

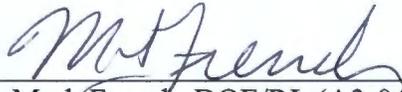
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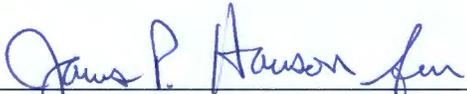
## 100/300 AREA UNIT MANAGER MEETING ATTENDANCE AND DISTRIBUTION

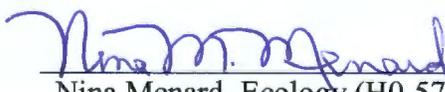
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Gadbois, Larry E	Gadbois.larry@epa.gov	B1-46	EPA
Hadley, Karl A	karl.hadley@wch-rcc.com	H4-21	WCH
Long, Heather	halong@wch-rcc.com	H4-10	WCH

100/300 AREA UNIT MANAGERS MEETING  
APPROVAL OF MEETING MINUTES

SEPTEMBER 9, 2010

APPROVAL:  Date 10-14-10  
Mark French, DOE/RL (A3-04)  
River Corridor Project Manager

APPROVAL:  Date 10-14-10  
Brian Charboneau, DOE/RL (A6-33)  
Groundwater Project Manager

APPROVAL:  Date 10-14-10  
Nina Menard, Ecology (H0-57)  
Environmental Restoration Project  
Manager

APPROVAL:  Date 10-14-10  
Laura Buelow, Rod Lobos, or Christopher  
Guzzetti, EPA (B1-46)  
100 Area Project Manager

APPROVAL:  Date Oct 14, 2010  
Larry Gadbois, EPA  
(B1-46)  
300 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); and Mission Completion****September 9, 2010****ADMINISTRATIVE**

- **Next Unit Manager Meeting (UMM)** – The next meeting will be held October 14, 2010, 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. Attachment B documents any delegations received from the agencies.
- **Approval of Minutes** – The August 12, 2010, 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 C).
- **Agenda** – Attachment D is the meeting agenda.

**EXECUTIVE SESSION (Tri-Parties Only)**

**Executive Session:** No Executive Session was held by RL, EPA, and Ecology prior to the September 9, 2010, UMM.

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

Attachment 1 provides status and information for groundwater. Attachment 2 provides a schedule and map showing the status of remediation at 100-IU-2 and 100-IU-6. No issues were identified and no action items were documented.

**Agreement 1:** Attachment 3 documents EPA approval of TPA change control form TPA-CN-379 to modify Appendix 3 of the *Waste Control Plan for the 100-FR-3 Operable Unit* to modify the names of three (3) boreholes previously approved in TPA-CN-361.

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

Attachment 1 provides status and information for groundwater. Attachment 4 provides status and information for D4/ISS at 183-H. No issues were identified and no action items were documented.

**Agreement 1:** Attachment 5 documents Ecology approval that the staging piles at 118-H-1:1 are closed and the sorting cells will be further evaluated using verification sampling and closed under the forthcoming Cleanup Verification Package.

**Agreement 2:** Attachment 6 documents Ecology approval for a staging pile area for the 132-H-1 and 132-H-3 waste sites waste sites.

Agreement 3: Attachment 7 documents Ecology approval regarding remediation of 100-D-8, 100-D-65 and 100-D-66 spillways below the Ordinary High Water Mark.

Agreement 4: Attachment 8 documents Ecology approval to add the 132-D-1 waste site to the 100-D Air Monitoring Plan.

Agreement 5: Attachment 9 documents Ecology approval of the locations of two staging piles to support remediation of 100-D-13.

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

Attachment 1 provides status and information for groundwater. Attachment 4 provides status and information for D4/ISS at 100-N. No issues were identified and no action items were documented.

Agreement 1: Attachment 10 documents Ecology approval of the additional staging pile locations for the 100-N-6, 100-N-16, and 128-N-1 grouped waste sites (and clarifies the status of confirmatory site 100-N-98) and the 100-N-14, 100-N-17, and 100-N-34 grouped waste sites.

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

Attachment 1 provides status and information for groundwater. 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 11 provides a schedule and map showing the status of remediation at 100-C-7. No issues were identified and no agreements or action items were documented.

#### **300 AREA – 618-10/11 (GROUNDWATER, SOILS, D4/ISS)**

Attachment 1 provides status and information for groundwater. 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 12 provides status and information for D4/ISS at 300 Area. No issues were identified and no agreements or action items were documented.

#### **REGULATORY CLOSEOUT DOCUMENTS OVERALL SCHEDULE**

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

### **MISSION COMPLETION PROJECT**

Attachment 13 provides status or information regarding the Orphan Sites Evaluations, Long-Term Stewardship, River Corridor Baseline Risk Assessment, the Remedial Investigation of Hanford Releases to the Columbia River, and a Document Review Look-Ahead. No issues were identified and no agreements or action items were documented.

### **5-YEAR RECORD OF DECISION ACTION ITEM UPDATE**

Attachment 14 provides an update from Ecology to the Five-Year Review Action Item List. No issues were identified and no agreements or action items were documented.

### **ANNUAL INSTITUTIONAL CONTROLS EVALUATION**

Attachment 15 provides the "Annual Sitewide Institutional Controls (IC) Review" for the River Corridor Contractor (RCC) source units. No issues were identified and no agreements or action items were documented.

# Attachment A

100/300 AREA UNIT MANAGER MEETING  
ATTENDANCE AND DISTRIBUTION  
SEPTEMBER 9, 2010

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# Attachment B

# Attachment C

# Attachment D

100/300 Area Unit Manager Meeting  
September 9, 2010  
Washington Closure Hanford Building  
2620 Fermi Avenue, Richland, WA 99354  
Room C209; 1:30-4:30 p.m.

1:30 - 1:45 p.m.

**Administrative:**

- Approval and signing of previous meeting minutes (August 2010)
- Update to Action Items List
- Next UMM (10/14/2010, Room C209)

1:45 - 4:00 p.m.

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

*Note: Each session is estimated at 5 to 15 minutes.*

- 100-F & 100-IU-2/6 Areas (Mike Thompson/Jamie Zeisloft)
- 100-D & 100-H Areas (Jim Hanson/Tom Post/Joanne Chance)
- 100-N Area (Joanne Chance, Rudy Guercia, Mike Thompson)
- 100-K Area (Jim Hanson, Jamie Zeisloft, Ellen Dagon, Steve Balone)
- 100-B/C Area (Greg Sinton, Tom Post)
- 300 Area - 618-10/11 exclusively (Chris Smith)
- 300 Area (Mike Thompson/Chris Smith/Rudy Guercia)
- Regulatory Closeout Documents Overall Schedule (John Neath, Mike Thompson)
- Mission Completion Project (John Sands)

4:00 - 4:15 p.m.

**Special Topics/Other**

- 5-Year Record of Decision Action Item Update (Jim Hanson)
- Annual Institutional Controls evaluation (Jamie Zeisloft)

4:15 - 4:30 p.m.

**Adjourn**

# Attachment E

## Long, Heather A

---

**From:** Hadley, Karl A  
**Sent:** Thursday, September 09, 2010 4:25 PM  
**To:** Long, Heather A  
**Subject:** FW: 100/300 Area Executive Session (Sept 9, 2010)

fyi

-----Original Message-----

**From:** French, Mark [mailto:Mark.French@rl.doe.gov]  
**Sent:** Wednesday, September 08, 2010 3:35 PM  
**To:** Hadley, Karl A  
**Cc:** Neath, John P; Smith, Chris  
**Subject:** RE: 100/300 Area Executive Session (Sept 9, 2010)

Neath has the lead on this but was out sick today. If he's gone again tomorrow I recommend just canceling the executive session. I will be on leave the rest of the week so Chris will be acting and he'll let you know if Neath is here or not.

Mark S. French  
Federal Project Director  
373-9863

-----Original Message-----

**From:** Hadley, Karl A [mailto:kahadley@wch-rcc.com]  
**Sent:** Thursday, September 02, 2010 12:39 PM  
**To:** French, Mark; Ayres, Jeffrey M; Balone, Steven; Bond, Fredrick W; Bryson, Dana; aboy461@ecy.wa.gov; buelow.laura@epamail.epa.gov; Chance, Joanne; Charboneau, Briant; Clark, Cliff; Dagan, Ellen; einan.david@epamail.epa.gov; gadbois.larry@epamail.epa.gov; Goswami, Dib; Guercia, Rudolph; guzzetti.christopher@epamail.epa.gov; Hanson, James; Huckaby, Alisa D; Jones, Mandy; lobos.rod@epamail.epa.gov; Menard, Nina; Morse, John; Neath, John; Rochette, Elizabeth; Sands, John; Seiple, Jacqueline; Sinton, Gregory; Smith, Douglas; Smith-Jackson, Noe'L; Thompson, Kenneth; Zeisloft, Jamie; Ceto, Nicholas  
**Cc:** Long, Heather A  
**Subject:** 100/300 Area Executive Session (Sept 9, 2010)

Attached is the draft Executive Session agenda for your input.

The meeting is scheduled for September 9, 2010, from 1:00 p.m. to 1:30 p.m. preceding the 100/300 Area Unit Manager Meeting scheduled for the same day starting at 1:30 p.m.

If no agenda items are received by Wednesday for the executive session a

meeting cancellation notice will be sent for your convenience.

I have also attached the meeting minutes from the August meeting.

Thanks,

Karl Hadley  
372-9331

# Attachment 1

**100/300 Areas Unit Managers Meeting  
September 9, 2010**

**100-FR-3 Operable Unit—Nathan Bowles / Mary Hartman**

(M-15-64-T01, 11/30/2011, Submit CERCLA RI/FS Report and Proposed Plan for the 100-FR-1, 100-FR-2, 100-FR-3, 100-IU-2, and 100-IU-6 Operable Units for groundwater and soil.)

*Schedule Status - On schedule to meet TPA milestone. Field investigations have been initiated.*

The second round of RI/FS spatial and temporal groundwater well-sampling activities for IU2/IU6 and 100-F is complete. The third sample round is scheduled for October.

Drilling of wells C7790 and C7792 reached total depth. The wells will be completed with screens at the top of the aquifer. The aquifer is ~21 ft thick at C7790 and ~28 ft thick at C7792. No Cr (VI) was detected in water samples collected during drilling. Results for other constituents have not yet been received.

**100-HR-3 Groundwater OU – Fred Biebesheimer / John Smoot**

(M-15-115, 08/30/2010, DOE will submit to Ecology a Treatability Test Plan for hexavalent chromium bioremediation of groundwater at 100-D).

*Schedule Status - Completed. Document delivered on August 26, 2010.*

(M-016-111B, 12/31/2010, Expand current pump-and-treat system at 100-HR-3 operable unit utilizing ex situ treatment, in situ treatment or a combination of both to a total 500 gpm capacity or as specified in the work plan).

