

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF NUCLEAR REACTOR REGULATION  
WASHINGTON, D.C. 20555-0001

December 23, 2005

NRC INFORMATION NOTICE 2005-32: PRODUCT ALERT FOR FIRE HYDRANTS

**ADDRESSEES**

All holders of operating licenses for nuclear power reactors and fuel cycle facilities, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

**PURPOSE**

The U.S. Nuclear Regulatory Commission (NRC) anticipates that recipients will review the information for applicability to their facilities and consider taking actions, as appropriate. However, no specific action or written response is required.

**BACKGROUND INFORMATION**

Section 50.48 of Title 10 of the *Code of Federal Regulations* (10 CFR) requires that each operating nuclear power plant have a fire protection plan that satisfies 10 CFR Part 50, Appendix A, General Design Criteria (GDC) 3, "Fire Protection." GDC 3 states that fire fighting systems shall be provided to minimize the effects of a fire. To implement this program, licensees need an operable fire water-supply system and operable fire hydrants.

10 CFR 70.61 requires certain licensees authorized to possess a critical mass of special nuclear material to meet performance requirements for all credible high or intermediate consequence events including radiological or hazardous chemical releases as a result of fires. For some fire-related events, effective control may require an operable fire water-supply system.

**DISCUSSION**

The American Cast Iron Pipe Company issued a product alert for fire hydrant types B-84-B, B-62-B, B-50-B, and MK-73 with cast dates between 1999 and 2003 (and may also apply to older hydrants as described below). The cast date is located on the hydrant barrel, opposite the nozzle. The vendor stated that the hydrant operating rod and grease in each of these hydrants must be replaced. The product alert stated that grease used in these hydrants contains an acetate additive that possibly can corrode the hydrant operating rods. Once started, this condition worsens over time, making hydrants difficult or, in extreme cases, impossible to operate.

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The vendor recommends that customers discontinue using any grease containing acetate in all of their hydrants, including any grease previously supplied by the vendor. The vendor recommends using Citgo Mystik food grade grease. The grease that contains acetate that was initially installed in the hydrants was Chevron Food Grade Grease, FMEPNLGI. This grease also was available for use on older fire hydrants and could have been used for maintenance. The vendor Web site <http://www.acipco.com> provides information on obtaining repair information.

## CONCLUSION

The use of proper grease is important in ensuring that fire hydrants remain operable and that fire protection systems remain fully operable. Fire hydrant vendors can provide corrective action information if problems are identified with installed hydrants. The use of grease containing acetate on older fire hydrants from this vendor can also affect the operability of these hydrants.

## CONTACT

This information notice does not require any specific action or written response. Please direct any questions about this matter to the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) or Office of Nuclear Material Safety and Safeguards (NMSS) project manager.

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Note: NRC generic communications may be found on the NRC public Web site, <http://www.nrc.gov>, under Electronic Reading Room/Document Collections.