Job Hazard Analysis & Safe Work Procedures Workshop

Please Sign In!
Workplace Safety and Health Act

Further duties of employers 4(2)(b)

“provide to all his workers such information, instruction, training, supervision and facilities to ensure, so far as reasonably practicable, the safety and health and welfare of his workers;”
Workplace Safety and Health Act

Content of Program 7.4(5)

“A workplace safety and health must include... a plan for training workers and supervisors in safe work practices and procedures;
Hierarchy of Controls: Most Desirable to Least Desirable

• **Most Attractive Option**

• **Elimination**: Remove the hazard completely.

• **Substitution**: Replace the hazard with a non or less hazardous option.

• **Engineering Controls**: Create Barriers to isolate worker from the hazard.
Hierarchy of Controls: Con’t

- **Administrative Controls**: Control remaining risk through Work Cycles, SWPs, Routine Maintenance or Policy.

- **Last Resort Personal Protective Equipment**: After that, then we will think about using PPE.
Difference between JHA & SWP

• A Job Hazard Analysis (JHA) is an assessment tool.

• Designed to Collect information.

• Slow down and take a critical look at all steps and the whole environment.

• Multiple Perspectives
Difference...

• A Safe Work Procedure is a step by step written instruction on how the employer wants the task performed. Similar to how you would follow a Recipe.

• Used for training (with trainer and self-learning after), corrective action, enforcement, ...
Difference between Occupation and Job/Task

• a job or a task in this context does not include a job such as a carpenter,

• a carpenter is an occupation, a job or task for a carpenter could include cutting a board to the correct size.
Process

• 3 Steps to analyze an areas jobs/tasks:

1. Develop a Critical Job Inventory.
   • What tasks/jobs need control?

2. Conduct a Job Hazard Analysis.
   • What hazards are present?

3. Develop Safe Work Procedures
   • How do we perform this task safely?
Before you start...

For a successful job observation:

• Select workers who can share knowledge.
• Explain what is being done and why.
• Observe task – record the “as is” steps.
• Review with workers for accuracy.
• Contact other relevant people or groups for information.
Basic Steps

1. Critical Job Inventory – What Tasks?
3. List Hazards – Each Step is Different but there may be duplication.
4. List Control Measures – For Each Hazard.
5. Create SWP – Standard Format
Critical Job Inventory- Information Collection

- Frontline Worker Interviews
- Observations
- Job Descriptions
- Operations Manual
- Experiment Requirements
Critical Job Inventory- Ordering Hazards

1. Order Hazards by most hazardous to least.
   - Severity x Frequency = Hazard Level.
     Next Slide!

   - Create “Risk Map” of tasks so priority can be given to highest risks.
     Y Axis = Frequency
     X Axis = Severity
Critical Job Inventory- Ordering Hazards

- Assign numbers to evaluate each Hazard.
- 5 = High (Death, Dismemberment, 3\textsuperscript{rd} degree Burns)
- 3 = Medium (Sprains, Strains, Tears)
- 1 = Low (Small Cuts, Bruises, Abrasions)

- **Special Attention paid to ALL High Hazards**

- Assign numbers to evaluate how often the task is performed.
- 5 = Daily
- 3 = Weekly
- 1 = Monthly
Job Hazard Analysis

• What is a Job Hazard Analysis
  – A step by step process
  – Analyzing a job to determine hazards
  – A look at the Environment the task is performed in
  – Recommending controls
  – Aid in developing safe work procedures
JHA Steps

3 steps to Conducting the JHA

1. Break the job into steps.
2. Identify the hazards of each step.
3. Developing controls for all hazards identified.
Step 1 – Breaking the job into steps

- Major Steps – Not intricate.
- Keep it brief – a few words only.
- Do NOT add safety measures or overthink it.
- Limit the number of steps...if there are more than 15, you may need to split the job down into different tasks.
Step 2 - Identify hazards for each step

- **Safety hazards**
  - Slip, Trip, Fall
  - Cuts, Abrasions
  - Pinch Points, Crush
  - Ergonomic, Material Handling
  - Tool Use,
  - Other Workers in the Area
Step 2 - Identify hazards for each step

- **Health hazards**
  - Chemical
  - Biological
  - Physical Agent
  - Risks for Musculoskeletal Injury (MSI)
  - Psycho-Social
Things to Consider...

