

U.S. NUCLEAR REGULATORY COMMISSION
FINDING OF NO SIGNIFICANT IMPACT
AMENDMENT OF SPECIAL NUCLEAR MATERIAL LICENSE NO. SNM-778
BABCOCK & WILCOX NNFD RESEARCH LABORATORY
DOCKET NO. 70-824

The U.S. Nuclear Regulatory Commission (the Commission) is considering the amendment of Special Nuclear Material License No. SNM-778 for the construction of a temporary storage facility at Babcock & Wilcox's (B&W) NNFD Research Laboratory in Lynchburg, Virginia.

Environmental Assessment

Identification of the Proposed Action: The proposed action is the construction and use of a temporary storage facility for hot cell waste. This facility will be an in-ground array of eight vertical, concrete cylinders arranged in two rows of four with 24 inches of concrete shielding at the top of each cylinder. The bottom of the cylinders will be at approximately 560 ft mean sea level (MSL) which is 58 ft above the Standard Project Flood determined by the U.S. Army Corps of Engineers for the James River at the B&W site.

The top of the concrete shielding will be approximately at ground level. Each cylinder will be 6 feet in diameter and 13-feet tall, and each is equipped with a stainless steel drain pipe which leads to a common sampling pit and rests on a common concrete pad. The concrete slab is surrounded by a foundation drain system which pipes to a second sampling pit. The two sampling pits will be sampled regularly and analyzed for the presence of radioactive material. In this facility, the stored waste is in long-life containers, the majority of which are stainless steel, 30-gallon drums. Others will be 30- and 55-gallon carbon steel drums but will be overpacked in stainless steel or galvanized drums.

Need for the Proposed Action: Presently, hot cell waste is stored in the Annex of Building J. This facility is full, and the normal operations in support of existing and anticipated contracts will generate approximately 100 more drums over the next 5 years. This waste is being stored onsite until it is accepted by the Department of Energy under the Nuclear Waste Policy Act of 1982. Denying the construction and use of this facility would completely curtail the normal operations associated with the hot cells.

Environmental Impact of the Proposed Action: Since only dry containerized waste will be stored in this facility, there should be no effluents produced. Any rain or snowmelt that manages to enter the concrete cylinders will automatically drain into the sampling pit. This water will be periodically removed. In the unlikely event that water should penetrate the drums, any leachate would flow to the sampling pit before radioactive material could enter the ground water. The drums, concrete walls, and subterranean location will provide shielding to reduce radiation levels above ground to below regulatory levels.

Agencies and Persons Consulted: There was no contact with other agencies.

Finding of No Significant Impact: The Commission has determined not to prepare an Environmental Impact Statement for the proposed action. Based upon the Environmental Assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment. The Environmental Assessment for the proposed action, on which this Finding of No Significant Impact is based, relies on the Babcock & Wilcox information submitted as Amendment 4 to License No. SNM-778, December 8, 1987, and the additional information submitted by B&W on March 30, 1988, and June 20, 1988.

The Environmental Assessment and the above documents related to this proposed action are available for public inspection and copying, for a fee, at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. Copies of the Environmental Assessment may be obtained by calling (301) 492-0609 or by writing to the Fuel Cycle Safety Branch, Division of Industrial and Medical Nuclear Safety, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Dated at Rockville, Maryland, this 8th day of July, 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed At

Leland C. Rouse, Chief
Fuel Cycle Safety Branch
Division of Industrial and
Medical Nuclear Safety, NMSS

OFC : IMUF	: IMUF	: IMUF	: IMUF	: IMSB
NAME: GLaRoche:lg/ht/mh	: JTharpe	: ALSoong	: JJSwift	: LCRouse
DATE: 06/30/88	: 06/30/88	: 06/30/88	: 06/27/88	: 06/27/88

OFFICIAL RECORD COPY