

John

# Los Alamos National Laboratory

*Environment, Safety, and Health Division*

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Date: April 14, 1999  
Refer to: ESH-DO:99-058



Ms. Phyllis Bustamante  
Ground Water Quality Bureau  
Pollution Prevention Section  
New Mexico Environment Department  
P.O. Box 26110  
Santa Fe, New Mexico 87502

**SUBJECT: GROUND WATER DISCHARGE PLAN APPLICATION FOR THE  
TA-50 RADIOACTIVE LIQUID WASTE TREATMENT  
FACILITY, DP-1132**

Dear Ms. Bustamante:

Enclosed is a detailed project schedule for installation and start-up of the proposed mechanical evaporator for the Laboratory's Radioactive Liquid Waste Treatment Facility (RLWTF) at TA-50. The estimated ready-to-run date for the mechanical evaporator is February 28, 2000. It should be noted that this project schedule includes a 20 percent contingency to account for the uncertainties associated with the required project activities. It is, however, the Laboratory's goal to complete the project by December 22, 1999, if no appreciable delays are encountered.

The Laboratory has tentatively identified Benchmark Environmental Corporation as the vendor for the mechanical evaporator. Benchmark has proposed a trailer-mounted system with a 15 gallon per minute (gpm) capacity. Input to the mechanical evaporator will be from the RLWTF's electro dialysis reversal (EDR) treatment unit that concentrates the reject stream from the reverse osmosis (RO) system. The condensate stream from the mechanical evaporator will be piped to the RLWTF's effluent tanks for eventual discharge to the NPDES Outfall at Mortandad Canyon or future reuse under the RLWTF's Zero Liquid Discharge Project. As currently proposed the bottoms waste stream from the mechanical evaporator will be shipped to an off-site contractor for solidification and disposal.



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HSWA LAB/L 5/11/97/50

TK

If you would like additional information concerning this response, please contact Bob Beers of the Laboratory's Water Quality and Hydrology Group at 667-7969.

Sincerely,



Dennis J. Erickson  
Division Director  
Environment, Safety, and Health Division

Sincerely,



Thomas E. Baca  
Program Director  
Environmental Management Program

DJE:TEB:RB/mm

Enclosures: a/s

Cy: M. Leavitt, NMED GWQB, Santa Fe, New Mexico, w/enc.  
J. Davis, NMED SWQB, Santa Fe, New Mexico, w/enc.  
B. Garcia, NMED HRMB, Santa Fe, New Mexico, w/enc.  
B. Enz, RD Enz, Inc., Santa Fe, New Mexico, w/enc.  
B. Stine, ALDNW, w/enc., MS F629  
R. Michelotti, CST-7, w/enc., MS E525  
T. Gunderson, DIR, w/enc., MS A100  
R. Burick, DLD-OPS, MS A100, w/enc., MS A100  
D. Gurule, DOE LAAO, w/enc., MS A316  
J. Vozella, DOE LAAO, w/enc., MS A316  
K. Hargis, EM/WM, w/enc., MS J591  
S. Hanson, EM/RLW, w/enc., MS E518  
D. Moss, EM/RLW, w/enc., MS E518  
P. Worland, EM/RLW, w/enc., MS E518  
T. Connors, EM/RLW, w/enc., MS E518  
L. McAtee, ESH-DO, w/enc., MS K491  
S. Rae, (ESH-18/WQ&H:99-0141) ESH-18, w/enc., MS K497  
B. Beers, ESH-18, w/enc., MS K497  
M. Saladen, ESH-18, w/enc., MS K497  
N. Williams, ESH-18, w/enc., MS K497  
D. Woitte, LC/GL, w/enc., MS A187  
B. Matthews, NMT-DO, w/enc., MS E500  
S. Schriber, NMT-2, w/enc., MS K490  
S. Yarbrow, NMT-2, w/enc., MS E511  
S. Gibbs, NW-MM, w/enc., MS A102  
CIC-10, w/enc., MS A150  
ESH-DO File, w/enc., MS K491  
WQ&H File, w/enc., MS K497

