

Job Risk Analysis

Name(s) of Risk Team Members: P. Cirnigliaro, D. Savage	Point Value → Parameter ↓	1	2	3	4	5
Job Title: Material Handling, Machinery Job Number or Job Identifier: JRA 2	Frequency (B)	≤once/year	≤once/month	≤once/week	≤once/shift	>once/shift
Job Description: Lifting by overhead crane and moving SNS Power Amplifier from building 922 to 912 by fork truck.	Severity (C)	First Aid Only	Medical Treatment	Lost Time	Partial Disability	Death or Permanent Disability
Training and Procedures List (optional):	Likelihood (D)	Impossible	Unlikely	Possible	Probable	Multiple
Approved by: <i>E. Lessard</i> Date: 8-15-04 Rev. #: 0						
Stressors (if applicable, please list all): DOE identified training deficiencies, illiteracy and poor safety attitude on the part of the IBEW as stressors.	Reason for Revision (if applicable):			Comments: The DDO for BNL is implementing a formal program to improve hoisting and rigging at BNL based on observations by a DOE ISM Team on August 13, 2004.		

				Before Additional Controls					After Additional Controls							
Job Step / Task	Hazard	Control(s)	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Select rigging equipment, move to or from load area	Falls on same level	Work planning, PPE (slip-resistant footwear), training, housekeeping, Tier 1 inspections	N	1	4	2	2	16								
Select rigging equipment, move to or from load area	Overexertion – injuries caused by excessive lifting, pushing, pulling, holding, carrying	Back safety training, use of squat lift technique, work planning, PPE, training, Tier 1 inspections, known weight of load, known center of gravity of load, known lifting points on load	N	1	4	2	2	16								
Inspect fork truck.	Falls to same level	Work planning, PPE (slip-resistant footwear), training, housekeeping, Tier 1 inspections	N	1	4	2	2	16								
Inspect fork truck	Overexertion – injuries caused by excessive lifting, pushing, pulling, holding, carrying	Selecting appropriate type of fork truck for application, back safety training, use of squat lift technique, work planning, PPE, training, Tier 1 inspections	N	1	4	2	2	16								
Start up and move fork truck to work location	Being struck/crushed against an object falling.	Procedures, training, route and area checked clear prior to movement, visible and audible alarms on fork truck as required.	N	1	4	2	2	16		N	3	4	2			

Start up and move fork truck to work location	Inhalation of exhaust fumes	Procedures, training, building ventilation	N	1	4	2	2	16									
Rig amplifier and lift by crane	Being struck/crushed against an object falling.	Work planning, PPE, training, PE & C-AD inspection and maintenance of equipment, procedures, Tier 1 inspections, known weight of load, known center of gravity of load, known lifting points on load.	Y	3	4	3	3	108	C-AD Supervisors to review their personnel assigned to perform mechanical material handling (FATS Action 2370.1.1). Recent rigging incidents have heightened awareness of needed competency and following of procedures and safety rules. C-AD Supervisors to participate in BNL Hoisting and Rigging Improvement Program beginning 8-16-04.	N	3	4	2	2	48	65%	
Move fork truck under object, lift load transport load or lower load at new location	Getting struck by dropped load or hitting other objects or people with load while moving	Work planning, PPE, training, PE & C-AD inspection and maintenance of equipment, procedures, Tier 1 inspections, known weight of load, known center of gravity of load, known lifting points on load, route and area checked clear prior to movement, visible and audible alarms on fork truck as required	Y	3	4	3	3	108	C-AD Supervisors to review their personnel assigned to perform mechanical material handling (FATS Action 2370.1.1). Recent rigging incidents have heightened awareness of needed competency and following of procedures and safety rules. C-AD Supervisors to participate in BNL Hoisting and Rigging Improvement Program beginning 8-16-04.	N	3	4	2	2	48	65%	
Move fork truck under object, lift load transport load or lower load at new location	Highway accident	Blocking of road, guides for fork truck driver, inspection of route, procedures, training.	Y	3	4	3	3	108	C-AD Supervisors to review their personnel assigned to perform mechanical material handling (FATS Action 2370.1.1). Recent rigging incidents have heightened awareness of needed competency and following of procedures and safety rules. C-AD Supervisors to participate in BNL Hoisting and Rigging Improvement Program beginning 8-16-04.	N	3	4	2	2	48	65%	

Further Description of Controls Added to Reduce Risk:

*Risk:	0 to 20	21 to 40	41-60	61 to 80	81 or greater
	Negligible	Acceptable	Moderate	Substantial	Intolerable