FH-0500221

0063945

DISTRIBUTION
UNIT MANAGERS' MEETING,
200 AREA GROUNDWATER SOURCE OPERABLE UNITS

EPA

Craig Cameron	B5-01

Ecology

John Price	H0-57
Administrative Record (2)	A3-01

FH-0500221

Meeting Minutes Transmittal/Approval
Unit Managers' Meeting
200 Area Groundwater and Source Operable Units
1200 Jadwin Avenue, Richland, Washington
May 20, 2004

APPROVAL: Arlene Tortoso Date: 2/17/05
Arlene Tortoso, Groundwater Unit Manager, DOE/RL

APPROVAL: Larry Romine Date: 2-17-05
Larry Romine, Project Management Support Div., DOE/RL

APPROVAL: Craig Cameron Date: 2/17/05
Craig Cameron, 200 Area Unit Manager, EPA

APPROVAL: John B. Price Date: 2/17/05
John Price, 200 Area Unit Manager, Ecology

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

Attachment 1	--	Agenda
Attachment 2	--	Attendance Record
Attachment 3	--	200 Area UMM Minutes – May 20, 2004
Attachment 4	--	200 Area Current Action Log
Attachment 5	--	Float Table
Attachment 6	--	200-UP-1, 200-ZP-1 and 200-PW-1 Status Report
Attachment 7	--	Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites FY 1998- FY 2004
Attachment 8	--	Table A "List of Supplemental Wells Supporting CERCLA Monitoring"
Attachment 9	--	Sampling Results for 299-W22-20

Prepared by: _____ Date 1-27-05
Linda DeLaMoy, Project Systems & Support (H8-49)

Concurrence by: _____ Date 2/9/05
Mary Todd-Robertson, FH Groundwater Protection Program (E6-35)

UNIT MANAGERS' MEETING AGENDA

1200 Jadwin Avenue
May 20, 2004

9 a.m. – 12 p.m. 200 Area Room 1C1

General (15 minutes)
- Outstanding Action Items
- Open for Regulatory Topics or Action Items

Central Plateau Closure (5 min)
- Decision/issues framework discussion

U Plant Area Regional Closure (10 minutes)
- Schedule Review
  - FFS/PP Status
  - Drive casing/Spectra Gamma

BC Cribs Area Closure (10 minutes)
- Schedule Review
  - Confirmatory DQO and SAP
  - TPA change request to move four LW-1 sites to TW-1

200-TW-1, 200-TW-2, & 200-PW-5 (10 minutes)
- Schedule Review
  - Status of RI Report
  - Status of FS and PP Review

GROUNDWATER OPERABLE UNITS

General (5 minutes)
- Update on Well Decommissioning
  - 89 Wells Scheduled For Decommissioning in FY04
    - 89 Subsurface Work Complete
    - 89 All Surface and Subsurface Work Complete

200-BP-5 & 200-PO-1 OUs (5 minutes)
- Sample collection/well list status
- Sampling and Analysis Plan revisions beginning

200-UP-1 OU (5 minutes)

- Remediation Treatment Status
- RI/FS Work Plan Status – April 7 Delivery to Ecology
- Drilling Status on New Monitoring Wells "K", "P", and "R"
- March sampling results for 299-W22-20

200-ZP-1 OU (5 minutes)

- Remediation Treatment Status
- RI/FS Work Plan Status –EPA and RL Comments have been incorporated. Document in editing
- Replacement Extraction Wells #1 and 4 are now online

SOURCE OPERABLE UNITS

200-PW-1, 200-PW-3, & 200-PW-6 OUs (15 minutes)

- Schedule Review
  - Remediation Treatment Status
  - Monthly Monitoring
  - Status of Field Work Preparation and Planning
  - Status of RI/FS Work Plan
  - Status of Field Work at 216-Z-9

218-W-4C Burial Ground (5 minutes)

- Remediation Treatment Status

200-CW-1 & 200-CW-3 OUs (10 minutes)

- Schedule Review
  - Status of FS and PP
  - Current Status Spring Sampling

200-PW-2 & 200-PW-4 OUs (10 minutes)

- Schedule Review
  - Status of Waste Management Activities
  - Status of Work Plan
  - Status of RI Report
  - Status of Field Planning for 216-S-7 Borehole
  - Status of WCP

200-CS-1 OU (2 minutes)

- Schedule Review
  - Status of RI Report

200-CW-5, CW-2, CW-4, & SC-1 OUs (10 minutes)

- Schedule Review
  - Status of Work Plan
  - Status of RI Report
  - Status of FS

200 Area Ecological Evaluation (10 minutes)

- Schedule Review
  - Status of Eco DQO
  - Status of Eco Evaluation Report
- Overview of Eco Activities
  - Spring Sampling Progress

200-IS-1 & 200-ST-1 (5 minutes)

- Schedule Review
  - Status of Work Plan
  - Status of ORP/RL work on pipeline strategy

200-LW-1/200-LW-2 (5 minutes)

  - Status of Field Planning

200-MW-1 (5 minutes)

  - Status of Field Planning
  - Status of 200-MW-1 WCP

200-UR-1 (5 minutes)

- Schedule Review
  - Status of DQO and Work Plan

200-SW-1/2 (5 minutes)

- Schedule Review
  - Status of Work Plan

Groundwater and Source Operable Units Unit Managers' Meeting
Official Attendance Record – 200 Area
May 20, 2004

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Virginia Rohay	FH	task lead	373-3803
Bryan Foley	DOE-RL/ARCP	200 Area Waste Site Remediation	376-7087
Bruce Ford	FH	Groundwater Dir	373-3809
GLORIA CUMMINS	FH	ENVIR. PROT.	372-9320
Larry Romine	RL	200A-CP	376-4747
Lanny Dusek	FH	CP D&D	438-1756
Dave Erb	FH	200-W GW Supt. 200-IS-1/ST-1	373-4457

Groundwater and Source Operable Units Unit Managers' Meeting
Official Attendance Record – 200 Area
May 20, 2004

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Lee J Farrell	FHI		373-3854
Beth Rochette	Ecology	200 area common 200 UR-1, UW-1	372-7922
MIKE HICKEY	FH	CW1, 3+5 LEAD FS	373-3092
Larry Hulstrom	FH	200-PW-2/4	373-3928
Kevin Leary	DOE	U-plant	373-7285
Rick Bond	Ecology	U-Plant	372-7885
Briant Charboneau	DOE	GW PD	373-6137
Arlene Tortoso	DOE	GW UM	373-9631
Jane V Borghese	FH	GW	373-3804
Craig Cameron	EPA	Proj. Man.	376-8665
Mark Byrnes	FH	Task Lead	373-3996
John P. McDonald	PNNL	UP-1 S+A	373-0362
Stuart Luttrell	PNNL	GW Mon.	376-6023
Eileen Murphy-Fitch	FH	TPAI	376-8868
Dan Teigman	FH	Intern	308-6513
Mike Benecke	FH	BC Cribs TW-1/2	376-0002
Bob Raidl	FH Geosc.	G.W	373-3904
Julie Robertson	FH D&D	CD1/U Plant	376-8162
Ron Jackson	FH	U Plant WS	373-3559
Chris Clarlock	CHG	CW-1, UW-1, MW-1	372-9638

MEETING MINUTES
200 AREA UNIT MANAGERS' MEETING -- 200 AREA
May 20, 2004

Agenda: See Attachment #1

Attendees: See Attachment #2

Topics of Discussion:

