



## Job Hazard Analysis Form (JHA)

This form can be used by all Sanford Underground Research Facility (SURF) employees as well as contractors, subcontractors, and science collaborators. This is a dynamic document which may require modification as the project moves from start to finish and must be readily available at the location where the work is being performed.

**New**       **Revision**

**JHA #** \_\_\_\_\_

**Hazard Analysis**      **Revision Reason:** \_\_\_\_\_

**Draft:**  **Yes**    **Final:**  **Yes**    **Date:** \_\_\_\_\_

<b>Job Title:</b>	
<b>Location:</b>	
<b>Contractor / SURF Personnel:</b>	<b>Contract/Work Order #</b>

*\*Note: For cases where information is not required, please respond with NA.*

	Hazard Analysis Performed By:	Date:	Affiliation:	Phone:
<i>1) General Job and JHA Information</i>				

<i>2) SURF Project Manager and Work Leader Contacts</i>	<b>Project Manager Name:</b>			<b>Phone:</b>
	<b>Work Leader Name:</b>			<b>Phone:</b>

<i>3) Contractor Contacts (if Applicable)</i>	<b>Contractor:</b>			<b>Phone:</b>
	<b>Project Manager:</b>			<b>Phone:</b>
	<b>Project Supervisor:</b>			<b>Phone:</b>
	<b>Project EHS Rep:</b>			<b>Phone:</b>

<i>4) Engineering Review and Approval / Rejection (if Applicable)</i>	<input type="checkbox"/> Accept	<b>Name</b>	<b>Signature</b>	<b>Date</b>
	<input type="checkbox"/> Reject			

**Rejection reasons:**

<i>5) EHS Review and Approval/Rejection</i>	<input type="checkbox"/> Accept	<b>Name</b>	<b>Signature</b>	<b>Date</b>
	<input type="checkbox"/> Reject			

**Rejection reasons:**



**Emergency Contact #s:** Underground:  Ross Hoist Op. 605-722-4881  Yates Hoist Op. 605-722-1037  
 Surface: 911 if fire or medical emergency services are needed; otherwise: 605-722-6039  Security: 605-920-0000 Other #'s:

**Any time work steps change, the JHA must be revised!**

When a JHA is revised; training in the new job methods, procedures, or protective measures must be provided to all persons affected by the changes.

**Description of Work:**

[Empty box for Description of Work]

**Personal Protective Equipment: (Check all protective equipment required for the job)**

Hard Hat  Reflective clothing  Safety glasses w/side shields  Goggles (type): \_\_\_\_\_  Respirator (filter type): \_\_\_\_\_  
 Self-Rescuer  Steel/hard toed boots  Face shield / Welding Hood  Hearing protection \_\_\_\_\_  Fall protection (type): \_\_\_\_\_  
 Kevlar sleeves  Chemical splash goggles  Gloves (type): \_\_\_\_\_  Other PPE (specify): \_\_\_\_\_

**Environmental Hazards: (Check all hazards that may exist and document mitigation within this JHA)**

Air pollution potential  Ground water pollution potential  Surface water pollution potential  Weather Conditions  Biological concern  
 Other pollution potential \_\_\_\_\_

**Mitigation:**

**Chemicals required for the job?**  Yes  No (if yes, list each chemical below and attach MSDS sheet to this JHA)

1) \_\_\_\_\_ 4) \_\_\_\_\_  
 2) \_\_\_\_\_ 5) \_\_\_\_\_  
 3) \_\_\_\_\_ 6) \_\_\_\_\_

**Body Motion: (Check all hazards that may exist)**

Lifting  Grasping  Pushing  Pulling  Bending  Kneeling  Reaching  Squatting  Standing  Sitting  Carrying  Climbing  Twisting  
 Other \_\_\_\_\_



