

## Meeting Minutes Transmittal

LERF/200 Area ETF and WESF  
 Project Managers Meeting  
 825 Jadwin / Room 554  
 Richland, Washington  
 August 22, 2013

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Project Managers Meeting. Signatures denote concurrence with the content only and are not intended to imply agreement to any commitments.

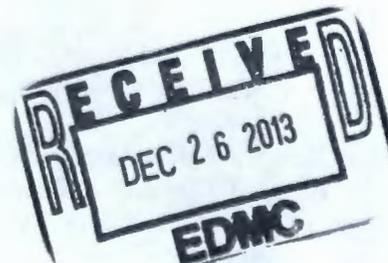
*Fredrick H. Bond*  
 Project Manager Representative, Ecology

Date: 10-24-13

*Janey 2013*  
 Project Manager Representative, RL

Date: 10-27-13

LWFS Administrative Record	H6-08
FW Bond	H0-57
MS Collins	A6-38
KA Conaway	H0-57
BJ Dixon	T3-11
RH Engelmann	H8-45
SK Johansen	T1-41
RL Long, Jr.	A5-15
VA Turner	A6-11
LC Petersen	S5-31
PT Saueressig	S5-31
FM Simmons	H8-45



1-28  
 5-2-8  
 6-2-10

LERF/200 Area ETF and WESF  
Project Managers Meeting Minutes  
825 Jadwin/Room 554/700 Area  
Richland, Washington

August 22, 2013

I. The March 28, 2013 and May 23, 2013 Project Managers Meeting (PMM) minutes were approved and submitted to the Administrative Record. There were no PMMs held in June or July 2013.

II. Operational Status

A. Linda Petersen (CHPRC) stated that the operational status report was for the months of May, June and July 2013. Ms. Petersen noted that the TEDF value being reported is for May and June 2013 only, since the July data was not in the database at the time the ops report was finalized. The average TEDF flow for July 2013 will be provided at the next PMM. Ms. Petersen stated that currently there is a campaign under way in Basin 42, and the level in the basin is being lowered. Ms. Petersen noted that if there is a 242-A Evaporator campaign later this year, the water will go into Basin 42 and there will be capacity for a campaign.

<b>LERF Basin Liquid Level, Inventory and Waste Received during May, June, &amp; July 2013</b>			
	<b>Basin 42</b>	<b>Basin 43</b>	<b>Basin 44</b>
Basin Liquid Level and Inventory on 7/31/2013	15.8 ft. ~4.53 Mgal	6.9 ft. ~1.46 Mgal	18.5 ft. ~5.78 Mgal
12 tanker shipments of leachate from LLBG trenches 31 & 34			~84,000 gallons
9 tanker shipments of BP-5 perched water		~22,500 gallons	
ERDF transfers		~570,152 gallons	

\*The volumes in this table are estimated. Tanker shipment volumes are estimated by multiplying the number of shipments by the capacity of the tanker being used.

Effluent Treatment Facility treated ~2.15 Mgal of wastewater during May, June and July 2013.
200 Area Treated Effluent Disposal Facility (TEDF) received wastewater at ~53 gpm during May and June 2013, based on TEDF Flow Totalizer information

III. Status of Previous Agreements and Commitments

A. There were no previous agreements or commitments to status.

IV. New Agreements and Commitments

A. There were no new agreements or commitments identified for discussion.

V. Near Term Schedules and Ongoing Activities (Milestones, TSD Unit)

A. ST-4500, ST-4502 and ST-4511 Status

Stacy Nichols (Ecology) reported that the ST-4511 permit went out for the public review and comment process, closing in February 2013, and the final permit should be ready within two months. Ms. Nichols noted that work on the ST-4500 permit hasn't been started due to efforts with finalizing the ST-4511 permit. Rick Bond (Ecology) stated that the ST-4511 permit is essentially the same as the last permit, with the exception of reducing the maximum number of gallons per day that can be discharged from two million gallons to 500,000 gallons. Mr. Bond stated that he will be meeting with Cliff Clark (RL) today to go over the lower discharge limit in the ST-4511 permit, which had previously been resolved.

Jim Rasmussen (RL) requested a copy of the latest version of ST-4511. Ms. Nichols agreed to send Ms. Petersen a copy of ST-4511, and Ms. Petersen will forward a copy to Mr. Rasmussen. There was no discussion regarding the ST-4502 permit.

B. LERF Basin Maintenance

Ms. Petersen provided an update on the cleanup of the LERF basin covers. Cleanup on the Basin 44 cover is under way, and most of the vegetation has been removed, with the exception of one corner of the basin. Most of the water has been removed, and the water that's left is being used as part of the vegetation removal to loosen up roots. Ms. Petersen noted that the initial plan to remove the mud was to pump slurry into totes, let the slurry settle out, decant the water and filter it, then put the water back under the cover. When the totes were full of mud, they would then be sent to ERDF. During the initial testing process, the settling of the slurry took longer than anticipated, and a different process for removing the mud is being tested. The mud will be placed in a large basket with a filter that will let the water pass through, and that would allow the mud to be removed more quickly.

