Final

Meeting Minutes Transmittal/Approval
Unit Manager's Meeting: 200 Aggregate Area/200 Area Operable Units
2440 Stevens Center, Room 1200 Richland, Washington
August 24, 1994

FROM/APPROVAL: Donna Wanek Date 9/28/94
Donna Wanek, 200 Aggregate Area Unit Manager, RL (A5-19)

APPROVAL: Paul R Beaver Date 11/17/94
Paul R. Beaver, 200 Aggregate Area Unit Manager, EPA (B5-01)

APPROVAL: Dib Goswami Date 9/28/94
Dib Goswami, 200 Aggregate Area Unit Manager, WA Dept of Ecology

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

Attachment #1	-	Meeting Summary
Attachment #2	-	Attendance Sheet
Attachment #3	-	Agenda
Attachment #4	-	Action Item Status List
Attachment #5	-	200-BP-5 Operable Unit Status
Attachment #6	-	200-BP-5 Sonic Push Sites
Attachment #7	-	Project Status of the 200 West Area Carbon Tetrachloride ERA
Attachment #8	-	Status of 200-ZP-1 Operable Unit
Attachment #9	-	Memorandum "Maps Identifying RCRA, CERCLA, and PNL Operations"

Prepared by: Kay Kimmel Date: 9-28-94
Kay Kimmel, Jim Consort, GSSC (B1-42)

Concurrence by: Joseph Zoghbi Date: 9-28-94
Joseph Zoghbi, BHI Project Manager - 200 Areas, (H4-79)

Attachment #1
Unit Manager's Meeting: 200 Aggregate Area/200 Area Operable Units
August 24, 1994

Meeting and Summary of Commitments and Agreements

1. **SIGNING OF THE JUNE AND JULY 200 AREA UNIT MANAGER'S MEETING MINUTES:** Meeting minutes were reviewed and approved with no changes.

2. **ACTION ITEM UPDATE. See Attachment 4 for status:**

   2AAMS.13 Open. Pending formal transmittal of the groundwater model study.
   2AAMS.14 CLOSED 08/24/94.
   2AAMS.16 Open.
   2UP1.2 Open. Still in process.
   2BP5.1 Open.

3. **NEW ACTION ITEMS (INITIATED August 24, 1994):**
   No new action items were initiated.

4. **INFORMATION ITEMS:**

   - Status 200-BP-5 Operable Unit - Raymond Boyd provided an update on activities in the 200-BP-5 Operable Unit (see Attachment #5). He noted that comments had been received on the Treatability Test Plan. Joe Zoghbi provided the status of field activities. He indicated a presentation on the three pump and treat systems was arranged for Friday August 26, 1994, with a field walkdown of the systems between 11:00 a.m. and 2:00 p.m. Greg Kasza provided details on the hydrogeologic investigations (see Attachment #6). He noted that the anticipated pumping rates are being met. He also provided an update on the cone penetrometer activities, noting that the three failed sites would be redrilled with a heavier pushing tool. Raymond Boyd continued the presentation by discussing the ion exchange bench-scale testing currently underway. He indicated that the results from these tests would be provided in the Treatability Test Plan Report. A meeting was scheduled for August 31, 1994 at 10:00 a.m. to discuss geophysics, plume maps and plans for fiscal year 1995.

   - Status 200-UP-1 Operable Unit - Brian Innis presented the status of activities at the 200-UP-1 Operable Unit. Dib Goswami requested data on the cluster wells with plume maps be provided to him by the August 31 meeting noted under the 200-BP-5 Operable Unit status. Brian Innis indicated that drilling activities had reached 527 feet and that the formation was too hard to take a sample. He noted that currently the pump and treat denitrification treatability test is running around the clock. He indicated the volume produced in 24 hours is completely treated in eight hours. He further noted that breakthrough is anticipated by the end of September.

   - Status 200-ZP-2 Operable Unit, ERA Activity - Sean Driggers provided an update on activities concerning the carbon tetrachloride plume (see Attachment #7). He noted that he is available to meet with RL and the regulators next week before completing the Proposed Plan.

