TIPS CONTINUED...

- Have the ability to supply adequate flow and pressure to any fixed water based fire suppression system.
- Repair temporary water connections ASAP.
- When static pressure exceeds 150 psi, pressure regulation should be provided.
- Water system pressures should be compatible with foam equipment used.

It Happened...

On January 18, 1984, undetected sparks from cutting operations ascended through a small opening in the planks of a false roof and a fire developed. A fire hose near the drive was used to fight the fire. The nozzle for the hose was missing, making fire fighting difficult and prolonging the time to extinguish the fire.

On April 7, 1987, coal and coal dust was ignited due to heat from the belt rubbing. Fire fighters encountered extremely high water pressures in the four inch line throughout the mine. This caused hoses and couplers to rupture while fighting the fire and delayed fire fighting efforts.



Water tank showing standpipe used for maintaining a volume of water reserved for firefighting.

Best Practices Fire Protection Card No. BPFP-2



T E R S U P P

Y

WATER SUPPLY CONSIDERATIONS are an absolute necessity in underground coal mining. Maintaining a supply of water reserved for fire fighting will have a critical impact on the ability to fight a mine fire. For example: a surface water storage tank may be equipped with standpipes at different levels to ensure a water reserve for fire fighting.

LOCATIONS

Working Sections Belt Conveyors Haulage Entry

- ALWAYS maintain the mine water system in working order.
- ALWAYS report water supply problems to mine management.
- **ALWAYS** store fire hose, nozzles, water cars, and related equipment in easily accessible locations.
- ALWAYS store extra hose coupling gaskets, spanner wrenches, and other tools with the fire hose.
- **NEVER** make changes to the fire protection water system without management's approval.
- **NEVER** close any valves affecting the supply of fire water without contacting your supervisor.
- **NEVER** use pipe wrenches or other non-fire protection tools on fire hose connections.

TIPS FOR WATER SYSTEM DESIGN

- Locate waterlines in accessible areas, such as the wide side of the belt entry.
- Only use valves, piping and equipment approved for the fire protection water system.
- Have the ability to supply 50 gpm to three hoses at a nozzle pressure of 50 psi.

U.S. Department of Labor Mine Safety and Health Administration J. Davitt McAteer, Assistant Secretary