1. General

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

2. Central Plateau Closure

- Decision/issues framework discussion
  - FH proposed developing a "Decision Framework Graphic" that would show upcoming, cross-cutting, and integration decisions. The graphic will support; 1) identifying the most appropriate forum (e.g., UMM or IAMIT or Central Plateau brownbag meetings) for discussion of the issues and 2) using the UMM more for issues resolution and discussion rather than "status" reports. The UMM could then be used to highlight issues and to status only specific OUs of concern. FH envisions the Decision Framework Graphic as a timeline that can be used to highlight when issues need to be resolved and decisions needed to be made. The objective is an integrated Central Plateau approach to decisions. FH suggested more communication on a quarterly basis might be implemented via email for general status reports. FH committed to developing a draft Decision Framework Graphic for the next UMM for review before implementing.
  - FH proposed that today's UMM be used to capture issues that will be highlighted at the next UMM. FH took the action to distribute the issues identified today.
  - FH inquired about the use of the NPL agreement form that had been in use in years past and asked if it should be brought back into use again. EPA indicated that the NPL agreement form had been used recently on other projects.
  - DOE-RL asked whether FH would be requesting the DOE Office of River Protection to be a participant in the discussion of issues and decisions. FH indicated that they have been working with ORP to identify and integrate decisions that cross-cut the Central Plateau cleanup.

3. U Plant Area Regional Closure

- Schedule Review
  - FFS/PP Status – No Discussion
  - Drive Casing/Spectral Gamma – No discussion

- RCRA/CERCLA integration issues – RL spoke about RCRA/CERCLA integration issues and a possible audit of 221-U regarding waste disposal issues

4. BC Cribs Area Closure

- Schedule Review
  - Confirmatory DQO and SAP – The draft DQO for confirmatory and design sampling has been briefly reviewed with RL. Further review is necessary before presentation to the agencies.
  - TPA change request to move four LW-1 sites to TW-1 – TPA change request to move the four LW-1 waste sites to TW-1 was approved.
  - FFS/PP Status – Following receipt of comments on the TW-1/2 FS, preparation of a focused feasibility study (FFS) for the BC cribs and trenching area was initiated. A series of meetings involving EPA, RL, and FH has begun with emphasis on determining what needs to be included in the FFS and PP to address anticipated public and Regulator expectations. This led to a general discussion of potential global issues that, unless resolved, have potential to derail projects identified for acceleration. It was noted that an off-line meeting to address intruder scenarios has been scheduled. Kevin Leary offered to schedule a meeting of decision makers to nail down recommendations.

5. 200-TW-1, 200-TW-2, & 200-PW-5

- Schedule Review
  - Status of RI Report – Additional fate and transport modeling has been performed to address EPA and USGS comments on the TW-1/2, PW-5 RI. Following acceptance of this modeling information, a schedule will be developed for revision and resubmitted to RI.
  - Status of FS and PP Review – EPA and Ecology have provided comments on the FS and PP submitted at the end of March. Both stated that the overall package is too large and complex to be reviewed and effectively presented to the public. EPA specifically proposed that the BC Cribs and Trenches Area waste sites be pulled out and addressed separately, and that the remainder of the waste sites be held in abeyance. RL has requested a detailed recommendation from FH. RL is concerned that unless a specific commitment is made to revise and submit the FS for the remainder of the waste sites that activity could be "lost". ROD strategy for these waste sites could become an issue in the future.

GROUNDWATER OPERABLE UNITS

6. General

- Update on Well Decommissioning
  - 89 Wells Scheduled For Decommissioning in FY 2004, 89 Subsurface Work Complete, 89 All Surface and Subsurface Work Complete.

7. 200-BP-5 & 200-PO-1 OUs

- Sample collection/well list status – Sample collection has resumed in wells at 200-BP-5, since the Waste Control Plan was approved.
- Sampling and Analysis Plan revisions beginning – The 200-BP-5 and 200-PO-1 Sampling and Analysis Plans will be revised in the next few months.

8. 200-UP-1 OU

- Remediation Treatment Status – Average Pumping Rate (counting all outage time as 0 gpm) for CY 2004 through May 9, 2004: 48.6 gpm. Most recent groundwater sampling of extraction well 299-W19-43 is now below the RAOs (Uranium 480 ppb, Tc-99 9,000 pCi/L). From April 5 through May 9, 2004, the system operated between 53.2 and 53.9 gpm. System was shutdown for a total of 17.5 hours between April 6 and 7, and 7 hours on April 28 for an ERDF leachate transfer. System Run Time:
  - For Month of April through May 9 97.1%
  - FY 2004 (Year to date) 87.7%
  - System Inception to date 92.6%
- RI/FS Work Plan Status, Draft B – Ecology requested review extension to June 6. Important Deliverables:
  - July 12, 2005 – DOE-RL submits Draft A RI Report to Regulators
  - April 5, 2007 – Issue Draft A FS Report to Regulators
- Drilling of new monitoring well "P", "K", and "R" – Drilling is currently on hold until a safety issue with the subcontractor is addressed (broken sling). Missing data to support the CERCLA RI/FS process will be collected from these wells.
- March sampling results for 299-W22-20 – John McDonald (PNNL) spoke to a handout (attached) regarding recent sample analysis results from well 299-W22-20.
- General - A revised Table A-3, DOE/RL-2000-51, Rev. 5, Interim Action Waste Management Plan for the 200-UP-1 Operable Unit – Added well 299-W19-47 was distributed as requested (attached).

9. 200-ZP-1 OU

- Remediation Treatment Status – Average Pumping Rate for FY 2004 through May 2, 2004: 19 gpm. For the month of April 5 through May 2, 2004, the system operated at between 85 and 176 gpm. Extraction well #1 was offline until replacement well 299-W15-45 was turned on April 26. Extraction well #4 was offline until replacement well 299-W15-47 was turned on April 28. Extraction well #2 (W15-34) was down until April 12 due to a failed pump. System was shutdown for approximately 2 hours on April 5 for a strainer replacement on air stripper. On May 15, 2004, a failed gasket in new Extraction Well #4 (W15-47) resulted in the loss of approximately 61,000 gallons of water at the well head. The problem was identified at 7:45 AM on May 17, 2004, and the system was immediately shut off. The total estimated quantity of chloroform, carbon

tetrachloride, and trichloroethylene lost to the ground using contaminant concentrations from the May 12, 2004 sampling of this well:

- Chloroform: 4.4 grams
- Carbon Tetrachloride: 625.4 grams
- Trichloroethylene: 1.7 grams

Replacement Extraction Wells #1 and 4 are now online. System Run Time:

- For Month of April through May 2 99.7%
- FY 2004 (Year to date) 94.5%
- System Inception to date 92.2%

- RI/FS Work Plan Status – EPA and RL comments have been addressed, document in editing.