*Schedule Status - On schedule to meet TPA milestone. The new DX pump-and-treat system will provide a capacity of 600 gpm to augment the existing HR3 operable unit treatment capacity of 350 gpm, and will be operational in the fourth quarter of this calendar year. Acceptance testing is underway at the DX facility.*

(M-15-70-T01, 07/30/2011, Submit feasibility study report and proposed plan for the 100-HR-1, 100-HR-2, 100-HR-3, 100-DR-1 and 100-DR-2 operable units for groundwater and soil).

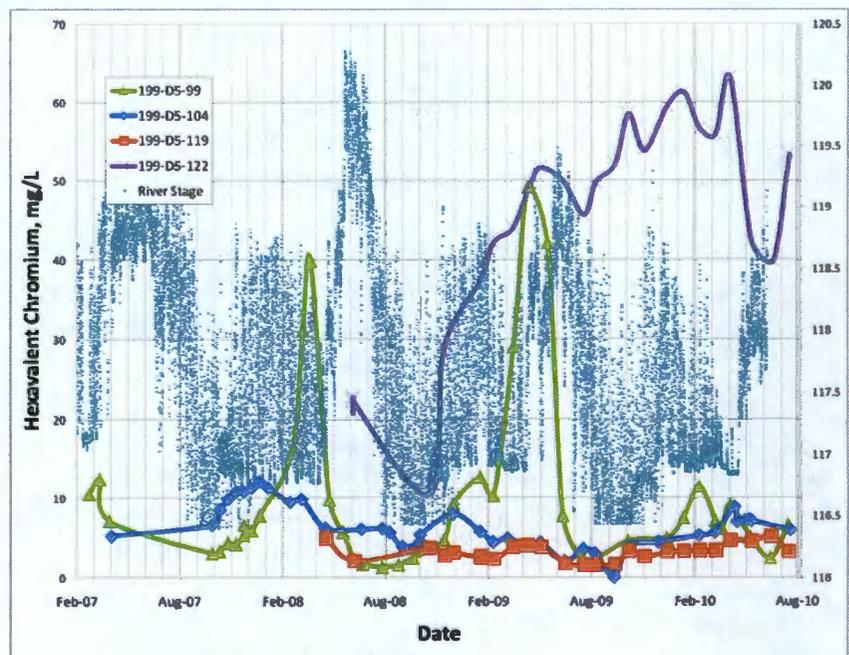
*Schedule Status - On schedule to meet TPA milestone. Field investigations were initiated following approval of the Rev. 0 RI/FS work plan documents. Drilling delayed to resolve safety issues.*

- HR-3 Treatment System
  - For the period August 1 through 31, 2010:
- The system is pumping at approximately 200 gpm since construction to bring on the two RUM wells for long term operations was completed.
  
- Total average flow through the system was 191 gpm.  
Average influent hexavalent chromium concentration for H Area was 160 ug/L  
Average influent hexavalent chromium concentration for D Area was 33 ug/L
  
- DR-5 Treatment System
  - For the period July 1 through 31, 2010:
    - The DR-5 is running with the hot spot well
    - Total average flow through the system was 29 gpm
    - The average influent hexavalent chromium concentration was 1880 ug/L.
  
- ISRM Pond Sealing.
  - Waiting for ISRM pond liquids to finish evaporation.

**100/300 Areas Unit Managers Meeting  
September 9, 2010**

- DX construction is in the acceptance testing phase. No contaminated groundwater has been introduced in the system at this point. All discharges related to testing of the DX system have been with clean raw water.
- Proposed treatment capacity at the 100-HX facility has been increased from 400 gpm to 800 gpm (current capacity is 300 gpm). The formal HX design has reached 60%. Construction is underway on road maintenance, HDPE pipe runs, and road crossings. Building construction is underway. The floor of the process building was poured the week of August 30, 2010.
- Deep Chromium Investigation
  - The Aquifer Test on three existing RUM wells was started August 18 to address the CERCLA 5-year Review Action Item 12-1. A report is in internal review.
- RD/RA Work Plan and IAMP. Both documents are being revised to make them stand-alone for 100-HR-3 and bring them up to date (i.e. include DX and HX expansions). The RD/RA Work Plan and IAMP have comments back from DOE and are being revised.
- EM-22 Technology Projects
  - Investigation for mending ISRM Barrier: Laboratory studies into alternative ZVI amendments and dispersants were completed.
  - The South Plume Investigation has been released.
  - The North Plume Investigation report is under comment incorporation.
- RI/FS Activities
  - All three spatial and temporal uncertainty groundwater sampling events have been conducted. Data are still being received from the laboratories.
  - New aquifer tube installation was completed in the D and H Areas and two sampling rounds are complete.
  - Drilling of RI Wells will begin in September
  - One borehole has been completed.

- May monitoring results from the south plume “hot-spot” are presented on the above. Well D5-122 concentrations have rebounded after the first significant drop in almost 2 years. This well is up gradient of the new 199-D5-104 “hot-spot” extraction well that is now pumping to the DR-5 extraction system.



**100/300 Areas Unit Managers Meeting  
September 9, 2010**

**100-NR-2 Groundwater OU – Nathan Bowles / Deb Alexander**

(M-15-61, 12/31/2009, Submit RI/FS Work Plan for the 100-NR-1 and 100-NR-2 Operable Units.)

*Schedule Status- TPA milestone met by DOE/RL submittal of Draft A document to Ecology on 12/22/09. Ecology comments on the Draft B version of the document were received on June 21, 2010, and responses are being developed and incorporated into a Rev. 0 document.*

(M-16-14B, 12/30/2009, Submit a Draft CERCLA Proposed Plan [PP] to either amend the 1999 100-NR-01/NR-02 ROD for Interim Action or to propose a new ROD. The PP will evaluate the permeable reactive barrier technology.)

*Schedule Status - TPA milestone met by DOE/RL submittal of Draft B document to Ecology and EPA on December 18, 2009. The document was released as Revision 0 for a public review period that began on June 21, 2010. Responses to the public comments are being finalized and included in the drafted IROD amendment.*

(M-15-62-T01, 12/31/2011, Submit a Feasibility Study [FS] Report and Proposed Plan [PP] for the 100-NR-1 and 100-NR-2 Operable Units including groundwater and soil. The FS Report and PP will evaluate the permeable reactive barrier technology and other alternatives and will identify a preferred alternative in accordance with CERCLA requirements.)

*Schedule Status - Future schedule status will depend on approval of RI/FS work plan documents.*

- **100-NR-1/2 Amendment to the Interim Action Record of Decision (IROD)** - The draft NR-1/2 OU Amendment to the Interim Action ROD is near finalization pending approval by RL, EPA and Ecology. The expedited schedule continues to be followed to meet a goal to have the IROD Amendment issued by the end of September.
- **100-N Integrated Sampling and Analysis Plan** – The Draft A document was submitted to Ecology by RL on June 2, 2010, and is still under Ecology review. Comments have not yet been received.
- **RI/FS Activities**
  - Planning is underway for collecting upwelling (river-porewater) samples from the bottom of the Columbia River as proposed in the Draft B RI/FS Work Plan Addendum. A separate SAP has been developed for this specific RI activity. The Draft A SAP document was submitted to Ecology for review. Ecology comments have not yet been provided for response and incorporation.
  - A TPA change notices (CN) was previously approved by RL and Ecology to allow RI/FS related aquifer-tube sampling activities to occur prior to approval of the RI/FS Work Plan and SAP. The second round of aquifer-tube sampling activities is scheduled for September. Another TPA CN has been drafted and provided to Ecology for a second round of spatial-and-temporal groundwater well sampling in September prior to approval of the RI/FS Work Plan and SAP. Approval of this TPA CN is still pending.
- **Apatite PRB**
  - Sampling of the 171 new well installations is almost done. Nineteen wells were sampled resulting in a total of 152 of the 171 new wells now sampled. The remaining 19 wells will be sampled in the near future.
  - Data from the 171 new wells which have been sampled thus far is being reviewed and tabulated. To date, the data from the upriver end of the expansion has been reviewed and shared with

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PNNL to augment their work on the petroleum contamination study (see bullet further on).  
Work continues on compiling the data available to date for the downriver end of the expansion.

- The barrier-expansion Design Optimization Study (DOS) has been revised based on Ecology comments. This revised version and the associated comment responses have been reviewed by RL and have now been provided to Ecology for review and concurrence. Ecology has not yet provided indication of acceptance of the comment responses. A meeting to review the responses is planned with Ecology on September 8, 2010. The injection-system fabrication and testing is generally complete on the first skid and delivery is expected by September 9, 2010. The second system remains at approximately 95% complete and is awaiting the delivery of remaining equipment before testing can be conducted. The RFP for the chemical procurement is out for bid. Additional planning and preparation activities continue.
- The final performance monitoring required for the original apatite barrier injections (performed in 2006, 2007, and 2008) was performed on August 15 and 16. All four monitoring wells and the sixteen barrier/injections wells were sampled. All seven aquifer tubes were sampled. All nine of the deep 1-in and 2- in (Ringold Fm. completion) monitoring wells were sampled. One of the eight shallow 1-in and 2-in (Hanford fm. completion) wells were able to be sampled. The remaining seven wells were dry, as river level was very low. In the table below, the highlighted wells are the ones that were not sampled. Wells were sampled for field parameters (pH, temperature, conductivity, dissolved oxygen, and oxidation-reduction potential), Sr-90, gross beta, metals/cations, and anions.

