

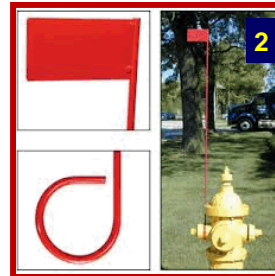
A Safety Device Gone Wrong!

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Picture 1 shows a fire hydrant in a town in the northern USA that gets a lot of snow in the winter. The vertical steel rod fastened to the left side of the hydrant is intended to mark the location of the hydrant, as shown in Picture 2. A flag is installed at the top of the rod so firefighters can find the hydrant if it is covered with snow. The flag also marks the location of the hydrant so it is less likely to be damaged by snow removal equipment, and so people do not park vehicles where they will block access to the hydrant. The flag is a safety device to help people know where the hydrant is located if it is buried in snow.

Clearly this safety device has created a problem. The metal rod was installed so that it passes through the valve handle. You cannot open the valve without first removing the rod! The rod may also impede the use of a hydrant wrench to open the hydrant. While the rod and flag can be removed, this will take valuable time, possibly in an emergency situation.

Picture 1 resembles Picture 3, from the October 2004 *Beacon*. In Picture 3, nature, in the form of a growing tree branch, makes it difficult to operate the fire water valve. In Picture 1, somebody has installed a rod and flag through a fire hydrant valve, with the same effect.



Do you know?

- ➔ The flag on the fire hydrant can be considered to be a safety device – to protect the hydrant from damage by snow removal equipment, to remind people not to block access to the hydrant, and to help firefighters find the hydrant if it is buried by snow. But, because it was improperly installed, it is difficult to quickly open the hydrant valve. So, a safety device has created a new, and perhaps more serious, safety problem!
- ➔ Any safety device can create a new hazard. Any change to equipment, even one intended to improve safety, can create new hazards or make other existing hazards more severe. This is particularly true if the safety device is not properly installed.

What can you do?

- ➔ Any change to a system, including the addition of a new safety device, is a change that must be reviewed using your plant's Management of Change (MOC) procedure.
- ➔ When doing an MOC review of a new safety device, be sure to consider the possibility that the change introduces new hazards.
- ➔ After the change is reviewed, make sure it is implemented correctly and is ready for operation using your plant's pre-startup safety review (PSSR) process.
- ➔ Get emergency response personnel involved in MOC and PSSR if the change impacts them.

Review all changes – even those intended for safety!