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USE CATEGORY:	INFORMATION USE	Page 1 of 20
SME: Kim Brown	Writer: Joy Thompson	

Level 2 Guide

Revision	Record of Issue/Revision	Affected Pages
5	Revision: delete all Hazard Control Identification Checklist (HCIC) references and requirements and Step B.2., and Step D.2. HCIC definition; update NOTE box information above Step C.1.e.; move NOTE box from after Figure 6 to before Figure 6; remove Step number wording from Step C.2.b.; minor editorial.	7, 9, 11, and 13 - 16

Previous Record of Issue/Revision information is available from the history files.

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A. PURPOSE

1. This guide instructs authors in the steps necessary to create a Job Hazard Analysis (JHA) document using web-based automated software to ensure compliance with FBP-IH-PRO-00022, *Job Hazard Analysis*, procedural requirements.
2. This document implements applicable regulatory requirements. They are listed in Appendix A, *Regulatory Requirements Flow Down*.

B. GENERAL INFORMATION


1. A JHA created under this guide is generated using the Job Hazard Analytics™ web-based software program created and maintained by Alliant Corporation. JHA Authors use the software to aid in comprehensive hazard analysis by selecting from a database of work activities, potential hazards and hazard controls (all linked together or selected separately and edited), or by creating entirely custom entries.
2. Professionals assigned to perform hazard analysis using the software are required to meet Job Hazard Analysis Preparer Qualification Card (MTG 01.01.26/TA5147) requirements.
3. If the Job Hazard Analytics™ program is not available, then FBP-IH-PRO-00022-F01, *Job Hazard Analysis*, must be used. Steps outlined in this guide detail the sequence of item entry into the JHA web-based system and may vary from that used to complete the paper form.

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C. INSTRUCTIONS

1. Create JHA Electronically

Author

- a. Perform JHA development using the web-based Job Hazard Analytics™ software program. Go to the **Log On** screen at **jha.alliantcorp.com** (see Figure 1).
- b. Enter your **Email** (email address) and **Password** and click the  button (assumes prior account established through the JHA System Administrator).

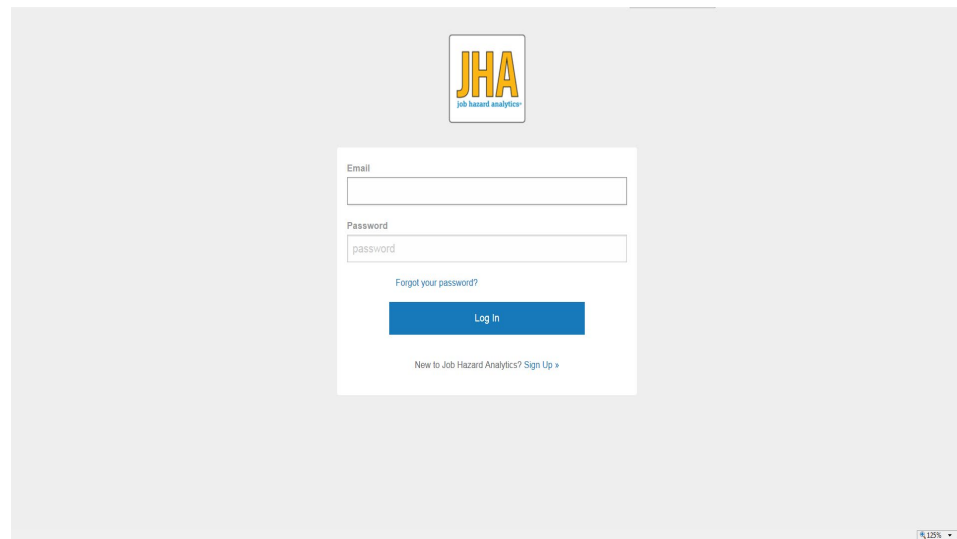


Figure 1

- c. Should you forget your **Password**, then click the “Forgot your password?” link and follow the steps to establish a new password.

