

It Happened...

On April 9, 1989, a belt examiner found a fire along the main belt entry caused by hot slag from cutting and welding operations conducted days prior.

On April 16, 1990, a fire occurred in the tailgate entry of a longwall when a methane gas feeder was ignited by a torch that was used for cutting of a roof bolt protruding from the roof.

On April 18, 1990, a fire occurred in an area where belt conveyor supports were being recovered. A cutting torch had been used to remove roof bolts supporting the belt conveyor structure. The fire was found on the shift after cutting was completed.

On June 27, 1990, a miner was cutting the hub off a scoop. The grease in the hub caught fire.



Typical cutting torch arrangement

Best Practices Fire Protection

Card No. BFP-1



CUTTING AND WELDING

CUTTING and WELDING procedures should be established which minimize the risk of a mine fire. This operation should be conducted by persons trained to recognize the fire hazards associated with cutting and welding. Too often, miners have taken for granted that an area is safe following cutting and welding, only to have a fire develop at a later time.

- **ALWAYS** follow your mine's cutting and welding plan.
- **ALWAYS** wear appropriate personal protective clothing and equipment.
- **ALWAYS** check the work area for methane gas.
- **ALWAYS** examine the work area for potential hazards.
- **ALWAYS** provide good ventilation.
- **ALWAYS** use suitable curtains to shield surrounding areas from sparks and molten metal.
- **ALWAYS** remove combustibles from the work area if possible.
- **ALWAYS** wet down combustibles or cover them with suitable non-combustible material.
- **ALWAYS** ensure that the cutting torch is equipped with check valves and flame arrestors to prevent flames from flashing back into the acetylene gas cylinder.
- **ALWAYS** inspect area for fire and maintain a fire watch for at least 30 minutes after work has been completed.

- **NEVER** apply heat to an enclosed vessel or confined spaces such as tanks, mounted tires, or mechanical equipment with enclosed cavities.
- **NEVER** conduct cutting and welding when mine fire protection water is out of service.

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Mine Safety and Health Administration