

Working Safely in Hazardous Environments

Waste Management Symposium
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DOE - Hazardous Environments

- ❑ Radiological areas
- ❑ Hazardous Waste
- ❑ Chemicals
- ❑ Rad and Toxic Air Emissions
- ❑ Thermal Stress
- ❑ Confined Spaces
- ❑ Falls from Elevations
- ❑ Demolition and Decommissioning

We All use Job Hazard Analysis Tools

Some Automated some Paper JSA

Examples Sites with Automated Applications

- ❑ Oak Ridge
- ❑ Los Alamos
- ❑ INEL
- ❑ Savannah River Project
- ❑ Hanford

Web Based Hazard Analysis

2003



Innovation
Award

ISM Core Function

- Define the Scope of Work
- Identify and Analyze Hazards
- Select Controls
- Perform Work to Controls
- Feedback / Continuous Improvement

AJHA Screen

(Task Information)

(Identify Hazards)

(Select Controls)

(Reports and Permits)

(Feedback Database)

FLUOR[®]

AJHA 

Automated Job Hazard Analysis

AJHA As An Integrating Process/Tool

- ❑ Early and Continued Worker Involvement
- ❑ Integrates ESH&Q and Work Management – Work Planning Teams
- ❑ Integrates Hazard Identification, Analysis, and Control with Work Management
- ❑ Integrates Requirements – In a Graded Approach
- ❑ AJHA Output – Included in Work Package Execution
- ❑ AJHA Post-Job Review – Documents “Feedback”

Focus on Thermal Stress

AJHA Hazard Selection

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[Task Information](#) [Hazard Prelim](#) [Hazard and Control Details](#) [Forms](#) [Involvements](#) [Photos](#) [Finalize](#)

Thermal stress (heat or cold stress/hypothermia) ... PENDING ... [Find Hazards \(Level 1 Only\)](#)
 Thermal stress (heat or cold stress/hypothermia) [Find Hazard \(All Levels\)](#)

[<< First](#) [< Prev Hazard](#) [< Prev Yes](#) **Hazard 34 of 60** [Next Yes >](#) [Next Hazard >](#) [Last >>](#)

Actions			Applies	Hazard Description	Select controls for these hazards	Comments	Help
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> ?		<u>Thermal stress (heat or cold stress/hypothermia)</u> Does the work environment pose a potential heat stress hazard from high temperature/humidity and/or moderate to heavy work load or potential for hypothermia from working in low temperatures?		Comment	Help
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> ?		<u>Cold stress/hypothermia?</u> Is there a potential for workers to experience cold stress/hypothermia as a result of working in low temperatures for an extended period of time? The potential hazard, 'cold stress/hypothermia' also includes the potential for frost bite to the workers extremities.		Comment	Help
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> ?		<u>Greenhouse?</u> Will work be conducted in greenhouses or other contaminants?		Comment	Help
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> ?		<u>Radiant Heat?</u> Are there sources of radiant heat present, such as boilers, steam lines, or heated vessels?		Comment	Help
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> ?		<u>High Heat Stress Situations?</u> Does this work involve the use of impermeable clothing or multiple layers of protective clothing (e.g., triple anti-Cs) that will severely reduce the body's ability to dissipate heat through sweating and can't be represented by the protective clothing? High heat stress can occur even though ambient temperatures are not excessive. The use of impermeable clothing or multiple layers of protective clothing will reduce the body's ability to dissipate heat through sweating. If the worker is required to wear such protective clothing and the clothing is not represented by the protective clothing types referenced in HNF-PRO-121, this question should be answered YES.		Comment	Help

AJHA ID: XX - 592 Rev: 0

AJHA - Automated Job Hazard Analysis

[Send questions or comments to AJHA Administration.](#) Or Contact Miles 372-3576 or Mark 376-2257 [Return To Local Intranet](#)
 Site is HANFORD - DOE - RL Richland Operations Current environment is production Version 1.04 Date is 11/14/2006
 /ajhaweb/secure/MainTool/AjhaInventory/AJHA_HazardSelection.cfm Current User is Jaeger, Miles B Time is 02:27:12
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Focus on Respirator Protection

AJHA Hazard Control Selection

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[< First](#) [<< Previous](#) [Selected Hazard Navigation \(1 of 2\)](#) [Next >>](#) [Last >](#)

Asbestos containing materials - contact, disturbance, or removal?

<input type="checkbox"/>	<input type="checkbox"/>	Control Type Required?	Control Description Comments	Comment
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Disposable nuisance-type mask (Filtering Facepiece)	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Personal protective equipment (other) Specify in Details	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection -Other (specify in comments)	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Airline with escape provision	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Combination Supplied Air/Self Contained Breathing Apparatus (SA/SCBA)	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Self Contained Breathing Apparatus (SCBA)	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Powered Air-Purifying Respirator (PAPR) <small>When a PAPR is required, the user should be warned that this equipment could be damaged due to inadvertent contact with objects, when used in a congested area. If damaged the PAPR could be rendered ineffective. Consideration should be given to special measures to avoid contact with objects or consider the use of an alternated means of respiratory protection.</small>	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Half-face mask Air-Purifying Respirator (APR)	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Full-face mask Air-Purifying Respirator (APR)	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Respiratory Protection - Escape unit Self Contained Breathing Apparatus (ESCBA)	Add Details
<input type="checkbox"/>	<input type="checkbox"/>	PPE Additional	Hand Protection - Leather work glove	Add Details

[< Return to Hazard](#) [Add User Added Control](#)

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 Site is HANFORD - DOE - RL Richland Operations
[/ajhaweb/secure/MainTool/AjhaInventory/AJHA_ControlByHazard.cfm](#)

Or Contact Miles 372-3576 or Mark 376-2257
 Current environment is production Version 1.04
 Current User is Jaeger, Miles B

[Return To Local Intranet](#)
 Date is 11/14/2008
 Time is 02:32:20

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Benefits

- ❑ Integrates ISMS and “VPP Principles”
- ❑ Reduces Opportunity for Unexpected Hazards/Surprises
- ❑ Reduces Risk of Personal Injury
- ❑ Creates Participant “Ownership”
- ❑ Improves Communications
- ❑ Minimizes Potential for Work Stoppage and Delays
- ❑ Decreases Cycle Time – Increases Productivity
- ❑ Provides Consistency in the Hazards Analysis Process