

097882

**DISTRIBUTION  
UNIT MANAGERS' MEETING  
200 AREA GROUNDWATER AND SOURCE OPERABLE UNITS**

**0057081**

Bryan Foley.....	DOE-RL RP (A5-13)
Marvin Furman .....	DOE-RL RP (A5-13)
Ellen Mattlin .....	DOE-RL EAP (A2-15)
Mike Thompson .....	DOE-RL RP (A5-13)
Arlene Tortoso .....	DOE-RL RP (H0-12)
Lisa Treichel .....	DOE-HQ (EM-442)
Dennis Faulk.....	EPA (B5-01)
Brenda Jentzen.....	WDOE (Kennewick) (B5-18)
Zelma Maine .....	WDOE (Kennewick) (B5-18)
Tina Masterson-Heggen .....	WDOE (Kennewick) (B5-18)
John Price.....	WDOE (Kennewick) (B5-18)
Matt Mills.....	WDOE (Kennewick) (B5-18)
Lynn Curry .....	BHI (H0-19)
Garrett Day .....	BHI (H0-19)
Bruce Ford .....	BHI (H0-21)
Alison Bryan.....	BHI (H0-21)
Greg Mitchem .....	BHI (H0-19)
Joan Woolard.....	BHI (H0-02)
Tim Lee.....	CHI (H9-02)
Virginia Rohay .....	CHI (H0-19)
L. Craig Swanson .....	CHI (H9-02)
Mary Todd.....	CHI (H9-03)
Curtis Wittreich .....	CHI (H9-03)
Stuart Luttrell .....	PNNL (K6-96)
Mark Sweeney .....	PNNL (K6-81)
Administrative Record (2) .....	BHI (H0-09)

Please inform Alison Bryan – BHI (372-9192)  
of deletions or additions to the distribution list.

**RECEIVED**  
APR 30 2002

**EDMC**

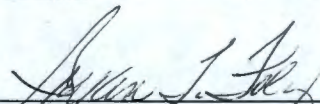
**HANFORD PROJECT OFFICE**

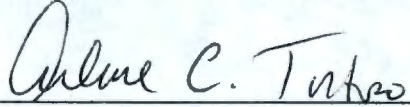
**FEB 21 2002**

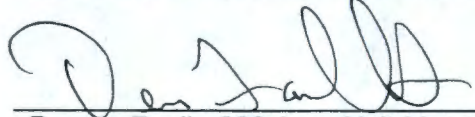
Revised 01/03/02  
**U. S. EPA**

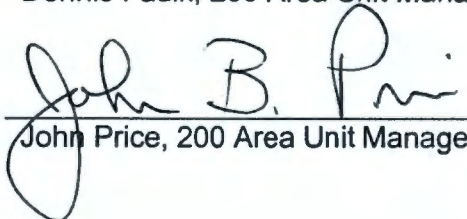
Meeting Minutes Transmittal/Approval  
Unit Managers' Meeting  
200 Area Groundwater and Source Operable Units  
3350 George Washington Way, Richland, Washington  
NOVEMBER 2001

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APPROVAL:  Date 01/24/02  
Bryan Foley, 200 Area Unit Manager, DOE/RL (A5-13)

APPROVAL:  Date 02/06/02  
Arlene Tortoso, Groundwater Unit Manager, DOE/RL (H0-12)

APPROVAL:  Date 3-5-02  
Dennis Faulk, 200 Area Unit Manager, EPA (B5-01)

APPROVAL:  Date 5-Mar-02  
John Price, 200 Area Unit Manager, Ecology (B5-18)

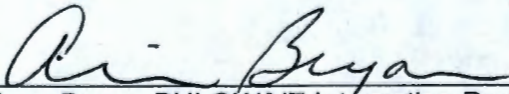
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Meeting minutes are attached. Minutes are comprised of the following:

Attachment 1	--	Agenda
Attachment 2	--	Attendance Record
Attachment 3	--	200 Area Current Action Log
Attachment 4	--	200 Area UMM Minutes – November 2001
Attachment 5	--	Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites July 2001 – October 2001
Attachment 6	--	Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites FY 1997 – FY 2002

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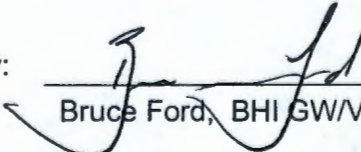
Prepared by:

  
Alison Bryan, BHI GW/VZ Integration Project (H0-19)

