LAFAYETTE COLLEGE

Personal Protective Equipment Program

Public Safety Department
Environmental, Health and Safety (EHS) Division
Standard Operating Procedure (SOP) #27

Introduction

Lafayette College policy is to maintain a safe and healthy work environment. Directors and supervisors are responsible for the establishment and maintenance of good health and safety practices. The objective of the Personal Protective Equipment Program is to protect employees from risk of injury or death by creating a barrier against workplace hazards.

Personal protective equipment is not a substitute for good engineering or administrative controls or good work practices, but should be used in conjunction with these controls to ensure the safety and health of employees. This program addresses eye, face, head, foot, and hand protection. Separate programs exist for respiratory and hearing protection.

The Occupational Safety and Health Administration (OSHA) standard 29 CFR 1910.132 requires that employers perform a hazard assessment of the workplace to determine the nature of the hazards and ensure that appropriate personal protective equipment (PPE) is available to employees. The standards require that employees be trained in the proper use, care and limitations of PPE.

Responsibilities

Department Heads

Department Heads will hold appropriate supervisors accountable for their responsibilities of this program.

Supervisors

Supervisors have the primary responsibility for implementation of the PPE Program in their work area and are responsible for the following:

- Conduct workplace hazard assessments using our “Certification of Hazard Assessment and Personal Protective Equipment Evaluation” form (Appendix I) to determine the presence of hazards which necessitate the use of PPE.
- Provide and make available appropriate PPE to employees.
- Ensure employees are trained on the proper use, care, and cleaning of PPE (refer to section IV Training).
- Maintain records on PPE assignments and training.
- Supervise staff to ensure that the PPE Program elements are followed and that employees properly use and care for PPE.
- Seek assistance from Environmental, Health and Safety (EHS) to evaluate hazards.
- Complete these tasks whenever new hazards are introduced or when processes are added or changed.

Employees

The PPE user is responsible for the following requirements of the PPE program:

- Wear PPE as required.
- Attend required training sessions.
- Care for, clean, and maintain PPE as required.
- Inform the appropriate supervisor of the need to repair or replace PPE.
- Return old/used equipment for replacement.

Environmental, Health and Safety (EHS)

- Assist in conducting workplace hazard assessments as requested by supervisors to determine the presence of hazards which necessitate the use of PPE.
- Assist in conducting periodic workplace reassessments as requested by supervisors.
- Maintain the completed certificates used for the hazard assessments.
- Provide training and technical assistance to supervisors on the proper use, care, and cleaning of PPE.
- Provide guidance to the supervisor for the selection and purchase of approved PPE.
- Review, update and evaluate the overall effectiveness of the PPE Program.

Personal Protective Equipment (PPE)

Eye and Face Protection

- Suitable protectors shall be used when employees are exposed to hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.
- Side protectors shall be used when there is a hazard from chemical splash.
- For employees who wear prescription lenses, eye protectors shall either incorporate the prescription in the design or fit properly over the prescription lenses.
- Protectors shall be marked to identify the manufacturer.
- Equipment fitted with appropriate filter lenses shall be used to protect against light radiation.
- Eye and face protectors shall meet all provisions contained in the ANSI standard (ANSI Z87.1).

Head Protection

- Protective hats shall be worn when hazards from falling or fixed objects, or electrical shock are present.
- Protective hats shall meet all provisions contained in the ANSI standard (ANSI Z89.1).

Foot Protection

- Safety shoes shall be worn when falling, rolling, puncture, or electrical hazards are present.
- Safety shoes shall meet all provisions contained in the ANSI standard (ANSI Z41.1).

Hand Protection

- Suitable gloves shall be worn when hazards from chemicals, cuts, lacerations, abrasions, punctures, burns, and harmful temperature extremes are present.
- Glove selection shall be based on performance characteristics, conditions, duration of use, and hazards present.

