**Appendix A**

***Last updated on July 29, 2015.***

**PPE Hazard Assessment Certification for Common Tasks and Work Areas**

***IMPORTANT NOTES:***

***1) Penn State University’s EHS Department certifies this document as a PPE hazard assessment.***

***2) More stringent PPE requirements may be imposed by EHS, Supervisors, or Safety Officers.***

***3) Contact EHS in order to have work tasks added to this document.***

**GENERAL PPE RULES**:

1) Basic rules for clothing:

a) Loose clothing must not be worn when entanglement hazards exist.

b) Shorts and open-toed shoes are not permitted in machine/maintenance shops.

2) Basic rules for hearing protection:

a) Hearing protection must be worn when using the following:

i. Gas powered equipment such as mowers, chain saws, concrete saws, leaf blowers, vacuums, weed trimmers, etc.

ii. Hilti-guns

iii. Electric concrete hammer/impact drills, jack hammers, etc.

iv. Pneumatic equipment (jack hammers, air guns, etc)

v. Skid loaders, tractors, feed grinders, etc.

b) Hearing protection must be worn when in areas where it is difficult to hear or understand a “normal” tone of voice or conversation at a distance of about three feet. This is an indication that noise levels are probably exceeding safe exposure levels.

3) Basic rules for respirators:

a) Must be worn when required in Appendix B of the PSU Respiratory Protection Program, [Respiratory Protection Program Manual.pdf](http://www.ehs.psu.edu/occhealth/Respiratory_Protection_Program_Manual.pdf).

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| **Task(s) / Area(s)** | **Potential Hazard(s)** | **PPE Required** |
| **Grounds Tasks** | | |
| Backpack Blower Operation | Flying particles, Noise, motor vehicle | Safety glasses  Hearing protection |
| Chainsaw Use | Flying particles, falling objects, cuts, noise, contact with motor vehicle | Hardhat  Safety glasses  Hearing protection  Face shield  Work gloves  Cut resistant leg protection  Safety shoes |
| Chipper Operation | Flying particles, noise, entanglement, cuts, falling objects, motor vehicle | Hardhat  Safety glasses  Hearing protection  Work gloves  Safety shoes |
| Cutting Hedges | Flying particles, noise, cuts, motor vehicle | Safety glasses  Hearing protection when using power tools  Work gloves  Work shoes |
| Dig holes, trenches, etc. | Flying particles, falling objects, noise, cuts, motor vehicle | Hard hat if heavy equipment used or in trench  Hearing protection if powered equipment is used  Safety glasses  Work gloves  Safety shoes |
| Fertilizer application (solid and liquid) | Chemical splash, flying particles, noise, inhalation | Safety glasses(solids)  Goggles(liquids)  Hearing protection if powered equipment  Respiratory protection based on label/SDS  Chemical resistant gloves  Long sleeve shirt/pants |
| Install remove snow blades, mover deck, etc. | Cuts, falling objects | Safety glasses  Work gloves  Safety shoes |
| Lawn Mowing- Riding | Flying particles, noise | Safety glasses  Hearing protection  Work shoes |
| Lawn Mowing- Walk Behind | Flying particles, noise | Safety glasses  Hearing protection  Work shoes |
| Load/unload trucks | Cuts, falling objects | Work Gloves  Safety shoes |
| Mulching | Cuts, falling objects | Work gloves  Work shoes |

