

# Training and Proper Equipment Help Ensure Worker Safety

**H**azards exist in every workplace for every utility. These range from sharp edges, falling objects, sparks, chemicals, loud noises and other dangerous situations. It's important that employees be protected from these hazards.

First and foremost, the best protection from these hazards is common sense. I don't know of anyone that would stick their unprotected hand in a fire just to see if it is hot. Common sense tells you that fire burns. However, there are several chemicals that will burn the skin and operators handle these chemicals without any protective clothing or gloves.

Water and wastewater utilities should provide proper Personal Protective Equipment (PPE) for all employees to safely perform their duties. However, the employees should also make sure they use that equipment for their own safety.

The Occupational Safety and Health Organization (OSHA) requires that employers protect their employees from workplace hazards that can cause injury. Although OSHA does not inspect municipalities, the State of Kansas does. Their regulations are as stringent as those from OSHA as required by law.

## Identifying the hazards



Each municipality should perform a Hazard Assessment to identify any potential physical and health hazards. They should then identify and provide PPE that is appropriate to prevent injuries. However, just providing the PPE is not enough. Training the employees in the use and care of the PPE is a must. If any of the PPE needs to be replaced then make sure it is taken care of. Risking injury or death because of laziness is not acceptable.

Some of the hazards that water systems encounter every day are not recognized by the employees or have become second nature and the use of PPE is forgotten. One of the simplest duties is mowing, which can easily turn into disaster. I have seen pictures of people who have been using a push mower with a foot that was caught under the deck. That is not a pretty sight. Sadly the person was wearing tennis shoes or even sandals. This is no protection against a sharpened blade. The best protection for your feet are proper boots, especially those with steel toes. Also when mowing, wear jeans instead of shorts, to protect the legs.

Another hazard that I see deals with repairing water leaks either under the roadway or adjacent to the road. Although cones and warning signs may have been set out to warn traffic, the employees doing the work do not wear PPE so they are noticed. Just wearing a blaze orange shirt is not enough. An approved DOT safety vest and hard hats are designed to draw attention and provide protection.

## Chemicals in the treatment process

Almost all water treatment systems utilize chemicals of some sort in the treatment process. Wearing the proper PPE can protect workers from injury. However, there are other hazards from these chemicals that can be taken for granted. Just wearing gloves to protect the hands is not enough. Other items to use are goggles or safety glasses as

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Here is a listing of Personal Protective Equipment (PPE) for water and wastewater system workers. Do more research for individual needs.

■ Eye and Face protection

- ✓ Goggles
- ✓ Prescription safety glasses
- ✓ Face Shield

■ Head Protection

- ✓ Hard hats – designated for the type of work (there are several different types)
- ✓ Caps for sun protection

■ Foot and Leg protection

- ✓ Special purpose shoes / boots
- ✓ Proper care of footwear
- ✓ Protective pants / coveralls

■ Hearing protection

- ✓ Ear muffs
- ✓ Ear plugs

required, rubber coats and pants may be needed depending on the chemical, and boots.

Working in wastewater treatment plants has even more hazards. Dealing with human waste has a degree of hazard much higher than most people are used to dealing with. Protective equipment and clothing is a must. I encourage you to read the article by Jeff Lamfers in this issue as he discusses protection for wastewater utility workers.

Also there is a great deal of loud noise in the workplace. Prolonged exposure to these noises can cause hearing damage. Wearing head phones, ear muffs or ear plugs can reduce the potential damage to hearing.

As stated before, just having the PPE available is not enough. Everyone must be trained, and then use and maintain the equipment for proper protection.

If you are going to work in a hazardous situation then make absolutely sure you have taken the proper steps to protect yourself. You will never be able to foresee all hazards, but maintaining your focus and being aware of your surroundings and environment will help reduce potential problems. Employees are critical to the ongoing operation of water and wastewater systems. Properly protecting them is not only important – it is the right thing to do.

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