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**ENTERED**



*Environmental Protection Division*  
Water Quality & RCRA Group (ENV-RCRA)  
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*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 15 2013**  
Refer To: ENV-RCRA-13-0058  
LAUR: 13-21738

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, REQUEST FOR TEMPORARY PERMISSION TO DISCHARGE TREATED GROUNDWATER FROM A PUMPING TEST AT WELL R-42, DP-1793**

On February 28, 2013, the U.S. Department of Energy and Los Alamos National Security, LLC (DOE/LANS) submitted to the New Mexico Environment Department (NMED) a request for temporary permission to discharge treated groundwater from a pumping test at monitoring well R-42 (ENV-RCRA-13-0046). Absent from the request was information on the design of the treated water storage pits. A conceptual design of the pits has been provided in Enclosure 1 for your review and approval.

Two temporary, synthetically lined treated water storage pits will be constructed in the vicinity of monitoring well R-42. Key design elements of the pits are as follows:

- A 12-mil synthetic liner will be installed over a 3-inch sub-grade of sand or fine soil
- The sub-grade will be free of sharp rocks, vegetation, and stubble
- A freeboard of 2-ft will be maintained
- The capacity of each pit is approximately 90,000 gal.



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

Sincerely,



- For AMD -

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

Enclosures:

1. Conceptual design of the treated water storage pit for R-42

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ENV-RCRA Correspondence File, w/enc., K490

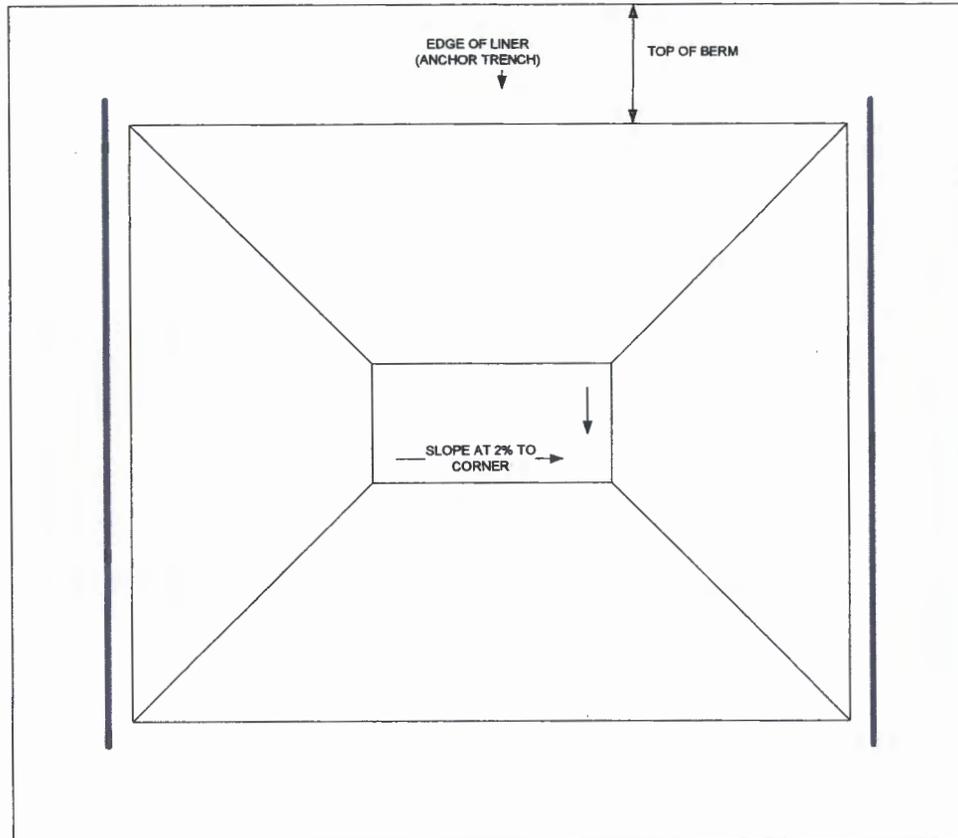
# **ENCLOSURE 1**

Conceptual design of the treated water storage pit for R-42

ENV-RCRA-13-0058

LAUR-13-21738

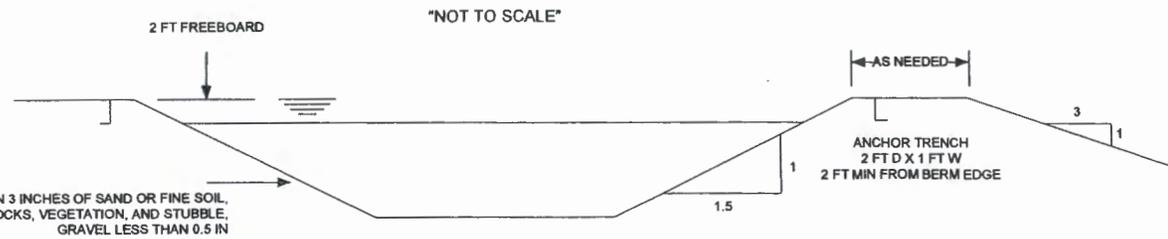
Date:           **MAR 15 2013**



NOTES:

1. DESIGN REQUIRES 3 BASINS AT R-28 AND 2 BASINS AT R-42
2. EXTERIOR BERMS TO BE CONSTRUCTED SUCH THAT CUT AND FILL FOR EACH BASIN ARE BALANCED.
3. ONE SIDE TO BE CONSTRUCTED AT 3:1 (H:V) TO ALLOW ACCESS TO BASIN BOTTOM.
4. LINER TO BE 12-MIL REINFORCED POLYETHYLENE, CONTAINING CARBON BLACK TO INCREASE LIFE.

		R-28	R-42
Side slopes	H:1	1.5	1.5
Length, bottom	ft	40	30
Width, bottom	ft	20	24
Depth, water	ft	10	8
Freeboard	ft	2	2
Depth, total	ft	12	10
Length, water surface	ft	70	54
Width, water surface	ft	50	48
Length, top	ft	76	60
Width, top	ft	56	54
Length, liner panel	ft	93	76
Width, liner panel	ft	73	70
Water Volume	cu ft	20,000	12,480
Water Volume	gal	149,600	93,350



**Figure 1**  
**LANL Pump Test**  
**Basin Conceptual Design**

March 14, 2013



COPY



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**GROUND WATER**  
**MAR 15 2013**  
**BUREAU**

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