



## **Job Hazard Analysis**

### **Introduction**

This procedure outlines the steps required to identify and control hazards associated with work to be performed utilizing Industrial Rope Access techniques. Rather than centering on the inherent risks of the methods used to complete the work, the Job Hazard Analysis should focus on the hazards which exist at the worksite, the risks associated with each planned work activity, and the successful elimination or mitigation of each identified hazard.

A Job Hazard Analysis should be completed at the beginning of each shift, prior to performing work. Each member of the team must be involved in the process to ensure adequate hazard identification. A well prepared Job Hazard Analysis ensures all workers have identified the hazards which exist at the worksite, understand the steps which will be taken to eliminate or mitigate the hazards, and agree that the Job Hazard Analysis will be implemented as written.

This procedure is not a substitute for proper risk-based work preparation and planning, nor is it a substitute for proper work permitting or safety critical procedures. It is also critical that all workers understand no activity is absolutely risk-free, and they must not assume that hazards remain unchanged, even on routine jobs. In fact, an effective Job Hazard Analysis includes constant monitoring of the work environment during the shift to identify potential hazards due to changing conditions.

## Work Procedure

The following steps are required for all work:

<b>Step</b>	<b>Action</b>
1	All work requires a survey of the worksite, prior to starting related tasks. The survey should be made by all members of the team.
2	Discuss jointly all identified present and potential hazards. Ensure all team members understand the hazards associated with the work activities, and all team members agree to the steps needed to eliminate or mitigate each hazard.
3	Using the attached Job Hazard Analysis form, the team must document each work activity, hazard involved, and the steps agreed upon to eliminate or mitigate each hazard.
4	Each Job Hazard Analysis must be reviewed and signed by all members of the team, thereby acknowledging their participation in the development and understanding of the details identified on the Job Hazard Analysis.
5	All hazards identified on the Job Hazard Analysis must be eliminated (preferred), or mitigated prior to work beginning. If the hazards cannot be eliminated or mitigated, the job must not begin, and a supervisor and/or client must be notified.
6	Additional persons becoming involved in the work activities already in progress must read and sign the Job Hazard Analysis in place prior to joining the activities.
7	If conditions or the plan changes (scope, weather, adjacent activities by others, etc.), the Job Hazard Analysis must be updated to reflect this change, and all team members shall review and acknowledge the revisions.
8	All Job Hazard Analysis shall be retained by the supervisor to be included in the paperwork.
9	Any hazards which were mitigated, but not eliminated completely must be communicated to personnel who will continue work on adjacent shifts. An example of this type of hazard is installing a temporary barrier to avoid contact with a hot pipe.

## Guidelines for Completing an effective Job Hazard Analysis

Work Activity	Associated Hazard	Elimination or Mitigation Steps
<p><b>HOW ARE YOU GOING TO DO YOUR WORK?</b></p> <p><i>Describe your work steps, including tools and equipment used to complete your tasks. Number each work step (1, 2, 3).</i></p>	<p><b>HOW COULD YOU BE INJURED?</b></p> <p><i>Describe TASK and AREA SPECIFIC hazards and number in outline form (1a., 1b., etc.)to the corresponding work activity.</i></p>	<p><b>WHAT ARE YOU GOING TO DO TO PREVENT INJURY?</b></p> <p><i>Describe how hazards will be eliminated or mitigated, including task specific PPE (ie. specialized gloves). Number each in outline form (1a., 1b., etc.)to the corresponding hazard.</i></p>
<p>Break the job down into a sequence of steps, each describing what work steps are being done.</p> <p>To determine the basic work steps, ask:  <b>"What step starts the job?"</b> Then, <b>"What is the next basic step?"</b>            Continue until all basic job steps have been identified.</p> <p>The wording for each job step should begin with an action word like "remove, open, weld, etc."</p> <p>This action is completed by naming the item to which the action applied, for example,            "remove extinguisher, weld spool piece to existing line, etc."</p> <p>Number each step 1, 2, 3, etc.</p>	<p>For each job step identified in the first column, begin the search for hazards.</p> <p>Ask yourself some key questions about each step, this could include, but is not limited to:</p> <ul style="list-style-type: none"> <li>• <b>Is there a danger of striking against, being struck by, or otherwise making harmful contact with an object?</b></li> <li>• <b>Is there a danger of being caught in, by, or between objects?</b></li> <li>• <b>Is there a potential for a slip, trip or fall? Will the</b></li> <li>• <b>fall be on the same level or to another?</b></li> <li>• <b>Is there a potential for strain due to pushing, pulling, lifting, bending, or twisting?</b></li> <li>• <b>Is the environment potentially hazardous (vapors, fumes, dusts, heat, radiation, noise, etc.)?</b></li> </ul> <p>Record the type of hazard and the agent involved, such as "Struck by falling object should rigging fail."</p> <p>Number each hazard to correspond with the specific work step it applies to. If multiple hazards exist for one particular step, number in outline form (example: 1a., 1b., 1c., etc.).</p>	<p>For each hazard identified in the middle column, identify specifically how the hazard will be eliminated or mitigated.</p> <p>The following hazard control options should be considered:</p> <ul style="list-style-type: none"> <li>• <b>Eliminate the hazard (e.g., remove it, substitution of materials, automation, etc.).</b></li> <li>• <b>Introduce engineering controls (e.g., placement of guards or barriers between the worker and the hazard).</b></li> <li>• <b>Provide warnings (e.g., signs, alarms, temporary barricades, etc.).</b></li> <li>• <b>Include administrative controls and training (e.g., inspect tools and equipment, job rotation, training and awareness, etc.).</b></li> <li>• <b>Furnish PPE (e.g., face shield, chemical suit, fall protection, respiratory protection, etc.).</b></li> </ul> <p>Hazard control measures should be specific and concrete. They should not be statements such as "look out, be careful, be alert, watch out, etc."</p> <p>Number each hazard control to correspond with the specific hazard it applies to. If multiple hazard controls exist for one hazard, number in outline form (example: 1a., 1b., 1c., etc.).</p>