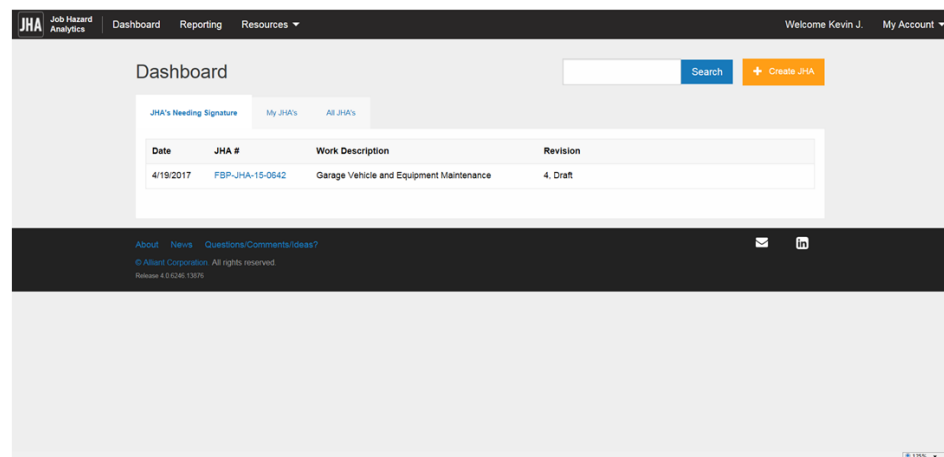


Figure 2

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d. Upon successful login, your **Dashboard** screen appears (see Figure 2) within which the following menus, features, items, and tools appear:

1. **Dashboard** - button in the upper left of the menu header; clicking this always returns you to your Dashboard (main page).
2. **Reporting** - button to the right of the Dashboard button of the menu header; clicking allows access to five reporting functions including the following:
 - **JHAs By Location**
 - **Top Users**
 - **Work Activity, Task, or Job Step Report**
 - **Potential Hazard(s) Report**
 - **Signature Report**
3. **Resources** ▾ - dropdown in the center left of the menu header; clicking allows access to a choice of up to five company files for additional related information and five company links for quick access to relevant company websites.
4. **My Account** ▾ - dropdown in the upper right of the menu header providing the following menu options:
 - My Settings – allows access to two tabs (Settings and Password) which permit selection of personal settings for email notifications and reset of your password, respectively.
 - Send Message – a means to notify the administrator via email.
 - User Guide – the generic Alliant user guide (replaced by this document).
 - Logout – selected to log out of the application.
5. **My JHA's** - tab containing a list of the most recent JHAs which you have created, listed by most recent first (additional pages show up at the bottom of the page).
6. **All JHA's** - tab containing an index of all company JHAs, listed by most recent first (additional pages show up at the bottom of the page).

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7. **JHA's Awaiting Review** tab appears when a JHA is awaiting your review (for preliminary comments and not final approval). Notification is made to you by way of your company email account. A free text box is available for submitting comments.
8. **JHA's Needing Signature** tab appears when a JHA is awaiting your review and final approval. As above, you are notified by email and a text box is available for comment. An **Approve** or **Reject** button adjacent to the text box must be selected.
9. A - button and text box - allows searching for any company JHA matching a number or word contained in the general information section of the JHA (does not search the body or content of the JHA).

Figure 3


10. A - button in the upper right-hand portion of the screen; clicking allows access to the Create New JHA screen shown in Figure 3. Alternatively, you may wish to find an existing JHA which comes close to matching your needs through the **All JHA's** feature, then use the button to copy and edit the JHA.

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NOTE

Contact a JHA Administrator for assistance in adding or modifying a selection in the software database for items e.1-3. below.

The selection 'Site Wide' or 'General Site' may be used for a General JHA as that term is defined.

- e. Identify and provide sufficient detail regarding where the activities are to be worked by:
 1. Identifying work activity site location in the **Site Location** box (default is PORTS).
 2. Making a selection for the **Facility** or **Project** box (e.g., X-720 Facility) from the drop-down menu provided.
 3. Making a selection for the **Activity** or **Area Name** box (e.g., Machine Shop) if one is available in a drop-down menu.
 4. Entering information in the **Specific Location** free text box (e.g., South Side) if refinement of the work activity location is desired.
- f. Enter the *JHA* suffix number (provided by Job Hazard Coordinator) into the **JHA Suffix Number** box. As an example, enter YY-XXXX where YY are the last 2 digits of the fiscal year and XXXX is the provided number. The **JHA NO.** block of the electronic form will auto-populate by including the prefix "FBP-JHA-" to provide the entire number as "FBP-JHA-YY-XXXX."
- g. Based on definitions for each as provided in FBP-IH-PRO-00022 enter the *JHA type* in the **General or Job-Specific** box by entering only one of the following terms:
 - "General"
 - "Job-Specific"
- h. Leave the **Expiration Date** box blank; DO NOT select an expiration date.
- i. Enter a short description or title of the JHA in the **Description** box.
 1. **IF** developing a General JHA, **THEN** provide information in the **Description** box so future users of the JHA may readily identify what the JHA covers.
 2. **IF** developing a Job-Specific JHA, **THEN** provide sufficient detail in the **Description** box so the JHA can be linked to the associated procedure or work control document through normal search capabilities.
- j. **WHEN** all general information is entered, **THEN** click on the  button to move to the **Confirm Revision Increment** screen (see Figure 4).

