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Administrative Procedure

HLMI-PRO-SH-50885

Job Hazard Analysis

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Change Summary

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Update alternate TA

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1.0 PURPOSE AND SCOPE

This procedure provides direction for the performance and administration of the hazard analysis process implemented by Hanford Laboratory Management and Integration, LLC (HLMI).

Every HLMI employee is expected to work safely and to maintain a safe work environment. All HLMI activities are evaluated for potential hazards and a detailed General Hazard Analysis (GHA) and Chemical Hygiene Plan (CHP) for laboratory work have been performed to ensure employee training and knowledge is sufficient to address routine safety hazards at HLMI facilities. Visitors should be briefed on the general hazards to which they may be exposed and controls expected of them as part of their orientation.

When hazards are present beyond those evaluated within the GHA or CHP, the job hazard analysis (JHA) process is followed to identify, evaluate, control, and communicate potential hazards associated with performing HLMI activities, including but not limited to facility maintenance, building maintenance, construction activities, facility operations, environmental remediation, subcontractor activities, and service organization support. For laboratory analytical work, a Laboratory Worksite Hazard Analysis form (A-6004-775), hereafter known as "LWHA," is completed rather than a Job Hazard Analysis Checklist (A-6008-219), hereafter known as the "JHA Checklist."

Hazard analysis for activities performed by other Hanford prime contractor service organizations (e.g., fire systems maintenance, refrigerated equipment service) are exempt from this process as the hazard analysis is performed in accordance with the prime contractor's work processes as outlined by the HLMI contract and statements of work.

Emergency Response Procedures (ERPs) are exempted from having a hazards analysis (JHA or GHA) performed. ERPs are performed by trained and qualified emergency responders under the Emergency Management System (EMS). Hazards and controls associated with emergency actions are evaluated and implemented as part of the EMS process.

2.0 RESPONSIBILITIES

Responsibilities are contained within Section 3.0.

3.0 PROCESS

With the exception of ERPs, a hazard evaluation is performed for all HLMI activities. If the hazard evaluation for a work activity determines all hazards are covered by the GHA, no additional job-specific hazard analysis is required. However, if the work team has identified the proper controls are not covered in the GHA, the JHA (per Section 3.3) will document this evaluation on the JHA Checklist (A-6008-219).

For radiological work, radiological hazards are evaluated and appropriate controls are implemented through the As Low As Reasonably Achievable work planning process (see HLMI-PRO-RAD-50830, *As Low As Reasonably Achievable Work Planning*).

The following sections describe:

- The expectations relating to work covered by the GHA
- The hazard analysis process to be taken when hazards beyond those covered by the GHA are present
- The hazard analysis process as described within the CHP
- Program requirements and administration for HLMI activity level work control documents (procedures and work instructions).

3.1 General Hazards Analysis (applicable to all personnel)

The safety policies established at HLMI are intended to ensure a safe working environment for employees, visitors, subcontractors, and the public. It is every employee's responsibility to maintain a safe work environment, be aware of hazards in the workplace, and ensure appropriate controls are implemented.

Only Activity Level Work Control Documents (ALWCD) (i.e., Technical Procedures, Work Packages) require a JHA. Administrative procedures, plans, standards, and similar documents do not require a JHA.

Based on evaluation of employee experience, training, and knowledge, the GHA identifies routine workplace hazards where controls are skill-based and can be implemented by the individuals performing the work.

The GHA is available through a link on the HLMI Functional Area Safety and Health, web page.

1. The GHA and associated controls are always in effect and are applicable to all HLMI activities.
2. Information contained in the GHA should be used as appropriate by workers, supervisors, and managers to discuss and identify applicable hazards and controls and required personal protective equipment (PPE) that shall be worn within the work area.
3. Current GHA document is submitted to HLMI Records Management for processing into Integrated Document Management System records.

The general hazards and controls covered by the GHA should not be specified on the JHA Checklist or placed in work documents. Specifying general hazard controls in work documents could result in diluting the importance of controls implemented for analyzed hazards specific to the work task or environment.

