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181931

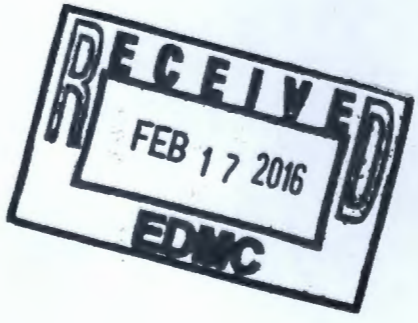
Please distribute to the following:

100/300 AREA UNIT MANAGER MEETING
ATTENDANCE AND DISTRIBUTION

NAME	E-MAIL ADDRESS	MSIN	COMP
Childers, Heather	Original +1 copy	H6-08	ADREC
Cline, Michael	Michael.Cline@rl.doe.gov	A5-11	DOE
French, Mark	Mark.French@rl.doe.gov	A6-38	DOE
Menard, Nina	NMEN461@ECY.WA.GOV	H0-57	ECO
Guzzetti, Chris	Guzzetti.Christopher@epa.gov	A3-46	EPA
Hadley, Karl A	karl.hadley@wch-rcc.com	H4-21	WCH

NOTE FOR ADMIN RECORD:
TPA Milestones
M-015-79
M-016-00C
M-016-143
M-016-173
M-016-175
M-016-176
M-016-177
M-016-178
M-016-181
M-016-186
M-093-27
M-093-28

Operable Units
100-BC-1
100-BC-2
100-BC-5
100-FR-3
100-HR-3
100-IU-2
100-IU-6
100-KR-4
100-NR-2
300-FF-5



181931

100/300 AREA UNIT MANAGERS MEETING
APPROVAL OF MEETING MINUTES

January 14, 2016

APPROVAL: _____ Date 2/11/16

Mark French, DOE/RL (A6-38)
River Corridor Project Manager

APPROVAL: _____ Date 2/11/16

Mike Cline, DOE/RL (A5-11)
Groundwater Project Manager

APPROVAL: _____ Date 2/11/16

Nina Menard, Ecology (H0-57)
Environmental Restoration Project
Manager

APPROVAL: _____ Date 2/11/16

Laura Buelow, Rod Lobos, or Christopher
Guzzetti, EPA (B1-46)
100 Area Project Manager

100 & 300 AREA UNIT MANAGER MEETING MINUTES

Groundwater and Source Operable Units; Facility Deactivation, Decontamination, Decommission, and Demolition (D4); Interim Safe Storage (ISS); Field Remediation (FR); Mission Completion; and 100-K Sludge Treatment Project and 100-K Facility Demolition and Soil Remediation Projects

January 14, 2016

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) – The next meeting will be held February 11, 2016, at the Washington Closure Hanford (WCH) Office Building, 2620 Fermi Avenue, Room C209.
- Attendees/Delegations – Attachment A is the list of attendees. Representatives from each agency were present to conduct the business of the UMM.
- Approval of Minutes – The December 10, 2015, meeting minutes were approved by the U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and U.S. Department of Energy, Richland Operations Office (RL).
- Action Item Status – The status of action items was reviewed and updates were provided (see Attachment B).
- Agenda – Attachment C is the Regular Session meeting agenda.

EXECUTIVE SESSION (Tri-Parties Only)

An Executive Session was not held by RL, EPA, and Ecology prior to the January 14, 2016, UMM.

100-K AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 2 provides a status of the 100-K Sludge Treatment Project and the 100-K Facility Demolition and Soil Remediation projects. No issues were identified and no agreements or action items were documented.

100-B/C AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 3 provides status and information for Washington Closure Hanford (WCH) Closure Operations activities at the 100 areas (B/C, D, H, and N), 618-10, and the 300 Area. Attachment 4 provides the Field Remediation schedule for 100-B, 100-D, 100-H, 100-N, and 100-IU-2/6. No issues were identified and no agreements or action items were documented.

100-N AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 3 provides status and information for WCH Closure Operations activities at the 100 areas (B/C, D, H, and N), 618-10, and the 300 Area. Attachment 4 provides the Field Remediation schedule for 100-B, 100-D, 100-H, 100-N, and 100-IU-2/6. No issues were identified and no agreements or action items were documented.

100-D & 100-H AREAS (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 3 provides status and information for WCH Closure Operations activities at the 100 areas (B/C, D, H, and N), 618-10, and the 300 Area. Attachment 4 provides the Field Remediation schedule for 100-B, 100-D, 100-H, 100-N, and 100-IU-2/6. No issues were identified and no agreements or action items were documented.

100-F & 100-IU-2/100-IU-6 AREAS (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 3 provides status and information for WCH Closure Operations activities at the 100 areas (B/C, D, H, and N), 618-10, and the 300 Area. Attachment 4 provides the Field Remediation schedule for 100-B, 100-D, 100-H, 100-N, and 100-IU-2/6. No issues were identified and no agreements or action items were documented.

300 AREA – 618-10/11 (GROUNDWATER, SOILS)

Attachment 3 provides status and information for WCH Closure Operations activities at the 100 areas (B/C, D, H, and N), 618-10, and the 300 Area. No issues were identified and no agreements or action items were documented.

300 AREA - GENERAL (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 3 provides the 100 areas (B/C, D, H, and N), 618-10, and the 300 Area. No issues were identified and no agreements or action items were documented. Attachment 5 provides the meeting minutes and a status summary for the 300 Area Closure Project's January 28, 2016, video teleconference (VTC) meeting. No issues were identified and no agreements or action items were documented.

ORCHARD LANDS

No update was provided. No issues were identified and no agreements or action items were documented.

SPECIAL TOPICS

Chris Guzzetti suggested that the status of the CERCLA Five Year Review be added to the agenda inasmuch as the draft document will be out in March or April working towards DOE issuing it to EPA in November.

Attachment A

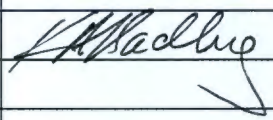
100/300 AREA UNIT MANAGER MEETING

ATTENDANCE

January 14, 2016

NAME	E-MAIL ADDRESS	MSIN	COMP	SIGNATURE
Abenth, Keelan R	keelan.abenth@rl.doe.gov	A5-16	DOE	
Balone, Steven N	steven.balone@rl.doe.gov	A3-04	DOE	
Chance, Joanne C	joanne.chance@rl.doe.gov	A3-04	DOE	
Clark, Clifford E	cliff.clark@rl.doe.gov	A5-19	DOE	
Cline, Michael	michael.cline@rl.doe.gov	A5-11	DOE	
Dagan, Ellen	ellen.dagan@rl.doe.gov	A3-04	DOE	
Foley, Bryan	bryan.foley@rl.doe.gov	A6-38	DOE	
French, Mark	mark.french@rl.doe.gov	A6-38	DOE	
Glossbrenner, Ellwood	ellwood.glossbrenner@rl.doe.gov	A3-04	DOE	
Guercia, Rudolph F	rudolph.guercia@rl.doe.gov	A3-04	DOE	
Hansen, James A	james.hansen@rl.doe.gov	A5-11	DOE	
Hanson, James P	James.Hanson@rl.doe.gov	A5-11	DOE	
Jaschke, Naomi M	Naomi.Jaschke@rl.doe.gov	A5-11	DOE	
Louie, Catherine S	catherine.louie@rl.doe.gov	A3-04	DOE	
Morse, John G	john.morse@rl.doe.gov	A5-11	DOE	
Neath, John P	john.neath@rl.doe.gov	A3-04	DOE	
Teynor, Thomas K	thomas.teynor@rl.doe.gov	A3-04	DOE	
Post, Thomas	thomas.post@rl.doe.gov	A3-04	DOE	
Quintero, Roger	roger.quintero@rl.doe.gov	A3-04	DOE	
Sands, John P	john.sands@rl.doe.gov	A5-11	DOE	
Sinton, Gregory L	gregory.sinton@rl.doe.gov	A6-38	DOE	
Smith, Chris	douglas.smith@rl.doe.gov	A3-04	DOE	
Vannah, Benjamin W	Benjamin.Vannah@rl.doe.gov	A5-11	DOE	
Zeisloft, Jamie	jamie.zeisloft@rl.doe.gov	A3-04	DOE	
Ayres, Jeffrey M	JAYR461@ECY.WA.GOV	H0-57	ECO	
Boyd, Alicia	ABOY461@ECY.WA.GOV	H0-57	ECO	
Crumpler, Dwayne	DCRU461@ECY.WA.GOV	H0-57	ECO	
Elliot, Wanda	WELL461@ECY.WA.GOV	H0-57	ECO	
Gent, Philip M	PGEN461@ECY.WA.GOV	H0-57	ECO	
Goswami, Dib	DGOS461@ECY.WA.GOV	H0-57	ECO	
Jackson-Maine, Zelma	ZJAC461@ECY.WA.GOV	H0-57	ECO	
Johnson, Brian	BRJ0461@ECY.WA.GOV	H0-57	ECO	
Kapell, Arthur	AKAP461@ECY.WA.GOV	H0-57	ECO	

Menard, Nina	NMEN461@ECY.WA.GOV	H0-57	ECO	
Rochette, Elizabeth	BROC461@ECY.WA.GOV	H0-57	ECO	
Smith-Jackson, Noe'l	NSMI461@ECY.WA.GOV	H0-57	ECO	
Varljen, Robin	RVAR461@ECY.WA.GOV	H0-57	ECO	
Welsch, Kim	KIWE461@ECY.WA.GOV	H0-57	ECO	
Whalen, Cheryl	CWHA461@ECY.WA.GOV	H0-57	ECO	
Buelow, Laura	Buelow.laura.epa.gov	B1-46	EPA	
Guzzetti, Christopher	Guzzetti.christopher@epa.gov	B1-46	EPA	
Lobos, Rod	Lobs.rod@epa.gov	B1-46	EPA	
Simes, Benjamin	Simes.Benjamin@EPA.gov		EPA	
Barrett, Bill F	William_F_Barrett@rl.gov	R3-20	CH	
Borghese, Jane V	Jane_V_Borghese@rl.gov	H8-43	CH	
Bowles, Nathan A.	Nathan_Bowles@rl.gov		CH	
Burke, Philip A	Philip_A_Burke@rl.gov	R3-50	CH	
Day, Roberta E	Roberta_E_Day@rl.gov	R3-50	CH	
Dittmer, Lorna M	Lorna_M_Dittmer@rl.gov	H8-45	CH	
Doornbos, Marty H	Martin_H_Doornbos@rl.gov	R3-50	CH	
Dixon, Brian J	Brian_J_Dixon@rl.gov	T4-09	CH	
Faught, William	William_R_Faught@rl.gov	R3-50	CH	
Ford, Bruce H	Bruce_H_Ford@rl.gov	H8-43	CH	
Hartman, Mary J	Mary_J_Hartman@rl.gov	R3-50	CH	
Lee, Art K	Art_K_Lee@rl.gov	R3-50	CH	
McKibben, Jon W	Jon_W_McKibben@rl.gov	X4-01	CH	
Stewart, Meghann	Meghann_K_stewart@rl.gov	H8-43	CH	
Toews, Michelle R	Michelle_R_Toews@rl.gov	R3-60	CH	
Moren, Rick	Rick_Moren@rl.gov	G3-55	MSA	
Shoemake, Joy	Joy_Shoemake@rl.gov	G3-55	MSA	
Turner, Michael J	Michael_J_Turner@rl.gov	A3-01	MSA	
Cimon, Shelley	scimon@oregontrail.net	--	Oregon	
Beers, Dan	Danny.Beers@doh.wa.gov	B1-42	WDOH	
Danielson, Al	Al.danielson@doh.wa.gov	B1-42	WDOH	
Utley, Randy	Randell.Utley@doh.wa.gov	B1-42	WDOH	
Lilligren, Sandra	sandral@nezperce.org	--	TRIBES	
Vanni, Jean	jvynerwm@hotmail.com	--	TRIBES	
Buckmaster, Mark A	mark.buckmaster@wch-rcc.com	N2-05	WCH	
Carlson, Richard A	richard.carlson@wch-rcc.com	H4-22	WCH	

Capron, Jason	jason.capron@wch-rcc.com	H4-23	WCH	
Cearlock, Christopher S	christopher.cearlock@wch-rcc.com	H4-22	WCH	
Darby, John W	john.darby@wch-rcc.com	N2-02	WCH	
Hadley, Karl A	karl.hadley@wch-rcc.com	H4-21	WCH	
Lawrence, Barry L	barry.lawrence@wch-rcc.com	T2-03	WCH	
Lerch, Jeffrey A	jeffrey.lerch@wch-rcc.com	H4-22	WCH	
McCurley, Clay D	clay.mccurley@wch-rcc.com	H4-21	WCH	
Parnell, Scott E	scott.parnell@wch-rcc.com	H4-21	WCH	
Thomson, Jill E	jill.thomson@wch-rcc.com	H4-21	WCH	

Attachment B

100/300 Area UMM
Action List
January 14, 2016

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status

Attachment C

100/300 Area Unit Manager Meeting
January 14, 2016
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99354
Room C209; 2:00 p.m.

Administrative:

- Approval and signing of previous meeting minutes
- Update to Action Items List
- Next UMM (2/11/2016, Room C209)

Open Session: Project Area Updates - Groundwater, Field Remediation, D4/ISS:

- 100-K Area (Steve Balone, Roger Quintero)
- 100-B/C Area (Greg Sinton, Tom Post)
- 100-N Area (Greg Sinton, John Neath)
- 100-D & 100-H Areas (Steve Balone, John Neath)
- 100-F & 100-IU-2/6 Areas (Greg Sinton, John Neath)
- 300 Area - 618-10/11 exclusively (Jamie Zeisloft)
- 300 Area (John Sands/Rudy Guercia)
- Orchard Lands (John Sands)

Special Topics/Other

Adjourn

Attachment 1

Unit Managers Meeting – *January 2016 (December Data)*

Summary Hanford Sampling Program

Hanford's overall Site groundwater monitoring program managed by CHPRC (River Corridor and Central Plateau) coordinates collection of groundwater samples from wells and aquifer tubes, as well as surface water samples from springs. Sample trips are scheduled by target month and prioritized based on project needs.

Importantly, target sample dates (months) are chosen to minimize the number of sample trips by temporally aligning requests from multiple activities for a single location into a single trip where practical.

Sample Trip Status by Month Scheduled

For Fiscal Year 2016, the groundwater monitoring program has 2,762 sample trips scheduled for collection. For 2016 (October through December 2015), 940 of 957 trips have been collected.

For December 2015 (FY 2016, month three), the program successfully completed 173 of the 174 scheduled trips and also collected 9 of the 240 trips scheduled for January 2016. Additionally, 1 trip scheduled for Fiscal year 2015 was collected in December, which brings the total number of Fiscal Year 2015 trips to 3,106 of 3,116 scheduled.

The specific wells, aquifer tubes, and springs sampled in the central plateau during December 2015 are listed in Table 1.

Awaiting Sample Trips

Of the Fiscal Year 2015 and 2016 sample trips scheduled, there are 29 that are awaiting collection. Of these, 3 require maintenance, 3 have access restrictions, 4 are being evaluated for cancelation or rescheduling, 4 are associated with special studies, 1 is awaiting drilling, and 14 are awaiting collection at month end.

