

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

MAY 7 1980

DOCKET NO .: 70-824

APPLICANT: Babcock & Wilcox

FACILITY: Lynchburg Research Center

Lynchburg, Virginia

SUBJECT: REVIEW OF AMENDMENT APPLICATION DATED FEBRUARY 18, 1980, AND

ITS SUPPLEMENTS DATED MARCH 25 AND APRIL 8, 1980

Background

Babcock & Wilcox, Lynchburg Research Center (LRC), by application dated February 18, 1980, and its supplements dated March 25 and April 8, 1980, requested authorization for the construction and use of a temporary addition to Building J for the storage of solid transuranium wastes. The purpose of the construction is to provide storage space for transuranium wastes until a licensed contractor is identified to receive the waste. In the past, this type of waste was shipped to a licensed disposal facility. However, the licensee was notified, in October 1979, that the disposal facility was no longer accepting transuranic wastes.

II. Discussion

A. Construction

The temporary addition (approximately eight feet high and having 178 square feet of storage space) is constructed of solid, unmortared concrete block. Three walls of the addition consist of four courses of block (approximately four feet thick) and the fourth wall, three courses of block (approximately three feet thick) abutting Building J. The addition is provided with a metal roof hinged to Building J and is provided with side panels which permit the roof to fit flush with the top of the blocks. Dry waste is loaded into the addition, through the opened roof, in closed containers suitable for off-site shipment. Although the four feet thickness of solid concrete block wall should be strong enough to withstand an accidental impact from a loading vehicle, a curbing is placed on the approach side of the addition as an added precaution to prevent the vehicle from accidentally contacting the exterior block wall.

B. Radiological and Nuclear Criticality Safety

The addition is provided with exhaust ventilation through ducting which connects Building J with the addition thereby permitting the smoke detector and air sampler in Building J to serve both. The addition adds less than 15% to the storage space in Building J. All radiological and nuclear criticality safety controls and procedures currently authorized for the storage of dry radioactive waste will be followed.

Administrative controls have been incorporated in the loading and unloading procedures to prevent the container or container handling boom from contacting the exterior block walls.

C. Environmental Effects

It has been determined that no significant environmental effect should result from approval of the amendment request to the license (see memorandum by E. Y. Shum dated April 25, 1980, "Environmental Review of Amendment Application Dated February 18, 1980").

D. General

The amendment application dated February 18, 1980, and its supplements dated March 25 and April 8, 1980, were discussed with J. B. Kahle, IE Region II inspector of the LRC facility, on April 30, 1980. He foresaw no safety or environmental problems with the authorization for the requested use of the temporary addition to Building J.

III. Conclusion

The requested use of Building J under the presently authorized radiological and nuclear criticality safety controls and procedures are adequate to protect the health and safety of the operating personnel, the public and the environment.

Issuance of the license amendment is recommended.

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Material Safety

Approved by:

W. T. Crow, Section Leader