1230538

179965

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

RECEIVED
JUL 15 2015
EDMC

100/300 AREA UNIT MANAGERS MEETING
APPROVAL OF MEETING MINUTES

June 11, 2015

APPROVAL: _____ Date 7/9/15
for Mark French, DOE/RL (A6-38)
River Corridor Project Manager

APPROVAL: _____ Date 7/9/15
for Mike Cline, DOE/RL (A5-11)
Groundwater Project Manager

APPROVAL: _____ Date 7/9/15
Nina Menard, Ecology (H0-57)
Environmental Restoration Project
Manager

APPROVAL: _____ Date 7-9-15
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

June 11, 2015

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) – The next meeting will be held July 9, 2015, 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 May 14, 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 June 11, 2015, 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 100-B/C, 100-D, 100-H, 100-N, 100-IU-2/6, and 618-10. 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 100-B/C, 100-D, 100-H, 100-N, 100-IU-2/6, and 618-10. 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 100-B/C, 100-D, 100-H, 100-N, 100-IU-2/6, and 618-10 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 action items were documented.

Agreement 1: Attachment 5 provides Ecology's approval to set up a CERCLA storage area at 100-D to manage waste generated during backfill and/or revegetation activities at 100-D

Agreement 1: Attachment 6 provides concurrence of a non-contiguous onsite approval request to send sample waste (PPE, plastic, plastic scoop) from 100-H:28:3, 100-H:5, and 100-H-44 to 100-D while awaiting the sample results.

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 100-B/C, 100-D, 100-H, 100-N, 100-IU-2/6, and 618-10. 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 1 provides status and information for groundwater. Attachment 3 provides status and information for WCH Closure Operations activities at 100-B/C, 100-D, 100-H, 100-N, 100-IU-2/6, and 618-10. 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 7 provides status of the 300 Area Closure Project activities. No issues were identified and no agreements or action items were documented.

ORCHARD LANDS

John Sands reported that comments on the Sampling and Analysis Plan and the Work Plan are pending from Ecology and EPA.

OTHER TOPICS

None.

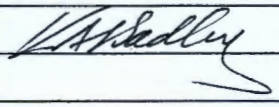
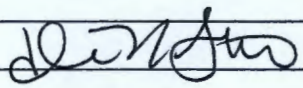
Attachment A

Attachment A

100/300 AREA UNIT MANAGER MEETING
ATTENDANCE
June 11, 2015

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	
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	James P. Hanson
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_G_Morse@rl.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	
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	Alicia L Boyd
Crumpler, Dwayne	DCRU461@ECY.WA.GOV	H0-57	ECO	Dwayne Crumpler WSECY
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	Brian Johnson
Kapell, Arthur	AKAP461@ECY.WA.GOV	H0-57	ECO	
Menard, Nina	NMEN461@ECY.WA.GOV	H0-57	ECO	Nina M. Menard
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	
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	
Adamson, Clinton J	clinton.adamson@wch-rcc.com	X8-02	WCH	
Buckmaster, Mark A	mark.buckmaster@wch-rcc.com	N2-05	WCH	
Carlson, Richard A	richard.carlson@wch-rcc.com	H4-22	WCH	
Capron, Jason	jmcapron@wch-rcc.com	H4-23	WCH	
Cearlock, Christopher S	cscearlo@wch-rcc.com	H4-22	WCH	

Clark, Steven W	steven.clark@wch-rcc.com	H4-23	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	bllawren@wch-rcc.com	T2-03	WCH	
Lerch, Jeffrey A	jeffrey.lerch@wch-rcc.com	H4-22	WCH	
McNeel, Kliss	kliss.mcneel@wch-rcc.com	H4-25	WCH	
Parnell, Scott E	scott.parnell@wch-rcc.com	H4-21	WCH	
Saueressig, Daniel G	Daniel.Saueressig@wch-rcc.com	N2-02	WCH	
Strand, Chris	cpstrand@wch-rcc.com	L4-45	WCH	
Strom, Dean N	dean.strom@wch-rcc.com	N2-02	WCH	
Thompson, Wendy	wsthomps@wch-rcc.com	H4-21	WCH	
Thomson, Jill E	thomson@wch-rcc.com	H4-21	WCH	
Beers, Dan	danny.beers@doh.wa.gov	B142	WDOH	

Attachment B

100/300 Area UMM
Action List
June 11, 2015

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

Attachment C

100/300 Area Unit Manager Meeting
June 11, 2015
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99354
Room C209; 2:00 p.m.

Administrative:

- Approval and signing of previous meeting minutes (May 14, 2015)
- Update to Action Items List
- Next UMM (7/9/2015, Room C209)

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

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

Special Topics/Other

Adjourn

Attachment 1

Remedy Selection & Implementation

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. 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.

Overall Progress Summary

For Fiscal Year 2015 Hanford's overall Site groundwater monitoring program has 3,009 sample trips scheduled for collection. We have successfully completed 1,972 of 2,003 sample trips scheduled for October 2014 through May 2015.

Sample Trip Status

Month Scheduled

Through May 2015 (FY15, month eight) the program successfully completed 229 of the 243 groundwater sampling trips scheduled for May 2015 and 16 trips scheduled for June which were collected in May ahead of schedule. This brings the total number of FY 2015 trips to be collected to 1,988.

The specific wells, aquifer tubes, and springs sampled in the river corridor areas during May 2015 are listed in Table 1

Month Collected

During May 2015, 243 sample trips were successfully collected. This includes the 3 trips scheduled for October 2014 through April 2015, 224 trips scheduled for May, and 16 trips scheduled for June.

This brings the total number of trips sampled during October 2014 through May 2015 to 1,970. Additionally 18 trips scheduled for October 2014 were sampled in September which brings the total number of FY 2015 trips to 1,988. The specific wells, aquifer tubes, and springs sampled in the river corridor areas during May 2015 are listed in Table 1.

Sample Trips Awaiting

Of the sample trips scheduled for May 2015 and prior, there are 35 that are awaiting collection. Of these, 2 P&T wells were not running, 8 require maintenance, 6 have access restrictions, 3 are being evaluated for cancelation or rescheduling, and 16 are awaiting collection at the month end.

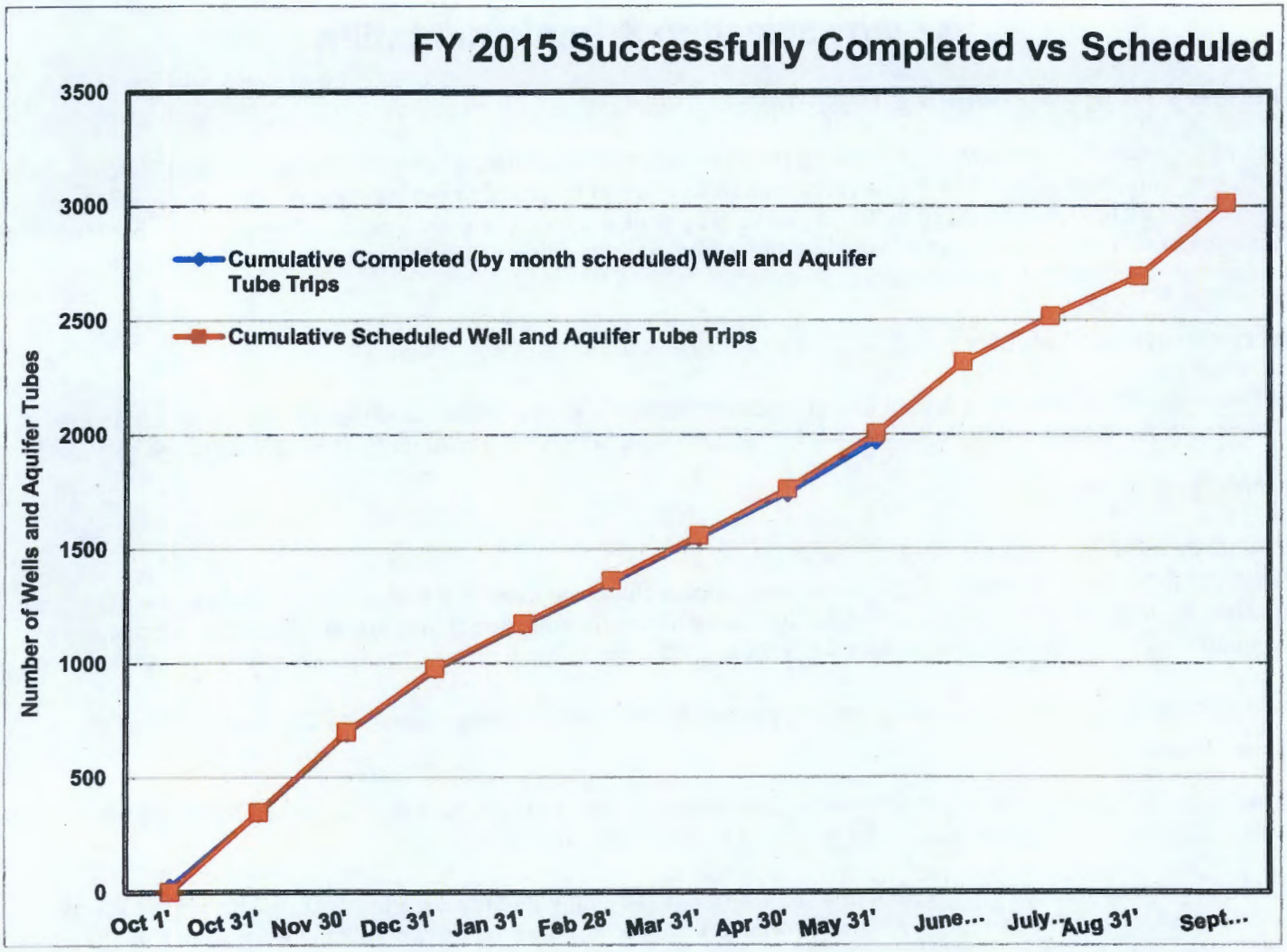
Table 2 presents the sample trips for only the river corridor that were not successfully completed in May. Sample trips in Table 2 are grouped by fiscal month scheduled and groundwater interest area. This table clearly shows that the number of awaiting well trips decreases with time from the schedule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

Upcoming Sample Trips

Sample trips for the river corridor only scheduled for collection in June 2015 (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/.


FY 2015 Successfully Completed vs Scheduled
Number of Wells and Aquifer Tubes
3500
3000
2500
2000
1500
1000
500
0
Cumulative Completed (by month scheduled) Well and Aquifer Tube Trips
Cumulative Scheduled Well and Aquifer Tube Trips
Oct 1'
Oct 31'
Nov 30'
Dec 31'
Jan 31'
Feb 28'
Mar 31'
Apr 30'
May 31'
June...
July...
Aug 31'
Sept...