Table 2 presents the sample trips for the river corridor that were not successfully completed in December 2015. Sample trips in Table 2 are grouped by fiscal month scheduled and groundwater interest area. This table shows that the number of awaiting well trips decreases with time from the schedule date. Reasons for sample trips to be awaiting include well maintenance, weather conditions, access restrictions, and resource limitations.

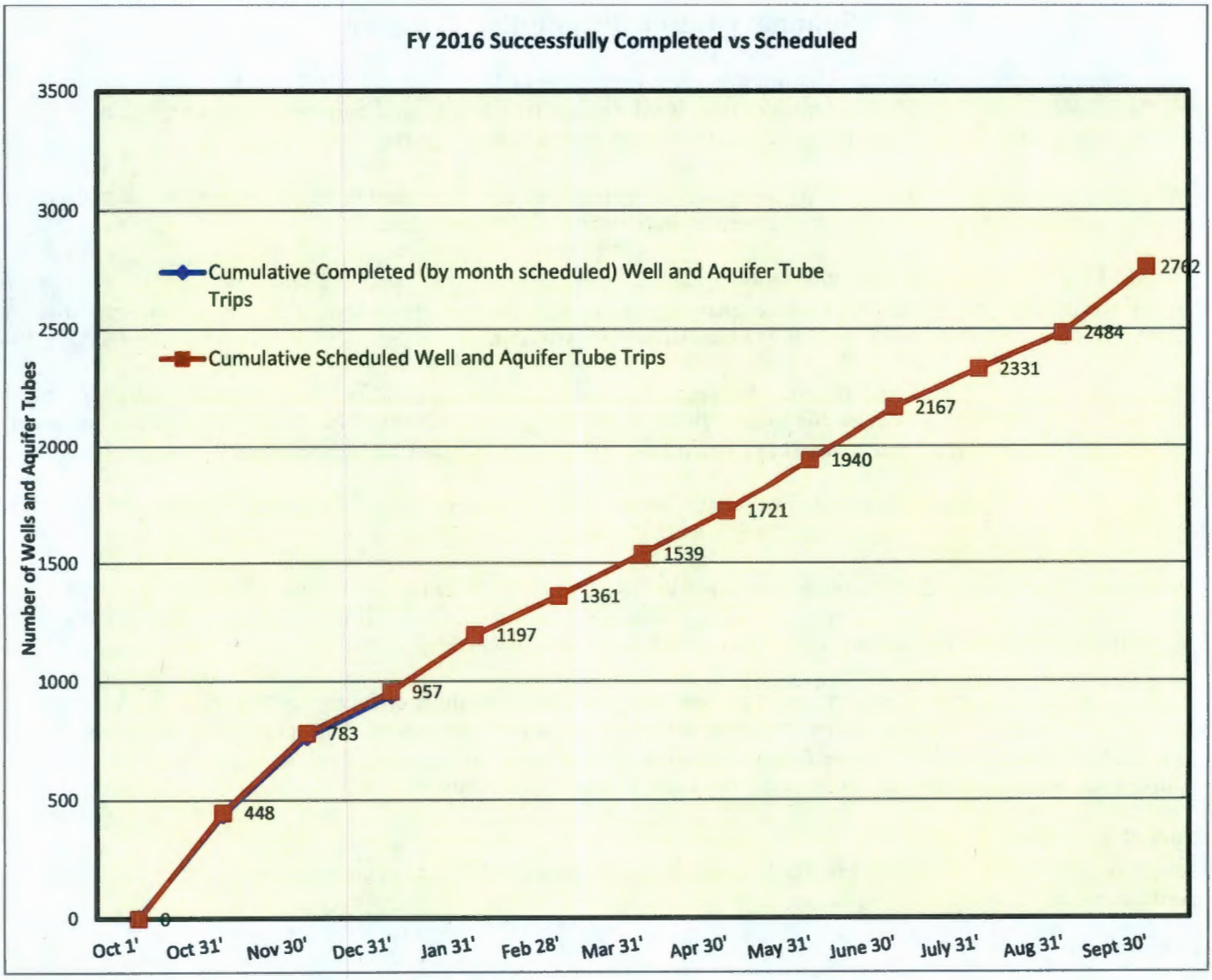
Upcoming Sample Trips

Sample trips for the river corridor scheduled for collection in January 2016 (and not collected before the target sample month) are listed in Table 3.

Data Access

The sampling results are available in HEIS and can be accessed from the Environmental Dashboard Application which can be accessed from the HLAN at https://ehs.chprc.rl.gov/eda/ or from the internet at https://ehs.hanford.gov/eda/.

100/300 Areas Unit Managers Meeting
January 14, 2016



Operable Unit Specifics

100-KR-4 Groundwater Operable Unit (Mike Drewett/Chuck Miller/Jason Hulstrom)

- CERCLA Process Implementation:
  - ✓ The RI/FS and PP documents are on hold pending 100-K East Reactor waste site characterization and modeling (wells 116-KE-3 and UPR-100-K-1). PNNL is conducting leach testing and the final report for this work is scheduled for completion in January 2016.
  - ✓ Monitoring Plan: The Draft A documents (Interim O&M Plan, Interim RD/RAWP, and Interim Groundwater Monitoring Plan) were delivered to RL on December 17, 2015.
- Remedial Actions & System Modifications:
  - ✓ The volume of groundwater treated and mass of Cr(VI) removed for the 100-K P&T systems (**KX, KR-4,** and **KW**) during December 2015 are:
    - o Treated 65.8 million gallons (63.3 November).
    - o Removal 3.6 kg of hexavalent chromium (3.3 November)
  - ✓ The current influent and effluent Cr(VI) concentrations (measure once weekly) for the three K systems (measured January 1, 2016) are:
    - o 100-KR4 – Influent = 5 µg/L; Effluent = less than detection
    - o 100-KW – Influent = 16 µg/L; Effluent = 2 µg/L
    - o 100-KX – Influent = 21 µg/L; Effluent = 2 µg/L
  - ✓ FY 2016 P&T performance to date:

P&T System	Treated (mgal)	Removed (kg)
KR-4	40.7	1.0
KW	43.5	2.7
KX	106.4	6.8
100-KR-4 OU TOTAL	190.5	10.5

  - ✓ For December 2015, all three pump and treat systems operated at 100% (fully on-line) and the 30-day average pumping rates were 305 gpm, 327 gpm, and 847 gpm for the KR-4, KW, and KX systems, respectively. A summary of the number of extraction and injection wells in the three systems is shown in Table K-1.

Table K-1. Summary of the Number of Extraction and Injection Wells in the Three Systems

	KR4		KX		KW		TOTAL	
Wells	**2015**	**2016**	**2015**	**2016**	**2015**	**2016**	**2016**	**Current**
Number of extraction wells	12	12	19	19	11	11	42	42
Number of injection wells	5	5	9	9	4	4	18	18

- ✓ The KR-4 system extraction wells and injection wells are currently in service except for 199-K-129. At the beginning of December, there was an event that caused the motor to burn up. At this time, the work is planned to be completed on a priority of manpower basis. The KR-4 hexavalent chromium concentration in extracted water continues to be below site cleanup requirements and cumulative hexavalent chromium removal is declining as a result. The system remains in service to provide hydraulic capture of groundwater inland of the river.
- ✓ At the KW system Wells 199-K-132, 199-K-139, and 199-K-166 remain off-line to allow increased pumping along the central axis of the plume. Based on current field and laboratory measurements in December 2016, all extraction wells at KW exhibit hexavalent chromium concentrations less than 20 µg/L. Cumulative hexavalent chromium removal is declining, primarily as a result of the continuing decrease in concentration in Well 199-K-205.
- ✓ All KX system extraction wells are in service. At the present time, 6 of 19 extraction wells have concentrations that exceed 20 µg/L. These include 199-K-141, 199-K-152, 199-K-154, 199-K-178, 199-K-182, and 199-K-210.
- ✓ Figures K-1 through K-3 present the groundwater treatment rate and hexavalent chromium removal information. As indicated in the curves below, Cr(VI) mass removal at KR-4, KW, and KX have generally decreased in recent months due to continued optimization of remedial performance (e.g., increasing the overall system pumping rates, while extracted groundwater concentrations decrease).
- ✓ Assessment of soil and groundwater characterization data from boreholes in the vicinity of 105-KE Reactor continues. New wells 199-K-221 and 199-K-222 have been placed in service as groundwater monitoring wells.
- ✓ Soil Remediation in Vicinity of 183-KE Head House
- ✓ Shallow soil remediation at selected waste sites in the vicinity of 183-KE Head House continues. These activities include removal of foundation works and shallow soil excavation (i.e., to about 10 feet below grade). Existing groundwater monitoring Wells 199-K-36 and 199-K-188 are remaining in service during the soil excavation.

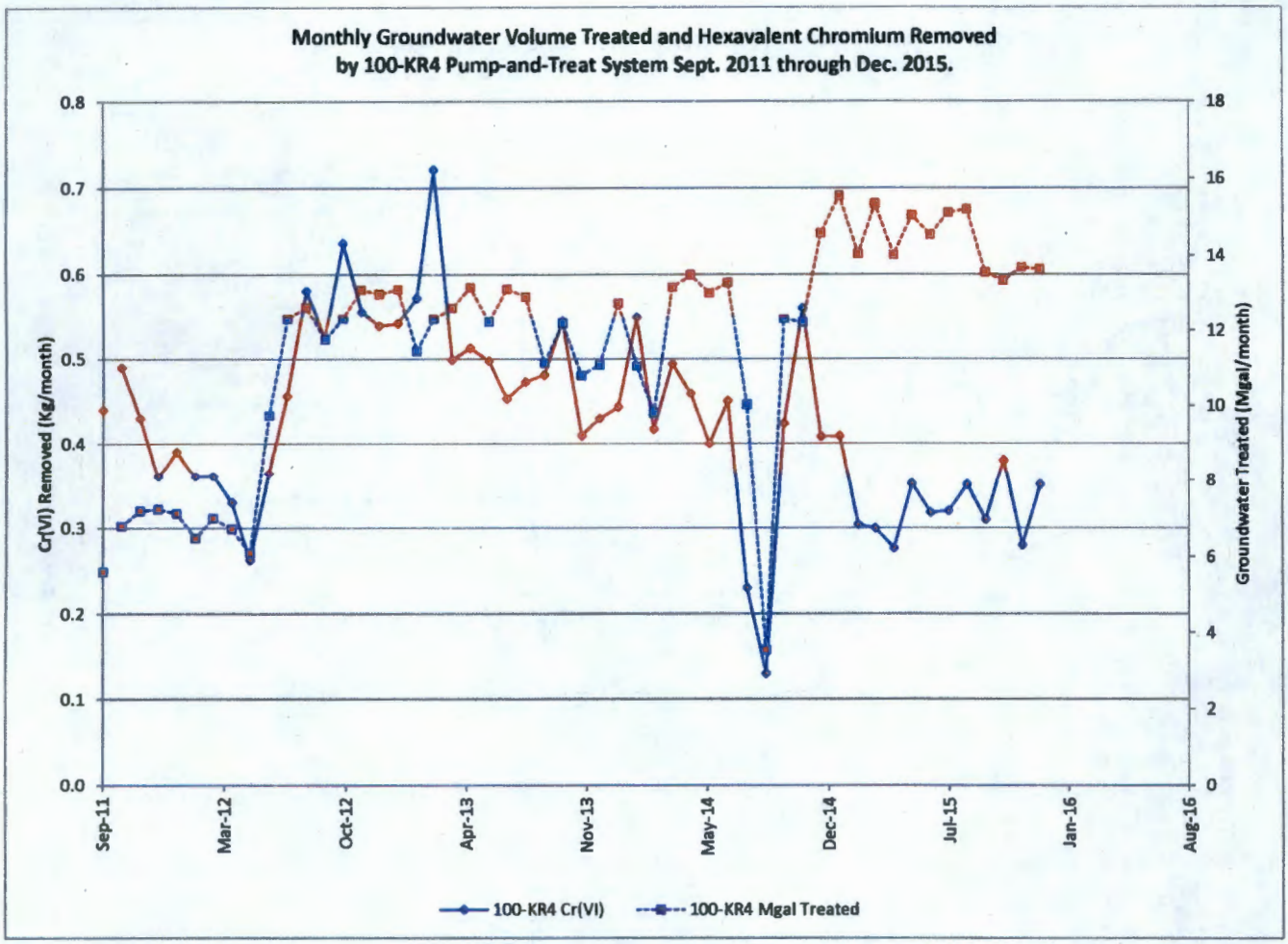


Figure K-1. Monthly Cr(VI) Removed and Groundwater Volume Treated by 100-KR-4 Pump-and-Treat, September 2011 through December 2015.

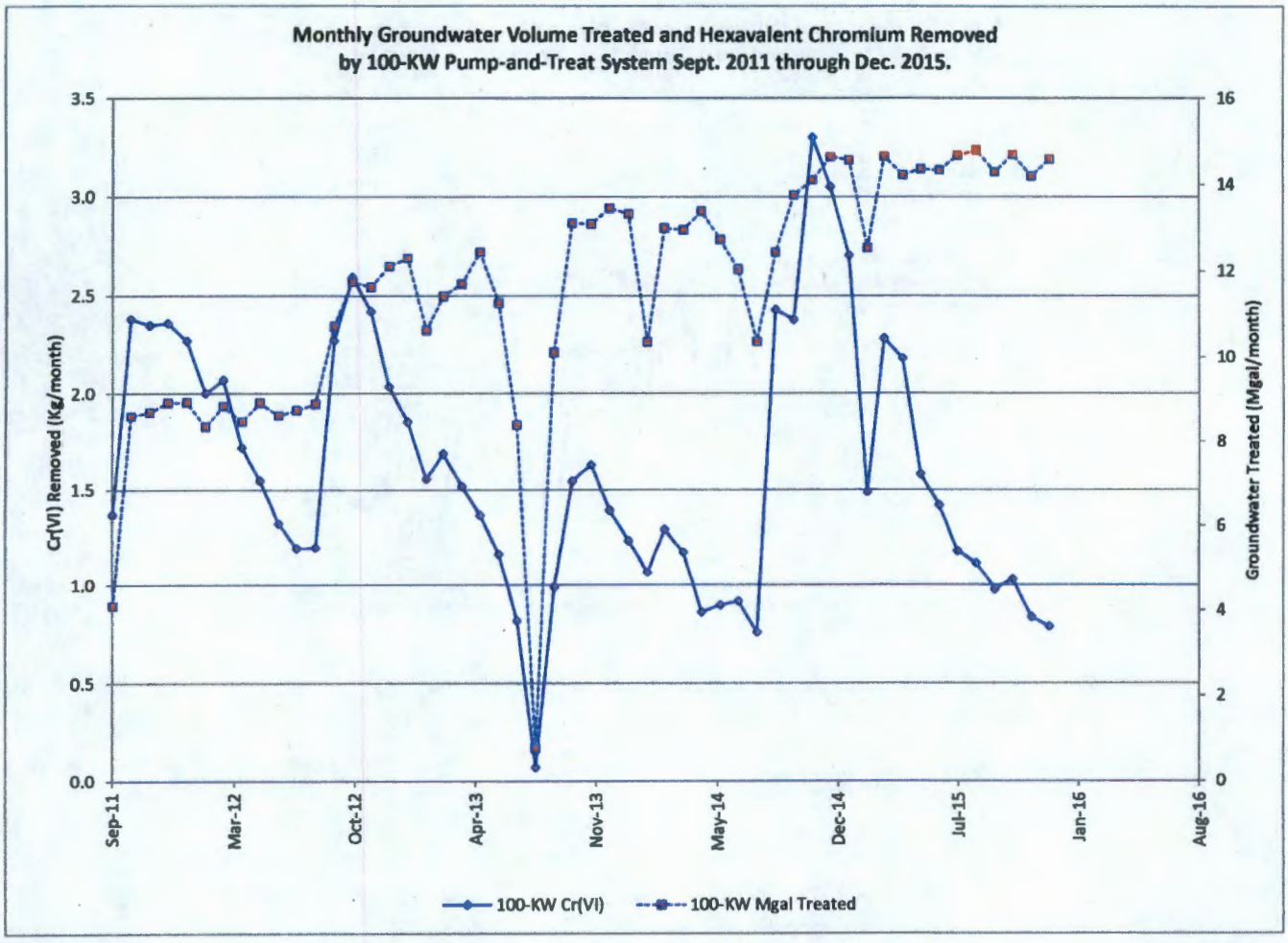


Figure K-2. Monthly Cr(VI) Removed and Groundwater Volume Treated by 100-KW Pump-and-Treat, September 2011 through December 2015.

