



## Job Hazard Analysis

University of Washington – Seattle Campus  
 Facilities Services – Campus Engineering & Operations  
 Seattle, WA 98195

Working Job Title: Power Plant Control Technician / Lead

JHA Completed by Assistant Director of Campus Utilities

Date: 4/27/22

The Job Hazard Analysis form is designed to help supervisors assess and address health and safety hazards that have the potential to cause serious injury or illness (e.g. power tools, electrical repairs). Supervisors can use this document to train staff on safe work procedures.

The information below is a good faith effort to identify hazards encountered by Power Plant Control Technician / Lead. If a specific job task is not listed below, contact your supervisor to determine if a specific job hazard analysis or work plan is required.

The baseline training requirements for this position are:

- Driver Safety and Awareness Online
- Fire Extinguisher Hands On
- First aid & CPR
- Hepatitis B Vaccination (must be offered)
- Monthly shop safety meetings on PPE, shop safety standard operating procedures and SDS
- Ergonomic Online training (optional)
- Fire Extinguisher Online
- HazCom/GHS
- Bloodborne Pathogens for Non-Lab Online
- Covid-19 Safety Training: Back to the Workplace

This document will serve as the certification of hazard assessment for personal protective equipment for the above working job title position.

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Driving vehicles	<ul style="list-style-type: none"> <li>• Bodily injury</li> </ul>	<ul style="list-style-type: none"> <li>• Daily pre-trip vehicle inspection</li> <li>• Follow all traffic rules</li> <li>• Maintain current driver’s license</li> <li>• Report problems with state vehicles</li> </ul>	<p><b>Task Specific Training</b></p> <ul style="list-style-type: none"> <li>• Driver Safety and Awareness</li> <li>• Monthly shop safety meetings on PPE</li> <li>• Seatbelt use policy</li> </ul> <p><b>PPE</b></p> <ul style="list-style-type: none"> <li>• Seatbelt</li> </ul>

Job Task	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Computer work	<ul style="list-style-type: none"> <li>• Eye strain</li> <li>• Ergonomic problems such as carpal tunnel and back problems</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate lighting</li> <li>• Request on Ergonomic evaluation from EH&amp;S</li> <li>• Review ergonomic info on EH&amp;S website</li> <li>• Take frequent breaks/stretch/move</li> </ul>	<p><b>Task Specific Training</b></p> <ul style="list-style-type: none"> <li>• Ergonomic Online training (optional)</li> </ul> <p><b>PPE</b></p> <ul style="list-style-type: none"> <li>• None</li> </ul>
General use of hand and power tools such as multi-meters, screwdrivers, wrenches, wire strippers	<ul style="list-style-type: none"> <li>• Bodily injury</li> </ul>	<ul style="list-style-type: none"> <li>• Follow industry safety standards for operating power/hand tools</li> <li>• Location of exits</li> <li>• Location of fire extinguisher</li> <li>• Location of first aid kit</li> <li>• Safety Data Sheets (SDS) for chemical and products</li> </ul>	<p><b>Task Specific Training</b></p> <ul style="list-style-type: none"> <li>• Monthly shop safety meetings on PPE and SDS</li> </ul> <p><b>PPE</b></p> <ul style="list-style-type: none"> <li>• Gloves (as needed)</li> <li>• Hearing protection (as needed)</li> <li>• Impact glasses (as needed)</li> <li>• Substantial footwear</li> </ul>
Maintain inventory supplies	<ul style="list-style-type: none"> <li>• Ergonomic problems such as carpal tunnel and back problems</li> <li>• Work off ladders</li> </ul>	<ul style="list-style-type: none"> <li>• Get help or use lifting tools for items exceeding 50 pounds or is an awkward shape</li> <li>• Request an ergonomic evaluation from EH&amp;S</li> <li>• Set-up work station using ergonomic principles</li> <li>• Take frequent breaks/stretch</li> <li>• Use hand cart</li> </ul>	<p><b>Task Specific Training</b></p> <ul style="list-style-type: none"> <li>• Back protection &amp; Lifting Safety Online</li> <li>• Ergonomic Online training (optional)</li> <li>• Ladder Safety Hands On</li> <li>• Ladder Safety Online</li> <li>• Monthly shop safety meetings on PPE</li> </ul> <p><b>PPE</b></p> <ul style="list-style-type: none"> <li>• Dusk mask (as needed)</li> <li>• Safety glasses (as needed)</li> <li>• Substantial footwear</li> </ul>
Cell phone usage	<ul style="list-style-type: none"> <li>• Inattention leading to bodily injury</li> </ul>	<ul style="list-style-type: none"> <li>• Be aware of your surroundings</li> <li>• Don't drive and talk unless utilizing a 'hands-free' device</li> </ul>	<p><b>Task Specific Training</b></p> <ul style="list-style-type: none"> <li>• Driver Safety and Awareness</li> </ul> <p><b>PPE</b></p> <ul style="list-style-type: none"> <li>• None</li> </ul>