Operable Unit Specifics

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

- CERCLA Process Implementation:
  - RI/FS, Proposed Plan and Additional Characterization: The RI/FS and PP documents are on hold pending 100-K East Reactor waste site characterization (wells 116-KE-3 and UPR-100-K-1) and modeling.
  - Drilling is continuing at the 116-KE-3 Fuel Storage Basin Crib and Reverse Well. This boring is the first of two implemented at contaminant release areas in the vicinity of the former 105-KE Fuel Storage Basin. Vadose zone sample collection is proceeding according to the sampling instruction. Radiological contamination was encountered in the vadose zone beginning at about the top of the perforated interval in the former reverse well. Drilling advanced to the water table on May 28 2015, where a groundwater grab sample will be collected. The location of the current investigative borehole (199-K-221) is shown in Figure K-1.
  - Monitoring Plan: The Draft A, O&M Plan, RD/RAWP, and Groundwater Monitoring Plan are still on hold pending RL approval. Requirements analysis and evaluation is ongoing.
- Remedial Actions & System Modifications
  - The volume of groundwater treated and mass of Cr(VI) removed for each 100-K P&T system **(KX, KR-4,** and **KW)** during May 2015 are:
    - Treated 64.4 million gallons (62.94 in April).
    - Removal 4.39 kg of hexavalent chromium (4.78 in April)
  - The current influent and effluent Cr(VI) concentrations (measure once weekly) for the three K systems (as measured on June 1, 2015) are:
    - 100-KR4 – Influent = 7 µg/L; Effluent = less than detection
    - 100-KW – Influent = 32 µg/L; Effluent = 4 µg/L
    - 100-KX – Influent = 19 µg/L; Effluent = less than detection
  - For the month of May, 2015, all three pump and treat systems at 100-KR-4 OU operated at 100% (fully on-line) and 30-day average pumping rates of 337 gpm, 322 gpm, and 784 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. One new extraction well (199-K-208) was brought on line at the KX system during this month. This well, located near the head end of 116-K-2 Trench, will expand groundwater extraction capacity in the vicinity of that plume segment.

Table K-1. Summary of the number of extraction and injection wells in the three systems

Wells	KR4		KX		KW		Total	
	2014	2015	2014	2015	2014	2015	2015	Current
Number of extraction wells	12	12	18	19	11	11	42	42
Number of injection wells	5	5	9	9	4	4	18	18

Figure K-1. Location of Well 199-K-221 at KE Reactor.

- All KR-4 system extraction wells and injection wells are currently in service. The hexavalent chromium concentration in extracted water at the KR-4 system is approaching non-detectable conditions. The system remains in service to provide continued hydraulic capture of groundwater inland of the river.

- At the KW system, wells 199-K-132, 199-K-139, and 199-K-166 are currently off-line and in standby mode to allow increased pumping rates along the central axis of the hexavalent chromium plume. Extraction well 199-K-205, located at the former 183-KW Head House vicinity, continues operating at an extraction rate of 120 gpm and provides the highest concentration of hexavalent chromium. All injection wells are in service.

- All KX system extraction wells are in service. Several wells exhibit seasonal decreases in extraction rates as the aquifer approaches the end of the low river stage period. As previously noted, new extraction well 199-K-208 entered service in May.

- Figures K-2 through K-4 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). Concentrations at some locations (e.g., 199-K-205, which still exhibits the highest single well concentration in the KW system at about 60 µg/L) have decreased with continued pumping. This single well continues to account for most of the Cr(VI) entering the KW system at this time due to pumping rate and persistent elevated chromium concentration. At the KW system, pumping is being currently focused on wells along the axis of the Cr(VI) plume where peripheral wells are exhibiting reduced Cr(VI) concentrations.

- RL comments on the annual groundwater monitoring report for 2014 have been incorporated and the Regulatory Draft was submitted to EPA and Ecology on June 9, 2015. June 21, 2015 will conclude the RL comment period on the pump-and-treat reports for 2014 and they will be delivered to EPA and Ecology at the end of June.

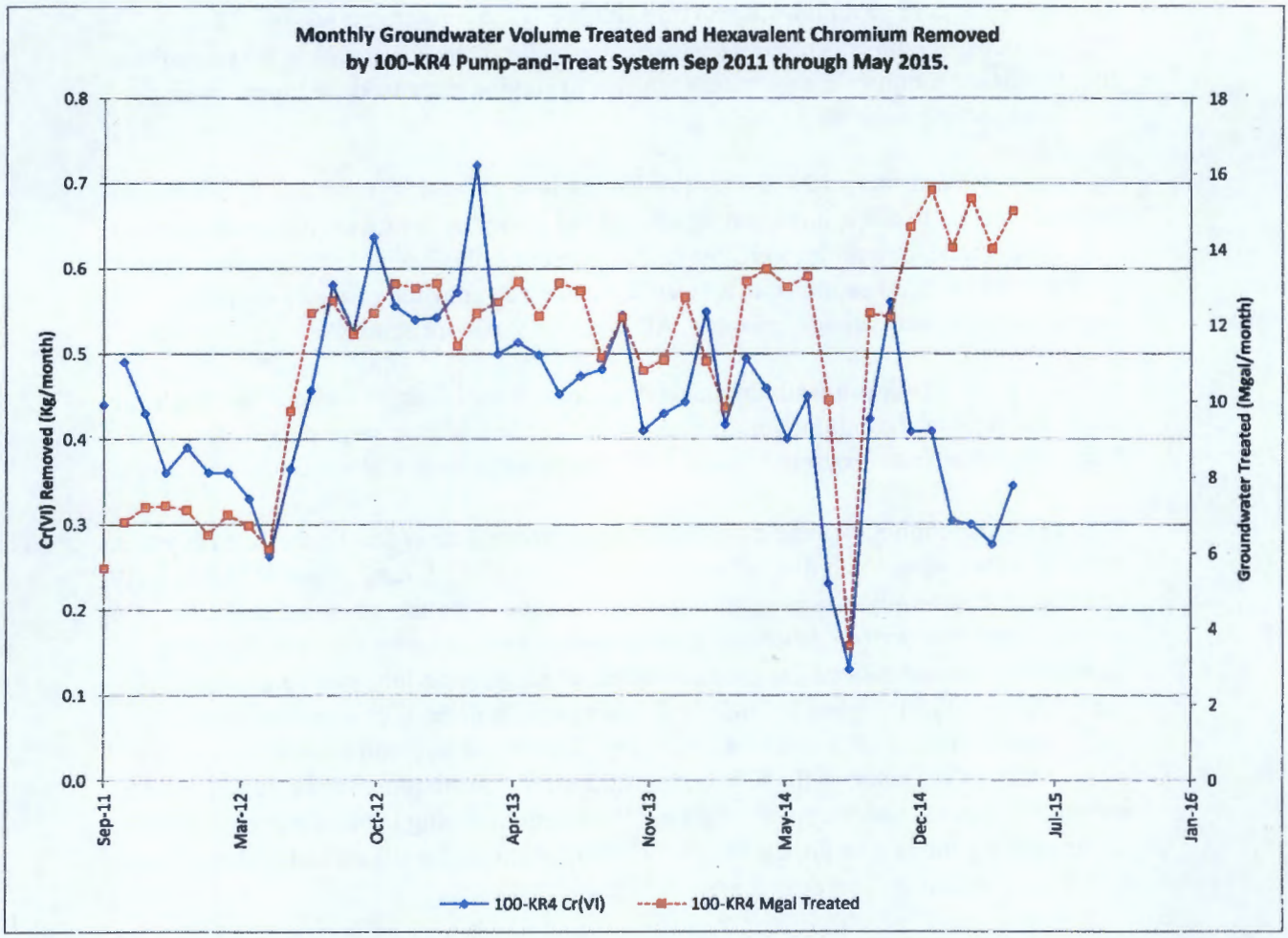


Figure K-2. Monthly Cr(VI) removed and groundwater volume treated by 100-KR4 pump-and-treat, September 2011 through May 2015.

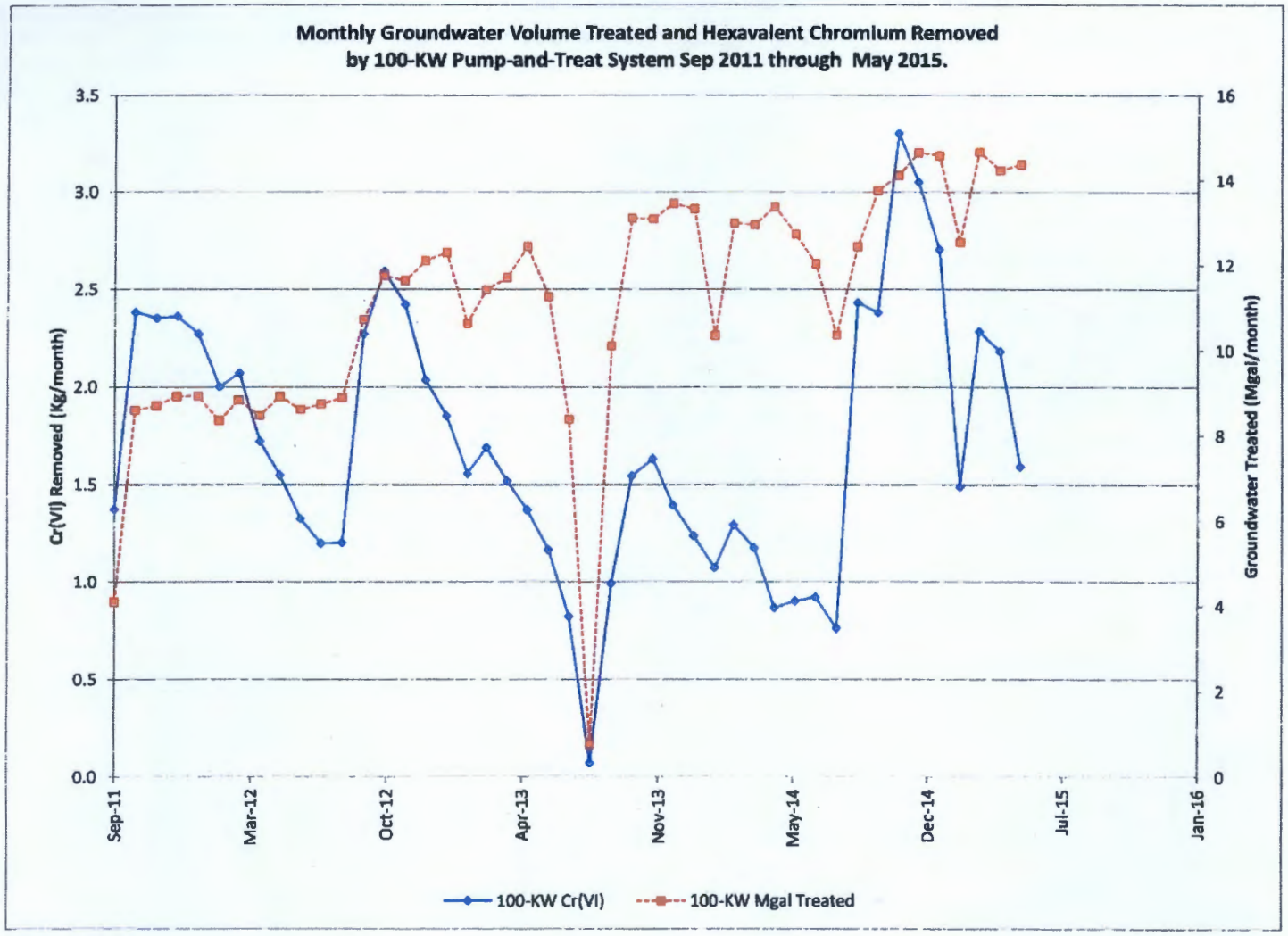


Figure K-3. Monthly Cr(VI) removed and groundwater volume treated by 100-KW pump-and-treat, September 2011 through May 2015.