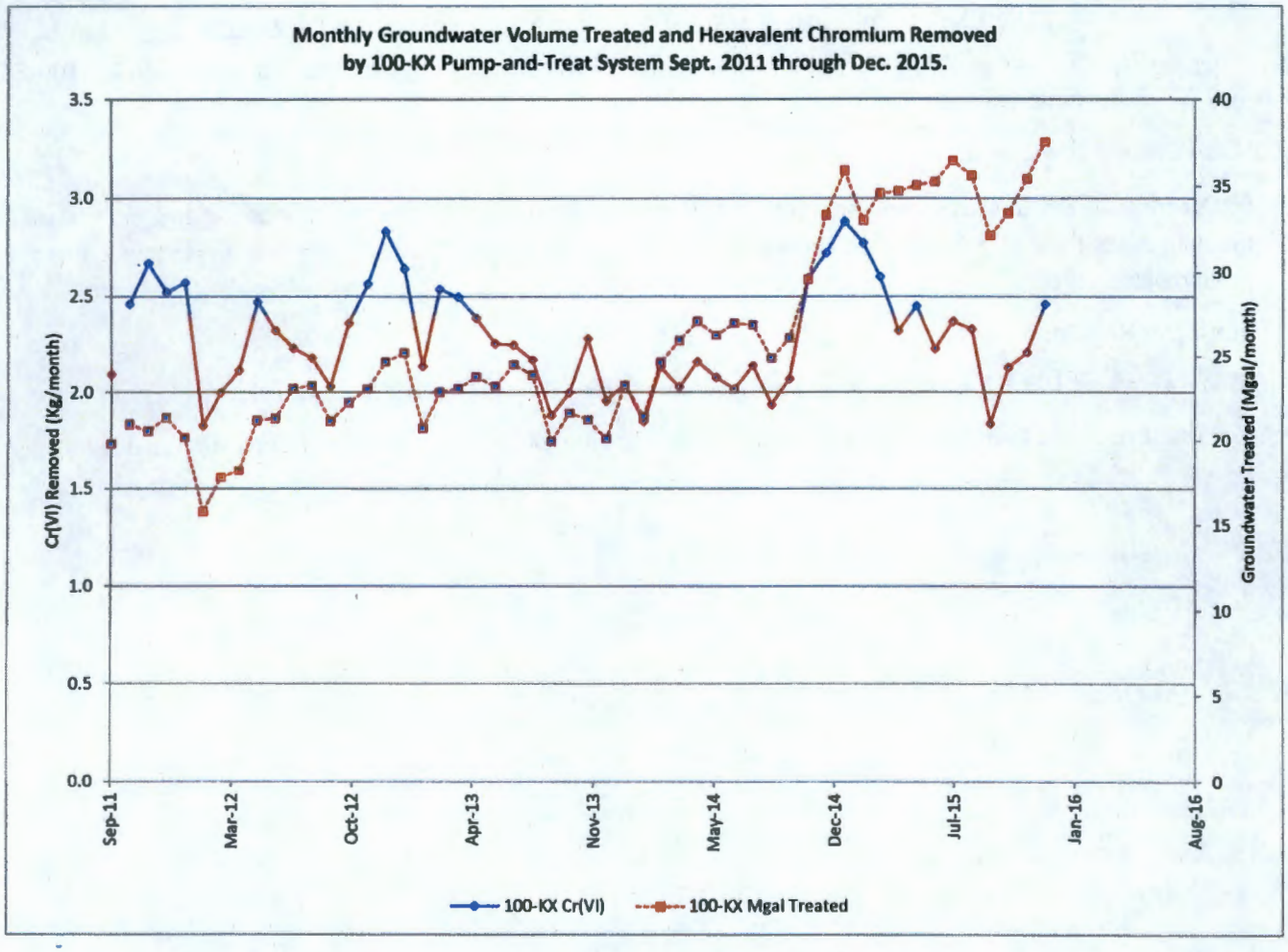


Figure K-3. Monthly Cr(VI) removed and groundwater volume treated by 100-KX pump-and-treat, September 2011 through December 2015.

100-BC-5 Groundwater Operable Unit – Robert Evans/Mary Hartman

- *Milestone M-015-79:* Due 12/15/2016 for the CERCLA RI/FS Report and Proposed Plan for the 100-BC-1, 100-BC-2 and 100-BC-5 Operable Units
- CERCLA Process Implementation:
  - ✓ In December, EPA and RL signed Revision 2 of DOE/RL-2003-38, the groundwater sampling and analysis plan that will cover the 3-to-5 year period between completion of the remedial investigation and implementation of the groundwater remedy.
- Monitoring & Reporting:
  - ✓ Monitoring well 199-B2-14 was sampled in December (delayed from October due to an electrical issue).
  - ✓ Field staff removed four data loggers from hyporheic sampling points in December. Data are being downloaded for use in the RI/FS report.

100-NR-2 Groundwater Operable Unit – Bill Faught/Virginia Rohay/Art Lee

- CERCLA Process Implementation
  - ✓ Revised Chapter 6 red-lines and the associated RCR form (incorporating the new waste sites) were provided to Ecology for review on February 9, 2015. Comments on this revised text arrived from Ecology on May 21, 2015. Responses continue to be shared.
  - ✓ Revised Chapter 7 red-lines and the associated RCR form were completed and sent to Ecology February 26, 2015. We anticipate resolving the single remaining comment within the extension period (December 2015).
  - ✓ The numerical modeling performed for Draft A is being revisited and the ECF completed. Chapter 5 is being updated as part of this effort.
  - ✓ The project extension for comment response has been received will expire and runs through March 31, 2016.
- Remedial Actions

Bioventing –

- ✓ Figure NR-1 provides a chart showing bioventing well gas sample results for monitoring wells 199-N-171 and 199-N-169. Monthly vapor sample measurements were collected on December 22, 2015. The next low river respirometry test started on January 11, 2016.

Product Recovery –

- ✓ The "smart sponge" assembly was changed out twice in December; once on December 1, 2015, and then the assembly was removed on December 29, 2015, in preparation for the respirometry testing. A total of 150 g of TPH was removed from groundwater from each assembly removed for a total of 300 g of TPH removed in December 2015. Assuming that the TPH is diesel with a density of 0.85 g/mL, 0.35 L of diesel was removed.

Aquifer Tubes –

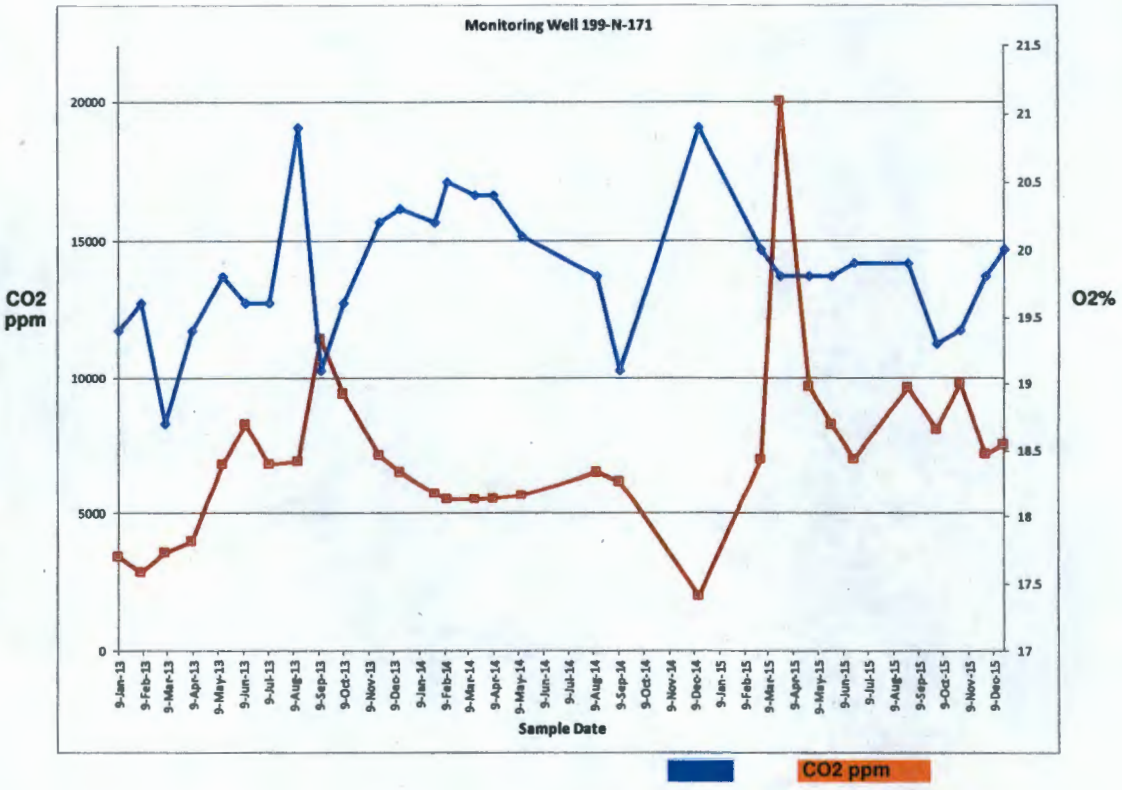
- ✓ Tubes C7934, C7935, and C7936 are located adjacent to one another (Figure NR-2), with screens at depths of ***14.41 ft. (C7934), 18.75 ft. (C7935), and 29.19 ft. (C7936)***. All three aquifer tubes were sampled on December 15, 2015. Tritium and strontium-90 concentration trends through December 15, 2015, are shown in Figures NR-3 and NR-4, respectively.
- ✓ Table NR-1 summarizes the sample results for CY 2015. These three aquifer tubes are scheduled for sampling in January 2016.
- ✓ The RCRA monitoring wells scheduled for September 2015 were sampled September 14 through 17, 2015, and on September 28, 2015. One RCRA monitoring well (199-N-2) had electrical issues with the pump and could not be sampled. The well will be sampled after the issue has been corrected. The next sampling event is scheduled for March 2016.

Table NR-1. Strontium-90 and Tritium Concentrations at Aquifer Tubes C7934, C7935, and C7936 Calendar Year 2015

Aquifer Tube	Sample Date	Strontium-90 Concentration (pCi/L)	Tritium Concentration (pCi/L)
C7934	01/12/2015	233	514,000
C7934	02/10/2015	177	263,000
C7934	03/11/2015	235	556,000
C7934	04/15/2015	342	863,000
C7934	04/15/2015	345	876,000
C7934	05/11/2015	331	739,000
C7934	06/19/2015	348	733,000
C7934	07/27/2015	369	700,000
C7934	07/27/2015	368	704,000
C7934	08/21/2015	304	467,000
C7934	09/15/2015	321	585,000
C7934	09/15/2015	320	588,000
C7934	10/26/2015	344	438,000
C7934	10/26/2015	335	442,000
C7934	11/19/2015	178	133,000
C7934	12/15/2015	335	414,000
C7935	01/12/2015	209	569,000
C7935	02/10/2015	155	498,000
C7935	02/10/2015	157	463,000
C7935	03/11/2015	165	379,000
C7935	04/15/2015	228	685,000
C7935	05/11/2015	283	831,000
C7935	05/11/2015	277	751,000
C7935	06/19/2015	267	704,000
C7935	07/27/2015	282	640,000
C7935	08/21/2015	178	355,000
C7935	08/21/2015	196	357,000
C7935	09/15/2015	279	640,000
C7935	10/26/2015	330	471,000
C7935	10/26/2015	331	459,000
C7935	11/19/2015	266	242,000
C7935	11/19/2015	271	247,000
C7935	12/15/2015	307	424,000
C7936	01/12/2015	72.5	527,000
C7936	02/10/2015	72	501,000
C7936	03/11/2015	65.2	496,000
C7936	04/15/2015	91.9	273,000
C7936	05/11/2015	74.3	58,600
C7936	06/19/2015	78.2	123,000
C7936	07/27/2015	76.7	327,000
C7936	08/21/2015	74.9	523,000
C7936	09/15/2015	76	233,000
C7936	10/26/2015	71.7	125,000
C7936	11/19/2015	77.9	392,000
C7936	12/15/2015	80.4	149,000

Well 199-N-171

Well #	Date	O2%	CO2 ppm
199-N-17	9-Jan-13	19.4	3400
	5-Feb-13	19.6	2840
	6-Mar-13	18.7	3570
	8-Apr-13	19.4	3960
	15-May-13	19.8	6820
	12-Jun-13	19.6	8290
	10-Jul-13	19.6	6800
	14-Aug-13	20.9	6940
	11-Sep-13	19.1	11400
	8-Oct-13	19.6	9380
	21-Nov-13	20.2	7160
	16-Dec-13	20.3	6520
	27-Jan-14	20.2	5720
	11-Feb-14	20.5	5520
	17-Mar-14	20.4	5520
	9-Apr-14	20.4	5560
	14-May-14	20.1	5670
	13-Aug-14	19.8	6520
	10-Sep-14	19.1	6180
	15-Dec-14	20.9	2000
	1-Mar-15	20	7020
	25-Mar-15	19.8	20000
	29-Apr-15	19.8	9650
	26-May-15	19.8	8260
	22-Jun-15	19.9	7000
	27-Aug-15	19.9	9620
	30-Sep-15	19.3	8070
	29-Oct-15	19.4	9770
	30-Nov-15	19.8	7200
	22-Dec-15	20	7510