Date

1-3-02

Concurrence by:

  
Bruce Ford, BHI GW/VZ Integration Project (H0-19)

Date

1/11/02

# UNIT MANAGERS' MEETING AGENDA

3350 George Washington Way

November 29, 2001

9-11 a.m.    200 Area    Room 1B45

## General (10 minutes)

- Outstanding Action Items (attached)
- Open for regulatory topics or action items

## 200-BP-5 (10 minutes)

- Status on Groundwater Sampling and Analysis Plan

## 200-UP-1 (10 minutes)

- Pump and Treat treatment system operation's status
- Monitoring well installation and characterization sampling status
- Open discussion

## 200-ZP-1 (10 minutes)

- Status of Well Drilling at PFP
- Pump and Treat treatment system operation's status
- Open discussion

## 200-PW-1 Plutonium/Organic-Rich Process Waste OU (10 minutes)

- Monthly Soil Vapor Monitoring
- Soil Vapor Extraction system
  - Active system status
  - Passive system status
  - Open discussion
- RI/FS Work Plan status

## 200-CS-1 Chemical Sewer OU (5 minutes)

- Status Fieldwork (Test Pits)

## 200-CW-5 U Pond/Z Ditches Cooling Water OU (5 minutes)

- Optimization of Shallow Casing Gamma Logging Task



**200 Area Unit Managers' Meeting  
OPEN ACTION ITEMS & TRACKING**

Action #	Action/Subject	Assigned To	Owed To	Assigned Date	Original Due Date	Adjusted Due Date	Date Complete	Status
16	Distribution of UMM minutes for January, February, March, April, May, and June 2001	Bruce Ford, BHI	Dennis Faulk, EPA	06/28/2001				In review

**MEETING MINUTES  
200 AREA GROUNDWATER AND SOURCE OPERABLE UNITS  
UNIT MANAGERS' MEETING -- 200 AREA  
November 29, 2001**

**Attendees:** See Attachment #2

**Agenda:** See Attachment #1

**Topics of Discussion:**

**1. General**

- Outstanding Action Items – (see attached) No discussion.
- Open for Regulatory Topics or Action Items – No discussion.

**2. 200-BP-5**

- Status on Groundwater Sampling and Analysis Plan – EPA is working with DOE-RL on the Sampling and Analysis Plan. It has been submitted for signature.

**3. 200-UP-1**

- Pump and Treat Treatment Systems Operations Status – The system is operating at 45 gallons per minute. A new extraction well will be added by the end of December. It is estimated it will increase the extraction rate by 10 to 15 gallons per minute.
- Monitoring Well Installation and Characterization Sampling Status – The use of one of the monitoring wells as a backup extraction well is being considered.

**4. 200-ZP-1**

- Status of Well Drilling at PFP – Drilling resumed November 26, 2001, at the alternate well location. Currently the well is at 52 feet in depth. Two soil samples and one vapor sample have been collected. No carbon tetrachloride was detected. An estimated completion date is January 31, 2002.
- Pump and Treat Treatment System Operations Status – The flow is running at 150 to 175 gallons per minute. The extraction rates are being fine-tuned.

**200-PW-1 Plutonium/Organic-Rich Process Waste OU**

- Monthly Soil Vapor Monitoring – A handout was distributed and reviewed by Virginia Rohay regarding carbon tetrachloride vapor monitoring. (Attached) The data showed nothing inconsistent with past readings.

- Soil Vapor Extraction System –
  - Active System Status – The system has been shut down for the winter.
  - Passive System Status – The passive extraction data, beyond what was in the annual report in September, are not yet available.
- RI/FS Work Plan Status – The Work Plan is on schedule. DOE/RL has reviewed the Work Plan and comments were incorporated. It will be delivered to EPA by the end of December.

#### 5. **200-CS-1 Chemical Sewer OU**

- Status Fieldwork (Test Pits) – The test pit characterization activities for the 200-CS-1 OU and the 216-A-29 Ditch Sampling for Project W-211 were conducted from October 29 to November 2, 2001. Test pits AD-1, AD-2, and AD-3 were completed at the 216-A-29 Ditch. Test pit BT-2 at the 216-B-63 Trench was started, but then terminated (when significant contamination was encountered) due to concerns of contaminating the non-regulated excavator. A reading of 1250 cpm beta/gamma were observed at this depth. The test pit characterization activities were temporarily put on hold until a regulated excavator is available for use for the remaining test-pits. A regulated excavator is expected to be available for use in late-January/early-February. Test pit BT-2 will be relocated 10 to 20 ft upstream of the original location and samples will be collected in accordance with the Work Plan.