3.2 Chemical Hygiene Plan (applicable to "skill-based" Analytical Laboratory work scope)

Analytical Laboratory work scope of chemists, chemical technologists, and/or laboratory work who, by their training and experience, establishes the skill level and understanding of hazards involved in routine Analytical Laboratory work. Such work and workers are expected to have all such hazards understood. This includes routine physical hazards and chemical hazards such as information found in each applicable Safety Data Sheet (SDS) hazard identification information.

SDS hazard statement(s), hazard symbols, pictograms, and formal training in chemicals, in conjunction with application of the HLMI-PRO-SH-50572, *Hazard Communication* procedure, provides chemical hazard information required for routine use of such chemical products according to the manufacturer's intended purpose. All non-evaluated or "off-label" use requires a documented LWHA and any resulting hazard controls identified during such chemical use.

Chemical Hygiene Plan (CHP) skill-based controls always remain in effect in all laboratory process work scope as described in HLMI-PLN-SH-51037, *222-S Laboratory Complex Chemical Hygiene Plan*. The LWHA is intended for beyond skill-based hazards, and the forementioned CHP are for routine work hazards.

Physical hazards that could present a potential exposure to all hazards experienced shall be evaluated by recognized subject matter expert (SME).

3.3 Conducting a Job Hazard Analysis

When possible, a JHA evaluates all aspects of task performance. This includes an analysis of the hazards associated with performing the task and an evaluation of hazards associated with the work area where the activity will be performed (e.g., confined space, radiological areas, beryllium-controlled areas). Controls for the hazards are identified and incorporated into the work control documents as appropriate (procedures/work instructions/permits).

In cases where a technical procedure or within exactly consistent work scope or work activity can be performed in multiple locations where work area and/or location-specific hazards exist, a standing JHA Checklist, hereafter known as an "SJHA Checklist," may be developed to identify and implement the additional specific controls for that location that is used to supplement the task-specific JHA controls that were incorporated into the work control documents.

The JHA Checklist (A-6008-219) is used for Operations and Maintenance ALWCD such as work packages and technical procedures, to capture hazards and controls identified at the time a procedure is developed or has a significant revision that introduces new hazards or eliminates previously identified hazards. Normal procedure change controls and processes provided in HLMI-POL-ASYS-50982, *Procedure Use Expectations,* or HLMI-PRO-ASYS-589, *Hanford Laboratory Management and Integration (HLMI) Procedures,* ensure new or additional hazards identified are mitigated and necessary controls are implemented within the procedure.

Laboratory technical procedures and test planning hazard analysis beyond CHP (skill-based) controls rely on the LWHA (A-6004-775) to capture hazards and controls identified at the time a laboratory procedure or test plan is created or changed.

The change process for analytical technical procedures or test plans is defined in:

- HLMI-POL-ASYS-50982, *Procedure Use Expectations*
- HLMI-PLN-LO-51015 (ATS-310, Section 1.9), *Laboratory Test Plans and Test Procedures*
- HLMI-PRO-ASYS-589.

New hazards identified from the following sources may drive changes to a procedure:

- Updates/revisions of the JHA Checklist (A-6008-219) (see Section 3.6)
- Updates/revisions of the LWHA (A-6004-775)
- Hazards introduced through equipment modifications/upgrades, permanent changes to field conditions that introduce new hazards.

Technical procedures performed in multiple locations will specify in the procedure the requirement for performing a location-specific hazard evaluation. As maintenance procedures are performed as part of a Level-2 preventative maintenance (PM) work package (in accordance with HLMI-PRO-MAINT-50656, *Pre-Job Briefings and Post-Job Reviews,* and HLMI-PRO-MAINT-50661, *Preventive/Predictive Maintenance Administration)*, specifying this requirement within preventative maintenance procedures is not required.

Workplace hazards that may be introduced in the work area following development of the JHA Checklist/LWHA (e.g., co-located work activities, radiological conditions, weather conditions) are evaluated prior to work execution, and appropriate controls implemented per Section 3.3.4.

This section applies to activities where the hazards have been evaluated and are not covered by the GHA and/or a SJHA Checklist.