Well #
199-N-169

Well 199-N-169

Date	O2%	CO2 ppm
9-Jan-13	20.9	0
5-Feb-13	20.9	0
6-Mar-13	20.9	0
8-Apr-13	20.9	0
15-May-13	20.9	800
12-Jun-13	20.9	780
#1 10-Jul 13	20.5	1020
#2 10-Jul 13	20.9	920
14-Aug-13	20.9	530
11-Sep-13	20.9	1250
8-Oct-13	20.9	550
21-Nov-13	21.3	600
16-Dec-13	20.9	530
27-Jan-14	20.9	500
11-Feb-14	20.9	550
17-Mar-14	20.9	470
9-Apr-14	20.9	860
14-May-14	20.9	840
13-Aug-14	20.9	520
10-Sep-14	20.9	410
15-Dec-14	21	100
1-Mar-15	20.9	360
25-Mar-15	20.9	325
29-Apr-15	20.9	410
26-May-15	20.9	460
22-Jun-15	21	0
27-Aug-15	21.4	330
30-Sep-15	20.9	530
29-Oct-15	20.9	360
30-Nov-15	20.9	460
22-Dec-15	20.9	490

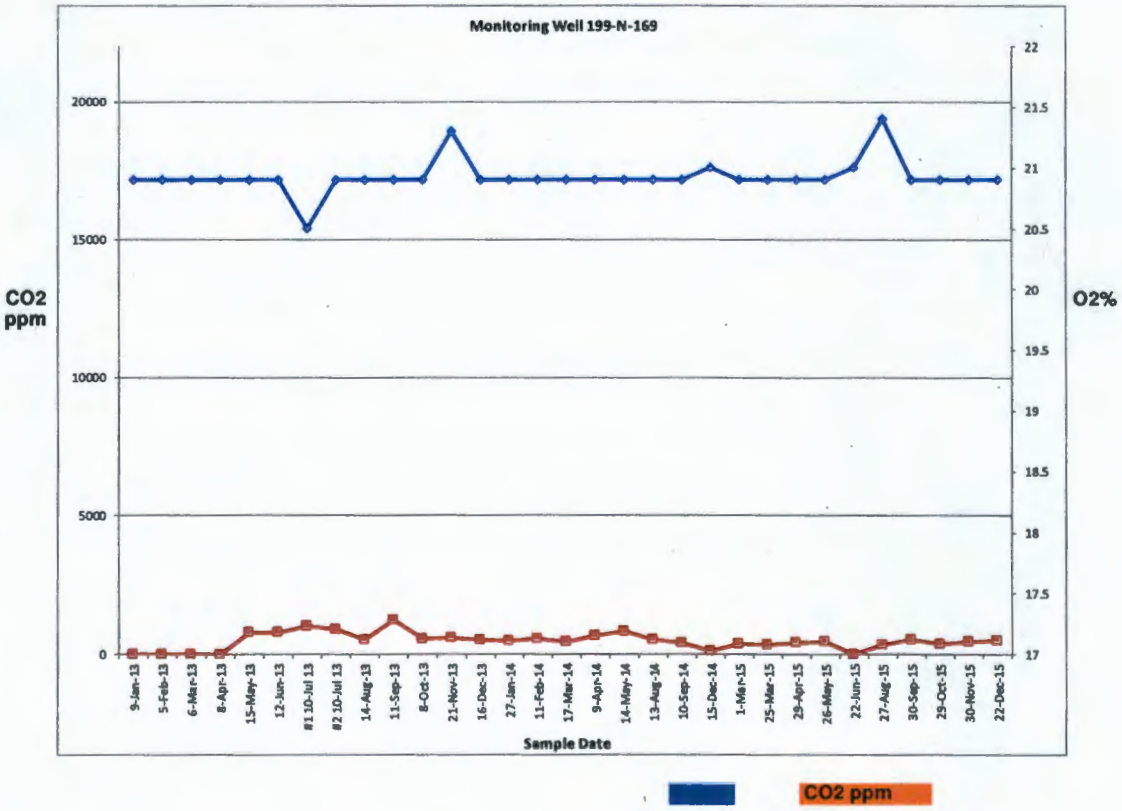


Figure NR-1. Bioventing Wells 199-N-169 and 199-N-171 Monthly Sampling Results.

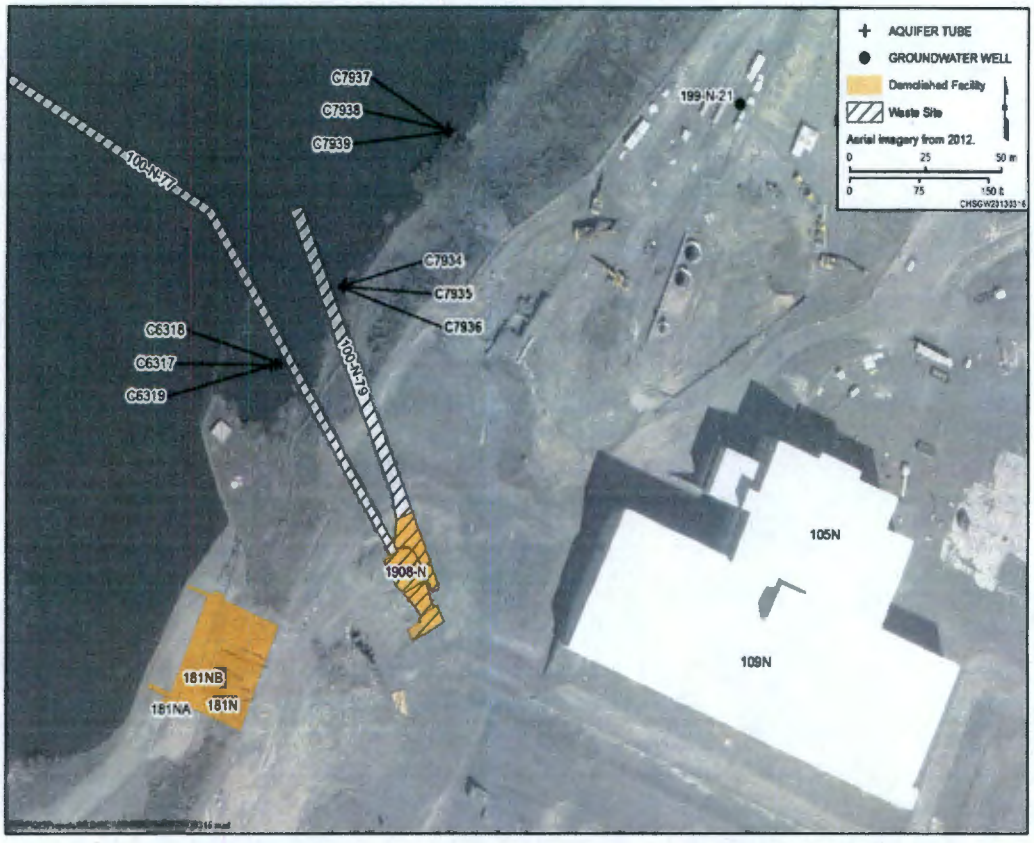


Figure NR-2. Locations of Aquifer Tubes C7934, C7935, and C7936.

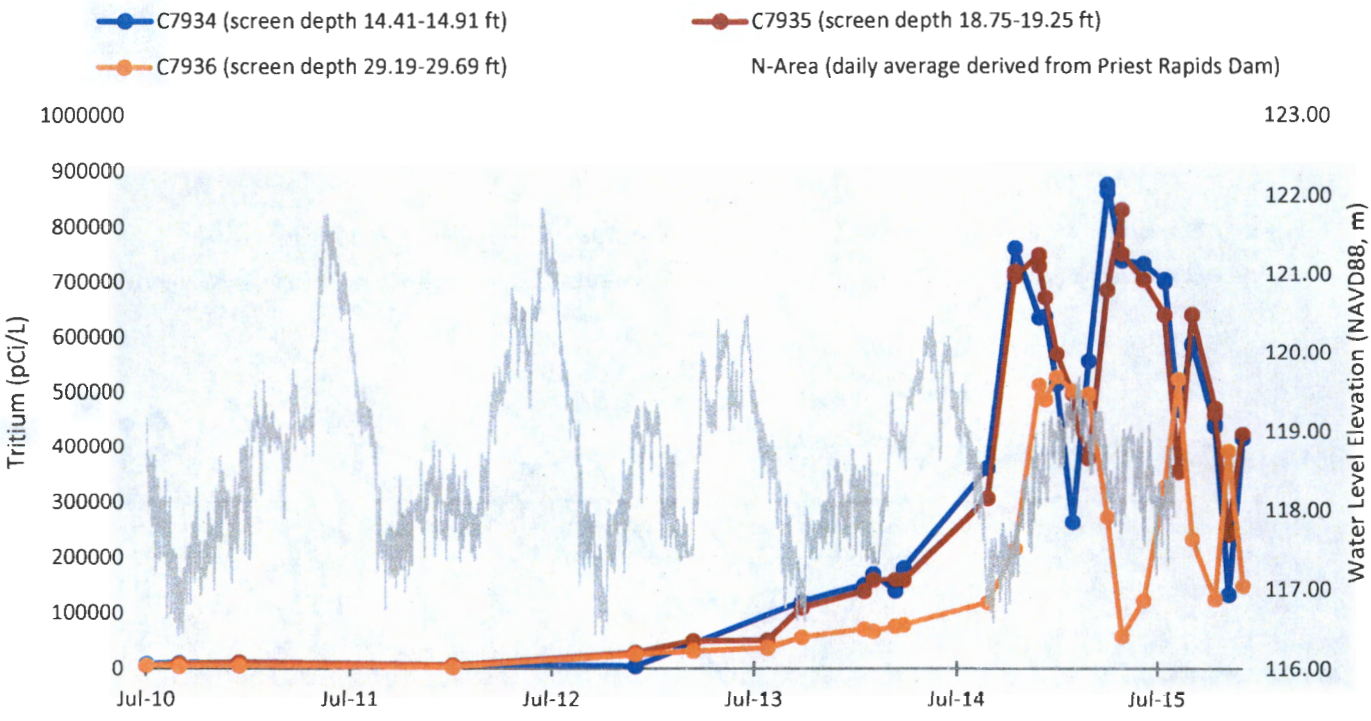


Figure NR-3. Tritium Trends through December 2015 at Aquifer Tubes C7934, C7935, and C7936.

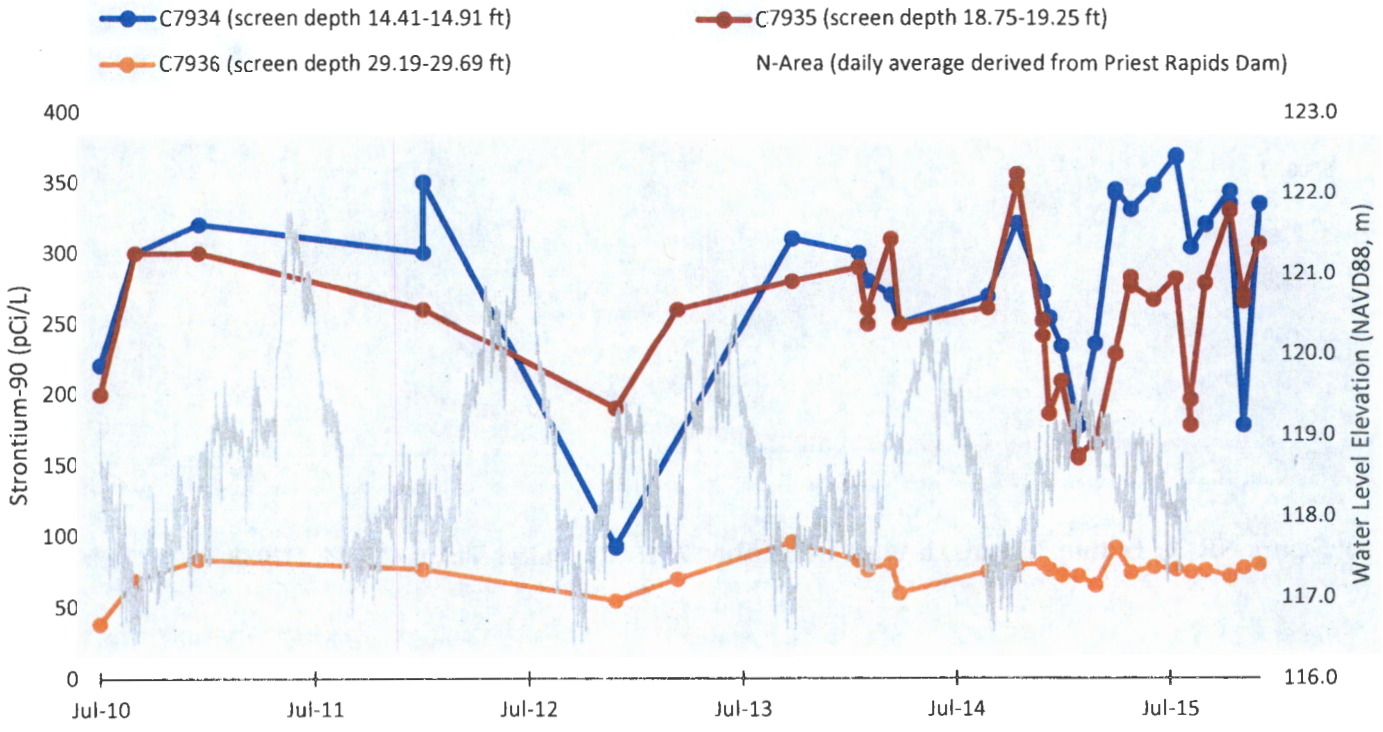


Figure NR-4. Strontium-90 Trends through December 2015 at Aquifer Tubes C7934, C7935, and C7936.

100-HR-3 Groundwater Operable Unit – Mike Drewett/Kris Ivarson

- CERCLA Process Implementation:
  - ✓ EPA legal comments were received on November 9, 2015. RL is reviewing comments for required changes/updates to the PP. Working towards meeting proposed issuance of PP to public by mid-January 2016.
  - ✓ Interim RD/RAWP, Interim Monitoring Plan, and Interim O&M Plan, Draft A plans were transmitted to Ecology on September 30, 2014. All comments have been resolved or conceptual agreement reached. Working towards January 2016 submittal of Rev. 0 for all three documents.
- FY16 Drilling Progress
  - ✓ Drilling of the seven (7) WCH replacement wells is anticipated to start the second week in January, 2016. Drilling will be conducted using a sonic drill rig.
  - ✓ The cultural reviews for the planned FY16 wells is ongoing.
- Ringold Upper Mud (RUM) Aquifer Pump Test
  - ✓ Instrumentation has been ordered for monitoring water levels and specific conductance from select monitoring and extraction wells, including both RUM wells and wells completed in the unconfined aquifer. This will enable an evaluation of aquifer connectivity between the two aquifers as well as across the confined aquifer unit.
- Remedial Actions & System Modifications
  - ✓ The volume of groundwater treated and mass of Cr(VI) removed from the 100-HR-3 P&T systems during December 2015 are:
    - Treated: 53.6 million gallons (51.0 in November)
    - Removed: 8.67 kg of Cr(VI) (9.17 in November)
  - ✓ FY 2016 P&T performance to date:

P&T System	Treated (mgal)	Removed (kg)
DX	101.0	21.3
HX	57.6	6.8
TOTAL	158.6	28.1

  - ✓ The current influent and effluent Cr(VI) concentrations (measure once weekly) for the two 100-HR-3 systems (as measured on January 4, 2016) are:
    - DX – Influent = 40 µg/L; Effluent = 3 µg/L
    - HX – Influent = 31 µg/L; Effluent = 1 µg/L

✓ A summary of the number of extraction and injection wells in the DX and HX P&T systems is shown in Table H-1.

