

Kim

# Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

Date: March 30, 1999  
In Reply Refer To: ESH-18/WQ&H:99-0124  
Mail Stop: K497  
Telephone: (505) 665-1859

3/15/82/16 [R-25]  
TA16  
SWA CANL

Mr. Samuel Coleman, P. E., Director  
Compliance Assurance and Enforcement Division (6-EN)  
U. S. Environmental Protection Agency  
1445 Ross Avenue  
Dallas, Texas 75202-2733



**SUBJECT: NPDES PERMIT NO. NM0028355, MONITORING WELL R-25  
DISCHARGE**

Dear Mr. Coleman:

On November 9, 1998, the Los Alamos National Laboratory (Laboratory) notified the U. S. Environmental Protection Agency (EPA) of its intent to discharge ground water from a monitoring well drilling operation to the Technical Area 16 High Explosives Wastewater Treatment Facility (TA-16 HEWTF). Following treatment, the effluent would be discharged through NPDES Outfall 05A055 into a tributary to Canyon de Valle at TA-16. This notice was submitted in accordance with Section III.D.1.a. of the NPDES Permit No. NM0028355 issued to the Laboratory on August 1, 1994 (See Attachment 1).

Please note, the Laboratory has evaluated the impact of treatment of this ground water at the TA-16 HEWTF and has decided not to discharge it to the TA-16 HEWTF. Instead, the Laboratory will land apply the ground water to a mesa top above Canada de Valle. A sprinkler system will be used in order to disperse the water. Land application will be conducted in a manner that will prevent runoff and eliminate any impact to a stream course. Additionally, Best Management Practices (BMPs) will be implemented as necessary to prevent runoff. The Laboratory has received approval for this discharge to the ground surface under the conditions of a Notice of Intent to Discharge (NOI) approved by the New Mexico Environment Department's Ground Water Quality Bureau (See Attachment 2) and the Hazardous and Radioactive Materials Bureau (See Attachment 3). Land application of this ground water is expected to begin during the week of March 29<sup>th</sup>.

Please contact me at (505) 665-1859 or Mike Saladen at (505) 665-6085 if you have any questions or need additional information.

Sincerely,

Steven Rae  
Group Leader  
Water Quality and Hydrology Group



6160

TL

SR:MS/em

Attachments: a/s

Cy: E. Spencer, EPA, Region 6, Dallas, Texas, w/att.  
S. Wilson, EPA, Region 6, Dallas, Texas, w/att.  
B. Hoditschek, NMED/SWQB, Santa Fe, New Mexico, w/att.  
P. Bustamante, NMED/GWB, Santa Fe, New Mexico, w/att.  
K. Hill, NMED/HRMB, Santa Fe, New Mexico, w/att.  
J. Vozella, DOE/LAAO, w/att., MS A316  
B. Grace, ESA-FM, w/att., MS C928  
A. Sherrard, ESA-FM, w/att., MS C924  
D. Broxton, EES1-, w/o att., MS D462  
D. Woitte, LC-GEN, w/att., MS A187  
D. Erickson, ESH-DO, w/att., MS K491  
M. Saladen, ESH-18, w/att., MS K497  
C. Nylander, ESH18, w/o att., MS K497  
S. Veenis, ESH-18, w/o att., MS K497  
WQ&H File, w/att., MS K497  
CIC-10, w/att., MS A150

# Los Alamos

NATIONAL LABORATORY

*Los Alamos National Laboratory  
Los Alamos, New Mexico 87545*

Date: November 9, 1998  
In Reply Refer To: ESH-18/WQ&H:98-0383  
Mail Stop: K497  
Telephone: (505) 665-1859

Mr. Samuel Coleman, P. E., Director  
Compliance Assurance and Enforcement Division (6-EN)  
U. S. Environmental Protection Agency  
1445 Ross Avenue  
Dallas, Texas 75202-2733

**SUBJECT: NPDES PERMIT NO. NM0028355, NOTICE OF CHANGED CONDITIONS  
AT OUTFALL 05A055**

Dear Mr. Coleman:

The Laboratory's Environmental Restoration (ER) Project is drilling monitoring wells as part of the ER Pilot Canyon Study and the Laboratory's Hydrogeologic Workplan. Groundwater investigations within the Laboratory are required by the U.S. Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act (RCRA) Hazardous and Solid Waste Amendments (HSWA) Module VII Permit for the Laboratory. An estimated 20,000 gallons of produced groundwater has been collected during the drilling of groundwater Monitoring Well R-25. Monitoring Well R-25 is located on the mesa top above Canon de Valle at Technical Area (TA) 16. The Laboratory is notifying EPA and the New Mexico Environment Department (NMED) of its intent to treat this produced groundwater through the TA-16 High Explosives Wastewater Treatment Facility (TA-16 HEWTF). An estimated total of 40,000 gallons of produced groundwater will be generated, containerized, and transported for treatment at the TA-16 HEWTF during this borehole drilling operation.