**Potential Hazard: (Check all hazards that may exist and document mitigation within this JHA)**

- Caught on / Between / Under  
  Slip / Trip / Fall  
  Struck by / Against  
  Puncture  
  Heights / Elevation  
  Ladders / Scaffolds  
  Explosion  
  Fire  
  High Voltage / Electrical  
 LOTO  
 Dust  
 Noise  
 Fumes  
 Temperature Extreme  
 Confined space  
 Hoisting / Rigging  
 Cranes  
 Trenching / Excavation  
 Forklifts / Powered Ind. Trucks  
 Welding / Grinding / Hot Work  
 Entanglement  
 Chemical contact  
 Cumulative trauma  
 Over exertion  
 High pressure or vacuum  
 Asbestos  
 Radiation  
 Reactive/oxidizing materials  
 Cryogenics/compressed gasses  
 Housekeeping  
 Insects or animals  
 Loss of air  
 Loss of water  
 Loss of power  
 Other \_\_\_\_\_

Mitigation:

**Other Hazards: (Check all hazards that may exist and document mitigation within this JHA)**

Mitigation:

**Permits / Special Authorization Required**

- Hot Work / Welding / Burning  
 Lock-Out / Tag-Out  
 Electrical Work  
 Confined Space  
 Waste Storage/Disposal  
 Trenching & Shoring  
 Digging - one-call made?  
 Building Surface Penetration  
 Concrete removal / application  
 Hoisting and Rigging  
 Cryogenics  
 Asbestos  
 Lead (Pb) Work  
 Working Alone  
 Other \_\_\_\_\_

**Additional JHA, Procedure, or Plan required for the job?**    Yes    No (if yes, list each and attach to this JHA)

- |    |    |    |
|----|----|----|
| 1) | 3) | 5) |
| 2) | 4) | 6) |

**Equipment required for the job:** (List the tools/equipment required to perform the job and any *special* requirements for use or storage of the equipment)

**Transportation and handling of equipment:** (Describe how equipment/items will be transported to the location)

If use of a forklift or rail system is required, check the appropriate box    Forklift    Rail system

Other:

**Multiple contractors / entities:**    Yes    No (if yes, list all involved contractors or entities)

- |    |    |    |
|----|----|----|
| 1) | 3) | 5) |
| 2) | 4) | 6) |



**Utilizing the format below, identify hazards and environmental aspects, and their corresponding safety precautions/procedures/controls to mitigate each hazard. Use as many sheets as necessary.**

**JOB HAZARD ANALYSIS (JHA)**

<b>Step</b>	<b>Work Steps</b>	<b>Safety, Health, or Environmental Hazards</b>	<b>Safety, Health, or Environmental Precautions / Procedures / Controls</b>
1			
2			
3			



Step	Work Steps	Safety, Health, or Environmental Hazards	Safety, Health, or Environmental Precautions / Procedures / Controls
4			
5			
6			



Step	Work Steps	Safety, Health, or Environmental Hazards	Safety, Health, or Environmental Precautions / Procedures / Controls
7			
8			
9			

Step	Work Steps	Safety, Health, or Environmental Hazards	Safety, Health, or Environmental Precautions / Procedures / Controls
10			
11			

**If applicable, add another sheet for additional steps.**



**6) Signatures and Approvals (For Contractor JHAs: the Project Manager and the Contractor Supervisor must sign. For SURF JHAs: the Director, Supervisor, or Leadman must sign. EHS approval is on cover page.)**

By signing this document, it is understood that the hazards have been assessed and controls identified to the best of my knowledge.

Name (print)	Title and Affiliation	Signature	Date

For projects not involving contractors, signatures must be attained from the SURF Project Manager and Work Leader. For work involving contractors, a signature from the SURF Project Manager and the Contractor's Project Manager, Supervisor, or EHS representative must be obtained.

## Job Briefing Attendance

JHA Title:	JHA Approval Date:
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My supervisor has reviewed this hazard analysis with me and I understand the hazards and required precautionary actions. I understand that there are Environment, Health and Safety Professionals on staff if I need further assistance or clarification. By signing below, I agree to the following:

- I agree to follow the work steps and implement the controls as written or notify my supervisor if I am unable to do so.
- I agree to stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.

**I confirm that I am authorized, qualified, and fit to perform the work.**

Print Name	Company	Signature	Date