## INTERIM NITRATE COMPLIANCE PROJECT-EDR AND VOLUME REDUCTION EVAPORATOR-DETAILED PROJECT SCHEDULE

ID	Task Name	% Complete	Duration	Early Start	Early Finish	Qtr 1, 1999			Qtr 2, 1999			Qtr 3, 1999			Qtr 4, 1999			Qtr 1, 2000		
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	INTERIM NITRATE COMPLIANCE PROJECT	25%	287 days	Mon 12/21/98	Mon 2/28/00	[Gantt bar spanning Dec 1998 to Feb 2000]														
2	BEGIN PROJECT	100%	1 day	Mon 1/4/99	Mon 1/4/99	[Gantt bar at start of Jan 1999]														
3	ZLD PRECONCEPTUAL DESIGN	49%	72 days	Tue 1/5/99	Fri 4/16/99	[Gantt bar from Jan 5 to Apr 16, 1999]														
16	EDR PROJECT	26%	123 days	Mon 1/11/99	Tue 7/6/99	[Gantt bar from Jan 11 to Jul 6, 1999]														
17	ES&H ACTIVITIES	23%	98 days	Tue 1/26/99	Mon 6/14/99	[Gantt bar from Jan 26 to Jun 14, 1999]														
26	ENGINEERING ACTIVITIES (EDR)	45%	65 days	Mon 1/25/99	Mon 4/26/99	[Gantt bar from Jan 25 to Apr 26, 1999]														
32	PROCUREMENT	50%	84 days	Mon 1/11/99	Mon 5/10/99	[Gantt bar from Jan 11 to May 10, 1999]														
40	CONSTRUCTION	0%	53 days	Tue 3/30/99	Fri 6/11/99	[Gantt bar from Mar 30 to Jun 11, 1999]														
62	EDR READINESS REVIEW	0%	48 days	Tue 4/27/99	Fri 7/2/99	[Gantt bar from Apr 27 to Jul 2, 1999]														
71	READY TO RUN EDR	0%	1 day	Tue 7/6/99	Tue 7/6/99	[Gantt bar at start of Jul 1999]														
72	VOLUME REDUCTION EVAPORATOR PROJECT	22%	287 days	Mon 12/21/98	Mon 2/28/00	[Gantt bar spanning Dec 1998 to Feb 2000]														
73	ES&H ACTIVITIES	35%	202 days	Tue 1/12/99	Thu 10/29/99	[Gantt bar from Jan 12 to Oct 29, 1999]														
86	PROCUREMENT	66%	141 days	Mon 12/21/98	Tue 7/20/99	[Gantt bar from Dec 21, 1998 to Jul 20, 1999]														
100	ENGINEERING ACTIVITIES	16%	157 days	Tue 1/12/99	Tue 8/24/99	[Gantt bar from Jan 12 to Aug 24, 1999]														
101	PROCLURE ENGINEERING SUPPORT	76%	59 days	Tue 1/12/99	Tue 4/6/99	[Gantt bar from Jan 12 to Apr 6, 1999]														
107	AVAILABLE FACILITY REVIEW	21%	23 days	Mon 3/1/99	Wed 3/31/99	[Gantt bar from Mar 1 to Mar 31, 1999]														
114	ENGINEER EVAPORATOR INSTALLATION	0%	40 days	Mon 5/3/99	Mon 6/28/99	[Gantt bar from May 3 to Jun 28, 1999]														
124	ENGINEER I&C	0%	33 days	Mon 5/3/99	Thu 6/17/99	[Gantt bar from May 3 to Jun 17, 1999]														
135	ENGINEER VR EVAP FACILITY REQUIREMENTS	0%	70 days	Mon 5/17/99	Tue 8/24/99	[Gantt bar from May 17 to Aug 24, 1999]														
142	CONSTRUCT/INSTALL SYSTEM	0%	109 days	Tue 6/8/99	Wed 11/10/99	[Gantt bar from Jun 8 to Nov 10, 1999]														
143	TASK/MOBLIZE JCNM (VRE)	0%	43 days	Tue 6/8/99	Fri 6/8/99	[Gantt bar from Jun 8 to Jun 8, 1999]														
155	FACILITY CONSTRUCTION	0%	20 days	Wed 8/4/99	Tue 8/31/99	[Gantt bar from Aug 4 to Aug 31, 1999]														
161	SYSTEM INSTALLATION	0%	23 days	Wed 8/18/99	Mon 9/20/99	[Gantt bar from Aug 18 to Sep 20, 1999]														
167	I&C INSTALLATION	0%	36 days	Tue 8/21/99	Wed 11/10/99	[Gantt bar from Aug 21 to Nov 10, 1999]														
172	READINESS REVIEW	0%	127 days	Fri 6/18/99	Tue 12/21/99	[Gantt bar from Jun 18 to Dec 21, 1999]														
182	20% PROJECT CONTINGENCY	0%	40 days	Wed 12/22/99	Fri 2/25/00	[Gantt bar from Dec 22, 1999 to Feb 25, 2000]														
184	BEGIN EVAPORATOR OPERATIONS	0%	1 day	Mon 2/28/00	Mon 2/28/00	[Gantt bar at end of Feb 2000]														

Project: RLW-EVAP Date: Mon 4/1/20

Task		Milestone		Rolled Up Critical Task		Split	
Critical Task		Summary		Rolled Up Milestone		External Tasks	
Progress		Rolled Up Task		Rolled Up Progress		Project Summary	

T. CONNORS/EM-RLW

### BASELINE SCHEDULE