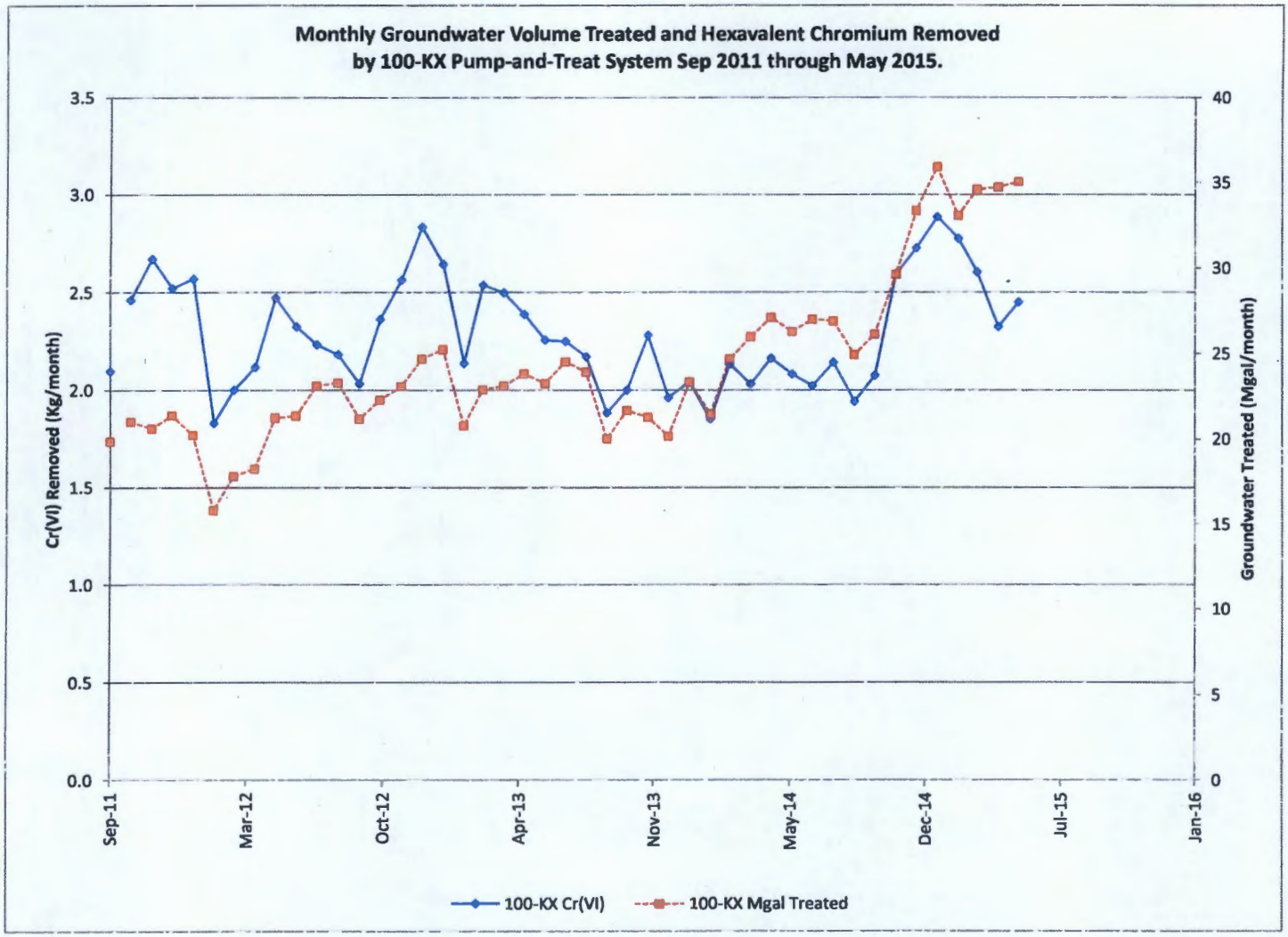


Figure K-4. Monthly Cr(VI) removed and groundwater volume treated by 100-KX pump-and-treat, September 2011 through May 2015.

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:
  - Continued groundwater monitoring and hyporheic zone sampling.
  - The draft groundwater sampling and analysis plan that will cover the 3 to 5 year period between RI completion and groundwater remedy implementation has completed internal CHPRC review. It will be transmitted to RL for review in mid-June and is scheduled to be completed by fall 2015.

- Monitoring & Reporting:
  - The HSPs were sampled as planned in May. Figure BC-1 shows river stage and HSP sample dates.
  - Figure BC-2 shows hexavalent chromium concentrations in the HSPs in April and May 2015, compared to the concentrations at the beginning of sampling (December 2013). Concentrations continued previous trends.
  - Most of the April 2015 groundwater monitoring results have been loaded into HEIS. They are generally on trend with previous results.
  - Vertical profiling of MNA parameters in a pair of monitoring wells was accomplished in May, as described in the RI groundwater SAP. The purpose of this profiling was to look for thin layers with reducing conditions, which would be indicated by lower dissolved oxygen. The results do not show any evidence of this. Details will be discussed with EPA to determine whether additional profiling is necessary.