Ms. Petersen stated that the plan was to complete the work on all three basin covers by the end of September 2013, but that was with the assumption that overtime shifts could be implemented. The overtime shifts did not occur, and the work will likely continue into October.

C. Hanford Facility RCRA Permit Rev. 9 Update

Mr. Bond stated that the process for completing Rev. 9 will take a few years, and there were no updates to status. There were no permit activities specific to the LERF/200 Area ETF or WESF units to report.

E. 8C Class 2 Mods

Mr. Bond stated that a meeting is scheduled tomorrow (8/23/13) to discuss the flow totalizer. Ms. Petersen stated that RL/CHPRC will be making a proposal to add the pump run time for calculating the flow at TEDF. Allan Cawrse (CHPRC) noted that the totalizer will be the primary system for calculating the flow at TEDF, and the proposal to add the pump run time will be used as a backup calculation if mechanical problems with the totalizer are encountered.

Mr. Bond stated that a meeting is scheduled August 28, 2013, to discuss the groundwater monitoring plan updates. Ms. Petersen stated that the groundwater team has updated the Monitoring Plan to include the fifth well. Ms. Petersen noted that the plan in Rev. 8C includes the four wells, two of which are dry. When the Monitoring Plan for Rev. 9 was being prepared, the monitoring plan included the two old dry wells and the two new wells, but the fifth well that was planned could not be discussed because it had not been installed. The fifth well has now been installed and is operational, and so this plan update will include the well. The revision that includes the fifth well will be discussed during the August 28 meeting.

Mr. Bond inquired about the 2F general condition on groundwater. Ms. Petersen responded that discussion of 2F will be at the discretion of Jennie Seaver (CHPRC). Stephanie Johansen (CHPRC) stated that submittal of the Class 2 permit modifications are tentatively planned for October 2013.

VI. Approved Changes Signed Off in Accordance with TPA Section 12.2

- A. There were no approved changes identified for discussion.

VII. General Discussion

- A. Mr. Engelmann initiated discussion regarding two topics that were not on today's agenda. The first topic was with regard to a briefing that was provided to Mr. Bond on repairs to the heat exchanger in ETF. During the briefing, RL and Ecology agreed to a summary on the heat exchanger and to document the discussion in the PMM minutes. Mr. Engelmann read the following summary of the briefing as follows: The ETF evaporator unit includes a heat exchanger. This heat exchanger developed a pinhole leak in September 2012. Ecology was briefed on planned repairs in December 2012, and repairs were complete January of this year. On June 27, another small leak was discovered in this heat exchanger. DOE-RL/CHPRC plans repairing and using this exchanger at this time, and we will evaluate potential for a complete replacement. It is agreed between DOE-RL and Ecology that a PE assessment is not necessary for this planned repair, including installation of a clamp device and injection of silicone rubber, or other material, between the clamping device and the heat exchanger.

Mr. Bond asked about the requirements for integrity assessments of tanks at ETF. Ms. Petersen responded that there is a requirement for integrity assessments, and they are conducted periodically. Ms. Petersen stated that after the original integrity assessment is done, the assessor determines a schedule for conducting integrity assessments based on the structure of the tank and the corrosivity of the material that is in the tank. Ms. Petersen noted that the regulations call out for an initial integrity assessment when a new component is added. Mr. Rasmussen asked if the summary provided today on the heat exchanger will close the activity out with Ecology. Mr. Bond agreed that the activity on the heat exchanger could be closed.

Mr. Engelmann stated that the second topic not included on today's agenda was with regard to maintenance of the flow totalizers. The totalizers on all three of the basins went down, and Ecology was briefed on the situation last month. An agreement was made to attach the briefing to the PMM minutes. Mike Collins (RL) noted that one of the totalizers has been repaired and replaced, and the remaining two should be repaired by the end of next week. Mr. Bond noted that the flow was being measured while the totalizers were out via the pump run time, which provided a fairly accurate measurement of the flow. Ms. Petersen added that the leachate level in the sump is also tracked, not on a daily basis, but on a longer periodicity. Each time the sump is pumped, the level changes and there is a delta. Ms. Petersen stated that that data comes off electronic equipment and is being tracked on a quarterly basis. Ms. Petersen noted that the pump run time is also tracked for the weekly requirement.