A preliminary review of the AD-3 Test Pit (CHG test pit) data from the 216-A-29 Ditch indicates that the radionuclides detected are at background concentrations. Th-228, Th-232, Ra-226, Ra-228, U-233, and U-238 were the primary radionuclides detected at concentrations less than 1.5 pCi/g. K-40 was also detected at background concentrations. Cs-137, Sr-90, and Pu-239 were not detected above the method detection activity (MDA).

For the nonradionuclides, all VOCs, PCBs, and Diesel Range Organics were below detection limits for all samples. Several SVOC were detected at low levels in only the 5.0-6.0 ft sample. All others sample intervals were below detection limit for SVOCs. The maximum concentrations detected in the samples for lead and arsenic were 11.7 mg/kg and 12.2 mg/kg, respectively. Hydrazine, as expected, was not detected above detection limits for any of the samples.

A summary report for the CHG test pit work at the 216-A-29 Ditch for project W-211 will be completed in December. A contained-in-determination for the removal of the U-133 code (hydrazine) for investigation derived waste at the 216-A-29 Ditch will be submitted to Ecology in late-January.

Analytical data for the test pits AD-1, AD-2, and BT-2 are expected in mid-December.



**6. 200-CW-5 U Pond/Z Ditches Cooling Water OU (5 minutes)**

- Optimization of Shallow Casing Gamma Logging Task – A meeting with EPA will be scheduled for sometime in the first week of December to provide some information to EPA and to discuss ways to cost-effectively complete the shallow gamma logging.

**Carbon Tetrachloride Rebound Concentrations  
Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites  
July 2001 - October 2001**

200-PW-1 (200-ZP-2)			07/31/2001	08/30/2001	09/25/2001	11/05/2001
Location (Well or Probe) /feet bgs	Site	Zone	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)
CPT-17/ 10 ft	Z-9	2				2.5
CPT-18/ 15 ft	Z-9	2				1.2
CPT-16/ 25 ft	Z-9	2				0
CPT-32/ 25 ft	Z-1A	2	0	0	0	0
CPT-4A/ 25 ft	Z-1A	2	0	0	0	
CPT-30/ 28 ft	Z-1A	2	0	0	0	0
CPT-13A/ 30 ft	Z-1A	2	0	0	1.9	0
CPT-7A/ 32 ft	Z-1A	2	3.8	4.2	4.1	1.8
CPT-27/ 33 ft	Z-9	2				1.2
CPT-1A/ 35 ft	Z-12	2	11.3	10.5	9.5	6.4
CPT-28/ 40 ft	Z-9	2	52.8	54.8	56.5	
CPT-33/ 40 ft	Z-1A	2	0	1.1	1.6	
CPT-34/ 40 ft	Z-18	2	1.5	1.8	2.2	
CPT-21A/ 45 ft	Z-9	2	90.9	133	126	88
CPT-9A/ 60 ft	Z-9	2	38.1	39	45.3	35
CPT-32/ 70 ft	Z-1A	2	4.0	3.9	4.3	
CPT-4A/ 75 ft (b)	Z-1A	2			7.1	
W15-82/ 82 ft	Z-9	2				15.6
W15-95/ 82 ft	Z-9	2				---- (c)
CPT-21A/ 86 ft	Z-9	2	179	186	184	148
CPT-28/ 87 ft	Z-9	2	167	225	220	136
CPT-1A/ 91 ft	Z-12	2	5.7	6.8	8.3	
CPT-4A/ 91 ft (a)	Z-1A	2	7.5	7.5		
CPT-9A/ 91 ft	Z-9	2	57.2	62.3	74.3	
W18-165/ 108 ft	Z-1A	2				---- (c)
W18-152/ 113 ft	Z-12	2	10.2	22.8	25.7	19
W15-217/ 115 ft	Z-9	3				86
W18-158L/ 123 ft	Z-1A	3	90.6	163	159	
W18-167/ 123 ft	Z-1A	3	283	229	248	254
W18-249/ 134 ft	Z-18	3	44.6	161	196	63
W18-248/ 136 ft	Z-1A	3	306	274	236	226
W15-9L/ 189 ft	Z-9	6				---- (c)
(a) Water noted in line at CPT-4A/ 91 ft, 7/31/01, 8/30/01. This is the first time that water has been encountered during ZP-2 sampling.						
(b) Substitute for CPT-4A/ 91 ft						
(c) not sample-ready						

