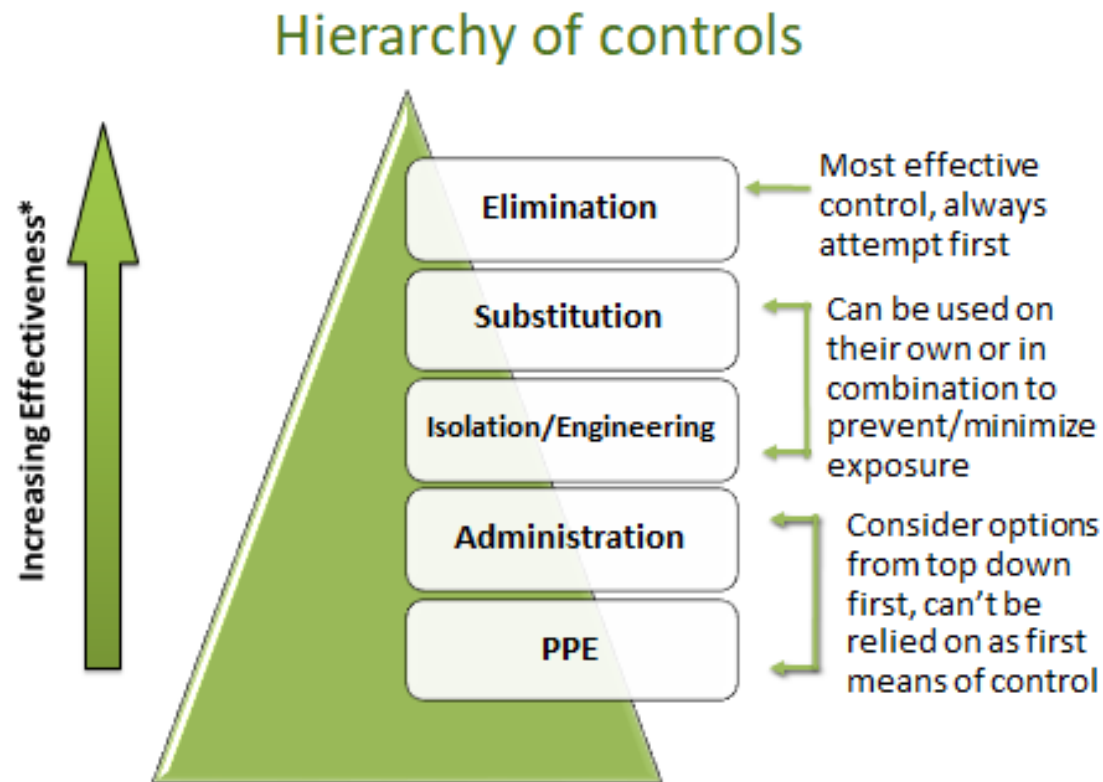
Section 5.2 - controls; including Personal protective equipment

Section 5.3 - Risk Assessment updated yearly at minimum; for existing hazards or potential hazards that have changed

Section 12 - Properly fitted PPE for head, foot, HVSA clothing including devices necessary to protect the worker from a particular hazard

