

Job Hazard Analysis



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

Working Job Title: Maintenance Mechanic 1 & 2 – Shop 69

JHA Completed by Guarrin Sakagawa – Shop 69 Manager

Date: August 2022

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 Maintenance Mechanic 2 – Shop 69. 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, 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"> Bodily injury 	<ul style="list-style-type: none"> Maintain current driver’s license Follow all traffic rules Report problems with state vehicles Daily pre-trip vehicle inspection 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Driver Safety and Awareness Seatbelt use policy Monthly shop safety meetings on PPE <p>PPE</p> <ul style="list-style-type: none"> Seatbelt
Computer work	<ul style="list-style-type: none"> Ergonomic problems: carpal tunnel and back problems Eye strain 	<ul style="list-style-type: none"> Adequate lighting Take frequent breaks/stretch/move Review ergonomic info on EH&S website Request on Ergonomic evaluation from EH&S 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Ergonomic online training (optional) <p>PPE</p> <ul style="list-style-type: none"> None
General use of hand and power tools such as multi-meters, screwdrivers, wrenches, wire strippers	<ul style="list-style-type: none"> Bodily injury 	<ul style="list-style-type: none"> Follow industry safety standards for operating power/hand tools Location of first aid kit Location of fire extinguisher Location of exits 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Monthly shop safety meetings on PPE <p>PPE</p> <ul style="list-style-type: none"> Hearing protection –as needed Substantial footwear Impact glasses -as needed Gloves -as needed
Maintain inventory supplies	<ul style="list-style-type: none"> Ergonomic problems: carpal tunnel and back problems Work at elevated heights 	<ul style="list-style-type: none"> Get help or use lifting tools for items exceeding 50 pounds or is an awkward shape Request on Ergonomic evaluation from EH&S Take frequent breaks/stretch/move Use ergonomic keyboard 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Back protection Ladder safety <p>PPE</p> <ul style="list-style-type: none"> None
Cell phone usage	<ul style="list-style-type: none"> Inattention leading to bodily injury 	<ul style="list-style-type: none"> Be aware of your surroundings Don’t drive and talk unless utilizing a ‘hands-free’ device 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Driver Safety and Awareness <p>PPE</p> <ul style="list-style-type: none"> None

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<p>Perform preventative maintenance and repairs on all types of mechanical HVAC equipment such as valves, actuators, drive belts, sprockets, shafts and bearings, or change / clean filters, to ensure proper operation on equipment when working on exposed equipment that is >50v in construction areas.</p>	<ul style="list-style-type: none"> • Airborne contaminants (such as occupant concerns, odors, mold, vapor, fume, animal dandruff, refrigerant leak) • Confined spaces (such as crawl space, ceiling plenums, cooling towers) • Construction Activities • Electrically energized equipment • Ergonomic problems such as lifting, repetitive motion, awkward posture • Fall hazard • Hazardous chemicals (such as chemicals in hydronic systems, solvents, degreasers) • Hazardous energy (mechanical, heat, pressure (gas or liquid lines)) • Heat stress • Insufficient lighting • Noise • Overhead equipment/hazards • Power/Hand tools • Regulated materials such as asbestos, lead, silica • Slip/trip/fall • Scaffolding • Vermin feces (such as bird or rodent) • Work off/use of ladder ladders 	<ul style="list-style-type: none"> • Asbestos work plan (if applicable) • Avoid energized electrical work when possible • Building system shutdown • Check-in with the department / construction contact person prior to work • Confined space permit (if applicable) • Energized electrical work permit & work plan (if applicable) • Ensure work area is clear from spills and trip hazards • Fall protection work plan (if applicable) • If hot, drink water and take necessary rest breaks • Lead work plan (if applicable) • Lift (scissor, boom, bucket) • Lockout procedure, LOTO locks & tags • Location of exits • Location of fire extinguisher • Location of first aid kit • Pest Contractor – as needed • Refrigerant leak SOP (if applicable) • Safety Data Sheets (SDS) for chemical and products • Shop safety standard operating procedures • Tool tethering and toe boards • Understand and implement industry safety standards for operating power/hand tools • Understand and implement safe practices for lifting items exceeding 50 pounds, or is an awkward shape • Use temporary lighting (such as flashlights, head lamps) • Water treatment plan • Cooling tower work practice (if applicable) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> • Asbestos <1% & Lead Work Practices • Audiometric Hearing Test • Back protection & Lifting Safety Online • Confined Space Entry /Hands On • Department specific training • Fall Protection • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lockout/Tagout Safety • MEWP training with boom, scissor & aerial evaluation • NFPA 70E Arc Flash/Electrical Safety • Refrigerant Monitoring • Respirator training & Fit Test • Scaffold Safety • Supv LOTO Field Evaluation <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> • Arc Flash rated: clothing, Tyvek coveralls, gloves, hard hat, head cover, impact glasses/goggles, electrical hazard footwear • Construction – hard hat, impact glasses/goggles, safety vest, gloves, substantial footwear – as required • Dust mask -as needed • Electrically rated tools • Head light / Flashlight / temporary lighting • Hearing protection - as needed • Personal fall restraint/arrest equipment • Respirator • Any other PPE as specified by the department / construction site / lab entry sign/ site specific work plan