3.3.1 Hazard Analysis for Analytical Technical Procedures and Analytical Laboratory Test Plans

Actionee	Step	Action
		NOTE: *This section applies to new and full revisions of technical procedures.*
Procedures Group/Laboratory Procedure or Test Plan Technical Authority	1.	ENSURE the procedure and site forms (JHA or LWHA) are drafted and ready for a Hazard Analysis meeting. ***NOTE:*** *Other SMEs for the team are determined by the supervisor, laboratory test plan author, and/or Procedure Writer based on the work scope, and may include the following (HLMI-POL-ASYS-50982 and HLMI-PRO-ASYS-589 may be used to assist in identifying appropriate SMEs):* • *Technical Authority* • *Radiological Control* • *Environmental* • *Operations* • *Fire Protection Engineer (FPE).*
	2.	SCHEDULE a meeting with the following participants (aka, Team Planning Meeting [TPM]): • Supervisor • Procedure Writer and/or TA • Procedure user • Industrial Safety • Industrial Hygiene.
Hazard Analysis Team/TPM	3.	PERFORM a review and discussion of the technical procedure or test plan, as applicable, to identify potential activity hazards. ***NOTE:*** *For Operations and Maintenance ALWCD, technical procedure TPMs, use the JHA Checklist (A-6008-219) to record the hazard(s) and method(s) of control.* ***NOTE:*** *For Analytical Laboratory technical procedures and test plans, use the LWHA (A-6004-775) to record hazards and methods of control.* a. ANALYZE the hazards using the following hierarchy of controls for mitigating the hazard: • Can the hazard be eliminated/reduced or substituted (e.g., different chemical cleaning agent)? • Can the engineering controls be utilized (e.g., ventilation)? • Can the administrative controls be utilized (e.g., dose monitoring)?

Actionee	Step	Action
Hazard Analysis Team/TPM		• Can PPE be used? • Can a less hazardous way to do the job be found? • Can the physical conditions that created the hazard be changed? • Can the way the sequence of work, the procedure, or test plan is written be modified to a safer alternative? • Can the need for doing the job or the frequency of hazardous tasks doing the job be reduced?
		b. IF no hazards other than general hazards (GHA or already covered in the CHP) were identified during the review, THEN PERFORM the following sub-steps: i. RECORD participation in the LWHA signature block or meeting roster. ii. APPROVE the hazard analysis review. iii. ENSURE the procedure and Site forms (JHA/LWHA) are drafted and ready for a hazard analysis meeting. iv. IF a field walkdown is not required, THEN GO to step 11.
	4.	PERFORM a field walkdown to identify potential field hazards, if required.
	5.	REVIEW to ensure additional hazards are not created due to selected controls (e.g., excessive PPE causing heat exhaustion or heat stress) and conflicts do not exist between the controls established for hazards identified (e.g., PPE requirements for radiological hazards don't conflict with PPE requirements for industrial hygiene hazards).
Supervisor/Industrial Safety/Industrial Hygiene Representative(s)	6.	REVIEW AND APPROVE the LWHA ensuring completeness, technical accuracy, and controls identified for activities are appropriate.
Procedure Writer	7.	ENSURE identified hazards are mitigated by the controls and methods identified on the /LWHA Checklist at the procedure step level.
	8.	IMPLEMENT any identified warning(s), caution(s), critical step(s) in accordance with HLMI-STD-ASYS-51269, *Hanford Laboratory Management and Integration Procedures Standards*.

Actionee	Step	Action
Procedure Writer	9.	IF the activity requires a permit, form, plan, or PPE determination *(e.g., beryllium work permit, confined space entry permit, respiratory protection form)*, THEN ENSURE the required document is called out appropriately as a prerequisite, specific work step, etc.
		NOTE: *Maintenance procedures are performed within the bounds of a Level 2 work package developed and performed in accordance with HLMI-PRO-MAINT-50656, and HLMI-PRO-MAINT-50661; specifying this requirement within maintenance procedures is not required.*
	10.	IF the procedure or laboratory test plan is performed in multiple locations *(e.g., generic procedures)* where work area and/or location specific hazards may differ, THEN IDENTIFY the need to perform a work area and/or location-specific hazard evaluation within the procedure."
	11.	RETAIN the approved LWHA in the technical procedure OR laboratory test procedure history file.