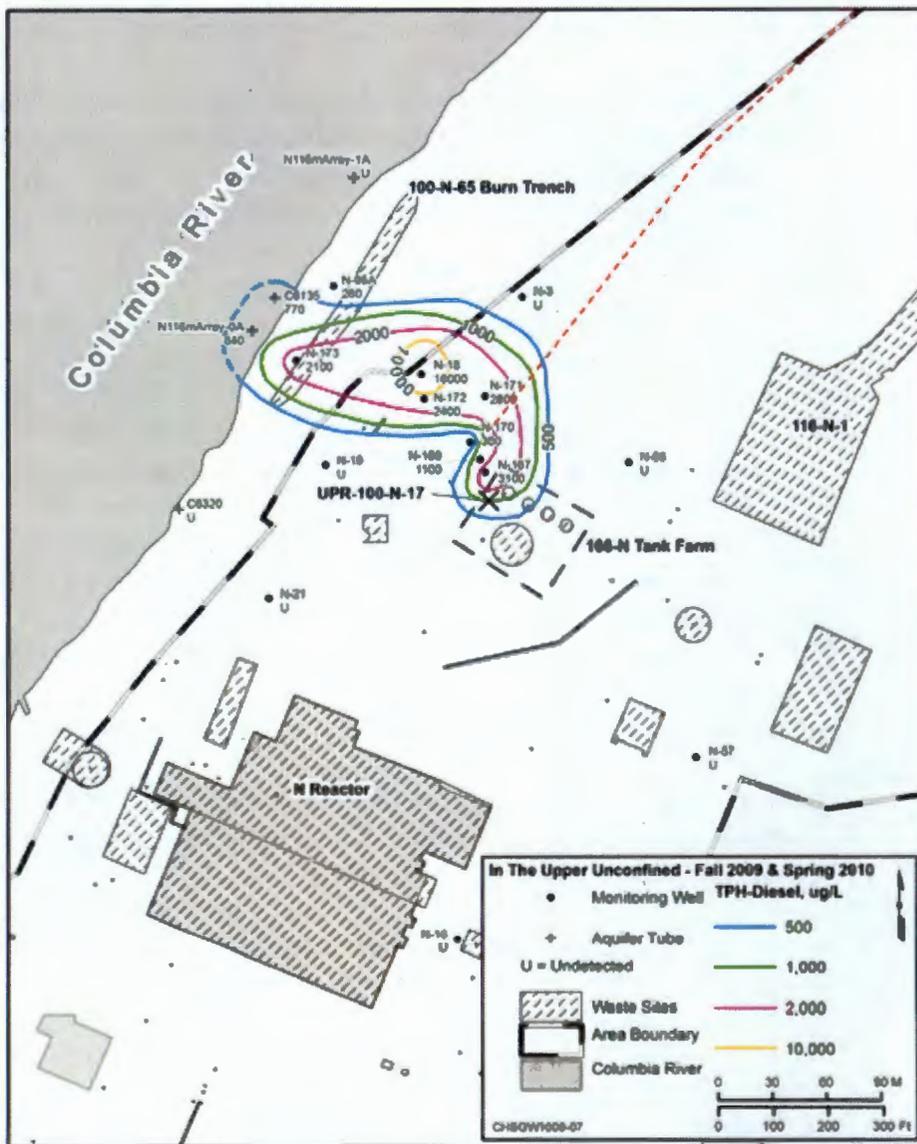
199-N-122 (MW)	199-N-133 (PT1MW)	199-N-137 (IBW)	199-N-161 (IBW)
199-N-123 (MW)	199-N-148 (PT2MW)	199-N-138 (IBW)	199-N-162 (IBW)
199-N-146 (MW)	199-N-149 (PT2MW)	199-N-139 (IBW)	199-N-163 (IBW)
199-N-147 (MW)	199-N-150 (PT2MW)	199-N-140 (IBW)	199-N-164 (IBW)
199-N-126 (PT1MW)	199-N-151 (PT2MW)	199-N-141 (IBW)	116mArray-2A (AT)
199-N-127 (PT1MW)	199-N-152 (PT2MW)	199-N-142 (IBW)	APT-1 (AT)
199-N-128 (PT1MW)	199-N-153 (PT2MW)	199-N-143 (IBW)	116mArray-3A (AT)
199-N-129 (PT1MW)	199-N-154 (PT2MW)	199-N-144 (IBW)	116mArray-4A (AT)
199-N-130 (PT1MW)	199-N-155 (PT2MW)	199-N-145 (IBW)	NVP2-116.0m (AT)
199-N-131 (PT1MW)	199-N-156 (PT2MW)	199-N-159 (IBW)	116mArray-6A (AT)
199-N-132 (PT1MW)	199-N-136 (IBW)	199-N-160 (IBW)	APT-5 (AT)

- The Rev. 0 pilot-scale Jet Injection Treatability Test Report has now been released and issued and is being provided to regulators and stakeholders for reference during review of the next Jet Injection TTP (300 ft), Draft A, described below..
- The Draft A demonstration-scale (300 ft) Jet Injection TTP was transmitted to RL on August 23, 2010 for Ecology review.
- Phytoextraction – The Draft A TTP for conducting a “hot” demonstration-scale treatability test of phytoextraction at the NR-2 site is near completion following a decisional-draft review by RL and informal review by Ecology.

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- Total Petroleum Hydrocarbon Investigation – PNNL has completed their first draft of their final study report. This draft is currently under internal review, but additional sampling events are still being included in this study to further refine the TPH conceptual site model. This includes recent groundwater sampling from wells completed as part of the WCH bio-venting test before the system was restarted in May. CHPRC and WCH are sharing groundwater and vadose data from the bio-venting test site to ensure a complete evaluation of the test. Also, data from the deep and shallow

apatite barrier extension wells that are located in the petroleum hydrocarbon plume are being included in this report (see red dashed line on figure). Field parameter data and field notes confirmed the presence of diesel/diesel odors in these wells when they were sampled. Field and analytical data from these samples will be used to further characterize the nature and extent of the TPH plume and to provide PNNL with more data for their evaluation report. The current plume map which was developed for the 100-N RI/FS Work Plan is shown below. The total petroleum hydrocarbon-diesel range (TPH-D) data used in this map were collected in the fall of 2009 and spring of 2010 and are shown by each well sampled. The map clearly shows the plume emanating from the spill source (166-N Tank Farm). The plume flowed to the north for a short time before it turned and generally followed the ambient groundwater flow direction (WNW) to the Columbia River shoreline. Well 199-N-18 is the center of the plume and the only well that still has minor amounts of floating hydrocarbon (diesel) in the well.



**100-KR-4 Groundwater OU – Art Lee**

- **Monthly Cultural Monitoring:** The monthly monitoring of cultural resources for the KR-4 Pump-and-Treat Project was conducted on August 20. No new issues were identified.

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- The updated KR4 Pump-and-Treat System cultural resource treatment plan was sent to the Tribes on June 17 with a request for comments by July 23, 2010. Comments have been received and being incorporated into the document for issuance.
- RI/FS Work Plan, Addendum 2 (K Area Operable Units):
  - The K DU data from the first round of risk assessment sampling has been delivered, reviewed, and loaded into HEIS. The second round of sampling has been completed and data loaded into HEIS. The third round of sampling for high river stage has been completed and awaiting sample analysis results.
  - Drilling to total depth completed on 100-KR-4 RI wells C7683, C7687, C7691, C7685, and C7690. Well design being prepared for C7690 based on preliminary analytical and field sample results. Well development and slug testing at well C7683 have been completed. Well construction and development has been completed for wells C7687, C7691, and C7685. Drilling is continuing at wells C7689 and C7692.
  - Drilling of RI borehole C7831 was completed. Drilling of RI borehole C7832 was initiated. Unexpected radioactive contamination was detected in the borehole at 18 ft bgs in an area which was previously remediated down to 25 ft bgs; the sampling was changed to continuous split-spoon samples.
  - Preliminary groundwater sample results from well C7683 indicate hexavalent chromium contamination in groundwater range from 11 ppb to 30 ppb in the bottom 10 feet of the well (187 – 197 ft bgs).
  - Preliminary groundwater sample results from well C7691 indicate 35 ppb hexavalent chromium contamination in groundwater at sample collected at the 83 ft bgs interval. Subsequent groundwater samples have been less than detectable.
  - August sampling completed on new aquifer tubes installed as part of the KR-4 remedial investigation.
  - Preparation of the RI/FS Report that will lead to a final record of decision is in progress.
- Interim Action Monitoring Plan: The decisional draft of the plan, which summarizes existing KR-4 Operable Unit interim action monitoring requirements into one updated document. Draft is being updated to incorporate comments received.
- Resin Testing with KX Groundwater:
  - The second SIR-700 resin test with pH control between 6.3-6.7 reached breakthrough at approximately 15,000 and 30,000 BVs through the 10" and 5" columns, respectively. The tighter pH controls showed improved resin performance from the first test where breakthrough occurred after ~5,000 bed volumes (BVs). Preparation of the K Area resin alternatives report is in progress.
  - A process test at the KW pump and treat facility is being prepared to perform full scale test to establish operating parameters using SIR-700 resin.
- KR-4 OU Pump-and-Treat Systems Expansions/Modifications:
  - Configuration of the wireless system components is being finalized to complete acceptance testing of the Phase 2 realignment at the KX pump and treat facility.
  - Detailed design continued through June on Phase 3 Realignment to the KW/KX/KR-4 pump and treat systems. Well locations have been staked and Area of Potential Affect notification was sent on March 25, 2010. Cultural Resources Review transmitted to SHPO and Tribes on July 27,

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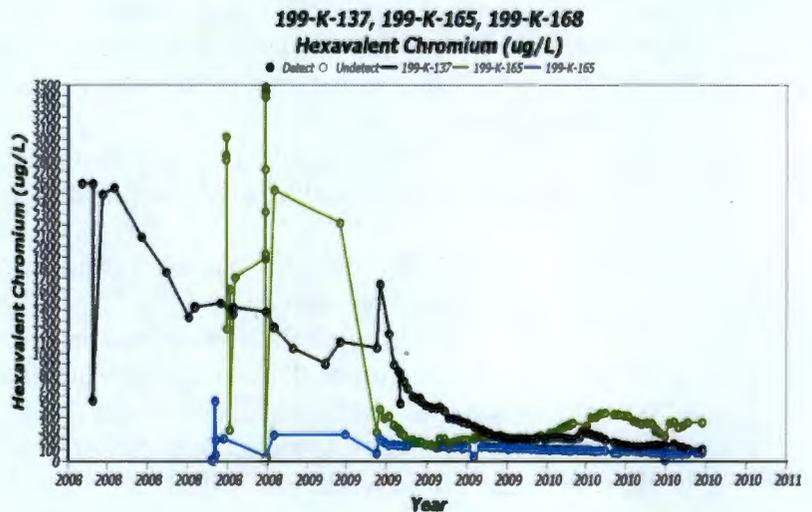
2010. SHPO did not concur with determination of no adverse effect. SHPO comments were addressed and report is being modified.

- Following integration discussions with 100K remediation of the 100-K-63 waste site, the new Phase 3 well for the KW P&T (199-K-196) will be relocated up gradient out of the contamination/excavation area to a location between existing extraction wells 199-K-132 and 199-K-138. 199-K-132 and 199-K-138 are shallow wells and installing a fully penetrating well between the two will help provide capture along this line of extraction wells.
  - Phase 3 procurement has been initiated for long lead items and to begin non-field related construction activities.
  - Field work initiated for the KR-4 PLC and well head modifications upgrade. Power and communications cable is being pulled to the wells. New well racks are being installed in the field. Software logic for new HMI with new PLC is being developed.
  - Procurement and shop fabrication for new well landing plates and electrical/mechanical racks to older KR-4 wells is in progress.
- Remedial Process Optimization (RPO):
    - Update to the 100-KR-4 RPO Conceptual Design Document is in review and comment. The document calls for taking a three-phased approach to meeting the 2012 and 2020 goals. The K-Area RPO Conceptual Design document was reviewed with RL on May 6 to discussion approach and groundwater modeling results. The document will be revised and updated in the coming months.
    - Implementation (initiation of detailed design) of the first of the three RPO phases is underway as Phase 3 KR4 OU pump-and-treat systems realignment.
    - RPO Phases 4 and 5 call for implementation of bioremediation actions in KW, KE, and the area around the 116-K-2 Trench, as well as additional well drilling and realignment of the pump-and-treat systems. Planning for implementation of a bio-infiltration treatability test at 100-KW is underway.
    - Preparation of a sampling and analysis plan, to support drilling of KR-4 OU RPO and compliance monitoring wells in FY 2011, is underway.
- 100-KR-4 System for the period of August 1 through August 31:
    - The system operated normally.
    - Total average flow through the system was approximately 211 gpm for August. Flow from various KR-4 extraction wells is being adjusted based on hexavalent chromium concentrations to optimize system performance. Groundwater from extraction wells with <10 ppb hexavalent chromium concentration is reduced or shut off to increase resin performance. During the month, flow from extraction wells 199-K-113, 114, 120, 127, and 162 was reduced or shut off as weekly samples indicated concentration at the extraction wells were <10 ppb.
    - Average influent hexavalent chromium concentration was approximately 21 µg/L for August.
  - KX System for the period of August 1 through August 31:
    - The facility operated normally.
    - Hexavalent chromium concentration remains <10 ppb at extraction wells 199-K-149 and 199-K-150 and the extraction wells have been turned off to evaluate rebound. Hexavalent chromium concentration at well 199-K-150 has been below 10ppb since October 2009, and at well 199-K-149 the concentration has been <10 ppb since June.. Switching extraction from these wells to monitoring wells 199-K-152 and 199-K-182, where hexavalent chromium contamination is >60 ppb, is being discussed with RL and EPA.
    - Total average flow through the system was approximately 446 gpm in August.

