



METAL/NONMETAL MINE FATALITY – On June 18, 2014, a 41-year-old production supervisor with 19 years of mining experience was killed at a sand and gravel mine. The victim and two contract workers were attempting to remove an impeller that was seized onto the threaded shaft of a centrifugal pump. After several failed attempts to unscrew the impeller, heat from a torch was applied to the enclosed hub on the impeller. While applying heat, the hub exploded and metal fragments struck the victim.



Best Practices

- Establish and discuss safe work procedures before beginning work. Identify and control all hazards associated with the work to be performed and use methods to properly protect persons.
- Train all persons to understand the hazards associated with the work being performed.
- Do not apply heat or open flame where enclosed spaces such as impeller hubs, mounted tires, suspension struts, or tanks may be subject to explosion except as directed by the manufacturer.
- Always examine materials before applying heat, cutting, or welding to ensure gases from the applied heat can vent.
- Never apply heat to materials before ensuring that flammables/combustibles/explosive materials are not present.
- Never apply heat to materials where pressure build up is possible.
- Do not apply heat or open flame where lubricants, oil, or grease are present.
- Use special tools, provided by the manufacturer, to loosen an impeller on a pump.
- Refer to the maintenance manual, warning labels on the pump, or contact the manufacturer for special safety precautions.

This is the 14th fatality reported in calendar year 2014 in metal and nonmetal mining. As of this date in 2013, there were 9 fatalities reported in metal and nonmetal mining. This is the 1st Ignition or Explosion of Gas fatality in 2014. There were 0 Ignition or Explosion of Gas fatalities in the same period in 2013.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.