



# e-TechNotes

*Editor-Kenneth E. Isman, P.E.*

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## **Recall of Pressure Transducers used in Fire Pump Controllers**

The Gems Sensors and Controls company, along with the Consumer Products Safety Commission (CPSC) has issued a voluntary recall of some of their pressure transducers that have been used in a number of different manufacturer's fire pump controllers. The news isn't actually new, but the CPSC issued the press release on April 24, 2012 in order to help spread the word about the concern over the product. Memos on the subject from Gems go back to at least November 2010 as they tried to get the word out to their customers about the potential problem.

Members of the NFSA Engineering and Standards Committee conducted an informal poll of sprinkler contractors and fire pump controller representatives in their area and found a surprising lack of knowledge about the problem with the pressure transducers. This E-TechNotes is an attempt to help the Gems company spread the word and to help sprinkler contractors understand how they can help their clients (building owners) determine if they have a problem and help them solve it.

The concern is over the Gems 3100 Pressure Transducer, which appears to experience upward "drift", with the sensor believing that the pressure in the system is higher than it really is. This could cause a delay in a pump set to start upon a drop to a specific pressure, or the pump might never start if the transducer does not recognize that the pressure in the system has dropped below the start point.

Approximately 25,000 of the Gems 3100 Pressure Transducers were sold to a number of pump controller manufacturers from January 2006 to February 2012. They can be identified by the words "Gems Sensors and Controls" printed on the transducer as well as an 18 digit part number that starts with "3100".

Both Gems and the CPSC agree that there are two different remedies available once it has been determined that one of these transducers is in a controller:

1. The 3100 Pressure Transducer can be replaced with a Gems 3300 Pressure Transducer.
2. An inspection can be conducted twice monthly by looking at a pressure gage on the system and comparing it to the digital pressure readout on the controller. If the digital pressure readout on the controller is within 2% of the system pressure gage (accounting for any elevation difference), then the 3100 Pressure Transducer can stay in service until the next inspection. If the digital readout on the controller is more than 2% above the system pressure gage (accounting for any elevation difference), Gems recommends replacement of the 3100 Pressure Transducer due to the concern that upward "drift" has started to occur.

It is worth noting that this additional inspection is fairly easy to add to a diesel driven fire pump that is already undergoing weekly testing and inspection in accordance with NFPA 25. However, NFPA 25 was modified in the 2011 cycle for electric motor driven fire pumps so that they are only tested and

inspected monthly. If 3100 Pressure Transducers are found in controllers for electric motor driven fire pumps and are not replaced, additional inspections will need to be added to the regular NFPA 25 inspections and tests as described above.

## **Upcoming NFSA “Technical Tuesday” Seminar – May 22**

*Topic: Horizontal Standpipes and Lateral Piping*

*Instructors: Kenneth E. Isman, P.E.*

*Date: Tuesday, May 22, 2012- 10:30 am EST*

Horizontal standpipes are treated differently than lateral runs of pipe to standpipe outlets by NFPA 14. This seminar will cover the differences between these two situations for both layout considerations and hydraulic calculations. In addition, this presentation will cover the different protection rules for these different piping situations.

To register or for more information, click [HERE](#) or contact Michael Repko at (845) 878-4207 or e-mail to [seminars@nfsa.org](mailto:seminars@nfsa.org).

## **Layout Technician Training Course (2-week course)**

*Fishkill, NY – October 8-19, 2012*

For more information, contact Nicole Sprague using [Sprague@nfsa.org](mailto:Sprague@nfsa.org) or by calling 845-878-4200 ext. 149 or click [HERE](#).

## **Upcoming In-Class Training Seminars**

The NFSA training department also offers in-class training on a variety of subjects at locations across the country, and in recognition of the current recession has adopted a new reduced fee structure. Here are some upcoming seminars:

May 15	Oklahoma City, OK	Inspection, Testing & Maintenance for the AHJ
June 5-6	Dearborn, MI	NFPA 13 Overview
June 7	Dearborn, MI	Plan Review Procedures & Policies
June 14	Mashantucket, CT	Hydraulics for Fire Protection
July 24	Mashantucket, CT	Plan Review Procedures & Policies

*These seminars qualify for continuing education as required by NICET, and meet mandatory Continuing Education Requirements for Businesses and Authorities Having Jurisdiction.*

To register for these in-class seminars, click [HERE](#). Or contact Michael Repko at (845) 878-4207 or e-mail to [seminars@nfsa.org](mailto:seminars@nfsa.org) for more information.

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***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](http://www.nfsa.org).*