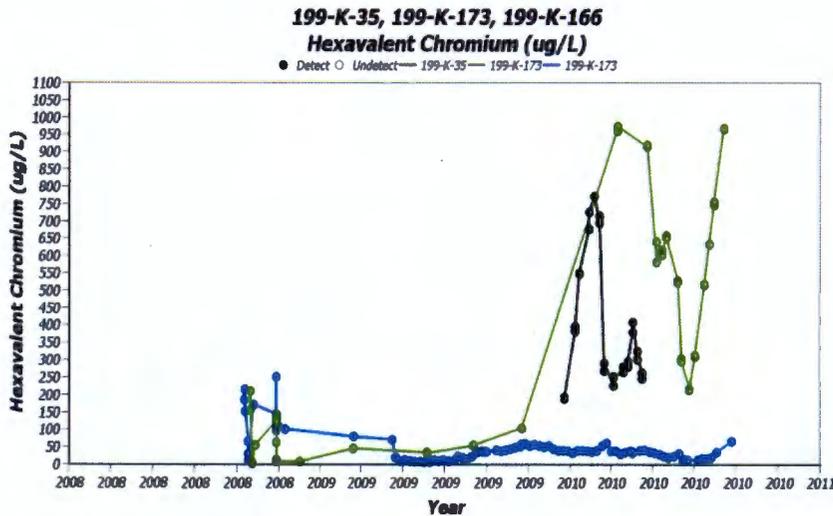
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- Average influent hexavalent chromium concentration was 44 µg/L in August.
- Sand has been observed in groundwater extracted from well 199-K-178. Extraction rate has been reduced from this well to minimize filter plugging. This will impact the planned aquifer test at well 199-K-178. Work package is being prepared to redevelop the well.
- KW System for the period of July 1 through July 31:
  - The KW system operated normally.
  - Total average flow through the system was approximately 192 gpm for August.
  - Average influent hexavalent chromium concentration was 137 µg/L for August.
  - 10 totes of resin from KW planned to be shipped for regeneration were above the authorization limit for C-14 (based on Sr-90 values) and could not be shipped. The Authorized Limit Application for the resin is currently undergoing revision to add C-14 as a COC and allow for our increased production as the authorization limit for C-14 will increase based on dose modeling calculations. Also, the Waste Management Plan is also undergoing revision to allow for composite sampling of the two totes representing one vessel of similar material. The composite analysis may result in some failed totes meeting the authorization limit.
- July Monitoring Activities:
  - Routine Monitoring: During August, 86 samples were collected at 21 KR4 OU wells and 21 samples were collected at 8 aquifer tubes. Weekly sampling at 199-K-173 continued in August but was halted due to access issues associated with the new K-Area water treatment plant. Results from the last sample taken 8/12/10 at 199-K-173 indicated a rebound to ~960 µg/L.

• KW extraction wells: All extraction wells were above the 20 µg/L aquatic standard at the through August. Cr6+ levels in the 2 wells closest to the river (K-132 and K-138) remained just above the RAO, at monthly averages of 24 µg/L and 22 µg/L, respectively. Key wells farther inland (K-137, K-165) experienced different trends. Well 199-K-137 averaged 108 µg/L in August while well 199-K-165 averaged 354 µg/L. The extraction well pair of 199-K-168 and 199-K-139 averaged 72 and 42 µg/L, respectively. Well 199-K-139, located within 30 ft of 199-K-168 is screened across the upper 25 ft of the 84 ft thick aquifer, while well 199-K-168 is screened across the lower 60 ft. As a potential response to increases at 199-K-173, downgradient extraction well 199-K-166 rose from 35 to 66 µg/L in August.

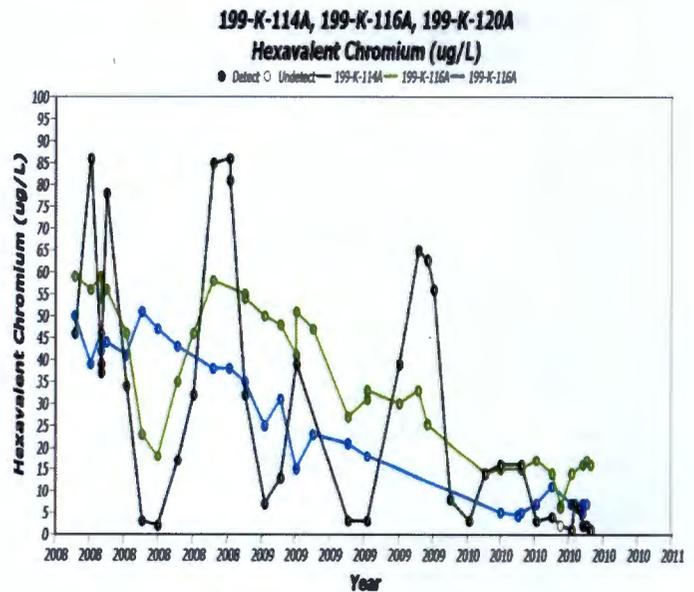


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KW Monitoring Wells: C  
Hexavalent chromium at monitoring well 199-K-173 rose sharply, spiking at 967  $\mu\text{g/L}$  in August 2010 sampling after declining to 215  $\mu\text{g/L}$  in late June.

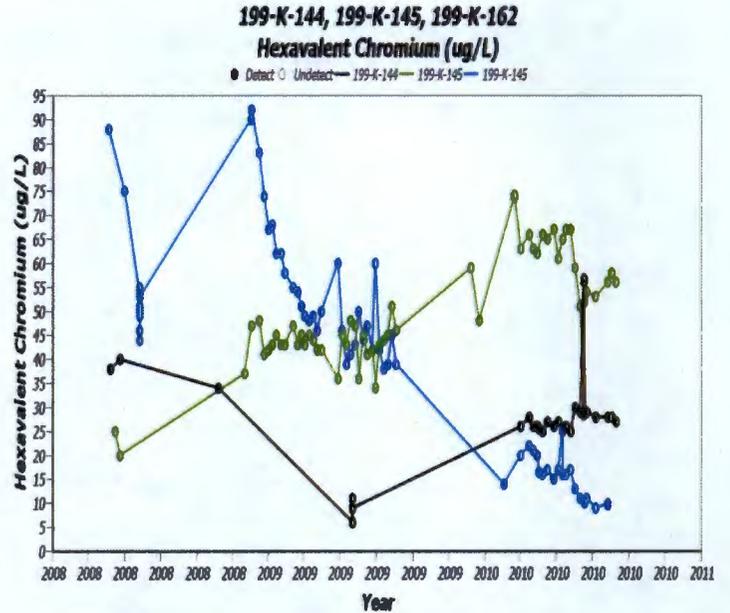
- KR4 Extraction Wells: Based on monthly operational sampling,  $\text{Cr}6+$  levels for wells at the NE end of the 116-K-2 trench and along the central section were generally below 20  $\mu\text{g/L}$  at all wells (K-113A, K-114A, K-120A, K-127, K-129) in August results. The highest concentration detected at these wells was 23  $\mu\text{g/L}$  at 199-K-129. Wells at the SW end of the K-2 trench ranged between 7 to 10  $\mu\text{g/L}$  (at 199-K-120A and 199-K-162) to 28 and 55  $\mu\text{g/L}$ , respectively (at wells 199-K-144 and 199-K-145). Well 199-K-145 is downgradient of monitoring well 199-K-18 (175  $\mu\text{g/L}$ ) and 199-K-115A is downgradient of 199-K-22 (117  $\mu\text{g/L}$  in June). The high river stage values observed in June may be. For August, extraction rates at the wells along the length and at NE end of the trench were 120-130 gpm, as wells 199-K-113A and 119-K-127 were temporarily shut down during high river stage. For the four wells at the SW end of the 116-K-2 trench, pumping rates were about 120 to 130 gpm.



KR-4 Extraction Wells

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- KR4 Monitoring Wells:** Hexavalent chromium concentrations at monitoring well 199-K-18 dropped to 173  $\mu\text{g/L}$  for filtered and unfiltered August (quarterly) samples. This is a break in the well's trend of high chromium levels in groundwater near the head end of the 116-K-2 trench. Additional data is not in to replace the June data for well 199-K-22 at 116  $\mu\text{g/L}$ . August hexavalent chromium concentrations at compliance well 199-K-20, located downgradient of the center of the 116-K-2 trench were above laboratory detection values at 4.4  $\mu\text{g/L}$ . Well 199-K-21 reached 21.3  $\mu\text{g/L}$  with a filtered sample on July 25, 2010 and averaged 19.9  $\mu\text{g/L}$  for that day's sampling event.

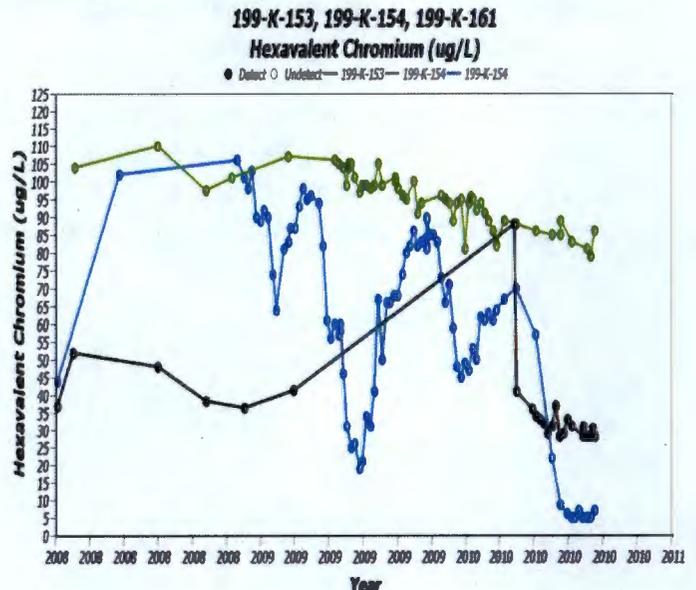


KR-4 Extraction Wells 116-K-2 Trench

- KX Extraction Wells:**  
 Northernmost plume: August field analytical results were relatively constant in overall Cr6+ trends. Well 199-K-130 showed a slight increase to 44  $\mu\text{g/L}$  over July data whereas well 199-K-131 showed a slight decrease to 33  $\mu\text{g/L}$ . Field values ranged from 39  $\mu\text{g/L}$  (K-148) to non-detect at wells 199-K-149 and 199-K-150, both of which were shut down to avoid processing low chromium water. Data from wells 199-K-150, K-149 and K-131 suggest this end of the plume is being remediated. Well 199-K-147, downgradient of the Calcium Polysulfide test facility shows a stable trend at 30  $\mu\text{g/L}$  Cr6+.