Note: For additional information on specific types and classes of PPE, see Appendix II, General Guidelines for Choosing Personal Protective Equipment.

Cleaning and Sanitizing

Protectors shall be capable of being cleaned and sanitized. PPE shall not be shared between employees until it has been properly cleaned and sanitized.

Training

Any worker required to wear PPE shall receive training in the proper use and care of PPE. Periodic retaining shall be offered to both the employees and the supervisors, as needed. The training shall include, but not necessarily be limited to, the following subjects:

- When PPE is necessary to be worn.
- What PPE is necessary.
- How to properly don, doff, adjust, and wear PPE.
- The limitations of the PPE.
- The proper care, maintenance, useful life and disposal of the PPE.
- Demonstration that the employee understands the training material and is able to use PPE properly.

After the training, the employees shall demonstrate that they understand the components of the PPE Program and how to use PPE properly, or they shall be re-trained.

Record Keeping

Written records shall be kept of the names of persons trained, the type of training provided, and the dates when training occurred. Supervisors shall send copies of the following records to Environmental, Health and Safety (EHS):

- Certification of Hazard Assessment and PPE Evaluation forms (see Appendix I).

Certification of Hazard Assessment and Personal Protective Equipment Evaluation

Department: _____ **Process/Operation:** _____ **Building/Room:** _____

A hazard assessment has been performed for the workplace identified above. The hazard assessment was conducted according to the guidelines in Appendix B to Subpart I - 29 CFR 1910. The need for PPE has been communicated to affected employees.

Supervisor: _____ **Signature:** _____ **Date:** _____

	Present			**Likelihood of Injury**	**Seriousness of Injury**	**Engineering Controls in Place**	**Administrative Controls**	**PPE Required**			
Hazard Classification	Y	N	Hazard Codes (1)	High, Moderate, Low	High, Moderate, Low	Hoods, Guards, etc.		Hand	Eye & Face	Foot	Head
Impact											
Penetration											
Compression											
Chemical-airborne											
Chemical-liquid											
Chemical-gas											
Hot											
Cold											
Light (optical) Radiation											
Ionizing Radiation											
Electrical											
Dust											

Hazard Codes (1)					
CR – Carrying	C – Corrosives	CT – Cutting	CO – Contact	CS – Cold Surface	EV – Environment
GR – Grinding	HS – Hot Surface	IR – Infrared	I – Irritant	LA – Lasers	R - Rolling
SA – Sanding	SW – Sawing	S – Sensitizers	SH – Sharps	SV - Solvents	SP – Sparks
ST – Striking	TG – Toxic Gases	UV – Ultraviolet	W – Welding		

Appendix II

General Guidelines for Choosing Personal Protective Equipment

Safety Glasses and Goggles

Protective eye wear is required when employees are exposed to flying particles, dusts, fumes, vapors or harmful rays.

- Safety Glasses
  Standard safety glasses look very much like normal glasses, but are designed to protect you against flying particles. Safety glasses have lenses that are impact resistant and frames that are far stronger than regular eyeglasses. Safety glasses must meet the standards of the American National Standards Institute (ANSI). Safety glasses are also available in prescription form for these persons who need corrective lenses. Safety glasses can be equipped with side shields, cups, or tinted lenses to offer additional protection.
- Safety Goggles
  Like safety glasses, goggles are impact resistant and are available in tinted lenses. Goggles provide a secure shield around the entire eye area to protect against hazards coming from many directions.

Shields and Helmets

Face shields and helmets are not in themselves protective eye wear. However, they are frequently used in conjunction with eye protectors to provide additional protection. Full-face shields are often used when you are exposed to chemicals or heat or glare hazards. Helmets are used when welding or working with molten materials.

General Guidelines for Choosing Protective Hats

Head injuries are caused by falling or flying objects, or by bumping the head against a fixed object. Head protectors, in the form of protective hats, must resist penetration and absorb the shock of a blow. The shell of the protective hat is hard enough to resist the blow and the headband and crown straps keep the shell away from the wearer's skull. Protective hats can also protect against electrical shock.