Comparison of Maximum Carbon Tetrachloride Rebound Concentrations  
Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites  
FY 1997 - FY 2002

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200-PW-1 (200-ZP-2)				November 1996 - July 1997		October 1997 - September 1998		July 1998 - September 1999		July 1999 - June 2001		July 2001 - September 2001		October 2001 - March 2002				
Location (Well or Probe)	Site	Zone	Maximum Rebound Carbon Tetrachloride /feet bgs	months of rebound	Maximum Rebound Carbon Tetrachloride (ppmv)	months of rebound	Maximum Rebound Carbon Tetrachloride (ppmv)	months of rebound	Maximum Rebound Carbon Tetrachloride (ppmv)	months of rebound	Maximum Rebound Carbon Tetrachloride (ppmv)	months of rebound	Maximum Rebound Carbon Tetrachloride (ppmv)	months of rebound	Maximum Rebound Carbon Tetrachloride (ppmv)	months of rebound		
79-03/ 5 ft	Z-18	1	0	8	0	3	0	12										
79-06/ 5 ft	Z-1A	1	not measured		not measured			1.4	12									
79-11/ 5 ft	Z-1A	1	0	8	0	6	2.9	12										
86-05/ 5 ft	Z-9	1	not measured		not measured			0	3									
86-05-01/ 5 ft	Z-9	1	not measured		not measured			0	3									
86-06/ 5 ft	Z-9	1	1.3	8	0	9	1.9	6										
87-05/ 5 ft	Z-1A	1	not measured		0	3	1.0	12										
87-09/ 5 ft	Z-1A	1	not measured		1.5	3	2.6	12										
94-02/ 5 ft	Z-9	1	0	8	not measured			1.4	3									
95-11/ 5 ft	Z-9	1	0	8	2.1	9	2.5	6										
95-12/ 5 ft	Z-9	1	1.1	8	1.5	9	1.3	6										
95-14/ 5 ft	Z-9	1	not measured		not measured			0	3									
CPT-13A/ 9 ft	Z-1A	2	not measured		0	6	1.0	12										
CPT-16/ 10 ft	Z-9	2	not measured		0	9	1.5	6										
CPT-17/ 10 ft	Z-9	2	not measured		4.2	9	5.1	6	6.6	24				2.5	1			
CPT-18/ 15 ft	Z-9	2	not measured		6.5	9	5.0	6	5.2	24				1.2	1			
CPT-31/25 ft	Z-1A	2	not measured		0	6	0	12										
CPT-16/ 25 ft	Z-9	2	not measured		not measured			not measured	1.8	24				0	1			
CPT-32/ 25 ft	Z-1A	2	not measured		9.1	6	10	12	16.5	18	0	3		0	4			
CPT-4A/ 25 ft	Z-1A	2	not measured		not measured			not measured	3.5	0			0	3				
CPT-30/ 28 ft	Z-18	2	not measured		not measured			3.2	12				1.4	18	0	3		
CPT-13A/ 30 ft	Z-1A	2	2.2	8	not measured			not measured	3.6	18			2	3		1.9	4	
CPT-7A/ 32 ft	Z-1A	2	not measured		2.3	6	5.4	12	6.2	18			4.2	3		4.2	4	
CPT-27/ 33 ft	Z-9	2	1.2	8	not measured			not measured	2.6	24						1.2	1	
CPT-1A/ 35 ft	Z-18	2	2.0	8	1.4	3	3.0	12	7.7	18			11.3	3		11.3	4	
CPT-28/ 40 ft	Z-9	2	40.1	8									56.5	0				
CPT-33/ 40 ft	Z-1A	2	not measured		2.0	3	2.6	12					2	3				
CPT-34/ 40 ft	Z-18	2	2.3	8	not measured			1.7	12			1.9	0	2.2	3			
CPT-21A/ 45 ft	Z-9	2	65.6	8	52.7	9	57	3	127	24			133	0		133	1	
W15-220ST/ 52 ft	Z-9	2	2	8	not measured			1.6	3			2.5	24					
CPT-28/ 60 ft	Z-9	2	not measured		1.5	0	3.7	3										
CPT-9A/ 60 ft	Z-9	2	45.5	8	41.1	0	44	3	68	24			45.3	0		45.3	1	