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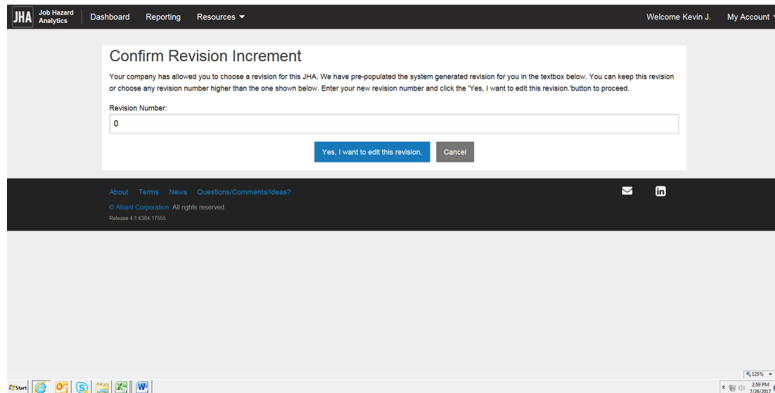


Figure 4

- k. Click the **Yes, I want to edit this revision.** button to move to the **Edit** screen (Figure 5). **IF** you wish to enter a revision number greater than the one given by the natural sequence of the system software, **THEN** enter that number and proceed. **IF** you do not wish to proceed, **THEN** click the **Cancel** button to revert to the prior screen.

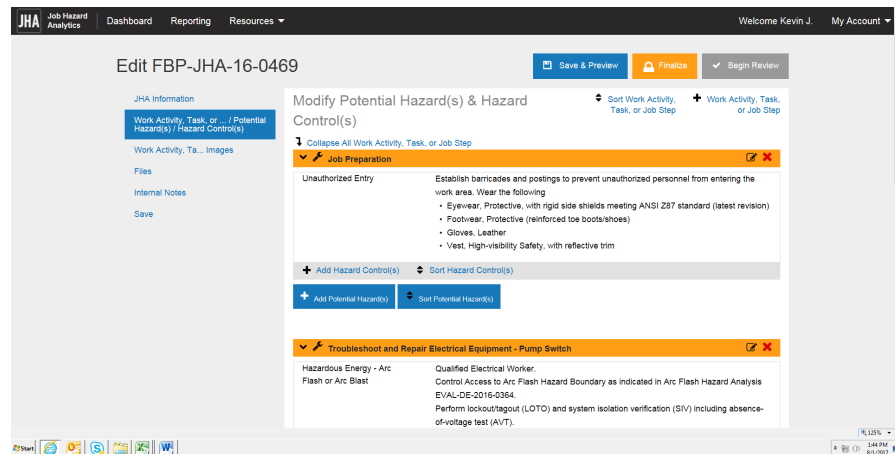


Figure 5

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2. Edit a JHA

In the Edit screen under the **Work Activity, Task, or ... / Potential Hazard(s) / Hazard Control(s)** tab, document the steps of the activity or work scope for which there are identified or potential hazards (see Figure 6).

NOTE

For work activities, potential hazard(s) and hazard control(s) entries, utilize the search function box in the upper right of the selection screen (free text box with 'Type to filter...').

Choose Work Activity, Task, or Job Step

Type to filter...