10. 200-PW-1, 200-PW-3, & 200-PW-6 OUs

- Schedule Review
  - Remediation Treatment Status – Average Air Flow Rate for FY 2004 through April 11: 374 CFM. Through April 11, the system operated at between 339 and 409 CFM. System was shutdown on April 20 for a GAC change-out, then was shutdown shortly afterwards due to a safety tripping hazard which is still not completely resolved. Data on system performance from April 12 through April 20, 2004, will not be available until system is turned back on. The passive system remains operational. System Run Time:
    - Through April 11 62.0%
    - FY 2004 (Year to date) 62.0%
    - System Inception to date 95.3%
  - Monthly Monitoring – The results of the monthly monitoring of carbon tetrachloride vapor concentrations was distributed (attached). The results for April 2004 monitoring were consistent with results from recent months. In April, monitoring locations were adjusted to focus more on the 216-Z-9 area while vapor extraction is being conducted at the 216-Z-1A area.
  - Status of Field Work Preparation and Planning – The Waste Control Plan for the 200-PW-1, 200-PW-3, and 200-PW-6 OUs has been prepared and reviewed by RL and EPA. Comment responses were provided to EPA on May 13, 2004. It is anticipated that the waste control plan will be ready for signatures next week, following review of the comment responses by EPA. Once the waste control plan has been approved, sampling will be conducted at the 216-A-8 Crib to support selection of the borehole location.
  - Status of RI/FS Work Plan – The RI/FS work plan was approved on April 26, 2004.
  - Status of Field Work at 216-Z-9 – The borehole drilling at the 216-Z-9 site reached 128 ft below ground surface. At the caliche, the borehole was geophysically logged and the casing was downsized from 13-inch diameter to 11-inch diameter. However, an additional zone of radiological contamination was encountered below the caliche.

To meet WAC requirements, it was necessary to remove the 11-inch casing string and advance the 13 inch casing string approximately 5 feet. During the removal of the 11- inch casing string, a sling broke. There were no injuries, but the drilling contract is in a safety stand-down as a result of critique findings. It is anticipated that drilling will resume next week.

11. 218-W-4C Burial Ground

- Remediation Treatment Status – A vapor extraction system has been operating at trench 4 in the 218-W-4C burial ground to remove carbon tetrachloride. SVE operations were concluded on May 3, 2004, to allow waste retrieval operations to remove the bulk of the soil overlying the drums in this trench.

12. 200-CW-1 & 200-CW-3 OUs

- Schedule Review
  - Status of FS and PP – Revised FS is underway. Status of Ecology comments unresolved
  - Current Status Spring Sampling – Presentation of the spring ecological sampling effort was given.

13. 200-PW-2 & 200-PW-4 OUs

- Schedule Review
  - Status of Waste Management Activities – Contaminated drill casing from the 216-A-10 and 216-A-36B cribs are all that remain to be disposed. Profiles are being completed and it is FH's plan to have them disposed to ERDF by May 30, 2004.
  - Status of Work Plan – All remaining comments were resolved at a meeting held on May 12, 2004. Preparation of the Rev. 1 version is being finalized.
  - Status of RI Report – The DOE review was conducted from May 3, 2004, through May 14, 2004. Comment incorporation is under way in support of submittal of the Draft A version in June and completion of TPA milestone M-015-43B.
  - Status of Field Planning for 216-S-7 Borehole – Preliminary hazards classification work has begun. Drilling may begin in August or September.
  - Status of WCP – Rev. 1 of the 200-PW-2 Waste Control Plan (CP-13935) is being updated to include the 216-S-7 borehole.

14. 200-CS-1 OU

- Schedule Review
  - Status of RI Report – The Draft A Remedial Investigation Report was transmitted to DOE/RL on May 14, 2004. DOE/RL will be submitting the report to the regulators the week of May 24, 2004.

15. 200-CW-5, CW-2, CW-4, & SC-1 OUs

- Schedule Review
  - Status of Work Plan – The Work Plan has been issued.
  - Status of the RI report – The RI report is under way.
  - Status of the FS – FS is due on October 31, 2004. A question was raised on whether to proceed with a report that has a large number of sites (49) located in 200 east and west or to partition the report differently.

16. 200 Area Ecological Evaluation

- Schedule Review
  - Status of Eco DQO – Ecological DQO is nearly complete – meeting on the 26th to share changes.
  - Status of Eco Evaluation Report – No discussion.
- Overview of Eco Activities
  - Spring sampling – SAP review meeting on the 27th. On schedule with the SAP.

17. 200-IS-1 & 200-ST-1

- Schedule Review
  - Status of Work Plan – No discussion.
  - Status of ORP/RL work on pipeline strategy – No discussion.

18. 200-LW-1, 200-LW-2, & 200 MW-1

- Schedule Review
  - Status of Work Plan – The MW-1 waste control plan has been signed by DOE/RL and EPA. The field work will begin in early June. The work was originally scheduled to begin in May; however, due to priorities associated with completing the U-Plant field activities, the work was delayed.

19. 200-UR-1

- Schedule Review
  - Status of DQO and Work Plan – Currently revising Work Plan.

20. 200-SW-1/2

- Schedule Review
  - Status of Work Plan – Legal issues between RL and the state are being discussed.

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
34	Provide a clear definition of "Central Plateau"	FH	EPA&Ecology	10/16/03				In progress

200 Area Unit Managers' Meeting
200 Area Remedial Action Float Table
March 2003

Task	Scheduled Date	Float	Comments
200-CS-1			
Deliver Draft A RI Report for Regulator Review	5/31/2004	--	On schedule
Deliver Draft A FS/PP for Regulator Review	11/30/2005	--	On schedule
200-CW-1			
Deliver Draft B FS for Regulator Review	7/3/2003 (original date based on receipt of regulator comments 45 calendar days after submittal (which would be 5/15/2003) with 45 days to revise and reissue)	-315-d	Regulator comments originally due on 5/15/2003; policy level comments received on that date; Ecology indicated additional comments would be coming; to date these comments have not been received; the new schedule date assumes no additional comments will be received from the regulators on Draft A
	10/31/2004 (new target date based on collecting spring samples and incorporating data into the revision)	--	On schedule
200-LW-1			
Deliver Draft A RI Report for Regulator Review	10/31/2005	--	On schedule
200-PW-2			
Deliver Revised Waste Control Plan for regulator review	3/8/2004	--	**Delivered 02/23/04**
Ecology approve Rev 1 RI/FS work plan	2/14/2003	-460-d	After BCR approval, field work is scheduled for 8/04 and completion of work is forecast to not generate a variance for the FS.
Deliver Draft A RI Report for Regulator Review	6/30/2004	--	Assumes RI can be delivered w/o add'l sampling, per Ecology agreement @ 12/03 UMM
Deliver Draft A FS/PP for Regulator Review	12/31/2005	--	Assumes additional sampling necessary for Ecology request
200-SW-1/200-SW-2			
Regulator DQO Interview	4/27/2004	--	**Interview conducted on 03/17/04**
Deliver Draft DQO to regulators	7/5/2004	--	On schedule
Deliver draft A RI/FS work plan for regulator review	12/31/2004	--	On schedule
Deliver Waste Control Plan for regulator review	4/15/2005	--	On schedule
Start field sampling	7/27/2005	--	On schedule
Deliver Draft A RI Report for Regulator Review	9/19/2007	--	On schedule
200-TW-1 (includes 200-TW-2)			

