

Thine EYES Have Seen the Chemicals

On more than half the ships that safety surveyors have visited recently, eyewash stations like this one were missing, didn't work, or were obstructed.



*By MMCM(SW) Tony DeJesus,
Naval Hospital, Portsmouth, Va.,
and MMCS(SW) Donald Forrester,
USS Dwight D. Eisenhower (CVN 69)*

Two Sailors (E-3s) were removing a three-quarter-inch valve from a JP-5 reclamation filter so they could do PMS. They followed double-valve procedures and hung red tags. The system had been drained, and no fuel showed in the sight glass. Unknown to the E-3s, though, the housing still was full of fuel, and it was pressurized.

When they loosened the valve, fuel sprayed into their eyes because they hadn't worn PPE. They flushed their eyes at an eyewash station, then went to medical where corpsmen flushed their eyes again, gave them saline drops, and released them for full duty.

That mishap was one of four involving chemical exposure to the eyes that occurred in a three-month period. Here are summaries of the other three incidents:

Face Full of Fuel-Oil Mist

A fireman was bleeding air off the No. 1 fuel-oil transfer pump when pressurized fuel-oil mist discharged from the sample valve. The mist was redirected by a funnel below the valve assembly into the fireman's face. After securing the valve, he used a portable eyewash station 10 feet away from the pumping station to flush his eyes. When the reservoir tank was empty, he went to sickbay for treatment. Corpsmen flushed his eyes for 30 more minutes and diagnosed a chemical burn on his cornea. The next day, the fireman returned to duty.

Hydraulic Fluid on the Loose

A Sailor was bleeding the hydraulic system on a 20-ton aircraft jack in the hangar bay. Following the procedures, he removed trapped air from the system by loosening the hose connection at the base of the cylinder. Once he had bled the system, he started tightening the loose hose. Suddenly, his wrench slipped, disconnecting the hose and allowing fluid to spray into his eyes. He immediately went to the nearest eyewash station, then to sickbay.

Why Did That Paint Have To Splash?

A Sailor was consolidating waste paint and materials inside a locker. While pouring paint from one container to another, a thick mass dropped into the can, splashing paint into his eyes. The Sailor flushed his eyes at a nearby eyewash station, then went to sickbay. Corpsmen flushed his eyes some more and returned him to full duty.

Because emergency eyewash stations were available, none of these injuries were serious. Safety surveys, however, show that problems may loom on the horizon. For example, on more than 50 percent of the ships we've looked at recently, eyewash stations were missing, didn't work, or were obstructed. We've also found a few portable stations that were installed too high for shorter Sailors to use.

According to the *NavOSH Program Manual for Forces Afloat*¹, ships must have an adequate number of properly installed, maintained and inspected eyewash facilities. These units must have signs posted to identify their locations. Areas where corrosive materials are used or stored (such

as main and auxiliary spaces, flammable-material storerooms, and paint lockers) are required to have eye-and-face-wash units. All of these stations require PMS², but we usually find it hasn't been done.

The availability of eyewash stations may not reduce the number of chemical exposures; how-



PH2 Matthew J. Thomas

Sailors check a three-quarter-inch valve on a ship's JP-5 reclamation filter. If you said they should be wearing PPE, you're right. Two E-3s aboard another ship made the same mistake and ended up with fuel in their eyes.

ever, it can reduce the severity of eye injuries. If you already have the required eyewash stations in your spaces, make sure you maintain them. If you need more stations, various styles of both fixed and portable units are available in the supply system. Play it safe, and don't wait until someone is injured before you check your eyewash stations. Better yet, make sure everyone wears the prescribed eye protection, and they may not need to use an eyewash station.

Both authors were assigned to the Naval Safety Center when they wrote this article.

For More Info...



¹Refer to Chapter B5 of OpNavInst 5100.19C (with change 2) for information about shipboard eyewash facilities.

²MIP and MRC 6600 outline PMS requirements for eye-and-face-wash units.