

Tuesday e-Tech Alert

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Issue Number: 185 Issued: July 27, 2010

Eaton Issues Safety Bulletin for Pump Controller Switch

The Eaton Corporation of Calgary, Alberta, in Canada has issued an "Important Product Safety Bulletin" relative to its Cutler-Hammer brand electric fire pump controllers manufactured between January of 1998 and February of 2010. The bulletin, issued on July 14th, concerns a 150-amp molded case switch used in their FD and FT series of fire pump controllers. Due to the potential for a nonconforming overload component, certain switches (models FD3150KW and FD3150N) may "fail to perform properly under certain specific conditions."

Eaton's press release indicates that the issue was discovered during a routine test of a fire pump controller, and that there have been no reported failures in the field to date. The switches have the potential for tripping during a pump's locked rotor condition (motor failure or stalled condition) and cannot be quickly reset. If the switch trips, there is a potential for the fire pump controller to fail to operate for a period of time.

Eaton is working through their distributors to notify affected parties. The immediate repair involves field replacement of the switch.

Antifreeze Update – Test Results Mixed

In the two weeks since the last issue of *eTechAlert* (No. 184), testing has gotten under way at Underwriters Laboratories under the auspices of the Fire Protection Research Foundation, the research arm of NFPA. The National Fire Sprinkler Association is among the organizations helping to fund this determination as to what concentrations of antifreeze can be used safely within sprinkler systems protecting dwelling units.

While results are only preliminary at this time, it looks like there may well be a distinct difference between a 50% concentration (by volume) of propylene glycol and a 50% concentration of glycerine. The former has exhibited a potential for spray ignition in some circumstances while the latter has not. The ongoing work will clarify what antifreeze solutions can be safely continued in use.

Both antifreeze products are considered Class IIIB combustible liquids in their pure form. While pure glycerin and pure propylene glycol have almost identical autoignition temperatures (temperatures at which the liquids will ignite when heated) their flash points (temperatures at which vapors will ignite by piloted ignition) are different. Glycerin's flash point is substantially higher than that of propylene glycol, which could account for different behavior when used in sprinkler sprays at similar concentrations.

The NFPA Standards Council will be meeting next week and will be briefed on the latest research as well as the positions of its technical committees relative to possible Tentative Interim Amendments that could restrict the use of antifreeze in new dwelling unit installations.

As a reminder, the official NFPA safety alert can be found at www.nfpa.org/antifreeze

NFSA "Technical Tuesday" Seminar – August 10th

Topic: Air Venting and Relief Valves

Instructor: Karl Wiegand, EIT, NFSA Manager of Installation Standards

Date: August 10, 2010

Starting with the 2010 edition of NFPA 13, all wet pipe sprinkler systems are going to have to take into account venting the air from the system as the system is being filled with water in order to minimize corrosion. Once most of the air has been removed from the system, it becomes more important to provide a relief valve to prevent the system from being over-pressurized as the water expands due to changes in temperature. This seminar will explore all of the new rules for providing venting and relief valves under the new standard.

To register or for more information, contact Michael Repko at (845) 878-4207 or e-mail to seminars@nfsa.org

NFSA/FSI "Best Practices Thursday" Seminar - August 19th

Topic: Information Technology Update
Instructor: John Karnatz and Paul Johnson

Date: August 19, 2010

A lot is changing in the way we process information. From server-based applications to internet-based solution providers, the landscape is rich with labor and cost saving opportunities. Join us for a 45-minute discussion on the latest in technology applications for business and fire sprinkler contractors. One-on-one follow-up is available after the call at no additional charge.

To register or for more information, contact Michael Repko at (845) 878-4207 or e-mail to seminars@nfsa.org

Additional training opportunities through the NFSA Engineering Department include the following...

