UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76012

"PDR HQ"

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August 10, 1979

SNM-1167

NORTHWESTERN OKLAHOMA STATE UNIV.
ALVA
OK 73717

Gentlemen:

Enclosed is IE Bulletin No. 79-19, which requires action by you with regard to your NRC license.

Should you have questions regarding this Bulletin or the actions required of you, please contact this office.

Sincerely,

Karl V. Seyfrit
Director

Enclosures:
1. IE Bulletin No. 79-19
2. List of Bulletins Issued in Last Six Months

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

IE Bulletin No. 79-19
Date: August 10, 1979

PACKAGING OF LOW-LEVEL RADIOACTIVE WASTE FOR TRANSPORT AND BURIAL

Description of Circumstances:

Low-level radioactive waste is that waste which can be transferred and shipped to one of three waste burial facilities which are located in and licensed by the Agreement States of Nevada, South Carolina, and Washington. On July 10, 1979, the Governors of the three states notified NRC Chairman Hendrie of the serious and repeated disregard for rules governing the shipments of low-level radioactive wastes to these burial facilities.

Examples of violations of Agreement State, DOT and NRC rules follow:

Improperly packaged uranium fines igniting packaged liquid scintillation vials in combustible waste is believed to have caused a fire and destruction of a truck at the Beatty, Nevada burial facility on May 14, 1979.

On July 2, 1979, three of twelve steel containers shipped to the Beatty burial facility were found to be leaking radioactive material. The material was described on the bill of lading as being a solid inorganic salt (evaporator concentrates solidified with urea formaldehyde) from a reactor facility. The Governor of the State of Nevada ordered the drums to be shipped out of the state and the burial facility was temporarily closed.

On July 30, the first shipment into the reopened Beatty facility contained free liquid in "solid" material. The radioactive contents were sand filters used at an insitu leaching process at a uranium mill.

Forty-three shipments with sixty-three deficiencies were observed during the package inspection program between April 10 and July 5, 1979, by the Agreement State of South Caroiina, at the Barnwell, South Carolina burial facility. The shipments were from reactor, medical, industrial and military facilities.

On June 28, 1979, the Federal Highway Administration issued a Notice of Violation to a reactor facility proposing a $10,000 fine for truck contamination resulting from improper closures on 55-gallon drums of LSA material and for improper loading of the drums on the vehicle.

These are a few examples of shipments of radioactive material to burial facilities which did not fully meet NRC, DOT and Agreement State requirements which were developed to protect the health and safety of the public. The Governors of the three States with licensed burial facilities have indicated that if the situation is not rectified, they may have to initiate actions which would deny use of the three burial sites by violators.

Sources of Information:

The DOT regulatory requirements can be found in 49 CFR Parts 170-179. The NRC regulatory requirements can be found in 10 CFR Parts 19 to 71. The NRC regulatory requirements for Agreement State licensees in non-agreement states are in 10 CFR Part 150. Copies of the regulations may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402.

Information about licensing requirements for NRC packages can be obtained from the NRC Transportation Branch (301-427-4122). Information about DOT packaging and transport requirements can be obtained by calling the DOT Office of Hazardous Materials (202-426-2311).

Action To Be Taken By Licensees:

To assure the safe transfer, packaging, and transport of low-level radioactive waste, each licensee is expected to:

1. Maintain a current set of DOT and NRC regulations concerning the transfer, packaging and transport of low-level radioactive waste material

2. Maintain a current set of requirements (license) placed on the waste burial firm by the Agreement State of Nevada, South Carolina, or Washington before packaging low-level radioactive waste material for transfer and shipment to the Agreement State licensee. If a waste collection contractor is used, obtain the appropriate requirements from the contractor.

3. Designate, in writing, people in your organization who are responsible for the safe transfer, packaging and transport of low-level radioactive material.

4. Provide management-approved, detailed instructions and operating procedures to all personnel involved in the transfer, packaging and transport of low-level radioactive material. Special attention should be given to controls on the chemical and physical form of the low-level radioactive material and on the containment integrity of the packaging.

5. Provide training and periodic retraining in the DOT and NRC regulatory requirements, the waste burial license requirements, and in your instructions and operating procedures for all personnel involved in the transfer, packaging and transport of radioactive material. Maintain a record of training dates, attendees, and subject material for future inspections by NRC personnel.

6. Provide training and periodic retraining to those employees who operate the processes which generate waste to assure that the volume of low-level radioactive waste is minimized and that such waste is processed into acceptable chemical and physical form for transfer and shipment to a low-level radioactive waste burial facility.

7. Establish and implement a management-controlled audit function of all transfer, packaging and transport activities to provide assurance that personnel, instructions and procedures, and process and transport equipment are functioning to ensure safety and compliance with regulatory requirements.