Please note, Waste Acceptance Criteria (WAC) have been developed for the TA-16 HEWTF based upon RCRA Universal Treatment Standards (UTS) and NPDES Permit Requirements. All HE waste streams are characterized under the Laboratory's Waste Profile Form (WPF) Process prior to discharge into the TA-16 HEWTF to insure the facility meets all NPDES Permit requirements. Based on screening characterization information, the additional influent to the TA-16 HEWTF should not significantly affect the quantity or quality of effluent at NPDES Outfall 05A055.

On October 30, 1998, Mike Saladen of the Laboratory's Water Quality and Hydrology Group (ESH-18) discussed the addition of this influent to the TA-16 HEWTF with Mr. Everett Spencer of your staff. Mr. Saladen advised Mr. Spencer that the Laboratory had identified the most common types of HE compounds, organic and inorganic compounds, and other water quality information related to the TA-16 HEWTF in the Laboratory's 1998 NPDES Permit Re-Application submitted to EPA on May 4, 1998, and therefore the new influent was covered by the NPDES Permit. Mr. Saladen was advised by Mr. Spencer to submit this information as a notification of changed conditions. Mr. Spencer concurred with the treatment of the discharge from Monitoring Well R-25 to the TA-16 HEWTF based on the information provided to him.

Please contact me at (505) 665-1859 or Mike Saladen at (505) 665-6085 if you have any questions or need additional information.

Sincerely,



Steven Rae  
Group Leader  
Water Quality and Hydrology Group

SR/em

Cy: E. Spencer, EPA, Region 6, Dallas, Texas  
S. Wilson, EPA, Region 6, Dallas, Texas  
B. Hoditschek, NMED/SWQB, Santa Fe, New Mexico  
P. Bustamante, NMED/GWB, Santa Fe, New Mexico  
K. Hill, NMED/HRMB, Santa Fe, New Mexico  
J. Vozella, DOE/LAAO, MS A316  
D. Woitte, LC-GEN, MS A187  
D. Broxton, EES-1, MS D462  
J. Canepa, EM-ER, MS M992  
T. George, EM-ER, MS M992  
B. Grace, ESA-FM, MS C928  
A. Sherrard, ESA-FM, MS C924  
D. Erickson, ESH-DO, MS K491  
M. Saladen, ESH-18, MS K497  
C. Nylander, ESH-18, MS K497  
N. Williams, ESH-18, MS K497  
S. Veenis, ESH-18, MS K497  
A. Puglisi, ESH-19, MS K498  
WQ&H File, MS K497  
CIC-10, MS A150



GARY E. JOHNSON  
GOVERNOR

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**  
*Ground Water Quality Bureau*  
*Harold Runnels Building*  
*1190 St. Francis Drive, P.O. Box 26110*  
*Santa Fe, New Mexico 87502*  
*(505) 827-2918 phone*  
*(505) 827-2965 fax*



PETER MAGGIORE  
Secretary

**CERTIFIED LETTER - RETURN RECEIPT REQUIRED**

March 19, 1999

Steven Rae, Group Leader  
Los Alamos National Laboratory  
MS-K497  
Los Alamos, New Mexico 87545

**RE: Response to Notice of Intent to Discharge Well Development and Purge Water Associated with Observation Well R-25, and Addendum to Notice of Intent to Discharge, Land Application Plan for R-25 Water**

Dear Mr. Rae:

The New Mexico Environment Department (NMED), Ground Water Quality Bureau (GWQB) has received and reviewed the information in the document Analytical Results from Sampling Stored Ground Water Produced During the Drilling of Monitoring Well R-25 dated January 29, 1999 submitted by the Los Alamos National Laboratory (LANL) and the Addendum to Notice of Intent to Discharge Land Application Plan for R-25 Water submitted to the Hazardous and Radioactive Materials Bureau (HRMB) March 4, 1999. The data was submitted as part of the requirements for the Response to Notice of Intent to Discharge Well Development Water and Purge Water Associated with Observation Well R-25 sent to LANL from the GWQB dated October 26, 1998.

Based on the presently available information in your letters dated January 29, 1999 and March 4, 1999, a discharge plan will not be required for the discharge as long as the discharge is as described. A discharge plan is not being required because it appears that the discharge of the containerized wastewater will not impact ground water quality.

