

EFCOG Work Management Sub-group Information Submittal Form

<p style="text-align: center;">This form will be used for submittal of information to Work Management Subgroup</p>	
<p>Title/Subject: Previous Site planner training course for Job Hazard Analysis and task breakdown</p>	
<p>Work Management Element: Plan Work</p>	
<p>Submitters Name: Tim Flake</p>	
<p>Site/Facility: Savannah River Site</p>	
<p>Phone: 803 725-1107</p>	
<p>E:MAIL tim.flake@srs.gov</p>	
<p>Description Summary (~ 100 words)</p> <p>Provided below is a copy of the previous Site Job Hazard Analysis (JHA) training, which was specifically requested at the November 9-11 Work Management Working Group meeting held at Savannah River Site. The training was developed as a Computer Based Training (CBT) module. What is provided below are “screen prints” of that CBT module (with narration statements).</p> <p>The attached information was created using Federal Funding under DOE Contract No. DE-AC09-96SR18500.</p>	

Send to:
Randy Cook
randy_w_cook@ri.gov



Welcome to Job Hazard Analysis Training.

Why is JHA Important?



JHA is Important

...because you are the most important person to your family and this company.

EXIT



Your safety is extremely important to your family, and to this company. An injury to you would have an impact on the entire team. Job Hazard Analysis is an important concept to learn and implement. J-H-A is one method that bonds actions together to ensure the best safety program is in place for you, the employee.

The JHA Program Utilizes.....

Safety Principles

Disciplined Operations

Teamwork



EXIT



The J-H-A program requires the consideration of:

Safety Principles

Disciplined Operations

...and Teamwork. The diversity of the J-H-A team members results in a safer work environment and more efficient work place.

The Performance Objectives

Performance Objectives

P01 Given a requirement to perform a specific JHA, identify the Key Job Steps

P02 Given a requirement to perform a specific JHA, identify the Hazards

P03 Given a requirement to perform a specific JHA, identify the Safe Practices

EXIT

◀ ▶ ↺

A screenshot of a presentation slide. The slide has a light green background and is framed by a dark green border. At the top left, the text 'The Performance Objectives' is visible. The main title 'Performance Objectives' is in a large, bold, blue font. Below the title, there are three bullet points, each starting with a bolded label (P01, P02, P03) followed by a description. At the bottom of the slide, there is a navigation bar with a green 'EXIT' button on the left and three green buttons with arrows (left, right, and a circular arrow) on the right.

The Performance Objectives for this course are, given a requirement to perform a specific J-H-A,

Identify the Key Job Steps

Identify the Hazards associated with each key step, and

Identify safe practices that would eliminate or reduce the identified hazards.

To accomplish these performance objectives, you will complete a practice Job Hazard Analysis.

Job Hazard Analysis

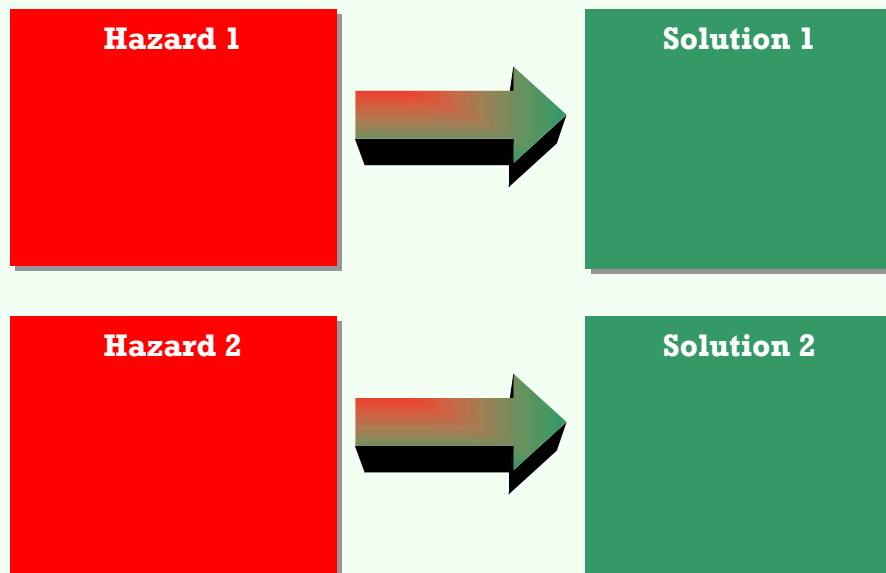
...is defined as a review of the basic steps of a job to identify worker hazards and the measures to prevent injury.