8. Perform, within 60 days of the date of this bulletin, a management-controlled audit of your activities associated with the transfer, packaging and transport of low-level radioactive waste. Maintain a record of all audits for future inspections by NRC or DOT inspectors. (Note: If your have an established audit function and have performed such an audit of all activities in Items 1-6 within the past six months, this audit requirement is satisfied.)

9. Report, in writing within 45 days, your plan of action and schedule with regard to the above items. In addition, provide responses to the three questions below. Reports should be submitted to the Director of the appropriate NRC Regional Office and a copy should be forwarded to the NRC Office of Inspection and Enforcement, Division of Fuel Facility and Materials Safety Inspection, Washington, D.C. 20555.

   Provide answers for 1978 and for the first six months of 1979 to the following questions:

   1. How many low-level radioactive waste shipments did you make? What was the volume of low-level radioactive waste shipped?

      (Power reactor licensees who report this information in accordance with Technical Specifications do not need to respond to this question.)

   2. What was the quantity (curies) of low-level radioactive waste shipped? What were the major isotopes in the low-level radioactive waste?

      (Power reactor licensees who report this information in accordance with Technical Specifications do not need to respond to this question.)

   3. Did you generate liquid low-level radioactive waste? If the answer is 'yes,' what process was used to solidify the liquid waste?

Licensees who do not generate low-level radioactive waste should so indicate in their responses and do not need to take other actions specified in the above items.

Approved by GAO, B180225 (R0072); clearance expires 7-31-80. Approval was given under a blanket clearance specifically for identified generic problems.

LISTING OF IE BULLETINS ISSUED IN LAST SIX MONTHS

Bulletin No.	Subject	Date Issued	Issued To
79-01A	Environmental Qualification of Class IE Equipment	6/6/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-02	Pipe Support Base Plate Designs Using Concrete Expansion Anchor Bolts	3/8/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-02 (Rev. 1)	Pipe Support Base Plate Designs Using Concrete Expansion Anchor Bolts	6/21/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-03	Longitudinal Weld Defects In ASME SA-312 Type 304 Stainless Steel Pipe Spools Manufactured by Youngstown Welding and Engineering Company	3/12/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-04	Incorrect Weights for Swing Check Valves Manufactured by Velan Engineering Corporation	3/30/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-05	Nuclear Incident at Three Mile Island	4/1/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)

79-05A	Nuclear Incident at Three Mile Island	4/5/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-05B	Nuclear Incident at Three Mile Island	4/21/79	All B&W Power Reactor Facilities with an Operating License (OL)
79-06	Review of Operational Errors and System Misalignments Identified During The Three Mile Island Incident	4/11/79	All Pressurized Water Power Reactor Facilities Except B&W Facilities
79-06A	Review of Operational Errors and System Misalignments Identified During the Three Mile Island Incident	4/14/79	All Westinghouse PWR Facilities with an Operating License (OL)
79-06A (Rev. 1)	Review of Operational Errors and System Misalignments Identified During the Three Mile Island Incident	4/18/79	All Pressurized Water Power Reactor Facilities of Westinghouse Design with an Operating License (OL)
79-06B	Review of Operational Errors and System Misalignments Identified During The Three Mile Island	4/14/79	All Combustion Engineering PWR Facilities with an Operating License (OL)
79-07	Seismic Stress Analysis of Safety-Related Piping	4/14/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)

79-08	Events Relevant to BWR Reactors Identified During Three Mile Island Incident	4/14/79	All BWR Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-09	Failures of GE Type AK-2 Circuit Breaker in Safety Related Systems	5/11/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-10	Requalification Training Program Statistics	5/11/79	All Power Reactor Facilities with an Operating License (OL)
79-11	Faulty Overcurrent Trip Device in Circuit Breakers for Engineered Safety Systems	5/22/79	All Power Reactor Facilities with an Operating License (OL) or a Construction Permit (CP)
79-12	Short Period Scrams at BWR Facilities	5/31/79	All Power Reactor Facilities with an Operating License (OL) or a Construction Permit (CP)
79-13	Cracking In Feedwater System Piping	6/25/79	All PWRs with an Operating License (OL) for action. All BWR with a Construction Permit (CP) for information
79-14	Seismic Analyses for As-Built Safety-Related Piping System	7/2/79	All Power Reactor facilities with an Operting License (OL) or a Construction Permit (CP)
79-15	Deep Draft Pump Deficiencies	7/11/79	All Power Reactor Facilities with a Construction Permit and/or Operating License (OL)
79-16	Vital Area Access Controls	7/26/79	All Power Reactors with an Operating License (OL) or anticipating fuel loading prior to January 1981.
79-17	Pipe Cracks in Stagnant Borated Water Systems at PWR Plants	7/26/79	All PWRs with Operating License (OL)
79-18	Audibility Problems Encountered on Evacuation of Personnel from High-Noise Areas	8/6/79	All Power Reactor Facilities with an Operating License (OL)