Create Cancel

Description Save Changes

- ☐ [ELE] Battery Activities that Involve Crossing the Restricted Approach Boundary
- ☐ [ELE] Electrical Work within a Hazard Rating Category 0 Arc Flash Boundary
- ☐ [ELE] Electrical Work within a Hazard Rating Category 2 Arc Flash Boundary
- ☐ [ELE] Electrical Work within a Hazard Rating Category 4 Arc Flash Boundary
- ☐ [ELE] Electrical Work within an Arc Flash Boundary
- ☐ [ELE] Electrical Work within the Restricted Approach Boundary of Energized Conductors and Circuit Parts including Voltage Testing
- ☐ [GENERAL] Equipment and Vehicle Activities (WSHP 2.5.4 and 2.5.12) - Process Building Vehicle Use
- ☐ [GENERAL] (Commercial-type) Shredding Activities NOTE: Does not include typical office shredding activity.
- ☐ [GENERAL] Activities Requiring the Use of A Spotter (2.5.5) [10 CFR 851.23(a)(7)]

Figure 6

- Select one or more pre-loaded activit(ies) by checking a box from the system list provided, then click on the **Save Changes** button to save them to the JHA.
- Alternatively or in addition to items selected above, click the **Create** button to open the following free text box, and provide a desired description of the work activity, task, or job step:

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
Create Work Activity, Task, or Job Step

Description

[Check Spelling](#)

Save

Cancel

- c. When the custom description entry is complete, click the  button and continue.

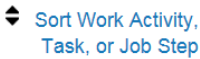
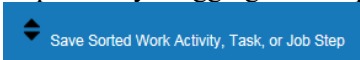
NOTE

DO NOT confuse hazard controls (establish boundary perform source isolation verification, etc.) for activities and be certain to precede all work activities, tasks, or job steps with a verb (remove valve, clean heat exchanger, demolish structure, etc.) based on original intent from the draft work performance document.

- d. Continue to select and/or create work activities (job steps) until the entire work scope is addressed.

NOTE

All column entries (Work Activity, Potential Hazards, and Hazard Controls) default to alphabetical order and may need to be re-arranged to suit a desired sequence or hierarchy.





- e. Select the  button and arrange the work activities in the desired sequence by dragging and dropping each and then click the  button.

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NOTE

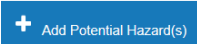

Obtain input from JHA Control Evaluators (JCEs) and/or Subject Matter Experts (SMEs) representing support groups (Environmental Protection, Fire Protection, Nuclear Safety, Radiation Protection, etc.) or other experiential/technical sources who can provide insight as to potential hazards likely to be encountered and the effective controls needed to prevent or mitigate the hazard(s).

Many types of common hazards such as driving passenger vehicles are addressed through general worker training. The General Work (GW) and Site Safety Orientation (SSO) JHAs also address general hazards on plant site. To avoid diluting the content of JHAs, DO NOT include this information in the JHA.

- f. Should the work activity language need to be edited, then click on the pencil  icon to the right of the orange activity bar (a pop-up box with the text in it will appear).
- g. Edit the text, then click the  button. Should you wish to not edit the entry, then click on the  button in the lower right hand corner of the pop-up and proceed to exit out of the action.
- h. Should you wish to remove the activity, then click on the  icon and confirm the action.

NOTE

Many types of hazards are pre-loaded to populate the database, and many are denoted by a common acronym for ease of searching. For example, type the acronym “FLL” in the search box and fall hazards will be presented for selection. A document titled Potential Hazards Key contains all of the available hazard acronyms and is located on your system dashboard in the **Resources** dropdown.

- i. **IF** a work activity already has a potential hazard associated (linked) with it, **THEN** determine whether or not it needs edited. **IF** so, **THEN** proceed as for the work activity editing the step above.
- j. **IF** a work activity needs a potential hazard(s) associated (linked) with it, **THEN** proceed to click on the  button at the lower left of the activity.
- k. As with the work activity function above, choose between a hazard in the system list or create a custom hazard by clicking the  button (see Figure 7).

Choose Potential Hazard(s)


Type to filter...