- Status of 200-ZP-1 - Dan Parker provided the status of the 200-ZP-1 Operable Unit (see Attachment #8). He noted that the readiness review would be completed by Friday so that start-up activities could commence on Friday, August 26, or the following Monday. Paul Pak indicated that he is continuing work on a letter report concerning ARARs that the regulators had requested at an earlier date. Dave Einan requested clarification on the schedule for activities in the 200-ZP-1 Operable Unit. Joe Zoghbi noted that a schedule had been setup at an earlier meeting with the regulators. This schedule indicated the Proposed Plan would be issued in calendar year 1995, however, the schedule was not available to review at this meeting.

- Transmittal Memorandum - Donna Wanek provided to the regulators copies of Hanford Site maps, documented with a cover letter (see Attachment #9). This transmittal closes Action Item 2AAMS.14, as well as provides additional information on already closed Action Item 2AAMS.18.

- Next Meetings - The next meetings are scheduled for September 28, 1994.

200 Aggregate Area Unit Manager's Meeting
Official Attendance Record
August 24, 1994

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Paul Beaver	EPA	Unit Mgr	376-8665
Donna Wanek	RL	UMM	376-5778
GEORGE C. ITENIZER III	BHI	200 AREA Assistant Proj Mgr	375-9696
Diana Sickle	BHI	Support	375-9422
D. Goswami	Ecology	UMM	736-3015
N. Hepner	Ecology	ERDF UM	736-3048
Ted Wooley	Ecology	200 AREA	736-3012
JENNIFER YOUNG	RL	200-UP-2 200-ZP-2 UM.	376-7044
JOSEPH ZOGHBI	BHI	P.M. 200 Area	376-9696
MICHAEL D. BAKER	ITH	ASSIS. TASK LEAD BP-5	373-6862
Brian Innis	ITH	200UP1 FTL Presenter of status	372-3620
RAYMOND BOYD	IT - SAN BERNARDINO	TECHNICAL SUPPORT	(909) 799-6869
GREG KASZA	ITH	200 BP-5	376-0763
Dave Einan	EPA	UP-1, UP-2 Unit Mgr	376-3883
Sandi Wheeler	PRC	EPA contractor	(206)624-2692
Stephanie Johansen	Dames+Moore	G-SSC support of RL	946-3693
Amoret Bunn	Dames+Moore	" "	946-3695
Paul Pak	RL	UM	376-4798
Gary Friedman	Ecology	OUM	736-3026
David Holland	Ecology	UM	736-3027
KAY KIMMEL	MACTEC/D&M	RL SUPPORT	946-3692
DAN PARKER	ITH	TASK LEAD ZP-1	372-1031
Suzanne Clarke	PAI	Support to RL	373-6165
Brian Drost	USGS	EPA Support	206-593-6510
Sean Driggers	ITH	Task Lead ZP-2	372-3493

Attachment #3
Unit Manager's Meeting: 200 Aggregate Area/200 Area Operable Units
August 24, 1994

Agenda

200 Area Activities

200-BP-5 - Raymond Boyd
* General Status
* Status of treatability test plan, and schedule - Greg Kasza

200-UP-1 - Brian Innis
* General Status
* Characterization
* Treatability Studies

ERA Status - Sean Driggers
* Status
* Carbon Tetrachloride

200-ZP-1 - Dan Parker
* Status

Attachment #4

Action Item Status List
Unit Manager's Meeting: 200 Aggregate Area/200 Area Operable Units
August 24, 1994

ITEM NO.	ACTION	STATUS	
2AAMS.13	Transmit the 200-UP-1 and 200-ZP-1 Treatability Test Plans and Mike Connelly's groundwater modeling studies for pump and treat to the regulators. Action: Paul Pak.	Open 03/31/94.	
2AAMS.14	Provide to the regulators a map identifying RCRA wells and CERCLA wells for the 200 East and 200 West areas. Action: Paul Pak.	Closed 08/24/94.	
2AAMS.16	Provide a schedule describing activities that are required prior to initiating pilot scale studies in the 200-BP-5 Operable Unit by August 1994. Action: Dave Erb.	Open 03/31/94.	Activities are ongoing.
2UP1.2	Develop a treatability test plan for denitrification of 200-UP-1 groundwater at laboratory and bench scales, based on the 100 Area Treatability Test Plan for Nitrate. Action: Paul Pak.	Open 05/26/94.	
2BP5.1	Revise the existing Description of Work to include the use of the cone penetrometer prior to installation of new wells to better locate extraction and recovery wells. Action: David Erb.	Open 05/26/94.	

