

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

June 28, 2001

NRC INFORMATION NOTICE 2001-10: FAILURE OF CENTRAL SPRINKLER COMPANY
MODEL GB SERIES FIRE SPRINKLER HEADS

Addressees

All holders of licenses for nuclear power, research, and test reactors and fuel cycle facilities.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to warn addressees that certain Model GB series sprinkler heads manufactured by Central Sprinkler Co. of Lansdale, Pennsylvania, have a potential for failure. It is expected that recipients will review the information for applicability and consider actions, as appropriate, to ensure safety at their facilities. However, suggestions contained in this information notice are not NRC requirements; therefore, no specific action or written response is required.

Description of Circumstances

On April 24, 2001, Underwriters Laboratories Inc. (UL) issued a news release on the failures of field samples of certain Model GB series sprinkler heads during operational testing. UL tested over 1800 GB series heads from over 100 different locations and found that 26 percent of the sprinkler heads needed higher water pressure than the 5 psi required for UL listing. Seven percent needed over 40 psi to operate and some did not operate at 60 psi. This is of great concern because the sprinkler systems are relied upon to protect structures, systems, or components important to safety against fire.

The sprinkler heads have O-ring water seals and were introduced in 1988. The following models are of concern: GB, GB-ALPHA, GB-J, GB-QR, GB-EC, GB-RS, GB-20, GB-20QR, GBR, GB-R1, GB-R2, GBR-LF, GB4, GB4-EC, GB4-FR, GB4-QREC, BB1, BB2, BB3, SD1, SD2, SD3, HIP, ROC, LF, and WS. Because of design changes, some of these models may have "O-ring" water seals and some may have disc spring water seals. Only the sprinkler head models with the "O" ring seal are of concern, not the models with the disc spring water seals. UL's Web site at: www.ul.com/about/newsrel/nr042401.html has pictures and descriptions of the water seals of different models.

Licensees who have GB series sprinkler heads installed in their facility may consider having some of the heads tested. UL will test heads submitted at no additional cost beyond the expense of removal, packaging, handling, and postage. Instructions for selecting, removing, and packaging the heads can be obtained from Central Sprinkling Co. at 1-800-523-6512.

Related Generic Communications

- IN 99-28, "Recall of Star Brand Fire Protection Sprinkler Heads," September 30, 1999
- IN 97-72, "Potential for Failure of the Omega Series Sprinkler Heads," September 22, 1997

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) or Office of Nuclear Material and Safeguards (NMSS) project manager.

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Attachments:

1. List of Recently Issued NRC Information Notices
2. List of Recently Issued NMSS Information Notices

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LIST OF RECENTLY ISSUED
 NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
2001-09	Main Feedwater System Degradation in Safety-Related ASME Code Class 2 Piping Inside the Containment of a Pressurized Water Reactor	06/12/01	All holders of operating licenses for pressurized water nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel
2001-08 Supplement 1	Update on the Investigation of Patient Deaths in Panama, Following Radiation Therapy Overexposures	06/06/01	All Medical Licensees
2001-08	Treatment Planning System Errors Result in Deaths of Overseas Radiation Therapy Patients	06/01/01	All medical licensees
2001-07	Unescorted Access Granted Based on Incomplete and/or Inaccurate Information	05/11/01	All holders of nuclear reactor operating licenses who are subject to Section 73.56 of Title 10, of the Code of Federal Regulations (10 CFR 73.56), "Personnel Access Authorization Requirements of Nuclear Power Plants."
2001-06	Centrifugal Charging Pump Thrust Bearing Damage not Detected Due to Inadequate Assessment of Oil Analysis Results and Selection of Pump Surveillance Points	05/11/01	All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel
2001-05	Through-Wall Circumferential Cracking of Reactor Pressure Vessel Head Control Rod Drive Mechanism Penetration Nozzles at Oconee Nuclear Station, Unit 3	04/30/01	All holders of operating licenses for pressurized water nuclear power reactors except those who have ceased operations and have certified that fuel has been permanently removed from the reactor vessel

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Information Notice No.	Subject	Date of Issuance	Issued to
2001-08, Supplement 1	Update on the Investigation of Patient Deaths in Panama, Following Radiation Therapy Overexposures	06/06/01	All medical licensees.
2001-08	Treatment Planning System Errors Result in Deaths of Overseas Radiation Therapy Patients	06/01/01	All medical licensees.
2001-03	Incident Reporting Requirements for Radiography Licensees	04/06/01	All industrial radiography licensees.
2001-01	The Importance of Accurate Inventory Controls to Prevent the Unauthorized Possession of Radioactive Material	03/26/01	All material licensees.
2000-22	Medical Misadministrations Caused by Human Errors Involving Gamma Stereotactic Radiosurgery (GAMMA KNIFE)	12/18/00	All medical use licensees authorized to conduct gamma stereotactic radiosurgery treatments.
2000-19	Implementation of Human Use Research Protocols Involving U.S. Nuclear Regulatory Commission Regulated Materials	12/05/2000	All medical use licensees.
2000-18	Substandard Material Supplied by Chicago Bullet Proof Systems	11/29/2000	All 10 CFR Part 50 licensees and applicants. All category 1 fuel facilities. All 10 CFR Part 72 licensees and applicants.
2000-16	Potential Hazards Due to Volatilization of Radionuclides	10/5/2000	All licensees that process unsealed byproduct material.
2000-15	Recent Events Resulting in Whole Body Exposures Exceeding Regulatory Limits	9/29/2000	All radiography licensees.