EXIT



Job Hazard Analysis is defined as a review of the basic steps of a job to identify worker hazards and the measures to prevent injury.

Identify and Eliminate Hazards



EXIT



A Job Hazard Analysis is the process of carefully studying and recording each step of the job. The J-H-A identifies existing or potential job hazards and determines the best way to perform the job by reducing or eliminating these hazards.

Benefits of JHA



EXIT



There are many significant benefits of a J-H-A.

It increases employees' involvement in the job planning process.

It helps to identify actual and potential job hazards.

It contributes to the productivity of a job by eliminating or reducing its injury potential.

It enhances communication between management and employees on safety concerns.

And it re-enforces the proper methods of performing operations by employees and supervisors.

Question

Which of the following describes a Job Hazard Analysis?

- A** A frequency analysis of the probability of the occurrence of two or more random events.
- B** A cost benefit analysis of a high risk job, including safety equipment, amount of time devoted to safe practices, and overall efficiency.
- C** A review of the basic steps of a job to identify worker hazards and the measures to prevent injury.

EXIT



**Which of the above describes a Job Hazard Analysis?
Choose the best answer to the question.**

Challenge Question

Question

Which of the following is a benefit of a JHA?

- A** — Identifies actual and potential job hazards.
- B** — Used to evaluate employee performance.
- C** — Increases engineering involvement with daily job functions.

EXIT



**Which of the above is a benefit of a Job Hazard Analysis?
Choose the best answer to the question.**

The JHA Team



Employees



Supervisors



Safety Engineer

- Industrial Hygienist
- Fire Protection
- Emergency Preparedness Coordinator
- Systems Engineer
- Medical Staff Member



Rad-Con



The members of the J-H-A team are:

Employees experienced in the job on which the J-H-A is being conducted

The First Line Supervisor, or designee for the specific job. This person serves as the Team Lead for conducting the J-H-A.

Additional subject matter expert resources may include:

a safety engineer

an industrial hygienist

fire protection personnel

the emergency preparedness coordinator

radiological control personnel

a systems engineer

a medical staff member, and so on.

What are the JHA team's responsibilities?

JHA Team Responsibilities



Conducting JHA

Recommending improvements



Inform management

EXIT

The Job Hazard Analysis Team responsibilities include:

Conducting a J-H-A by defining the key steps of the job, identifying hazards and potential hazards within each key step, and recommending safe practices to eliminate or reduce each hazard or potential hazard

Recommending changes to improve performance of the job, such as specific procedures, policies, equipment, training, and so on

Providing management with a completed copy of the J-H-A.

Challenge Questions

Question/True False

T You would normally not need to complete a JHA when a near miss incident occurs

F

T The JHA Team is responsible for identifying the key steps of a job.

F

T Personnel experienced with the job should be included in the JHA Team.

F

EXIT

◀ ▶ ↺ ▶

True or False. You would normally not need to complete a J-H-A when a near miss incident occurs.