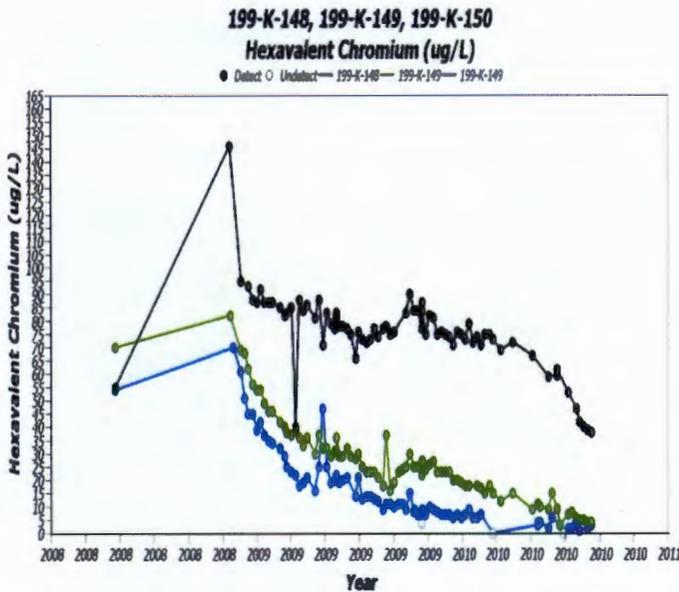
**Plume at Northeast End of K-2 Trench:** August field results indicated generally long-term decreases in overall Cr6+ levels. For wells downgradient of the 116-K-2 trench, Cr6+ concentrations less than 20  $\mu\text{g/L}$  at 199-K-146 and approaching nondetect for field analysis at well 199-K-161 are noted. River stage effects are known at these wells.

- For wells upgradient of the trench, in line with the plume at 199-K-171, average Cr6+ concentrations of 29, 83 and 51  $\mu\text{g/L}$  were detected at respective wells 199-K-153, 199-K-154 and 199-K-163 for August. These wells averaged a combined extraction rate of 180 - 190 gpm. Hexavalent chromium concentrations at recently started well 199-K-171 averaged 51  $\mu\text{g/L}$ . This well lies 800 m upgradient of wells 199-K-163 and 199-K-154 and yielded an average pumping rate of 60 gpm.



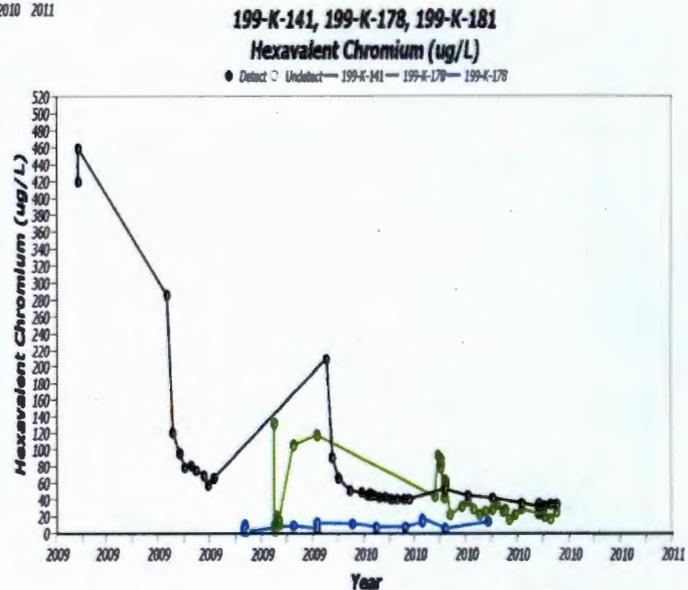
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- KE Reactor Plume: Cr6+ at well K-141 decreased to 34 µg/L in August. At K-178 chrome has declined to an average of 21 µg/L. The two wells extracted at a combined rate of 50-70 gpm.
- KE Monitoring Wells: Sampling at well 199-K-29 was attempted but water could not be pumped to the surface (dry). Attempts to replace a bad pump are being hindered by ongoing D4 activities at the 117-KE facility.



KX Extraction Wells, Northernmost plume

KX Extraction and Monitoring Wells, 105-KE Reactor.



- KX Monitoring Wells: Two monitoring wells, 199-K-151 and 199-K-152, help define the Cr6+ plume near the N-Reactor fence line. Cr6+ trends at these two wells increased slightly for 199-K-151 up from 9.2 to 21 µg/L between March and June. Well 199-K-152 remained constant at 62 µg/L from March data. No new values reported in August. Well 199-K-182, upgradient of the two, recorded Cr6+ concentrations of 79 µg/L in August sampling.

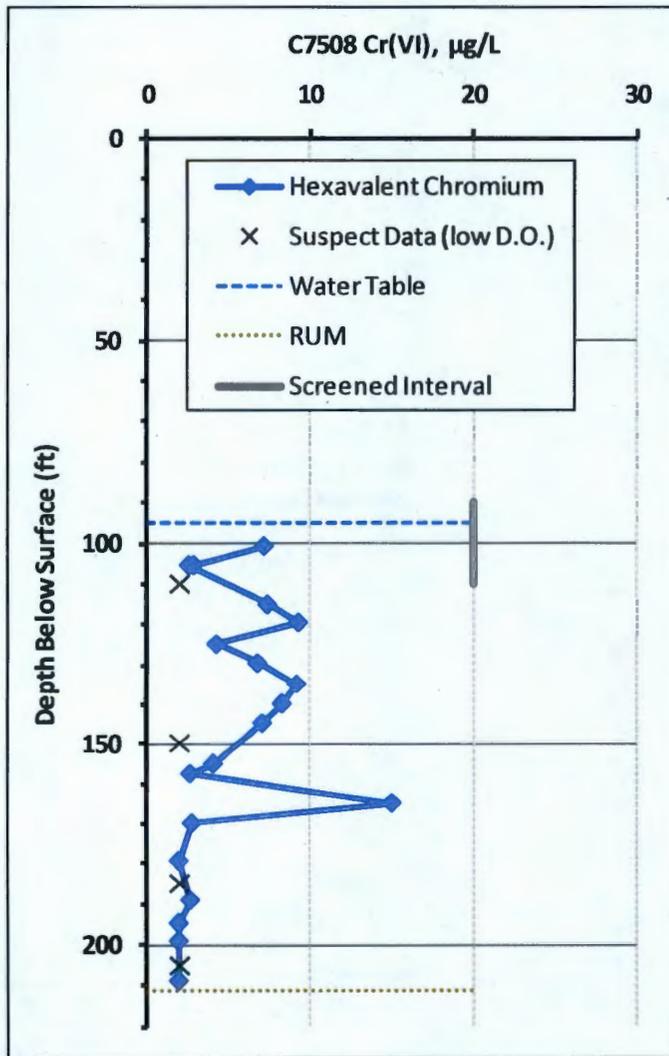
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**100-BC-5 Operable Units—Nathan Bowles / Mary Hartman**

(M-15-68-T01, 11/30/2011, Submit CERCLA RI/FS Report and Proposed Plan for the 100-BC-1, 100-BC-2 and 100-BC-5 Operable Units for groundwater and soil.)

*Schedule Status - On Schedule to meet TPA milestone. Field investigations have been initiated.*

- The second round of RI/FS spatial and temporal groundwater sampling for 100-BC is complete.
- RI/FS well 4 (C7508) was drilled near C Reactor building. The well will be screened at the top of the aquifer. Cr(VI) levels were below 10 ug/L except for one sample at 15 ug/L. These concentrations are consistent with the current interpretation of the chromium plume.



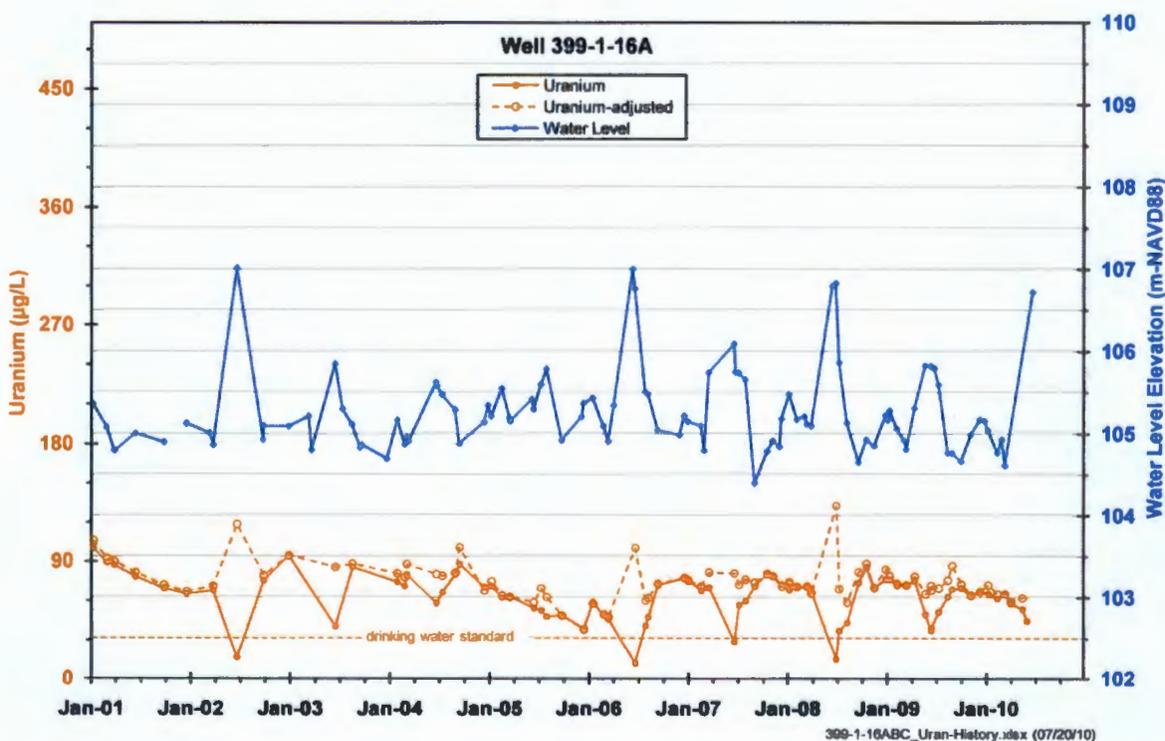
RI/FS well 2 (C7784) is being drilled near the water intake structure. The first few water samples near the top of the aquifer had Cr(VI) levels between 5 and 9 ug/L. Characterization samples will be collected through the entire thickness of the unconfined aquifer.