200 Area Unit Managers' Meeting
200 Area Remedial Action Float Table
March 2003

Task	Scheduled Date	Float	Comments
EPA/Ecology approve RI Report	7/10/2003	-247-d	Path forward on modeling presented to regulators and USGS on 05/03/04. Approach accepted and implementation underway. **Preliminary modeling results scheduled for 05/21/04 delivery to regulators**
Deliver Draft A FS/PP for Regulator Review	3/31/2004	--	Delivered on 03/31/04. Comments expected mid-May
200-UR-1			
Deliver draft A RI/FS work plan for regulator review	6/30/2004	--	On schedule
Deliver Waste Control Plan for regulator review	3/1/2006	--	On schedule
Start field sampling	4/26/2006	--	On schedule
Deliver Draft A RI Report for Regulator Review	5/14/2007	--	On schedule
U Plant Waste Sites			
Ecology approve confirmatory sampling SAP	12/1/2003	-110-d	Remedial decisions were not reached with Ecology and EPA as planned. General consensus has just been developed and the SAP is being finalized.
Start U Plant Confirmatory and Design Sampling	1/5/2004	--	Deferred until FY05 due to budget constraints
Deliver Draft A RD/RA work plan for regulator review (surface barrier RD/RA)	1/18/2005	--	On schedule
Deliver Draft A RD/RA work plan for regulator review (excavation RD/RA)	1/18/2005	--	On schedule
200-IS-1/200-ST-1			
Deliver Rev. 1 RI/FS work plan	10/29/2004		On schedule with current understanding of work scope. If scope of work expands, then schedule will require reevaluation.
Deliver Waste Control Plan for regulator review	1/24/2005	--	On schedule
200-PW-1/200-PW-3/200-PW-6			
Deliver Rev. 0 RI/FS work plan	3/31/2004	--	**Delivered to RL on 3/8**
Deliver PW-3 Waste Control Plan for regulator review	3/29/2004	--	**Delivered 04/14/04**
Deliver revised PW-1 Waste Control Plan for regulator review	3/29/2004	--	**Delivered 04/14/04**
200-MW-1			
Deliver Waste Control Plan for regulator review	3/26/2003	--	**Delivered 03/23/04**
Deliver Draft A RI Report for Regulator Review	12/31/2005	--	On schedule
200-CW-5/200-CW-2/200-CW-4/200-SC-1			

200 Area Unit Managers' Meeting
200 Area Remedial Action Float Table
March 2003

Task	Scheduled Date	Float	Comments
Deliver Rev. 1 RI/FS work plan	M-013-22 met on schedule; Rev. 0 work plan approved 9/28/2002. Consolidation TPA change package approved 6/5/2002. Rev. 1 originally scheduled to be delivered 5/6/2003	-347-d	**Delivered 03/22/04**
Deliver Rev. 0 RI Report	9/1/2003 (original date based on receipt of regulator comments on 7/15/2003 with 45 days for revision)	-259-d	Inconsistencies between the work plan and the RI report were identified last month. RESRAD runs are underway to resolve the issue. New delivery date 06/18/04
Deliver Draft A FS/PP for Regulator Review	10/31/2004	--	On schedule

200 Area UMM – May 2004

200-UP-1:

- Average Pumping Rate (counting all outage time as 0 gpm) for CY04 through May 9: 48.6 gpm.
- Most recent groundwater sampling of extraction well 299-W19-43 is now below the RAOs (Uranium 480 ppb, Tc-99 9,000 pCi/L).
- From April 5 through May 9, the system operated between 53.2 and 53.9 gpm.
- System was shutdown for a total of 17.5 hours between April 6 and 7, and 7 hours on April 28 for an ERDF leachate transfer.
- System Run Time
    - For Month of April through May 9 97.1%
    - FY2004 (Year to date) 87.7%
    - System Inception to date 92.6%

- RI/FS Work Plan Draft B – Ecology requested review extension to June 6
- Important Milestones: Delivered DP 2-17-05 ACT 4/17/05
    - July 12, 2005 – ~~G2U40195~~, DOE-RL submits Draft A RI Report to Regulators
    - April 5, 2007 – ~~G2U54160~~, Issue Draft A FS Report to Regulators
- Drilling of new monitoring well "P", "K", and "R" is currently on hold until a safety issue with the subcontractor is addressed (broken sling). Missing data to support the CERCLA RI/FS process will be collected from these wells.
- Distribute revised Table A-3, DOE/RL-2000-51, Rev. 5, Interim Action Waste Management Plan for the 200-UP-1 Operable Unit – Added well 299-W19-47 as requested.
- 1,4-Dioxane discussion (PNNL)

200-ZP-1:

- Average Pumping Rate for FY04 through May 2: 119 gpm
- For the month of April 5 through May 2, the system operated at between 85 and 176 gpm.
- Extraction well #1 was offline until replacement well 299-W15-45 was turned on April 26. Extraction well #4 was offline until replacement well 299-W15-47 was turned on April 28.
- Extraction well #2 (W15-34) was down until April 12 due to a failed pump.
- System was shutdown for approximately 2 hours on April 5 for a strainer replacement on air stripper.
- On May 15, a failed gasket in new Extraction Well #4 (W15-47) resulted in the loss of approximately 61,000 gallons of water at the well head. The problem was identified at 7:45 AM on May 17, 2004, and the system was immediately shut off. The total estimated quantity of chloroform, carbon

tetrachloride, and trichloroethylene lost to the ground using contaminant concentrations from the May 12, 2004 sampling of this well:

Chloroform: 4.4 grams
Carbon Tetrachloride: 625.4 grams
Trichloroethylene: 1.7 grams

- System Run Time
  - For Month of April through May 2 99.7%
  - FY2004 (Year to date) 94.5%
  - System Inception to date 92.2%

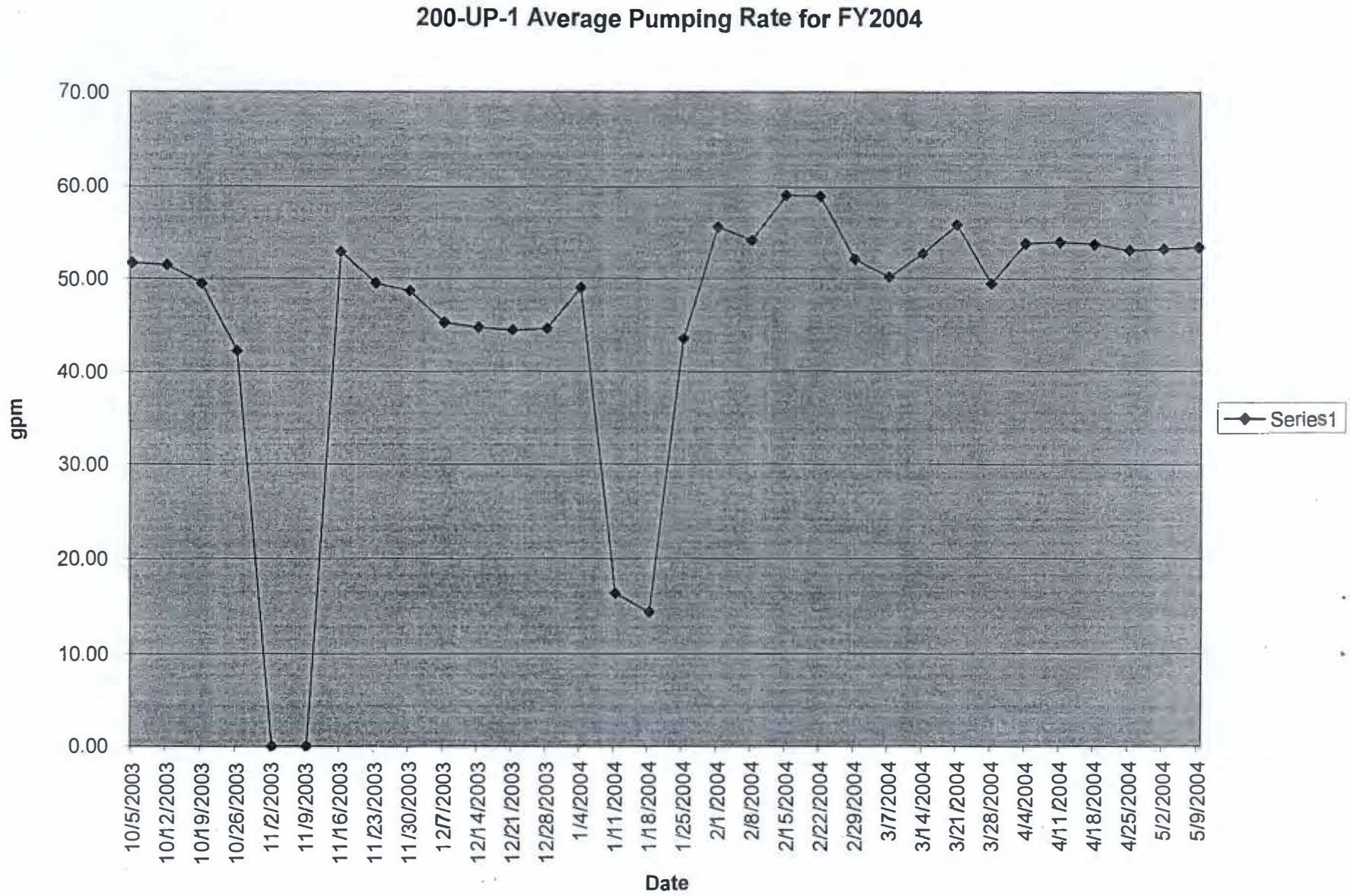
- RI/FS Work Plan Status – EPA and RL comments have been addressed, document in editing.

