

START

0036779

Meeting Minutes Transmittal

LIQUID EFFLUENT RETENTION FACILITY
Unit Managers Meeting (Videoconference)
Federal Building, Room 784B
Richland, Washington

February 15, 1994
10:00 a.m. - 12:00 p.m.

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Unit Managers Meeting.

Clifford E. Clark Date: 5/19/94
Clifford E. Clark, Unit Manager, RL

Daniel L. Duncan Date: 5/31/94
Daniel L. Duncan, RCRA Program Manager, EPA Region 10

Moses N. Jaraysi Date: 5/19/94
Moses N. Jaraysi, Unit Manager, Washington State Department of Ecology

LERF, WHC Concurrence

RC Bowman Date: 5/19/94
Roger C. Bowman, Contractor Representative, WHC

Purpose: Discuss Permitting Process

Meeting Minutes are attached. The minutes are comprised of the following:

- Attachment 1 - Agenda
- Attachment 2 - Summary of Discussion and Commitments/Agreements
- Attachment 3 - Attendance List
- Attachment 4 - Action Items
- Attachment 5 - LERF Notice of Deficiency Resolution Workshop Meeting
- Attachment 6 - LERF Notice of Deficiency Resolution Workshop Meeting Attendance List
- Attachment 7 - LERF Notice of Deficiency Resolution Workshop Meeting
- Attachment 8 - LERF Notice of Deficiency Resolution Workshop Meeting Attendance List



9413224.213

Attachment 1

Unit Managers Meeting
200 AREA EFFLUENT TREATMENT FACILITY (ETF)
AND
LIQUID EFFLUENT RETENTION FACILITY (LERF)
AND
242-A EVAPORATOR
VIDEO CONFERENCE ROOMS
FEDERAL BUILDING/2750E/LACEY
RICHLAND, WASHINGTON

February 15, 1994
10:00 a.m. to NOON

Agenda

200 Area Effluent Treatment Facility

1. Status of schedule/design/construction (WHC)
2. Unit specific topics
 - RCRA permit and NOD workshops
 - Coordination of "216" permit & delisting approval
3. General discussion
4. Action items

Liquid Effluent Retention Facility

1. Status of permit application
2. Program status
 - Provide DOE order(s) requiring waste minimization plans to Dan Duncan. (WHC)
3. General discussion
4. Action items

242-A Evaporator

1. Status of permit application
2. Program status
 - Restart date
3. General discussion
4. Action items
5. Set next meeting date

4112-425116

Attachment 2

LIQUID EFFLUENT RETENTION FACILITY
Unit Managers Meeting (Videoconference)
Federal Building, Room 784B
Richland, Washington

February 15, 1994
10:00 a.m. - 12:00 p.m.

Summary of Discussion and Commitments/Agreements

1. STATUS OF PERMIT APPLICATION

Mr. M. Jaraysi (Ecology) reported that all the notice of deficiency (NOD) comments on Chapter 5 of the Part B permit application regarding the underground monitoring systems were resolved at the February 4, 1994 NOD workshop meeting. Mr. J. Coenenberg (WHC) noted that resolutions from the NOD workshop meetings held January 19, 1994 and February 4, 1994 will be attached to the January 10, 1994 Unit Manager Meeting minutes.

2. PROGRAM STATUS

- Provide DOE Order(s) Requiring Waste Minimization Plans to Dan Duncan (EPA)

Mr. Coenenberg stated that the DOE order requiring waste minimization plans was transmitted to Mr. D. Duncan (EPA) on January 13, 1994, and Mr. Duncan confirmed that he had received the order.

3. GENERAL DISCUSSION

Mr. J. Berwick (WHC) inquired about the status of the EPA granting Ecology authority to regulate land disposal restrictions (LDRs). Mr. A. Stone (Ecology) stated that a response to the request for permission from the EPA to control LDRs may take up to two years.

Mr. Jaraysi inquired about the status of repairs to the third basin. Mr. T. Galioto (WHC) responded that WHC is waiting to hear whether or not the contractor can arrange a new schedule for completing the repairs. Mr. Galioto estimated that if the contractor can fit in a new schedule, it would be in the March 1994 time frame. Mr. Jaraysi asked if the contractor had submitted a plan for locating the hole. Mr. Galioto stated that the contractor plans to use the standard methods. If the standard methods don't work, the contractor plans to use the smoke detection method, which involves inserting a smoke bomb underneath the liner.

9413224.2115

4. ACTION ITEMS

There were no past or present action items to status.

5. NEXT MEETING DATE

The next Unit Managers Meeting was scheduled for March 24, 1994.