3.3.2 Job Hazards Analysis for Activity Level Work Control Documents

Actionee	Step	Action
Planner/Supervisor/ Industrial Safety/ Industrial Hygiene Representative/ FWS/Other required SME	1.	EVALUATE the work activity, work location, and identified hazards to determine if the activity falls within the GHA, or a current Standing JHA.
Hazard Analysis Team	2.	IF additional JHA development is required, THEN PERFORM field walkdowns to identify potential hazards relating to work activities and the work area.
Planner		a. IF a field walkdown is not conducted, THEN OBTAIN the Responsible Level 2 Manager approval for a tabletop review, with documented justification on the JHA Checklist.

Actionee	Step	Action
		NOTE: *For Level 3 work packages, either the Supervisor or the Planner may participate.*
Planner		Required walkdown participants include: • Supervisor • Worker(s) • Industrial Safety • Industrial Hygiene • FWS. Additional SME Representatives, as determined by the work scope (Attachment B of HLMI-PRO-MAINT-50655, *222-S Operations Contractor Work Control,* may be used to assist in identifying appropriate SME involvement), include the following: • Technical Authority • Radiological Control • Environmental Representative • Operations • Waste Services • Fire Protection Engineer • Subcontractor Safety Representative.
	3.	RECORD JHA development participation on the JHA Checklist signature sheet.
	4.	EVALUATE the activities to be performed, AND IDENTIFY critical steps and tasks, considering the following: • Not all work activities have critical tasks. • Improperly applying the use and identification of critical steps can introduce unnecessary confusion and complexity. • Controls such as peer review, independent review, checklists, and verification signatures can serve as good administrative controls for critical steps and tasks
Planner/Supervisor/ Industrial Safety Representative/ Industrial	5.	FINALIZE the JHA by documenting the results of the hazard identification, hazard analysis, selection of controls, and method(s) of control implementation on the JHA Checklist (A-6008-219) (or equivalent for subcontractors).

Actionee	Step	Action
Hygiene/FWS/Other required SME	6.	REVIEW to ensure additional hazards are not created due to selected controls *(e.g., excessive PPE causing heat exhaustion or heat stress)* and conflicts do not exist between the controls established for hazards identified (e.g., PPE requirements for radiological hazards don't conflict with PPE requirements for industrial hygiene hazards). ***NOTE:*** *Job Hazard Analysis Checklist (A-6008-219) may be copied and used by subcontractors when unable to access the Hanford Local Area Network (HLAN) to retrieve from site forms.* ***NOTE:*** *When work is to be performed by a subcontractor, additional review and concurrence is required by the subcontractor safety representative.* ***NOTE:*** *The approved JHA Checklist is used as input to development of the work document.*
Supervisor/Industrial Safety Representative/ Industrial Hygiene	7.	REVIEW AND APPROVE the JHA Checklist ensuring completeness, technical accuracy, and controls identified for activities are appropriate.
Planner/Supervisor/ Technical Authority	8.	IF the activity requires a permit, form, plan, or PPE determination (e.g., beryllium work permit, confined-space entry permit, respiratory protection form), THEN ENSURE the appropriate SME organizations review and approve the document for inclusion in the work document, or that the permit, form, plan, etc. is called out appropriately as a prerequisite, specific work step, etc.
	9.	RETAIN the approved checklist with the work package. a. IF a checklist is to be used as a SJHA Checklist, THEN RETAIN a copy AND FOLLOW steps outlined in Section 3.3.3.

3.3.3 Standing Job Hazard Analysis Checklist

When possible, the hazards associated with performing a consistent or routine task, and any location-specific hazards identified on the JHA are incorporated into the procedure or work document. In cases where a technical procedure or work activity can be performed in different areas where location-specific hazards exist, an SHJA Checklist may be developed to identify and implement the additional specific controls for that location. As SJHA controls are not routinely incorporated into the procedure or work document, they are considered a supplemental work document for that activity and must be reviewed and used in the field. When SJHA Checklists are used, field conditions must be reviewed each time the work is performed, and approved controls established if additional hazards are identified.