• Task
• Material/Equipment
• Worker
• Management
• Environment
<table>
<thead>
<tr>
<th>Workplace hazard</th>
<th>Example of hazard</th>
<th>Example of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thing</td>
<td>Knife</td>
<td>Laceration</td>
</tr>
<tr>
<td>Substance</td>
<td>Benzene</td>
<td>Leukemia</td>
</tr>
<tr>
<td>Material</td>
<td>Asbestos</td>
<td>Mesothelioma</td>
</tr>
<tr>
<td>Source of energy</td>
<td>Electricity</td>
<td>Shock, electrocution</td>
</tr>
<tr>
<td>Condition</td>
<td>Wet floor</td>
<td>Slips, falls</td>
</tr>
<tr>
<td>Process</td>
<td>Welding</td>
<td>Metal fume fever</td>
</tr>
<tr>
<td>Practice</td>
<td>Hard rock mining</td>
<td>Silicosis</td>
</tr>
</tbody>
</table>
Step 3 - Consider control measures

• For each hazard identified, state all possible control measures.

• They may repeat.

• May have solution available now, or may need to develop one or add to one.
Class group work -

• The task
• The steps?
• The hazards?
• The control measures?
Small work groups, in 3’s

- Select a task that you are familiar with (1 min)
- First: state the basic steps of the task (5 mins)
- Second: list the hazards for each step (5 mins)
- Third: list control measures for each hazard (5 mins)
Safe Work Procedures
http://safemanitoba.com/safe-work-procedure-templates-maintenancegeneral
Safe Work Procedures

Develop from the Job Hazard Analysis:

- Summarize information from the JHA,
- Use positive language - no: ‘do not’ or ‘if’
- Start with a action – verb
- Briefly, what do you want them to do?
- As a Manager/Supervisor this is an opportunity to dictate how you want work done
Safe Work Procedures

• Use photos
• Diagrams
• Video?

• After all, the SWP is a communication tool.
• No standard requirement as to what needs to be part of the SWP.
Safe Work Procedures - other

• Identify the specific job.
  • Area, then # and Name each SWP.

• Identify who wrote or approved the SWP.
  • Who participated? Who had final signoff?

• When was this originally written and has it been revised?
  • Date it upon completion and every time it is revised.
SWP - Continued

• Specific hazards to watch for?
  • Environment
  • Slippery Surfaces
  • Field Work Issues

• What PPE or other protection is required?
  • Gloves
  • Respirator
  • Safety Shoes
SWP - Continued

• Special equipment or controls required.
  • Fencing
  • Guarding

• Emergency Actions
  • Injury
  • Equipment Failure
SWP - Continued

• References
  • Operator’s Manuals
  • Guidance Documents
  • Legislation
  • Standards
Using Your SWP

Putting safe work procedures to work

• Employee orientation
• Task instruction
• Planned task observation
• Personal Contacts and Coaching
• Safety talks
• Incident investigations
• Skill training
Follow Up

• You need to review your JHA’s and SWP:
  • Proactively
    • Stipulated periods of time. Every 3 years.
    • Is information current? Update users, etc.
  • Reactively
    • If there is an incident. Review with comparison to incident investigation notes.
Progression to a Final Product

• The JHA and the SWP may not be perfect the first time you write it.

• It’s a work in progress – as we learn more, we improve.

• By the way – other languages, may require pictures, or videos.
Group work

• Using the JHA your group has completed, use the blank form to write your safe work procedure

• (not testing grammar or punctuation... this time)

• Prepare to present to the class.
Questions?