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Entrance into T Wing shafts to perform work.	<ul style="list-style-type: none"> Airborne contaminants (such as chemicals, odors, mold, vapor) Confined spaces Ergonomic problems such as lifting, repetitive motion, awkward posture Fall hazard Hazardous chemicals (such as formaldehyde from subducts) Hazardous energy (mechanical, pressure (air pressure lines)) Insufficient lighting Noise Overhead equipment/hazards Pedestrian traffic Power/Hand tools Regulated materials such as asbestos, lead, silica Slip/trip/fall 	<ul style="list-style-type: none"> Barricades/signs/spotter (if applicable) Confined space permit – (if applicable) Ensure work area is clear from spills and trip hazards Ergonomics – knee pads, grab bars, folding step *EH&S to prove air monitoring/assessment Fall protection work plan (if applicable) Location of exits Location of fire extinguisher Location of first aid kit Safety Data Sheets (SDS) for chemical and products Shop safety standard operating procedures This job position does not typically perform work on regulated building materials Understand and implement industry safety standards for operating power/hand tools Understand and implement safe practices for lifting items exceeding 50 pounds, or is an awkward shape Use temporary lighting (such as flashlights, head lamps) <p>* Interim (during EH&S assessment)</p>	<p>Task Specific Training</p> <ul style="list-style-type: none"> Asbestos <1% & Lead Work Practices Audiometric Hearing Test Back protection & Lifting Safety Online Confined Space Entry /Hands On Fall Protection Hearing Protection/Conservation Online Ladder Safety Hands On Ladder Safety Online Respirator training & Fit Test <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> Dust mask -as needed Ergonomics (knee pads) – as needed Gloves - as needed Head light / Flashlight / temporary lighting – as needed Hearing protection - as needed Impact glasses/goggles – as needed Personal fall restraint/arrest equipment – as needed Respirator (multi-gas cartridge) Substantial footwear Any other PPE as specified by the department / construction site / lab entry sign/ site specific work plan

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Clean screens on hydronic systems	<ul style="list-style-type: none"> Airborne contaminants (such as animal dandruff, refrigerant leak) Confined spaces (such as ceiling plenums) Ergonomic problems such as lifting, repetitive motion, awkward posture Fall hazard Hazardous chemicals (such as chemicals in hydronic system) Hazardous energy (mechanical, heat, pressure (liquid lines)) Insufficient lighting Noise Overhead equipment/hazards Pedestrian traffic Power/Hand tools Regulated materials such as asbestos Slip/trip/fall Scaffolding Vermin feces (such as bird or rodent) Work off/use of ladder ladders 	<ul style="list-style-type: none"> Asbestos work plan (if applicable) Avoid energized electrical work when possible Barricades/signs (if applicable) Check-in with the department prior to work Confined space permit (if applicable) Ensure work area is clear from spills and trip hazards Fall protection work plan (if applicable) Lift (scissor) Location of exits Location of fire extinguisher Location of first aid kit Pest Contractor – as needed Refrigerant leak SOP (if applicable) Safety Data Sheets (SDS) for chemical and products Shop safety standard operating procedures Tool tethering and toe boards Understand and implement industry safety standards for operating power/hand tools Understand and implement safe practices for lifting items exceeding 50 pounds, or is an awkward shape Use temporary lighting (such as flashlights, head lamps) Water treatment plan 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Asbestos <1% & Lead Work Practices Audiometric Hearing Test Back protection & Lifting Safety Online Biosafety: Working in Non-Human Primate Areas Confined Space Entry /Hands On Department specific training Fall Protection Hearing Protection/Conservation Online Ladder Safety Hands On Ladder Safety Online MEWP training with scissor & aerial evaluation Refrigerant Monitoring Respirator training & Fit Test Scaffold Safety <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> Animal Areas: head cover, shoe covers, gloves, coveralls, face shield Bump cap -as needed Dust mask -as needed Gloves Head light / Flashlight / temporary lighting Hearing protection - as needed Impact glasses/goggles Personal fall restraint/arrest equipment Respirator Substantial footwear Tyvek / Shop coveralls – as needed Any other PPE as specified by the department / construction site / lab entry sign/ site specific work plan