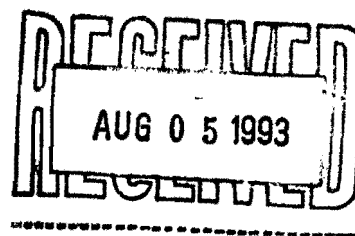




Department of Energy
Field Office, Albuquerque
Los Alamos Area Office
Los Alamos, New Mexico 87544



AUG 03 1993

LETTER TO

Mr. Ron Curry, Deputy Secretary
New Mexico Environment Department
P. O. Box 26110
Santa Fe, NM 87502

Dear Mr. Curry:

Under the U. S. Department of Energy (DOE) State Agreement in Principle (AIP), New Mexico Environment Department (NMED) staff have participated in regular meetings of the Omega West Reactor (OWR) Recovery Team and have provided valuable input in addressing environmental concerns at the site. NMED's AIP staff made recommendations regarding the drilling of additional monitoring wells in the shallow alluvium at Technical Area (TA) 2 as an early warning system for detecting future leaks. DOE and the Los Alamos National Laboratory (LANL) concurred with these recommendations. NMED also recommended that the tritiated water from the cooling loop be removed as soon as possible and all parties agreed that this water should be pumped from TA-2 through the radioactive liquid waste line to a storage tank at the TA-50 Radioactive Liquid Waste Treatment Plant until final disposition could be evaluated.

In reference to your letter of March 10, 1993, concerning the tritiated water being stored at TA-50, I would like to confirm that the OWR Recovery Team has carefully evaluated all reasonable options for disposal of this water and would prefer to treat the residual radioactive materials at the TA-50 Plant and discharge the tritiated effluent to Mortandad Canyon. This option was found to be the most acceptable method based upon health, safety, and environmental considerations. The following considerations are the primary factors in this determination:

1. Evaporation at the TA-53 Radioactive Wastewater Lagoon would involve trucking of tritiated water which would result in increased exposure to workers and to the public and increased risk of a spill.
2. Evaporation at the TA-53 Radioactive Wastewater Lagoon would result in greater exposure to the public from air releases than discharge to Mortandad Canyon. However, either option would result in extremely minimal exposures.
3. Although the TA-50 Radioactive Liquid Waste Treatment Plant does not treat tritiated water, the plant would treat the

LANL TA-2, 50, 53 Omega West Reactor tritiated water disposal.

S14



Mr. Ron Curry

2

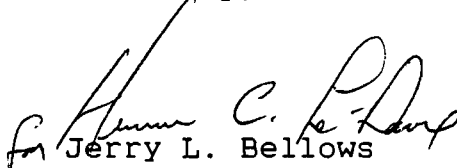
residual radioactive materials having long half-lives which were picked up by the tritiated water during pumping through the radioactive liquid waste line from TA-2 and during storage in the tank at TA-50.

4. Approximately one-half of the tritium discharged from the TA-50 Plant to Mortandad Canyon is naturally evaporated. The total cumulative release of tritium (1963-1991) to Mortandad Canyon decayed through 1991 is 430.3 Curies. The total release due to the OWR cooling water discharge to Mortandad Canyon would be 1.3 Curies. All surface flow from Mortandad Canyon has been retained on DOE property since the TA-50 Radioactive Liquid Waste Treatment Plant was constructed in 1962 due to the limited drainage area of the canyon and the construction of sediment basins in the canyon bottom.

I hope that this information will be helpful in your review of the OWR Recovery Team's findings concerning the tritiated water from TA-2. I suggest that a working level meeting of NMED, DOE and LANL staff be scheduled as soon as possible in order to review the Recovery Team's findings and to determine if a resolution of this issue can be reached. Please advise if such a meeting is agreeable and what date would be acceptable to your staff.

If you have any questions, please call me at FTS 8-505-667-5105, or Joseph C. Vozella of my staff at FTS 8-505-665-5027.

Sincerely,


for Jerry L. Bellows
Area Manager

LESH:7JV-094

CC:
See Page 3

Mr. Ron Curry

3

cc:

B. Swanton

NMED

525 Camino de los Marquez
Santa Fe, NM 87502

P. Monahan

NMED

525 Camino de los Marquez
Santa Fe, NM 87502

J. Vozella, ES&H, LAAO

D. Webb, ES&H, LAAO

A. Puglisi, ES&H, Scientech, LAAO

A. Tiedman, ADO, LANL, MS-A120

T. Gunderson, EM-DO, LANL, MS-J591

K. Hargis, (EM-8:93-920-2, rev-2),
EM-8, LANL, MS-K490

S. Rae, EM-8, LANL, MS-K490

M. Alexander, EM-8, LANL, MS-K490

A. Drypolcher, EM-7, LANL, MS-E517

S. Hanson, EM-7, LANL, MS-E517

A. Gancarz, INC-DO, LANL, MS-J515

G. Peterson, INC-15, LANL, MS-J514

B. Charles, INC-9, LANL, MS-J514

G. McFarlane, INC-9, LANL, MS-J514

H. Lindberg, HS-3, LANL, MS-K489

G. Schlapper, HS-12, LANL, MS-K483