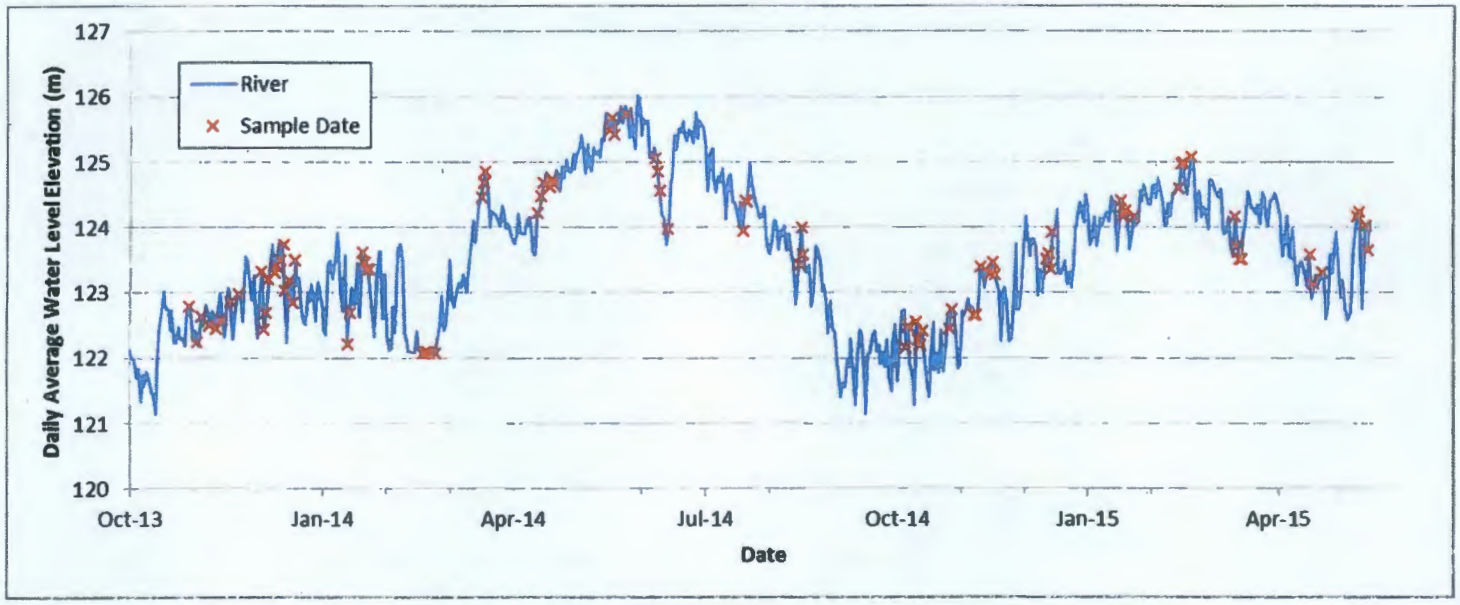


Figure BC-1. River Stage and Sampling Dates for 100-BC Hyporheic Sampling Points

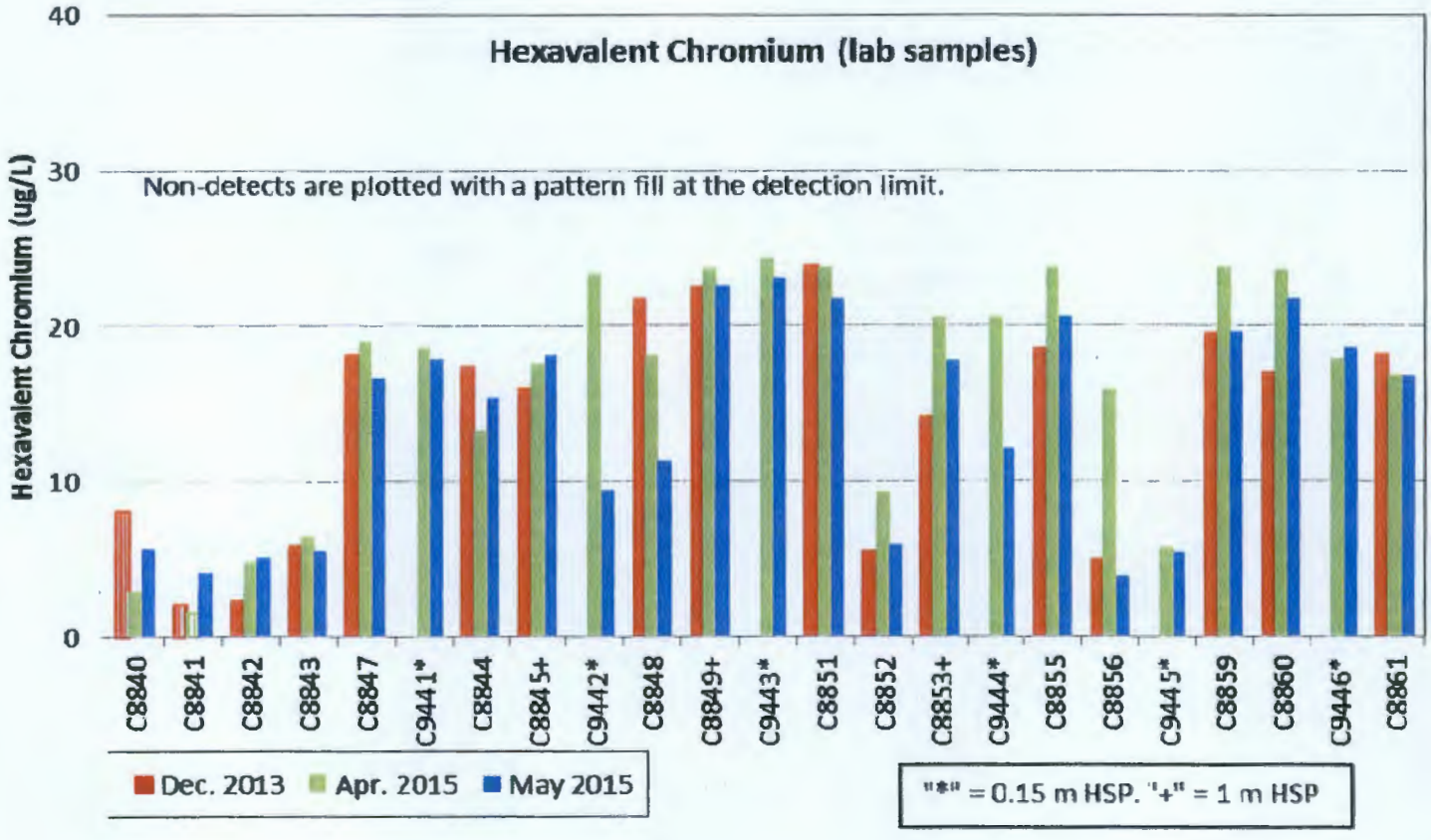


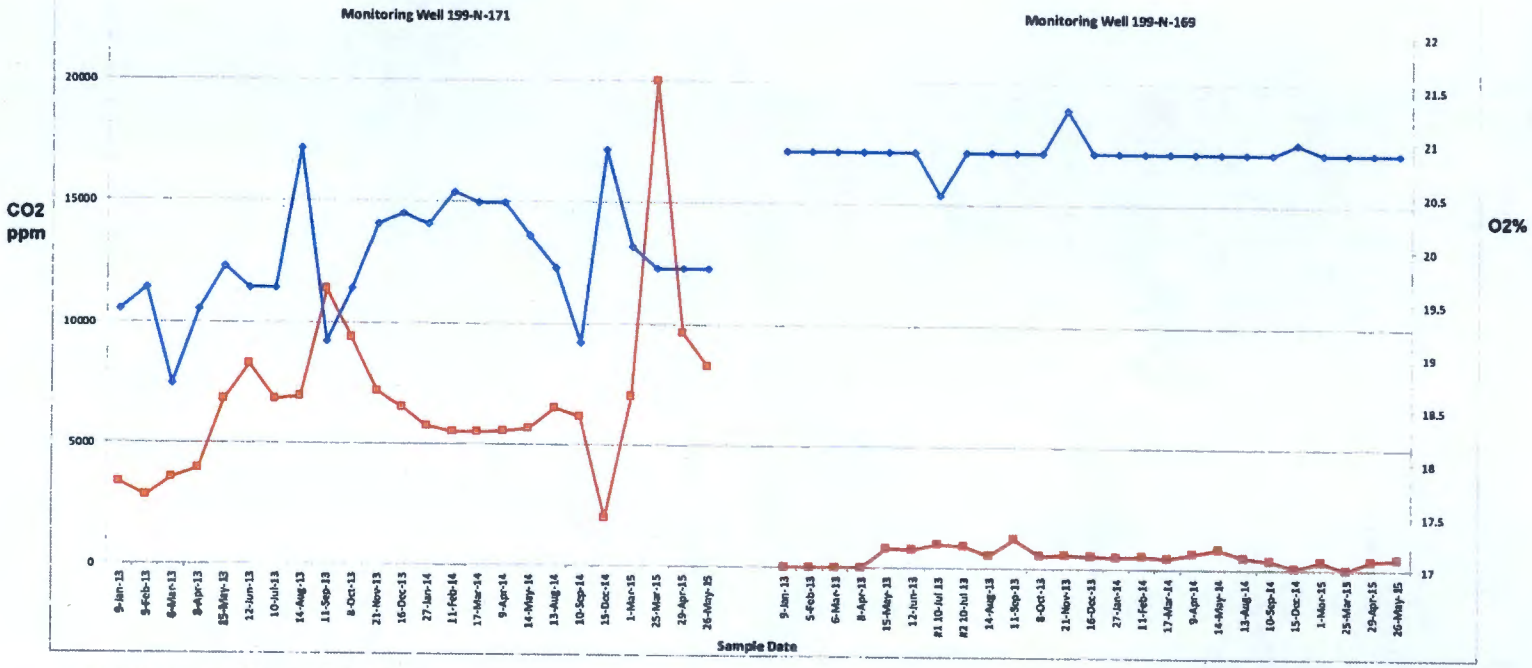
Figure BC-2. Hexavalent Chromium in 100-BC HSPs

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

- CERCLA Process Implementation:
  - The Draft A, RI/FS Report (DOE/RL-2012-15) and Proposed Plan (DOE/RL-2012-68) were transmitted to Ecology on June 24, 2013 completing TPA milestone M-015-75.
  - Ecology initial comments on the Draft A, RI/FS Report were received on October 2, 2013. We are preparing responses and redline changes to these comments. . Chapters 1 to 8 are in progress and we have completed discussion on informal comments on the "PRB and Hot Spots" and "P&T" position papers. "Surface Barriers" and "Phyto-Remediation" remain.
  - 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 are being prepared by CHPRC and planned to be discussed these in detail on June 15, 2015.
  - Revised Chapter 7 red-lines and the associated RCR form were completed and sent to Ecology February 26, 2015, and will be discussed, if needed, based on the Ecology response. On June 2, 2015, Ecology closed 2 of the 3 remaining comments on this chapter.
  - Follow-up FS discussions and workshops will begin once the risk assessment comments are dispositioned.
- Remedial Actions –
  - ***Bioventing***- The bioventing system operated through May without any shutdown periods. 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 for May were taken on May 26 , 2015. Monthly measurements do not indicate significant biodegradation activity at well 199-N-169. The biodegradation rates calculated for well 199-N-169 based on the respirometry test completed in January show a biodegradation rate similar to that observed at well 199-N-171. Reviewing the December 2014 – January 2015 respirometry test report that is included in the bioventing annual report.

    The next respirometry test for high river stage is schedule to start June 22, 2015, and is planned to last for 6 weeks. Daily vapor samples will be collected the first week from 6 monitoring wells (199-N-167, 199-N-169, 199-N-171, 199-N-172, 199-N-183, and 199-N-18) and then once a week for the remainder of the test. To support evaluation of the low biodegradation activity measured in the monthly sampling at well 199-N-169, the initial purge time for will be extended at 199-N-169. The extended purge will help determine if monthly high oxygen readings are due to: 1) 199-N-169 being located very close to the 199-N-167 injection well, such that the volume and rate of injected air flowing through the subsurface completely replenishes all oxygen consumed by the bacteria, and/or 2) there is a potential preferential pathway between the two well casings that allows short-circuiting.
  - ***Product Recovery***- The smart sponge assembly in well 199-N-18 was changed out June 2, 2015. 150 g of product was removed by the sponges in this event and a total of 450 g of TPH have been removed from groundwater so far in 2015. Assuming that the TPH is diesel with a density of 0.85 g/mL, 0.5 L of diesel has been removed.

- Monitoring & Reporting:
  - Aquifer 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 April 15, 2015, and again on May 11, 2015. The samples are being analyzed. Tritium and strontium-90 concentration trends through April 2015 are shown in Figure NR-3 and Figure NR-4, respectively.
  - The aquifer tube that could not be sampled in March (N116mArray-8.5A) is being planned for repair. This will be planned into the 2016 funding profile. The next sampling event is scheduled for June 2015 and this tube will be missed.
  - The next groundwater sampling event for the bioventing wells is scheduled for June 2015 during the next respirometry test.
  - The next sampling event for the apatite barrier wells is scheduled for June 2015.
  - Sampling of 100-NR-2 RCRA monitoring wells scheduled for March has been completed. Results for March have been loaded in HEIS. Specific conductance results continued to be above the critical mean for1324-N/NA down gradient monitoring wells (199-N-165, 199-N-72, and 199-N-73), and 1325-N down gradient monitoring wells (199-N-32, 199-N-41, and 199-N-81). Previous assessments for the two RCRA sites identified the high specific conductance is caused by past discharges of non-regulated constituents (sulfate and sodium). Results did not exceed critical mean values for the remaining indicator parameters. The next sampling event for RCRA monitoring wells is scheduled for September 2015.



BIOVENT WELL SAMPLE RESULTS

Well #	Date	O2%	CO2 ppm
199-N-171	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	19.8	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

Well #	Date	O2%	CO2 ppm
199-N-169	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	660
	14-May-14	20.9	640
	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	15.6
	29-Apr-15	20.9	410
	26-May-15	20.9	460

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

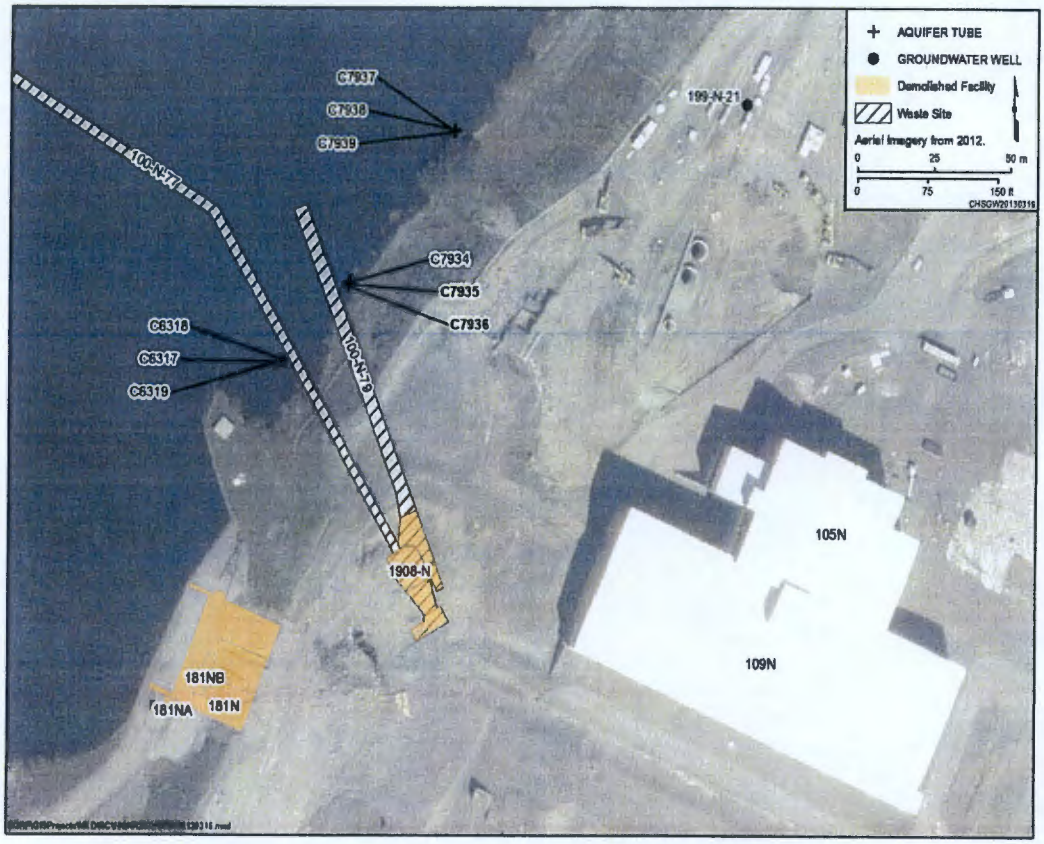


Figure NR-2. Locations of Aquifer Tubes C7934, C7935, and C7936.