200-PW-1 (200-ZP-2):

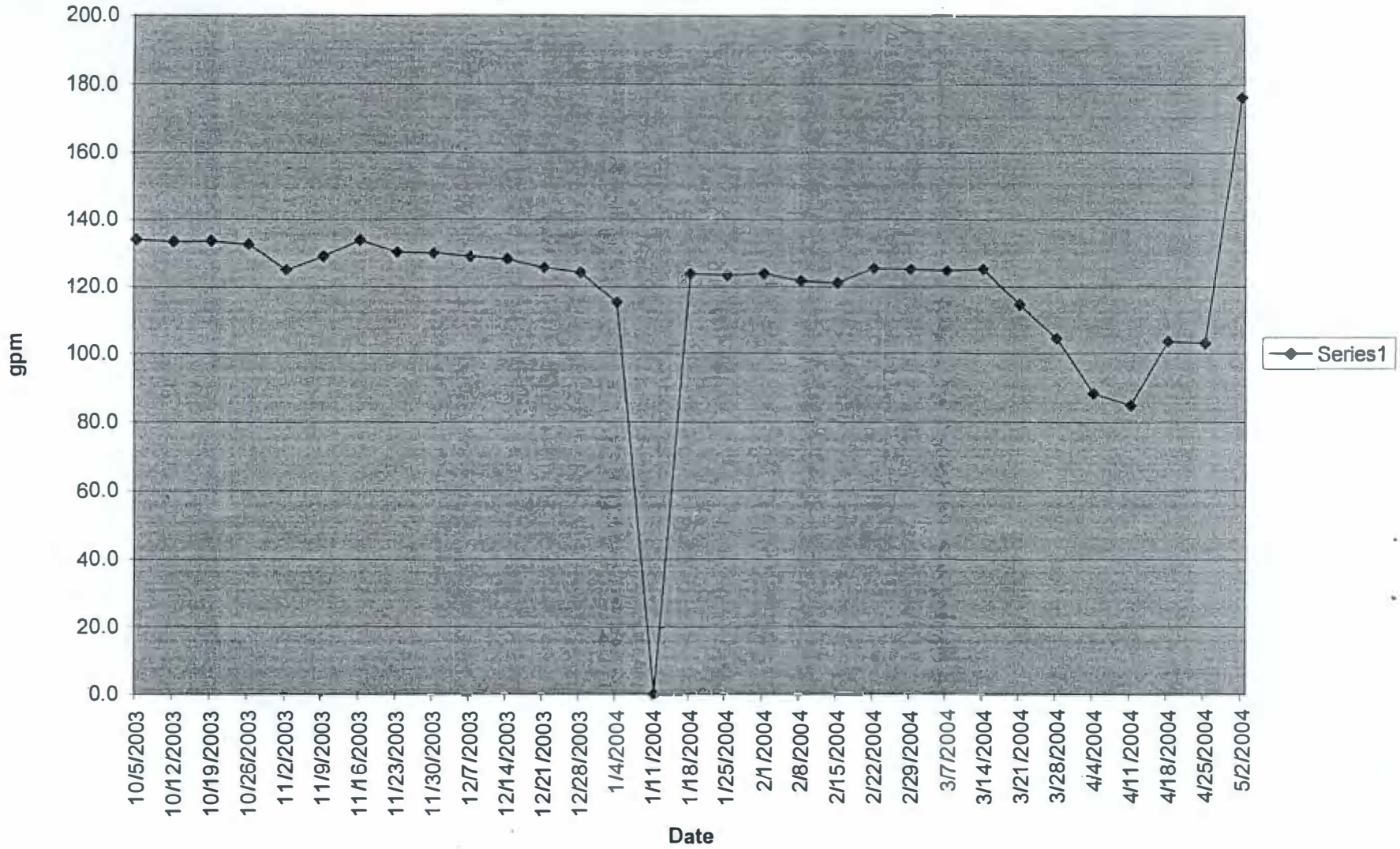
- Average Air Flow Rate for FY04 through April 11: 374 CFM
- Through April 11, the system operated at between 339 and 409 CFM.
- System was shutdown on April 20 for a GAC change-out, then was shutdown shortly afterwards due to a safety tripping hazard which is still not completely resolved.
- Data on system performance from April 12 through April 20 will not be available until system is turned back on.

- System Run Time
  - Through April 11 62.0%
  - FY2004 (Year to date) 62.0%
  - System Inception to date 95.3%

- The passive system remains operational.


200-UP-1 Average Pumping Rate for FY2004
gpm
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
10/5/2003
10/12/2003
10/19/2003
10/26/2003
11/2/2003
11/9/2003
11/16/2003
11/23/2003
11/30/2003
12/7/2003
12/14/2003
12/21/2003
12/28/2003
1/4/2004
1/11/2004
1/18/2004
1/25/2004
2/1/2004
2/8/2004
2/15/2004
2/22/2004
2/29/2004
3/7/2004
3/14/2004
3/21/2004
3/28/2004
4/4/2004
4/11/2004
4/18/2004
4/25/2004
5/2/2004
5/9/2004
Date
Series1

