



PERSONAL PROTECTIVE EQUIPMENT (PPE)

Integrated Water Services, Inc.
(the Company)



Purpose

The purpose of the Personal Protective Equipment (PPE) Program is to set forth the procedures for the use, care, and maintenance of personal protective equipment required to be used by employees and contractors of Integrated Water Services for the prevention of injuries.

Key Responsibilities

Safety Director

- Provide an inventory of PPE available for ready access by employees.
- Assists managers in assuring all PPE meets regulatory requirements.
- Ensures a certified PPE hazard assessment is completed. The hazard assessment must indicate a determination if hazards are present or are likely to be present, which necessitate the use of PPE. The certifier's name, signature, date(s) should be present on the assessment documents. Sources of hazards include but are not limited to: hazards from impact/motion, high/low temperatures, chemicals, materials, radiation, falling objects, sharp objects, rolling or pinching objects, electrical hazards, and workplace layout. Certifies in writing the tasks evaluated, hazards found, and PPE required to protect employees and contractors against hazards and ensures exposed employees and contractors are made aware of hazards and required PPE before they are assigned to the hazardous task.

Managers and Supervisors

- Assists in the selection of appropriate PPE. If a task exposes an employee to hazards which cannot be eliminated through engineering or administrative controls, the Managers and Supervisors will work together to identify and select PPE suitable for the specific task performed, conditions present, and frequency and duration of exposure. Employees need to give feedback to management about the fit, comfort, and suitability of the PPE being provided.
- Supervisors and managers shall regularly monitor employees and contractors for correct use and care of PPE and make sure training is completed to ensure each employee and/or contractor has adequate skill, knowledge, and ability to use PPE.
- Supervisors and managers shall enforce PPE safety rules as outlined in this procedure.

Employees

- Complying with the correct use and care of PPE.
- Reporting changes in exposure to hazardous conditions that might require a follow-up assessment of the task for PPE.
- Reporting and replacing defective or damaged PPE, which shall not be used.
- Understand that the use of the required PPE is a condition of employment.

Procedure

General

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, must be provided, used and maintained in a sanitary and reliable condition.



Integrated Water Services is responsible for employee-owned equipment and contractors are responsible for contractor owned equipment. Where employees provide their own protective equipment, Integrated Water Services must assure its adequacy, including proper maintenance and sanitation of such equipment.

Integrated Water Services does not provide safety footwear, hardhats or any other PPE to contractors.

All PPE issued to the employees shall be issued at no cost as required by federal regulation.

Personal Protective Equipment

Eye Protection

Employees and contractors must use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids or chemical gases or vapors. Eye and Face PPE must comply with ANSI Standard Z87.1-2003 (Z87+), *Occupational and Educational Personal Eye and Face Protective Devices*.

Safety Glasses

Safety glasses, with side shields, that meet ANSI Z-87.1-2003 standards with “high Impact lenses” are required to be worn by all employees, contractors, contractors, and visitors while on Integrated Water Services owned or controlled property, at all times, as described below:

- At field locations, in shops and warehouses, except in approved, designated, striped safety zones.
- In all yard work zones or by everyone when in the vicinity of loading or unloading equipment, performing mechanic or maintenance work, test stand operations, operating equipment such as forklifts, welding, or any type of work which has the potential to inflict an eye injury.
- In any office, restroom, or any other building while performing any type of work where a potential eye injury may be present.
- Visitors will be provided with visitor glasses. In the absence of approved prescription safety glasses, “Over the glass” type safety glasses or goggles, must be worn over the nonsafety glasses until approved prescription safety glasses are obtained.
- Workers assisting welders must wear absorbent safety glasses that protect the wearer from ultra-violet (UV) and/or infrared rays (IR).
- Dark shaded lens (sunglasses) darker than a # 1 shade is prohibited to be worn indoors unless welding or assisting a welder.
- A doctor must support “exceptions for medical reasons” in writing to exempt safety eyewear requirements.
- Safety glasses are not required:
 - Inside offices.
 - Inside vehicles.
 - Parking lots when traveling from vehicles to and from trailers or buildings that do not pass through active work areas.