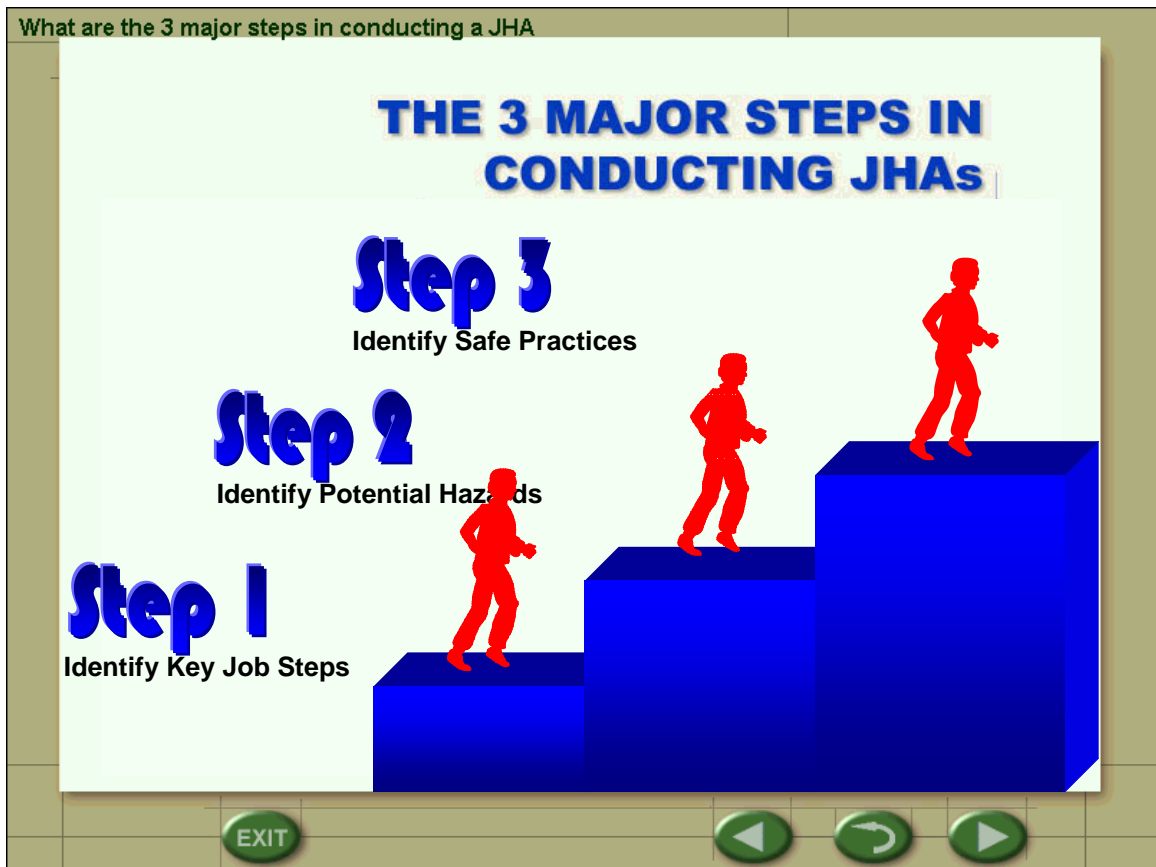
Correct! A near miss incident is exactly when a J-H-A should be performed. You can find ways to eliminate the potential incident and make that job task safe.

True or False. The J-H-A Team is responsible for identifying the key steps of a job.

Correct! Identifying the key steps of a job is an important task of the J-H-A Team.

True or False. Personnel experienced with the job should be included in the J-H-A Team.

Correct! It's important to include personal experienced with the job in your J-H-A Team.



Job Hazard Analysis process has three major steps.

Step 1 – Identify key job steps

Step 2 – Identify possible hazards of each step

Step 3 – Identify safe practices to eliminate or reduce the identified hazards

This course will describe the characteristics of each step in performing a J-H-A.

What are the 3 major steps in conducting a JHA

Employee Involvement



EXIT



Completed J-H-A's involve employees in all phases of the analysis, from identifying and reviewing the key steps of the job, to discussing the hazards and potential hazards of each step, to recommending solutions.



The first major step in conducting a Job Hazard Analysis is breaking the job down into a sequence of key steps. The key steps describe what is to be done to accomplish a job.

It is important to avoid making the breakdown too detailed or too general.

Sometimes it helps to use photos or videos of the task to prevent unnecessary worker exposure to the hazards.

When possible, use mock-ups for high hazard-potential jobs that allow the workers to practice performing the task in a safe, controlled environment.

Step 2



HAZARD IDENTIFICATION

Pictures of
example hazards
go here.

EXIT



The second major step in conducting a J-H-A is identifying existing and potential hazards for each step of the job. Take a look at the pictures that will appear below, and try to identify the hazard in each *before* they are revealed to you.

