

KEEPING WORKERS SAFE DURING NIGHT-TIME REPAIRS

Doug Riseden | Technical Support Manager, Krausz USA

Working at night on pipe repairs is always more difficult than during the day. Workers are usually tired having already worked a full day and visibility is greatly reduced due to shadows, darkness and poor lighting at the work site. Throw in drivers who are also tired and perhaps driving faster than usual due to reduced traffic, and you have the makings of a high-risk situation. Your employees are your most valuable asset, so every precaution should be taken to make sure they come home safely every day.

Here are six things to ensure your night-time workers are safe, and get the job done effectively.

1. MOVE CAREFULLY AND DELIBERATELY ON THE WORK SITE

Many times, workers will want to get the job done quickly and skip some steps. This is understandable but it's important to remind them to slow down, and work more cautiously than they do during the day. Even if they are very familiar with performing certain repairs, dark areas and shadows can hinder their perception of risk.

Planning and communication become crucial during night time operations. Before the job starts, supervisors should have a brief meeting to ensure all team members understand what will take place at the work site, what their role is, and where they will be located throughout the night. Plan your work and work your plan!

Make sure everything is done with a focus on safety. This includes wearing reflective clothing in accordance with the law, and using a trench box or shoring to ensure that the trench doesn't collapse while workers are inside. There are many who never use a trench box because it gets in the way of some repairs. At night, the use of trench boxes and shoring is even more critical. Make trench boxes a normal part of every excavation, and never put speed ahead of safety.

2. HAVE THE RIGHT REPAIR PRODUCTS ON HAND FOR EVERY POSSIBILITY

Always make sure that you have repair products on hand for every situation. There is nothing worse than not having the right parts during an emergency repair. Poor planning results in the job taking longer to complete, delays in returning water service to normal, and disgruntled customers.

Krausz designs and manufactures a variety of repair couplings that are quick and easy to install, and are extremely useful for night

conditions. The HYMAX VERSA coupling can attach to two pipes of differing diameters and materials which comes in handy when the exact material of the pipe or its diameter are not known in advance.

The coupling also features top-facing bolts which are simple to tighten, and drastically cut installers' repair time. The product has a stab-on design and does not need to be disassembled – there

is nothing more aggravating for an operator than losing a bolt in a water-filled ditch at night. Another unique feature is its MAG dry anti-galling process that prevents galling, enables repeated bolt tightening and eliminates the need to grease the bolts, preventing dust and dirt build-up.



3. KEEP A CLOSE EYE ON THE CREW

Supervisors need to keep a close eye on workers who will be tired from working a full day and prone to making mistakes. Supervisors should patrol their work area to see how workers are doing, and offer food and drink on a regular basis. Flaggers in particular should be checked as they play a critical role in making sure night time operations are safe.

Crews want to make the repair and then get some rest before having to get up and do it all over again. A lack of rest or sleep accumulates over time. It's important that crews are not run down to the point where they become exhausted and unable to perform. Provide them with the proper tools and repair parts to get the job done.

4. KEEP THE WORK AREA LIT AND CLEAR

In the interests of saving time, sometimes workers will use the lights of the backhoe to do this job without auxiliary lighting and a generator. These lights will not supply enough illumination for the work site and compromise safety.

Use floodlights to illuminate any equipment crossings, and other areas where crew members will be working. Flaggers in particular should be well lit to ensure their own safety, and >>>



Backhoe lights are not enough to illuminate a night time work site and auxiliary lighting with a generator is a must.

the safety of the work zone. If drivers can't see the flagger, his or her ability to slow down, divert or stop traffic is hindered.

Floodlights can also blind drivers entering a work zone. Once lights are set, a worker should drive through the area to observe the lights' positioning and make adjustments as necessary. The use of self-righting work lights are a great way to provide light without causing it to shine in motorists' eyes. Keep the work area also clear of obstacles, tools, and equipment.

The use of rotating or flashing amber lights on service vehicles is necessary and required by law in most states, however, these lights can be their own hazard. They can be very bright and blind drivers who are traveling the roadways and prevent safe driving. Whereever possible, direct these lights so drivers can see properly as they drive through and ensure worker safety.

5. MANAGE TRAFFIC

If possible, close the roadway where the repairs are taking

place and direct traffic away. If you can't close the roadway, place warning signs or lights in a way that will give motorists more time to react and slow down before reaching the work area. Ensure that your signs are clean and have good reflectivity.

Make the work zone as large as possible to give employees more of a buffer and to keep them safe. After the repair is completed and the roadway re-opened, do several drive-throughs to make sure that the road is clear and the road repair is safe for the public's use.

6. NOTIFY THE PUBLIC

Make every effort to contact law enforcement, fire and rescue services, emergency dispatch centers and the general public about the night time operation. Notify the above organizations, and local radio and television stations, in advance by sending a concise email and following up by phone. Include information about where the repair is taking place, why it's happening and any roads that will be closed off. These agencies and media outlets will appreciate the information, and keep the community aware of the repair.

ABOUT THE AUTHOR

Doug Riseden is the Technical Support Manager for Krausz USA, and has worked in the public utility field for over 20 years. His extensive experience with water and wastewater repairs and operations includes working for municipalities and private contractors, and providing water services to the NATO-led security mission in Afghanistan as part of Operation Enduring Freedom. 💧💧💧