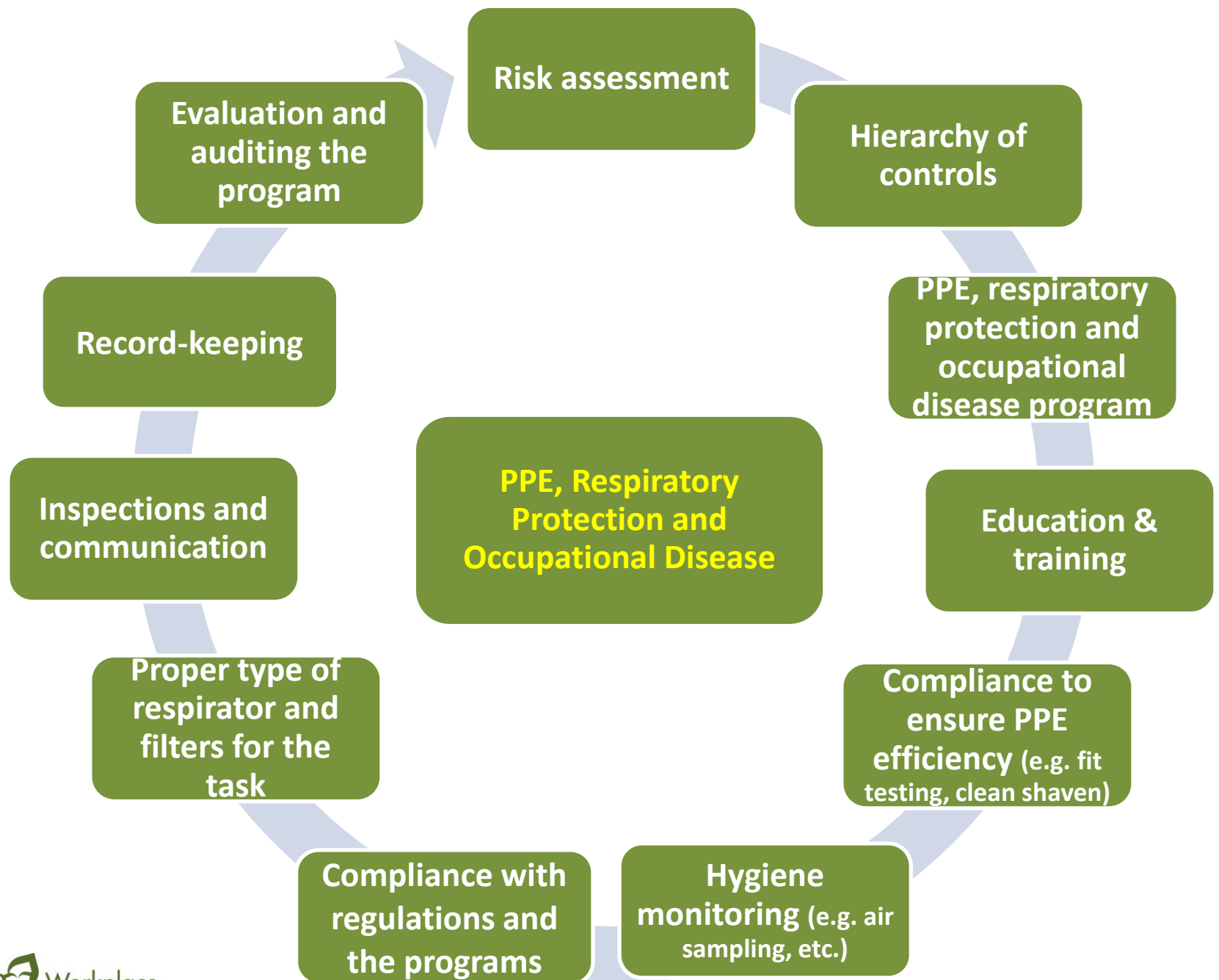


Hierarchy of controls: PPE is the least effective manner to control a hazard



Hierarchy of controls: PPE is the least effective manner to control a hazard

- A thorough Risk Assessment looks for changes that may affect the current status of hazards and re-assess as required
- Control program(s) should include engineering controls, work practices, hygiene facilities
- Methods and procedures used to monitor airborne concentrations and worker exposure
- Worker training