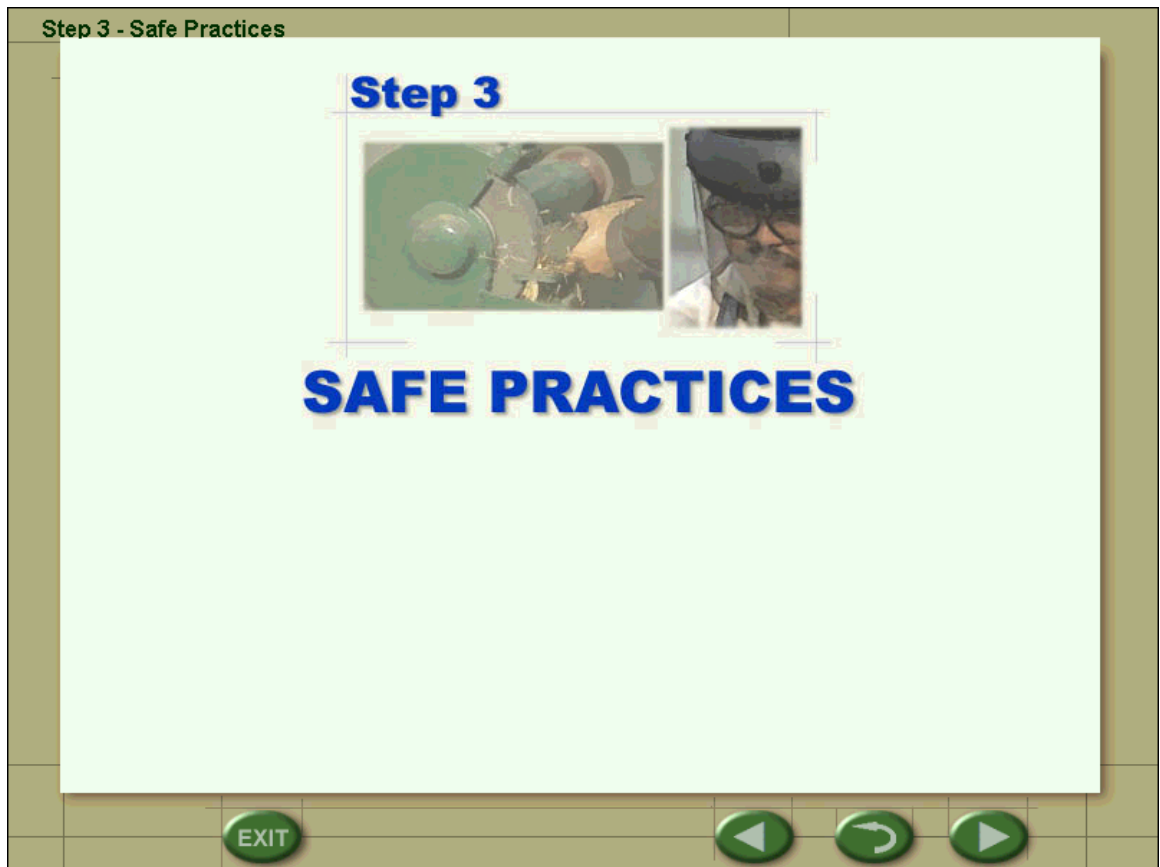
In this picture, the worker is operating a jackhammer without adequate personal protective equipment. This is a common practice, and has been previously identified as a hazard.

This picture shows an environmental hazard.

This picture depicts a performance hazard. The welder in this picture may potentially suffer an eye injury because.

In this picture cleaning agents or combustible materials constitute a chemical hazard.

Finally, this picture depicts a shielding hazard.



The third and last major step in conducting a J-H-A is identifying the safe practices that would eliminate or reduce each identified hazard or potential hazard. Some examples to lessen the hazards could be:

Using engineering controls

Combining steps

Changing the sequence of steps in performing the job

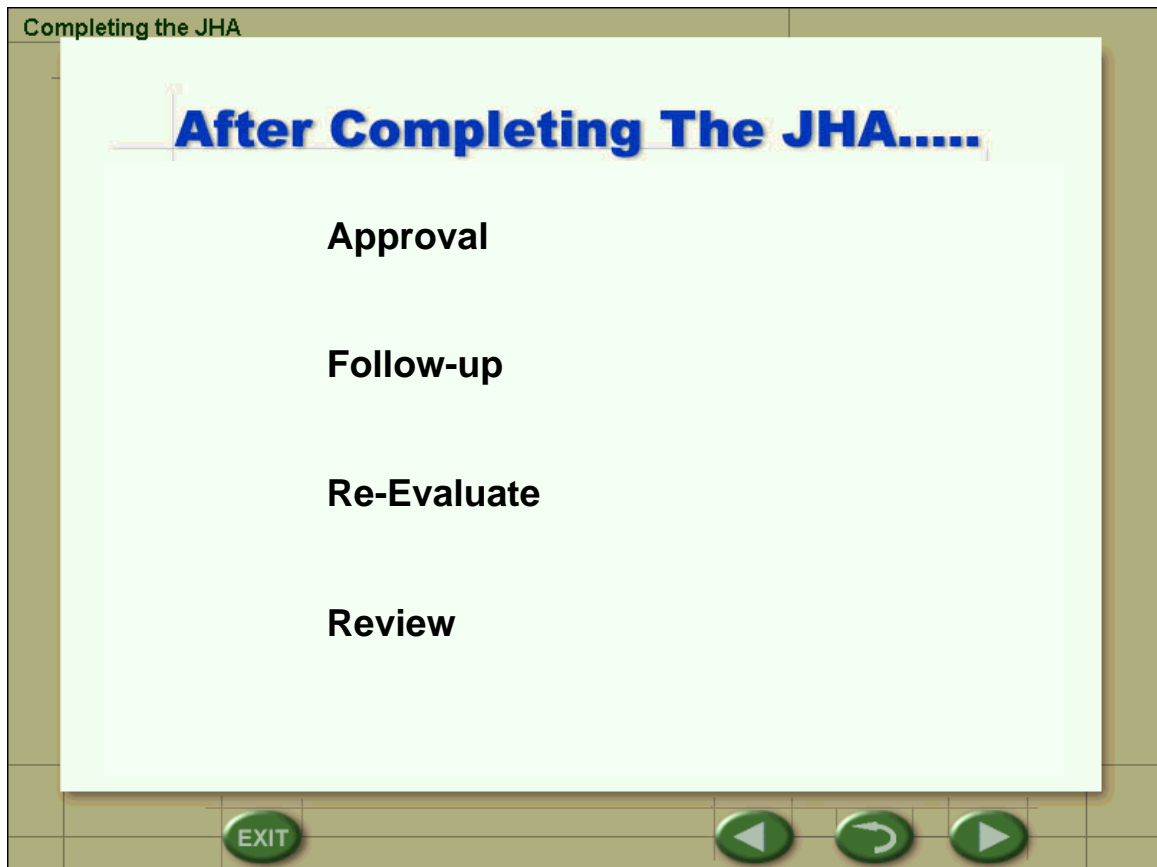
And using safety equipment and precautions.

If a safer method could be used to accomplish the same outcome, these steps should be listed. Be sure to list

exactly what the worker needs to know to perform the job using the new method.

Do not make general statements such as “Be Careful.” You need to be as specific as possible in the recommendations.

The team may need to determine whether any physical changes such as redesigning equipment, changing tools, adding machine guards, personal protective equipment or ventilation, will eliminate or reduce the hazards and potential hazards.



After completing the J-H-A, the team should submit the J-H-A to management for approval of the recommendations, which may include alternate methods for eliminating or reducing the hazards.

The J-H-A Team needs to perform a follow-up and determine if the recommended safe practices will eliminate or reduce the identified hazards.

The workers performing the job should re-evaluate the J-H-A to ensure conditions have not changed prior to beginning the J-H-A.

Finally, the team should review the J-H-A for accuracy and completeness.

Completing a JHA - Step 1

Key Job Steps	Hazards / Potential Hazards	Safe Practices
Worker opening rollup door		

Let's take a look a job task. Click the Play button to start the video. The video will continue to play in a loop unless you click the Stop button. Click the Play button now and watch the video.

The key job step in this job task is: “Worker opening roll-up door.” We’ll add that to our J-H-A form.

Completing a JHA - Step 2

Key Job Steps	Hazards / Potential Hazards	Safe Practices
Worker opening rollup door	Improper lifting techniques Pinch Points Back Injury Door hard to roll up Door could come down unexpectedly	

The next step in the J-H-A process will be to identify the hazards and potential hazards. These are:

Improper lifting techniques

Pinch points


Back injury

The door is hard to roll up

And, the door could come down unexpectedly.

Watch the video again and see if you can identify all the hazards in the list. When you are ready to continue, click the Next button.

Completing a JHA - Step 3



Key Job Steps	Hazards / Potential Hazards	Safe Practices
Worker opening rollup door	Improper lifting techniques	Review proper lifting techniques
	Pinch Points	Wear leather gloves
	Back Injury	Change door to chain assist
	Door hard to roll up	Change door to chain assist
	Door could come down unexpectedly	Change door to chain assist

EXIT PLAY ◀ ▶ ↺

The final step of the J-H-A process is to identify the safe practices to prevent the hazards identified. The Safe Practices associated with each hazard are:

Review the proper lifting techniques in the pre-job briefing

Require leather gloves to be worn

And, change the door from a manual opening type to a chain assist type to eliminate manual lifting. By changing the door to a chain assist type, you now have control over the door, minimizing or limiting the last three hazards.

This is how a Job Hazard Analysis is performed. The form shown here is an example and may not be the one you will use. Check with your facility procedures to identify the proper form to use.