Actionee	Step	Action
Planner/Supervisor/ Industrial Safety Representative/ Industrial Hygiene	1.	EVALUATE the work activity, work location, and identified hazards to determine if there is a current SJHA available for use, or if the activity requires development of a new SJHA.
Hazard Analysis Team	2.	IF SJHA development is required, THEN PERFORM field walkdowns to identify potential hazards relating to the work area.
	3.	IF a field walkdown is not conducted, THEN OBTAIN the Responsible Level 2 Manager approval for a Tabletop Review, with documented justification on the JHA checklist.
	4.	***NOTE:*** *For Level 3 work packages, either the Supervisor or the Planner may participate.* Required walkdown participants include: • Supervisor • Worker(s) • Industrial Safety • Industrial Hygiene. Additional SME Representatives, as determined by the work scope (Attachment B of HLMI-PRO-MAINT-50655 may be used to assist in identifying appropriate SME involvement), include the following: • Technical Authority • Radiological Control • Environmental • Operations • Waste Services • Fire Protection Engineer • Subcontractor Safety Representative.
	5.	RECORD JHA development participation on the JHA Checklist signature sheet.
	6.	USE the following hierarchy of controls for mitigating identified hazards: • Can hazard be eliminated/reduced or substituted? • Can engineering controls be utilized (e.g., ventilation)? • Can administrative controls be utilized (e.g., dose monitoring)? • Can PPE be used (e.g., self-contained breathing apparatus)?

Actionee	Step	Action
Hazard Analysis Team		• Can the physical conditions that created the hazard be changed? • Can the need for doing the job or the frequency of doing the job be reduced?
Planner/Supervisor/ Industrial Safety Representative/ Industrial Hygiene	7.	FINALIZE the JHA by documenting the results of the hazard identification, hazard analysis, and selection of controls on the JHA Checklist (A-6008-219).
	8.	REVIEW to ensure additional hazards are not created due to selected controls and conflicts do not exist between the controls established for hazards identified (e.g., PPE requirements for radiological hazards do not conflict with PPE requirements for industrial hygiene hazards).
Supervisor/Industrial Safety Representative/ Industrial Hygiene	9.	REVIEW AND APPROVE the JHA Checklist ensuring completeness, technical accuracy, and controls identified for activities are appropriate.
	10.	ROUTE the approved SJHA Checklist to Safety programs.
Safety Programs Representative	11.	REVIEW the SJHA Checklist for completeness. a. IF complete, THEN ASSIGN a Standing JHA tracking number. b. IF not complete, THEN CONTACT the originator to resolve issues identified.
	12.	POST the SJHA Checklist to the HLMI Safety – Health Programs web page.
	13.	EMAIL a record copy of the SJHA to ^HLMI_Records_Management.
	14.	ENSURE expired SJHA Checklist hyperlinks are removed from the HLMI Safety – Health Programs web page.
Responsible Manager/Procedure Owner	15.	ENSURE that a review AND update of the SJHA Checklists is performed and documented by the appropriate Supervisor and SMEs on a biennial basis (every 2 years).

3.3.4 Field Condition Hazard Evaluation

Actionee	Step	Action
Supervisor	1.	CONDUCT a pre-job briefing in accordance with HLMI-PRO-MAINT-50656. ***NOTE:*** *Subcontractors may also use the Job Safety Analysis (JSA) Checklist, as a supplemental tool. Use of the JSA Checklist is governed by the subcontractor procedures and controls. When this option is invoked, the content of the JHA Checklist and contractor JSA must be consistent.*
Worker/ Supervisor	2.	Prior to starting work activities, EVALUATE the job site AND DETERMINE if any hazards associated with the task and/or work location are consistent with: • Hazards identified in the work control documents and pre-job briefing (e.g., hazards introduced by co-located work, changes to work area conditions, previously unidentified hazards) • Current environmental conditions (e.g., rain, snow, high/low temperature).
	3.	IF additional activity, work location, and/or environmental hazards are identified, THEN DETERMINE AND IMPLEMENT the appropriate controls *(e.g., work rest regimen, hard hats, barricades, heat stress mitigation, ice removal, supplemental lighting)*.
	4.	PERFORM the work only when required controls and appropriate personal protective equipment have been established.
	5.	ENSURE controls remain in place while the hazard(s) exists.