Table H-1. Summary of the Number of Extraction and Injection Wells in the 100-HR-3 Systems

Wells	DX		HX		Total
	2014	2015	2014	2015	Current
Number of extraction wells	44	46	31	34	80
Number of injection wells	14	11	14	16	27

Notes:
DX system Well 199-D8-55 was not used for injection in 2014, but was operational as an extraction well
Four injection wells for DX are remain connected, but are not counted in 2015 since they are not operating.

✓ Realignments for FY16 are in planning stages.

✓ Summaries of the volume of groundwater treated and Cr(VI) removed for the 100-DX and 100-HX pump-and-treat systems are shown in Figures H-1 and H-2, respectively.

✓ A general reduction in Cr(VI) mass removal over time, a function of progress of remediation with associated reduction in groundwater contaminant concentration, is exhibited at both DX and HX. The drop in concentrations is more pronounced at DX, where concentrations were previously at very high levels. Influent concentrations at DX continue to decline as remediation progresses.

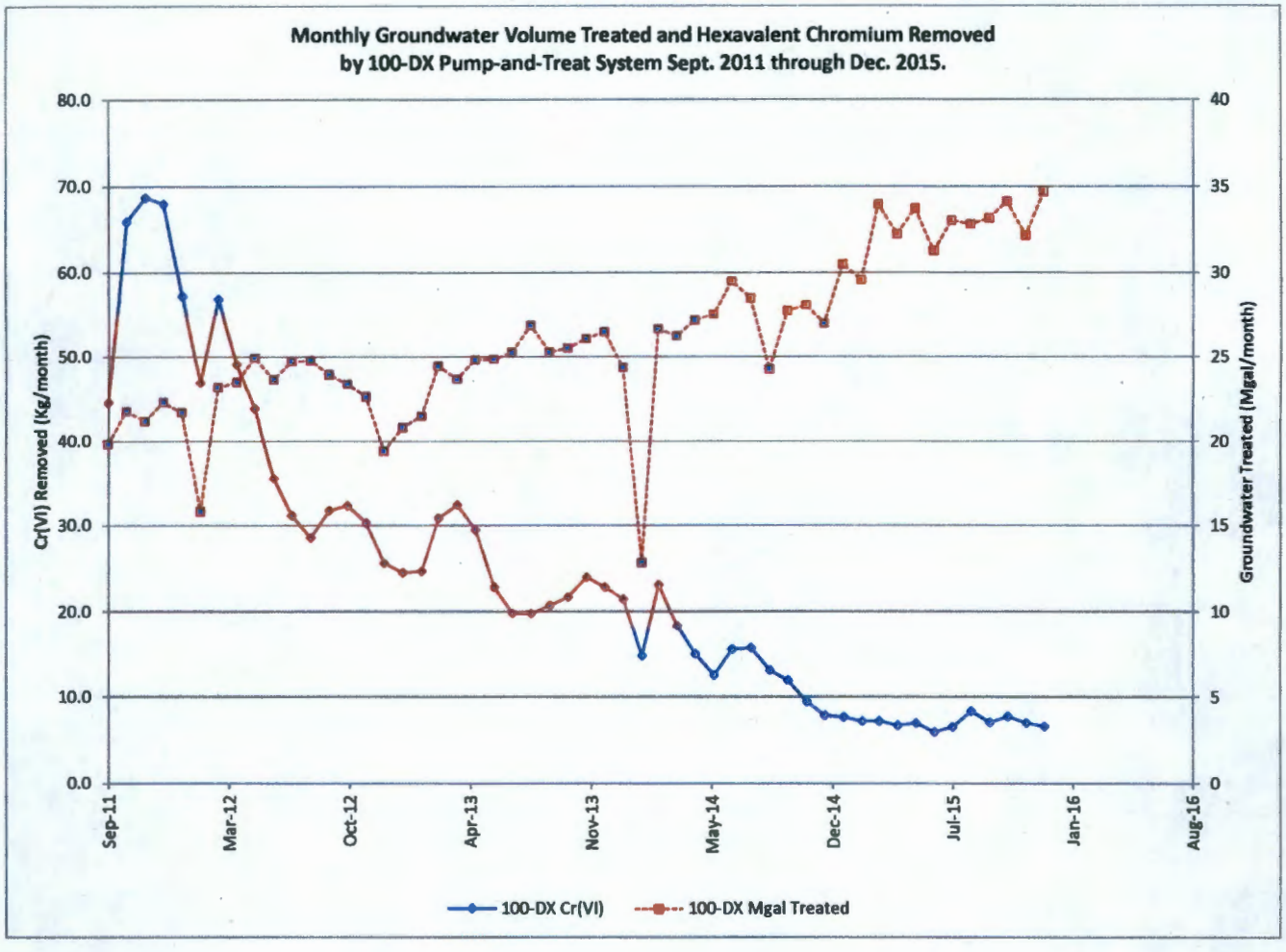


Figure H-1. Monthly Cr(VI) Removed and Groundwater Volume Treated by 100-DX Pump-and-Treat, September 2011 through December 2015.

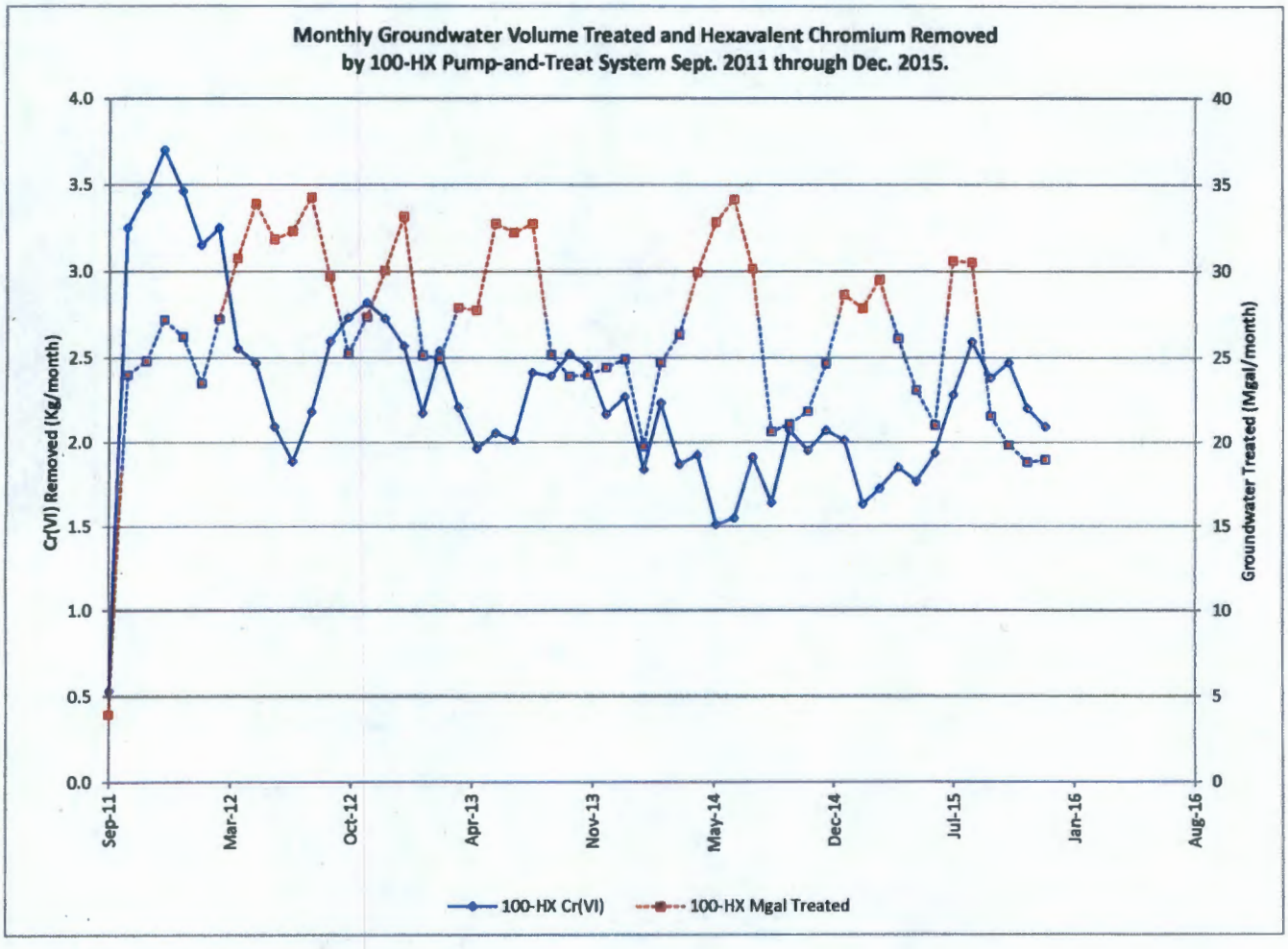


Figure H-2. Monthly Cr(VI) Removed and Groundwater Volume Treated by 100-HX Pump-and-Treat, September 2011 through December 2015.

100-FR-3 Groundwater Operable Unit – Robert Evans/Mary Hartman

- CERCLA Process Implementation:
  - ✓ Continued planning to prepare for mobilization and installation of 8 new monitoring wells associated with the remedial action.
- Monitoring & Reporting:
  - ✓ October trichloroethene concentrations in southwestern 100-F Area wells continued in previously established ranges (199-F7-1 and 699-77-36 in Figure F-1). A lower level (1.9 µg/L) was detected in well 699-71-30, located 2 km south of 100-F.

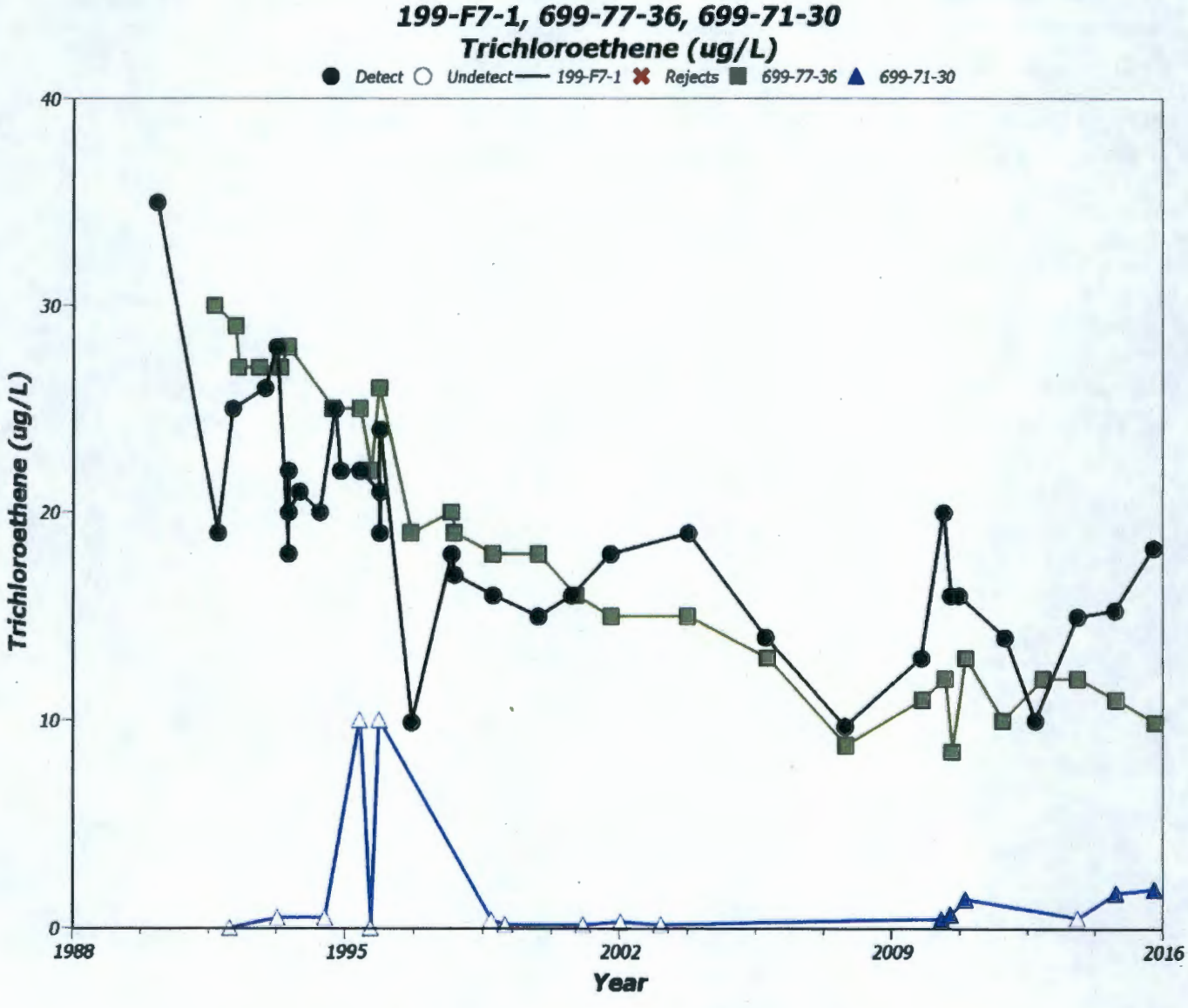


Figure F- 1. Trichloroethene in Selected 100-FR-3 Monitoring Wells.

300-FF-5 Groundwater Operable Unit – Patrick Baynes/Virginia Rohay/Randy Hermann

- CERCLA Process Implementation:
  - ✓ Nothing to report.
- Remedial Actions:
  - ✓ Nothing to report.
- Monitoring & Reporting:
  - ✓ 300 Area Industrial Complex: All 12 wells were sampled as scheduled on either December 4 or December 6, 2015. The next sampling event is scheduled for March 2016.
  - ✓ 618-10 Burial Ground/316-4 Crib: All three wells were sampled as scheduled on December 6, 2015. The next sampling event is scheduled for December 2016.
  - ✓ 618-11 Burial Ground: The next sampling event is scheduled for October 2016.
  - ✓ 300 Area Process Trenches (316-5) RCRA Monitoring: All 8 wells were sampled on either December 4 or December 6, 2015. The next sampling event is scheduled for January 2016.

