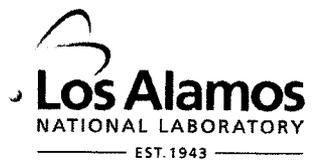


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ENTERED



Environmental Protection Division
Water Quality & RCRA Group (ENV-RCRA)
PO Box 1663, MS K490
Los Alamos, New Mexico 87545
(505) 667-0666

National Nuclear Security Administration
Los Alamos Field Office, A316
3747 West Jemez Road
Los Alamos, New Mexico, 87545
(505) 667-5794/FAX (505) 667-5948

Date: MAR 21 2013
Refer To: ENV-RCRA-13-0061
LAUR: 13-21826

Mr. Jerry Schoeppner, Chief
Ground Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building, Room N2250
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502

Dear Mr. Schoeppner:

**SUBJECT: ADDITIONAL INFORMATION, CORRECTIVE ACTION PLAN, DP-857,
SIGMA MESA EVAPORATION BASINS, PRIMARY LINER LEAKS**

In October 2012 the U.S. Department of Energy and Los Alamos National Security, LLC (DOE/LANS) submitted a corrective action plan (ENV-RCRA-12-0227) to the New Mexico Environment Department (NMED) for leaks in the primary liners at the Sigma Mesa evaporation basins. A corrective action plan is required by Discharge Permit DP-857 whenever liquid is discovered in one of the basin's leak collection sumps. Because new information has emerged since the corrective action plan was submitted, we would like to provide you with an update on the status of the leaks and associated repairs.

The current condition at each of the four Sigma Mesa evaporation basins is presented below.

- **Southwest Evaporation Basin.** The leak in the southwest basin has been isolated to a location in the upper 20% of the basin. The basin's volume is being actively managed to maintain water levels in the lower 80% of the basin until repair can be completed. Repair is scheduled for completion by April 30, 2013.



- **Southeast Evaporation Basin.** A crack in the overflow pipe boot has been identified as the source of a leak in the southeast basin. It appears that expanding ice lifted the overflow pipe and cracked the surrounding boot. The basin's volume is being actively managed to maintain water levels below the overflow pipe. The boot repair will not be scheduled until there is adequate capacity in the other basins to receive the contents of the southeast basin. It is expected that the repair can be completed by September 2013.
- **Northwest Evaporation Basin.** No leaks have been identified in the northwest basin.
- **Northeast Evaporation Basin.** The repeated presence of water in both leak collection sumps at the northeast basin indicates that the primary liner is leaking. The location of the leak is unknown at this time. The basin will be drained and the leak repaired when there is adequate capacity in the other basins to receive the contents of the northeast basin. It is expected that the repair can be completed by September 2013.

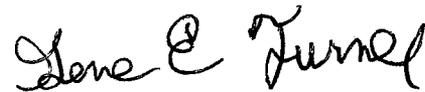
Please contact Robert S. Beers by telephone at (505) 667-7969 or by email at bbeers@lanl.gov if you have questions regarding this request.

Sincerely,



Alison M. Dorries
Division Leader
Environmental Protection Division
Los Alamos National Security, LLC

Sincerely,



Gene E. Turner
Environmental Permitting Manager
Environmental Projects Office
Los Alamos Field Office
U.S. Department of Energy

AMD:GET:RSB/lm

Cy: James Hogan, NMED/SWQB, Santa Fe, NM
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New Mexico Environment Department
Harold Runnels Building, Room N2250
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502

GROUND WATER
MAR 21 2013
BUREAU

Dear Mr. Schoeppner:

**SUBJECT: ADDITIONAL INFORMATION, CORRECTIVE ACTION PLAN, DP-857,
SIGMA MESA EVAPORATION BASINS, PRIMARY LINER LEAKS**

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