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>Install, troubleshoot, repair, test, calibrate Power Plant equipment (such as transmitters, valves, analyzers, meters)</p>	<ul style="list-style-type: none"> <li>• Airborne contaminants (such as odors, ozone, fume, refrigerant leak)</li> <li>• Biological hazards (such as sanitary sewer meters, cooling tower –legionella, blood)</li> <li>• Compressed gasses (such as heat-shrink gun fuel, calibration)</li> <li>• Confined spaces (such as crawl space, cooling towers, vault, tank)</li> <li>• Electrically energized equipment</li> <li>• Ergonomic problems such as lifting, repetitive motion, awkward posture</li> <li>• Fall hazard</li> <li>• Hazardous chemicals (such as solvents, degreasers, ozone)</li> <li>• Hazardous energy (mechanical, heat, pressure (gas or liquid lines))</li> <li>• Heat stress</li> <li>• Insufficient lighting</li> <li>• Material Handling (ie, hoisting/rigging)</li> <li>• Noise</li> <li>• Overhead equipment / hazards</li> <li>• Power/Hand tools</li> <li>• Regulated materials such as asbestos, lead, silica</li> <li>• Slip/trip/fall</li> <li>• Scaffolding</li> <li>• Vermin feces (such as bird or rodent)</li> <li>• Work off / use of ladders</li> </ul>	<ul style="list-style-type: none"> <li>• Aerial lift</li> <li>• Avoid energized electrical work when possible</li> <li>• Check-in with the control room prior to work</li> <li>• Confined space permit (if applicable)</li> <li>• Cooling tower work practice (if applicable)</li> <li>• Energized electrical work permit &amp; work plan (if applicable)</li> <li>• Ensure work area is clear from spills and trip hazards</li> <li>• Fall protection work plan (if applicable)</li> <li>• Follow industry safety standards for operating power/hand tools</li> <li>• 4-gas monitor (ie Bacharach)</li> <li>• Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape</li> <li>• Hot Work Permit</li> <li>• If hot, drink water and take necessary rest breaks</li> <li>• Lockout procedure. LOTO locks &amp; tags</li> <li>• Location of exits</li> <li>• Location of fire extinguisher</li> <li>• Location of first aid kit</li> <li>• Pest Contractor – as needed</li> <li>• Refrigerant leak SOP (operated by EEOP lead)</li> <li>• Safety Data Sheets (SDS) for chemical and products</li> <li>• Shop safety standard operating procedures</li> <li>• This job position does not typically perform work on regulated building materials</li> <li>• Tool tethering and toe boards</li> <li>• Use temporary lighting (such as flashlights, head lamps)</li> <li>• Understand and implement regulatory practices / standards for operating a hoist</li> <li>• Water treatment plan</li> </ul>	<p><b>Task Specific Training</b></p> <ul style="list-style-type: none"> <li>• Asbestos Awareness</li> <li>• Audiometric Hearing Test</li> <li>• Back protection &amp; Lifting Safety Online</li> <li>• Compressed Gas Safety Online</li> <li>• Confined Space Awareness Online</li> <li>• Confined Space Entry /Hands On</li> <li>• Electrical: Arc Flash Awareness Online (optional)</li> <li>• Fall Protection</li> <li>• Hoisting and Rigging</li> <li>• Hearing Protection/Conservation Online</li> <li>• Ladder Safety Hands On</li> <li>• Ladder Safety Online</li> <li>• Lead Awareness Online</li> <li>• Lockout/Tagout Safety</li> <li>• MWP training with scissor &amp; aerial evaluation</li> <li>• NFPA 70E Arc Flash/Electrical Safety</li> <li>• Refrigerant Monitoring</li> <li>• Scaffold Safety</li> <li>• Supv LOTO Field Evaluation</li> </ul> <p><b>PPE (as required unless noted as needed)</b></p> <ul style="list-style-type: none"> <li>• Arc Flash rated clothing: Tyvek coveralls, gloves, hard hat, head cover, impact glasses/goggles, substantial <u>leather</u> footwear- per NFPA 70E</li> <li>• Chemical: goggles, splash shield, gloves</li> <li>• Dust mask -as needed</li> <li>• Electrically rated tools</li> <li>• Gloves</li> <li>• Hard hat</li> <li>• Head light / Flashlight / temporary lighting</li> <li>• Hearing protection - as needed</li> <li>• Impact glasses/goggles – as needed</li> <li>• Personal fall restraint/arrest equipment</li> <li>• Safety vest</li> <li>• Steel toe footwear</li> <li>• Substantial footwear</li> </ul>