Protective hats are made in the following types and classes:

Type 1 - Helmets with a full brim.

Type 2 - Brimless helmets with a peak extending forward from the crown.

Class A - General Service, limited voltage. Intended for protection against impact hazards. Used in mining, construction, and manufacturing.

Class B - Utility service, high voltage. Used by electrical workers.

Class C - Special service, no voltage protection. Designed for lightweight comfort and impact protection. Used in certain construction, manufacturing, refineries, and where there is a possibility of bumping the head against a fixed object. General Guidelines for Choosing Safety Shoes and Boots

Protective Footwear

Protective footwear is required by Facilities Operations for all General Trades, Mechanical Trades, Grounds, Steam Plant and Custodial employees. There are many types and styles of protective footwear and it's important to realize that your job may require additional protection other than listed here. Whatever your specific requirements are, you can ensure that your footwear meets established safety standards by checking for the American National Standards Institute (ANSI) label inside each shoe.

Steel-Reinforced Safety Shoes - These shoes are designed to protect your feet from common machinery hazards such as falling or rolling objects, cuts, and punctures. The entire toe box and insole are reinforced with steel, and the instep is protected by steel, aluminum, or plastic materials. Safety shoes are also designed to insulate against temperature extremes and may be equipped with special soles to guard against slip, chemicals, and/or electrical hazards.

Safety Boots - Safety boots offer more protection when splash or spark hazards (chemicals, molten materials) are present.

- When working with corrosives, caustics, cutting oils, and petroleum products, neoprene or nitrile boots are often required to prevent penetration.
- Foundry or "Gaiter" style boots feature quick-release fasteners or elasticized insets to allow speedy removal should any hazardous substances get into the boot itself.
- When working with electricity, you may need to wear special electrical hazard boots which are designed with no conductive materials other than the steel toe (which is properly insulated).

General Guidelines for Choosing Personal Protective Gloves

Work gloves cannot prevent hand accidents only safe and conscientious work practices can do that. But, choosing the right work gloves for the job can help protect you from unnecessary injury and disability if an accident should occur. When protective hand wear is required for the job you perform, make sure that the gloves you use fit well, are comfortable to wear, and are rated to guard against the particular hand hazards you face.

The following is a guide to the most common types of protective work gloves and the types of hazards they can guard against.

Disposable Gloves - Disposable gloves, usually made of light-weight plastic, can help guard against mild irritants.

Fabric Gloves - Made of cotton or fabric blends are generally used to improve your grip when handling slippery objects. They also help insulate your hands from mild heat or cold.

Leather Gloves - These gloves are used to guard against injuries from sparks or scraping against rough surfaces. They are also used in combination with an insulated liner when working with electricity.

Metal Mesh Gloves - These gloves are used to protect your hands from accidental cuts and scratches. They are used most commonly by persons working with cutting tools or other sharp instruments.

Aluminized Gloves - Gloves made of aluminized fabric are designed to insulate your hands from intense heat. These gloves are most commonly used by persons working molten materials.

Chemical Resistance Gloves - These gloves may be made of rubber, neoprene, polyvinyl alcohol or vinyl, etc. The gloves protect hands from corrosives, oils, solvents. The following table is provided as a guide to the different types of glove materials and the chemicals they can be used against. When selecting chemicals resistance gloves, be sure to consult the manufacturer's recommendations, especially if the gloved hand will be immersed in the chemical.