200-ZP-1 Average Pumping Rate for FY2004



Attachment 7

Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites FY 1998 - FY 2004

200-PW-1 (200-ZP-2) Location (Well or Probe) /feet bgs	Site	July 1998 - September 1999 Maximum Rebound Carbon Tetrachloride (ppmv)	months* of rebound	July 1999 - June 2001 Maximum Rebound Carbon Tetrachloride (ppmv)	months* of rebound	July 2001 - June 2002 Maximum Rebound Carbon Tetrachloride (ppmv)	months* of rebound	July 2002 - September 2003 Maximum Rebound Carbon Tetrachloride (ppmv)	months* of rebound	July 2002 (Z-9) or October 2003 (Z-1A) - March 2004 Maximum Rebound Carbon Tetrachloride (ppmv)	months* of rebound	July 2002 (Z-9) or April 2004 (Z-1A) - April 2004 Maximum Rebound Carbon Tetrachloride (ppmv)	months of rebound
79-03/ 5 ft	Z-18	0	12										
79-06/ 5 ft	Z-1A	1.4	12										
79-11/ 5 ft	Z-1A	2.9	12										
86-05/ 5 ft	Z-9	0	3										
86-05-01/ 5 ft	Z-9	0	3										
86-06/ 5 ft	Z-9	1.9	6										
87-05/ 5 ft	Z-1A	1.0	12										
87-09/ 5 ft	Z-1A	2.6	12										
94-02/ 5 ft	Z-9	1.4	3										
95-11/ 5 ft	Z-9	2.5	6										
95-12/ 5 ft	Z-9	1.3	6										
95-14/ 5 ft	Z-9	0	3										
CPT-13A/ 9 ft	Z-1A	1.0	12										
CPT-16/ 10 ft	Z-9	1.5	6										
CPT-17/ 10 ft	Z-9	5.1	6	6.6	24	3.2	6	6.6	15	9.0	21	90	22
CPT-16/ 15 ft	Z-9	5.0	6	5.2	24	1.4	6	2.4	15	2.4	21	2.4	22
CPT-4A/ 25 ft	Z-1A	not measured		3.5	0	3.4	10						
CPT-4E/25 ft	Z-1A	not measured		not measured		2.6	12	1.3	0			1.7	0
CPT-16/25 ft	Z-9	not measured		1.8	24	1.1	8	2	15	2.6	21	2.6	22
CPT-31/25 ft	Z-1A	0	12										
CPT-32/ 25 ft	Z-1A	10	12	16.5	18	13.0	12	8.3	6	6	6		
CPT-30/ 28 ft	Z-18	3.2	12	1.4	18	0	12	0	6	0	6		
CPT-13A/ 30 ft	Z-1A	not measured		3.6	18	2.6	12	1.6	6	2	6	1.4	0
CPT-7A/ 32 ft	Z-1A	5.4	12	6.2	18	5.6	12	3.9	6	9.5	6	1.7	0
CPT-27/ 33 ft	Z-9	not measured		2.6	24	1.5	6	1.7	15	2.7	21	2.7	22
CPT-1A/ 35 ft	Z-12	3.0	12	7.7	16	11.3	12	22.0	15	18.3	6	4.2	0
CPT-28/40 ft	Z-9					56.5	6						
CPT-33/ 40 ft	Z-1A	2.6	12			2.3	12						
CPT-34/ 40 ft	Z-18	1.7	12	1.9	0	2.2	12	1.6	0			1.4	0
CPT-21A/ 45 ft	Z-9	57	3	127	24	133	6	90.0	15	150	21	150	22
W15-220ST/ 52 ft	Z-9	1.6	3	2.5	24			1.5	1				
CPT-28/ 60 ft	Z-9	3.7	3										
CPT-9A/ 60 ft	Z-9	44	3	68	24	45.3	6	35.9	15	35.9	21	35.9	22
CPT-16/ 65 ft	Z-9	not measured		not measured		not measured		4.2	15			3.1	22
CPT-1A/ 68 ft	Z-12	not measured		not measured		5.5	12						
CPT-30/ 68 ft	Z-18	3.0	12										
CPT-32/ 70 ft	Z-1A					7.7	12						
CPT-13A/ 70 ft	Z-1A	5.6	12										
CPT-24/70 ft	Z-9	3.6	3					4.7	15			4.4	22
W15-219SST/ 70 ft	Z-9	7.6	3	7.8	24			1.9	1			9.5	22
CPT-18/ 75 ft	Z-9	not measured		18	24			4.5	15			8.0	22
CPT-4A/ 75 ft	Z-1A	not measured		not measured		7.1	3						
CPT-31/ 76 ft	Z-1A	4.2	12										
CPT-33/ 80 ft	Z-1A	9.2	12										
W15-82/ 83 ft	Z-9	46	6	55	24	66.7	6	85.8	15	85.8	21	85.8	22
CPT-21A/ 86 ft	Z-9	148	6	195	24	186	6	206	15	244	21	244	22
CPT-34/ 86 ft	Z-18	0	12										
W15-95U/ 86 ft	Z-9	39	6	43	21								
W15-218SST/ 86 ft	Z-9	0	3					1.6	2				
CPT-28/ 87 ft	Z-9	203	6	224	24	229	6	235	15	258	21	258	22
CPT-4B/ 90 ft	Z-1A					3.2	10						
CPT-1A/ 91 ft	Z-18	4.2	12			10.7	10						
CPT-4A/ 91 ft	Z-1A	14	12			7.5	2						
CPT-9A/ 91 ft	Z-9	72	3			74.3	6						
W15-85/ 91 ft	Z-9	not measured		51	24								
W18-252SST/ 100	Z-1A	24	12										
W18-152/ 101 ft	Z-12	33	12	25	18	25.7	12	20.7	6	12.4	6		
CPT-4E/ 103 ft	Z-1A	not measured		not measured		16.1	12						
W18-167/ 106 ft	Z-1A	228	12	248	18	297	12	243	6	266	6		
W18-165/ 109 ft	Z-1A	not measured		not measured		278	12	328	6	205	6		
W15-217/ 114 ft	Z-9	561	6	442	24	93.6	6	444	15	458	21	458	22
CPT-24/ 118 ft	Z-9	37	6	35	24			27.8	15			5.3	22
W15-220SST/ 118	Z-9	36	3	34	24			27.5	3			26.0	22
W18-158U/ 120 ft	Z-1A	492	12	284	18	163	3						
W15-219SST/ 130	Z-9	47	3	54	24			23.1	1			5.7	22
W18-249/ 130 ft	Z-18	215	12	176	18	196	12	48.3	6	41.0	6		
W18-248/ 131 ft	Z-1A	177	12	214	18	306	12	182	6	180	6		
W15-95U/ 144 ft	Z-9	not measured		not measured		31.8	6	25.1	15	40.3	21	40.3	22
W15-219SST/ 155	Z-9	24	3	44	24			6.8	1			0	22
W15-220U/ 163 ft	Z-9							-----	15			8	22
W15-219U/ 175 ft	Z-9							-----	15			23	22
W15-9U/ 176 ft	Z-9	15	6	20	21	16.9	6	13.1	15	13.1	21	13.1	22
W15-84U/ 180 ft	Z-9	not measured		not measured		not measured		25.9	15	25.9	21	25.9	22
W15-6U/ 182 ft	Z-9	1.3	6										
W15-220SST/ 185	Z-9	13	3	15	24			-----	1				
W18-7/ 197 ft	Z-1A	29	12										
W18-12/ 198 ft	Z-18	19	12										
W18-6U/ 206 ft	Z-1A	15	12										

* - based on locations (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 CCl4 concentrations and airflow modeling based on measured vacuums (BHI-01105, p. 6-1)

Carbon Tetrachloride Found Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites July 2002 (Z-9) or April 2004 (Z-1A) - April 2004