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>Install, troubleshoot, repair, test, calibrate Power Plant equipment (such as transmitters, valves, analyzers) on a construction site</p>	<ul style="list-style-type: none"> <li>• Airborne contaminants (such as odors, fume, refrigerant leak)</li> <li>• Biological hazards (such as blood)</li> <li>• Confined spaces (such as crawl space, vault)</li> <li>• Construction Activities</li> <li>• Fall Hazard</li> <li>• Electrically energized equipment</li> <li>• Ergonomic problems such as lifting, repetitive motion, awkward posture</li> <li>• Hazardous chemicals (such as solvents, degreasers)</li> <li>• Hazardous energy (mechanical, heat, pressure (gas or liquid lines))</li> <li>• Heat stress</li> <li>• Insufficient lighting</li> <li>• Noise</li> <li>• Overhead equipment / hazards</li> <li>• Power/Hand tools</li> <li>• Regulated materials such as asbestos, lead, silica</li> <li>• Slip/trip/fall</li> <li>• Vehicle traffic</li> <li>• Work off / use of ladders</li> </ul>	<ul style="list-style-type: none"> <li>• Aerial lift</li> <li>• Avoid energized electrical work when possible</li> <li>• Check-in with the construction contact person</li> <li>• Confined space permit (if applicable)</li> <li>• Energized electrical work permit &amp; work plan (if applicable)</li> <li>• Ensure work area is clear from spills and trip hazards</li> <li>• 4-gas monitor (ie Bacharach)</li> <li>• Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape</li> <li>• If hot, drink water and take necessary rest breaks</li> <li>• Lockout procedure, LOTO locks &amp; tags</li> <li>• Location of exits</li> <li>• Location of fire extinguisher</li> <li>• Location of first aid kit</li> <li>• Refrigerant leak SOP (operated by PPOE lead)</li> <li>• Safety Data Sheets (SDS) for chemical and products</li> <li>• This job position does not typically perform work on regulated building materials</li> <li>• Understand and implement industry safety standards for operating power/hand tools</li> <li>• Use temporary lighting (such as flashlights, head lamps)</li> </ul>	<p><b>Task Specific Training</b></p> <ul style="list-style-type: none"> <li>• Asbestos Awareness</li> <li>• Audiometric Hearing Test</li> <li>• Back protection &amp; Lifting Safety Online</li> <li>• Confined Space Awareness Online</li> <li>• Confined Space Entry /Hands On</li> <li>• Fall Protection</li> <li>• Hearing Protection/Conservation Online</li> <li>• Ladder Safety Hands On</li> <li>• Ladder Safety Online</li> <li>• Lead Awareness Online</li> <li>• Lockout/Tagout Safety</li> <li>• MEWP training with boom, scissor &amp; aerial evaluation</li> <li>• NFPA 70E Arc Flash/Electrical Safety</li> <li>• Refrigerant Monitoring</li> <li>• Supv LOTO Field Evaluation</li> </ul> <p><b>PPE (as required unless noted as needed)</b></p> <ul style="list-style-type: none"> <li>• Arc Flash rated: clothing, Tyvek coveralls, gloves, hard hat, head cover, impact glasses/goggles, substantial <u>leather</u> footwear-per NFPA 70E</li> <li>• Chemical: goggles, splash shield, gloves</li> <li>• Construction – hard hat, impact glasses/goggles, safety vest, gloves, substantial footwear</li> <li>• Dust mask -as needed</li> <li>• Electrically rated tools</li> <li>• Head light / Flashlight / temporary lighting</li> <li>• Hearing protection - as needed</li> <li>• Personal fall restraint/arrest equipment</li> <li>• Steel toe footwear</li> <li>• Substantial footwear</li> <li>• Any other PPE as specified by the construction site</li> </ul>