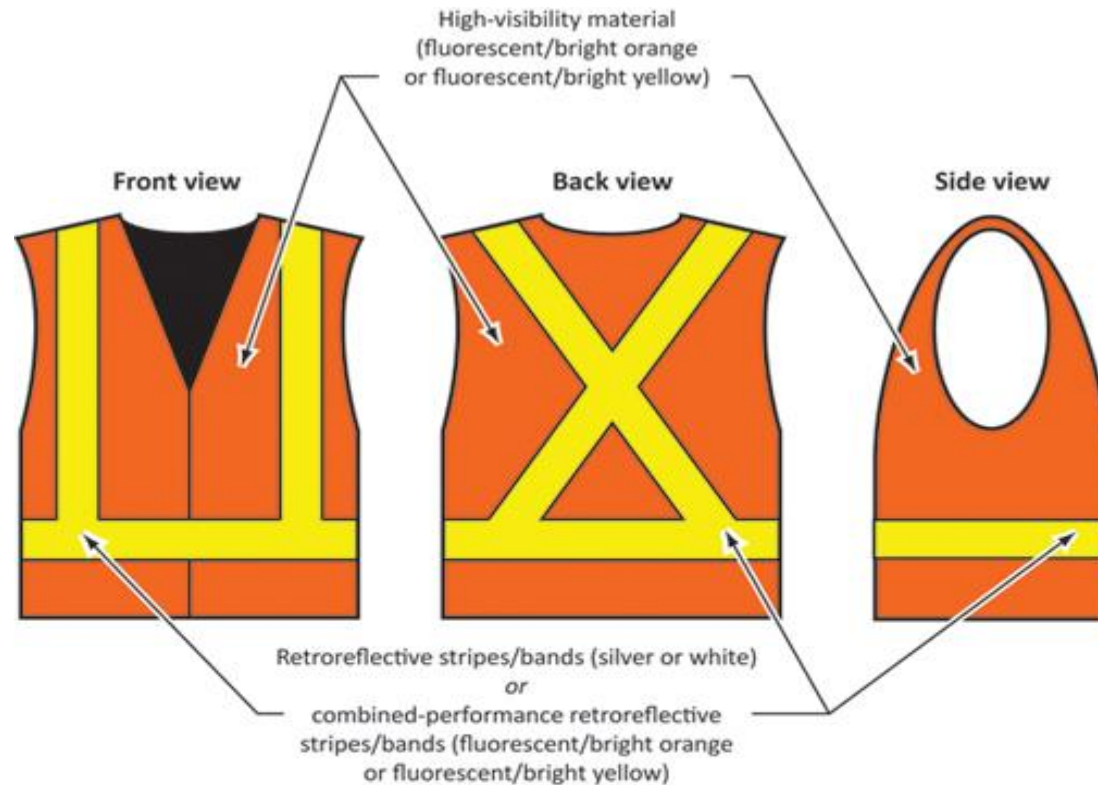


Respiratory protection

- Safe work practices
 - Ensure workers follow policies and procedures
 - Effective supervision
- Personal protective equipment (PPE) provided to workers, employers must,
 - Ensure that workers are trained on proper use and care of PPE
 - Ensure that workers are trained to inspect their PPE
 - Ensure that workers are trained on how to store and clean their PPE