GLOVE CHART			
TYPE	**ADVANTAGES**	**DISADVANTAGES**	**USE AGAINST**
natural rubber	low cost, good physical properties dexterity	poor vs. oils, greases, organics; frequently imported; may be poor quality	bases, alcohol, dilute water solutions; fair vs. aldehydes, ketones
natural rubber blends	low cost, dexterity, better chemical resistance than natural rubber vs. some chemicals	physical properties frequently interior to natural rubber.	same as natural rubber
polyvinyl chloride (PVC)	low cost, very good physical properties, medium cost, medium chemical resistance	plasticizers can be stripped; frequently imported may be poor quality	strong acids and bases salts, other water solutions, alcohols
neoprene	medium cost, medium chemical resistance, medium physical properties	NA	oxidizing acids, aniline, phenol, glycol ethers
nitrile	low cost, excellent physical properties, dexterity	poor vs. benzene, methylene choloride, trichloroethylene, many ketones	oils, greases, aliphatic chemicals, xylene, perchloroethylene, trichloroethane; fair vs. toluene
butyl	specialty glove, polar organics	expensive, poor vs. hydrocarbons, chlorinated solvents	glycol ethers, ketones, esters
polyvinyl alcohol (PVA)	specialty glove, resists a very broad range of organics, good physical properties	very expensive, water sensitive, poor vs. light alcohol	aliphatics, aromatics, chlorinated solvents, ketones (except acetone), esters, ethers
fluoroelastomer (Viton)	specialty glove, organic solvents	extremely expensive, poor physical properties, poor vs. some ketones, esters, amines	aromatics, chlorinated solvents, also aliphatics and alcohol
norfoil (silver shield)	excellent chemical resistance	poor fit, easily punctures, poor grip	use for hazmat work

PPE Hazard Assessment Certification for Common Tasks and Work Areas

IMPORTANT NOTES:

- **Lafayette College EHS certifies this document as a PPE hazard assessment.**
- **Contact EHS in order to have work tasks added to this document.**

GENERAL PPE RULES:

- Basic rules for clothing:
    - Loose clothing must not be worn when entanglement hazards exist.
    - Shorts and open-toed shoes are not permitted in machine/maintenance shops.
- Basic rules for hearing protection:
    - Hearing protection must be worn when using the following:
        - Gas powered equipment such as mowers, chain saws, concrete saws, leaf blowers, vacuums, weed trimmers, etc.
        - Hilti-guns
        - Electric concrete hammer/impact drills, jack hammers, etc.
        - Pneumatic equipment (jack hammers, air guns, etc)
    - 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.
- Basic rules for respirators:
    - Must be worn when required in Appendix B of the Lafayette College Respiratory Protection Program.

Grounds Tasks		
*Grounds employees are required to wear reflective safety vests at all times per Director of Facilities Operations.		
Task(s) / Area(s)	**Potential Hazard(s)**	**PPE Required**
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 (if needed) 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	Hardhat if heavy equipment used or in trench Hearing protection if powered equipment is used Safety glasses Work gloves Work 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
Garbage Truck Operation (entering/exiting, moving dumpsters, emptying garbage cans/dumpsters)	Slips/Falls, falling objects, cuts, flying particles, chemical splash, contact with potentially infectious materials	Work Shoes Safety Glasses Protective Clothing Chemical resistant gloves Work Gloves

Task(s) / Area(s)	Potential Hazard(s)	PPE Required
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	Work gloves Work shoes
Operate loaders/backhoes/power equipment	Flying particles, falling objects	Hardhat (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
Removing fallen rock from Sullivan Road	Vehicular traffic, falling rock	Traffic cones (or other warning device) Hardhat
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	Hardhat Safety glasses Face shield if climbing tree Hearing protection if using power tool Work gloves Work shoes

Task(s) / Area(s)	Potential Hazard(s)	PPE Required
Weed trimming- String/Blade	Flying particles, noise	Safety glasses Hearing protection Long pants Work shoe
Maintenance work at oil/water separator on Bushkill Drive	Falling rock, vehicular traffic	Hardhat Work gloves Work shoes Reflective vest

