Hazard & Risk Management Overview

John Kelly
IHSA Safety Groups and COR™ Consultant
To provide a brief overview of Hazard and Risk Management
Topics

• What is an OHSMS?
• Know Your Hazards
• Rate Your Hazards
• Control the Risks
What is it?

• A process to organize and manage health and safety within an organization
Is it required by law?

• An employer shall

“prepare and review at least annually a written occupational health and safety policy and develop and maintain a program to implement that policy”

[OHSA sec.25(2)(j)]
Hazard and Risk Management

- What are you managing?
- How are you managing it?
What are you managing?

- Legal obligations
- Facilities
- Activities
- Environmental hazards
- Externally created hazards
- Impacts of change
- Work process design
How are you managing it?

- Identifying Hazards
- Risk Assessment and Analysis
- Prioritizing Risks
Hazard or Risk?

- A **Hazard** is a source of potential damage, harm, or adverse health effects on something or someone.

- The **Risk** is the consequence of exposure to a hazard.
Know Your Hazards

Identify all reasonable, foreseeable hazards:

- Workplace environment
- All parts, and functions of process
- Foreseeable misuse
- Worker knowledge
- Organizational culture
Rank Your Hazards

• Measures the level of risk

• Risk assessment and analysis is a systematic process of evaluating the potential risks that may be involved in a projected activity or task

• Use the results to develop measures for eliminating or controlling identified hazards
The higher the risk the greater control required
Assessment Tools

- Checklists
- Preliminary Hazard Assessments (PHA)
- Consequence Probability Matrices
- Failure Modes and Effects Analysis (FMEA)
Prioritizing, Ranking or Rating Risk

To arrange or deal with in order of importance

• Process should include:
  – Potential exposure
  – Potential of occurrence
  – Possibility of avoiding/limiting harm
Risk Rating Scales

- Probability
- Severity
- Frequency
## Threshold Level

<table>
<thead>
<tr>
<th>Probability</th>
<th>Minor Injury (small cut)</th>
<th>Significant Injury</th>
<th>Significant Injury</th>
<th>Incapacity or Possible Fatality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible But Unlikely A</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Medium Risk</td>
<td>High Risk</td>
</tr>
<tr>
<td>Possible          B</td>
<td>Low Risk</td>
<td>Medium Risk</td>
<td>Medium Risk</td>
<td>High Risk</td>
</tr>
<tr>
<td>Probably          C</td>
<td>Medium Risk</td>
<td>Medium Risk</td>
<td>High Risk</td>
<td>High Risk</td>
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<tr>
<td>Very Likely       D</td>
<td>Medium Risk</td>
<td>Medium Risk</td>
<td>High Risk</td>
<td>High Risk</td>
</tr>
</tbody>
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**Low Risk**
May require warning signs and/or protective clothing

**Medium Risk**
Will require training, guarding or both or other forms of risk reduction
Whatever combination of measures is identified the result must be Low Risk

**High Risk**
Prevent or discontinue. Revise or replace task to achieve Medium or Low Risk
Critical Tasks

- Based on established threshold
- Require development of specific procedures
Controlling Hazards

- Hierarchy of Controls
  - Control at the Source
  - Control along the Path
  - Control at the Worker
**Controls**

- When selecting control methods begin by identifying and addressing the highest priority risk

- A combination of controls may be required

- Make sure your control actually protects the worker
The higher the risk the greater control required
Communicating & Monitoring

- Communication and consultation
- Monitoring and review
Communication and Consultation

- Develop/revise communication plan
- Gain support for controls
- Get all parties involved
- Use SMEs
- Determine Hazard & Risk process
Monitoring

- Develop/revise monitoring and review plan
- Include accountability
- Written review
- Comparison with previous reviews
- Documentation

Monitoring & Review
Hazard and Risk management is a logical and systematic process for:

- identifying, analysing, evaluating, controlling hazards and risks
- monitoring and reviewing
- communicating and consulting
- reporting and recording
- continuous improvement