Work Activity, Task, or Job Step Information


Create Cancel

Description	Save Changes
<input type="checkbox"/> [ELE Cat 0] Arc Flash or Arc Blast	
<input type="checkbox"/> [ELE Cat 2] Arc Flash or Arc Blast	
<input type="checkbox"/> [ELE Cat 4] Arc Flash or Arc Blast	
<input type="checkbox"/> [ELE] Hazardous Energy - Arc Flash or Arc Blast	
<input type="checkbox"/> [ELE] Hazardous Energy - Electrical Shock or Electrocutation	
<input type="checkbox"/> [ELE] Shock Hazard or Explosion	
<input type="checkbox"/> [FLL CORE] Elevated Work Platform (Aerial Lifts/Scissor/Vertical Lift)	
<input type="checkbox"/> [FLL CORE] Fall From Roof	
<input type="checkbox"/> [FLL CORE] Fall to elevation below (> 4 feet during facility maintenance/general industry activities)	
<input type="checkbox"/> [FLL CORE] Fall to elevation below (> 6 feet during Construction activities)	
<input type="checkbox"/> [FPE CORE] Refueling Stationary Equipment (light plant generators, diesel pumps, etc.) - Chemical Exposure, Environmental Insult, Fire	

Figure 7

- l. Continue to select and/or create a hazard(s) until all needed are added. Custom entries are not added to the software database and are only specific to the JHA within which you are working.
- m. As with the 'Work Activity' function, edit a hazard by hovering over it then click on the pencil icon  next to it (a pop-up box with the text in it will appear).
- n. Make the desired edit, then click the

Save

 button.
- o. Remove a potential hazard by hovering over the entry and then click on the delete icon  to the right (a pop-up box will appear asking for confirmation).
- p. Click

OK

 to delete the entry. Click

Cancel

 to negate the action if desired.

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NOTE


When an activity/hazard/control combination occurs several (at least three) times for a given work scope, it is acceptable to list it only once in the JHA by “rolling it up” to a general activity such as “Performance of all work steps.”

- q. List at least one hazard for each work activity listed.

NOTE

Be as specific as possible when selecting items to safely accomplish a task or to control a potential hazard. For instance, when selecting personal protective equipment (PPE), be specific as to type (e.g., “Tychem SL or Tychem QC coveralls” as opposed to the generic brand, Tyvek®) such that the PPE is targeted to effectively control a given hazard. For chemicals, this information may be obtained from the Safety Data Sheet (SDS), the manufacturer’s product literature, or from other sources.

When developing control language, avoid ambiguous phrases such as “as required,” “as appropriate,” or “when necessary.” Instead describe the acceptable constraints, exceptions, or alternatives.

- r. **IF** a hazard already has a hazard control(s) associated (linked) with it, **THEN** determine whether or not it needs edited. **IF** so, **THEN** proceed as with the editing steps above.
- s. **IF** a potential hazard needs a hazard control(s) associated (linked) with it, **THEN** click on the  [Add Hazard Control\(s\)](#) link directly under the hazard.

NOTE

Many types of hazard controls are pre-loaded to populate the database. Those prescribed by SMEs are denoted by an acronym followed by the word CORE or SUPP (short for “supplemental”) for ease of searching. For example, type the acronym BIO in the search box, and both core and supplemental biological hazard controls will appear. CORE controls are those required in all instances while SUPP controls are individually-selected by the team based on the nature of the work being performed (i.e., methods of work accomplishment, magnitude of hazard(s), etc.).




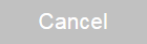


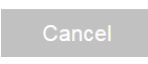
- t. As with the ‘Potential Hazard(s)’ function, above, choose between one or more control(s) in the system list or create an additional custom control(s) by clicking the  button (see Figure 9).

Figure 9

- u. Continue to select and/or create hazard control(s) until all are added. Custom entries are not added to the software database and are only specific to the JHA within which you are working.
- v. As with the Potential Hazard(s) function, edit a hazard control by hovering over the entry and then click on the pencil icon  to the right of the entry (a pop-up box with the text in it will appear).
- w. Click the  button once the edit has been made. Should you wish to not edit the entry once the pop-up appears, then click on the  button to exit out of the action.
- x. Remove a hazard control by hovering over the entry and then click on the delete icon  to its right (a pop-up box will appear asking for confirmation).
- y. Click  to delete the entry. Click  to negate the action (if desired).
- z. List at least one hazard control for each potential hazard listed.
- aa. Order hazard controls according to the hierarchy of controls outlined in FBP-IH-PRO-00022.

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- bb.** Click on the **Files** tab and upload files needed to enhance the review of the JHA. Such files may include cut sheets, drawings, SDSs, procedures, etc. These files are maintained permanently with the electronic version of the JHA, but are not all printed out with the JHA.
- cc.** Use the **Internal Notes** tab to provide text of any notes the author wishes to associate with the JHA; these notes will not appear on the printed (pdf) document.

