NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 2: Work Planning and Control

Area Hazard Analysis Procedure

Product ID: 518 | Revision ID: 2344 | Date published: 10 May 2021 | Date effective: 10 May 2021
URL: https://www-group.slac.stanford.edu/esh/eshmanual/references/wpcProcedAHA.pdf

1 Purpose

The purpose of this procedure is to ensure that the complex or unique hazards and particular controls (training, PPE/equipment, and access requirements) associated with working in or entering a specific area are adequately identified and communicated. The procedure covers the development and use of *area hazard analyses (AHAs)*. It applies to area managers, ESH coordinators, and associate laboratory directors.

All *industrial areas* (defined as an area where some level of hazard, for example, moving machinery, noise, electrical, chemical, may exist), accelerator areas, and areas with radiation controls at SLAC must have an AHA. The AHA must be reviewed at least annually and when the training requirements or level or types of hazards change.

In some cases hazards may have been addressed in supporting safety documents (safety assessment documents, citizen committee reviews, fire hazard analyses, independent safety reviews), referencing the supporting document and completing the PPE/equipment and training requirements sections is adequate.

1.1 Program Introduction

Maintaining a safe workplace is the responsibility of everyone at SLAC. Identifying and understanding hazards, the risks they present, and mitigating those hazards is an essential foundation for achieving excellence in environment, health, and safety performance.

When entering an area to observe or conduct work, it is important to consider area hazards. During the planning of any work, one must consider the impact of such hazards. Some may require PPE or training, while others may require a permit.

The AHA program will serve

1. Anyone by providing relevant information about hazards, personal protective equipment (PPE), and access and training requirements for entry
2. Supervisors or those authorizing work by providing information that enhances planning for work conducted by their workforce

1.1.1 Supporting Programs

Work planning and control (WPC) addresses the activity level hazards and controls associated with work conducted anywhere on the SLAC site (see Work Planning and Control: Work Planning and Control Procedure). Furthermore, WPC addresses the authorization and release of activity-level work. The AHA should be referenced during planning, prior to authorization, to ensure that area specific hazards are

considered and that the training and PPE associated with entry are addressed. However, the AHA should not be used to document task-specific controls, such as arc flash protection, lockout/tagout (LOTO), or activity-specific training. Hazards such as compressed gas cylinder storage and ventilation hood velocity measurements are also not addressed by an AHA.

2 Roles and Responsibilities

2.1.1 Area Manager

- Prepares AHA for his or her area
- Reviews AHA at least annually

2.1.2 ESH Coordinator

- Assists line organizations in completing an AHA for all areas requiring one
- Periodically reviews AHAs to ensure that SLAC addresses hazards appropriately and consistently

2.1.3 Associate Laboratory Director

- Is responsible for ensuring this policy is implemented within his or her unit. In all areas for which he or she is accountable, each associate laboratory director is responsible for ensuring that a person is assigned to develop and maintain AHAs.

2.1.4 ESH Division

- Owns and is responsible for administering the AHA program, including providing a lab-wide tool for storing and accessing AHAs

3 Procedure

The AHA must include and clearly communicate the following information:

1. Date
2. Area and building identifier; area and building manager name and contact information
3. Minimum PPE/equipment required to enter the area
4. Training required to enter the area
5. WPC green work release requirements
6. Area-related hazards and associated controls

SLAC NATIONAL ACCELERATOR LABORATORY	**Area Hazard Analysis** **Created by**	Date: Approved by: [name] or blank

Building Number:	**Building Manager Name**: _____ Extension:_____ Cell phone: _____	**Alternate Building Manager**: _____ Extension:_____ Cell phone: _____
Area Name/Number:	**Area Manager Name**: _____ Extension:_____ Cell phone: _____	**Alternate Area Manager**: _____ Extension:_____ Cell phone: _____

Reference "Control" column for additional PPE/equipment required, but this is the minimum required for access: ☐ none ☐ safety glasses ☐ safety shoes ☐ hard hat ☐ reflective vest ☐ long pants ☐ hearing protection ☐ closed toe street shoes ☐ head lamp or flashlight ☐ other _____	**Training required for access**: ☐ none ☐ GERT ☐ RWT I * ☐ RWT II * * - dosimeter required ☐ other _____ [Up to 15 lines]
Green Release requirements: ☐ Adhere to postings and signage. Area Manager release not required. ☐ Remain within marked boundaries, such as taped or painted floors, or other hazard barriers. ☐ If your work takes you outside marked boundaries, such as taped or painted floors, or other hazard barriers, then a release is required, contact the Area Manager. ☐ Contact the Area Manager to release all green work. ☐ See Additional Information section	**Additional Information**: [FREE TEXT FIELD]

Figure 1 Sample AHA Screen

Step	Person	Action
1.	Area manager	Goes to the Area Hazard Analysis eTool
2.	Area manager	Selects Create AHA button
3.	Area manager	Selects approver's name, if approval is required by division or department. This is an optional field. (If a name is entered in the 'to be approved by' field, the tool will auto generate an e-mail with a link to the identified person for approval.)
4.	Area manager	Selects building identifier (only those buildings with areas will be listed) Verifies auto-populated building manager name and contact information
5.	Area manager	Selects area identifier (only those areas within the selected building will be listed) Verifies auto-populated area manager name and contact information
6.	Area manager	Selects minimum PPE, equipment, and training requirements for entry to area (Job-specific PPE must be documented in an ATA or JSA) (Up to 15 training classes may be listed)
7.	Area manager	Selects requirements for releasing green work
8.	Area manager	Enters additional information, if applicable
9.	Area manager	Lists up to 30 area-related hazards and their associated controls
10.	Area manager	Chooses hazards from the pre-defined list (the associated control will auto populate)
11.	Area manager	If finished, Select Submit button; if not finished, Select Draft button. *Note: when submitted, the AHA is posted in an uneditable format (except by the area manager) in the Area Hazard Analysis Library. If in draft, AHA is listed as pending.*

Step	Person	Action
12.	Area manager	Reviews AHA at least annually and when the training requirements or level or types of hazards change

4 Forms

The following forms and systems are required by this procedure:

- Area Hazard Analysis eTool. Tool for creating, approving, and storing/viewing AHAs

5 Recordkeeping

The following recordkeeping requirements apply for this procedure:

- Completed AHAs are stored in the Area Hazard Analysis Library.

6 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 2, "Work Planning and Control"
  - Work Planning and Control: Work Planning and Control Procedure (SLAC-I-720-0A21C-002)
  - Work Planning and Control: Construction Work Planning and Control Procedure (SLAC-I-720-0A21C-005)
  - Work Planning and Control (includes online tools)

Other SLAC Documents

- Building Management Manual (SLAC-I-708-403-005-00)