200-BP-5 UNIT MANAGERS MEETING
AUGUST 24, 1994
HANFORD TRAINING CENTER, MT. ADAMS ROOM

CURRENT STATUS

TREATABILTY TEST PLAN

COMMENTS RECIEVED

FIELD STATUS

REVERSE WELL

BY-CRIB

READNESS REVIEW

REVERSE WELL-AUGUST 26, 1994

BY-CRIB-AUGUST 26, 1994

HYDROGEOLOGICAL INVESTIGATION

THREE WELLS INSTALLED TO GROUNDWATER

INJECTION TEST AT 299E-28-1

INJECTION TEST AT 699-49-55A

PRELIMINARY ENGINEERING ASSESSMENT

OF TREATMENT ALTERNATIVES

CHEMICAL PRECIPITATION

ION EXCHANGE WITH DISPOSAL OF SPENT RESIN

ION EXCHANGE WITH REGENERATION OF SPENT RESIN

MEMBRANE PROCESSES

BONE CHAR AND CLINOPTILOLITE

EVAPORATIVE CONCENTRATION

PEATA

TREATMENT FACILITY DESIGN BASIS

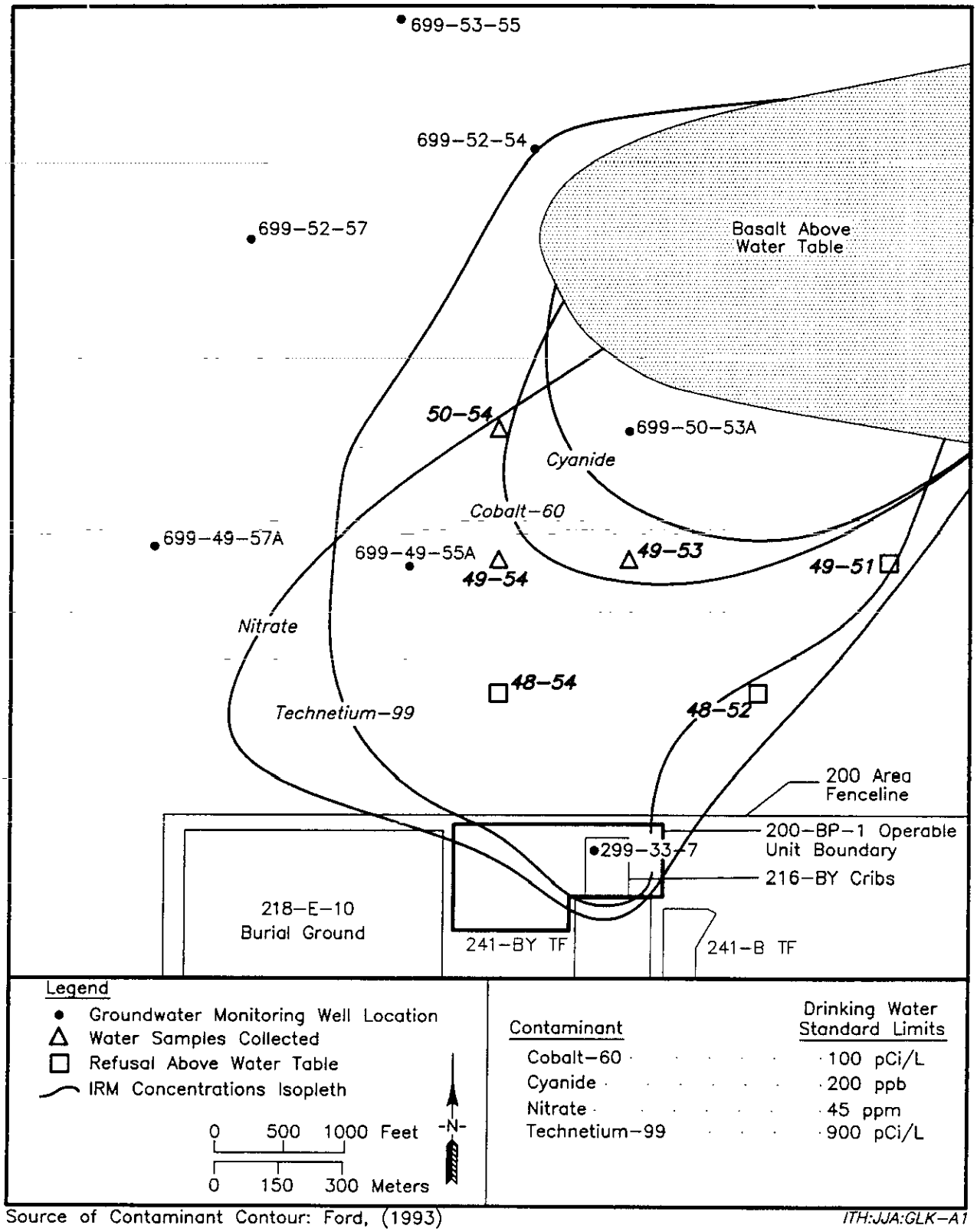
24 HOURS PER DAY, 350 DAYS PER YEAR

10 YEAR OPERATING LIFE

300 GPM FLOW

90 PERCENT CONTAMINANT REMOVAL

RESIDUALS ARE SOLIDS SUITABLE FOR DISPOSAL ON SITE



Source of Contaminant Contour: Ford, (1993)

ITH:JJA:GLK-A1

Figure 2. Sonic Push Sites

TABLE 2.

MEASUREMENT RESULTS FROM SONIC PUSH

HOLE NUMBER	DEPTH TO WATER	DEPTH TO BASALT	AQUIFER THICKNESS
49-54	125.8 ft BGS	133 ft BGS	7.2 ft
50-54	155.1 ft BGS	162 ft BGS	6.9 ft
49-53	129.2 ft BGS	135.6 ft BGS	6.4 ft

BGS -- Below Ground Surface

TABLE 3.

RESULTS OF GROUNDWATER SAMPLING

HOLE NUMBER	Cobalt-60 Pci/L	Technetium-99 Pci/L	Cyanide µG/L	Nitrate ppm
49-54	20.1	480	39.4	note (a)
50-54	19.2	1380	44.8	note (a)
49-53	9.7	205	16.4	66

note (a) = Hach Kit nitrate results inconclusive due to excessive turbidity in sample

Table 1. Summary of 200-BP-5 Well Useability Test Results