Hanford Sampling Program Information

Table 1. Wells, Aquifer Tubes, and Springs in the River Corridor Areas Successfully Sampled In December 2015

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
199-B2-14	77-D	199-D3-2	199-H1-1	199-K-203	199-N-165	699-S31-E10A	399-1-1
		199-D4-1	199-H1-2	199-K-204	199-N-71	699-S31-E10C	399-1-10A
		199-D4-14	199-H1-25		C6132	699-S31-E8A	399-1-10B
		199-D4-22	199-H1-34		C6323	699-S36-E13A	399-1-16A
		199-D4-23	199-H1-36		C7881	699-S37-E14	399-1-16B
		199-D4-25	199-H1-43		C7934	699-S41-E12	399-1-17A
		199-D4-27	199-H1-45		C7935	699-S42-E8A	399-1-17B
		199-D4-31	199-H1-7		C7936		399-1-18A
		199-D4-32	199-H3-2A		C7937		399-1-18B
		199-D4-36	199-H3-2C		C7938		399-1-24
		199-D4-38	199-H4-10		C7939		399-1-24
		199-D4-4	199-H4-11		N116mArray-0A		399-1-24
		199-D4-48	199-H4-12A		N116mArray-10A		399-1-25
		199-D4-62	199-H4-13		N116mArray-11A		399-1-25
		199-D4-7	199-H4-45		N116mArray-15A		399-1-25
		199-D5-103	199-H4-5		N116mArray-1A		399-1-36
		199-D5-104	199-H4-63		N116mArray-2A		399-1-36
		199-D5-123	199-H4-64		N116mArray-3A		399-1-36
		199-D5-125	199-H4-65		N116mArray-4A		399-1-37
		199-D5-126	199-H4-69		N116mArray-6A		399-1-37
		199-D5-131	199-H4-70		N116mArray-8A		399-1-37
		199-D5-145	199-H4-75		N116mArray-9A		399-1-65
		199-D5-146	199-H4-77		NVP1-1		399-1-65
		199-D5-15	199-H4-8		NVP1-2		399-1-65
		199-D5-16	199-H4-83		NVP1-3		399-1-66
		199-D5-34	199-H4-90		NVP1-4		399-1-66
		199-D5-38	199-H4-91		NVP1-5		399-1-66
		199-D5-39	48-M		NVP2-115.1		399-1-67
		199-D5-43	48-S		NVP2-115.4		399-1-67
		199-D7-3	49-D		NVP2-115.7		399-1-67
		199-D7-6	AT-H-1-D		NVP2-116.0		399-1-69
		199-D8-5	AT-H-1-M		NVP2-116.3		399-1-69
		199-D8-53	AT-H-1-S				399-1-69
		199-D8-54A	AT-H-2-D				399-1-7
		199-D8-54B	AT-H-2-M				399-1-70
		199-D8-68	AT-H-2-S				399-1-70
		199-D8-69	AT-H-3-D				399-1-70
		199-D8-70	AT-H-3-S				399-1-71

Table 1. Wells, Aquifer Tubes, and Springs in the River Corridor Areas Successfully Sampled In December 2015

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
		199-D8-72	C5682				399-1-71
		199-D8-88	C6299				399-1-71
		199-D8-90	C6300				399-1-72
		199-D8-91	C7649				399-1-72
		199-D8-95	C7650				399-1-72
		199-D8-96					399-1-73
		199-D8-97					399-1-73
		199-D8-98					399-1-73
		199-H1-5					399-1-74
		199-H4-80					399-1-74
		199-H4-81					399-1-74
		199-H4-82					399-1-75
		36-S					399-1-75
		38-D					399-1-75
		38-M					399-1-76
		AT-D-1-D					399-1-76
		AT-D-1-M					399-1-76
		AT-D-1-S					399-1-77
		AT-D-2-M					399-1-77
		AT-D-2-S					399-1-77
		AT-D-3-D					399-1-78
		AT-D-3-M					399-1-78
		AT-D-3-S					399-1-78
		AT-D-4-D					399-1-79
		AT-D-4-M					399-1-79
		AT-D-4-S					399-1-79
		AT-D-5-D					399-1-80
		AT-D-5-M					399-1-80
		C6266					399-1-80
		C6267					399-1-81
		C6268					399-1-81
		C6269					399-1-81
		C6270					399-1-82
		C6271					399-1-82
		C6272					399-1-82
		C6275					399-1-83
		C6278					399-1-83
		C6281					399-1-83
		C6282					399-1-84
		DD-06-2					399-1-84

Table 1. Wells, Aquifer Tubes, and Springs in the River Corridor Areas Successfully Sampled In December 2015

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
		DD-06-3					399-1-84
		DD-12-2					399-1-85
		DD-12-4					399-1-85
		DD-15-2					399-1-85
		DD-15-3					399-1-86
		DD-15-4					399-1-86
		DD-16-3					399-1-86
		DD-16-4					399-1-87
		DD-17-2					399-1-87
		DD-17-3					399-1-87
		DD-39-1					399-2-1
		DD-41-1					399-2-2
		DD-41-2					399-3-9
		DD-41-3					399-4-10
		DD-42-2					399-4-14
		DD-42-3					399-4-7
		DD-42-4					399-8-1
		DD-43-2					399-8-5A
		DD-43-3					699-S19-E13
		DD-44-3					699-S27-E9A
		DD-44-4					699-S28-E12
		Redox-1-3.3					699-S29-E16A
		Redox-1-6.0					699-S6-E4A
		Redox-2-6.0					699-S6-E4B
		Redox-3-3.3					699-S6-E4E
		Redox-3-4.6					699-S6-E4K
		Redox-4-3.0					
		Redox-4-6.0					

Table 2. Fiscal Year 2015 and 2016 Sample Trips in the River Corridor Areas Awaiting at the end of December 2015

Quarter Scheduled	GWIA	Sample Site or Type	Site Name	Schedule Date	Frequency	Months Remain	Status	Comment
FY 2015 Q1	100-KR	SPRING	SK-077-1	10/1/2014	Annual	0	Late	Review for Cancelation
FY 2015 Q3	100-HR-D	AQUIFER TUBE	DD-39-1	5/1/2015	Biannual	0	Late	Review for Cancelation
FY 2015 Q4	100-NR	WELL	199-N-333	9/1/2015	Quarterly	0	Late	Maintenance Required, Unsuccessful 9/18/2015
		WELL	199-N-343	9/1/2015	Annual	8		Maintenance Required, Unsuccessful 9/30/2015
		AQUIFER TUBE	C6134	7/20/2015	Annual	6		Access Restricted
		AQUIFER TUBE	C6331	9/1/2015	Annual	8		
		AQUIFER TUBE	N116mArray-0A	7/20/2015	Quarterly	0	Late	Review for Cancelation
		AQUIFER TUBE	N116mArray-0A	9/1/2015	Quarterly	0	Late	Review for Cancelation
FY 2016 Q1	100-HR-D	AQUIFER TUBE	36-M	11/1/2015	Annual	10		
	100-HR-H	WELL	199-H1-8	10/1/2015	Quarterly	0	Late	Awaiting Drilling
	100-KR	SPRING	100-K SPRING 68-1	10/1/2015	Annual	9		
		WELL	199-K-124A	11/1/2015	Biannual	4		
		WELL	199-K-188	11/1/2015	Quarterly	1		
		WELL	199-K-23	11/1/2015	Biannual	4		
		WELL	199-K-36	11/1/2015	Biannual	4		
		AQUIFER TUBE	AT-K-4-M	10/1/2015	Annual	9		
	100-NR	SPRING	River water adjacent to C6317/18/19	10/1/2015	Annual	9		
		SPRING	River water adjacent to C7934/35/36	10/1/2015	Annual	9		
		SPRING	River water adjacent to C7937/38/39	10/1/2015	Annual	9		
FY 2016 Q1	1100-EM	WELL	699-S30-E15A	12/1/2015	Annual	11		

Table 3. Groundwater Sampling Locations in the River Corridor Areas Scheduled to be sampled in January 2015

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
199-B4-14	699-87-42A	199-D4-101	199-H1-8	199-K-117A	199-N-167		399-1-10A
199-B4-16		199-D4-19	199-H4-6	199-K-166	199-N-169		399-1-10B
199-B4-18		199-D4-26	199-H4-92	199-K-173	199-N-171		399-1-16A
199-B4-7		199-D4-55	199-H4-93	199-K-18	199-N-172		399-1-16B
199-B5-10		199-D4-65	199-H5-16	199-K-20	199-N-173		399-1-17A
199-B5-11		199-D4-77	699-100-43B	199-K-202	199-N-183		399-1-17B
199-B5-12		199-D4-86	699-101-45	199-K-205	199-N-19		399-1-18A
199-B5-13		199-D4-92	699-88-41	199-K-207	199-N-3		399-1-18B
199-B5-14		199-D4-93	699-89-35	199-K-221	199-N-56		699-13-1A
199-B5-6		199-D4-95	699-90-37B	199-K-222	199-N-96A		699-13-1C
199-B5-9		199-D4-96	699-90-38	C7641	C6132		699-13-3A
199-B8-9		199-D4-97	699-97-47B	C7642	C6135		
		199-D4-98	699-97-60	C7643	C7934		
		199-D4-99			C7935		
		199-D5-101			C7936		
		199-D5-103			N116mArray-0A		
		199-D5-104					
		199-D5-127					
		199-D5-13					
		199-D5-130					
		199-D5-14					
		199-D5-145					
		199-D5-146					
		199-D5-153					
		199-D5-154					
		199-D5-159					
		199-D5-20					
		199-D5-32					
		199-D5-33					
		199-D5-34					
		199-D5-36					
		199-D5-37					
		199-D5-39					
		199-D8-101					
		199-D8-4					
		199-D8-89					
		699-97-61					

100/300 Areas Unit Managers Meeting
January 14, 2016

Documents for AR Submission

Number	Title	Referencing Doc/Driver
DOE/RL-2003-38, 2015	100-BC-5 Operable Unit Sampling and Analysis Plan, Rev. 2	
ECF-Hanford-13-0020, Rev. 3, 2015	Process for Constructing a Three-dimensional Geological Framework Model of the Hanford Site 100 Area	SGW-46279, Rev. 3
SGW-46279, Rev. 3, 2015	Conceptual Framework and Numerical Implementation of 100 Areas Groundwater Flow and Transport Model, Rev. 3	referenced in the 100-KR-4 and/or 100-HR-3 Interim Action RD/RAWP, O&M, and SAP
DOE/RL-2013-35-ADD7, Rev. 0, 2016	100-HR-3 Groundwater Operable Unit Well Installation Sampling and Analysis Plan, Addendum 7: Wells (199-D5-160, 199-D5-161, 199-D8-102, 699 97 47C, 699-88-41A, 699-93-37A, 699-90-47B, and 699-90-45B)	
DOE/RL-2003-93, Rev. 1	Remedial Design Report/Remedial Action Work Plan for the 100-N Area	100-N RI

Attachment 2

100K Area Report
100/300 Area Unit Manager Meeting
January 14, 2016

RL-0012 Sludge Treatment Project

TPA Milestone **M-016-177**, *Complete 105-KW sludge transfer equipment installation.*
(9/30/17) – On Schedule

- Statements of Work for ECRTS equipment procurement have been grouped into 20 separate procurement sets. Eleven sets are in progress, seven have been completed, one remains to be developed, and one has been canceled.
- The first 1 of 24 total STCSs has been fabricated and received. The fabrication contractor started work on task 2 which includes the delivery of 12 STSCs in 2016.
- RL has completed initial review of the updated Preliminary Documented Safety Analysis (PDSA). KW Basin integrated Documented Safety Analysis (DSA) development has begun. The integrated DSA combines the ECRTS PDSA and the KW Basin Final Safety Analysis Report into a single safety basis document.
- K West Basin Annex construction acceptance testing is scheduled to complete by the end of January.
- The construction subcontractor initiated preparatory work for Engineered Container re-lidding in the K West Basin.

TPA Milestone **M-016-175**, *Begin sludge removal from 105-KW Fuel Storage Basin*
(9/30/18) – On Schedule

- Preparation of ECRTS test specifications and production hardware for the upcoming MASF Pre-operational test (MPAT) are in-progress

TPA Milestone **M-016-176**, *Complete sludge removal from 105-KW Fuel Storage Basin*
(12/31/19) – On Schedule

- Initiation of this milestone follows completion of Milestone M-016-175.

TPA Milestone **M-016-178**, *Initiate deactivation of 105-KW Fuel Storage Basin.*
(12/31/19) – On Schedule

- The following pre-deactivation actions are underway:
    - Integrated Water Treatment System garnet filter media removal system design continues.
    - Sand filter backwash solids sample analyses being performed by PNNL are nearly complete and a summary letter report is being prepared.
    - Dose to curie modeling of basin below-water debris continues - utilizing dose rates, buoyant weights, and observations collected by KW Basin Operations. The basin East Bay is complete. Center and West Bay modeling is approximately 50% complete. This characterization data will become a key input to the calculation to demonstrate compliance with ERDF waste acceptance criteria for 105-KW Basin.

TPA Milestone **M-016-173,** *Select K Basin sludge treatment and packaging technology and propose new interim sludge treatment and packaging milestones.*
(9/30/22) – On Schedule

- The preliminary treatment and packaging site evaluation report and the remedial design/remedial action work plan (DOE/RL-2011-15) for sludge treatment and packaging have been issued.

TPA Milestone **M-016-181,** *Complete deactivation, demolition and removal of 105-KW Fuel Storage Basin*
(9/30/23) – On Schedule

TPA Milestone **M-016-186,** *Initiate soil remediation under the 105-KW Fuel Storage Basin.*
(12/31/23) – On Schedule

RL-0041 K Facility Demolition and Soil Remediation

TPA Milestone **M-016-143**, *Complete the interim response actions for 100 K Area within the perimeter boundary and to the Columbia River for Phase 2 actions. Phase 2 is defined in the 100 K Area RD/RA Work Plans.*
(9/30/24) – On Schedule

- Excavation of 9 waste sites within the AB waste site area near the 100KE head house began in October. The waste sites were excavated to ten feet in October and in-process samples were taken on November 20, 2015. Sample results were returned on December 1. Additional analysis for metals using the toxicity characteristic leaching procedure (TCLP) is being performed on samples from two of the waste sites. Three more waste sites were added to the subcontract for remedial action (remove, treat, dispose) in the AB area in November. Those sites were also excavated to ten feet and in-process sampling of them is scheduled for January 15, 2016.
- Thirteen additional AB area waste sites have been added to the remedial action contract and excavation of those sites is underway.

TPA Milestone **M-093-28**, *Submit a change package for proposed interim milestones for 105-KE and 105-KW Reactor Interim Safe Storage*
(12/31/19) - On Schedule

TPA Milestone **M-093-27**, *Complete 105-KE and 105-KW Reactor Interim Safe Storage in Accordance with the Removal Action Work Plan.*
(9/302024) - On Schedule

TPA Milestone **M-016-00C**, *Complete all response actions for the 100 K Area*
(9/30/24) - On Schedule

Attachment 3

January 14, 2016 Unit Manager's Meeting
Closure Operations Status

100 Areas (B/C, D, H, N)

- Continuing to support revegetation activities at 100-D.
- Continuing design activities to isolate export water lines to D, F, H, and N reactor areas.
- Continuing planning for remediation of 600-385 waste site.
- Continuing planning for remediation of 100-N-83 waste site.
- Received cultural clearances for 100-N-83 and 100-N area MR sites.

