



General

NEW MEXICO
ENVIRONMENT DEPARTMENT

Water and Waste Management Division



BILL RICHARDSON
Governor
DIANE DENISH
Lieutenant
Governor

1190 South St. Francis Drive
P.O. Box 5469, Santa Fe, NM 87502-6110
Phone (505) 827-2900 Fax (505) 827-2965
www.nmenv.state.nm.us

RON CURRY
Secretary
JON GOLDSTEIN
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 22, 2010

Robert S. Beers
Environmental Protection Division
Water Quality & RCRA Group
P.O. Box 1663, MS K497
Los Alamos, New Mexico 87545



RE: RESPONSE TO LANL's REQUEST FOR A VARIANCE FROM THE NOI DECISION TREE

Dear Mr. Beers:

On October 21, 2009, the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) and Ground Water Quality Bureau (GWQB) received a request for a variance from the *Notice of Intent Decision Tree: Drilling, Development, Rehabilitation and Sampling Purge Water-Revised 7/26/06* (NOI Decision Tree, copy enclosed) from you on behalf of Los Alamos National Laboratory (LANL). The request proposes land application of 13 batches of drilling fluids and development water produced during the drilling and development of 11 of LANL's monitoring wells. The drilling fluids and development water exceed the water quality criteria outlined in the Decision Tree (Box D6). On October 30, 2009, NMED received a corrected version of the letter (copy enclosed) that included corrections to the manganese data.

NMED evaluated the information submitted in your request. The volumes of drilling fluids and development water currently containerized and proposed to be land applied in your request range from 7,000 – 60,000 gallons and the total volume is 225,000 gallons. Most of the contaminant concentrations exceed not just the Decision Tree screening limits, which are based upon 90% of the appropriate standard or human health criteria, but exceed the appropriate standard or human health criteria themselves. Based upon this alone, the GWQB is not able to approve your proposal, because discharge of these fluids in the manner you propose would likely require a ground water Discharge Permit pursuant to Section 20.6.2.3104 NMAC of the Water Quality Control Commission (WQCC) Regulations (20.6.2 NMAC). Permitting of these discharges would require substantial site specific information and a demonstration that the discharges would not cause an exceedance of standards or the presence of a toxic pollutant in ground water. Beyond the technical



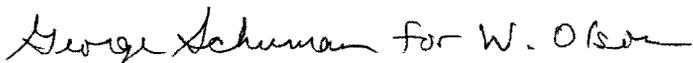
limitations of the proposal, no justification for why the fluids cannot be disposed of through the other options available in the Decision Tree was provided. Given these considerations, **NMED hereby denies LANL's request for a variance from the NOI Decision Tree for the land application of these drilling fluids and development waters.**

Because NMED has denied your variance request, these drilling fluids and development waters must be disposed of in accordance with the other options outlined in the NOI Decision Tree (assumedly to a LANL wastewater treatment facility or off-site disposal). As you are aware, NMED is in the process of revising the NOI Decision Tree (now to be titled: *LANL Drilling, Development, Rehabilitation, and Sampling Purge Water Decision Tree*). It is anticipated that the final revised version will be issued sometime in early 2010. Please note that there will be differences in the revised document, including a change that requires LANL to report the fate of fluids that do not meet the Decision Tree water quality criteria.

Also note for the future that NMED identified differences between the NOI Decision Tree limits listed in Corrected Table 1.0 of your proposal for methylene chloride and DEHP (bis(2-ethylhexyl)phthalate) and the most current EPA Regional Screening Levels that will be utilized under the revised Decision Tree. The carcinogenic target risk concentration listed in EPA's most current Regional Screening Levels for both of these toxic pollutants is 4.80 ppb, resulting in a 90% Decision Tree limit of 4.32 ppb.

If you have any questions regarding this matter, please contact Jennifer Fullam at (505) 827-2909 or George Schuman of the GWQB at (505) 827-2945.

Sincerely,



William C. Olson, Chief
Ground Water Quality Bureau

WO:JF,RG

Enc: October 13, 2009 letter from LANL Requesting a Variance from the NOI Decision Tree
(enclosures not included)
Notice of Intent Decision Tree: Drilling, Development, Rehabilitation and Sampling Purge
Water-Revised 7/26/06

cc: Mr. Gene Turner, LASO-EO, Los Alamos Site Office, MS A316, 528 35th Street Los
Alamos, NM 87545 (w/o encl)
Hai Shen, LASO-EO, P.O. Box 1663, MS A316, Los Alamos, New Mexico 87545-
0001(w/o encl)
Michael Mallory, PADOPS, LANL, LLC, P.O. Box 1663, MS A102, Los Alamos, New
Mexico 87545-0001(w/o encl)

Chris Cantwell, ADESHQ, P.O. Box 1663, MS K491, Los Alamos, New Mexico 87545-0001(w/o encl)
Danny Katzman, ADEP-PM, P.O. Box 1663, MS M992, Los Alamos, New Mexico 87545-0001(w/o encl)
Tim Goering, ADEP-PM, P.O. Box 1663, MSM992, Los Alamos, New Mexico 87545-0001(w/o encl)
Mike Alexander, ADEP-PM, P.O. Box 1663, MS K497, Los Alamos, New Mexico 87545-0001(w/o encl)
Michael Saladen, ENV-RCRA, LANL, LLC, P.O. Box 1663, MS K490, Los Alamos, New Mexico 87545-0001(w/o encl)
Jocelyn Buckley, ENV-RCRA, Los Alamos National Laboratory, P.O. Box 1663 MS K490, Los Alamos, New Mexico 87545-0001(w/o encl)
Paul Huber, LWSP, Los Alamos National Laboratory, P.O. Box 1663 M992, Los Alamos, New Mexico 87545-0001(w/o encl)
Matt Riggs, LWSP, Los Alamos National Laboratory, P.O. Box 1663 M992, Los Alamos, New Mexico 87545-0001(w/o encl)
Mark C. Everett, WES-RS, Los Alamos National Laboratory, P.O. Box 1663 M992, Los Alamos, New Mexico 87545-0001(w/o encl)
Marcy Leavitt, Director, NMED Water and Waste Management Division (w/o encl)
James Bearzi, NMED/HWB (w/o encl)
Glen Saums, NMED/SWQB (w/o encl)
Richard Powell, NMED/SWQB (w/o encl)
Steve Yanicak, NMED/DOE OB (w/o encl)