Well	Saturated Thickness (feet)	Test Date	Test Length (minutes)	Pump Rate (gpm)	Total Volume (gallons)	Max Drawdown (feet)	SWL(3) (feet)	DTB(3) (feet)
699-50-53A	22.1(1)	07/12/94	430	5	2150	16.60	155.9	178.0
699-49-55A	12.2	05/12/94	180	1.5	270	>6.75(2)	129.4	141.6
699-49-57A	11.3	05/10/94	106	24	2544	1.94	152.3	163.6
299-E28-1	41.3	05/18/94	480	19.8	9504	0.08	283.4	324.7
299-E28-2	40.5	05/24/94	480	20	9600	0.04	279.1	319.6
299-E28-23	44.8	07/18/94	170	18.5	3145	0.06	284.6	329.3
299-E28-24	41.0	04/28/94	105	1.5	157.5	8.40	284.3	325.3
299-E28-25	46.6	07/20/94	140	20.2	2828	<0.05	284.3	330.9

(1) Includes deepened borehole into the basalt; estimate of 0.5 ft of groundwater in sediments.
(2) Water level drawn below the bottom of the transducer
* Reading from top of outer casing. SWL = Static Water Level; DTB = Depth to Bottom

Table 2. Estimated Long-Term Production of the 200-BP-5 Extraction Wells

Well	Test Length (minutes)	Max Drawdown (feet)	Pump Rate (gpm)	Available Drawdown (1) (feet)	Estimated Production (2) (gpm)
699-50-53A	430	16.60	4-5	17.1	3-4
699-49-57A	106	1.94	24	6.3	>30
299-E28-2	480	0.04	20	36	>100
299-E28-23	170	0.06	18.5	40	>100
299-E28-24	105	8.40	1.5	36	2-3
299-E28-25	140	<0.05	20.2	42	>100

(1) Available drawdown is the total saturated screen/perforated length minus 5 ft. The 5 feet is needed to accommodate the pump and measure equipment.

(2) Based on professional experience, which takes into account well configuration, total saturated thickness of aquifer, amount of screened interval, potential for well turbulence, drawdown trend during useability testing, previously observed aquifer responses, length of useability test, etc.