3.4 Methods for Implementation of Controls

Methods of implementation are used to identify how the required hazard controls are to be implemented or identified in the work control documents. In order to effectively communicate the controls necessary to mitigate or eliminate hazards to the workers, the following additional guidelines should be used to select the methods of implementation.

Methods of controls are specified for each identified hazard on the JHA Checklist/LWHA and include the following:

- **Precaution/Limitation/Prerequisite** – Control incorporated into the Precaution/Limitation/Prerequisite section of the work document.
    - The Precaution/Limitation method is selected when the hazard and relating control are general in nature and apply to the entire scope of work.

  - Prerequisite is selected if the control must be in place and verified as complete PRIOR to start of work.

- **WARNING/CAUTION** – Specified through a statement in a work document.
  - This method is selected when a hazardous condition applies to a specific step in the body of a procedure or work instruction or when a step has been identified as critical.
- **Work Package/Technical Procedure Work Instruction** – Directions provided through incorporating specific steps and step sequencing within a work document.
  - This method is selected when the control is established through performance of a sequence of steps.
- **Permit/Plan/Evaluation** – Detailed controls, requirements, or actions are specified in a permit or plan.
  - This method is selected when hazard controls are contained in supporting permits or plans required to be generated by another controlling procedure/program.
  - Required Permits/Plans/Evaluations should be identified in the procedure or work instruction as either a Prerequisite or specific step as appropriate.

  Example: *Step 1.1 Ensure an industrial hygiene plan is approved and available for performance of the work activity.*

3.5 Hazard/Control Changes to Existing Approved Job Hazard Analysis or Laboratory Worksite Hazard Analysis Checklist(s)

Changes to the JHA Checklist/LWHA are not required for hazards and controls related to field conditions (e.g., weather, co-located work) or if additional identified hazards fall within the GHA.

For technical procedures, the normal procedure change controls and processes provided in HLMI-POL-ASYS-50982 or HLMI-PRO-ASYS-589 ensure new or additional hazards identified are mitigated and necessary controls are implemented within the procedure.

Changes to work package or SJHA Checklists may be performed by marking up the original JHA Checklist with the required change or preparing a new JHA Checklist describing the additional hazards and controls. The method selected is determined by the number and significance of changes that are required and the ability for the change to be made in a legible manner.

Consult Environmental, Safety and Health to verify current version of the JHA Checklist (A-6008-219) or LWHA (A-6004-775) accurately covers potential programmatic elements for change, if the version is greater than 2 years old.

Actionee	Step	Action
Supervisor/Planner/ ES&H Representative	1.	PREPARE the change by marking up the original JHA Checklist OR PREPARE a new JHA Checklist identifying the new/changed hazards and relating controls.
Worker/Supervisor/ ES&H Representative	2.	REVIEW to ensure additional hazards are not created due to selected controls and conflicts do not exist between the controls established for hazards identified.
Supervisor/ES&H Representative/SME	3.	IF acceptable, the Supervisor, ES&H Representative, and any appropriate SMEs PERFORM the following actions: a. APPROVE the change as documented by initializing the change(s) b. EXPLAIN entry in the JHA comments sections.
Supervisor/Planner	4.	REVIEW the other documents (e.g., work document, permit, plan) to determine the need for revision.
	5.	REVISE in accordance with the applicable procedure.

3.6 Revisions to the Job Hazard Analysis or Laboratory Worksite Hazard Analysis Checklist(s)

Revisions to the JHA Checklist form itself may be required to address editorial changes (updating form numbers, references, form versions, etc.) or to address implementation of additional hazards or specific control, or the elimination of a hazard. The effect of checklist revisions on field activities will be evaluated, and appropriate direction for implementing the change communicated to the appropriate organizations.

