Approved

ORNL WORK PLAN

Operations, Maintenance and Services

Work Plan Name / Rev: MOVE CMS IN RFTF / 0
Expiration Date: 6/25/2025

61430

WORK SCOPE/DESCRIPTION	
Requester (Name/Badge/Division):	Mammosser, John / 00913993 / X185
Location of work (Bldg/Rm/Other):	8330 / / RFTF test cave and 1st floor
Work Plan Title:	Move and stage CMs in RFTF test cave and 1st floor
Description of Service/Work Needed: MB spare will be mounted on carts and moved to stage the HB spare, HB spare will be moved into the MB spare slot. PPU08 will have carts mounted and moved into the HB slot. Then the MB spare will be moved into the test cave	
Charge Number, if required:	NRATCS22
Work Plan Grade/Worktype:	3 / 0
Author (Name/Badge):	Mammosser, John / 00913993
File Attachments:	

Badge	Name	Attachment Desc	File Name
00913993	Mammosser, John	This is the hazard analysis for moving cryomodules	Hazard analysis for moving cryomodules.docx

INSTRUCTIONS

Prerequisites/Precautions:
Disconnect the insulating vacuum pump from the cryomodule and disconnect the pump cart from the beamline. Remove all hardware from the test cave.

Directions:
The MB spare will have the transfer carts mounted to it (RMs). The CM will be manually pushed forward to end of cleanroom. The HB spare will then be pushed over into the MB slot to make room for PPU08. PPU08 will have transfer carts mounted to it. Then CM will be moved out of the cave either manually and with the tugger. Once out it will be moved into the HB original slot. The MB spare will then be pushed into the test cave and mounted onto stands and transfer carts removed (RMs).

Post Work Testing:
Setup beampine vacuum on ionpump

Closeout:

JOB HAZARD EVALUATION

HAZARDS	PERMITS / CONTROLS
Radiological Work: MB spare is activiated and tagged	ı Radiological Work Permit (Enter RWP no.): RCTs will be contacted for movement
Manual Material Handling: Cryomodules will be pushed arround or moved using a tugger	ı Establish Controls (Guideline) [apply 30-50-30 criteria for a non-repetitive lifting task] ¡ Reduce weight ¡ Decrease load ¡ Design work area ¡ Facilitate access to material ¡ Optimum environment ¡ Reduce distance /Provide proper storage facilities ¡ Load storage ¡ Eliminate manual lifting/lowering ¡ Eliminate pushing/pulling – Use lifting aids ¡ Other instructions to staff ı Exposure Assessment: Enter or attach justification to classify exposure scenario as low risk, qualitative exposure assessment (QEA), or requirement to conduct quantitative exposure monitoring (QEM)

DOCUMENTATION REVIEW AUTHORIZATION
(Approvals are certification of hazards assessment)

Reviewer/Approver Roles	Signature	Date
Accountable Management		

(Service Provider, Line, Equipment Owner, or Facility Management)	Howell, Matthew	6/25/2024
Task Leader	Mammosser, John	6/25/2024
Work Package Concurrence		
Facility Manager		
Operations Supervisor		
Facility Manager Approval To Start Work		
Facility Manager		
Work Start Authorization		
Task Leader		
Work Acknowledged Complete		
Task Leader		
Worker Feedback:		

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PRE-JOB SAFETY REVIEW GUIDE

ID: 61430

Scope of Work: Review work package/plan to ensure all participants understand the work activity.

Hazards: Review the hazards identified in Job Hazard Evaluation (JHE) / work plan (IOP).

- Since the work package / plan was written: 1) Have conditions changed? 2) Are there new hazards? Refer to Field Notes and Focus Areas.

Hazard Controls / Permits: Review:

- Written permits for the work activity.
- Precautions, step warnings, Hold Points ...
- Personal Protective Equipment (PPE)
- Work instructions for information - e.g., steps where hazards are introduced.
- ORNL subject area requirements - e.g., non-permit hazard controls.

Performing Work:

- Discuss group/individual responsibilities for safe & effective work.
- Follow work instructions & safety procedures.
- Availability/location of materials, tools, etc.
- Any previous experiences / lessons learned?
- Response if work cannot be performed as planned.
- What is the worst thing that could happen?
- Are there *Potential error traps* with the job? → →
- Take a minute before: work start & leaving work area.
- Work Hand-off / Turnover - workers & Task Leader

→ Potential Error Traps:

- Time pressures
- Distractive environment
- High workload
- First time evolution
- First day back
- Vague guidance
- Over confidence
- Imprecise communications
- Work stress

Abnormal Situation Response:

- *Stop Work*: Observe an unsafe act, activity or condition that creates an imminent danger.
- *Emergency Response*: Discuss egress paths or other responses if problems are encountered.

Field Notes and Focus Areas: (Use this area as a work space to record notes related to new hazards identified in the field or changed conditions. Record feedback in work package/plan information systems.)

By signing below, I am indicating that I have been briefed on the potential hazards associated with completing this job.

Signature / Badge	Date	Signature / Badge	Date