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| **Task(s) / Area(s)** | | **Potential Hazard(s)** | | **PPE Required** |
| Operate loaders/backhoes/power equipment | | Flying particles, falling objects | | Hard hat (if not in cab)  Hearing protection  Safety glasses  Safety shoes |
| Operating Z-Track/Gators | | Noise | | Work shoe  Hearing protection (depending on noise level of the vehicle) |
| Pesticide Applicators | | Chemical splash, flying particles, noise, inhalation | | Refer to container label for PPE requirements |
| Planting Trees | | Cuts, falling objects | | Hardhat if large trees  Work gloves  Work shoes |
| Rake/remove leaves | | Cuts | | Work gloves  Work shoes |
| Salting Walks | | Flying particles, slip, skin irritation | | Safety glasses  Work shoes |
| Shoveling Snow | | Slip | | Work gloves  Work shoes |
| Snow Blower Operation | | Flying particles, slip | | Safety glasses  Hearing protection  Work gloves  Work shoes |
| Tree trimming/climbing with non-power tools | | Eye hazard, falling object, bump hazard, cuts, fall | | Hard hat  Safety glasses  Face shield if climbing tree  Hearing protection if using power tool  Work gloves  Work shoes |
| Weed trimming- String/Blade | | Flying particles, noise | | Safety glasses  Hearing protection  Long pants  Work shoe |
| **Janitorial Tasks** | | | | |
| Clean bathrooms | | Chemical contact, potentially infectious materials | | Safety glasses as label/SDS recommends  Chemical/liquid resistant glove |
| Dump trash | | Cuts | | Work gloves |
| Floor care- stripping/waxing | | Chemical contact, flying particles | | Safety glasses  Chemical resistant gloves as label/SDS recommends |
| Floor mopping | | Chemicals contact | | Safety glasses  Chemical resistant gloves as label/SDS recommends |
| Mix concentrates | Chemical contact | | Safety glasses  Chemical resistant gloves as label/SDS recommends | |
| **Task(s) / Area(s)** | **Potential Hazard(s)** | | **PPE Required** | |
| Move furniture and equipment | Falling objects, cuts | | Work gloves recommended  Safety/work shoes | |
| Operate scrubbing, buffing, shampooing equipment | Contact hazard | | Work gloves recommended  Work shoes | |
| Remove and replace light bulbs | Eye hazard | | Safety glasses | |
| Shovel snow | Slip | | Work gloves  Work shoes | |
| Spread salt | Slip | | Safety glasses  Work glove  Work shoe | |
| Wash and clean windows, mirrors, walls, chalkboards, ceilings, blinds, light fixtures | Chemical contact | | Safety glasses  Chemical resistant gloves as label/SDS recommends | |
| Wash and polish furniture, etc. | Chemical contact | | Safety glasses  Chemical resistant gloves as label/SDS recommends | |
| **Athletic Facilities Tasks** | | | | |
| Check/add chemicals to pool | Chemical contact | | Safety glasses/goggles as label/SDS recommends  Chemical resistant gloves as label/SDS recommends | |
| Set up, tear down indoor and outdoor equipment | Falling object, cut | | Gloves recommended  Safety shoes | |
| Athletic field painting | Chemical contact | | Safety glasses | |
| Laundry – (towels, uniforms) | Chemical contact | | Safety glasses or goggles Chemical resistant gloves (when working in areas where chemicals are dispensed according to label/SDS) | |
| **Carpentry Tasks** | | | | |
| Shop work – fixed and portable power tools (saws, drills, grinders, sanders, nailers, etc.) | Flying particles, noise, airborne dust, heavy objects | | Safety glasses  Safety shoes | |
| Field work – portable power tools (saws, drills, grinders, sanders, nailers, etc.) | Flying particles, noise, airborne dust, heavy objects | | Hardhat if overhead hazard exist  Safety glasses  Safety shoes | |
| Roof Repair | Working at height, flying particles, noise, airborne dust, heavy objects | | Hardhat  Safety glasses  Fall harness, See PSU Fall Protection Policy  Safety shoes | |

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| **Task(s) / Area(s)** | **Potential Hazard(s)** | **PPE Required** |
| Installing insulation (sound / thermal) – fiberglass, rigid, etc. | Airborne dust | Safety glasses/goggles body cover (tyvek, etc) |
| Drywall installation | Flying particles, heavy objects | Safety glasses  Safety shoes |
| Paint / Coatings / Caulking applications (water, oil, and epoxy based) | Chemical contact | safety glasses |
| Glass cutting | Cuts, flying particles | Safety glasses  Cut resistant gloves  Work shoe |
| Ceiling tile installation (grid and adhesive) | Flying particles | Safety glasses or goggles |
| **Plumbing Tasks** | | |
| Cut, thread, bend, join metal pipe | Cut, flying objects | Safety glasses  Work gloves  Safety shoe |
| Cut and join plastic pipe | Cut, flying objects | Safety glasses  Work gloves  Work shoe |
| Clear blocked drain lines (chemical, power snakes, plungers) | Splash, cut | safety glasses  Work gloves (using power tools)  Chemical resistant gloves (using chemicals) |
| **Electrical Tasks** | | |
| Electrical circuit work – testing; troubleshooting; ballast, switch, receptacle replacement, etc. | Shock, noise, light, shrapnel, fire | See PSU Energized Electrical procedure, [Energized Electrical Safety Program.pdf](http://www.ehs.psu.edu/occhealth/PSU_Energized_Electrical_Safety_Program.pdf) |
| Electronics repair / maintenance | Shock, flying particles | Safety glasses  (see PSU Energized Electrical procedure, [Energized Electrical Safety Program.pdf](http://www.ehs.psu.edu/occhealth/PSU_Energized_Electrical_Safety_Program.pdf) ) |