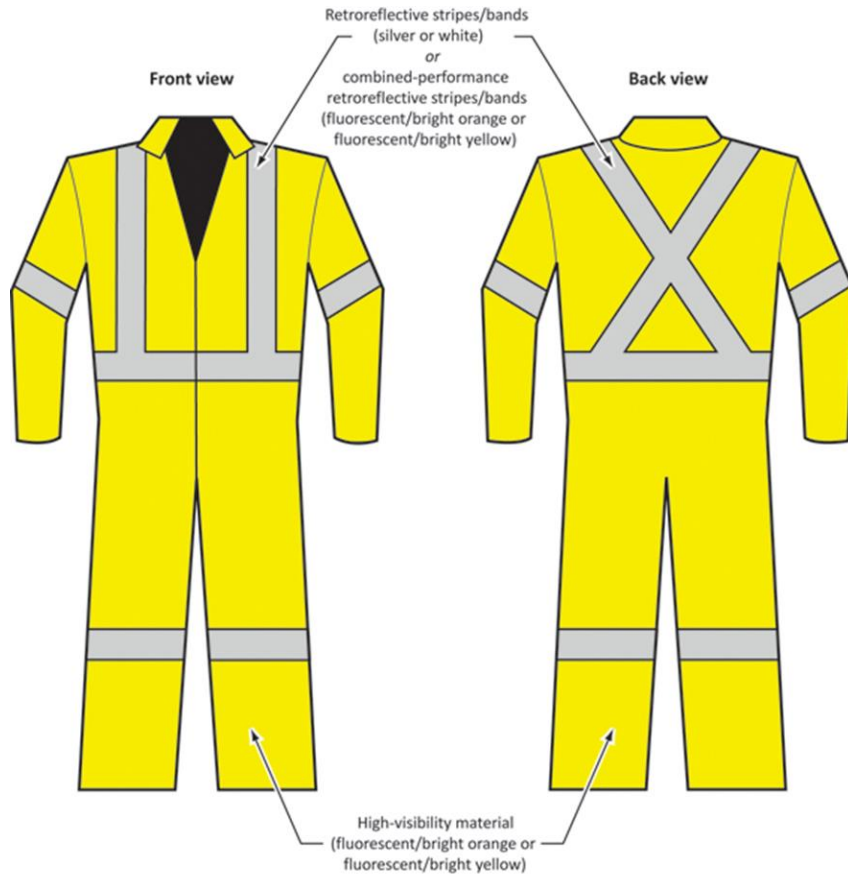


High visibility workwear for use in mines (as per CSA Z96)



Examples of alternative materials

High visibility workwear for use in mines



- Retro-reflective material on headgear must be in good condition so that the worker is visible.
- Dirty/worn retro-reflective materials provide lower visibility than clean and well-maintained ones.



Example of alternative materials

Fall Hazards Controls

- Safe work practices
 - Ensure workers follow policies and procedures
 - Effective supervision
- Personal protective equipment (PPE) provided to workers,
 - Ensure that workers are *trained on proper use and care of PPE*
 - Ensure that worker are trained to inspect their PPE



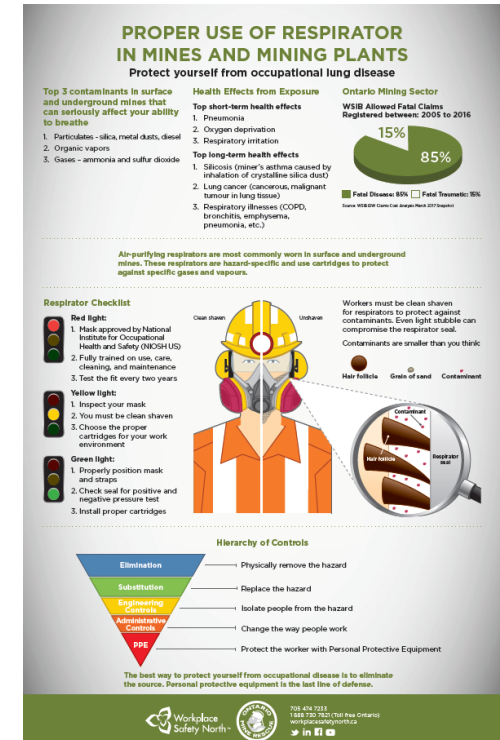
Information and Resources

- **CSA-Z94.4-11 – Selection, use, and care of respirators**

<http://shop.csa.ca/en/canada/respiratory-protection/canrsa-z944-11-r2016/inv/27016392011>

- **WSN – Infographic for Respirators in Mines and Mining Plants**

Coming February 2018 – Free download



Information and Resources

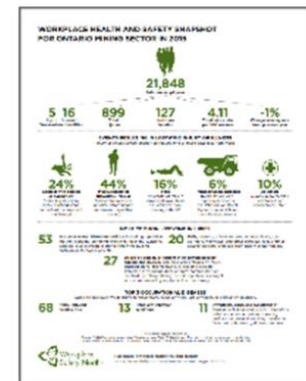
- **WSN – PPE Infographic**

[https://www.workplacesafetynorth.ca/sites/default/files/resources/Mining Health Safety Infographic OMA WSN-2017_0.pdf](https://www.workplacesafetynorth.ca/sites/default/files/resources/Mining%20Health%20Safety%20Infographic%20OMA%20WSN-2017_0.pdf)

Free download

- **WSN - Mining Statistics Poster**

https://www.workplacesafetynorth.ca/sites/default/files/Mining-All_ON_Health_Safety_Info_graphic_2016.pdf



