

Note:

Entry into Accelerator housing :

- a) All entry by Controlled Access
- b) Tunnel Hazards Training required
- c) Familiarity with SPEAR Tunnel Area Hazard Analysis (AHA) required
- d) SPEAR Lock Down Verification available for review

Work Authorization :

- a) Prior authorization to work on accelerator via area manager & line manager
- b) For Non-SSRL Workers - implement Interim Work Authorization Process

Integrated Safety Manament System :

<p>Five functions</p> <ul style="list-style-type: none"> <li>Define the Scope of Work</li> <li>Analyze the hazards</li> <li>Develop and Implement Controls</li> <li>Perform the Work</li> <li>Feedback and Improve</li> </ul>	<p>Seven Guiding Principles</p> <ul style="list-style-type: none"> <li>Line Management Responsible for Safety</li> <li>Clear roles and responsibilities</li> <li>Competences Commensurate with Responsibilities</li> <li>Balanced Priorities</li> <li>Identification of Safety Standards and Requirements</li> <li>Hazard Controls Tailored to the Work Being Performed</li> <li>Operations Authorization</li> </ul>
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People responsible for ensuring implementation of ISMS

- a) Workers
- b) PIC - person in charge
- c) RLM - responsible line manager

## Accelerator Maintenance Day Tasks

1/12/2009

			PIC	Shop	Task Person	Forms	(hr)
Access	Conditions:	1.	SPEAR access: 6:30 to14:00				
Access	Conditions:	2.	SPEAR - Power Supply Checks - 2 hrs after power restored				
Access	Conditions:	3.	OUTAGES:				
Access	Conditions:	4.	RSWCF Open:				
Beamline	Vacuum	5.	Installing new high voltage cables for the		Horton		
			PIC	Shop	Task Person	Forms	(hr)

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1/12/2009

			PIC	Shop	Task Person	Forms	(hr)
Beamline	Vacuum	6.	bl5 ion pumps, some of which are in alcove. Beamline - out of alcove:	Neal	Vac		
			a) BL11,14,4 & 13 power outage prep and monitoring---Spector/Bach 2 hrs b) BL4 4-1 IG3, 4-2 IG1, 4-3 IG1, 4-3 IG2 may be mixed up. Check cable to gauge -- Spector/Bach 2 hrs. c) BL14 in hutch boiloff installations -- Spector/Bach 4 hrs. d) BL5 IP power supplies moved upstairs -- Spector/Bach 2 hrs.				
Beamline	Beam Monitoring, Diagnostics	7.	Install 3 cables at BL2-3 for time-resolved measurements	Martin	ESG	Rafael, Martin	
Facilities	Chiller	8.	Chiller electrical tie-in to S532: -- 8:30am to 2:30pm Affected buildings: 1. BL11, 13, 14 and 4. 2. Building 130 (first and second floor). 3. Laboratory Room 113 in B131 4. Actinide Room in B131 Temporary power will be provided to the monos of BL11 and BL4 and an instrument in Room 113 of B131.	Cadapan			
Inj/SP	Vacuum	9.	In Alcove:	Neal	Vac	Pak, Bach,	.5
				PIC	Shop	Task Person	Forms (hr)

# Accelerator Maintenance Day Tasks

1/12/2009

				PIC	Shop	Task Person	Forms	(hr)
			SPEAR Walkthru-----Pak Beamline Walkthru----- Bach/Spector			Spector		
SPEAR	Mechanical	10.	Mechanical inspections	Ernst	MSG	1-MSG tech		.5
SPEAR	Mechanical	11.	Install SPEAR flow switch labeling (ongoing)	Ernst	MSG	1-MSG tech		5
SPEAR	Mechanical	12.	Shutdown HCW system	Ernst	MSG	1-MSG tech		.25
SPEAR	Mechanical	13.	Restart HCW system, verify interlocks - 1-MSG tech 1/2-hour	Ernst	MSG	1-MSG tech		.5
SPEAR	Mechanical	14.	Install BL-1, BL-8 ECD supports/anchor drilling - 2-MSG techs 6-hours (type 1 penetration permit required)	Ernst	MSG	2-MSG tech		6
SPEAR	Mechanical	15.	Install lead restraints in radiation leak area wall seam next to SPEAR girder-11 (Note: secure lead on floor so it can not be removed)	Ernst	MSG	1-MSG tech	type 1 penetration permit required)	2
SPEAR	Mechanical	16.	Inspect BL-12 ID NESLAB chiller water quality - 1-MSG tech - 1/2-hour	Ernst	MSG	1-MSG tech	LOTO required	2
SPEAR	Mechanical	17.	Read LCW flow switches on insertion devices with existing metering valves	Ernst	MSG	1-MSG tech		2
SPEAR	Magnet - Top-off	18.	Support installation for ECD magnets (2 support legs x 2 remaining locations: BL1, BL2, BL8, BL14)	Ernst	MSG			
				PIC	Shop	Task Person	Forms	(hr)

# Accelerator Maintenance Day Tasks

1/12/2009

			PIC	Shop	Task Person	Forms	(hr)
SPEAR	Power Supply	19.	Pull: 3 LMR-400 cables: 1 from BL 2-3 to 05G-BPM5 - BPM signal 1 from BL 2-3 to 05G-BPM5 - patch - B116-R07 - 1.28MHz 1 from BL 2-3 to 05G-BPM5 - patch - B116-R07 - 476MHz 4 access keys for 4 hs	Rafael	ESG		4
	RF	20.	Replace Spear RF Thermocouple Input Module (Replace borrowed unit - B132 Room 101 Klystron room.) Bad Thermocouple Input Module, Allen-Bradley 1771-IXE/D at the Spear RF system. Unit was repaired by the manufacturer.			Sebek, Park	1
SPEAR	Vacuum	21.	9S TSP2 Troubleshoot	Neal	Vac	Pak/Ortiz	2
SPEAR	Vacuum	22.	Investigate 12S1G1 "0" reading	Neal	Vac	Pak/Ortiz	2
SPEAR	Vacuum	23.	Install<---- Power Outlet Location Labels	Neal	Vac	Pak	1
SPEAR	Vacuum	24.	BL11 UB Bellows insp. After 500 mA run	Neal	Vac	Pak	.5
SPEAR	Vacuum	25.	IP Power Supply Nomenclature Labeling	Neal	Vac	Pak/Neal	1

PIC Shop Task Person Forms (hr)