**300-FF-5 Operable Unit—Mark Kemner/Bob Peterson**

- RI drilling continues on site, with three of 11 monitoring wells complete or under construction. An additional five temporary monitoring wells will be drilled at the completion of the original 11. The well design of 399-1-57 was modified to capture an interval containing elevated concentrations of VOCs in the Hanford formation. A second drill rig is on site to accelerate well drilling and maintain the schedule for the RI/FS production.

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- 300-FF-5 Operations and Maintenance Plan Activities (DOE/RL-95-73, Rev. 1, 2002)
  - *300 Area Subregion:* The most recent results for uranium are for samples collected from wells in July. Results are consistent with historical trends and expectations. This year's high water table conditions extended to an elevation between 106.5 and 107.0 meters, and into the zone where mobile uranium still remains at some locations. Uranium concentrations for some June samples are elevated as a result. The trend chart below for 399-1-16A, which is located near the former North Process Pond and is influenced by the influx of river water during high stage conditions, illustrates the consequences. When the water table rises above ~106.5 meters, uranium concentrations at the well fall because of dilution by river water. If that effect is removed, using specific conductance as a guide, there is the suggestion that uranium has actually been added to groundwater, indicating the presence of mobile uranium in the periodically rewetted zone. The most recent samples were collected in early August in support of the 300 DURA sampling (June, August, and October 2010 events), CERCLA O&M plan, and RCRA 300 APT programs.



- *Special sampling downgradient of the 618-7 Burial Ground remediation site:* (no change since the last unit managers meeting in August)
- *Special sampling near the 618-1 Burial Ground remediation site:* (no change since the last unit managers meeting in August)
- *618-11 Burial Ground Subregion:* (no change since July unit manager meeting) The most recent results are for samples collected in June 2010 (quarterly frequency). The most recent sampling of these wells occurred in late August.
- *618-10 Burial Ground Subregion:* (no change since July unit manager meeting) The most recent results are for samples collected in early June 2010 (quarterly frequency). The most recent sampling occurred in early August.

- Other Activities:

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- *Uranium Analyzer Field Test:* Site preparation activities continue with plans to install a field analyzer for continuous uranium monitoring in water samples. Water will be withdrawn from up to four sources, currently planned to be aquifer tubes near the South Process Pond. Uranium will be measured continuously at intervals of several hours. The installation is part of a DOE technology development research grant.

# Attachment 2

# Field Remediation IU-2/6

## TPA Milestone M-16-56 (02-28-12)



### Milestone Description: Complete Interim Remedial Actions for 100-IU-2 & 100-IU-6 Waste Sites

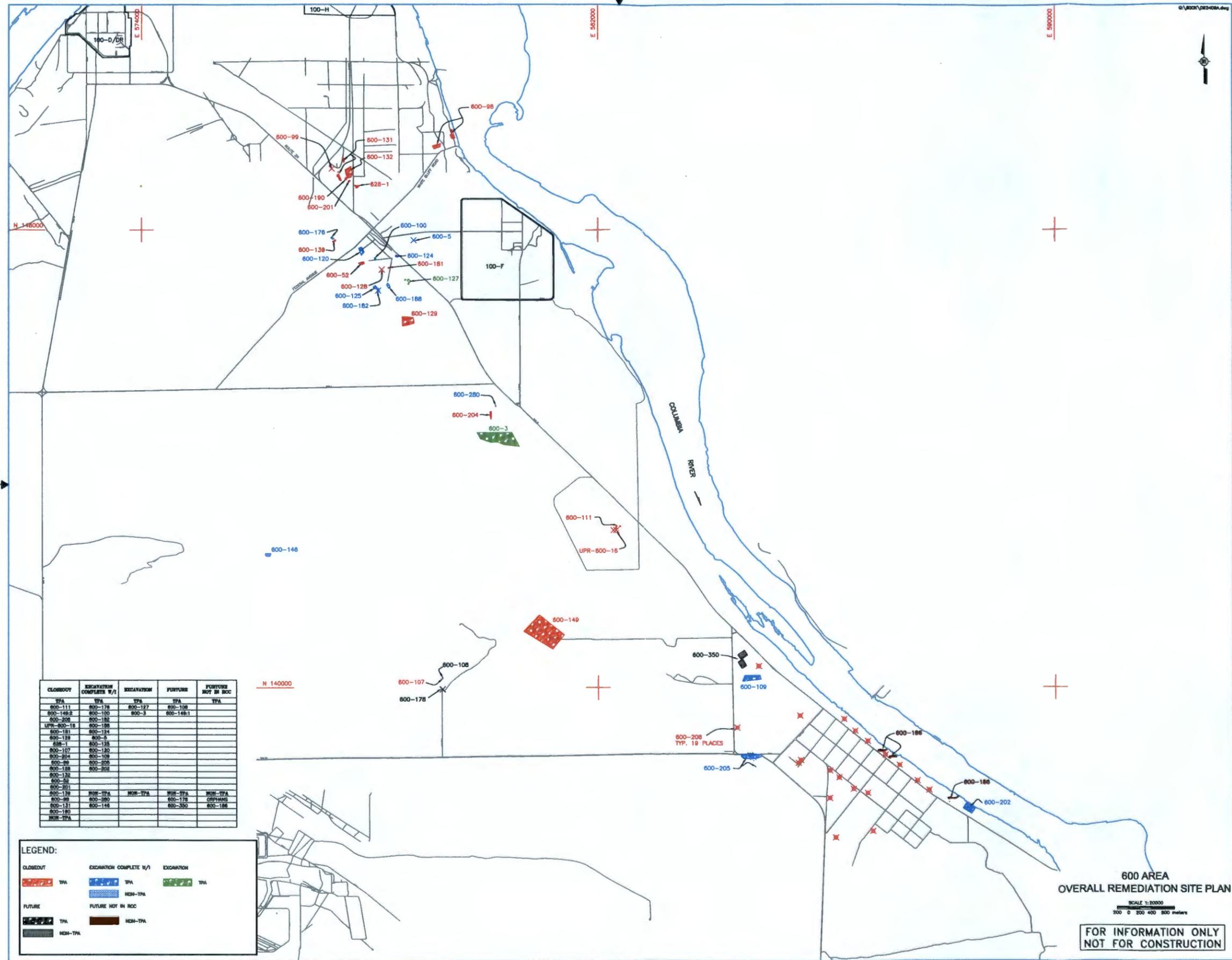
Activity ID	Activity Description	% Comp	Rem Dur	Early Start	Early Finish	Schedule											
						FY10	FY11			FY11					FY11		
						SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN		
<b>IU 2 &amp; 6 Excavation</b>																	
R003E3	600-003 Excavation Part 2	78	25	12APR10A	21OCT10												
R178E	600-178 Excavation	0	9	04OCT10*	18OCT10												
R108E	600-108 Excavation	0	35	19OCT10	21DEC10												
<b>IU 2 &amp; 6 Load-out</b>																	
R003L	600-003 Load-Out	35	29	11AUG10A	28OCT10												
R280L2	600-280 Load-Out	0	1	20SEP10*	20SEP10												
R108L	600-108 Load-Out (ERDF Cans)	0	35	19OCT10*	21DEC10												
DMLO	PNNL Dirt Mounds	0	2	04NOV10	08NOV10												
R178L	600-178 Load-Out (ERDF Cans)	0	2	27DEC10*	28DEC10												
<b>600-108 - 213 J&amp;K Storage Facility</b>																	
6108C100	Cultural Resource Review	98	2	27JAN10A	13SEP10												
6108C110	Acceptance of Estimate & NTP	0	1	09SEP10	09SEP10												
6108C120	Hire Additional Crew	0	12	13SEP10	30SEP10												
6108F100	Notify Tribes of Start of Excavation	0	1	12OCT10	12OCT10												
6108E100	Start Excavation/Removal	0	0	19OCT10													
<b>600-149:1- Small Arms, Rifle &amp; Pistol Range</b>																	
6149M110	JHA	0	3	14SEP10*	16SEP10												
6149M120	Crew Training	0	2	20SEP10	21SEP10												
6149M130	PSR	0	2	22SEP10	23SEP10												
6149E100	Boundary Civil Survey & Field Characterization	0	68	27SEP10	31JAN11												
6149R100	Coordinate and Remove UXO	0	28	01FEB11	22MAR11												
6149C100	Prepare Final and Closure Reports	0	40	23MAR11	01JUN11												
<b>600-186 - Construction Camp Septic System</b>																	
6186CR	Cultural Review-Phase II Samples (7 locations)	84	21	10MAR10A	14OCT10												
6186EP	Excavation Permit	87	9	10MAY10A	23SEP10												
6186PHASE2	Collection of Phase II Samples (7 locations)	0	4	18OCT10	21OCT10												
<b>600-350 Dirt Mounds</b>																	
DM150	Mobilization	0	1	25OCT10	25OCT10												
DM160	Excavation	0	6	26OCT10	03NOV10												

#### Activity /Actions Supporting Schedule

- Cultural Reviews are important for the following sites: 600-108 & 600-186
- Based on additional volumes and increased Rad items at 600-3, the projects duration may impact the start date for 100-C-7.

#### ISSUE / CONCERNS

Milestones	Due Date	Status
TPA M-16-56	2/28/2012	2/28/12 F
PM - 26	3/31/2012	3/31/12 F



CLOSOUT	EXCAVATION COMPLETE W/I	EXCAVATION	FUTURE	FUTURE NOT IN BOC
600-111	600-178	600-187	600-128	
600-148.2	600-100	600-3	600-148.1	
600-208	600-182			
600-181	600-188			
600-124	600-124			
600-129	600-5			
600-1	600-128			
600-107	600-182			
600-204	600-108			
600-58	600-205			
600-128	600-202			
600-132				
600-52				
600-201				
600-128	600-124	600-124	600-124	600-124
600-99	600-200	600-200	600-178	600-178
600-131	600-148	600-148	600-350	600-188
600-182				
600-278				

**LEGEND:**

**CLOSOUT**  
 TPA  
 NEH-TPA

**EXCAVATION COMPLETE W/I**  
 TPA  
 NEH-TPA

**EXCAVATION**  
 TPA

**FUTURE**  
 TPA  
 NEH-TPA

**600 AREA OVERALL REMEDIATION SITE PLAN**

SCALE 1:20000  
 0 200 400 600 meters

**FOR INFORMATION ONLY  
 NOT FOR CONSTRUCTION**

# Attachment 3

## TRI-PARTY AGREEMENT

Change Notice Number TPA-CN- 379	TPA CHANGE NOTICE FORM	Date: 8/25/2010
Document Number, Title, and Revision: <i>Waste Control Plan for the 100-FR-3 Operable Unit, DOE/RL-2004-31, Rev. 1</i>		Date Document Last Issued: May 2005
Originator: Jon McKibben / Nathan Bowles		Phone: 373-4677/373-3007

**Description of Change:**

Appendix 3, "100-FR-3 Operable Unit Groundwater Well List", on page 8 of the *Waste Control Plan for the 100-FR-3 Operable Unit* is being updated to include modified borehole names for three previously approved boreholes per TPA-CN-361.