Information and Resources

- **WSN – New and Young Worker Employer Guide**
https://www.workplacesafetynorth.ca/sites/default/files/WSN_New_Young_Worker_Guide_for_Employers.pdf
- **CDC NIOSH Personal Protective Equipment**
<https://www.cdc.gov/niosh/ppe/default.html>
<https://www.cdc.gov/niosh/topics/respirators/default.html>
- **Canadian Centre for Occupational Health and Safety (CCOHS) - Personal Protective Equipment**
<https://www.ccohs.ca/oshanswers/prevention/ppe/>

Information and Resources

- **WSN - Fall Protection: Take Ten to Safety**
<http://www.workplacesafetynorth.ca/sites/default/files/Fall%20Protection%20Presentation.pdf>
- **MOL – Working at Heights Training Program Standard**
<http://www.labour.gov.on.ca/english/hs/pubs/wah/>

Compliance on Personal Protective Equipment and High Visibility Clothing Mines and Mining Plants

Blitz Date

February 1st - March 31st, 2018

Why is the MOL doing this blitz (1 of 3)

- According to WSIB Occupational disease continues to be the highest contributor to fatalities and reported illnesses in the workplace.
- Between 2012 and 2016, 108 workers in the Ontario mining sector died as a result of an occupational disease.
- Personal Protective Equipment is the last measure of control along the path to protect workers. If other controls are ineffective in the Hierarchy; using and maintaining Personal Protective Equipment is extremely important to protect workers.
- Ministry of Labour during field visits has noted compliance issues with requirements for High Visibility Clothing, as well as supplier issues with providing clothing that meets the requirements.

Why is the MOL doing this blitz (2 of 3)

- As of July 1, 2016, changes to Regulation 854 (Mines and Mining Plants) strengthened requirements for high visibility safety apparel.
- As of January 1, 2017, changes to Regulation 854 require employers to complete risk assessments for workplace hazards and consult the joint health and safety committee (JHSC) or the health and safety representative (HSR) when developing measures to control the hazards.
- As of January 1, 2017, changes to Regulation 854 require employers to develop and maintain a written traffic management program in consultation with the JHSC or HSR.

Why is the MOL doing this blitz (3 of 3)

- Effective July 1, 2016, hearing protection requirements that apply to mines and mining plants (and all Ontario workplaces) are set out in O. Reg. 381/15 (Noise) instead of Regulation 854.
- Effective July 1, 2016, WHMIS requirements in OHSA and Reg. 860 changed to align with new international standards for classifying hazardous chemicals and providing information on labels and safety data sheets.
- These new international standards are part of the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS) and are being phased in across Canada between February 2015 and December 2018.

IMPORTANT NOTE RE:

- For guidance purposes, this presentation references specific sections of regulations under the Occupational Health and Safety Act (OHSA) to highlight some key focus areas of Ministry of Labour (MOL) inspectors' activities during this Blitz. It is the employer's responsibility to be aware of all relevant requirements that are set out under the OHSA and its regulations.
- MOL inspectors may check for compliance with requirements in Regulation 854 (Mines and Mining Plants) and other provisions set out in the OHSA and other regulations, such as those in O. Reg. 490/09 (Designated Substances), O. Reg. 833 (Control Of Exposure To Biological Or Chemical Agents), and others related to training, procedures, etc.
- Inspectors will take enforcement action, as appropriate, if they find violations of the OHSA and any of its regulations.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 854

- 12 (3) An employer shall require a worker to wear or use such personal protective equipment, clothing and devices as are necessary to protect the worker from the particular hazard to which the worker may be exposed.
- 12 (4) Every worker shall be properly fitted with personal protective clothing or equipment by a competent person or persons.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 854

- 262 (2) Every worker in an underground mine shall wear:
 - (a) high visibility safety apparel that makes the worker visible to others in the workplace and that meets the requirements set out in subsection (3).
 - (b) retro-reflective material applied to the front, back and sides of head gear.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 854