200-PW-1 (200-ZP-2) Location (Well or Probe) /feet bgs	Site	05/01/2003 CCl4 (ppmv)	05/22/2003 CCl4 (ppmv)	07/01/2003 CCl4 (ppmv)	08/05/2003 CCl4 (ppmv)	08/26/2003 CCl4 (ppmv)	10/31/2003 CCl4 (ppmv)	12/04/2003 CCl4 (ppmv)	12/22/2003 CCl4 (ppmv)	01/20/2004 CCl4 (ppmv)	02/19/2004 CCl4 (ppmv)	03/16/2004 CCl4 (ppmv)	03/24/2004 CCl4 (ppmv)	04/29/2004 CCl4 (ppmv)	05/05/2004 CCl4 (ppmv)
CPT-17/ 10 ft	Z-9	5.3	6.6	4.5	6.1	5.3	3.2	4.1	2.7	5.8	5.0	--- (c)	9.0	7.0	
CPT-18/ 15 ft	Z-9	0	2.0	0	1.8	2.4	0	1.1	1.0	1.5	1.4	--- (c)	1.6	1.2	
CPT-4E/ 25 ft	Z-1A													1.7	
CPT-16/ 25 ft	Z-9	1.0	0	1.2	1.5	1.5	2.6	1.2	1.4	0	1.7	2.2		1.8	
CPT-32/ 25 ft	Z-1A						0	0	0	2.4	5.1	5.9			
CPT-30/ 28 ft	Z-1A						0	0	0	0	0	0			
CPT-13A/ 30 ft	Z-1A						0	0	0	0	0	1.8		1.4	
CPT-7A/ 32 ft	Z-1A						2.4	3.0	2.7	4.3	3.0	9.5		1.7	
CPT-27/ 33 ft	Z-9	1.0	1.7	1.1	1.0	1.6	1.1	0	1.1	1.5	2.0	2.7		2.5	
CPT-1A/ 35 ft	Z-12						18.3	9.5	13.1	10.8	6.0	9.0		4.2	
CPT-34/ 40 ft	Z-18													1.4	
CPT-21A/ 45 ft	Z-9	72.8	90.0	75.1	85.5	83.0	52.3	89.1	68.5	59.2	71.8	--- (c)	150	59.2	
CPT-9A/ 60 ft	Z-9	30.1	33.2	30.1	30.0	28.5	25.9	33.1	30.8	24.3	33.8	27.1		25.7	
CPT-16/ 65 ft	Z-9													3.1	
CPT-24/ 70 ft	Z-9													4.4	
W15-219SST/ 70 ft	Z-9													9.5	
CPT-18/ 75 ft	Z-9													8.0	
W15-82/ 83 ft	Z-9	50.0	56.2	49.2	44.3	54.4	24.0	34.4	43.1	47.5	45.9	50.5		83.1	
CPT-21A/ 86 ft	Z-9	199	206	153	187	197	91.8	183	171	244	98.1	--- (c)	212	73.3	
CPT-28/ 87 ft	Z-9	178	235	150	197	190	155	206	140	56.7	96.1	--- (c)	258	26.8	
W18-152/ 101 ft	Z-12						5.7	10.5	11.3	10.5	12.4	12.1			
W18-167/ 106 ft	Z-1A						201	223	201	266	201	--- (b)			
W18-165/ 109 ft	Z-1A						94.2	205	193	188	186	94.8			
W15-217/ 114 ft	Z-9	74.3	409	89.7	335	444	53.8	80.4	66.4	82.5	62.0	--- (c)	458	256	
CPT-24/ 118 ft	Z-9													5.3	
W15-220SST/ 118 ft	Z-9														26.0
W18-249/ 130 ft	Z-18						8.0	31.1	21.4	19.6	22.1	41.0			
W15-219SST/ 130 ft	Z-9													5.7	
W18-248/ 131 ft	Z-1A						78.6	80.4	85.6	90.9	166	180			
W15-95L/ 144 ft	Z-9	17.2	18.8	25.1	13.7	10.9	19.2	20.3	— (a)	— (a)	40.3	23.0		35.0	
W15-219SST/ 155 ft	Z-9													0	
W15-220L/ 163 ft	Z-9													7.5	
W15-219L/ 175 ft	Z-9													--- (d)	23.0
W15-9L/ 176 ft	Z-9	8.2	11.6	10.3	13.1	12.5	6.1	5.8	— (a)	— (a)	9.1	9.6		8.8	
W15-84L/ 180 ft	Z-9	8.3	25.9	17.9	21.0	23.8	4.7	4.9	4.9	10.7	18.5	--- (c)	19.5	15.6	

(a) Unable to access because of drilling operations

(b) Unable to sample; tubing will be repaired.

(c) anomalously low due to pump problems; resampled on 3/24/04

(d) unable to install sample tubing; sampled W15-219SST/70 ft, W15-219SST/130 ft, and W15-219SST/155 ft instead

Fluor Hanford

FLUOR

Memorandum

To:	Distribution	Date:	May 18, 2004
Location:		Reference:	
Telephone:		Client:	
From:	M. E. Byrnes MEB	Subject:	Interim Action Waste Management Plan for the 200-UP-1 Operable Unit, DOE/RL-2000-51, Revision 5
Location:	E6-35		
cc:			

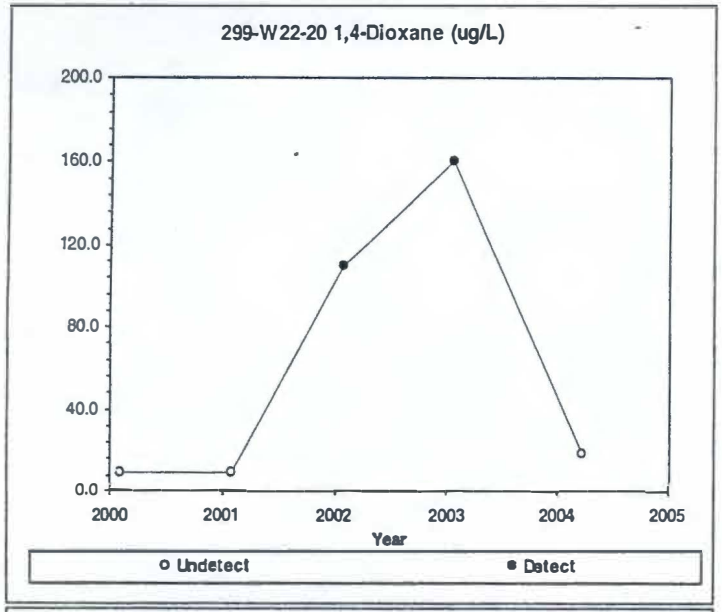
Attached are replacement pages for the above document that adds well C4528/299-W19-47 to Table A-3 "List of Supplemental Wells Supporting CERCLA Monitoring." Please insert them into your document to ensure that it remains current.

