Jefferson Lab		TITLE:		ES&H Manual		
ISSUING AUTHORITY	CHAPTER AUTHOR	APPROVAL DATE	EFFECTIVE DATE	EXPIRATION DATE	REV.	Page 1 of 2
ESH&Q	Mary Jo Bailey					
DOCUMENT ID: 3210-T3 Task Hazard Analysis (THA) Worksheet						

THA	A Author: Christopher Curtis						
Date: 3 July 2008		Task #: Frequency of use:			Daily		
Complete all information. Use as many sheets as necessary							

Task Location: Jefferso		Jefferso	n Lab site	Task Title:	General Survey Activities		
Division: Engineering			Prepared by:	C. Curtis			
Departmen	nt:	Alignmen	t & Metrology	Reviewed by (
Supervisor	: V	V. Oren		Approved by:			
Standard Requirements: (PPE, TOSPs, SOPs, etc.)EH&S manual, chapter Equipment transportation					2, 6146, 6410, 6440, 6620. procedure.		

Sequence of Job Steps	Potential Hazards	Risk Code before mitigation	Proposed Mitigation Safe Procedures/Practices/Controls	Risk Code after mitigation
1. Transport equipment to job site.	Back strain	2	Proper lifting techniques; use of van ramps (see procedures). Avoid lifting when possible (transfer equipment under beamline etc.) or use mechanical aids (carts, transfer table in FEL etc.)	1
2. Assess the work area for hazards.		0	Training required; be aware of signs denoting radiation areas etc., and others working in the area. Define energized state of components to be worked on (EH&S 6110, 6440)	0
3. Set up equipment and targets.	Trip hazards. Falls.	2	Set up equipment and power cords so as to avoid trip hazards (EH&S 6131). Set up cones if targets are left on the floor. Use proper techniques for ladders (EH&S 6132), or fall restraint, if required (EH&S 6131-T2)	1

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Jefferson Thomas Jefferson Nati	Lab	TITLE:		ES&H Manual			
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Sequence of Job Steps	Potential Hazards	Risk Code before mitigation	Proposed Mitigation Safe Procedures/Practices/Controls	Risk Code after mitigation
4. Measure survey monuments and targets on component.	Class II laser usage for Tracker and Mekometer.	1	Set up laser warning signs. (EH&S 6410).	0
5. Adjust any components that are out of tolerance.	Awkward positions, restricted space.	2	Use PPE (e.g. gloves, mats) if necessary (EH&S 6620). Use correct tools (EH&S 6120)	1
6. Complete task	No additional hazards	0	Break down equipment in proper order. Account for all tools and equipment. Leave the worksite in an orderly state.	0
7. Transport equipment back to survey lab	No additional hazards	2	As step 1 above	1

When completed if the analysis indicates that the Risk Code before mitigation for any of the steps of this task is "medium" or higher (RC \geq 3), then develop a formal Work Control Document (WCD) (See <u>ES&H Manual Chapter 3310</u> <u>Work Control Documents</u>) for the task, attach this THA, have it reviewed and approved prior to beginning the work in accordance to <u>ES&H Manual Chapter 3310</u> Work Control Documents.