Goggles

- Chemical splash proof goggles shall be worn when handling or mixing liquid chemicals, solvents, paints, corrosives etc., and/or as recommended on the Safety Data Sheet of the material being handled.



- Dust proof goggles shall be worn when using air to clean equipment or while performing other jobs where safety glasses are not adequate to prevent airborne particles from entering the openings around the lenses and side shields. This includes windstorms and sandstorms.

Face Shields

- Full face shields shall be worn over safety glasses when operating handheld or stationery grinders with abrasive or wire wheels, while chipping paint or concrete or, performing jobs where there is the potential for flying objects striking the face and safety glasses or goggles would not provide adequate protection.

Head Protection

Employees must wear hardhats when working in areas where there is a potential for injury to the head from impact events. Helmets must comply with ANSI Standard Z89.1-1997 Class E, *American National Standard for Industrial Head Protection* for Type II head protection or be equally effective.

- Employees must wear hardhats when working in areas where there is a potential for injury to the head from falling objects.
- Hardhats will not be altered in any way.
- Do not paint hardhats.
- Do not drill, cut, bend, or apply heat.
- Hardhats will be inspected by the employee or contractor regularly for cracks, chips, scratches, signs of heat exposure (sun cracks), etc.
- Defective hardhats will be replaced immediately.
- Hardhats must be made available to visitors.
- Employees will be trained in the use, care, and maintenance of head protection equipment.

Hearing Protection

Hearing protection is required to be worn by all employees, contractors, and visitors while in posted "High Noise" areas.

Warning signs will be posted in areas known or suspected to have noise levels exceeding 85 dBA over an 8-hour time weighted average, or where impulse noise exceeds 130dBA at any point.

When signs are not posted, employees and contractors shall wear hearing protection when noise caused by machinery, tools, etc., prevents normal conversations from being heard clearly.

Rule of thumb: If you must yell to be heard, hearing protection is required.

Types of protection

- Molded Inserts (ear plugs)
- Canal Caps (head band type)
- Headband or hard hat mounted earmuffs and/or earplugs shall be provided to employees in sizes and configurations that will be comfortable to the employee.

Care and Maintenance

- Inspect hearing protection prior to each use.
- Hearing protection must be kept clean to prevent ear infections.
- If earplugs are of disposable type, they must be discarded when they become dirty, greasy, or cracked.



- Earmuffs that have deteriorated foam inserts, cracked seals or are defective must be replaced.

Fit

- Due to individual differences, not everyone can wear the same type of hearing protection. A variety of styles may have to be tried before one is found to be comfortable and provide adequate protection.
- Employees shall be instructed how to obtain the proper fit.

Hand Protection

Gloves

- Gloves are required to be worn when performing work which may expose the hands to extreme temperatures, cuts and abrasions, or exposure to chemicals.
- Welding gloves made of leather or other heat resistant materials shall be worn when performing arc welding or oxy/gas cutting.
- Impervious (chemical resistant) gloves shall be worn when handling chemicals that specify gloves as personal protection equipment when handling.
- Refer to the specific chemical's Safety Data Sheet for the correct glove type.
- Persons assigned to working with chemicals, i.e., solvent vats, shall be issued their own individual gloves for hygiene purposes.
- Leather gloves should be worn when working with sharp materials or when handling rigging equipment.
- Cloth gloves should be worn when handling objects or materials, which could cause blisters, splinters, cuts, etc.
- Heat resistant gloves shall be worn when handling hot materials or objects that have been heated beyond ambient temperatures.
- Insulated gloves shall be worn to prevent frostbite in extreme cold climates.
- Glove Inspections
 - Gloves shall be inspected before each use for holes, tears, and worn areas.
 - Chemical gloves shall be periodically air tested for pinholes by twisting the cuff tightly, apply low air pressure to expand the glove, and then submersing in water to check for bubbles.
 - Defective gloves shall be discarded immediately. Exception: machinists are exempted from wearing gloves while working with rotating machinery.

