DOE F 1325.8
(8-89)

United States Government **Department of Energy**

memorandum

DATE: July 29, 1994

REPLY TO
ATTN OF: Office of NEPA Oversight:Simpson:6-4600

SUBJECT: Environmental Assessment and Finding of No Significant Impact for the Low-Level Waste Drum Staging Building at the Weapons Engineering Tritium Facility at the Los Alamos National Laboratory

TO: Victor H. Reis
Assistant Secretary for Defense Programs

On March 31, 1994, the Office of NEPA Oversight authorized you to transmit the subject environmental assessment to the State of New Mexico and the Pueblos of Cochiti, Jemez, Santa Clara, and San Ildefonso for their preapproval review. The State responded on June 3, 1994, that it viewed the proposed action as "environmentally benign," and counsel for San Ildefonso Pueblo noted on June 2, 1994, that the Pueblo did not have any substantive comments on the proposed action. Your NEPA Compliance Officer forwarded the responses to my staff on June 7, 1994, and requested that we proceed with approval of the environmental assessment and issuance of a finding of no significant impact.

Based on my staff's review and its recommendation, I have determined, after consultation with the Office of General Counsel, that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act and its implementing regulations (40 CFR Parts 1500-1508 and 10 CFR Part 1021). Therefore, an environmental impact statement is not required. Accordingly, the environmental assessment is approved as DOE/EA-0874, and I have signed the attached finding of no significant impact.

Your office is responsible for providing public notice of the availability of the environmental assessment and finding of no significant impact as required by 40 CFR 1506.6(b), 10 CFR 1021.322, and DOE 5440.1E, paragraph 6a(24). Publication of the finding of no significant impact in the Federal Register is not necessary since this is not an action with effects of national concern. Please send five copies and one electronic copy of the environmental assessment and distribution list to the Office of NEPA Oversight for our records.

for Tara O'Toole, M.D., M.P.H.
Assistant Secretary
Environment, Safety and Health

Attachment

cc: Henry Garson, DP-24, NEPA Compliance Officer
Constance Soden, AL, Acting NEPA Compliance Officer

DEPARTMENT OF ENERGY

FINDING OF NO SIGNIFICANT IMPACT,
LOW-LEVEL WASTE DRUM STAGING BUILDING
LOS ALAMOS NATIONAL LABORATORY

PROPOSED ACTION: The United States Department of Energy proposes to construct and use a small prefabricated building to temporarily hold low-level radioactive waste at Technical Area 16 of the Los Alamos National Laboratory in Los Alamos, New Mexico. The proposed staging building is needed to make more efficient use of existing laboratory space, and to help reduce the radiation dose to workers. The proposed staging building would be a 3 meter (10 feet) by 4.5 meter (15 foot) [13.5 square meter (150 square feet)] prefabricated storage building to temporarily hold up to eight sealed 55-gallon drums of noncompactible tritium-contaminated solid waste before Laboratory waste management personnel transport them to the Laboratory's low-level radioactive waste disposal area at Technical Area 54. The proposed drum staging building would be placed on a bermed asphalt pad near other existing similar structures used for accumulating office trash and compactible low-level radioactive waste.

The proposed staging building would be used for non-compactible low-level radioactive waste from operations at the Weapons Engineering Tritium Facility (Tritium Facility). The Weapons Engineering Tritium Facility repackages small quantities of tritium (in laboratories inside the Facility) to meet precise requirements of experiments. In the course of this work, noncompactible waste is generated, such as used or broken valves, plumbing, pumps, sieves, etc. Because tritium, a radioactive gas, is used in these laboratories, the waste is presumed to be contaminated with small amounts of tritium. Up to ten drums of waste are generated per year. Space inside the Tritium Facility is limited, and only one drum for noncompactible waste can be stored inside the building. Workers inside the Tritium Facility

are exposed to releases of tritium when drums are opened to receive more waste, and, although the total personnel dose is well below five rem per year (the Departmental limit for worker exposure), continuing to keep the drums inside the building does not allow the Department to reduce the dose to workers.

The Department has prepared an environmental assessment (DOE/EA-0874) that compares impacts of the proposed action with those of continuing with present practices (the "no action" alternative). The Department considered, but dismissed as unreasonable, the alternative of using a staging building at another facility at the Laboratory.

ENVIRONMENTAL IMPACTS: The environmental assessment indicates that the environmental impacts from constructing and using the proposed staging building would be very small. The prefabricated building would be erected on an already-disturbed site adjacent to an existing building and would not impact any ecologically or culturally sensitive areas, including floodplains or wetlands. The proposed building would not affect the amount of waste generated and stored: the only difference between the proposed action and the "no action" alternative is whether the sealed drums would be stored and opened to receive waste inside the laboratory or inside the drum staging building. The individual radiation dose to the ten or less people working inside the Tritium Facility is estimated to range between 5 to 200 millirem per year; the dose to the individual who adds waste to the drums could be as much as 0.34 millirem per year (with a resulting risk of excess fatal cancer of 1.4×10^{-7}) in addition to the dose associated with other Tritium Facility operations. This dose would be the same whether the drum is in the proposed staging building or in the Tritium Facility, but workers inside the Tritium Facility would not receive this additional exposure if drums were filled in a

staging building. Under normal operating conditions, any tritium released from the waste drums would escape to the environment, regardless of whether the drums were inside the laboratory space or inside the proposed drum staging building. Under accident conditions, the dose to an individual in the adjacent building would be 6.6×10^{-3} millirem, yielding a 2.6×10^{-9} risk of excess fatal cancers. (A worker in the proposed staging building is assumed to immediately evacuate to the Tritium Facility.) The dose to a maximally exposed offsite individual from the proposed staging building under accident conditions would be 3×10^{-4} millirem, yielding a 1.5×10^{-10} risk of excess fatal cancers.

The Department consulted with the New Mexico State Historic Preservation Officer, the United States Fish and Wildlife Service, the New Mexico Fish and Game Department, and the New Mexico Department of Natural Resources to develop the impact analysis in the environmental assessment.

FOR FURTHER INFORMATION CONTACT: For further information on the proposal or the National Environmental Policy Act review program concerning proposals at the Laboratory, please contact:

M. Diana Webb
Los Alamos Area Office
U. S. Department of Energy
528 35th Street
Los Alamos, NM 87544
(505) 665-6353

For general information on the Department's National Environmental Policy Act process, please contact:

Carol M. Borgstrom, Director
Office of NEPA Oversight, EH-25
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585
(202)586-4600 or (800)472-2756

Copies of the environmental assessment are also available for public review at the Los Alamos National Laboratory Community Reading Room, 1450 Central Ave., Suite 101, Los Alamos, New Mexico 87544. For information on the availability of specific documents and hours of operation, please contact the reading room at (505) 665-2127, or (800) 543-2342.

FINDING: Based on the analysis of impacts in the environmental assessment, construction and operation of the proposed low-level waste drum staging building would not significantly affect the quality of the human environment within the meaning of the National Environmental Policy Act, 42 U.S.C. 4321, et seq. Therefore, the Department is issuing this finding of no significant impact and an environmental impact statement is not required.

Signed in Washington, D.C., this 29th day of July, 1994.

for Tara O'Toole, M.D., M.P.H.
Assistant Secretary,
Environment, Safety and Health