Table 3. Estimated Maximum Injection Rates of the 200-BP-5 Injection Wells

Well	Test Length (minutes)	Max Mounding (feet)	Injection Rates (gpm)	Volume Injected (gallons)	Estimated Max. Injection Rate* (gpm)
699-49-55A	210	7.4	5,10,15,20	2400	>50
299-E28-1	240	5.2	5,10,15,20	2995	>100

* Injection capacity is dependent on the elevation of the driving head, and also assumes that the quality of the well does not deteriorate thru time.

August 24, 1994 Unit Managers Meeting
Project Status of the 200 West Area Carbon Tetrachloride ERA

1. As of Thursday, August 18, the ERA has removed a total of 61,500 lbs (~30,000 kg) of CCl_4.

2. Finished characterizing wells at the Z-18 wellfield on July 26. Results indicate flows ranging from 33 to 476 scfm. CCl4 concentrations ranged from 12 to 618 ppm. Highest concentrations are associated with wells between the Z-18, Z-12 and Z-1A crib sites.

3. Started 24 hour-per-day, 7 day-per-week operation at the Z-18 site with the 500 cfm system on August 3.

4. Plan to start wellfield expansion work on selected existing wells using the shot perforation technique the first week of September.

4. Working on the Proposed Plan for the 200-ZP-2 Operable Unit. Working to the tentative schedule established at the August 10 meeting that discussed plans for the 200-ZP-1 and ZP-2 Proposed Plans.

5. Finalizing Wellfield Strategy (Optimization) Report this week.

STATUS OF THE 200-ZP-1 OPERABLE UNIT

AUGUST 24, 1994

- o General Status - D. Parker
  - Treatability Test
    - o System is ready
    - o Readiness Review Complete Friday
    - o Start Pump and Treat Friday or Monday

DON'T SAY IT --- *Write It!*

DATE: August 23, 1994

TO: Paul Beaver EPA
Dib Goswami WDOE

FROM: Donna Wanek A5-19
Telephone: 376-5778

cc: Diana Sickle (w/o att)

SUBJECT: MAPS IDENTIFYING RCRA, CERCLA, AND PNL OPERATIONS

The subject Hanford Site maps are attached to satisfy action items 2AAMS.14 and 2AAMS.18 of the CERCLA Unit Mangers Meeting Action Item Status List.

If you need any further information, please feel free to call me on 376-5778.

Distribution

Unit Manager's Meeting: 200 Aggregate Area/200 Area Operable Units
August 24, 1994

Donna Wanek . . . . . DOE-RL, PRD (A5-19)
Jennifer Young . . . . . DOE-RL, PRD (A5-19)
Mary Harmon . . . . . DOE-HQ (EM-442)
Richard Person . . . . . DOE-HQ (EM-442)

Paul Beaver . . . . . 200 Aggregate Area Manager, EPA (B5-01)
Brian Drost . . . . . USGS, Support to EPA
~~Jeffrey Ross~~ . . . . . PRC, Support to EPA
Jim Rankin
Dib Goswami . . . . . WDOE (Kennewick)
Larry Goldstein . . . . . WDOE (Lacey)

Lynn Albin . . . . . Washington Dept. of Health

Curt Wittreich . . . . . BHI (H6-02)
Joe Zoghbi (Please route to:) . . . . . BHI (H4-79)
M.J. Galgoul . . . . . BHI (H6-01)
Diana Sickle . . . . . BHI (H6-27)
Kay Kimmel . . . . . MAC (B1-42)
Alvina Goforth . . . . . BHI (H6-08)
R. Scott Hajner . . . . . BHI (H4-79)
Andrea Hopkins . . . . . BHI (H4-79)
Tom Page (Please route to:) . . . . . PNL (K1-31)

Cheryl Thornhill	PNL (K1-19)	Steve Slate	PNL (K1-19)
Mark Hanson	PNL (K1-51)	Bill Stillwell	PNL (K1-30)
Roy Gephart	PNL (K1-22)	Ben Johnson	PNL (K1-78)

Original Sent To: ADMINISTRATIVE RECORD: 200 AAMS Care of EDMC, WHC (H6-08)

Please inform Kay Kimmel (946-3692) GSSC - Mactec/Dames & Moore (B1-42) of deletions or additions to the distribution list. Last updated 09/23/94.