Foot Protection

Safety footwear shall be worn by all employees and visitors upon entering the worksite.

- In adherence to OSHA regulations, all personnel engaged in construction activities must wear appropriate safety shoes at all times while on site. Safety shoes must meet ANSI Z41 standards and provide protection against potential hazards such as falling objects, punctures, and electrical hazards. Before commencing work, employees are required to inspect their safety shoes for any signs of damage or wear and promptly report any issues to their supervisor. Furthermore, employees must ensure that their safety shoes are properly fitted and laced to provide maximum protection and support throughout their shift.

Fall Protection

Personal fall protection is required when performing certain elevated jobs in excess of four feet for construction work and six feet in general industry work. Consult the Integrated Water Services Fall Protection Program for more instruction on Fall Protection.

**Electrical Protection**

Consult the Integrated Water Services Electrical Safety Procedure.

Proper Fitting or Sizing of PPE

Consideration must be given to comfort and fit. PPE that fits poorly will not afford the necessary protection. Continued wearing of the PPE is more likely if it fits the wearer comfortably. PPE is generally available in a variety of sizes. Care should be taken to ensure that the right size is selected.

Defective Equipment

If PPE is defective, it should be repaired or replaced. If the equipment is not repairable, it shall be discarded and disposed of.

Training on the Use of PPE

Training shall be provided to employees and contractors concerning when to wear PPE, what PPE should be worn, how to put on and take off and adjust PPE. The limitations of the PPE and its use, care, and maintenance should also be included in the training.

Retraining on the Use of PPE

Each affected employee and/or contractor must demonstrate an understanding of training received and the ability to use PPE properly. When there is a reason to believe that any employee or contractor who has been trained does not have the required understanding and skill or there are changes in the workplace, the employee or contractor must be retrained.

PPE Training is Documented

Training is documented and records are maintained through the online support center document management system. The training certification shall include:

- Name of instructor that provided the training
- Name of employee(s) or contractor(s) trained
- The dates of training, and
- The training content



PPE Matrix For: Integrated Water Services, Inc.

Location: All locations

D Depends on situation	M Mandatory	N Not Mandatory unless hazards become present
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This PPE Assessment is subject to change if equipment, conditions, or risk exposures change!

EQUIPMENT	HAZARD	INSPECTION	Operation					
			Field Services/Const	Deliveries/Visitors	Shop Work	Driving	Office	Winter Conditions
Hard Hat (Class G or E Only)	Striking Head or Falling Objects	Each use	-	-	D	-	-	-
Safety Glasses w/shields	Objects Striking Eyes	Each use	D	D	M	-	-	M
Impact Vented Goggles	Small Particles in Eyes	Each use	-	-	D	-	-	D
Chemical Splash Goggles	Chemicals or Oil in Eyes	Each use	D	D	D	-	-	-
Disposable Earplugs	Damage to Hearing (85 dB)	Each use	D	D	D	-	-	-
Ear Muffs (w/Disposables)	Damage to Hearing (105 dB)	Each use	D	D	D	-	-	-
Cold Weather Clothing	Cold Temperature	Each use	D	D	D	D	-	D
Rainwear	Wet body	Each use	-	-	D	-	-	-
Protective Sleeves	Biohazardous materials	Each use	-	M	-	-	-	-
Slip Resistant Footwear	Injury to Body	Each use	M	M	M	-	-	-
Anti-Slip Cleats during Winter	Injury to Body	Each use	M	M	M	-	-	D
Anti-cut Gloves	Cuts	Each use	M	D	M	-	-	-
Vinyl Disposable Gloves	Biohazardous materials	Each use	-	M	-	-	-	-
Heavy Duty Gloves	Injuries to Hands	Each use	-	-	M	-	-	-
Cold weather Gloves	Environmental Exposure	Each use	-	-	-	-	-	M
Rubber Gloves	Hot Water Burns	Each use	M	-	-	-	-	-