

LANL TH-55

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MEMORANDUM

To: Gedi Cibas, WWMD
From: *SY* Steve Yanicak, LANL POC, DOE OB
Date: June 1, 1998
Subject: Pit Disassembly and Conversion Demonstration Environmental Assessment and Research and Development Activities, May 1998

NMED File No: 1172 ER

Attached is the DOE Oversight Bureau's review of the subject document.

If you have any questions, please contact Tim Michael at 827-1536.

SY:tlm

Attachment

cc: John Parker, Chief, DOE Oversight Bureau



DOE Oversight Review of
"Pit Disassembly and Conversion Demonstration Environmental Assessment and Research and
Development Activities" May 1998
NMED File No: 1172 ER

To determine the feasibility of a process to disassemble and convert plutonium pits to a form suitable for long-term disposition, a Pit Disassembly and Conversion Demonstration is proposed at the Los Alamos National Laboratory (LANL). The demonstration would start during June 1998 and continue for up to four years. It would be conducted in existing buildings and facilities, at LANL's Plutonium Facility (PF-4) in TA-55. It is planned to involve the disassembly of up to 250 pits and conversion of the recovered plutonium to plutonium metal ingots and plutonium oxide. It also includes the conversion of up to 80 kilograms of clean plutonium metal to plutonium oxide.

This *Pit Disassembly and Conversion Demonstration Environmental Assessment* is part of the NEPA review for research and demonstration activities for the disposition of surplus plutonium. It is being undertaken to determine whether there are any potentially significant environmental impacts associated with conducting the Pit Disassembly and Conversion Demonstration, before issuance of the *Surplus Plutonium Disposition Environmental Impact Statement* (SPD EIS) Record of Decision.

This *Pit Disassembly and Conversion Demonstration Environmental Assessment* is intended to provide sufficient information for DOE to determine whether a Finding of No Significant Impact (FONSI) is warranted or whether an Environmental Impact Statement (EIS) must be prepared.

The EA identifies two alternatives:

- (1) *No Action* An integrated pit disassembly and conversion line would not be demonstrated at LANL. Research related to these activities would continue to be performed in a series of individual gloveboxes. Currently, pits are disassembled in gloveboxes at LANL's TA-55.
- (2) *Pit Disassembly and Conversion Demonstration* An integrated pit disassembly and conversion process would be tested on a small sample of pits and plutonium metal at LANL. The plutonium to be used in the demonstration would be taken from storage at LANL or shipped from other DOE facilities.

The "proposed action" is to conduct the Pit Disassembly and Conversion Demonstration at LANL. Plutonium pits will be transported to New Mexico. Waste transport standards should be at least as protective as for other transuranic materials. Small amounts of transuranic waste, mixed low-level waste, and hazardous waste will be produced. Since most of LANL's waste processing capability and waste storage capacity has been committed, impacts at TA-55 and at the Low Level Waste Disposal Facility (TA-54), and the Radioactive Liquid Waste Treatment Facility (TA-50) should be considered. Small amounts of plutonium, americium, and tritium may be released to the atmosphere. Monitoring and control of these emissions should be demonstrated to be adequate and should be maintained.

OVERSIGHT BUREAU

ATTN:

FACILITY ENVIRONMENTAL
DOCUMENT REVIEW PROCEDURE

STEVE

YANICK

TRACKING AND ROUTING SLIP

SUBJECT PIT DISASSEMBLY & CONVERSION

ACTION REVIEW & COMMENT

FOR STEVE YANICK SIGNATURE/APPROVAL

ASSIGNED TO TIM MICHAEL DATE DUE 6/1/98

	NAME	DATE RCVD	DATE FWD	INITIALS
1. REVIEWER	Tim Michael	5/14/98	6/1/98	TJM
2. SUPERVISOR	John Parker	5/1/98	6/1/98	JWP
3. POC	Steve Yanick	6-2-98	6-2-98	SJ
4. TECH SUPPORT PM	Tim Michael	6/2/98	6/2/98	TJM
5. BUREAU CHIEF	John Parker	6/2/98	6/2/98	JWP

COMMENTS:

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