91124 1228 PM

Attachment 3

LIQUID EFFLUENT RETENTION FACILITY
Unit Managers Meeting
Federal Building, Room 784B (Videoconference)
Richland, Washington

February 15, 1994
10:00 a.m. - 12:00 p.m.

Attendance List

<u>Name</u>	<u>Organization</u>	<u>Phone #</u>
Joan K. Bartz	GSSC	(509) 946-3693
Joel D. Berwick	RL	(509) 376-9869
Mark W. Bowman	WHC	(509) 373-9379
Roger C. Bowman	WHC	(509) 376-4876
Clifford E. Clark	RL	(509) 376-9333
Michael W. Cline	WHC	(509) 376-7957
Joe G. Coenenberg	WHC	(509) 376-1745
John R. Cook	GSSC	(509) 946-3684
Dan L. Duncan	EPA	(206) 553-6693
Jan L. Fields	WHC	(509) 376-8556
Don L. Flyckt	WHC	(509) 372-3142
Tom M. Galimoto	WHC	(509) 373-4894
Moses N. Jaraysi	Ecology	(509) 736-3016
Kathy E. Knox	WHC	(509) 372-3596
Gary Mezger	RL	(509) 376-5039
Melodie Selby	Ecology	(509) 736-3021
R. Clayton Smith	WHC	(509) 372-2537
Alex Stone	Ecology	(509) 736-3018
Armin K. Vogt	WHC	(509) 376-2352

9113224.2117

Attachment 4

LIQUID EFFLUENT RETENTION FACILITY
Unit Managers Meeting (Videoconference)
Federal Building, Room 784B
Richland, Washington

February 15, 1994
10:00 a.m. - 12:00 p.m.

Action Items

<u>Action Item</u>	<u>Description</u>
--------------------	--------------------

None	
------	--

9/13/24.2118

Attachment 5

LIQUID EFFLUENT RETENTION FACILITY
 Notice of Deficiency Resolution Workshop Meeting
 Richland, Washington

January 19, 1994

No.	Comment/Response	Ecology Concurrence
44.	<p>CHAPTER 4.0, SECTION 4.4.5.1.2, Page 4-20, Lines 4 to 7: " ... <i>the waste acceptance criteria are set at levels that are <u>less than</u> those previously analyzed in Method 9090 tests, <u>where such test data are available.</u>"</i></p> <p>Comment: How much less are the acceptance criteria levels set than the 9090 test levels? The last part of this text, "...where such test data are available.", is not clear.</p> <p>Requirements: Specify the reduction factor(s) used to set the acceptance criteria levels from the levels used for the 9090 chemical compatibility tests. Also, clarify the last part of this text: "where such test data are available".</p> <p>DOE-RL/WHC Response: The sentence, "For all constituents except acetone, the waste acceptance criteria are set at ..." will be deleted from the text. This wording was the result of a typographical error in editing previous drafts.</p> <p>NOD Workshop Resolution: The LERF Part B permit application text will be rewritten to reflect waste acceptance criteria for liner compatibility using a literature review and 9090 testing which was performed.</p>	01-19-94

Attachment 6

LIQUID EFFLUENT RETENTION FACILITY
Notice of Deficiency Workshop Meeting
7601 West Clearwater Avenue, Suite 102
Kennewick, Washington

January 19, 1994
3:00 p.m. - 4:00 p.m.

Attendance List

<u>Name</u>	<u>Organization</u>	<u>Phone #</u>
Mark Bowman	WHC	(509) 373-9379
Mike Cline	WHC	(509) 376-7957
Joe Coenenberg	WHC	(509) 376-1745
Moses Jaraysi	Ecology	(509) 736-3016
Al Larrick	WHC	(509) 373-6098
Brian Von Bargaen	WHC	(509) 373-1829

0212 4225 416

Attachment 7

**LIQUID EFFLUENT RETENTION FACILITY
Notice of Deficiency Workshop Meeting
Richland, Washington**

February 4, 1994

No.	Comment/Response	Ecology Concurrence
72.	<p><u>CHAPTER 5.0, GENERAL COMMENT:</u></p> <p>Requirement: A contingency plan needs to be added to the permit application in the event that discharges are discontinued to B-Pond resulting in a reversal of groundwater flow in the immediate area.</p> <p>DOE-RL/WHC Response: In the event that discharges are discontinued to B-Pond resulting in a reversal of groundwater flow in the immediate area of the LERF, the groundwater monitoring plan (WHC 1990c) might be revised at the time the gradient is reversed. This plan will not identify additional monitoring wells and locations.</p> <p>NOD Workshop Resolution: Text will be revised to reflect the following: Annual assessments of groundwater directions and elevations are performed for all interim status facilities (see DOE/RL annual and quarterly reports). In the event that discharges are discontinued to B-Pond resulting in reversal of groundwater flow in the immediate area of LERF, the groundwater monitoring plan (WHC 1991) will be revised to evaluate the change in gradient. This plan will contain modifications to the monitoring network as necessary. Well locations will be generated using MEMO model (Jackson et al., 1991).</p>	02-04-94
74.	<p><u>CHAPTER 5.0, GENERAL COMMENT:</u></p> <p>Requirement: The latest geology and hydrology reference of Hanford should be included; specifically "Geology and Hydrology of the Hanford Site: A Standardized Text for use in Westinghouse Hanford Company Documents and Reports", WHC-SD-ER-TI-003.</p> <p>DOE-RL/WHC Response: This reference will be cited if appropriate.</p> <p>NOD Workshop Resolution: Text will reference the most current Hanford Site Stratigraphy.</p>	02-04-94