Checklist changes typically fall into one of three categories:

- Inconsequential change where no further action is required.
- Changes where the impact on currently approved JHA Checklist/LWHA is limited, and review or additional controls can be made to the JHA/LWHA checklist by using the pen-and-ink method and providing the appropriate entry in the JHA Checklist/LWHA “Comments” section.
- Updating currently approved JHA Checklists/LWHAs to the new revision of the checklist.

Actionee	Step	Action
Supervisor/Industrial Safety Representative/ Industrial Hygiene	1.	PROCESS revisions to the JHA Checklist/LWHA as directed and as described in this procedure.
	2.	ENSURE superseded JHA Checklists/LWHAs are retained in the work document or procedure history file.

4.0 FORMS

Job Hazard Analysis Checklist (A-6008-219)

Laboratory Worksite Hazard Analysis (A-6004-775)

5.0 RECORD IDENTIFICATION

The Record Capture table identifies the records generated during the performance of this procedure.

Table 5-1. Records Capture

Record Name	Record Processed By
General Hazard Analysis (GHA)	ERA-210416
Job Hazard Analysis (JHA) (A-6008-219)	
Laboratory Worksite Hazard Analysis (A-6004-775)	

Documents are controlled in accordance with HLMI-PRO-IRM-50386, *Document Control*.

Completed records are managed in accordance with HLMI-PRO-IRM-50387, *Records Management*.

6.0 SOURCES

6.1 Requirements

10 CFR 851, *Worker Safety and Health Program*

HLMI-PLN-SH-51037, *222-S Laboratory Complex Chemical Hygiene Plan*

HLMI-PLN-SH-51116,*Integrated Safety Management System Description*

HLMI-POL-ASYS-50982, *Procedure Use Expectations*

HLMI-POL-SH-50701, *Safety and Health Policy*

6.2 References

HLMI-PRO-ASYS-589, *Hanford Laboratory Management and Integration (HLMI) Procedures*

HLMI-PRO-IRM-50386, *Document Control*

HLMI-PRO-IRM-50387, *Records Management*

HLMI-PLN-LO-51015 (ATS-310, Section 1.9), *Laboratory Test Plans and Test Procedures*

HLMI-PRO-MAINT-50655, *222-S Operations Contractor Work Control*

HLMI-PRO-MAINT-50656, *Pre-Job Briefings and Post-Job Reviews*

HLMI-PRO-MAINT-50661, *Preventive/Predictive Maintenance Administration*

HLMI-PRO-NS-50488, *Unreviewed Safety Question Process*

HLMI-PRO-RAD-50830, *As Low As Reasonably Achievable Work Planning*

HLMI-PRO-SH-50572, *Hazard Communication*

HLMI-STD-ASYS-51269, *Hanford Laboratory Management and Integration Procedures Standards*

APPENDIX A - GLOSSARY

Term	Definition
Critical Task	An instruction or procedure step, series of steps, or action that, if performed improperly, will cause intolerable or irreversible harm to people, plants, the environment, or significantly impact plant operation.
Field Condition Hazard Evaluation	A process of reviewing field conditions and related hazards (e.g., co-located work, weather, changes to facility conditions) prior to the performance of work to ensure adequate controls are in place.
Inconsequential change	A non-technical change to an existing work document as defined by HLMI-PRO-NS-50488, *Unreviewed Safety Question Process*.
Job Hazard Analysis Checklist	A Site form (A-6008-219) used to identify the hazards, controls, permits, and PPE associated with the non-Analytical Laboratory scope of work, when hazards are present beyond those evaluated within the GHA.
Laboratory Worksite Hazard Analysis (LWHA) Checklist	A Site form (A-6004-775) used to identify hazards and controls applicable to Laboratory scope of work (Maintenance and Operations work is not Analytical Laboratory work scope).
Pen-and-Ink change	A method used when a change can be made by hand-writing the change on the existing work document in a clear and legible manner or utilizing track changes via Microsoft Word and replacing the affected page(s).
Standing Job Hazard Analysis (SJHA) Checklist	A JHA Checklist developed allowing repetitive performance of a specific scope of work.
Team Planning Meeting (TPM)	A hazard analysis team qualified to identify and suggest hazard controls for planned work scope.