BROOKHAVEN NATIONAL LABORATORY

775

WORK PERMIT # _____

Work Order # _____ **Job #** _____ **Activity #** _____

1. Work requester fills out this section

STANDING WORK PERMIT [ ]

Requester: S MARMO Date: 12/5/01 Ext. _____ Dept/Div/Group: _____

Other Contact person (if different from requester): _____ Ext. _____

Work Control Coordinator C PEARSON Start Date 12/20 Est. End Date 12/20

Description of Work / Problem:

LIFT 600# 9U VME CRATE TO ECM44

Building 1008 Room EA Equipment EC Service Provider PHENIX TECH

2. Work requester, service provider, and ES&H (as necessary) fill out this section or attach analysis

ES&H Analysis

RADIATION CONCERNS [X] NONE [ ] Activation [ ] Airborne [ ] Contamination [ ] Radiation [ ] OTHER _____

[ ] Special nuclear materials involved, notify Isotope Special Materials Group [ ] Fissionable materials involved, notify Laboratory Criticality Officer

SAFETY CONCERNS [ ] NONE

[ ] Adding / Removing Walls or Roofs	[ ] Confined Space*	[ ] Explosives	[ ] Lead*	[ ] Penetrating Fire Wall
[ ] Asbestos*	[ ] Corrosive	[ ] Flammable	[ ] Magnetic Field	[ ] Pressurized Systems
[ ] Beryllium*	[ ] Cryogenic	[ ] Fumes/Mist/Dust*	[X] Material Handling	[ ] Rigging/Critical Lift
[ ] Biohazard*	[ ] Electrical	[ ] Heat/Cold Stress*	[ ] Noise*	[ ] Toxic Materials*
[ ] Chemicals*	[ ] Elevated Work*	[ ] Hydraulic	[ ] Non-ionizing Radiation	[ ] Vacuum
	[ ] Excavation	[ ] Lasers*	[ ] Oxygen Deficiency*	[ ] OTHER _____

*Does this work require medical clearance or surveillance from the Occupational Medicine Clinic? [ ] Yes [ ] No

ENVIRONMENTAL CONCERNS [X] NONE

[ ] Atmospheric Discharges (rad/non-rad)	[ ] Liquid Discharges	[ ] Work impacts Environmental Permit No. _____	
[ ] Chemical or Rad Material Storage or Use	[ ] Oil / PCB Management	[ ] Soil activation/contamination	[ ] Waste - Mixed
[ ] Cesspools (UIC)	[ ] Protected areas / species	[ ] Waste - Clean	[ ] Waste - Radioactive
[ ] High water / power consumption	[ ] Spill potential	[ ] Waste - Hazardous	[ ] Waste - Regulated Medical
		[ ] Waste - Industrial	[ ] OTHER _____

Waste disposition by: _____

POLLUTION PREVENTION (P2) / WASTE MINIMIZATION OPPORTUNITY: [X] None [ ] Yes

Facility Concerns

[X] NONE

[ ] Access/Egress Limitations	[ ] Impacts Facility Use Agreement	[ ] Temperature Change	[ ] OTHER _____
[ ] Configuration Control	[ ] Maintenance Work on Ventilation Systems	[ ] Utility Interruptions	
[ ] Electrical Noise	[ ] Potential to Cause a False Alarm	[ ] Vibrations	

Work Controls

WORK PRACTICES

[ ] NONE	[ ] Exhaust Ventilation	[ ] Lockout/Tagout		[ ] Spill Containment
[X] Back-up Person/Watch	[ ] HP Coverage	[ ] Posting/Warning Signs		[ ] Time Limitation
[ ] Barricades	[ ] IH Survey	[ ] Scaffolding - requires inspection		[ ] Warning alarm (i.e. "high level")

PROTECTIVE EQUIPMENT

[ ] NONE	[ ] Ear Plugs	[ ] Gloves	[ ] Lab Coat	[ ] Safety Glasses	
[ ] Coveralls	[ ] Ear Muffs	[ ] Goggles	[ ] Respirator	[ ] Safety Harness	
[ ] Disposable Clothing	[ ] Face Shield	[X] Hard Hat	[ ] Shoe covers	[ ] Safety Shoes	[ ] OTHER _____

PERMITS REQUIRED (*Please attach*)

Initial next to box to show who has responsibility to generate the permit. Permits must be valid when job is scheduled.

