

JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

Facilities Services

Motor Change Out

TASK	HAZARDS	CONTROLS
<p>1. Setting up equipment and preparing the work area</p> <p>Set up rigging to remove old motor and install new one. Includes mounting a bracket to the concrete beam above the motor.</p> <p>Set up mechanical lift if necessary.</p> <p>Removal of equipment.</p>	<p>Slips, trips, and falls</p> <p>Musculoskeletal injuries</p> <p>Pinch points, nip points, impact, penetration, puncture points, cuts, lacerations, amputation</p> <p>Silica dust/debris from drilling into concrete: irritation to eyes, nose, throat and upper respiratory system</p> <p>COVID 19: working in close proximity with others</p> <p>Noise from drills and other equipment</p>	<p>Inspect area prior to commencing work Inspect equipment prior to use Clear the area and barricade work space with caution tape, cones, or signs if necessary Be aware of those around you and maintain communication at all times Ensure proper clearance of equipment</p> <p>Training on safe lifting techniques and proper body mechanics Use proper tools and equipment Stretch and flex</p> <p>Wear appropriate gloves and safety toed work boots Watch hand placement and surroundings No gloves while drilling. Gloves can become entangled in the drill and cause finger amputation Maintain communication with affected employees</p> <p>Wear appropriate eye protection and N95 respirator Water down the area being drilled to control dust Use HEPA vacuum if necessary</p> <p>Practice social distancing if possible Use face coverings or N95 respirator</p> <p>Wear hearing protection</p>
<p>2. LOTO motor circuits, disconnect wires, removing and installing old/new motors</p> <p>Test new motor</p>	<p>Electrical shock, electrocution</p> <p>Pinch points, nip points, impact, penetration, puncture points, cuts, lacerations</p>	<p>De-energize electrical systems Block or lock moveable parts to prevent inadvertent movement Bleed any hydraulic or air pressure Test systems before continuing Wear insulated gloves and use insulated tools if available</p> <p>Wear appropriate gloves and safety toed work boots Watch hand placement and surroundings Maintain communication with affected employees Use appropriate lifting devices and equipment</p>

	3. Attach chain falls or mechanical lift to the motor	Slips, trips, and falls	<p>Inspect area prior to commencing work</p> <p>Inspect equipment prior to use</p> <p>Clear the area and barricade work space with caution tape, cones, or signs if necessary</p> <p>Be aware of those around you and maintain communication at all times</p> <p>Ensure proper clearance of equipment</p>
		Musculoskeletal injuries	<p>Use safe lifting techniques and proper body mechanics</p> <p>Use proper tools and equipment</p> <p>Stretch and flex</p>
		Pinch points, nip points, impact, penetration, puncture points, cuts, crushing	<p>Wear appropriate gloves and safety toed work boots</p> <p>Watch hand and body placement. Do not place under the motor or attachments</p> <p>Maintain communication</p>
Other Information:	Required Training:	Personal Protective Equipment (PPE)	
	<p>Proper lifting techniques and body mechanics</p> <p>Lock Out/Tag Out</p> <p>Personal Protective Equipment</p> <p>Respiratory Protection</p> <p>Silica</p>	<p>Gloves</p> <p>N95 Respirator</p> <p>Safety Toed Work Boots</p> <p>Eye Protection</p> <p>Hearing Protection</p>	
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