618-10

Trench Remediation

- Continuing primary/secondary sorting, drum retrieval, and load-out.
- Continuing processing waste drums in grout, including UOX, Debris, and concrete shielded drums.
- Continuing NDA and drum characterization activities
- DOE has authorized additional excavation volume to retrieve drums near the VPU field

VPU Remediation

- Seventeen (17) VPUs total have been augered, all in row 2 and one in row 3. In-situ characterization has been completed on 12 VPU's in accordance with the SAP requirements.
- Results of the in-situ characterization have, thus far, shown that the ranking calculation has been conservative in regard to radiological contamination. This includes the highest ranked VPU in WCH's current remediation scope (VPU #24) which has also met the ERDF Waste Acceptance Criteria.
- Low-Level Waste (LLW) retrieval mockups are in progress. The project plans to complete a readiness assessment and begin LLW retrieval in the April-May timeframe.

300 Area

324 Building

- Continuing with close out of the 300-296 AREVA contract.
- Completed troubleshooting of 324 Exhaust Plenum Fan 975 (bearing replacement required).
- Reinstalled the pressure flow switch on the 324 fire riser.
- Continuing to work with DOE and Ecology on RCRA Part A Permit and Closure Plan

300-288:2

- Continuing with remediation of east side and west side.
- Remediation of the west side (Phase II) of waste site 288:2 recently added to WCH scope of work.

300 Area Removal Action Work Plan

- EPA comments have been incorporated into RAWP and RAWP has been returned to DOE for review and approval.

WSRFs/CVPs

- 300-277 Pending

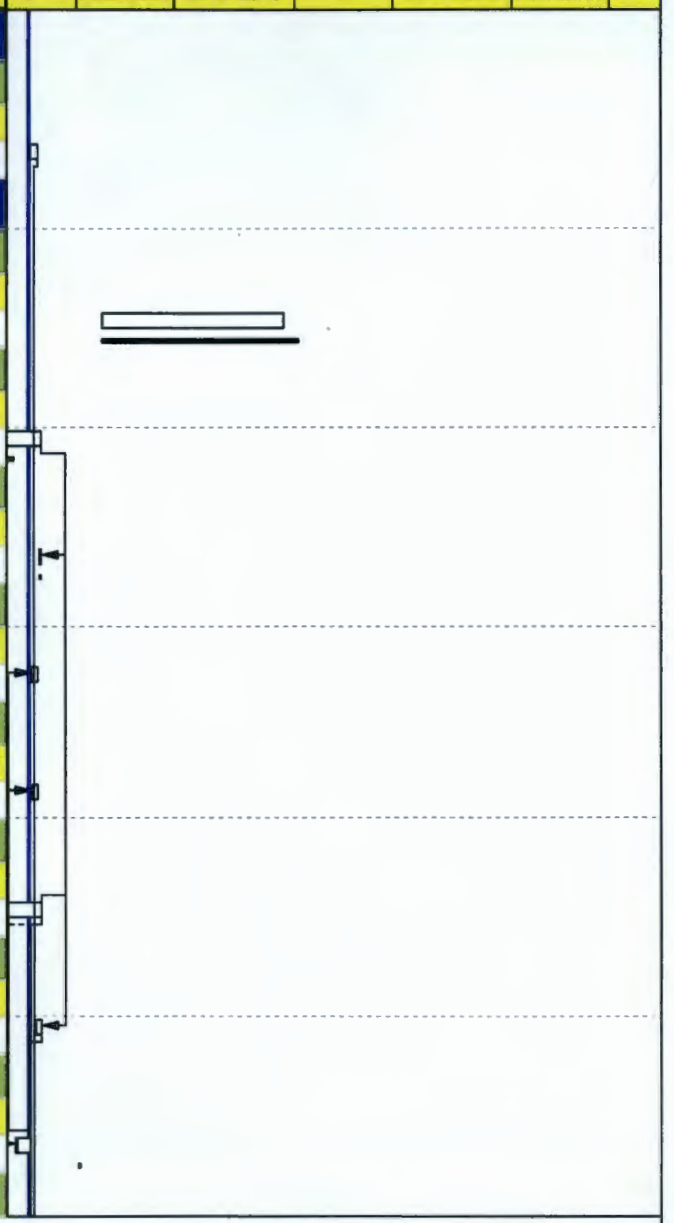
Attachment 4

Data Date: 11-Jan-16

100 Area UMM Schedule

12-Jan-16 09:14

Activity ID	Activity Name	Start	Finish
100 B/C			
100-B-35			
Revegetation			
BB524E10	Reveg 100-B-35:1 (11.56 Acres)	11-Jan-16*	13-Jan-16
100 D			
100-D-100 Tier 3			
Special Projects			
100D100A408	Well Replacement at 100-D (REA-184) 4 wells	01-Feb-16*	24-Mar-16
100-D-100			
Revegetation			
100D100A432	Reveg 100-D-100 - 54.06 acres (incl stockpiles)	11-Nov-15 A	14-Jan-16
120-D-2			
Revegetation			
CBB0404E	Reveg 120-D-2 (0.5 acres)	14-Jan-16	14-Jan-16
100-D-104			
Revegetation			
D104RVGFY16	Reveg 100-D-104 Stockpile (2.75 acres)	12-Jan-16*	13-Jan-16
100-D-30			
Revegetation			
D30RVGFY16	Reveg 100-D-30 stockpile (2.75 acres)	12-Jan-16*	13-Jan-16
100-D-31:11/12			
Revegetation			
CBB0516J	Reveg 100-D-31:11/12 (21.41 acres)	09-Nov-15 A	14-Jan-16
100-D-50:7			
Revegetation			
RD05507140	Reveg 100-D-50:7 (5.74 acres)	13-Jan-16	14-Jan-16
100-D-50:9			
Revegetation			
RD05509140	Reveg 100-D-50:9 (1.32 acres)	07-Jan-16 A	11-Jan-16
100-D-72			



Current Bar Labels % Complete
Project Baseline Milestone

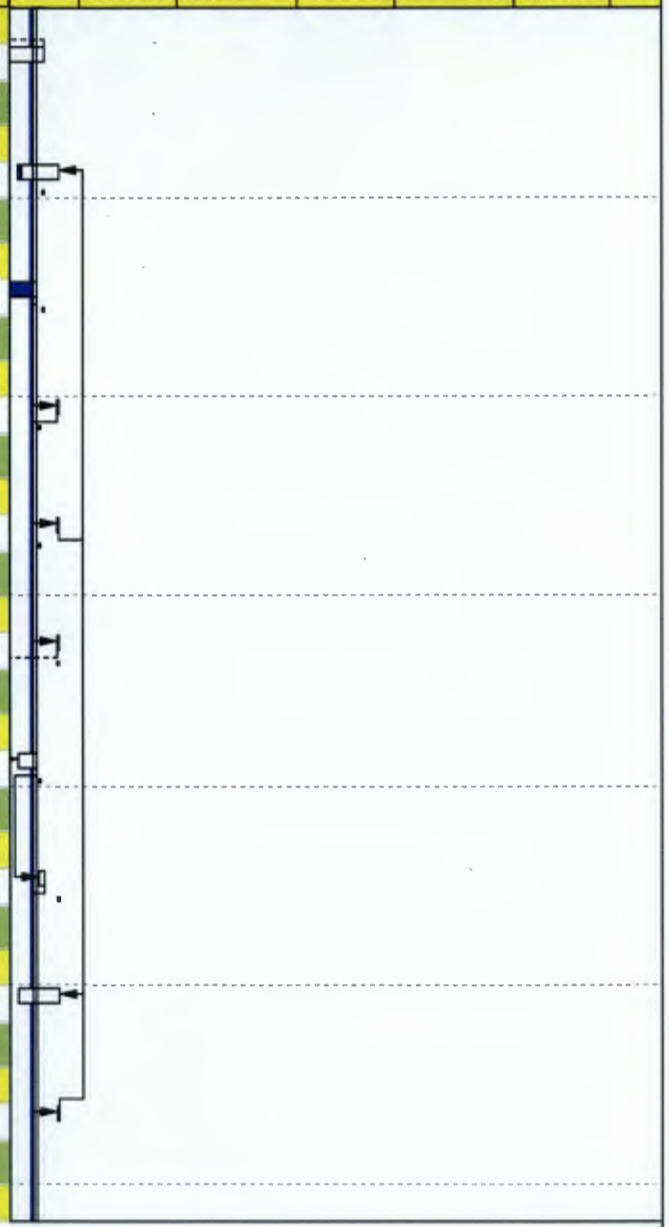
Closure Operations

Data Date: 11-Jan-16

100 Area UMM Schedule

12-Jan-16 09:14

Activity ID	Activity Name	Start	Finish
Revegetation			
CBB0537E	Reveg 100-D-72 (0.83 acres)	11-Nov-15 A	14-Jan-16
118-D-5			
Revegetation			
CBC0608E	Reveg 118-D-5 (0.25 acres)	07-Jan-16 A	18-Jan-16
118-DR-1			
Revegetation			
CBC0609E	Reveg 118-DR-1 (1.0 acres)	17-Dec-15 A	12-Jan-16
100-D-97			
Revegetation			
CBB0548E	Reveg 100-D-97 (0.37 acres)	18-Jan-16	18-Jan-16
100-D-69			
Revegetation			
CBB0535E	Reveg 100-D-69 (2.82 Acres)	18-Jan-16	18-Jan-16
100-D-99			
Revegetation			
CBB0550E	Reveg 100-D-99 (0.37 Acres)	18-Jan-16	18-Jan-16
100-D-85:2			
Revegetation			
CBB0544E	Reveg 100-D-85:2 (5.79 acres)	07-Jan-16 A	12-Jan-16
100-D-86:1			
Revegetation			
CBB0545E	Reveg 100-D-86:1 (4.96 acres)	13-Jan-16	14-Jan-16
100-D-86:3			
Revegetation			
CBB0546E	Reveg 100-D-86:3 (4.33 acres)	07-Jan-16 A	18-Jan-16
100-D-106			
Revegetation			
CBC0518E	Reveg 100-D-106 (1.37 Acres)	18-Jan-16	18-Jan-16
100-D-75:1			
Revegetation			



Current Bar Labels % Complete
Project Baseline Milestone

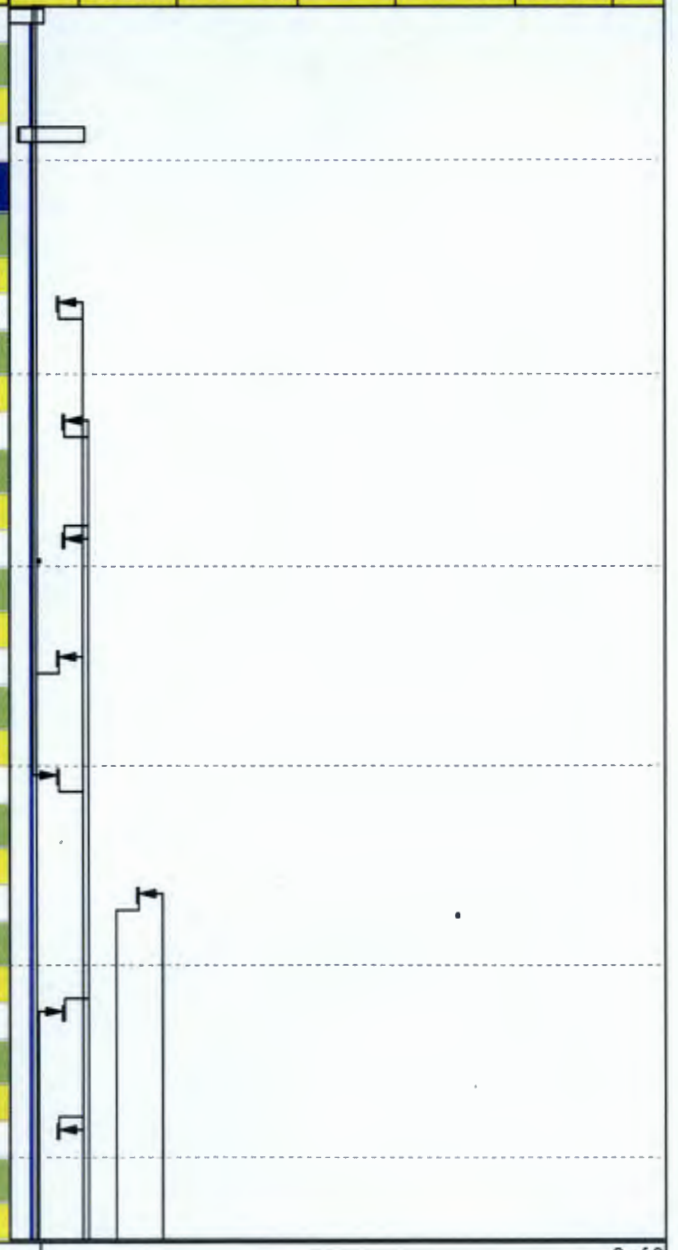
Closure Operations

Data Date: 11-Jan-16

100 Area UMM Schedule

12-Jan-16 09:14

Activity ID	Activity Name	Start	Finish
CBB0558E	Reveg 100-D-75:1 (6.11 acres)	17-Dec-15 A	14-Jan-16
100-D			
Revegetation			
DRVGDSTR	Reveg 100-D Disturbed Areas (12.0 acres)	07-Jan-16 A	26-Jan-16
100 H			
100-H-59:2			
Revegetation			
H592101	Reveg 100-H-59:2 (2.5 acres)	18-Jan-16	18-Jan-16
100-H-59:1			
Revegetation			
HB528E	Reveg 100-H-59:1 (1.0 Acres)	20-Jan-16	20-Jan-16
100-H-51:6			
Revegetation			
HB526E10	Reveg 100-H-51:6 (1.60 Acres)	20-Jan-16	20-Jan-16
116-H-5			
Revegetation			
HB503E20	Reveg 116-H-5 (3.0 acres)	18-Jan-16	18-Jan-16
116-H-9			
Revegetation			
HB404E20	Reveg 116-H-9 (0.40 acre)	18-Jan-16	18-Jan-16
118-H-4			
Revegetation			
HC604E20	Reveg 118-H-4 (0.22 acre)	10-Feb-16	10-Feb-16
100-H-4			
Revegetation			
HB910F1	Reveg 100-H-4 (1.2 acres) (tied with H-43)	20-Jan-16	20-Jan-16
100-H-3			
Revegetation			
HB900F1	Reveg 100-H-3 (0.3 acres) (tied with H-43)	18-Jan-16	18-Jan-16
100-H-42			
Revegetation			



Current Bar Labels % Complete

Project Baseline Milestone

Closure Operations

Data Date: 11-Jan-16

100 Area UMM Schedule

12-Jan-16 09:14

Activity ID	Activity Name	Start	Finish
HB515E	Reveg 100-H-42 (2.5 acre)	11-Feb-16	11-Feb-16
100-H-44			
Revegetation			
HB517E	Reveg 100-H-44 (1.0 acres)	10-Feb-16	10-Feb-16
100-H-49:1			
Revegetation			
HB524E	Reveg 100-H-49:1 (0.3 Acres)	25-Jan-16	25-Jan-16
100-H-31 Waste Site			
Revegetation			
HB502E	Reveg 100-H-31 (0.33 acre)	18-Jan-16	18-Jan-16
100-H-28:2			
Revegetation			
HB511E07	Reveg 100-H-28:2 (49.0 Acres)	26-Jan-16	10-Feb-16
100-H-28:3			
Special Projects			
HB512A30	Well Replacement - Phase 2 (100-H REA 138) (3 wells)	01-Mar-16*	21-Apr-16
Revegetation			
HB512E	Reveg 100-H-28:3 (4.0 acres)	19-Jan-16	19-Jan-16
100-H-28:4			
Revegetation			
HB513E50	Reveg 100-H-28:4 (4.25 Acres)	21-Jan-16	21-Jan-16
100-H-28:5			
Revegetation			
HB514E	Reveg 100-H-28:5 (4.0 acre)	21-Jan-16	21-Jan-16
100-H-51:1			
Revegetation			
HB525E	Reveg 100-H-51:1 (0.30 Acres)	10-Feb-16	10-Feb-16
100-H-51:2			
Revegetation			
HB520E	Reveg 100-H-51:2 (1.25 acre)	20-Jan-16	20-Jan-16
100-H-51:3			