CPT-30/ 68 ft	Z-18	2	1.7	8	not measured			3.0	12									
CPT-32/ 70 ft	Z-1A	2	7.4	8									4.3	3				
CPT-13A/ 70 ft	Z-1A	2	5.2	8	not measured			5.6	12									
CPT-24/70 ft	Z-9	2	not measured		3.2	9	3.6	3										
W15-219SST/ 70 ft	Z-9	2	14.6	8	not measured			7.6	3			7.8	24					
CPT-18/ 75 ft	Z-9	2	not measured		not measured			not measured				18	24					
CPT-4A/ 75 ft	Z-1A	2	not measured		not measured			not measured					7.1	3				
CPT-31/ 76 ft	Z-1A	2	4.0	8	not measured			4.2	12									
CPT-33/ 80 ft	Z-1A	2	5.8	8	not measured			9.2	12									
W15-82/ 82 ft	Z-9	2	28.9	8	5.5	9	46	6	55	24						15.6	1	
W15-95/ 82 ft	Z-9	2	not measured		15.3	9	39	6	43	21						0	1	
CPT-21A/ 86 ft	Z-9	2	221	8	206	9	148	6	195	24			186	0		186	1	
CPT-34/ 86 ft	Z-18	2	36.3	8	5.9	3	0	12										
W15-218SST/ 86 ft	Z-9	2	not measured		not measured			0	3									
CPT-28/ 87 ft	Z-9	2	280	8	230	9	203	6	224	24			225	0		225	1	
CPT-1A/ 91 ft	Z-18	2	3.9	8	not measured			4.2	12				8.3	3				
CPT-4A/ 91 ft	Z-1A	2	not measured		7.7	3	14	12					7.5	3				
CPT-9A/ 91 ft	Z-9	2	103	8	34.5	9	72	3					74.3	0				
W15-85/ 92 ft	Z-9	2	not measured		not measured			not measured				51	24					
W18-252SST/ 100	Z-1A	2	38.2	8	17.8	3	24	12										
W18-165/ 108 ft	Z-1A	2	not measured		not measured			not measured					not measured				0	4
W18-152/ 113 ft	Z-12	2	46.8	8	11.1	3	33	12	25	18			25.7	3		25.7	4	
W15-217/ 115 ft	Z-9	3	797	8	630	9	561	6	442	24						86	1	
CPT-24/ 118 ft	Z-9	3	44.6	8	37.7	9	37	6	35	24								
W15-220SST/ 118	Z-9	4	21.9	8	not measured			36	3	34	24							
W18-158L/ 123 ft	Z-1A	3	not measured		143	3	492	12	284	18			163	3				
W18-167/ 123 ft	Z-1A	3	323	8	79.7	3	228	12	248	18			283	3		283	4	
W15-219SST/ 130	Z-9	4	298	8	not measured			47	3	54	24							
W18-249/ 134 ft	Z-18	3	206	8	20.4	3	215	12	176	18			196	3		196	4	
W18-248/ 136 ft	Z-1A	3	288	8	86.3	3	177	12	214	18			306	3		306	4	
W15-219SST/ 155	Z-9	5	59.6	8	not measured			24	3	44	24							
W15-220SST/ 185	Z-9	5	14.5	8	not measured			13	3	15	24							
W15-6L/ 189 ft	Z-9	6	22.6	8	17.8	9	1.3	6										
W15-9L/ 189 ft	Z-9	6	18.3	8	15.0	9	15	6	20	21						0	1	
W18-7/ 200 ft	Z-1A	6	28.5	8	17.3	3	29	12										
W18-6L/ 208 ft	Z-1A	6	36	8	31.3	6	15	12										
W18-12/ 210 ft	Z-18	6	not measured		3.8	3	19	12										

\* - based on location (Z-1A/18/12 or Z-9) of monitoring point; specific points may be beyond SVE zone of influence during particular operating configurations

- Z-18 and Z-12 wells off-line Oct 96 - Apr 98

- CPT-1A, CPT-9A, and possibly CPT-7A appeared to be beyond SVE zone of influence in Oct 96 based on differential pressure (BHI-01105, p. 6-1)

- CPT-9A, CPT-21A, CPT-28 beyond SVE zone of influence in May 96 based on CCH concentrations and airflow modeling based on measured vacuums (BHI-01105, p. 6-1)