



# MSHA's Accident Prevention Program Safety Idea

Safety and  
Health are  
Values!

## Compatible Threads on Fire Hoses and Standpipes

Several years ago, a small fire occurred in an underground coal mine. A team of miners approached the fire from upwind and when they got close enough to put water on the fire, they tried to attach the fire hose to the standpipe only to find that the NPT (National Pipe Thread) threads on the standpipe did not match the Higby cut NH (National Hose) threads on the fire hose. Fortunately, the fire was extinguished using another hose and rock dust. An investigation revealed that when the fire hoses were ordered, they failed to ensure that they were compatible with the mine's standpipes.

The following guidelines should be followed to prevent the reoccurrence of this situation.

- Ensure compatibility of new equipment with existing system. Install the new equipment or hoses and test them for performance and effectiveness before adding them to the system.
- Test all fire fighting equipment at least annually. A test of the system would have revealed the problem before it was needed.
- Fire hoses should be attached to the standpipes when they are placed in service. This would ensure compatibility and enable the hose to be hung or stored in a manner to provide quick deployment.

Size	National Standard (NH)		Straight Iron Pipe (NPSH)		National Pipe Tapered (NPT)	
	O.D. of male	Threads per inch	O.D. of male	Threads per inch	O.D. of male	Threads per inch
1"	1.375	8	1.295	11.5	1.295	11.5
1½"	1.99	9	1.878	11.5	1.878	11.5
2"	2.515	8	2.352	11.5	2.352	11.5
2½"	3.068	7.5	2.841	8	2.841	8
3"	3.623	6	3.47	8	3.47	8

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