NOTE

The results of the JHA are documented in a computer-generated document similar to FBP-IH-PRO-00022-F01 (see Figure 11). The computer-generated JHA may differ slightly in appearance.

- dd.** Click the **Save** tab to save a draft version of the document and to view a set of options to **Save & Preview** **Finalize** **Generate PDF** as desired (see Figure 10).

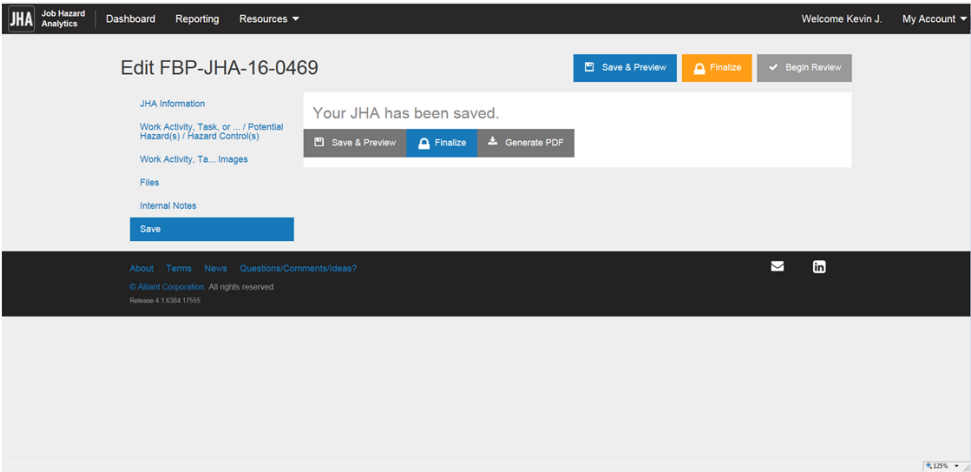



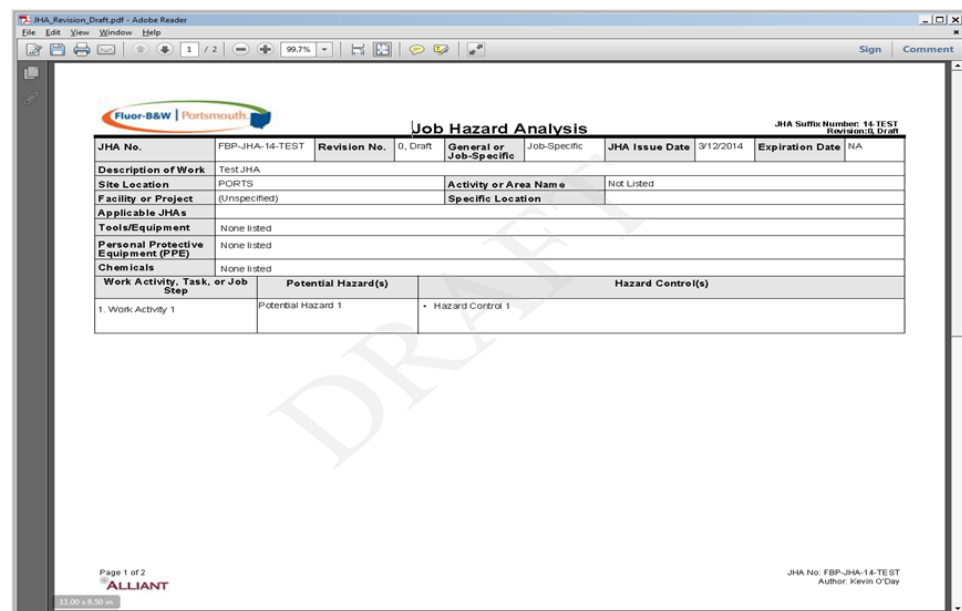
Figure 10

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NOTE



JHA documents created using the Job Hazard Analytics™ program appear in .pdf format (Figure 11). Documents printed out prior to final approval will have a 'DRAFT' watermark on the copy. To obtain a concurrence signature(s) without the watermark, a JHA must go through the full electronic approval process before it can be printed out and hand-carried for signature.

- ee. **IF** review of the JHA by others (Primary Concurrence Reviewers, JCEs, etc.) within the Alliant system is desired prior to finalizing the JHA for approval, **THEN** click on the  button.