Custodial Tasks		
Task(s) / Area(s)	**Potential Hazard(s)**	**PPE Required**
Clean bathrooms	Chemical contact, potentially infectious materials	Chemical/liquid resistant glove
Cleaning with chemicals	Chemical contact	Safety glasses as recommended by manufacturer on label and SDS
Cleaning bloodborne pathogens and other potentially infectious materials	Contact with infectious materials	*Refer to Bloodborne Pathogens Standard Operating Procedure
Floor mopping	Chemicals contact	Chemical resistant gloves as label/SDS recommends
Mix chemical concentrates	Chemical contact	Safety glasses and chemical resistant gloves as label/SDS recommends
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 Work gloves
Removing/shoveling snow and ice, spreading salt	Slip	Work gloves Work shoes Reflective vest (if near vehicular traffic)
Set up, tear down indoor and outdoor equipment for special events	Falling object, cut	Gloves recommended Safety shoes
Trash collection	Cuts	Work gloves are recommended, chemical resistant gloves are

		acceptable
Vacuuming	Noise	Hearing protection *Refer to Hearing Protection SOP for more info
Wash and clean windows, mirrors, walls, chalkboards, ceilings, blinds, light fixtures	Chemical contact	Safety glasses (when working above shoulder level) Chemical resistant gloves as label/SDS recommends
Wash and polish furniture, etc.	Chemical contact	Safety glasses and chemical resistant gloves as label/SDS recommends

General Trades		
Task(s) / Area(s)	**Potential Hazard(s)**	**PPE Required**
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
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
Paint scraping, cleaning, sanding	Flying particles, respiratory hazard (Lead, Cadmium, Chromium, dust)	Safety glasses or goggles respirator may be required

Priming / Painting	Flying particles, respiratory hazard	Safety glasses or goggles, respirator may be required

Mechanical Trades - Plumbing Tasks		
Task(s) / Area(s)	**Potential Hazard(s)**	**PPE Required**
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
Clear blocked drain lines (chemical, power snakes, plungers)	Splash, cut, contact with potentially infectious materials	Safety glasses Work gloves (using power tools) Chemical resistant gloves (using chemicals) Protective clothing, boots and/or masks (as needed)
Mechanical Trades - Electrical Tasks		
Electrical circuit work – testing; troubleshooting; ballast, switch, receptacle replacement, etc.	Shock, noise, light, shrapnel, fire	See Lafayette College Energized Electrical Safety Procedures
Electronics repair / maintenance	Shock, flying particles	See Lafayette College Energized Electrical Safety Procedures
Mechanical Trades - 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

Steam Plant / Motor Vehicle Repair / Maintenance Tasks		
Task(s) / Area(s)	**Potential Hazard(s)**	**PPE Required**
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 (FR) Work gloves Safety shoes
Torch Cutting and Brazing	Burns, flying particles, falling objects, cuts	Welding hood with proper shading Welding clothing (FR) Thermal/work gloves Safety shoes
Sheet metal work	Cuts, falling object, flying particles	Safety glasses Cut resistant gloves 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

Miscellaneous Tasks		
Task(s) / Area(s)	**Potential Hazard(s)**	**PPE Required**
Cleaning with compressed air (less than 30 psi)	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, custodial tasks, etc.)	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 shoes Harness
Operating forklift/powered hand truck	Crush hazard	Safety shoes
Operating scissor lift	Crush hazard, contact with objects, fall	Hardhat Safety shoes Harness if anchor point is available on scissor lift
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
Laser Equipment – operation and maintenance	Skin and eye damage	PPE requirements are different for each laser depending on the wavelength and power output.
Work at height (roof, scaffolds)	Fall	See Lafayette College Fall Protection 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
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
Torch Cutting and Brazing	Burns, flying particles, falling objects, cuts	Welding hood with proper shading Welding clothing (FR) Thermal/work gloves Safety shoes
Servicing Pool Chemical Pump(s)	Chemical Contact	Safety goggles, face shield, as label/SDS recommends Chemical resistant gloves