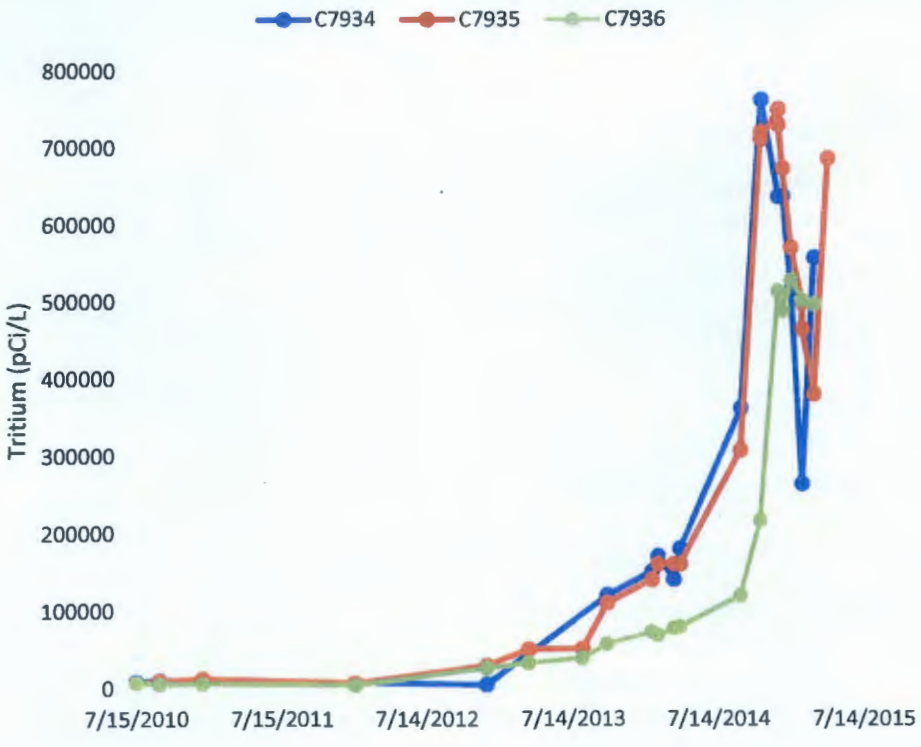


Figure NR-3. Tritium Trends through March 2015 at Aquifer Tubes C7934 and C7936 and through April 2015 at Aquifer Tube C7935

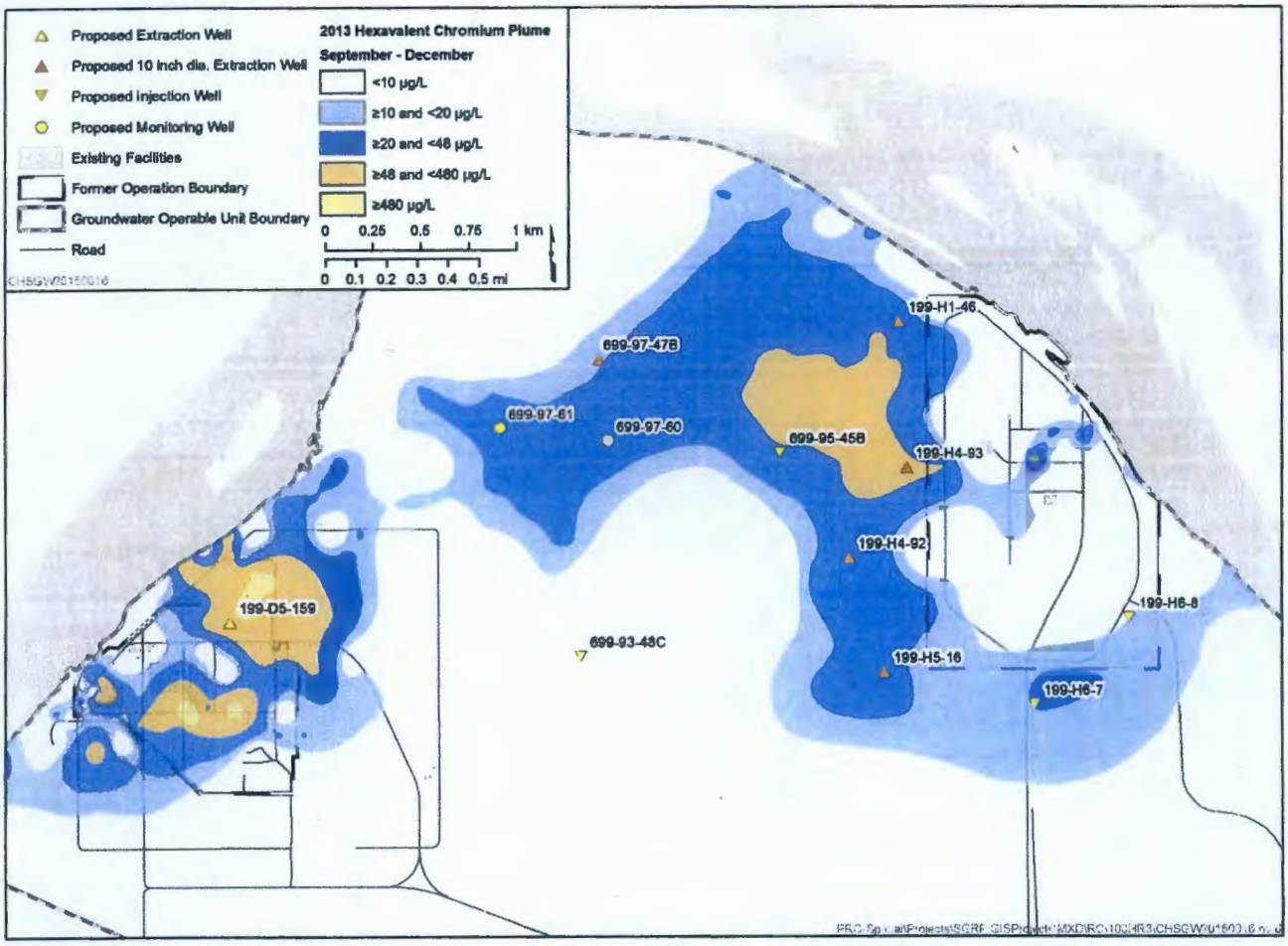
Figure NR-4. Strontium-90 Trends through March 2015 at Aquifer Tubes C7934 and C7936 and through April 2015 at Aquifer Tube C7935

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

- CERCLA Process Implementation:
  - RI/FS: Final Rev. 0 was transmitted to Ecology on October 17, 2014.
  - PP: Reviewed and resolved comments on Rev 0 during a May 28, 2015, meeting between RL, EPA and Ecology. Draft Rev 0 provided to Ecology on June 2, 2015 for legal review.
  - RD/RAWP, Monitoring Plan, and O&M Plan, Draft A plans were received on September 30, 2014. Received comments from Ecology on three plans on April 30, 2015. Requested a 90-day extension to respond to comments on May 27, 2015.
- Remedial Actions & System Modifications
  - May 2015 performance for **DX** and **HX** systems:
    - Treated: 56.67 million gallons (58.33 in April)
    - Removed: 8.69 kg of Cr(VI) (8.52 in April).

    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.
  - The current influent and effluent Cr(VI) concentrations (measure once weekly) for the two HR-3 systems (as measured on June 1, 2015) are:
    - DX – Influent = 17 µg/L; Effluent = less than detection
    - HX – Influent = 17 µg/L; Effluent = less than detection
  - Drilling activities include:
    - New well locations are shown in Figure H-1.
    - Wells 199-H1-46, 699-97-47B and 699-93-48C are not yet drilled. All other wells are completed and developed.
  - Well realignment activities are continuing, with piping and electrical work ongoing.
  - RL comments on the annual groundwater monitoring report for 2014 have been incorporated and the Regulatory Draft was submitted to EPA and Ecology on June 9, 2015. June 21, 2015 will conclude the RL comment period on the pump-and-treat reports for 2014 and they will be delivered to EPA and Ecology at the end of June.

Figure H-1. New Well Locations Planned for FY15



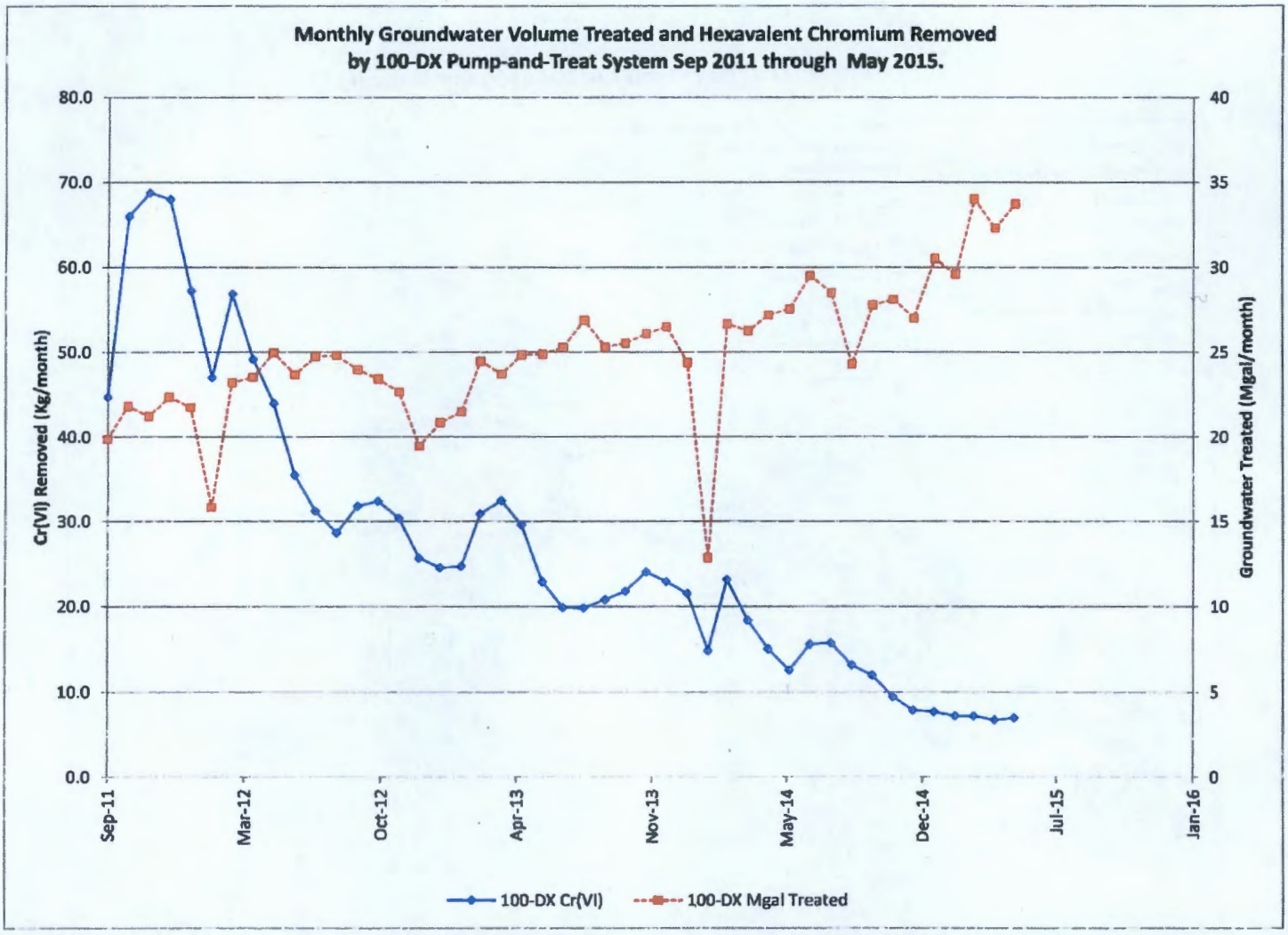


Figure H-2. Monthly Cr(VI) removed and groundwater volume treated by 100-DX pump-and-treat, September 2011 through May 2015.

