

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

June 26, 1979

IE Circular No. 79-10
(7906200171)

PIPEFITTINGS MANUFACTURED FROM UNACCEPTABLE MATERIAL

Description of Circumstances:

Liberty Equipment and Supply Company of Kennewick, Washington and Tube Turns Division, Chemetron Corporation of Louisville, Kentucky reported on April 4 and 12, 1979, respectively, that potentially defective pipe fittings were manufactured from material with a high carbon content beyond the range allowed by ASTM A-234 WPB. These high carbon content fittings may crack when welded.

Tube Turns received 3.500 OD x .250W pipe from U. S. Steel - Lorain - identified as U. S. Steel Heat No. N570028. A total of 28,153 feet was received and identified by Tube Turns as Lot W6719. U. S. Steel has not been able to determine the exact number of lengths of pipe of incorrect chemistry, but indicated it could be at least four lengths. From this pipe, 4" - 90 degrees and 45 degrees - .237 wall elbows and 2" - .237 wall straight tees, ASTM A-234 WPB, were produced by Tube Turns. Each length of pipe is twenty feet and makes from 20 to 30 fittings. Approximately 27,000 fittings were produced and each is identified by Tube Turns Lot No. W6719. Shipment of these fittings started in March of 1978, and it is estimated all were shipped before the end of 1978.

On May 10, 1979, the Tube Turns Division reported to the NRC that 4" elbows, Lot W6719, have been provided to the nuclear power plants listed below. U.S. Steel has tested about one hundred and fifty (150) loose and installed fittings at the seven sites noted by an asterisk.

*Grand Gulf	*Zimmer	*Phipps Bend	*Waterford III
*Brown's Ferry	Midland	Limerick	
Shoreham	*LaSalle	Sequoyah	
*Brunswick	Hartsville	Bellefonte	

On June 1, 1979, the Tube Turns Division reported to the NRC via telephone that of the 160 fittings tested at Nuclear Power Plants, three (3) pieces were found to have a high carbon content and were replaced.

All construction permit holders are advised to conduct a review of their pipefitting receiving documents for the period from March 1978 to January 1979 and determine if fittings manufactured by the Tube Turn Division can be identified as Tube Turn Lot W6719. If shipment of the defective material lot were received, appropriate corrective action should be initiated.

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No written response to this circular is required, if you require additional information regarding this subject, contact the Director of the appropriate NRC Regional Office

LISTING OF IE CIRCULARS ISSUED IN
LAST TWELVE MONTHS

Circular No.	Subject	Date of Issue	Issued To
78-12	HPCI Turbine Control Valve Lift Rod Bending	6/30/78	All Holders of BWR OLs or CPs for plants with HPCI Terry Turbine
78-13	Inoperability of Multiple Service Water Pumps	7/10/78	All Holders of Reactor OLs and CPs except for plants located in: AL, AK, CA, FL, GA, LA, MS, SC
78-14	HPCI Turbine Reversing Chamber Hold Down Bolting	7/12/78	All Holders of BWR OLs or CPs for plants with a HPCI Terry Turbine excepting Duane Arnold and Monticello
78-15	Checkvalves Fail to Close In Vertical Position	7/20/78	All Holders of Reactor OLs or CPs
78-16	Limiter Valve Actuators	7/26/78	All Holders of Reactor OLs or CPs
78-17	Inadequate Guard Training/Qualification and Falsified Training Records	10/13/78	All Holders of and applicants for Reactor OLs
78-18	UL Fire Test	11/6/78	All Holders of Reactor OLs or CPs
78-19	Manual Override (Bypass) of Safety Actuation Signals	12/28/78	All Holders of CPs

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LAST TWELVE MONTHS

Circular No.	Subject	Date of Issue	Issued to
79-01	Administration of Unauthorized Byproduct Material to Humans	1/12/79	All Holders of Licensees except Teletherapy Medical Licensees and each Radiopharmaceutical Suppliers
79-02	Failure of 120 Volt Vital AC Power Supplies	2/16/79	All Holders of Reactor OLs and CPs
79-03	Inadequate Guard Training- Qualification and Falsified Training Records	2/23/79	All Holders of and applicants for Special Nuclear Material Licenses in Safeguards Group I
79-04	Loose Locking Nut On Limitorque Valve Operators	3/16/79	All Holders of Reactor OLs or CPs
79-05	Moisture Leakage In Stranded Wire Conductors	3/20/79	All Holders of Reactor OLs or CPs
79-06	Failure to Use Syringe and Battle Shields in Nuclear Medicine	4/19/79	All Holders of Medical Licensees except teletherapy licensees
79-07	Unexpected Speed Increase of Reactor Recirculation MG Set Resulted in Reactor Power Increase	5/2/79	All Holders of BWR OL's or CP's
79-08	Attempted Extortion - Low Enriched Uranium	5/18/79	All Fuel Facilities Licensed by NRC
79-09	Occurrences of Split or Punctured Regulator Diaphragms In Certain Self Contained Breathing Apparatus	6/22/79	All Materials Priority I, Fuel Cycle and Operating Reactor Licensees