- 262 (3) High visibility safety apparel must meet the following requirements:
 1. It shall be made of fluorescent or bright-coloured background material.
 2. It shall have retro-reflective striping that,
 - i. is located on the outside of the garment,
 - ii. measures at least 50 mm in width,
 - iii. completely encircles the waist, each arm and each leg below the knee.
 - iv. is arranged in two vertical lines on the front of the garment, extending over the shoulders and down to the waist, and
 - v. is arranged in the form of an “X” on the back of the garment, extending from the shoulders and down to the waist.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 854

- 262 (4) All high visibility safety apparel and all retro-reflective material on head gear must be maintained in good condition so that they adequately visually identify a worker.
- 263 (2) Subject to subsection (3), between sunset and sunrise, every worker on the surface shall wear:
 - (a) high visibility safety apparel that makes the worker visible to others in the workplace and that meets the requirements set out in subsection 262 (3).
 - (b) retro-reflective material applied to the front, back and sides of head gear.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 854

- 263 (3) A worker is not required to comply with subsection (2) if the worker is in a booth, vehicle cab or another protective enclosure or if a work area is provided with fixed lighting that enables the worker to be seen.
- 263 (4) All high visibility safety apparel and all retro-reflective material on head gear must be maintained in good condition so that they adequately visually identify a worker.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing:
Mines and Mining Plants

Regulation 490

- 16 (1) Every employer shall take all necessary measures and procedures by means of engineering controls, work practices and hygiene facilities and practices to ensure that a worker's airborne exposure to each of the following designated substances and forms of designated substances does not exceed the TWA, STEL or C set out for the substance or form of substance in Table 1:
 1. Benzene
 2. Coke oven emissions
 3. The forms of lead listed in Table 1
 4. The forms of mercury listed in Table 1

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing:
Mines and Mining Plants

Regulation 490

- 16 (2) Every employer shall take all necessary measures and procedures by means of engineering controls, work practices and hygiene facilities and practices to ensure that a worker's airborne exposure to each of the following designated substances and forms of designated substances is reduced to the lowest practical level and, in any event, does not exceed the TWA, STEL or C set out for the substance or form of substance in Table 1:

1. Acrylonitrile
2. Arsenic
3. The forms of asbestos listed in Table 1
4. Ethylene oxide
5. The forms of isocyanates listed in Table 1
6. The forms of silica listed in Table 1
7. Vinyl chloride

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing:
Mines and Mining Plants

Regulation 490

- 16 (3) Subject to section 18, an employer shall comply with this section without requiring a worker to wear and use respiratory equipment.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing:
Mines and Mining Plants

Regulation 490

- 18 (1) An employer shall provide a worker with respiratory equipment if the employer cannot comply with the strict duty imposed by subsection 16 (1) or (2) because:
 - (a) an emergency exists
 - (b) the measures and procedures necessary to control the exposure of a worker to the airborne designated substance:
 - (i) do not exist or are not available
 - (ii) are not reasonable or practical for the length of time or frequency of exposure or the nature of the process, operation or work
 - (iii) are not effective because of a temporary breakdown of equipment

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing:
Mines and Mining Plants

Regulation 490

- 18 (2) A worker who is exposed to any level of an airborne designated substance may request respiratory equipment from his or her employer, and the employer shall provide respiratory equipment in response to the request.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing:
Mines and Mining Plants

Regulation 490

- 18 (3) An employer who provides a worker with respiratory equipment shall ensure that the equipment,
 - (a) is appropriate in the circumstances for the form and concentration of airborne designated substance in respect of which the equipment is to be used;
 - (b) meets or exceeds the requirements set out in the applicable code for respiratory equipment; and
 - (c) is used in accordance with the requirements of the applicable code for respiratory equipment.
- 18 (4) An employer who provides a worker with respiratory equipment shall provide training and instruction to the worker in the care and use of the equipment.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 833

- 3 (1) Every employer shall take all measures reasonably necessary in the circumstances to protect workers from exposure to a hazardous biological or chemical agent because of the storage, handling, processing or use of such agent in the workplace.
- 3 (2) The measures to be taken shall include the provision and use of:
 - (a) engineering controls
 - (b) work practices
 - (c) hygiene facilities and practices
 - (d) if section 7.2 applies, personal protective equipment

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 833

- 7.2 (1) An employer shall protect workers from exposure to a hazardous biological or chemical agent without requiring them to wear and use personal protective equipment, unless subsection (2) applies or the employer complies with an applicable code of practice.