Now it's your turn...

Key Job Steps

- Push empty cart to storage
- Unload and sort laundry
- Close the roll up door

Key Job Steps	Hazards / Potential Hazards	Safe Practices
1		
2		
3		

SUBMIT
EXIT
PLAY
◀
↺
▶

Now it's your turn to practice conducting a Job Hazard Analysis. Click the Play button to start the video and watch for the key steps and hazards for each step. The video will play in a loop unless you press the Stop button.

In the box at the top right of your screen are the three key steps in this job task. Drag and drop them in the proper order on the J-H-A form. To drag-and-drop, press and hold the mouse button over a key job step, drag it to the proper location, and release the button to "drop it". When you're finished, click the Submit button.

Let's continue with step 2 of the J-H-A process.

:

Step 2

Hazards / Potential Hazards

- Improper Lifting
- Pinch Points on cart and bags
- Cart could roll over foot
- Back Injury
- Cart will roll off - no brakes
- Tripping hazard
- Cart is hard to steer
- Handle will come out unexpectedly
- Pinch Points on door
- No control over the speed of the door
- Low overhead hazard
- Stand on tip toes to reach door

Key Job Steps	Hazards / Potential Hazards	Safe Practices
Unload and sort laundry		
Push empty cart to storage		
Close the roll up door		

SUBMIT
EXIT
PLAY
◀
↺
▶

Now identify the hazards associated with each job step. The box in the upper right contains all the hazards and potential hazards that are associated with the three key job steps. Drag-and-drop the hazards onto the proper area of the J-H-A form. When you are finished, click the Submit button. Press the Play button to review the video.

Correct!

Now let's progress to the third and final step of the J-H-A process.

Step 3

Safe Practices

- Review proper lifting techniques
- Wear leather gloves when sorting
- Require steel toe shoes to be worn
- Change to cart w/ spring loaded bottom
- Change to laundry cart with brakes
- Change to cart with flush wheels
- Change to laundry cart with 5 casters
- Change to laundry cart with no handles
- Require leather gloves be worn at door
- Change door to chain assist type
- Place chain assist within easy reach
- Store sorted laundry in cart

Key Job Steps	Hazards / Potential Hazards	Safe Practices
Unload and sort laundry	Improper Lifting	
	Pinch Points on cart and bags	
	Cart could roll over foot	
	Back Injury	
Push empty cart to storage	Tripping hazard	
	Cart is hard to steer	
	Handle will come out unexpectedly	
	Cart will roll off - no brakes	
Close the roll up door	Low overhead hazard	
	Pinch Points on door	
	No control over the speed of the door	
	Stand on tip toes to reach door	

SUBMIT
EXIT
PLAY

Note the list of Hazards and Potential Hazards may appear to have been rearranged. You successfully placed all the hazards with the proper associated key job step. But in preparation for Step 3, they’ve also been “lined up neatly” and placed in order for you.

Let’s continue with Step 3, and select a safe practice for each hazard. The box in the top right corner now holds all the safe practices that correspond to the identified hazards. Match each safe practice with its corresponding hazard. When you’re finished, click the Submit button. Press the Play button to review the video.

Correct!

Now it's your turn...

Key Job Steps

Key Job Steps	Hazards / Potential Hazards	Safe Practices
1		
2		
3		

SUBMIT
EXIT
PLAY
◀
↺
▶

Now you can try to complete a Job Hazard Analysis from start to finish. You will receive directions along the way, but you will not receive any feedback until you are completely finished.

First, watch the video and identify the key job steps. Drag and drop the steps to the first column in the proper order, then click the Submit button.

Next, you will identify the hazards and potential hazards for the first job step. Click on the first job step.

The first job step is now highlighted. The Hazards and Potential Hazards column pertains only to the highlighted job step. Notice the box in the upper right corner now

contains a number of hazards. Drag and drop the hazards that pertain to the highlighted job step. You will not use all the hazards in the list. When you are finished, click the “Safe Practices” column title.

When you are finished, click on the words “Safe Practices.”

Finally, you will select the appropriate safe practices for the hazards you just identified. Notice the box in the upper right corner now contains a number of safe practices. Drag and drop the safe practices to the appropriate hazard. Again, you will not use all the safe practices in the list. When you are finished, click the second job step.

Great job. Now, continue to click on each job step and select the appropriate hazards and safe practices to complete the JHA. When your are entirely finished with the JHA, click the Submit button. You cannot leave any empty spaces.