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Description of Work	Test JHA									
Site Location	PORTS				Activity or Area Name	Not Listed				
Facility or Project	(Unspecified)				Specific Location					
Applicable JHAs										
Tools/Equipment	None listed									
Personal Protective Equipment (PPE)	None listed									
Chemicals	None listed									
Work Activity, Task, or Job Step	1. Work Activity 1		Potential Hazard 1			Hazard Control 1				


Figure 11

- ff. Using the search box, select from the list of users those individuals you wish to review the JHA and click the  button. Note the JHA is sent to all reviewers simultaneously and each has 24 hours to respond before the review period expires.
- gg. **WHEN** the review phase is complete and reviewers' comments are incorporated as deemed necessary by the author, **THEN** click the  button so the document can be readied for final review and approval.

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NOTE

The Job Hazard Analytics™ program has an electronic signature feature. Once initiated, the feature automatically routes email notices to selected reviewers/approvers. If any reviewer/approver in the chain rejects the JHA, then the JHA review is cancelled and an email message is sent to inform all reviewers; comments may or may not then be incorporated by the author. This process starts over and continues until final approval of the document is achieved after which the approved JHA is forwarded to Document Control or the JHA Coordinator.

- hh. Select Primary Concurrence and Concurrence Reviewers in accordance with FBP-IH-PRO-00022.
- ii. Route the document for concurrence review either electronically or by paper copy. **IF** concurrence/approval is to be obtained through the electronic signature feature, **THEN** perform the following:
 1. On the **Choose Reviewers** screen, select all required concurrence reviewers from the checkboxes provided on the screen (use the search box for assistance).
 2. Click the  button to begin the final review and electronic approval process.


NOTE

Within the Job Hazard Analytics™ program, a newly-created JHA will default to draft until approved at which time it progresses to revision level zero. A subsequent revision proceeds initially as “1, Draft” until fully approved at which time it becomes revision level “1,” etc. Any change to a JHA requires an evaluation/review of the technical procedure or work document associated with the JHA to determine if the procedure/work document also requires revision prior to resuming work. The JHA Author is the individual who revises his/her own JHA within the Job Hazard Analytics™ program. However, under extenuating circumstances such as when the JHA Author is unavailable (i.e., sickness, vacation, etc.), the JHA System Administrator can intervene to edit an Author’s JHA and reassign to another qualified author.

- jj. **IF** the JHA Author wishes to add, delete, or replace a reviewer during the review cycle without having to restart the process, **THEN** click on the  button at the bottom of the view screen and follow the prompts.



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kk. IF the JHA in review is rejected, **THEN** the JHA Author and all other reviewers will receive an email notification with a link for accessing the JHA by way of the Log On screen.

ll. Access the rejected JHA and click on the  button.

mm. View the comments stating the reason for the rejection, and proceed to make edits to the JHA as decided by affected team members.

3. Revise JHA Electronically

a. Modify a 'Draft' JHA or revise a fully-approved JHA by clicking the available  **Edit** or  button to incorporate the changes. The following confirmation will appear:

Approval Warning

This JHA is currently out for approval and review. If you want to change the approvals - the system will reject all current approvals and begin the approval cycle again. If you want to continue, please click the 'OK - I want to continue' button. Otherwise, click the 'Nevermind' link

Yes, I want to edit this revision.
Cancel

b. Click the Yes, I want to edit this revision. button and make required corrections.

c. IF you do not want to proceed, **THEN** click Cancel.

d. GO TO the relevant step in the above section to make required edits.

e. Click on the Revision Notes tab after all corrections are made, and then click on Add New Revision Note to enable the following 'pop-up' box.

Revision Notes


Page Number(s):

Notes

[Check Spelling](#)

Save
Cancel

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- f. Provide affected page number(s) and information describing the change(s) (the “Rev. Level” and date will auto-populate).
- g. Click the  button. Resulting information will appear just below the general information portion of the form in the “JHA REVISION LOG (As Applicable)” section.
- h. Proceed with finalizing the JHA as in the above paragraphs and issue for approvals as described above.

D. DEFINITION(S)/ACRONYM(S)

1. **DC** – Document Control
2. **JCE** - JHA Control Evaluator
3. **JHA** – Job Hazard Analysis
4. **PPE** - Personal Protective Equipment
5. **SDS** - Safety Data Sheet

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Appendix A
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None