

DEPARTMENT OF CONSUMER & BUSINESS SERVICES
Oregon Occupational Safety & Health Division

MEMORANDUM

Date: May 29, 2001

To: All Staff

From: Marilyn Schuster, Technical Section Manager

Subject: Backflow/Flashback Preventers (REVISED)

On April 25, 2000 the technical section issued a memo regarding flashback preventers used in oxy-fuel gas welding and cutting apparatus that incorrectly defined the roles of backflow check valves and flashback preventers.

The Oregon initiated standard, OAR 437-002-0290(1) allows either an approved backflow preventer or flashback preventer to be used in oxy-fuel gas welding apparatus. The OR-OSHA standard is considered a minimal requirement. Of these two options the flashback preventer is significantly better at preventing fire from traveling back into the hose than a backflow device and is recommended by OR-OSHA. Check valves/backflow preventers will not prevent flashbacks but flashback preventers that have check valves will prevent backflow of gas and also prevent flashback.

Related Questions/answers revised from the previous memo:

- 1. Is it okay to accept flashback preventers that are installed between the regulator and hoses on oxygen/acetylene torch systems, if there is no backflow or flashback preventers already installed between the torch and hoses or built into the torch?**

Not by OAR 437-002-0290(1). Approved back-flow or flashback preventers must be installed between the blowpipe or torch and the hoses, unless the device's are built into the torch handle.

- 2. Is it acceptable to install flashback preventers between the**

regulator and the hoses if the torch is equipped with backflow or flashback prevention devices?

Yes, the issue is flow, if the flow capacity of the combined protection will not starve the torch you can have protection between the regulator and the hoses as well as between the hoses and the torch. This approach is recommended by OR-OSHA to protect both the hose and the regulator.

Note: The installation and use of flashback preventers is not a substitute for using the torch correctly per manufacturer's recommendations.