Attachment 7

LIQUID EFFLUENT RETENTION FACILITY
 Notice of Deficiency Workshop Meeting
 Richland, Washington

February 4, 1994

No.	Comment/Response	Ecology Concurrence
76.	<p><u>CHAPTER 5.0, SECTION 5.2.2.4, Page 5-6, Lines 24 to 37:</u></p> <p>Comment: The first sentence, lines 24 through 27, indicates that down gradient wells were completed in the entire saturated thickness. Does this mean they were screened over the entire saturated thickness?</p> <p>Comment: The second sentence, lines 27 through 29, states that the up gradient well was completed in broken basalt and screened at approximately the same hydrostratigraphic unit. Does this mean that the up gradient well was screened in the broken basalt? Is this an indication that the aquifer is in both the Hanford formation and the upper basalt?</p> <p>Requirement: Clarify the above queries in the text.</p> <p>DOE-RL/WHC Response: Text will be revised to clarify screen locations.</p> <p>NOD Workshop Resolution: Text will be revised to reflect the following: The three downgradient wells installed at the LERF were drilled through the sediments overlying Elephant Mountain Member basalt and were screened in the entire saturated thickness of the aquifer (<10'). The upgradient well penetrated Hanford gravel with low permeability silt and clay and was completed just within the fractured basalt (semiconfined conditions). This upgradient well is screened at the same hydrostratigraphic horizon as the downgradient unconfined suprabasalt aquifer. The configuration of the upgradient well complies with the specifications for completion of monitoring wells in confined aquifers presented in WHC (1990h). Borehole Completion package (WHC 1990) contains as-built diagrams for wells in LERF monitoring network.</p>	02-04-94

Attachment 7

**LIQUID EFFLUENT RETENTION FACILITY
Notice of Deficiency Workshop Meeting
Richland, Washington**

February 4, 1994

No.	Comment/Response	Ecology Concurrence
80.	<p><u>CHAPTER 5.0, SECTION 5.3.5.1, Page 5-22, Lines 37 to 45:</u></p> <p>Comment: These lines indicate data from the installation of LERF monitoring wells and previously existing bore holes was used for stratigraphic correlation at the facility.</p> <p>Requirement: The previously existing bore holes used in the correlation should be listed and cross section of the LERF facility should be included in the permit application.</p> <p>DOE-RL/WHC Response: This information is provided in the groundwater monitoring plan that is referenced (WHC 1990c).</p> <p>NOD Workshop Resolution: Response is accepted by Ecology.</p>	02-04-94
82.	<p><u>CHAPTER 5.0, SECTION 5.3.6, Page 5-27, Lines 8 to 16:</u></p> <p>Comment: Figure 5-15 shows a westward flow from the LERF. At some point the flow turns north as stated in section 5.3.3, in the fourth sentence.</p> <p>Requirement: Revise the text in this section to answer the following two questions:</p> <ul style="list-style-type: none"> * What data is there to support that water passing beneath LERF and/or Liquids migrating from LERF would not come into contact with the area in which the unconfined aquifer and the Elephant Mountain interflow zone are in contact? * How substantial is the data (how many measuring points and for how long) of the slight upward flow from the aquifer to the upper unconfined aquifer? 	