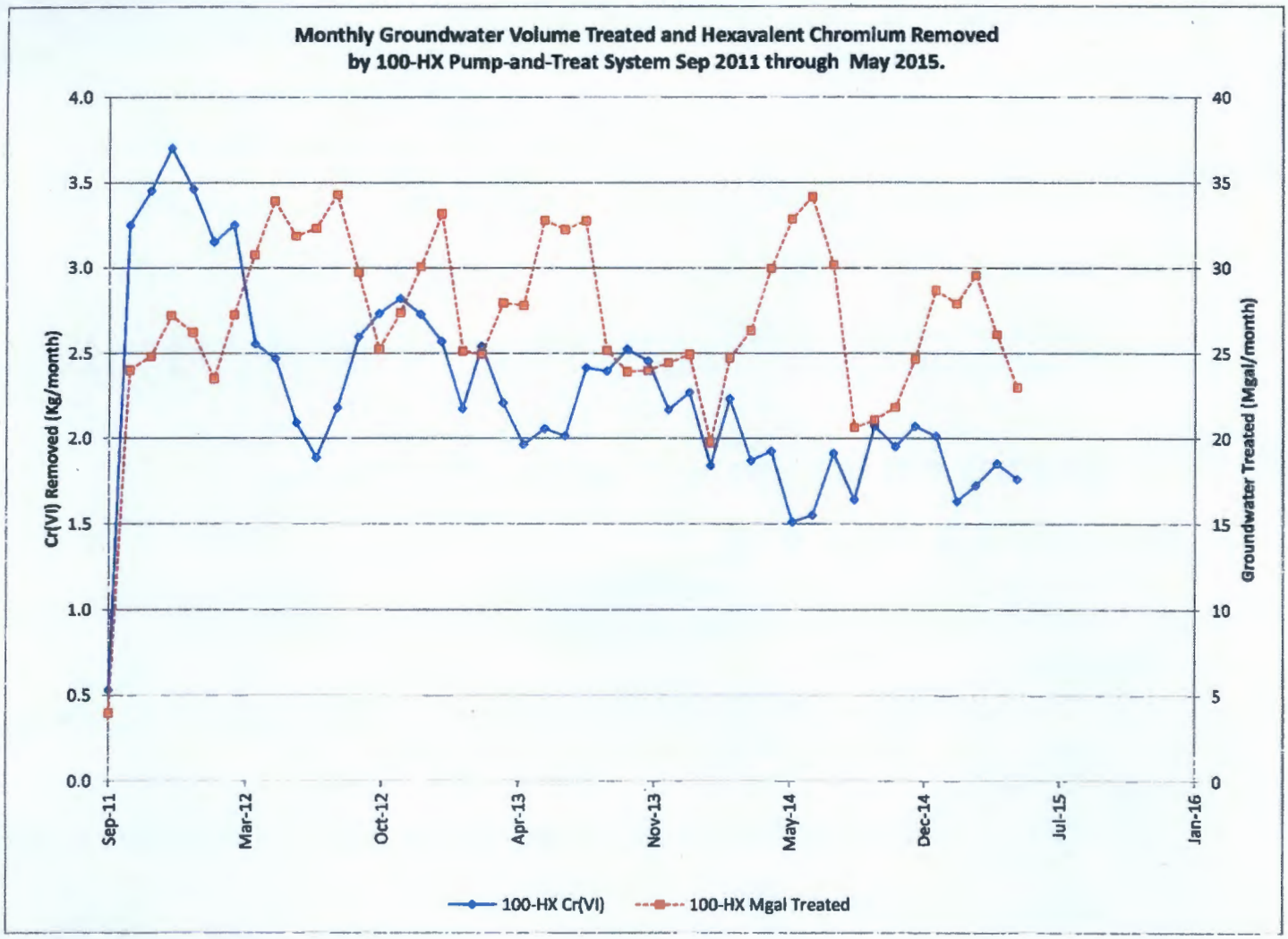


Figure H-3. Monthly Cr(VI) removed and groundwater volume treated by 100-HX pump-and-treat, September 2011 through May 2015.

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

- CERCLA Process Implementation:
  - Cultural Clearance was initiated on May 19, 2015, for the well installation associated with the remedial action.
  - Received EPA comments on the RDR/RA WP on May 6, 2015 and began preparation of Rev 0.
- Monitoring & Reporting:
  - No activities to report. The next groundwater sampling event is planned for June (4 wells). The full network will be sampled in October 2015.

300-FF-5 Groundwater Operable Unit – Bert Day/Virginia Rohay/Randy Hermann

- CERCLA Process Implementation:
  - Incorporated RL and EPA updates to the Rev. 0 RDR/RAWP (DOE/RL-2014-13) integrated and groundwater addendum for Rev. 0 formal signatures.
- Remedial Actions:
  - Conducted well (i.e., injection, and monitoring) drilling kick-off meeting with contractor on June 2, 2015, followed by field mobilization on June 3, 2015.
- Monitoring & Reporting:
  - Preparing to transmit Draft A, 300-FF-5 OU Remedy Implementation SAP (DOE/RL-2014-42) for EPA review.
  - Monitoring Overview:
    - 300 Area Industrial Complex: One well that was not sampled in March 2015 requires maintenance before it can be sampled; maintenance is planned to be completed mid-June. The next sampling event is scheduled for June 2015.
    - 618-10 Burial Ground/316-4 Crib: The next sampling event is scheduled for June 2015.
    - 618-11 Burial Ground: The five wells scheduled for sampling in April 2015 were sampled April 24, 2015. The next sampling event is scheduled for July 2015.
    - 300 Area Process Trenches (316-5) RCRA Monitoring: The next sampling event is scheduled for June 2015.

Hanford Sampling Program Information

Table 1 Wells, Aquifer Tubes, and springs in the River Corridor Areas Successfully Sampled in May 2015

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
199-B4-14		199-D2-11	199-H1-32	199-K-106A	199-K-131		
C8840		199-D2-6	199-H1-33	199-K-107A	199-K-149		
C8841		199-D3-2	199-H1-35	199-K-108A	199-K-150		
C8842		199-D3-5	199-H1-37	199-K-11	C7934		
C8843		199-D4-23	199-H1-38	199-K-110A	C7935		
C8844		199-D4-39	199-H1-40	199-K-111A	C7936		
C8845		199-D5-103	199-H2-1	199-K-113A			
C8847		199-D5-104	199-H3-10	199-K-114A			
C8848		199-D5-106	199-H3-2A	199-K-115A			
C8849		199-D5-123	199-H3-4	199-K-116A			
C8851		199-D5-132	199-H3-9	199-K-119A			
C8852		199-D5-133	199-H4-10	199-K-120A			
C8853		199-D5-14	199-H4-11	199-K-124A			
C8855		199-D5-142	199-H4-12A	199-K-125A			
C8856		199-D5-143	199-H4-16	199-K-127			
C8859		199-D5-145	199-H4-45	199-K-129			
C8860		199-D5-146	199-H4-46	199-K-13			
C8861		199-D5-147	199-H4-49	199-K-133			
C9441		199-D5-15	199-H4-65	199-K-136			
C9442		199-D5-16	199-H4-83	199-K-137			
C9443		199-D5-18	199-H4-85	199-K-138			
C9444		199-D5-34	199-H4-86	199-K-140			
C9445		199-D5-38	199-H5-1A	199-K-141			
C9446		199-D5-39	199-H6-1	199-K-142			
		199-D5-41	199-H6-3	199-K-144			
		199-D5-43	199-H6-4	199-K-145			
		199-D5-92	699-94-41	199-K-146			
		199-D5-97	699-94-43	199-K-147			
		199-D6-3	699-95-45	199-K-148			
		199-D8-5	699-97-41	199-K-153			
		199-D8-54B	699-98-46	199-K-154			
		199-D8-70	699-99-41	199-K-157			
		199-D8-71	699-99-44	199-K-161			
		199-D8-72		199-K-162			
		699-93-48A		199-K-163			
		699-95-48		199-K-168			
		699-95-51		199-K-171			
		699-96-52B		199-K-178			
		699-97-51A		199-K-181			

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
		699-98-49A		199-K-182			
		699-98-51		199-K-184			
		C6266		199-K-185			
		C6267		199-K-186			
		C6268		199-K-187			
		C6269		199-K-188			
		C6270		199-K-189			
		C6271		199-K-190			
		DD-41-1		199-K-191			
		DD-41-2		199-K-192			
		DD-41-3		199-K-193			
		DD-42-2		199-K-194			
		DD-42-3		199-K-196			
		DD-42-4		199-K-197			
		DD-43-2		199-K-198			
		DD-43-3		199-K-199			
		DD-44-3		199-K-200			
		DD-44-4		199-K-201			
		Redox-1-3.3		199-K-203			
		Redox-1-6.0		199-K-204			
		Redox-2-6.0		199-K-208			
		Redox-3-3.3		199-K-209			
		Redox-3-4.6		199-K-210			
		Redox-4-3.0		199-K-212			
		Redox-4-6.0		199-K-22			
				199-K-220			
				199-K-23			
				199-K-32A			
				199-K-34			
				199-K-36			
				199-K-37			
				699-78-62			

Table 2. Sample Trips in the River Corridor Areas awaiting at the end of May 2015

Quarter Scheduled	GWIA	Sample Type	Location Name	Scheduled Date	Frequency	Months Remain	Status	Comment
FY 2014 Q1	300-FF	WELL	399-1-63	12/1/2013	Annual	0	Late	FY-2014 Carry over, Maintenance Required
FY 2015 Q1	100-KR	WELL	199-K-132	11/1/2014	Biannual	0	Late	Maintenance Required
		SPRING	SK-077-1	10/1/2014	Annual	4	OK	
	100-NR	AQUIFER TUBE	C6135	10/1/2014	Annual	4	OK	
FY 2015 Q2	100-HR-H	WELL	199-H1-4	3/1/2015	Quarterly	0	Late	P&T Not Running
	300-FF	WELL	399-3-20	3/1/2015	Quarterly	0	Late	Maintenance Required
FY 2015 Q3	100-HR-D	WELL	199-D5-40	5/1/2015	Quarterly	2	OK	
		AQUIFER TUBE	DD-39-1	5/1/2015	Biannual	5	OK	Unsuccessful 5-12-2015
	100-HR-H	WELL	199-H4-12C	5/1/2015	Quarterly	2	OK	
		WELL	199-H4-15A	5/1/2015	Quarterly	2	OK	
		WELL	199-H4-4	5/1/2015	Quarterly	2	OK	
		WELL	199-H6-7	5/1/2015	Special	1	OK	
	100-KR	WELL	199-K-132	5/1/2015	Biannual	5	OK	Maintenance Required
		WELL	199-K-139	5/1/2015	Biannual	5	OK	
		WELL	199-K-166	4/1/2015	Quarterly	1	OK	P&T Not Running
		WELL	199-K-19	5/1/2015	Biannual	5	OK	

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

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
199-B2-14	199-F5-1	199-D4-14	199-H1-1		199-K-150		399-1-1
199-B2-16	199-F5-46	199-D4-22	199-H1-2		199-N-122		399-1-10A
199-B3-1	199-F5-55	199-D4-25	199-H1-25		199-N-123		399-1-10B
199-B3-46	199-F5-6	199-D4-38	199-H1-27		199-N-136		399-1-11
199-B3-47		199-D4-62	199-H1-3		199-N-14		399-1-12
199-B3-50		199-D5-103	199-H1-34		199-N-146		399-1-15
199-B4-1		199-D5-104	199-H1-36		199-N-147		399-1-16A
199-B4-14		199-D5-125	199-H1-39		199-N-159		399-1-16B
199-B4-8		199-D5-126	199-H1-4		199-N-165		399-1-17A
199-B5-1		199-D5-145	199-H1-42		199-N-169		399-1-17B
199-B5-2		199-D5-146	199-H1-43		199-N-171		399-1-18A
199-B5-5		199-D5-34	199-H1-45		199-N-173		399-1-18B
199-B8-6		199-D5-39	199-H1-6		199-N-183		399-1-2
199-B9-3		199-D8-53	199-H3-2C		199-N-19		399-1-21A
C8840		199-D8-54A	199-H4-13		199-N-200		399-1-21B
C8841		199-D8-68	199-H4-5		199-N-201		399-1-57
C8842		199-D8-69	199-H4-63		199-N-21		399-1-59
C8843		199-D8-73	199-H4-64		199-N-210		399-1-6
C8844		199-D8-88	199-H4-69		199-N-211		399-1-7
C8845		199-H1-5	199-H4-70		199-N-229		399-1-8
C8847		199-H4-80	199-H4-75		199-N-230		399-2-1
C8848		199-H4-81	199-H4-76		199-N-247		399-2-2
C8849		199-H4-82	199-H4-77		199-N-248		399-2-32
C8851			199-H4-90		199-N-268		399-2-5
C8852			199-H4-91		199-N-269		399-3-1
C8853					199-N-280		399-3-10
C8855					199-N-281		399-3-12
C8856					199-N-297		399-3-18
C8859					199-N-298		399-3-19
C8860					199-N-3		399-3-2
C8861					199-N-315		399-3-20
C9441					199-N-316		399-3-22
C9442					199-N-32		399-3-33
C9443					199-N-332		399-3-6
C9444					199-N-333		399-3-9
C9445					199-N-342		399-4-1
C9446					199-N-343		399-4-10
					199-N-346		399-4-12
					199-N-347		399-4-14
					199-N-348		399-4-7
					199-N-349		399-4-9