Mr. Cawrse noted that there are two major instrument components to the totalizer. One component is the magnetic flow meter. The other component is the totalizer, which indicates the amount of flow volume that passes through the meter and is converted into a gallon output. Mr. Cawrse added that replacing the totalizer involves getting the whole system in place and calibrating the flow meter.

- B. An off-the-record discussion was held regarding EPA's inspection.

VIII. Actions

Unit	Description of Action	Status	Date
LERF/200 Area ETF	RL will send Ecology a letter with updated copies of catch basin drawings.	Action opened.	04/26/12
		Jennie Seaver (CHPRC) is following up on this action.	03/28/13
		CHPRC in the process of addressing this action.	5/23/13
		No status was provided.	8/22/13

IX. Documents for Submittal to the Administrative Record

A. There were no documents identified for submittal to the AR.

X. Next Project Managers Meeting

A. The next PMM is planned for October 24, 2013, on the bimonthly basis as agreed to between RL and Ecology. Mr. Collins stated that a meeting could be scheduled sooner if there are any results from EPA's inspection that need to be discussed.

# Leachate Monitoring Path Forward

- **Totalizer Equipment scheduled to be repaired & in-service by mid to late August**
- **Document reporting the non-compliance in the August LERF-ETF PMM**
- **Submit a notification via next annual noncompliance report (Sitewide Permit Condition I.E.19)**
- **Discuss a potential permit modification & path forward**
  - Option 1: describe both flow totalizer and pump hour meter operations, then state that leak rate is determined without stipulating equipment
  - Option 2: replace leachate totalizer language with text describing use of the leachate pump hour meter to determine leak rate
  - Option 3: Add pump run time language to the existing flow totalizer language and state that either can be used to determine leak rate.

# Totalizers Repair history

- **Basin 44 Totalizer out of service since 6-20-2011**
- **Basin 42 Totalizer out of service since 8-9-2012**
- **Basin 43 Totalizer out of calibration since May 2013**
  - **reading two orders of magnitude (x100) high**

**During these times, the action leakage rate was being calculated via the pump run time with NO exceedences.**

**NOTE: The LERF/ETF portion of the Hanford RCRA permit specifies an action leakage rate of 2100 gallons/acre of wetted surface area/day. The ECO determined that action leakage rates since January 2008 have averaged less than 6 gallons/acre/day for Basins 42 and 44 and less than 25 gallons per acre per day for Basin 43, based on a 28-day rolling average.**

# What RCRA Permit Says About LERF Leachate Monitoring

Section C.5.6: “A flow meter/totalizer on the leachate return pipe measures fluid volumes pumped and pumping rate from the leachate collection sumps, and indicates volume and flow rate on local readouts...Leak detection is provided through inspections of the leachate totalizer readings.”

Section I.1.2.3.3: “A flow meter and totalizer measure the amount of leachate removed. An inspection is performed weekly where the totalizer reading and basin level reading are used to determine the leak rate per wetted surface area”



# Leachate Totalizer Information & Issues

- **The Leachate from the basins has been monitored by 2 methods for many years (totalizer & leachate pump run time) via the inspection checklist**
  - Both of these methods were used to calculate the action leakage rate
- **The totalizers are inherently problematic, tending to indicate 'phantom' flow volumes (i.e., false readings)**
  - The inspection checklist included the Leachate pump run time, which is also totalized and is a more reliable method of determining leachate leak rate

# First ETF Evaporator Heat Exchanger Leak

The ETF evaporator includes a heat exchanger, which developed a pinhole leak in September 2012



Repairs were completed in January 2013 and involved replacing a portion of a baffle. Ecology was briefed on the repairs in December 2012.

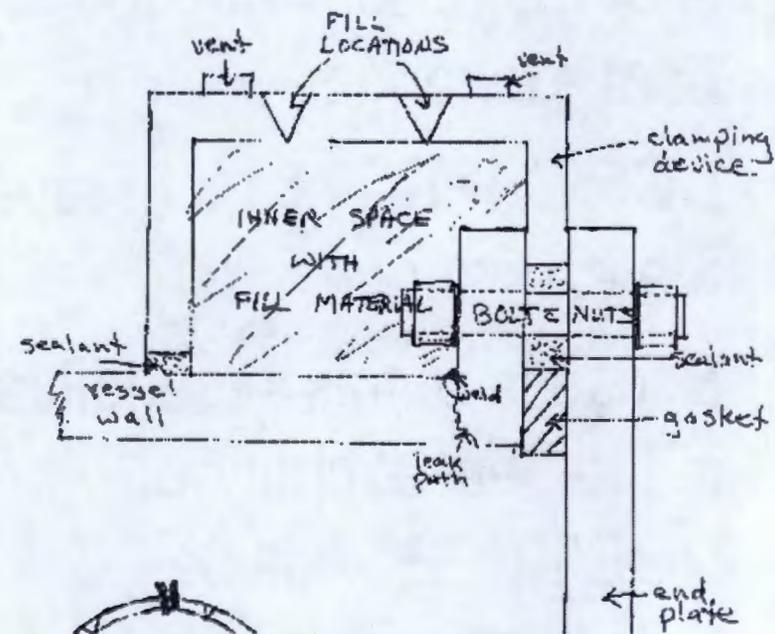
# Current ETF Evaporator Heat Exchanger Leak