[X] NONE	[ ] Cutting/Welding	[ ] Impair Fire Protection Systems
[ ] Concrete/Masonry Penetration	[ ] Digging/Core Drilling	[ ] Rad Work Permit - RWP No. _____
[ ] Confined Space Entry	[ ] Electrical Working Hot	[ ] OTHER _____

DOSIMETRY/ MONITORING

[X] NONE	[ ] Heat Stress Monitor	[ ] Real Time Monitor		[ ] TLD
[ ] Air Effluent	[ ] Noise Survey/Dosimeter	[ ] Self-reading Pencil Dosimeter		[ ] Waste Characterization
[ ] Ground Water	[ ] O_2/Combustible Gas	[ ] Self-reading Digital Dosimeter		[ ] OTHER _____
[ ] Liquid Effluent	[ ] Passive Vapor Monitor	[ ] Sorbent Tube/Filter Pump		

Training Requirements (List below any location specific training requirements)

PHENIX ACCESS TRAINING, SAC

Based on analysis above, the Walkdown Team determines the risk, complexity, and coordination ratings below.

ES&H Risk Level: X LOW ___MODERATE ___HIGH

Complexity Level: X LOW ___MODERATE ___HIGH

Work Coordination: X LOW ___MODERATE ___HIGH

Note: If all the ratings are LOW, the **Work Control Coordinator** and **Service Provider** must sign for concurrence on the back side. Further review of the work permit is **not** required. If any ratin are MODERATE or HIGH, the entire permit must be complete

FILE CODE: BNL F3093A

Rev. 2 --11/01

BY

3. *Both work requester and service provider coordinate on work plan (use attachments for detailed plans)*

Work Plan: (procedures, timing, equipment, and personnel availability need to be addressed)

SKILL OF THE CRAFT

WITH HOOK COMPLETELY UP, MOVE 12T CRANE OVER NORTH END OF NE SCAFFOLD TOWER. HOIST CRATE TO 4TH LEVEL OF TOWER WITH MIN MOVEMENT OF CRANE. REMOVE CRATE & RAISE HOOK COMPLETELY UP. PARK CRANE. LOCK OUT

Special Working Conditions Required: CRANE OPERATOR MUST BE SAL OR JIM WITH SPOTTER

Operational Limits Imposed:

Post Work Testing Required:

Job Safety Analysis Required ___ Yes ✓ No Walkdown Required ___ Yes ✓ No

Reviewed By: *Primary Reviewer will determine the size of the review team and the other signatures required based on hazards and job complexity. Primary Reviewer signature means that the hazards and risks that could impact ES&H have been identified and will be controlled according to BNL requirements.*

Title	Name (print)	Signature	Life #	Date
Primary Reviewer				
ES&H Professional				
Other				
Other				
Work Control Coordinator*	C PEARSON	Charles Pearson	15245	12/19/01
Service Provider*				

Only signatures required for concurrence on LOW rated jobs. *Review done: in series · team*

4. *Job site personnel fills out this section*

Note: Signature indicates personnel performing work have read and understand the hazards and permit requirements (including attached permits).

Job Site Supervisor Contractor Supervisor

Workers:	Life #	Workers:	Life #

Workers are encouraged to provide feedback on ES&H concerns or on ideas for improved job work flow. Use feedback form or space below.

5. *Work Requester or designee fills out this section*

Conditions are Appropriate to Start Work: (Work permit has been reviewed, work controls are in place, and site is ready for job.)
Name C PEARSON Signature Charles Pearson Life # 15245 Date 12/21/01

6. *Work Requester determines if Post Job Review is required ___No ___Yes (Fill in names of reviewers)*

Post Job Review:
Name: ___ Signature ___ Life #: ___ Date: ___
Name: ___ Signature ___ Life #: ___ Date: ___

7. *Worker provides feedback*

Worker Feedback:

8. *Work Control Coordinator (requesting dept.) checks quality of completed permit and closes out*

Closeout: Name A D Frawley Signature A Frawley Life #: F5711 Date: 12/20/01
Comments:

MATRIX

RISK		
High	**High Risk / Low Complexity** Guideline written instructions Normal supervisor involvement Craft qualified for task Example: A gate valve needs to be replaced in a chemical processing system. The task of replacing the valve is simple, but the isolation of the chemical system demands some rigor. This job would demand written instructions or a procedure and some work site supervision (i.e. pre-job briefing, work site visitation, etc.)	**High Risk / High Complexity** Detailed written instructions Maximum supervisor involvement Craft qualified for task Example: An air compressor in a plant safety class system in a radiological controlled area requires a complete overhaul; the process piping may have internal contamination. The job screening identifies this job as high hazard with a high level of rigor requiring written guidance, craft skills, and work site supervision.
Low	**Low Risk / Low Complexity** Verbal instructions Minimum supervisor involvement Skill of the craft sufficient for task Example: A gate valve needs to be replaced in a water irrigation system. Here the leak is just a nuisance. Management identifies the task as low hazard and the job is given to a tradesman with minimum paperwork and he utilized his "skill of the craft" knowledge.	**Low Risk / High Complexity** Guideline written instructions Normal supervisor involvement Skill of the craft sufficient for task Example: An air compressor in a maintenance shop needs a complete overhaul. Due to the complexity of the air compressor, the job requires a higher level of planning and preparation.
	Low	COMPLEXITY — High