100/300 Areas Unit Managers Meeting
June 11, 2015

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
					199-N-350		399-5-4B
					199-N-351		399-6-3
					199-N-352		399-8-5A
					199-N-353		699-S6-E4A
					199-N-354		699-S6-E4B
					199-N-355		699-S6-E4E
					199-N-356		699-S6-E4K
					199-N-357		699-S6-E4L
					199-N-358		
					199-N-359		
					199-N-360		
					199-N-361		
					199-N-362		
					199-N-363		
					199-N-364		
					199-N-365		
					199-N-366		
					199-N-367		
					199-N-46		
					199-N-56		
					199-N-71		
					199-N-75		
					199-N-76		
					199-N-92A		
					199-N-96A		
					APT1		
					APT5		
					C6132		
					C6136		
					C6324		
					C7881		
					C7934		
					C7935		
					C7936		
					C7937		
					C7938		
					C7939		
					N116mArray-0A		
					N116mArray-10A		
					N116mArray-11A		
					N116mArray-13A		

100-BC	100-FR	100-HR-D	100-HR-H	100-KR	100-NR	1100-EM	300-FF
					N116mArray-15A		
					N116mArray-1A		
					N116mArray-2A		
					N116mArray-3A		
					N116mArray-4A		
					N116mArray-6A		
					N116mArray-8A		
					N116mArray-9A		
					NVP1-1		
					NVP1-2		
					NVP1-3		
					NVP1-4		
					NVP1-5		
					NVP2-115.1		
					NVP2-115.4		
					NVP2-115.7		
					NVP2-116.0		
					NVP2-116.3		

Documents for AR Submission

DOE/RL-2012-66 R0, 2015	Data Quality Assessment for the 100-FR-1,100-FR-2, 100-FR-3, 100-IU-2, and 100-IU-6 Operable Units Remedial Investigation/Feasibility Study
DOE/RL-2014-13 R0, 2015	Integrated Remedial Design Report/ Remedial Action Work Plan for the 300 Area (300-FF-1, 300-FF-2 & 300-FF-5 Operable Units)
DOE/RL-2014-13 ADD2, 2015	Remedial Design Report/Remedial Action Work Plan Addendum for the 300 Area Groundwater
DOE/RL-2014-42 DA, 2015	300-FF-5 Operable Unit Remedy Implementation Sampling and Analysis Plan
SGW-43616 R0, 2011	Functional Design Criteria for the 100-HX Pump and Treat System
SGW-47776 R0, 2010	Aquifer Testing and Rebound Study in Support of the 100-H Deep Chromium Investigation
SGW-46621 R0, 2010	100 Area Groundwater Chromium Resin Management Strategy for Ion Exchange Systems

Attachment 2

100K Area Report
100/300 Area Unit Manager Meeting
June 11, 2015

The U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) agreed to add a new milestone and extend the dates of 10 cleanup milestones in the 100K Area. The new milestone is for installing sludge removal equipment at the K West Basin. The other milestones were extended to align with a new 2018 date to start removal of the sludge from the K West Basin.

RL-0012 Sludge Treatment Project

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

- Awarded nine of twenty fabrication contract "sets" for ECRTS process equipment.
- Delivered one procurement set (hose-in-hose assemblies).
- Fully developed eleven procurement sets (sets are in the formal acquisition process).
- Restoring previously approved hydrogen control strategy for the Preliminary Design Safety Analysis conditions.
- Continued planning in support of in-basin construction.

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

- Engineered Container Retrieval & Transport System tooling and equipment fabrication, testing, and operating procedure and training development continue.
- Agreement reached by DOE, EPA and Washington State Department of Ecology on a regulatory path forward for sludge storage at T Plant.

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

- Initiation of this milestone follows completion of Milestone M-016-176.
- The KW Basin below-water debris and demolition rubble Sampling and Analysis Plan have been approved by RL and EPA.
- Integrated Water Treatment System garnet filter media removal system design, and Skimmer System sand filter media sampling and characterization activities have begun.
- Activities to facilitate basin deactivation continue. Such activities include below-water debris relocation to clear the ECRTS footprint; concurrent debris dose rate measurement; dose-to-curie model development; and debris characterization.

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 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

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

Other Information and Status Updates

105KW Roof Repairs
Work package planning is complete and a Hazard Review Board (HRB) meeting was conducted on June 8, 2015. Comments from the HRB are being incorporated with HRB approval on track for June 11, 2015. Field work is currently scheduled to start mid-June and complete by the end of July.

100K Bore Holes
Drilling continues at the 116-KE-3 waste site with a drill depth of 70 feet below ground surface (bgs) as of June 4, 2015. Contamination was detected at 48 feet bgs and continued to approximately 60 feet. Groundwater was encountered at approximately 59 feet bgs and the first groundwater sample was collected at approximately 66 feet bgs. Drilling will continue to the planned depth of 102 feet.

Attachment 3

June 11, 2015 Unit Manager's Meeting
Closure Operations Status

100-B/C

- Finalizing closure documentation for 100-B-35:1

100-D

- Completed backfill of 100-D-100, final contouring ongoing
- Commenced backfill of 100-D-31:11/12 100-D-72

100-H

- Completed taking replacement samples at 100-H-28:3/:5/H-44
- Preparing verification work instruction for 100-H-59:2

100-N

- Finalizing closure documentation for 100-N-96

618-10 Trench Remediation

- Intrusive activities on hold pending recovery from contamination release events
- Continued preparations for remediation of VPU-like anomalies
- Continued Non-destructive examination of concrete drums

618-10 VPU Remediation

- Continued preparations and mock-ups for VPU augering
- VPU characterization SAP transmitted to EPA for review/approval

100-IU-2/6

- Finalizing closure documentation for 600-358 and 600-20

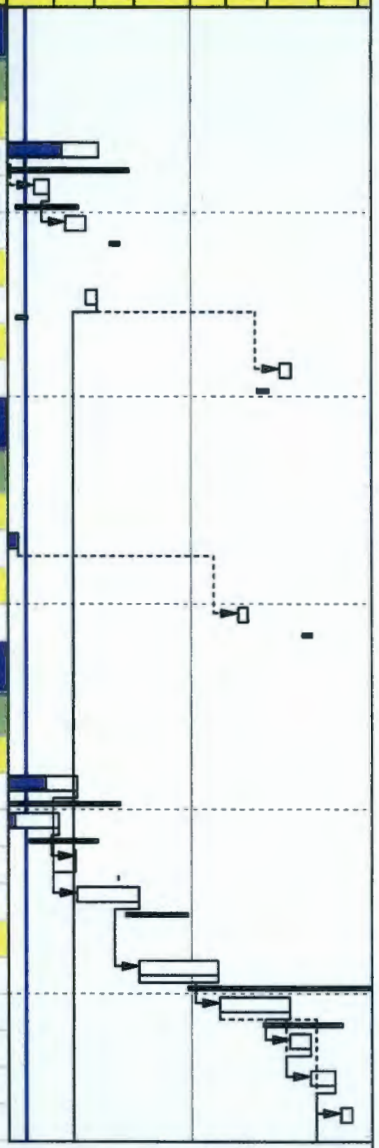
Attachment 4

Data Date: 08-Jun-15

100 Area UMM Schedule

09-Jun-15 08:09

Activity ID	Activity Name	Start	Finish
100 B/C			
100-B-35:1			
Final Project Closeout			
BB524D101	Prepare Closure Doc 100-B-35	07-May-15 A	29-Jul-15
BB524D121	RL/Reg Review Draft A Closure Doc for 100-B-35	15-Jun-15	25-Jun-15
BB524D131	RL/Reg Sign Rev. 0 Closure Doc for 100-B-35	07-Jul-15	20-Jul-15
Backfill			
BB524C10	100-B-35 Backfill (30,000 BCM)	21-Jul-15	28-Jul-15
Revegetation			
BB524E10	100-B-35 Reveg (6.78 Acres)	01-Dec-15*	08-Dec-15
100 D			
100-D-100			
Backfill			
100D100A0AUW	Backfill 100-D-100	10-Feb-15 A	02-Jun-15 A
Revegetation			
100D100A280	Reveg 100-D-100 (10 acres)	03-Nov-15*	09-Nov-15
100 H			
100-H-59:2			
Closeout Sampling & Docs			
H592031	Prepare Verification Work Instruction 100-H-59:2	05-May-15 A	14-Jul-15
H592041	RL/Reg Review Draft A Work Instruction 100-H-59:2	21-May-15 A	01-Jul-15
H592051	RL/Reg Sign Work Instruction 100-H-59:2	13-Jul-15	13-Jul-15
H592061	Closure Sampling 100-H-59:2	15-Jul-15	25-Aug-15
Final Project Closeout			
H592071	Prepare Closure Doc 100-H-59:2	26-Aug-15	19-Oct-15
H592081	RL/Reg Review Draft A Closure Doc 100-H-59:2	20-Oct-15	07-Dec-15
H592083	Resolve RL/Reg Comments Draft A Clos Doc 100-H-59:2	08-Dec-15	21-Dec-15
H592091	RL/Reg Sign Rev 0 Closure Doc 100-H-59:2	22-Dec-15	07-Jan-16
H592111	Prepare and Issue Rev 0 Closure Doc 100-H-59:2	11-Jan-16	19-Jan-16