Inspection & Testing for the Sprinkler Industry (3-day course)

New Castle, DE – September 28-30, 2010 Delaware State Fire School's Regional Center 2311 McArthur Drive, New Castle, DE 19720

Layout Technician Training Course (2-week course)

Champaign, IL – August 2-13, 2010 Academy of Fire Sprinkler Technology, Inc. 1617 Interstate Dr., Champaign, IL 61822

For more information, contact Nicole Sprague using <u>Sprague@nfsa.org</u> or by calling 845-878-4200 ext. 149.

Additional In-Class Training Seminars

The NFSA training department also offers in-class training on a variety of subjects at locations across the country. Here are some seminars scheduled for 2010:

| Aug 9 | Wailuku, HI | CPVC Piping (1/2 day a.m.) |
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| Aug 9 | Wailuku, HI | Underground Piping (1/2 day p.m.) |
| Aug 10 | Wailuku, HI | Standpipe Systems (1/2 day a.m.) |
| Aug 10 | Wailuku, HI | Commissioning & Acceptance Testing (1/2 day p.m.) |
| Aug 11 | Wailuku, HI | Inspection, Testing & Maintenance |
| Aug 24 | Menasha, WI | NFPA 13 Update 2007 |
| Aug 25 | Menasha, WI | Sprinkler Protection for General Storage |
| Aug 26 | Menasha, WI | Foam Water Systems (1/2 day a.m.) |
| Aug 26 | Menasha, WI | Commissioning & Acceptance Testing (1/2 day p.m.) |
| Aug 31 | Rochester Hills, MI | NFPA 13 Update 2007 |
| Sept 1 | Rochester Hills, MI | Plan Review Policies & Procedures |
| Sept 2 | Rochester Hills, MI | Commissioning & Acceptance Testing (1/2 day a.m.) |
| Sept 2 | Rochester Hills, MI | Introduction to Sprinklers (1/2 day p.m.) |
| Sept 8 | Seattle, WA | Sprinklers for Dwellings |
| Sept 9 | Seattle, WA | Plan Review Policies & Procedures |
| Sept 10 | Seattle, WA | Commissioning & Acceptance Testing (1/2 day a.m.) |
| Sept 10 | Seattle, WA | CPVC Piping (1/2 day p.m.) |
| Sept 14 | Dayton, OH | Plan Review Policies & Procedures |
| Sept 15 | Dayton, OH | Inspection, Testing & Maintenance |
| Sept 16 | Dayton, OH | Basic Seismic Protection (1/2 day a.m.) |
| Sept 16 | Dayton, OH | Standpipe Systems (1/2 day p.m.) |
| Sept 16 | Concord, NH | Sprinkler Protection for General Storage |
| Sept 17 | Concord, NH | Sprinkler Protection for Rack Storage |
| Sept 18 | Concord, NH | Plan Review Policies & Procedures |
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These seminars qualify for continuing education as required by NICET, and meet mandatory Continuing Education Requirements for Businesses and Authorities Having Jurisdiction.

To register or for more information, contact Michael Repko at (845) 878-4207 or e-mail to seminars@nfsa.org

NFSA Tuesday eTechAlert is c. 2010 National Fire Sprinkler Association, and is distributed to NFSA members on Tuesdays for which no NFSA Technical Tuesday Online Seminar is scheduled. Statements and conclusions are based on the best judgment of the NFSA Engineering staff, and are not the official position of the NFPA or its technical committees or those of other organizations except as noted. Opinions expressed herein are not intended, and should not be relied upon, to provide professional consultation or services. Please send comments to Russell P. Fleming, P.E. fleming@nfsa.org.

About the National Fire Sprinkler Association

Established in 1905, the National Fire Sprinkler Association (NFSA) is the voice of the fire sprinkler industry. NFSA leads the drive to get life-saving and property protecting fire sprinklers into all buildings; provides support and resources for its members – fire sprinkler contractors, manufacturers and suppliers; and educates authorities having jurisdiction on fire protection issues. Headquartered in Patterson, N.Y., NFSA has regional operations offices throughout the country. www.nfsa.org.