

**Work scope details:**

Title: 1531808 Move Cabinet to the Basement

Work Scope Summary: - The task involves relocating a cabinet from its current location to the basement. This requires the removal of a floor plug and the use of a crane to facilitate the movement of the cabinet safely and efficiently.

Key Work Scope Components: - Removal of floor plug - Use of crane for cabinet relocation - Safe transportation of cabinet to basement - Coordination of crane operation - Ensuring safety protocols are followed during the move

**Relevant previous events and lessons learned:**

Event Title	Event Summary	Lessons Learned	Reference link
Employee Injury During Cabinet Move	On 6/26/2007, an employee strained their lower back while attempting to manually move a 500-pound office cabinet on a carpeted floor. The employee initially moved one end of the cabinet with assistance but strained their back when trying to move the other end alone.	Proper lifting techniques and assistance should be used when moving heavy objects to prevent injury.	N/A
Damage to Canal Parapet during Crane Use	At the Advanced Test Reactor, a 2-Ton crane was used to remove a Test Train Assembly, which became caught on a storage rack, causing damage to the canal parapet.	Ensure clear paths and proper alignment during crane operations to avoid binding and damage.	<a href="#">Link</a>
Crane Collapse in Manhattan	On February 5, 2016, a crawler crane collapsed in NYC due to failure to follow safety protocols regarding wind speed, resulting in one fatality and injuries.	Adhere strictly to safety protocols, especially concerning environmental conditions like wind speed.	<a href="#">Link</a>
Spider Cranes Crash in Hell's Kitchen	On June 30, 2023, two mini spider cranes crashed while being hoisted, resulting in a stop-work order and investigation.	Conduct thorough safety checks and ensure proper procedures are followed during crane operations.	<a href="#">Link</a>
Crane Collapse in Orlando	In October 2023, a crane collapsed onto a home during an OUC project, causing worker injuries.	Highlight the risks of crane operations near buildings and infrastructure, emphasizing safety measures.	<a href="#">Link</a>
Employee Laceration During Cabinet Move	A worker sustained a leg laceration while moving a 750-pound cabinet that became unbalanced and slid off a dolly.	Movement of heavy equipment requires walk downs, hazard controls, and proper team coordination.	<a href="#">Link</a>

## Missing Hazards:

Hazard	Missing or Inadequate Mitigation in Current Work Control Document	Recommended Mitigation for Revision	Reference link	SBMS Link
Manual handling of heavy cabinet	Not addressed in current hazards	Implement ergonomic training and use of mechanical aids for lifting heavy objects	<a href="#">OSHA Manual Handling</a>	<a href="#">Link</a>
Crane operation	Not specifically addressed, though related to Hoisting and Rigging	Develop specific crane operation protocols and training requirements	<a href="#">Crane Operation Safety</a>	<a href="#">Link</a>
Removal of floor plug	Not addressed in current hazards	Implement lockout/tagout procedures and training for floor plug removal	<a href="#">Floor Plug Safety</a>	<a href="#">Link</a>
Time pressures and distractive environment	Not addressed in current hazards	Develop time management strategies and environmental controls to reduce distractions	<a href="#">Time Pressure Safety</a>	<a href="#">Link</a>
Improper communication and coordination	Not addressed in current hazards	Implement a comprehensive hazard communication program and coordination protocols	<a href="#">Hazard Communication Standard</a>	<a href="#">Link</a>

## Failure mode analysis:

Current control	Failure mode of the control	Effect of Failure	Cause of Failure	Recommended action
Written permits for the work activity	Permit not obtained or incomplete	Unauthorized work leading to safety hazards	Miscommunication or oversight in permit process	Ensure all permits are obtained and verified before starting work
Personal Protective Equipment (PPE)	PPE not used or inadequate	Increased risk of injury	Lack of awareness or availability of PPE	Conduct PPE checks and ensure availability and proper use
Work instructions for information	Instructions not followed or misunderstood	Unsafe work practices leading to accidents	Vague or unclear instructions	Provide clear, detailed instructions and conduct briefings

ORNL subject area requirements	Non-compliance with safety standards	Regulatory violations and increased risk	Lack of training or awareness	Regular training and audits to ensure compliance
Discuss group/individual responsibilities	Roles not clearly defined	Confusion and errors during task execution	Poor communication or planning	Conduct pre-task meetings to clarify roles and responsibilities
Follow work instructions & safety procedures	Deviations from procedures	Increased likelihood of accidents	Time pressure or lack of oversight	Implement strict adherence protocols and supervision
Availability/location of materials, tools	Tools/materials not available or misplaced	Delays and unsafe improvisation	Poor inventory management	Ensure all materials and tools are checked and ready before work
Response if work cannot be performed as planned	Inadequate response to unforeseen issues	Escalation of risk and potential accidents	Lack of contingency planning	Develop and communicate contingency plans
Potential error traps	Error traps not identified	Increased risk of human error	High workload or distractive environment	Conduct error trap analysis and implement mitigation strategies
Stop Work: Observe an unsafe act	Unsafe conditions not addressed	Imminent danger leading to accidents	Lack of vigilance or authority to stop work	Empower workers to stop work and report unsafe conditions
Emergency Response	Inadequate emergency procedures	Ineffective response to emergencies	Lack of training or unclear procedures	Regular emergency drills and clear communication of procedures
Hoisting and Rigging	Equipment failure or misuse	Dropped loads causing injury or damage	Inadequate maintenance or operator error	Regular equipment checks and operator training
Elevated Work	Fall from height	Serious injury or fatality	Lack of fall protection or improper use	Ensure proper fall protection equipment and training
Traffic control	Inadequate area posting	Personnel exposed to hazards	Poor signage or communication	Implement clear signage and barriers to control area access