- On June 27<sup>th</sup> another small leak was discovered in this heat exchanger.
- DOE/CHPRC plans to repair the exchanger
- Because of this second leak in the heat exchanger, DOE/CHPRC will be evaluating if it should be replaced in total



# Current Repair Plans - External Clamp

- Design, fabricate, and install clamp device around end of heat exchanger
- Inject silicon rubber or other material into the space between the clamping device and the heat exchanger



- Perform in-service leak test to ensure clamp device repaired the leak

# Proposed PMM Submittal in August

- The ETF evaporator unit includes a heat exchanger. This heat exchanger developed a pinhole leak in September 2012. Ecology was briefed on planned repairs in December 2012 and repairs were complete by January 2013.
- On June 27, 2013, another small leak was discovered in this heat exchanger. DOE/CHPRC plans to repair and use the exchanger at this time, and will evaluate the potential for a complete replacement .
- It is agreed between DOE/Ecology that a PE assessment is not necessary for the planned repairs (including installation of a clamp device and injection of silicon rubber or other material between the clamping device and heat exchanger).

**PMM**

**MAY, JUNE, AND JULY 2013  
ETF/LERF/200 AREA TEDF OPERATIONS REPORT FOR  
THE AUGUST 22, 2013 PMM**

<b>LERF Basin Liquid Level, Inventory and Waste Received - May, June, &amp; July 2013</b>			
	<b>Basin 42</b>	<b>Basin 43</b>	<b>Basin 44</b>
<b>Basin Liquid Level and Inventory on 7/31/2013</b>	<b>15.8 ft. ~4.53 Mgal</b>	<b>6.9 ft. ~1.46 Mgal</b>	<b>18.5 ft. ~5.78 Mgal</b>
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200 Area Treated Effluent Disposal Facility (TEDF) received wastewater at ~53 gpm during May and June 2013, based on TEDF Flow Totalizer information.

**LERF/200 AREA, ETF, AND WESF  
Project Managers Meeting  
825 Jadwin / Room 554  
Hanford, Washington**

**August 22, 2013  
ATTENDANCE LIST**

Name	Organization	Phone Number
1. Kathy Knox	Knux Court Reporting	946-5535
2. Rick Engelman	CHPRC	376-7485
3. Stephanie Johnson	CHPRC	373-1031
4. Brett M Baines	CHPRC	521-3053
5. Stacy Nichols	Ecology	372-7917
6. Rick Bond	Ecology	372-7885
7. LINDA Petersen	CHPRC-FGG	373-4200
8. Al Lawrence	CHPRC	376-3145
9. Michael Collins	DOE-EL	376-6536
10. P. Sharon Dalba	CHPRC-FGG	373-9792
11. Jim RASMUSSEN	DOE-	406-538-3893
12. Janna Dittmer	CHPRC TPA	376-7017
13. Brian Dixon	CHPRC	376-7053
14. LEE Tuott	CHPRC	376-1048
15. Stu Mortenson		
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25.		

Via Phone

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**LERF/200 AREA ETF and WESF PROJECT MANAGERS MEETING**  
**825 Jadwin / Room 554**  
**Hanford, Washington**  
**August 22, 2013**

**9:00 a.m. to 9:30 a.m.**

**Agenda**

- I. The approved March 28, 2013, and May 23, 2013, Project Managers Meeting (PMM) Minutes were submitted to Administrative Record. No June or July 2013 PMMs took place.
- II. Operational Status
- III. Status of Previous Agreements and Commitments
- IV. New Agreements and Commitments
- V. Near Term Schedules and Ongoing Activities (Milestones, TSD Unit)
  - A. ST-4500, ST-4502 and ST-4511 status
  - B. LERF Basin Maintenance
  - C. HF RCRA Permit Rev. 9 Update
  - D. 8C/Class 2 Mods
- VI. Approved Changes Signed Off in Accordance with TPA Section 12.2
- VII. General Discussion
- VIII. Actions

Unit	Description of Action	Status	Date
LERF/200 Area ETF	RL will send Ecology a letter with updated copies of catch basin drawings	Action opened	4/26/12
		Jennie Seaver (CHPRC) is following up on this action.	3/28/13
		CHPRC in the process of addressing this action.	5/23/13

- IX. Documents for Submittal to the Administrative Record
- X. Next Project Managers Meeting