## WATER MAIN BREAK HAZARDS

Six Sections. One Mission

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WATER MAIN BREAK REPAIRS CAN EXPOSE EMPLOYEES TO HAZARDS! Water main breaks require immediate attention, but there's no need for injuries during the repair process. Water districts are usually familiar with the size and depth of the line – especially when the line is old and breaks often. Water main break repairs should not be allowed to go "out of control". Prepare beforehand by having tools, generator, pumps, personal protective equipment, backhoe, shoring and/or trench box ready to roll. Better organization beforehand improves work safety, work quality and reduces the risk of injury due to stress and rushing.

- Water main repairs expose employees to these hazards:
  - o Traffic
  - Night work (poor visibility, fatigue)
  - Overtime work (fatigue)
  - o Wet, class C soil and vibration from nearby traffic
  - Unsafe trench depth
  - Previously disturbed soil
  - Heavy equipment, awkward body postures
  - Heavy lifting by employees or machines
  - $\circ$   $\,$  Saw and other power tool use
  - Excavation near other underground utilities
- Take each water main break seriously. If you're on call, stay away from alcohol and get some sleep. The phone could ring at 2:00 AM. In the winter, make sure your vehicle is ready.
- Be prepared beforehand. Prepare personal protective equipment (P.P.E.), fuel, lighting, generators, equipment, tools, saws, and consumable supplies. Dress appropriately.
- Always call immediately for emergency utility locates. Even though the break can classify as an emergency, please do not put your crew at risk by striking an underground natural gas, fiberoptic, electric or steam line. Walk around the area to look for indicators that an underground utility may be present. Look for warning signs, pedestals, gas meters, etc.
- Do not expose yourself or your crew to unrestricted traffic. Set up cones, signage and barricades if needed.
- Wear appropriate P.P.E., to include hearing protection, highvisibility garments, protective footwear, eye protection and head protection. Bring extra P.P.E. in the work truck.
- Never enter an unsafe, unprotected trench. Bring shoring or your trench box along and have it ready.
- Classify the soil and make sure you have the right protective systems for the job. Even shallow trenches could collapse.
- Use saws safely. Cutoff saws can kick back.
- Set up generator lights to improve visibility. Use ground-fault circuit interrupters on extension cords.
- Stay clear of overhead power lines and lifted loads.
- Keep hands and fingers clear of pinch points.



PROTECT WORK ZONE CREWS FROM MOVING TRAFFIC. DRIVERS CAN HAVE POOR VISION, BE DISTRACTED OR INTOXICATED.



BEWARE STRUCK-BY HAZARDS LIKE TRAFFIC, SWINGING BACKHOE BUCKETS OR DROPPED PIPE.



THERE ARE MANY TYPES OF MODULAR, LIGHTWEIGHT TRENCH BOXES ON THE MARKET THAT WOULD WORK WELL FOR WATER MAIN BREAK REPAIR WORK.



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