

12-15-93

NMED REPLY TO PUBLIC COMMENTS RECEIVED ON THE U.S.
DEPARTMENT OF ENERGY/LOS ALAMOS NATIONAL LABORATORY
RESEARCH, DEVELOPMENT AND DEMONSTRATION HYDROTHERMAL
PROCESSING UNIT DRAFT PERMIT

Comment Period Ran from October 20, 1993 to December
15, 1993.

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Response to public comments on the draft Research, Development and Demonstration Hazardous waste Permit for Los Alamos National Laboratory (RD&D2) Hydrothermal Processing Unit:

Comment 1

"Operator safety is a concern that must be addressed. ASME design criteria must be applied to prevent accidents and potential exposure of workers and the environment.

Corrosion of the reactor and other components must be addressed. Corrosion can cause catastrophic failure of the reactor and should be controlled by limiting exposure of the pressure containment to oxygen and flames.... These recommendations will help to protect workers and the environment, in addition to enhancing LANL's participation in business development for New Mexico".

HRMB Response:

DOE/LANL was given a copy of the above comments from the League of Women Voters of Santa Fe County, to respond to the above-raised issues. DOE/LANL gave the following response:

1. "ASME design criteria were applied through the unit design;
2. Because the reaction rates are relatively rapid, the required residence time at treatment temperatures and pressures is short (roughly 10 seconds). Consequently, the reactor volume (and therefore the amount of waste) that is at full temperature and pressure at any one time is fairly small. This helps to minimize the consequences of any failure or accidents.
3. Because the reactor volume is small, secondary confinement of the reactor is readily accomplished.
4. The unit is operated remotely from a separate control room. No one is allowed near the unit during operation.
5. LANL plans to frequently inspect the RD&D unit for any indication of corrosion."
6. In responding to the question by (The League of Women Voters of Santa Fe County) that DOE/LANL should make the RD&D facility a Designated User Facility, to allow participation by private industry in the development and commercialization of the technology under discussion, DOE/LANL replied that "the concept is under discussion but no final decision has yet been made."

In response to the above comments, the following permit condition shown in bold print has been added to Module II:

II.H.2.b. The Permittee shall frequently inspect the RD&D unit for any indication of corrosion. The Hydrothermal Processing unit shall be operated remotely from a separate control room and no one shall be allowed near the unit during operation, in compliance with HWMR-7, Part V, §264.31.

Comment 2

"I am in opposition to the construction and operation of the LANL hydrothermal processing unit." "Please send me information regarding the amount of water being used to treat the 2 gallons of hazardous waste per hour. Also, what contamination remains in the effluent from the plant? "

HRMB Response:

The commenter who wrote the above remarks did not state his reason for opposing the construction and operation of the hydrothermal processing unit. NMED will therefore issue the RD&D operating permit in accordance with the regulatory requirements of the State of New Mexico. Moreover, DOE/LANL has met all technical requirements for operation of the hydrothermal processing unit in a manner that protects human health and the environment.

Asked the above questions, DOE/LANL replied that "about 481 gallons of water will be used in the plant on any typical 8-hour day". In addition, "the contaminants remaining in the effluents include gaseous effluents and molecular nitrogen with small amounts of nitrous oxide (laughing gas). The liquid water effluent contained trace amounts of carbon and nitrogen".

There will be no changes to the permit because the anticipated gaseous and liquid effluents have been described in the draft Permit on page A-5, Section 2.2 (Wastes Generated by the RD&D Treatment).

Comment 3

"Before approval may be given, the DOE must produce a full impact statement and hold a public hearing to receive and to respond to public concerns."

HRMB Response:

Environmental Impact Statements (EIS) are a requirement of the National Environmental Policy Act (NEPA). Getting a permit is not subject to NEPA. DOE/LANL produces EISs under NEPA for the

whole LANL environment which includes the subject PBR/SDP unit. DOE/LANL plans to continue to produce EISs for the entire LANL area as opposed to the current pilot-scale RD&D experiment.

After a public meeting that was held on March 11, 1994, to resolve the issue, the commenter sent a letter to NMED saying that she wished to withdraw her request for a public hearing.

An excerpt from the commenter's letter to HRMB, which was received on March 15, 1994 reads as follows:

"The meeting this morning at which representatives from Los Alamos Labs, Department of Energy and the NMED has answered my concerns regarding the one year permits requested for the two RD&D projects we discussed. I withdraw my request for a public hearing on the matter."