Current Bar Labels % Complete
Project Baseline Milestone

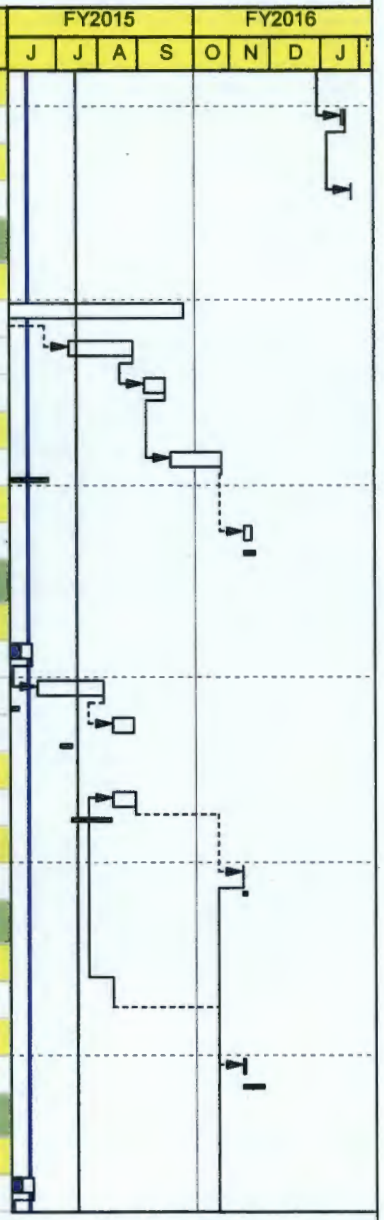
Closure Operations

Data Date: 08-Jun-15

100 Area UMM Schedule

09-Jun-15 08:09

Activity ID	Activity Name	Start	Finish
Backfill			
H592021	Recontour 100-H-59:2 (200 BCMs)	11-Jan-16	14-Jan-16
Revegetation			
H592101	Revegetate 100-H-59:2 (2 acres)	18-Jan-16	18-Jan-16
100-H-28:2			
Final Project Closeout			
HB511D64	Prepare Draft A Closure Doc for 100-H-28:2	21-May-15 A	23-Sep-15
HB511D65	RL/Reg Review Draft A Closure Doc for 100-H-28:2	07-Jul-15	19-Aug-15
HB511D67	RL/Reg Sign Rev. 0 Closure Doc for 100-H-28:2	27-Aug-15	10-Sep-15
Backfill			
HB511C05	Backfill 100-H-28:2 (127,157 BCMs)	14-Sep-15	19-Oct-15
Revegetation			
HB511E07	Reveg 100-H-28:2 (12.1 Acres)	04-Nov-15*	09-Nov-15
100-H-28:3			
Final Project Closeout			
HB512D14	Prepare Closure Doc 100-H-28:3	15-Apr-15 A	11-Jun-15
HB512D19	RL/Reg Review Draft A Closure Doc for 100-H-28:3	15-Jun-15	29-Jul-15
HB512D21	RL/Reg Sign Rev. 0 Closure Doc for 100-H-28:3	06-Aug-15	19-Aug-15
Backfill			
HB512C	Backfill 100-H-28:3 (45,546 BCMs)	06-Aug-15	20-Aug-15
Revegetation			
HB512E	Reveg 100-H-28:3 (10.0 acres)	03-Nov-15*	03-Nov-15
100-H-28:4			
Backfill			
HB513C50	Backfill 100-H-28:4 (6,000 BCMs)	05-Aug-15	05-Aug-15
Revegetation			
HB513E50	Reveg 100-H-28:4 (2.8 Acres)	03-Nov-15*	03-Nov-15
100-H-28:5			
Final Project Closeout			
HB514D14	Prepare Closure Doc for 100-H-28:5	15-Apr-15 A	11-Jun-15



Current Bar Labels % Complete
Project Baseline Milestone

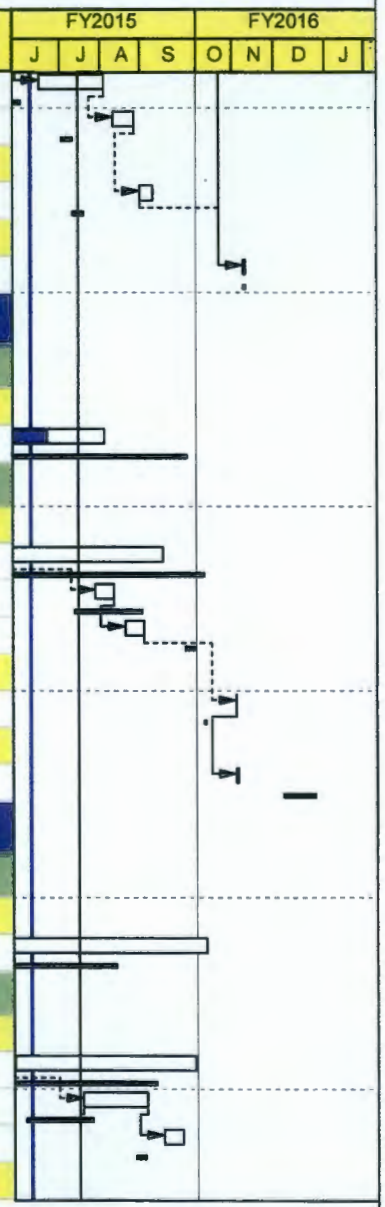
Closure Operations

Data Date: 08-Jun-15

100 Area UMM Schedule

09-Jun-15 08:09

Activity ID	Activity Name	Start	Finish
HB514D19	RL/Reg Review Draft A Closure Doc for 100-H-28:5	15-Jun-15	29-Jul-15
HB514D21	RL/Reg Sign Rev. 0 Closure Doc for 100-H-28:5	06-Aug-15	19-Aug-15
Backfill			
HB514C	Backfill 100-H-28:5 (33,041 BCMs)	24-Aug-15	01-Sep-15
Revegetation			
HB514E	Reveg 100-H-28:5 (4.0 acre)	03-Nov-15*	04-Nov-15
IU-2/6			
600-349			
Final Project Closeout			
IU226610	Prepare 600-349 UXO Closure Doc	16-Feb-15 A	29-Jul-15
600-358			
Final Project Closeout			
IU225940	Prepare Closure Doc 600-358	14-May-15 A	08-Sep-15
IU225950	RL/Reg Review of Draft A Closure Doc 600-358	23-Jul-15	05-Aug-15
IU225960	RL/Reg Sign Rev.0 Closure Doc 600-358	13-Aug-15	26-Aug-15
Backfill			
IU225990	Backfill 600-358 (1,818 BCMs)	28-Oct-15	28-Oct-15
Revegetation			
IU226000	Reveg 600-358 (2 acres)	29-Oct-15	29-Oct-15
100 N			
100-N-85			
Final Project Closeout			
NB588DW	Prepare WSRF - 100-N-85	26-Mar-15 A	07-Oct-15
100-N-96			
Final Project Closeout			
NB5C3D05	Prepare Closure Doc - 100-N-96	14-May-15 A	30-Sep-15
NB5C3D06	RL/Reg Review Draft A Closure Doc for 100-N-96	14-Jul-15	27-Aug-15
NB5C3D07	RL/Reg Sign Rev. 0 Closure Doc for 100-N-96	08-Sep-15	21-Sep-15
Backfill			



Current Bar Labels % Complete
Project Baseline Milestone

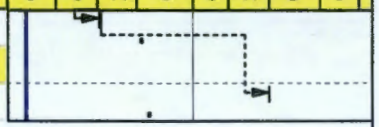
Closure Operations

Data Date: 08-Jun-15

100 Area UMM Schedule

09-Jun-15 08:09

Activity ID	Activity Name	Start	Finish
NB5C3C	Backfill 100-N-96 (2,545 BCMs)	29-Jul-15	29-Jul-15
Revegetation			
NB5C3E	Reveg - 100-N-96 (3.0 Acres)	23-Nov-15*	23-Nov-15



Current Bar Labels % Complete
Project Baseline Milestone

Closure Operations

Attachment 5

179612

^WCH Document Control

From: Saueressig, Daniel G
Sent: Wednesday, May 20, 2015 5:50 AM
To: ^WCH Document Control
Subject: FW: CERCLA STORAGE AREA REQUEST
Attachments: 100-D CERCLA Storage Area.pdf

Please provide a chron number (and include the attachment). This email documents a regulatory approval.

Thanks,

Dan Saueressig
Environmental Project Lead
Washington Closure Hanford
521-5326

From: Boyd, Alicia (ECY) [mailto:aboy461@ecy.wa.gov]
Sent: Tuesday, May 19, 2015 4:47 PM
To: Saueressig, Daniel G
Cc: Menard, Nina
Subject: RE: CERCLA STORAGE AREA REQUEST

Dan
That plan and location sounds good.

Alicia L. Boyd
Washington State Department of Ecology
3100 Port of Benton Blvd
Richland, WA 99352
509-372-7934

From: Saueressig, Daniel G [mailto:daniel.saueressig@wch-rcc.com]
Sent: Monday, May 18, 2015 5:43 AM
To: Boyd, Alicia (ECY)
Subject: CERCLA STORAGE AREA REQUEST

Alicia, since remediation activities at all the 100 Areas are complete we've closed all our CERCLA container storage areas (except 100-H which will close before June 6, 2015). We still have a need to accumulate small amounts of non-regulated material from equipment spills and leaks during backfill and revegetation. I'd like to request your approval to set up a CERCLA storage area at 100-D (see attached aerial photo of location). We plan to stage an ERDF container at this location for management of waste generated during backfill and/or revegetation activities at 100-D.

Let me know if you concur.

Thanks,

Dan Saueressig
Environmental Project Lead
Washington Closure Hanford
521-5326

<< File: 100-D CERCLA Storage Area.pdf >>

CERCLA Storage Area

Attachment 6

Hadley, Karl A

From: Saueressig, Daniel G
Sent: Tuesday, June 09, 2015 7:40 AM
To: Hadley, Karl A
Subject: FW: NON-CONTIGUOUS ONSITE APPROVAL REQUEST

For the UMM.

Thanks,

Dan Saueressig
Environmental Project Lead
Washington Closure Hanford
521-5326

From: ^WCH Document Control
Sent: Monday, June 01, 2015 4:49 PM
To: Saueressig, Daniel G
Subject: RE: NON-CONTIGUOUS ONSITE APPROVAL REQUEST

CCN 179678

From: Saueressig, Daniel G
Sent: Monday, June 01, 2015 3:57 PM
To: ^WCH Document Control
Subject: FW: NON-CONTIGUOUS ONSITE APPROVAL REQUEST

Please provide a chron number. This email documents a regulatory approval.

Thanks,

Dan Saueressig
Environmental Project Lead
Washington Closure Hanford
521-5326

From: Guzzetti, Christopher [mailto:Guzzetti.Christopher@epa.gov]
Sent: Monday, June 01, 2015 3:55 PM
To: Saueressig, Daniel G
Cc: Boyd, Alicia
Subject: RE: NON-CONTIGUOUS ONSITE APPROVAL REQUEST

I concur with the request.

Christopher J. Guzzetti
Project Manager
Hanford Project Office
U.S. Environmental Protection Agency
825 Jadwin Avenue, Suite 210
Richland, WA 99352

Phone: (509) 376-9529
Fax: (509) 376-2396
Email: guzzetti.christopher@epa.gov

From: Saueressig, Daniel G [mailto:daniel.saueressig@wch-rcc.com]
Sent: Monday, June 01, 2015 3:34 PM
To: Guzzetti, Christopher
Cc: Boyd, Alicia
Subject: NON-CONTIGUOUS ONSITE APPROVAL REQUEST

Chris, we have closed our container storage area at 100-H thinking we were done with remediation and sampling and there was a small issue with a couple samples that need to be retaken (for pesticides only) at 100-H-28:3/:5/H-44. We have an ERDF container set up for managing spill waste at 100-D and I'd like to request your approval to send the sample waste (PPE, plastic, plastic scoop) to 100-D while we await the sample results.

I left a voicemail message with Alicia to discuss and haven't heard back from her but she has been receptive to allow waste movement between 100-H and 100-D in the past.

Thanks,

Dan Saueressig
Environmental Project Lead
Washington Closure Hanford
521-5326

Attachment 7

300 Area Closure Project Status
June 11, 2015

Backfill

- Backfill underway on RLWS, RRLWS, 300-15, and 309 excavations.
- 300-280 backfill complete.

324 Laboratory

- 90% Design advancing.
- Proof of Principle testing completed.
- Construction of the REC mock-up completed.
- Continue facility min-safe operations.

316-3

- Remediation of the 316-3 waste site complete.
- Verification sampling completed, backfill concurrence granted.

300-277

- Remediation nearly complete.

300-288:2

- Remediation scheduled to begin late June early July.
- Will include subsurface investigation of an additional 8+ acres to the west.

Final Revegetation

- Late summer/early fall industrial sites seeding.
- Starts for UPR-600-22 winter of 15/16.

309 Reactor/Waste Sites Excavation

- Verification sampling of excavation completed, backfill pending.

Site Completion

- Demobilization and fence repair started.