Attachment 7

**LIQUID EFFLUENT RETENTION FACILITY
Notice of Deficiency Workshop Meeting
Richland, Washington**

February 4, 1994

No.	Comment/Response	Ecology Concurrence
82. cont'd	<p>DOE-RL/WHC Response: Text will be revised.</p> <p>NOD Workshop Resolution: Text will be revised to include a paragraph referencing the vertical component of groundwater movement.</p>	02-04-94
83.	<p><u>CHAPTER 5.0, SECTION 5.3.7.1, Page 5-27, Lines 32 to 41:</u></p> <p>Comment: The information gained from the soil characteristic curves should be used in determining estimates in travel times in the vadose zone.</p> <p>Requirement: If the soil characteristic curves are completed for the samples collected they should be included in the Permit Application.</p> <p>DOE-RL/WHC Response: Soil characteristic curves are not required and were not done for the samples collected.</p> <p>NOD Workshop Resolution: Ecology meant to reference sieve plot rather than soil characteristic curve. Text will be revised to reference appropriate supporting documents.</p>	02-04-94
84.	<p><u>CHAPTER 5.0, SECTION 5.3.7.1, Page 5-27, Lines 32 to 41:</u></p> <p>Comment: If a release was to occur from a LERF basin, it would increase the degree of saturation of the soil column above the water, resulting in a greater downward migration rate.</p> <p>Requirement: Has this been taken into account in the computer modeling for the travel time?</p>	

Attachment 7

LIQUID EFFLUENT RETENTION FACILITY
Notice of Deficiency Workshop Meeting
Richland, Washington

February 4, 1994

No.	Comment/Response	Ecology Concurrence
84. cont'd	<p>DOE-RL/WHC Response: The release would be taken into account if the total infiltration (natural recharge plus release from LERF basin) is within the range of infiltration rates presented in lines 3-15 on p. 5-28. Please note that these estimates are conservative in that it is assumed that no lateral movement of moisture would occur.</p>	02-04-94
	<p>NOD Workshop Resolution: Response is accepted by Ecology.</p>	
85.	<p><u>CHAPTER 5.0, SECTION 5.3.7.2, Page 5-27, General:</u></p>	
	<p>Requirement: Has the model used to estimate the vadose zone transport been calibrated and verified?</p>	
	<p>DOE-RL/WHC Response: The same unit gradient model also was applied in the liquid effluent study. Comparison of the model results with field observed data (Section 2.13 of WHC 1990) indicates that the model over predicts by a factor of about two, illustrating the conservatism of the model.</p>	
	<p>NOD Workshop Resolution: Response is accepted by Ecology.</p>	02-04-94

Attachment 8

LIQUID EFFLUENT RETENTION FACILITY
Notice of Deficiency Workshop Meeting
7601 West Clearwater Avenue, Suite 102
Kennewick, Washington

February 4, 1994
8:30 a.m. - 12:00 p.m.

Attendance List

<u>Name</u>	<u>Organization</u>	<u>Phone #</u>
Joan Bartz	GSSC	(509) 946-3693
Joel Berwick	DOE-RL	(509) 373-0421
Clifford Clark	DOE-RL	(509) 376-9333
Mike Cline	WHC	(509) 376-7957
Joe Coenenberg	WHC	(509) 376-1745
Moses Jaraysi	Ecology	(509) 736-3016
Paul Johnson	WHC	(509) 373-1970
Krystyna Kowalik	Ecology	(206) 407-7134
Stan Leja	Ecology	(509) 736-3046
Steve Lijek	GSSC	(509) 946-3683
Mark Sweeney	WHC	(509) 373-0703

9113224.2126

Distribution:

B. A. Austin	WHC	B2-35
J. D. Berwick	WHC	R3-80
J. Blacklaw	DOH	
M. W. Bowman	WHC	R2-54
R. C. Bowman	WHC	H6-24
G. P. Burchell	WHC	A5-56
D. C. Bryson	WHC	A5-21
C. E. Clark	RL	A5-15
M. W. Cline	WHC	H6-24
J. G. Coenenberg	WHC	H6-24
J. Cook	GSSC	B1-42
A. J. Deliberto	WHC	R3-46
V. R. Dronen	WHC	A5-56
D. L. Duncan	EPA	HW-106
D. L. Flyckt	WHC	R3-45
L. D. Garner	WHC	R2-86
R. D. Gustavson	WHC	R1-51
M. N. Jaraysi	Ecology	
J. W. Kelly	WHC	L4-94
P. J. Mackey	WHC	B3-15
T. M. Michelena	Ecology	
S. L. Petersen	KEH	E6-25
S. M. Price	WHC	H6-23
L. R. Tollbom	WHC	R3-46
J. T. Thomas	KEH	E6-51
B. J. Von Bargaen	WHC	R1-43
RCRA Files/GHL	WHC	H6-23

ADMINISTRATIVE RECORD: Liquid Effluent Retention Facility, TSD S-2-8
[Care of EPIC, WHC (H6-08)]

Washington State Department of Ecology Nuclear and Mixed Waste Hanford Files,
P.O. Box 47600, Olympia, Washington 98504-7600

Environmental Protection Agency Region 10, Seattle, Washington 98101, Mail
Stop HW-106 (Records Center)

Please send comments on distribution list to K. E. Knox, WHC (H6-24),
(509) 372-3596

9413224.2127