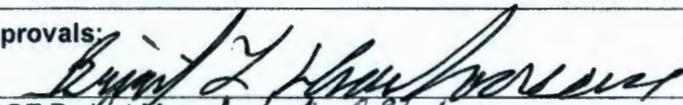
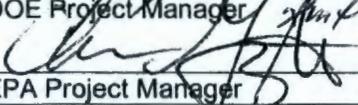
Briant Charboneau and Christopher Guzzetti agree that the proposed change  
**DOE** **Lead Regulatory Agency**  
 modifies an approved workplan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, *Documentation and Records*, and not Chapter 12.0, *Changes to the Agreement*.

Note: Include affected page number(s)

**Justification and Impacts of Change:**

Appendix 3 (well list) on page 8 of the *Waste Control Plan for the 100-FR-3 Operable Unit* needs to be updated to modify the names of three (3) boreholes previously approved in TPA-CN-361. Names are being changed from C7973, C7974 and C7975 to C7970, C7971, C7972

**Approvals:**

 DOE Project Manager	8-30-2010 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved
 EPA Project Manager	8/30/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved

**Attachment 3\***  
**100-FR-3 Operable Unit Groundwater Well List**  
 (from Table 1 of DOE/RL-2003-49)

**Shading indicates wells added or text modified by this change.**

100-FR-3 Wells	100-FR-3 Wells (cont.)	Aquifer Sampling Tubes <sup>a</sup>
199-F1-2	699-66-23	60 <sup>c</sup>
199-F5-1	699-67-51	61 <sup>c</sup>
199-F5-3 <sup>b</sup>	699-69-45 <sup>b</sup>	62
199-F5-4	699-71-30	63 <sup>c</sup>
199-F5-42	699-71-52 <sup>b</sup>	64
199-F5-43A	699-74-44	65 <sup>c</sup>
199-F5-43B	699-77-36	66
199-F5-44	699-77-54	67
199-F5-45	699-80-43S <sup>b</sup>	68
199-F5-46	699-81-38	69 <sup>c</sup>
199-F5-47	699-82-32 <sup>b</sup>	70 <sup>c</sup>
199-F5-48	699-82-34 <sup>b</sup>	71 <sup>c</sup>
199-F5-6	699-83-47	72 <sup>c</sup>
199-F5-52	699-84-35A <sup>b</sup>	73 <sup>c</sup>
199-F5-53		74
199-F5-54		75
199-F6-1		76
199-F7-1	<b>100-FR-3 Boreholes</b>	77
199-F7-2	<del>C7973</del> C7970	78 <sup>c</sup>
199-F7-3	<del>C7974</del> C7971	80 <sup>c</sup>
199-F8-2	<del>C7975</del> C7972	AT-F-1
199-F8-3		AT-F-2
199-F8-4		AT-F-3 <sup>c</sup>
199-F8-7		AT-F-4 <sup>c</sup>
699-58-24		C6302, C6303, C6304
699-60-32		C6305, C6306, C6307
699-61-37 <sup>b</sup>		C6308, C6309, C6310
699-62-31		C6311, C6312, C6313
699-62-43F		C6314, C6315, C6316
699-63-25A		
699-63-55		
699-64-27		<b>Seeps</b>
699-65-50 <sup>b</sup>		187-1
		190-4
		207-1

Any other natural seep along the shoreline of the 100-FR-3 groundwater interest area<sup>b</sup>

<sup>a</sup> One or more of the available tubes at each site may be sampled (see DOE/RL-2003-38)

<sup>b</sup> Not listed in DOE/RL-2003-49 but included here for completeness.

<sup>c</sup> Not listed in DOE/RL-2000-59 but included here for completeness.

\* This revision to the FR-3 WCP Attachment 3 (Well List) was approved under TPA-CN-379.

# Attachment 4

## 100 Area D4/ISS Status

September 9, 2010

### D4 (WCH)

**100-N River Structures (181-N, 181-NE, 1908-N, 1908-NE):** After evaluating various options for demolition of 100-N river structures, D4 settled on a general conceptual plan that is still in the process of being finalized. Once complete, the conceptual plan will be presented to the tribes, Ecology, and other regulatory agencies. Completion of the cultural resources review is still scheduled for mid November. In the meantime, equipment removal at the 181-N River Pumphouse will continue and equipment removal from the 181-NE HGP River Pumphouse will again commence after two transformers at the facility have been drained of their coolant.

**1322-N Facilities:** Below grade demolition is almost complete. Remaining work for the next three weeks includes load out of debris and removal of below grade TSD piping.

**183-H West Clearwell:** Load out of demolition debris is complete and floor of clearwell has been sampled and cracked to prevent stormwater retention. TCLP analyses of the concrete have come back and no dangerous waste action levels for metals were found. Much of the residual ash in the pump room has been cleaned out. The excavator that broke down in the clearwell has a new engine and is expected to again be operational soon, maybe today. Once the excavator is driven out, Ecology will once again be invited to inspect the west clearwell. Final activities for D4 include removal of bridge (placed across pump room) and final cleaning of coal ash from pump room.

**182-N High Lift Pumphouse:** Minor scaffolding erection activities conducted. Completion of scaffolding is pending manpower.

**105-N Fuel Storage Basin:** No activities during last month other than minor housekeeping.

**1909-N Waste Disposal Valve Pit:** Removed cover and began excavation of pit. Excavation is at approximately 50 percent. Excavation completion and backfill expected during next month.

### ISS/SSE (Dickson):

**105-N Reactor Building:** North side demolition is complete with excavation now partially backfilled. Potholing/soil sampling at intake plenum (discovery site) has been completed and the analytical results indicate the soil contamination found in front of the intake plenum's straightening vanes, does not increase with depth. Demolition and excavation of the west side below-grade, including UPR-100-N-39, is almost complete.

**109-N Heat Exchanger Building:** Structural steel erection on 109-N roof structure and sealing of penetrations in SSE walls ongoing and proceeding as planned.

# Attachment 5

**^WCH Document Control**

152862

---

**From:** Saueressig, Daniel G  
**Sent:** Wednesday, August 18, 2010 7:53 AM  
**To:** ^WCH Document Control  
**Subject:** FW: CLOSURE REQUEST FOR STAGING PILE/SORTING CELLS AT 118-H-1:1

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

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
**Sent:** Tuesday, August 17, 2010 5:05 PM  
**To:** Saueressig, Daniel G  
**Cc:** Varljen, Robin; Chance, Joanne C; Landon, Roger J; Wilkinson, Stephen G; Menard, Nina  
**Subject:** RE: CLOSURE REQUEST FOR STAGING PILE/SORTING CELLS AT 118-H-1:1

Dan, Ecology concurs that you are no longer using the staging piles at 118-H-1:1 and that all waste has been removed. We concur that the staging piles are closed and the sorting cells will be further evaluated using verification sampling and closed under the forthcoming CVP.

Any soil contamination issues that remain within the sorting cells will be further evaluated and addressed through the verification sampling and details within the CVP.

Thank you for formally documenting this agreement. Please add this agreement to the meeting minutes at the September UMM.

Thanks,  
Mandy

---

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Tue 8/17/2010 1:07 PM  
**To:** Jones, Mandy (ECY)  
**Cc:** Varljen, Robin (ECY); Chance, Joanne C; Landon, Roger J; Wilkinson, Stephen G  
**Subject:** CLOSURE REQUEST FOR STAGING PILE/SORTING CELLS AT 118-H-1:1

Hi Mandy, I'd like to request Ecology approval to close the sorting cells (SCs) at 118-H-1 from a staging pile perspective as described in Section 4.5.2 of the 100 Area Remedial Design Report/Removal Action Work Plan (RDR/RAWP), DOE/RL-96-17, Rev. 6. The RDR/RAWP requires that staging piles must be closed in accordance with provisions of 40 CFR 264.258(a) and 40 CFR 264.111, or 40 CFR 265.258(a) and 40 CFR 265.111. 40 CFR 264.258(a) and 40 CFR.265.258(a) require, "At closure, the owner or operator must removed or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils and structures and equipment contaminated with waste and leachate and manage them as hazardous waste unless §

8/18/2010

**152862**

261.3(d) of this chapter applies."

Approval to construct and use the SCs was obtained from Ecology on 7/14/08 and documented in the August 2008 Unit Managers Meeting. Although the 7/14/08 approval did not specifically identify the SCs as a staging pile, the SCs were constructed outside the Area of Contamination, so the requirements of Section 4.5.2 of the RDR/RAWP are applicable. The SCs began operation on August 18, 2008, with the delivery of the first excavated soil from the 118-H-1 burial grounds for sorting, sampling and storage pending shipment to the Environmental Restoration Disposal Facility. The SCs continued to operate in this capacity until June 24, 2009, when the last of the excavated material from the 118-H-1 burial ground was removed. The SCs were further excavated on September 15, 2009 to remove the exposed soil below the SCs. Final GPERS indicated no gamma contamination above background.

It's WCH's belief that we've met the intent of closure by removal of all waste and underlying soil from the SCs. The SCs remain in the closure package for the 118-H-1:1 and will be included in the Closure Verification Package currently being negotiated with Ecology.

Let me know if you concur with closing the SCs from a staging pile perspective in accordance with Section 4.5.2 of the RDR/RAWP.

Thanks and give me a call if you have any questions.

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

8/18/2010

# Attachment 6

153051

**^WCH Document Control**

---

**From:** Saueressig, Daniel G  
**Sent:** Wednesday, September 01, 2010 2:02 PM  
**To:** ^WCH Document Control  
**Subject:** FW: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)  
**Attachments:** 132-H-1\_132-H-3 Stockpile.PDF

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

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Post, Thomas [mailto:Thomas.Post@rl.doe.gov]  
**Sent:** Tuesday, August 31, 2010 9:21 AM  
**To:** Jones, Mandy; Laurenz, Julian E  
**Cc:** Martin, David W; Saueressig, Daniel G; Cone, Nels B  
**Subject:** RE: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)

Julian,

I concur as well. Sorry, I've been out the past few days.

Thanks.

Tom

---

**From:** Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
**Sent:** Monday, August 30, 2010 1:33 PM  
**To:** Laurenz, Julian E; Post, Thomas  
**Cc:** Martin, David W; Saueressig, Daniel G; Cone, Nels B  
**Subject:** RE: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)

Julian, thank you for the follow up information.

Ecology has reviewed WCH's proposal for a staging pile area for the 132-H-1 and 132-H-3 waste sites. If DOE is in agreement, Ecology is prepared to approve your suggested staging pile as identified on the drawing provided August 25th, 2010.

