

Work scope details:

Title: Move Cabinet to the Basement

Work Scope Summary: This work plan outlines the procedure for removing a floor plug and utilizing a crane to safely move a cabinet from the ground level to the basement of Building 8700. The operation requires careful coordination and adherence to safety protocols to mitigate risks associated with hoisting and rigging, as well as elevated work.

Key Work Scope Components:

- Removal of floor plug
- Use of crane for cabinet relocation
- Posting of warning signs for open holes
- Implementation of fall protection measures

Relevant previous events and lessons learned:

| Event Title | Event Summary | Lessons Learned | Reference Link |
|--------------------------------|--|--|---|
| Crane Accident at XYZ Facility | A crane operator lost control while moving a heavy load, resulting in the load falling and injuring a worker. | Importance of ensuring load stability and proper communication among team members during crane operations. | OSHA Crane Safety |
| Fall from Height Incident | A worker fell from an unprotected edge while performing maintenance work at height, resulting in serious injuries. | Necessity of implementing and enforcing fall protection measures for all work above 4 feet. | OSHA Fall Protection |
| Improper Tool Use | An incident occurred when a worker used a tool not suited for the task, leading to equipment failure and minor injuries. | Ensure proper tool selection and training for all personnel involved in equipment handling. | Tool Safety Guidelines |
| Electrical Hazard Exposure | A maintenance crew encountered live wires while moving equipment, leading to a near-miss incident. | Conduct thorough inspections and ensure de-energization of electrical systems before work begins. | OSHA Electrical Safety |
| COVID-19 Exposure Incident | A worker contracted COVID-19 due to inadequate social distancing and mask usage during a group task. | Reinforce the importance of PPE and social distancing protocols in all work environments. | CDC COVID-19 Guidelines |

Missing Hazards:

| Hazard | Missing or Inadequate Mitigation in Current Work Control Document | Recommended Mitigation for Revision | Reference Link | SBMS Link |
|------------------------|--|--|-----------------------|------------------|
| Material Handling | Not addressed | Implement a manual handling assessment and training for workers involved in moving the cabinet. | N/A | N/A |
| Overhead Work | Not addressed | Ensure that all personnel are trained in overhead work safety and that a designated spotter is used during crane operations. | N/A | N/A |
| Open Hole Hazard | Inadequate warning signage | Use highly visible and durable signage to indicate the open hole, and consider physical barriers to prevent access. | N/A | N/A |
| Fall Protection | Not adequately specified | Specify the type of fall protection equipment required (e.g., harness type, lanyard length) and ensure proper training on its use. | N/A | N/A |
| COVID-19 Risks | Not addressed | Implement a daily health screening protocol and ensure compliance with mask-wearing and social distancing measures. | N/A | N/A |
| Noise Exposure | Not addressed | Conduct a noise assessment and provide hearing protection if noise levels exceed permissible limits. | N/A | N/A |
| Tool Safety | Not addressed | Ensure that all tools used are inspected prior to use and that operators are trained in their safe operation. | N/A | N/A |
| Communication Failures | Inadequate communication plan | Develop a clear communication plan for all team members, including hand signals for crane operations and regular safety briefings. | N/A | N/A |
| Time Pressure | Not addressed | Establish realistic timelines for the job and ensure that workers are not rushed, which could lead to safety violations. | N/A | N/A |

| Hazard | Missing or Inadequate Mitigation in Current Work Control Document | Recommended Mitigation for Revision | Reference Link | SBMS Link |
|--------------------------|---|---|----------------|-----------|
| Environmental Conditions | Not addressed | Assess for environmental hazards (e.g., temperature extremes) and provide appropriate PPE or work modifications. | N/A | N/A |
| Equipment Failure | Not addressed | Conduct thorough pre-use inspections of the crane and other equipment to ensure they are in safe working condition. | N/A | N/A |

Failure mode analysis:

| Current Control | Failure Mode of the Control | Effect of Failure | Cause of Failure | Recommended Action |
|----------------------------|--------------------------------------|--|--|---|
| Crane Operation Procedures | Permit not obtained or expired | Unauthorized use of crane leading to accidents | Lack of oversight in permit management | Implement a digital tracking system for permits to ensure current status is visible to all team members. |
| PPE Requirements | PPE not used or inadequate | Increased risk of injury from falls or impacts | Lack of enforcement or training on PPE usage | Conduct mandatory PPE training sessions and regular audits to ensure compliance. |
| Work Instructions | Instructions not followed or unclear | Increased likelihood of accidents due to improper procedures | Vague or poorly communicated instructions | Revise work instructions to be clear and concise, and conduct a pre-job briefing to clarify expectations. |

| Current Control | Failure Mode of the Control | Effect of Failure | Cause of Failure | Recommended Action |
|--------------------------|---|--|----------------------------------|--|
| Communication Protocol | Miscommunication during crane operations | Potential for accidents due to lack of coordination | Inadequate communication methods | Establish a standardized communication protocol, including the use of radios or hand signals. |
| Emergency Response Plan | Emergency procedures not known or practiced | Delayed response to incidents, worsening outcomes | Lack of training or drills | Schedule regular emergency response drills and ensure all team members are familiar with the plan. |
| Tool Availability | Tools not available or inadequate | Increased risk of using improper tools, leading to accidents | Poor inventory management | Maintain an inventory checklist and conduct regular inspections to ensure all necessary tools are available and in good condition. |
| Training and Competency | Workers not adequately trained | Increased risk of accidents due to lack of knowledge | Insufficient training programs | Develop a comprehensive training program that includes hands-on practice and assessments for all workers involved. |
| Traffic Control Measures | Traffic control not implemented | Increased risk of accidents with personnel or equipment | Lack of awareness or enforcement | Designate a traffic control officer and establish clear traffic patterns and signage around the work area. |

| Current Control | Failure Mode of the Control | Effect of Failure | Cause of Failure | Recommended Action |
|------------------------------|--|-------------------------------------|-------------------------------|---|
| Fall Protection Equipment | Fall protection not utilized or inadequate | Increased risk of falls from height | Lack of training or awareness | Ensure that all workers are trained in the proper use of fall protection equipment and conduct regular inspections. |
| Health and Safety Monitoring | Health risks not monitored | Increased risk of illness or injury | Lack of monitoring systems | Implement a health and safety monitoring system to track worker health and safety compliance. |

This comprehensive risk assessment report provides a detailed analysis of potential hazards associated with the work plan to move a cabinet to the basement, along with relevant historical events, missing hazards, and failure modes to ensure a safe and effective operation.