Blitz focus: Mines and Mining Plants

Compliance on personal protective equipment and high visibility clothing: Mines and Mining Plants

Regulation 833

- 7.2 (2) The employer shall provide, and workers shall wear and use, personal protective equipment appropriate in the circumstances to protect the workers from exposure to the agent, if engineering controls required by this Regulation:
 - (a) are not in existence or are not obtainable
 - (b) are not reasonable or not practical to adopt, install or provide because of the duration or frequency of the exposures or because of the nature of the process, operation or work
 - (c) are rendered ineffective because of a temporary breakdown of the controls
 - (d) are ineffective to prevent, control or limit exposure because of an emergency

Additional Blitz focus: Mines and Mining Plants

Distracted driving was one of the top risks identified in the surface mining risk assessment completed in 2016 with industry and labour representatives.

Regulation 854

- 105.1 (1) An employer at a mine shall, in consultation with the joint health and safety committee or health and safety representative, if any, develop and maintain a written traffic management program.
- 105.1 (2) The program shall include measures and procedures to,
 - (a) prevent collisions, of motor vehicles, that may endanger the health and safety of workers by addressing hazards relating to reduced or impeded visibility of motor vehicle operators; and
 - (b) protect the health and safety of workers and pedestrians who may be endangered by the movement of a motor vehicle.

Additional Blitz focus: Mines and Mining Plants

Distracted driving was one of the top risks identified in the surface mining risk assessment completed in 2016 with industry and labour representatives.

Regulation 854

- 105.1 (3) A copy of the program shall be provided to the joint health and safety committee or health and safety representative, if any, and shall be kept readily available at the mine site.
- 105.1 (4) The program shall be reviewed at least annually.

What's New: Noise

- A new Noise Regulation (O. Reg. 381/15) under the Occupational Health and Safety Act (OHSA) came into effect on July 1, 2016.
- This regulation will help protect Ontario's workers from noise-induced hearing loss, a leading cause of occupational disease for Ontario workers.
- O. Reg. 381/15 replaces the noise protection requirements set out in the regulations for Industrial Establishments, Mines and Mining Plants, and Oil and Gas-Offshore and extends the same noise protection requirements to all workplaces under OHSA.
- Subsection 2(1) of O.Reg 381/15 provides that “every employer shall take all measures reasonably necessary in the circumstances to protect workers from exposure to hazardous sound levels.”
- For more information on the new regulation, please visit the Source Law section of the e-Laws website: <https://www.ontario.ca/laws/regulation/r15381>

What's New: WHMIS 2015

- WHMIS is changing to adopt new international standards for classifying hazardous chemicals and providing information on labels and safety data sheets.
- These new international standards are part of the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS) and are being phased in across Canada between February 2015 and December 2018.
- By December 1, 2018 the transition to WHMIS 2015 must be complete.
- In Ontario, the necessary amendments to the [Occupational Health and Safety Act](#) (OHSA) and Reg. 860 (Workplace Hazardous Materials Information System) came into force on July 1, 2016.

Disclaimer

- *This material has been prepared to assist the workplace parties in understanding their obligations under the OHSA and the regulations. It is not intended to replace the OHSA or the regulations and reference should always be made to the official version of the legislation.*
- *It is the responsibility of the workplace parties to ensure compliance with the legislation. This web resource does not constitute legal advice. If you require assistance with respect to the interpretation of the legislation and its potential application in specific circumstances, please contact your legal counsel.*
- *While this material may also be available to Ministry of Labour inspectors, they will apply and enforce the OHSA and its regulations based on the facts as they may find them in the workplace. This material does not affect their enforcement discretion in any way.*

Thank you for helping make Ontario workplaces safer

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