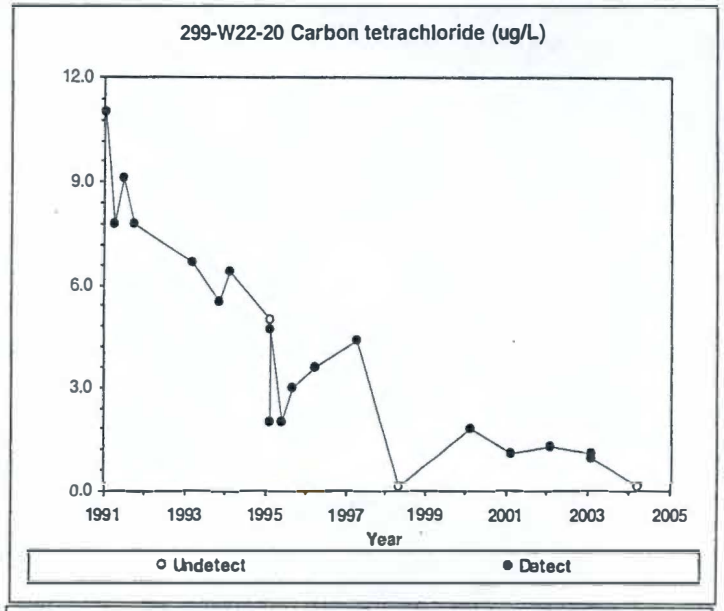
Well Numbers	Comments
299-W14-6	SST(TX/TY) tank farm assessment
299-W15-15	LLBG(4) detection monitoring
299-W15-16	LLBG(4) detection monitoring
299-W15-17	LLBG(4) detection monitoring
299-W15-40	SST(TX/TY) tank farm assessment
299-W15-41	SST(TX/TY) tank farm assessment
299-W15-763	SST(TX/TY) tank farm assessment
299-W15-765	SST(TX/TY) tank farm assessment
299-W18-21	LLBG(4) detection monitoring
299-W18-22	LLBG(4) detection monitoring
299-W18-23	LLBG(4) detection monitoring
299-W18-24	LLBG(4) detection monitoring
299-W18-30	SST(U) tank farm assessment
299-W18-31	SST(U) tank farm assessment
299-W18-40	SST(U) tank farm assessment
299-W19-12	SST(U) tank farm assessment
299-W19-41	SST(U) tank farm assessment
299-W19-42	SST(U) tank farm assessment
299-W19-44	SST(U) tank farm assessment
299-W19-45	SST(U) tank farm assessment
299-W19-47	SST(U) tank farm assessment
299-W22-10	SST(S) tank farm assessment
299-W22-2	SST(S) tank farm assessment
299-W22-44	SST(S) tank farm assessment
299-W22-45	SST(S) tank farm assessment
299-W22-46	SST(S) tank farm assessment
299-W22-48	SST(SX) tank farm assessment
299-W22-49	SST(SX) tank farm assessment
299-W22-50	SST(SX) tank farm assessment
299-W22-79	U-12 crib assessment
299-W22-80	SST(SX) tank farm assessment
299-W22-81	SST(SX) tank farm assessment
299-W22-82	SST(SX) tank farm assessment

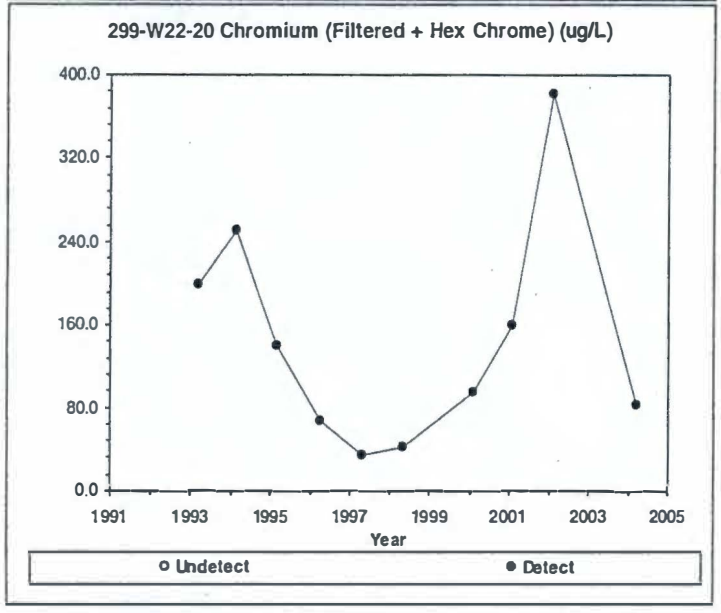
Well Numbers	Comments
299-W22-83	SST(SX) tank farm assessment
299-W22-84	SST(S) tank farm assessment
299-W22-85	SST(SX) tank farm assessment
299-W23-15	SST(S) tank farm assessment
299-W23-19	SST(S) tank farm assessment
299-W23-19	SST(SX) tank farm assessment
299-W23-20	SST(SX) tank farm assessment
299-W23-21	SST(SX) tank farm assessment
299-W23-4	SST(SX) tank farm assessment
299-W26-12	S-10 detection monitoring
299-W26-13	S-10 detection monitoring
299-W26-7	S-10 detection monitoring
299-W27-2	S-10 detection monitoring
299-W7-1	LLBG(3) detection monitoring
299-W7-11	LLBG(3) detection monitoring
299-W7-12	LLBG(3) detection monitoring
299-W7-3	LLBG(3) detection monitoring
299-W7-4	LLBG(3) detection monitoring
299-W7-5	LLBG(3) detection monitoring
299-W7-7	LLBG(3) detection monitoring
299-W7-8	LLBG(3) detection monitoring
299-W7-9	LLBG(3) detection monitoring
299-W8-1	LLBG(3) detection monitoring
Deep Monitoring Wells	
299-W6-3	Monitors near bottom of aquifer
299-W6-6	Monitors near bottom of aquifer
299-W7-3	Monitors near bottom of aquifer
299-W10-14	Monitors near bottom of aquifer
299-W11-32	PNNL-10422, piezos, 15 m (50 ft) (mid-depth) below water table
299-W14-9	Screened in lower unit 5, 6, and all of 9 across mud unit
299-W15-17	Monitors near bottom of aquifer
299-W18-1	large open interval 0 to 60 m (0 to 200 ft) to below water table, needs recompletion

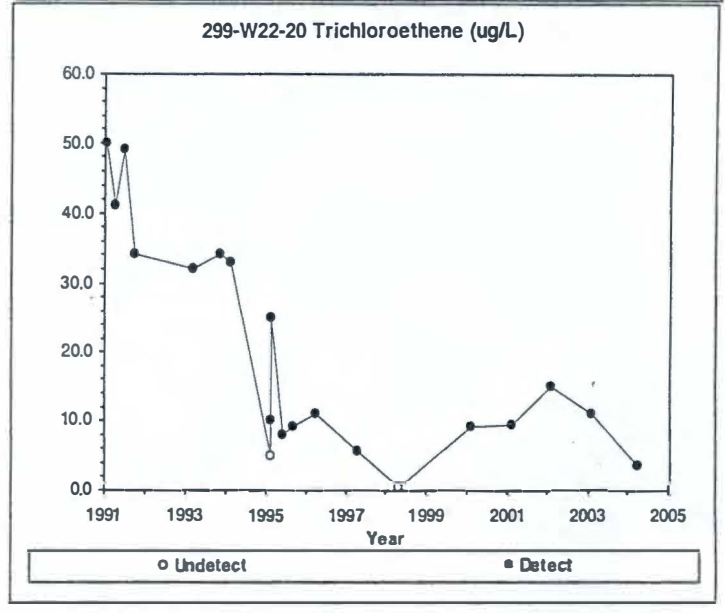
Well Numbers	Comments
299-W18-22	Monitors at bottom of aquifer
299-W19-4	Open across mud unit 5-9, needs recompletion, large open interval 0 to 78.8 m (0 to 260 ft) below water table
299-W27-2	Monitors at bottom of aquifer
699-48-77C	Monitors mid-depth in aquifer
699-48-77D	Monitors near the State Approved Land Disposal Site

Sampling results for 299-W22-20 samp on 3/17/2004 with a Kabis sampler









Attachment 9