

In accordance with subcontract general provisions, non-construction subcontractors are required to develop task-specific Activity Hazard Analysis(s) (AHA) which address the hazards specified in the Environment, Safety, and Health Clauses defined within the Special Provisions of the agreement and are associated with the project scope of work. AHAs are developed using Subcontractor Activity Hazard Analysis (AHA) form and after completion, are submitted to the UT-Battelle Technical Project Officer (TPO) for review and approval prior to commencement of work. **The AHAs must include the following information:**

- Description of the activities/tasks to be performed for the entire project scope of work
- Identification of potential hazards and subcontract requirements associated with the activity/task
- A list of the subcontractor's planned controls to eliminate or mitigate the identified hazards

Recommendations for Conducting an AHA

NOTE: See Example Subcontractor Activity Hazard Analysis on pages 2-3 of this document.

- 1. Break down scope of activities/tasks into steps.
 - List each step in the order it is performed starting with mobilization on-site
 - Begin each step with a verb
 - Do not make the steps too broad or too detailed
 - Whenever possible, review the steps with the workers who have performed the same or similar job to ensure job steps are not left out
- 2. Identify the hazards of each step. For each step, ask the following questions to identify, analyze and categorize potential hazards for the purpose of development of appropriate controls to prevent/mitigate hazards:
 - What can go wrong?
 - What are the consequences?
 - How could it happen?
 - What are other contributing factors?
 - How likely is it that the hazard will occur?
 - What contractual and regulatory requirements are associated with the hazard?
 - Whenever possible, review the list of hazards with the workers who have performed the same or similar job to ensure all potential hazards are identified.
- 3. Specify the control methods that will be used to eliminate or reduce the hazards and comply with subcontract requirements.
 - The hierarchy of hazard control must be considered when developing controls. The hazard controls in the hierarchy are, in order of decreasing effectiveness: Elimination, substitution, engineering controls, administrative controls and personal protective equipment.
 - Ensure administrative controls include required work permits, inspections, training and medical surveillance, where applicable.
 - Be specific when identifying the type of required personal protective equipment. Examples include: Wear hearing protection device with minimum NRR of 20 dBA, wear Ansell Nitrile SOL-VEX gloves, etc.
 - Whenever possible, review the hazard controls with the workers who have performed the same or similar step to ensure all hazards methods of control have been identified.



EXAMPLE

UT-Battelle Subcontractor Activity Hazard Analysis (AHA) Form

Project Title	Glovebox model XYZ repair
Subcontract Number	123456
Subcontractor Name	Your Company, Inc.

Description of Planned Activities/Task for the Scope-of-Work for the Entire Project

Replace floor in glovebox contaminated with unbound engineered nanoparticles.

ES&H Clauses Amended to Subcontract				
Accessible - Exposed Electrical Hazards	🗆 Lead			
□ Asbestos	🛛 Lockout/Tagout			
🗆 Beryllium	□ Noise			
Biohazards	□ NRC Exemption			
Bloodborne Pathogens	Outages of Emergency Evacuation-Notification Systems			
Confined Space	Outages of Fire Protection Systems			
Cooling Towers	Penetration through Fire Barrier			
Cryogenics	Peroxide Forming Chemicals			
Dosimetry	Powder Actuated Tools & Equipment			
Electrical – Post Receipt Field Evaluation	Respirable Crystalline Silica			
🗆 Explosives – Blasting	Respiratory Protection			
□ Firearms	☑ Unbound Engineered Nanoparticles			
Hoisting & Rigging Cranes	□ Water/Boating Activities			
□ Lasers	🗆 Welding, Cutting, & Hot Work			
🖾 Other Hands-on Work – No ES&H Clauses, No Purchase Rec, etc.				

Directions

1. Break planned work scope into activity/task steps in the table below

- 2. Evaluate possible troubleshooting activities/tasks which may be needed
- 3. For each task step identify the applicable hazards and define the controls which will be used
- 4. Ensure requirements from ES&H Clauses identified in the subcontract are addressed in the appropriate task step

5. Additional guidance can be found here (link)

6. Submit completed AHA to UT-Battelle Technical Project Officer (TPO) for review and approval prior to

commencement of work

AHA Author	Date Completed
John Doe	4/15/2025

UT-Battelle TPO signature indicates approval of activity-specific hazard controls identified in the subcontractor AHA					
ΤΡΟ ΝΑΜΕ	Signature	4/16/2025			
Name:	Signature:	Date:			
UT-Battelle ES&H/QHSP Representative Concurrence					
QHSP NAME	Signature	4/16/2025			
Name:	Signature:	Date:			

Rev. 1, Date: 04/15/2025



EXAMPLE

UT-Battelle Subcontractor Activity Hazard Analysis (AHA) Form

Activity/Task Step	Hazard(s)	Control(s)
Disconnect glovebox from power	120 VAC power	Engineering Controls (Local Exhaust Ventilation, HEPA Filtration, etc.)
	supply	Completely remove power cord from glovebox unit
		Administrative Controls (Work Methods, Operation Procedures, Training, etc.)
		Post sign on glovebox indicating that it is out of service
		Personal Protective Equipment (Safety Glasses, Hearing Protection Devices, etc.)
		none
Repair glovebox used for	Unbound	Engineering Controls (Local Exhaust Ventilation, HEPA Filtration, etc.)
nanomaterial research.	engineered	HEPA-Filtered Vacuum
	nanoparticles	Laboratory hood or glove box
		Administrative Controls (Work Methods, Operation Procedures, Training, etc.)
		Training: Project supervisor(s) and workers shall complete
		ORNL web-based course Nanoscale ES&H prior to
		performing any activity with the potential for exposure or
		contact with unbound engineered nanoparticles (UNPs).
		Posting and Labeling: Post signs on all doors that enter the
		laboratory during the repair which indicate the hazard,
		personal protective equipment requirements and
		administrative control requirements. All containers of
		waste (e.g. disposal PPE, wet cleaning wipes, etc.), bagged
		used respirators, the HEPA filtered vacuum cleaner and any
		other equipment with potential UNP contamination shall
		be labeled will "Caution" label that states: "Caution
		Contains Dispersible Nanomaterials Avoid Breathing Dust,
		Injection and Skin Contact".
		Personal Protective Equipment (Safety Glasses, Hearing Protection Devices, etc.)
		Disposable DuPont [™] Tyvek [®] 600 coverall with hood and
		feet, shoe covers and two pairs of nitrile exam glove. Full
		Face APR with P-100 or N-100 cartridges.
		Engineering Controls (Local Exhaust Ventilation, HEPA Filtration, etc.)
		Administrative Controls (Work Methods, Operation Procedures, Training, etc.)
		Personal Protective Equipment (Safety Glasses, Hearing Protection Devices, etc.)