Current Bar Labels % Complete
Project Baseline Milestone

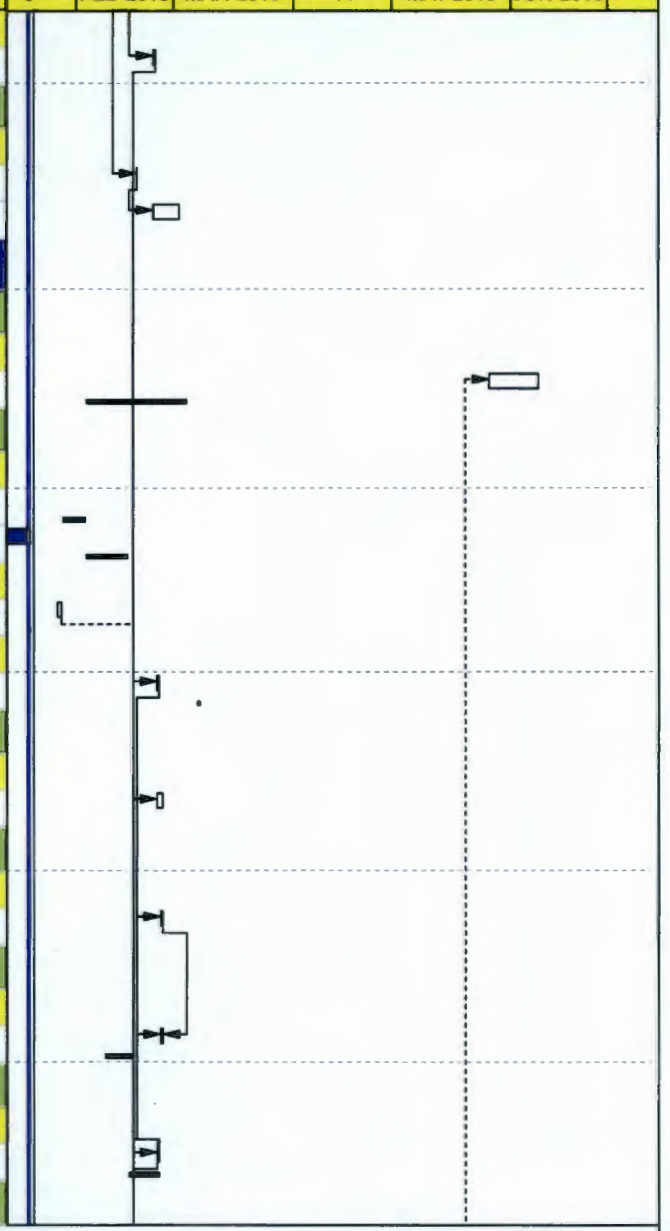
Closure Operations

Data Date: 11-Jan-16

100 Area UMM Schedule

12-Jan-16 09:14

Activity ID	Activity Name	Start	Finish
Revegetation			
HB526E	Reveg 100-H-51:3 (0.30 Acres)	16-Feb-16	16-Feb-16
100-HR			
Revegetation			
HREVGCTA	Reveg 100-H Trailer Village (0.56 acres)	11-Feb-16	11-Feb-16
HREVGDTRB	Reveg 100-H Disturbed Areas (23.64 acres)	16-Feb-16	23-Feb-16
IU-2/6			
Segment 4 Fence and MR			
Demolition Above Grade			
M513DF011	Seg 4-D/H Culturally Sensitive MR Removal (Near 600-38	23-May-16	06-Jun-16
600-326			
Final Project Closeout			
IU222740	RL/Reg Signature Rev.0 Closure Doc 600-326	02-Dec-15 A	04-Jan-16 A
IU222745	Prepare and Issue Rev.0 Closure Doc 600-326	05-Jan-16 A	11-Jan-16
Backfill			
IU222660	Backfill 600-326 (15 BCM)	19-Jan-16*	20-Jan-16
Revegetation			
IU222680	Reveg 600-326 (0.1 acre)	17-Feb-16	17-Feb-16
600-349 UXO Site			
Revegetation			
6349-E01	Hand seed 600-349 (0.5 acre)	17-Feb-16*	18-Feb-16
600-20			
Revegetation			
IU226210	Reveg 600-20 (3.12 acres)	18-Feb-16	18-Feb-16
600-332			
Revegetation			
IU223680	Reveg 600-332 (1.0 acre) tied with 600-358	18-Feb-16	18-Feb-16
600-358			
Revegetation			
IU226650	Reveg 600-358 (1.43 acres)	17-Feb-16	17-Feb-16
600-385			



Current Bar Labels % Complete
Project Baseline Milestone

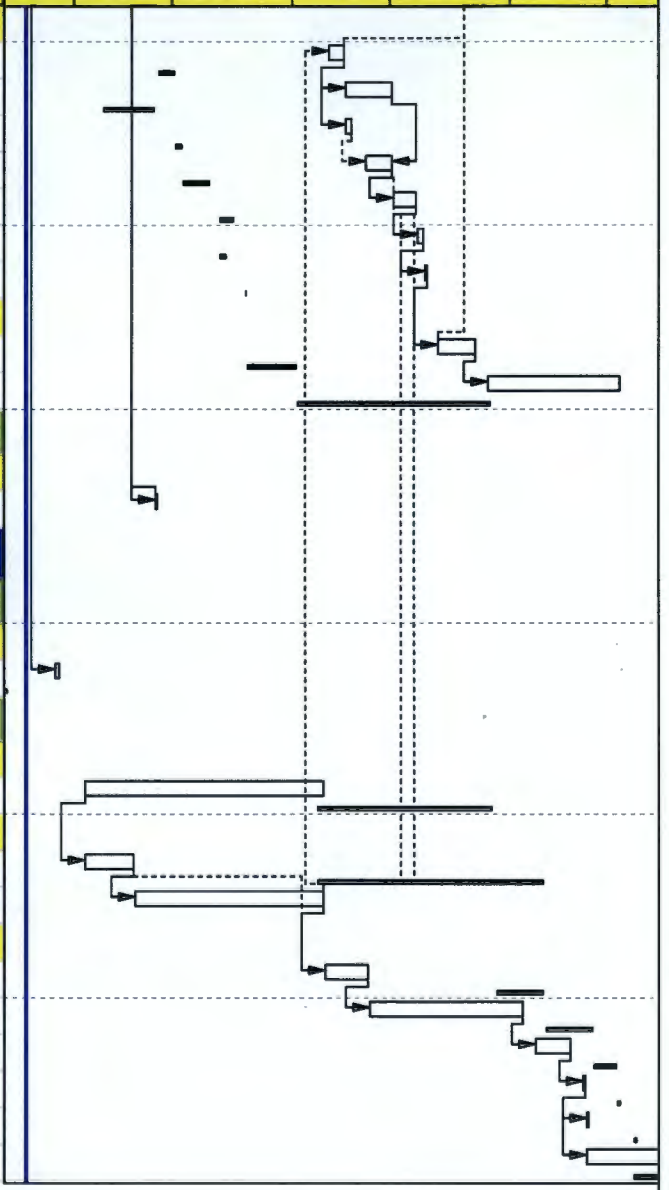
Closure Operations

Data Date: 11-Jan-16

100 Area UMM Schedule

12-Jan-16 09:14

Activity ID	Activity Name	Start	Finish
Excavation			
R-6385-020	600-385 Mob equipment to 100-H	07-Apr-16	11-Apr-16
D-6385-030	Haul sand material (road bedding) to H for 600-385	12-Apr-16	25-Apr-16
R-6385-040	600-385 Walkdown the site with cultural monitor and stake	12-Apr-16	13-Apr-16
R-6385-050	Haul and place sand bedding on road to 600-385	18-Apr-16	25-Apr-16
R-6385-070	Build/place mats on road to 600-385	26-Apr-16	02-May-16
R-6385-080	600-385 Haul and place pit run for equipment access on w	03-May-16	04-May-16
R-6385-090	Set up equipment at waste site 600-385	05-May-16	05-May-16
Loadout			
R-6385-110	Loadout 600-385 (1,280 tons) (8 cans/day)	09-May-16	19-May-16
R-6385-130	Loadout 600-385 (4,480 tons) (10 cans/day)	23-May-16	30-Jun-16
Misc Restoration			
Revegetation			
RVGSG4-477	Apply seeds to SG4-477 (MR) (0.4 acre)	17-Feb-16*	17-Feb-16
100 N			
100-N-96			
Revegetation			
NB5C3E	Reveg 100-N-96 (8.16 Acres)	19-Jan-16	20-Jan-16
100-N-83			
Excavation			
NB5B2A	Excavation - 100-N-83 (20,659 BCM)	28-Jan-16	05-Apr-16
Loadout			
NB5B2B	Loadout - 100-N-83 (9,600 UST) 60 c/d	28-Jan-16	10-Feb-16
NB5B2B10	Loadout - 100-N-83 (35,851 UST) 60 c/d	11-Feb-16	05-Apr-16
WI and Closeout Sampling			
NB5B2D	Prepare Verification Work Instruction - 100-N-83	06-Apr-16	18-Apr-16
NB5B2D02	RL/Reg Review Draft A Work Instr for 100-N-83	19-Apr-16	02-Jun-16
NB5B2D017	Resolve RL/Reg Comments Draft A Work Instr 100-N-83	06-Jun-16	16-Jun-16
NB5B2D03	RL/Reg Sign Rev. 0 Work Instr for 100-N-83	20-Jun-16	20-Jun-16
NB5B2D027	Prepare and Issue Rev 0 Work Instr for 100-N-83	21-Jun-16	21-Jun-16
NB5B2D04	Closure Sampling - 100-N-83	21-Jun-16	19-Jul-16



Current Bar Labels % Complete
Project Baseline Milestone

Closure Operations

Attachment 5

WCH Washington Closure Hanford

Meeting Minutes

SUBJECT UNIT MANAGERS' MEETING FOR 300 AREA AND 600 AREA

TO Attendees listed below

FROM Clay McCurley

DATE February 4, 2016

ATTENDEES

Ben Simes, A3-46
Dennis Faulk, A3-46
Elis Eberlein, H0-57
Clay McCurley, N2-02
Jamie Zeisloft, A3-04
John Sands, A5-11
Rudy Guercia, A3-04
John Neath, A3-04
Eric Ison, N2-02
Danny Beers, B1-42
Jeff Lerch, H4-22
Dib Goswami, H0-57

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Document Control H4-11

A meeting on the above subject was held on January 28, 2016 at 10:00 am at Federal Building, 2nd Floor EPA Conference Room. Washington Closure Hanford provided a handout (attached). R. Guercia briefed the attendees on the activities in the 300 Area.

Excavation and closeout activities for 300-288:2 were discussed. A revision to the existing verification work instruction is planned to cover the western portion of the site. Backfill and revegetation activities will not be performed because the site is physically located in an active borrow pit. D. Faulk suggested review of the requirements in the ROD related to backfill and revegetation as part of the selected remedy. R. Guercia indicated he will perform a review and determine the appropriate documented needed to clarify the intentions for 300-288:2.

B. Simes and R. Guercia discussed the design of the 324 building and it was determined that R. Guercia will supply D. Faulk with a disk that contains files of the designs and D. Faulk will forward the disk to B. Simes.

With regard to the batch sampling that WCH is performing for the concreted drum batches at 618-10, B. Simes verbally agreed to reduce the sample frequency from 1 in 4 (25%) to 1 in 20 (5%). C. McCurley indicated he will incorporate this change into ***Acceptance and Treatment Plan for Liquid Anomalies in Bottles and Processing Concrete Drums at the 618-10 Burial Ground*** (WCH-532, Rev. 5) and send to J. Zeisloft and B. Simes for approval.

J. Zeisloft briefed attendees of the progress and issues currently at the 618-10 waste site.

J. Zeisloft signed the signature page for WCH's ***Treatment Plan for Containerized Granular Material at the 618-10 Burial Ground*** (WCH-585). C. McCurley will scan and email the signature page to B. Simes for his signature.

J. Zeisloft signed the signature page for WCH's ***Air Monitoring Plan for the Remediation of the 618-10 Burial Ground*** (PLN-010). C. McCurley will scan and email the signature page to B. Simes for his signature.

J. Sands and D. Goswami discussed groundwater issues. They indicated the discussion involved no new information than that provided at the January 14 UMM and no new agreements were reached.

Closure Project Status
January 28, 2016
VTC Meeting

300 Area

324 Building

- Continuing with close out of the 300-296 AREVA contract.
- Zone 1 HEPA filters recently changed out.
- Continuing to work with DOE and Ecology on RCRA Part A Permit and Closure Plan

300-288:2

- Excavation of east side material is complete. West side material, which was recently added to WCH scope of work, is now being excavated. GPERS and sampling of east side soil to be conducted soon. Planning to revise the existing Work Instruction to also cover the west side and submit for approval.

300 Area Removal Action Work Plan

- Comments have been incorporated into RAWP and RAWP has been returned to DOE and EPA for review and approval.

618-10

Trench Remediation

- Continuing primary/secondary sorting, drum retrieval, and load-out.
- Continuing processing waste drums in grout, including UOX, Debris, and concrete shielded drums.
- Continuing NDA and drum characterization activities
- DOE has authorized additional excavation volume to retrieve drums near VPU field.
- Recently requested from DOE and EPA relief from requirement to sample 25% of batches from concreted drum processing. TCLP metals results to date are orders of magnitude below limit. Awaiting EPA response to request.
- Recently revised ***Treatment Plan for Containerized Granular Material at the 618-10 Burial Ground*** (WCH-585). Awaiting DOE and EPA signatures on the plan's signature page.

VPU Remediation

- Twenty one (21) VPUs have been augered to date including all in row 2 and some in rows 3 and 4. Last VPU augered was No. 45 which ranked highest for VPUs for potential TRU concentration based on cone penetrometer data. Characterization data from this VPU are still being evaluated.
- Augering and characterization activities are now being focused on east end of VPU field to support efforts to retrieve drums that are believed to still be buried there.
- Results of the in-situ characterization have, thus far, shown that the ranking calculation has been conservative in regard to radiological contamination.
- Low-Level Waste (LLW) retrieval mockups are in progress. The project plans to complete a readiness assessment and begin LLW retrieval in April-May timeframe.
- Recently revised 618-10 Air Monitoring Plan (AMP) to incorporate description of how waste will be retrieved from VPUs. Awaiting DOE and EPA approval of AMP.