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| **Task(s) / Area(s)** | **Potential Hazard(s)** | **PPE Required** |
| **Heating, Ventilation, Air Conditioning (HVAC) Tasks** | | |
| Clean / replace filters (HVAC systems) | Cut | Safety glasses  Work gloves |
| Boiler / Water Treatment chemical handling | Chemical contact | safety glasses/goggles/face shield/chemical resistant gloves  (as recommended by label/SDS) |
| Water softening systems – back-flushing, adding salt | Chemical contact | Safety glasses |
| Refrigerant gases handling | Chemical contact | Safety glasses |
| **Motor vehicle repair / maintenance Tasks** | | |
| Soldering, filing, grinding, sanding | Flying particles, cuts | Safety glasses or goggles Work gloves  Work shoes |
| Welding | Burns, eye damage, electrical shock, cuts, and falling objects, respiratory | Welding hood with proper shading  Welding clothing  Work gloves  Safety shoes |
| Sheet metal work | Cuts, falling object, flying particles | Safety glasses  Cut resistant glove  Safety shoes |
| Tire balancing | Falling object, abrasion | Safety glasses  Safety shoes |
| Small engine repair / maintenance | Chemical release/contact, flying particles | Safety glasses |
| Vehicle body work (apply fillers, grind, sand, file, prime, paint, buff) | Flying particles, cut | safety glasses or goggles  Work gloves  Respirator may be required |
| **Painting Tasks** | | |
| Paint scraping, cleaning, sanding | Flying particles, respiratory hazard (Lead, Cadmium, Chromium, dust) | Safety glasses or goggles respirator as required |
| Priming / Painting | Flying particles, respiratory hazard | Safety glasses or goggles, respirator may be required |

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| **Task(s) / Area(s)** | **Potential Hazard(s)** | **PPE Required** |
| **Miscellaneous Tasks** | | |
| Cleaning with compressed air (less than 30 psi) | Flying particles | Safety glasses |
| Sign engraving (laminated plastic) | Flying particles | Safety glasses |
| Cut keys | Flying particles | Safety glasses |
| Snow removal (emergencies) – shoveling, plowing, blowing, etc. | Slip/fall, cut | Safety glasses  Hearing protection (blower)  Work gloves, work shoes |
| Working on/near roadway   * (i.e. landscaping tasks, utility work tasks, construction tasks, water services tasks, steam services tasks, janitorial tasks, etc) | Contact with motor vehicle | Reflective vest (minimum ANSI Class 2) |
| Airport baggage handlers | Contact with motor vehicle | Reflective vest (minimum ANSI Class 2) |
| Directing parking (outside a booth) | Contact with motor vehicle | Reflective vest (minimum ANSI Class 2) |
| Directing traffic | Contact with motor vehicle | Reflective vest (minimum ANSI Class 2) |
| Material handling (equipment, furniture, material receipts) | Cuts, falling objects | Work gloves  Work shoe or Safety shoe |
| Working in shops (metal, wood or maintenance shop) | Flying particles, falling objects, noise | Safety glasses  Hearing protection (as needed)  Safety shoe |
| Pouring, mixing, dispensing, and disposal of hazardous materials | Splash, chemical contact | Eye protection  Face protection  Hand protection  Body protection  (as recommended by label/SDS) |
| Transporting empty or full chemical cylinders | Falling object | Safety shoes |
| Installing or removing compressed gases | Chemical release | Safety glasses or goggles |
| Operating aerial lift, boom lift or bucket truck | Crush hazard, contact with objects, fall | Hardhat  Safety glasses or goggles if transporting chemicals  Safety shoes  Harness |
| Operating forklift/powered hand truck | Crush hazard, chemical contact | Safety glasses or goggles if transporting chemicals  Safety shoes |
| **Task(s) / Area(s)** | **Potential Hazard(s)** | **PPE Required** |
| Operating scissor lift | Crush hazard, contact with objects, fall | Hardhat  Safety shoes  Harness if anchor point is available on scissor lift |
| Refueling Forklift, aerial lift, scissor lift or other types of powered industrial trucks | Crush hazard, chemical contact | Safety glasses or goggles  Work gloves  Safety shoes |
| Filling batteries with distilled water (Forklift, aerial lift, scissor lift or other types of powered industrial trucks) | Chemical contact | Safety glasses  Face shield  Chemical resistant apron  Chemical resistant gloves  Work shoes |
| Cutting, Welding and Brazing | Burns, flying particles, falling objects, cuts | Welding hood with proper shading  Welding clothing  Thermal/work gloves  Safety shoes  Respiratory protection (as needed) |
| Laser Equipment – operation and maintenance | Skin and eye damage | PPE requirements are different for each laser depending on the wavelength and power output. (See PSU Laser safety program) |
| Work at height (roof, scaffolds) | Fall | See PSU Fall protection program  See PSU Scaffold program |
| Blacksmithing | Cuts, falling object, thermal burns, flying particles | Safety glasses or goggles  Thermal/work gloves  Safety shoes |
| Check compressed gas/air systems | Chemical contact | Safety glasses  Work gloves |
| Check cryogenic systems | Chemical contact | Safety glasses  Cryogenic/work glove |
| Operating machinery within a completely enclosed cab. | None | As soon as employee exits the piece of machinery PPE may be required. Perform a Hazard Assessment. |