Personal protective clothing and equipment (PPE) is designed to shield or isolate individuals from chemical, physical, and biological hazards that may be present in the workplace. The most common forms of personal protective equipment are as follows:

**Hearing Protection**: Hearing protection must be provided when working around excessive noise levels. Examples of such equipment are small engines, blowers, jackhammers, chainsaws, and other miscellaneous machinery that can cause hearing loss or impairment. Apply the following depending on the level of noise encountered:

- Soft polyurethane foam ear plugs mold easily to the ear and are reusable. Waxed cotton or fiberglass wool ear plugs are self-forming and disposable.
- Earmuff style hearing protection provides increased noise reduction and allows a tight seal around the ears.
- Under extremely noisy situations both earplugs and earmuffs should be used together.

**Eye, Face, and Head Protection**: Must be used when working in an area or with equipment that may cause injury to the eye, face, or head. Be sure to wear eye protection under the following situations: using power tools, mixing or pouring chemicals, welding, grinding, working with or near lasers, or whenever there is potential for head or eye injury.

- Make sure the safety glasses, face shield, or goggles fit properly and seal completely.
- Wear impact resistant safety glasses when you use materials or operate equipment that could result in debris striking your eyes. Everyday sunglasses do not meet requirements.
- Welding or exposure to other types of intense light requires the use of a face shield or goggles with properly tinted lenses.
- **Hardhats** should be worn when required or whenever an employee has any overhead exposure.

**Arm and Hand Protection**: Wear arm and hand protection whenever there is potential exposure to cuts, burns, harmful physical or chemical agents, or radioactive materials.

The following are examples that work effectively:

- Use rubber gloves when working around chemicals or other agents.
- Use properly insulated gloves when working with or around electricity.
- When working with metal or iron, Kevlar or leather gloves provide excellent protection.
- Wear gauntlet or proper protective clothing when welding or exposed to flying hot slag.
- Impact and vibration resistant gloves are good protection while working with vibrating machinery or jackhammers.
- **Never wear loose clothing or gloves around machinery with moving parts** or with power tools that might get entangled.
- When working around chemicals and other agents wear long sleeves and proper chemical resistant clothing.

(continued)
Personal Protective Equipment (PPE)

Respiratory Protection: Wear proper respiratory protection when airborne contaminants are present.
- Respiratory protection requires that proper respirators and cartridges are chosen and used.
- Employees must receive a confidential medical evaluation, proper training, and fit testing prior to using a respirator.

Fall Protection: Working at heights exposes workers to significant risk. Use of the following equipment is not only required but is also the most effective way to reduce the dangers associated with working at heights.
- Harnesses, lanyards, and lifelines are an excellent means of fall protection. Ensure all employees are properly trained prior to working at heights and using equipment.
A full-body harness combined with a lanyard will distribute the fall force evenly across the worker’s body.
Using proper PPE helps keep everyone safe on the job.

Foot and Leg Protection: Choosing the right protective footwear will help prevent painful and costly foot/toe injuries. Appropriate foot protection is mandatory when exposed to foot hazards.
- Wear thick soled leather work boots when working on construction sites. Steel toe boots are used when working around heavy material or gravel.
- Wear rubber boots if working in concrete or if legs have potential exposure to chemicals.
- Wear comfortable snug fitting shoes with good traction while working on elevated surfaces and roofs.
- Make sure boots/shoes are laced and fit properly and never wear loose pants which can get caught in machinery or equipment.
- Sheen guards and leather chaps are effective protective clothing and reduce the risk of leg injury from flying debris and are also used for working in areas with overgrown brush.
- Use knee pads when kneeling for a prolonged period.