JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

Facilities Services

Sump Pump Maintenance & Replacement

TASK	HAZARDS	CONTROLS
1. Prepare and inspect the area for unsafe conditions. Inspect tools and equipment.	Slips, trips, and falls	Evaluate and remove hazards in the area prior to commencing work Barricade work space with caution tape, cones, or signs if necessary Maintain communication when working with others
	Overhead hazards	Ensure proper clearance of equipment Wear a hardhat or a bump cap if there are protruding overhead hazards
	Confined space	Follow the confined space program requirements
	Noise	Wear hearing protection if working around loud equipment
	Musculoskeletal injuries	Use proper lifting techniques and body mechanics. Two people lifting above 50 pounds if possible. Use lifting equipment when possible. Stretch and flex before and throughout shift. Take breaks if necessary
2. Troubleshoot the pump by checking the power, floats, and the actual pump itself.	Slips, trips, and falls	Evaluate and remove hazards in the area prior to commencing work Barricade work space with caution tape, cones, or signs if necessary Maintain communication when working with others
3. De-energize and lock out/tag out the equipment. Block moveable parts to prevent inadvertent movement. (Group LOTO is required when working with others)	Electrical hazards	De-energize equipment If area is wet, check for frail, corroded, and/or exposed wires Check the ground, live, and neutral wires
	Pinch points, nip points, lacerations	Wear gloves if necessary
4. Identify the inlet and outlet of the pump and drain it.	Chemical and biological hazards, including, but not limited to, bloodborne pathogens, COVID 19, and other potentially infectious	If you have any concerns regarding the pump you're working on, request a hazard assessment from campus EH&S. If it's an

		materials	urgent request, call 510-642-3073 during business hours and UCPD after business hours. Wear appropriate PPE. Tyvek suit, nitrile or rubber gloves, eye protection with face shield if there's a splash hazard, and N95 Use shop vacuum to capture water if necessary Consult Environmental SME for waste disposal
		Musculoskeletal injuries	Use proper body mechanics
		Slips, trips, and falls	Wear slip resistant work boots. Evaluate and remove hazards in the area prior to commencing work Barricade work space with caution tape, cones, or signs if necessary Maintain communication when working with others
	5. Remove, spray down, and disinfect float trees. Let the disinfectant soak for 10 minutes or the suggested contact time.	Electrical hazards	LOTO Disconnect electrical wires from float tree prior to removal.
		Chemical and biological hazards, including but not limited to COVID 19	Same as above
		Chemical exposure from use of disinfectant	Hazard communication and training on disinfectant Wear gloves Use a fan to circulate air if necessary Open windows if possible
	6. Install new floats and connect new wires.	Pinch points, nip points, lacerations	Wear gloves
	7. Set up hoisting equipment and remove the old pump. Disinfect the pump and let disinfectant soak for 10 minutes or the suggested contact time.	Chemical and biological hazards, including, but not limited to, bloodborne pathogens, COVID 19, and other potentially infectious materials	If you have any concerns regarding the pump you're working on, request a hazard assessment from campus EH&S. If it's an urgent request, call 510-642-3073 during business hours and UCPD after business hours. Wear appropriate PPE. Tyvek suit, nitrile or rubber gloves, eye protection with face shield if there's a splash hazard, and N95
		Musculoskeletal injuries	Use proper lifting techniques and body mechanics. Two people lifting above 50 pounds if possible. Stretch and flex before and throughout shift. Take breaks if necessary
		Pinch points, nip points, impact, penetration,	Wear appropriate gloves and safety toed work

		puncture points, lacerations	boots Watch hand placement and surroundings Maintain communication with affected employees Use the right tools for the job
		Chemical exposure from use of disinfectant	Hazard communication and training on disinfectant Wear gloves Use a fan to circulate air if necessary Open windows if possible
	8. Install new pump, remove equipment, reconnect wires, refill water, re-energize, and test the pump.	Musculoskeletal injuries	Use proper lifting techniques and body mechanics. Two people lifting above 50 pounds if possible. Stretch and flex before and throughout shift. Take breaks if necessary
		Electrical hazard	Consult LOTO SME for possible guidance

Required Training:		**Personal Protective Equipment (PPE)**	
Hazard Communication (GHS)	Lock Out/Tag Out	Nitrile/Rubber Gloves	Safety Toed Boots
Confined Space	4 Gas Meter	Eye Protection	Hard Hat or Bump Cap as necessary
Personal Protective Equipment	Respiratory Protection Program	Tyvek Suit	N95
		Hearing Protection	Face Shield for splash hazard

Other Information:

Contributors:
Jeremy Lang – Lead Electrician
Todd Stires – Lead Electrician
Jerry Robinson – Lead Machinist
Michael Robertson – Lead Plumber
Hoanhni Nguyen – Facilities Safety Specialist
Soheila Khaligh – Safety Engineer Program Specialist
Priya Shah – Safety Specialist

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For more information about this JSA, contact the Department Safety Coordinator.