

# **Technical Update**

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# Serious Accidents and Close Calls at Mine Sites

The Mine Safety and Health Administration (MSHA) publishes incident reports from mine sites throughout the United States. These reports are aimed at increasing awareness of mine-site hazards as well as outlining best safety practices. Following are two recent incidents showcasing common potential hazards on surface mine sites such as gravel pits.

## Working with a Crusher

Miners were working to unplug a crusher and after the obstruction was cleared, the crusher still would not turn. A miner attempted to manually turn the crusher rotor with a pry bar when his foot was caught in the moving part. Coworkers helped to free him and he was transported him to a local hospital for medical treatment. The accident occurred on June 22, 2017.

#### Best Practices

- Conduct a job hazard analysis to identify all potential hazards associated with the work to be performed, and jointly discuss procedures to minimize those hazards.
- Review maintenance procedures to ensure all possible hazards have been identified and appropriate controls are in place to protect miners.
- Make sure everyone is positioned so they are not exposed to the hazards.
- Support or block all components against motion, and personally lock out and tag out equipment.
- Make sure that proper equipment and tools are provided and used and that everyone is trained in safe work procedures.
- Follow manufacturer's specifications and operating procedures

#### Trench Collapse

Two miners were attempting to access a plugged grizzly screen by excavating a slot cut trench when the trench walls collapsed, engulfing the miners. During an initial rescue attempt, the walls collapsed further, trapping two additional miners. The material

was waist high on three of the miners and was over the shoulders on the fourth miner. After several intense hours of rescue efforts, all four were freed from the debris and flown to a nearby hospital. The accident occurred on June 29, 2017.

#### Best Practices

- Ensure trench walls are either supported for the full height or sloped to a safe angle in any trench equal to or greater than 5 feet in depth.
- Provide an egress method such as ramps, ladders or other safe way for workers to exit any excavation that is 4 feet or more in depth.
- Rely on a professional engineer to design deep trench excavations.
- Carefully examine ground conditions prior to performing tasks near excavated embankments, trenches, or ditches.
- Keep excavated soil (spoils) and other materials at least 2 feet from trench edges.
- Identify hazards associated with the task to be performed and review those hazards with all personnel involved before beginning work.
- Maintain awareness of changes in conditions that might affect trench stability.

### **What This Means for Counties**

Maintaining a safe worksite is the responsibility of all employees. Proper training and safety precautions are necessary to prevent the loss of time, equipment, and lives. CTSI offers a range of certified MSHA safety classes to help you maintain a safe jobsite and workforce. A list of available classes can be found at: http://www.ctsi.org/lpclasses/ClassList.pdf. Please contact CTSI Loss Prevention at 303-861-0507 to schedule a class.

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