The discharge is briefly described as follows:

Up to 25,000 gallons of purge and well development water per day will be discharged

Mr. Rae  
March 19, 1999  
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onto the mesa top with a sprinkler system near the well for up to three days. All purge water discharged onto the ground shall not be allowed to pond or enter any surface water courses. Purge and well development water may only be discharged onto areas with no known soil contamination.

Although a discharge plan is not being required for this discharge at this time, you are not relieved of liability should your operation result in actual pollution of surface or ground waters. Further, this decision by NMED, GWQB does not relieve you of your responsibility to comply with any other applicable federal, state, and/or local laws and regulations, such as zoning, plumbing codes and nuisance ordinances.

If at some time in the future you intend to change the amount, character, or location of your discharge so that it will not be as described, or if observation or monitoring shows that the discharge is not as described, you must file a new request for exemption with the Ground water Pollution Prevention Section (GWPPS).

If you have any questions, please contact Phyllis Bustamante of the GWPPS at 827-0166 or Dale Doremus, Program Manager of the GWPPS at 827-2900.

Sincerely,



Marcy Leavitt, Chief  
Ground Water Quality Bureau

ML:PAB/pab

xc: James Bearzi, District Manager, NMED District II  
Barbara Hoditschek, SWQB  
John Young, HRMB  
NOI File



**GARY E. JOHNSON**  
GOVERNOR

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**  
*Hazardous & Radioactive Materials Bureau*  
2044 Galisteo Street  
P.O. Box 26110  
Santa Fe, New Mexico 87502  
(505) 827-1557  
Fax (505) 827-1544



**PETER MAGGIORE**  
SECRETARY

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

March 22, 1999

Mr. Theodore Taylor, Project Manager  
Los Alamos Area Office-Department of Energy  
528 35<sup>th</sup> Street  
Los Alamos, NM 87544

Dr. John C. Browne, Director  
Los Alamos National Laboratory  
P.O. Box 1663, MS-A100  
Los Alamos, NM 87545

**RE: Review of the Land Application Plan for Stored Ground Water Produced During the Drilling of Monitoring Well R-25, Los Alamos National Laboratory (NM0890010515)**

Dear Mr. Taylor and Dr. Browne:

The Hazardous and Radioactive Materials Bureau's (HRMB) RCRA Permits Management Program (RPMP) has reviewed the land application plan for the stored ground water produced from drilling activities at R-25, dated March 4, 1999 (referenced by ESH-18/WQ&H:99-0069). After review of the plan, as it may have related to any RCRA concerns, RPMP approves the land application of the stored ground water related to groundwater/hydrogeological characterization activities at regional well R-25.

As stated in the letter from RPMP requesting the application plan, this concurrence only applies to the application of the water in the tanks labeled, FT 200, FT 213, Poly #1, Poly #2, Poly #3, Poly #4, Poly #5, Poly #6 and Poly #8. High explosives and metals analyses of all other tanks storing water produced by drilling activities at R-25 must be conducted and submitted to HRMB-RPMP prior to land application.

Response to the Proposed Land Application of Stored Ground Water Produced During the Drilling of Monitoring Well R-25  
LANL NM0890010515  
March 22, 1999  
Page 2 of 2

If you have any questions please do not hesitate to call me at 827-1561 extension 1039 or, John Kieling, RPMP's LANL Facility Manager, at 827-1558 extension 1012.

Sincerely,



Robert S. (Stu) Dinwiddie, Ph. D.  
RCRA Permits Management Program Manager  
Hazardous and Radioactive Materials Bureau

RSD:jry

cc:

T. Baca, LANL EM-DO, MS-J951  
J. Canepa, LANL EM/ER, MS-M992  
J. Davis, NMED SWQB  
D. Erickson, ESH-DO, MS-K491  
B. Garcia, NMED HRMB  
J. Kieling, NMED HRMB  
M. Kirsch, LANL EM/ER, MS-M992  
S. Kruse, NMED HRMB  
M. Leavitt, NMED GWQB  
H. LeDoux, DOE LAAO, MS-A316  
D. Neleigh, EPA, 6PD-N  
C. Nylander, LANL ESH-18, MS-497  
J. Parker, NMED DOE-OB  
S. Rae, LANL ESH-18, MS-497  
J. Vozella, DOE LAAO, MS-A316  
S. Yanicak, NMED DOE-OB, MS-J993  
File: HSWA LANL 3/1082/16 [R-25]  
Track: LANL, Doc date, n/a, DOE/LANL, HRMB/Dinwiddie, RE, file