Please ensure that this staging pile is operated in accordance with the Section 4.5.2 in the RDR/RAWP for the 100 Area, DOE/RL-96-17, Rev 6. Additionally, please ensure that all contaminants of concern for 132-H-1 and 132-H-3 are carried forward into the verification sampling plan for this staging pile location.

Please have this agreement captured in the 100/300 Area UMM minutes along with the updated civil drawing, which clearly identifies the staging pile location.

Let me know if you have any questions.

9/1/2010

Thanks,  
Mandy

---

**From:** Laurenz, Julian E [mailto:jelauren@wch-rcc.com]  
**Sent:** Monday, August 30, 2010 5:57 AM  
**To:** Jones, Mandy (ECY); Post, Thomas C  
**Cc:** Martin, David W; Saueressig, Daniel G; Cone, Nels B  
**Subject:** RE: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)

Mandy,

It's as simple as me not being familiar with that area. I guess I should have called this a Take 3 on the drawing. There are no existing waste sites located under the proposed staging pile area.

Thanks,  
Julian

---

**From:** Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
**Sent:** Friday, August 27, 2010 7:56 AM  
**To:** Laurenz, Julian E; Post, Thomas C  
**Cc:** Martin, David W; Saueressig, Daniel G; Cone, Nels B  
**Subject:** RE: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)

Julian, Comparing the map that was provided on 8/19 with the map provided on 8/25 it appears that the requested staging pile area has gotten much larger, can you tell me why? Did the project learn something about the waste site remediation that would require a larger staging pile area or was the area just mis-represented on the 8/19 map?

Additionally, can you confirm that there are no existing waste sites located under the proposed staging pile area, as depicted on the 8/25 map.

Thank you,  
Mandy

---

**From:** Laurenz, Julian E [mailto:jelauren@wch-rcc.com]  
**Sent:** Wed 8/25/2010 6:23 PM  
**To:** Jones, Mandy (ECY); Post, Thomas C  
**Cc:** Martin, David W; Saueressig, Daniel G; Cone, Nels B  
**Subject:** RE: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)

Mandy,

I hadn't forgotten about your request below. Attached is the updated map. I've noted the first overburden pile with a 1 inside a triangle. The second overburden pile (i.e., where the material will be moved) is denoted with a 2 inside a triangle.

If you and Tom could give me a response by next Tuesday, 8/31, it would be much appreciated.

Thanks,  
Julian

9/1/2010

-----Original Message-----

From: Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
Sent: Thursday, August 19, 2010 1:28 PM  
To: Laurenz, Julian E; Post, Thomas C  
Cc: Martin, David W; Saueressig, Daniel G; Cone, Nels B  
Subject: RE: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)

Julian, Could you please update this map to show where the 118-H-6:4 overburden material will overlay the proposed staging pile area .

Additionally, could you add to the map the location of the 2nd 118-H-6:4 overburden area (i.e., where the material will be moved).

Thanks in advance!  
Mandy

-----Original Message-----

From: Laurenz, Julian E [mailto:jelauren@wch-rcc.com]  
Sent: Thursday, August 19, 2010 10:04 AM  
To: Jones, Mandy (ECY); Post, Thomas C  
Cc: Martin, David W; Saueressig, Daniel G; Cone, Nels B  
Subject: RE: Proposed 132-H-1\_132-H-3 Stockpile Area (Take 2)

Mandy/Tom,

I've been at 100-D too long, so my sense of direction at 100-H isn't quite there yet. Please disregard my original request and review the attached. This sketch contains two items of note: 1) The requested staging/stockpile area; 2) Location of 132-H-1/132-H-3.

Please review by 8/26.

Thanks,  
Julian

-----Original Message-----

From: Laurenz, Julian E  
Sent: Thursday, August 19, 2010 6:56 AM  
To: Jones, Mandy; Post, Thomas C  
Cc: Martin, David W; Saueressig, Daniel G; Cone, Nels B  
Subject: RE: Proposed 132-H-1\_132-H-3 Stockpile Area

Mandy/Tom,

One thing I forgot to mention. Part of the area I've recommended currently has 118-H-6:4 overburden (BCL) material. In order to use this area, we'll be re-locating these overburden piles east of the 105-H reactor, where another 118-H-6:4 overburden pile exists.

Please let me know if you have any questions.

Julian

-----Original Message-----

From: Laurenz, Julian E  
Sent: Thursday, August 19, 2010 6:37 AM  
To: Jones, Mandy; Post, Thomas C  
Cc: Martin, David W; Saueressig, Daniel G; Cone, Nels B  
Subject: Proposed 132-H-1\_132-H-3 Stockpile Area

9/1/2010

Mandy/Tom,

How is it going? Our plan is to start remediation of the 132-H-1/132-H-3 sites the week of August 30. Attached is a proposed staging/stockpile area for the sites.

Please review and let me know if you have any questions. If the area is acceptable with you guys, I'm looking to get concurrence by Thursday, 8/26.

Thanks,  
Julian

9/1/2010



# Attachment 7

153072

**^WCH Document Control**

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**From:** Saueressig, Daniel G  
**Sent:** Thursday, September 02, 2010 2:02 PM  
**To:** ^WCH Document Control  
**Subject:** FW: SUMMARY OF 7/19/10 MEETING ON REMEDIATION OF 100-D-8, 100-D-65 AND 100-D-66

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

Thanks,

Dan Saueressig  
 FR Environmental Project Lead  
 Washington Closure Hanford  
 521-5326

---

**From:** Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
**Sent:** Thursday, September 02, 2010 1:44 PM  
**To:** Saueressig, Daniel G; Seiple, Jacqueline; Varljen, Robin  
**Cc:** Post, Thomas C; Wilkinson, Stephen G; Landon, Roger J; Menard, Nina  
**Subject:** RE: SUMMARY OF 7/19/10 MEETING ON REMEDIATION OF 100-D-8, 100-D-65 AND 100-D-66

Dan, we did make one minor edit in the last two sentences below (in red). Ecology concurs with the text as written below.

Please let me know if you have any questions or concerns.

Thank you,  
 Mandy

---

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Thursday, September 02, 2010 1:07 PM  
**To:** Jones, Mandy (ECY); Seiple, Jacqueline (ECY); Varljen, Robin (ECY)  
**Cc:** Post, Thomas C; Wilkinson, Stephen G; Landon, Roger J  
**Subject:** SUMMARY OF 7/19/10 MEETING ON REMEDIATION OF 100-D-8, 100-D-65 AND 100-D-66

Jacqui/Mandy/Robin, below is a revised summary of the formal design briefing held at the Ecology office on 7/19/10 regarding the remediation designs for the 100-D-8, 100-D-65 and 100-D-66. Let me know if this accurately reflects the discussion and agreements made at the meeting and we can document the results of the meeting at the next Unit Managers Meeting (UMM) .

The design drawings for the sites listed above were shared with Ecology and Ecology provided comments on the drawings on 8/30/10. Once the Ecology comments are incorporated and agreed to, they will be included with this summary at the next UMM (or the following UMM) for inclusion into the administrative record. WCH/DOE indicated that remediation of all three waste sites above the ordinary high water mark (OHWM) would be performed consistent with existing remediation designs (pending Ecology review) and once remediation above the OHWM is complete, closure of these portions of the waste sites would commence consistent with existing protocols. The focus of this discussion was on remediation of these waste sites below the OHWM, as each site is

9/2/2010

153072

unique and excavation below the ordinary low water mark (OLWM) will introduce additional complexities that may not have been evaluated when the interim Record of Decision (ROD) for these sites was issued.

100-D-8 was discussed first, as this is the site that must be remediated to complete Milestone M-16-47, due 12/31/2011. WCH indicated that the 100-D-8 was demolished in the 1970's and there's no documentation found indicating if the spillway remains, only that it was demolished and backfilled. Ecology noted that the Preliminary Remaining Sites Verification Report (PRSVR) states that the spillway rip rap extends 45 feet into the river below the low water mark. WCH (Dan Saueressig) took an action to verify the discussion in the PRSVR related to how far the grouted rip rap extends into the water if it does remain and determine if any documentation exists confirming the length of the grouted rip rap at the end of the spillway. WCH indicated that no work was planned below the OLWM. WCH/DOE indicated that they would attempt to remove any structure remaining between the OHWM and OLWM and planned to perform this portion of the work when river flows are lowest, at approximately 61,500 cubic feet per second (CFS) through Priest Rapids Dam, which is typically in the September to December timeframe. WCH/DOE indicated that they felt they could remove the structure down to the 117 meter above sea level elevation, which would provide a level of assurance that during remediation of the portion of the site between the OHWM and OLWM that the site would not get inundated with water should the river level rise and cause a potential stranding hazard for salmon and steelhead smolt, in addition to potentially allowing sediment to be released to the river. WCH/DOE also indicated that when any remediation is performed below the OHWM, those areas would be sampled and backfilled the same day to avoid potential stranding hazards and sedimentation releases.

The next design discussed was the 100-D-65 spillway that extends well into the river and can't be completely removed without substantial effort and controls that may not have been evaluated when the original interim ROD was issued. WCH/DOE proposed to remove the portion of the spillway between the OHWM and OLWM consistent with the proposed remediation of the 100-D-8, to approximately 117 meters above sea level when river levels are at their lowest (October - December). Sampling and backfill of the portion of the site between the OHWM and OLWM would be performed in the same manner discussed for 100-D-8.

The last design discussed was the 100-D-66 spillway that appears to be completely out of the river during low river stages. WCH/DOE proposed to remove the entire spillway and sample and backfill the portion of the spillway between the OHWM and OLWM consistent with the discussion above.

Sampling and closure of the sites was also discussed. It was agreed that closure of the sites above the OHWM would be performed consistent with existing protocols. For the portions of the sites between the OHWM and OLWM, Ecology agreed to allow sampling and backfill of these portions of the sites the same day they are removed as long as a sampling plan is prepared and approved by Ecology prior to remediating any portion of the site below the OHWM. Regarding closure of the sites, sample data received from the samples taken below the OHWM (and above the OLWM) will be compared against the soil clean up levels in the IROD and used by the Tri-Parties to determine how these portions of the waste sites will be dispositioned (interim closed out or create a new waste sub-site to be addressed in the final ROD). Any remaining structure in the riverbed will be considered a new waste sub-site to be evaluated in the final ROD.

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

9/2/2010

# Attachment 8

152852

**^WCH Document Control**

---

**From:** Saueressig, Daniel G  
**Sent:** Tuesday, August 17, 2010 2:11 PM  
**To:** ^WCH Document Control  
**Subject:** REQUEST TO ADD 132-D-1 TO THE 100-D AIR MONITORING PLAN

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

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
**Sent:** Friday, August 13, 2010 7:37 AM  
**To:** Saueressig, Daniel G  
**Cc:** Varljen, Robin; Post, Thomas C; Wilkinson, Stephen G; Landon, Roger J  
**Subject:** RE: REQUEST TO ADD 132-D-1 TO THE 100-D AIR MONITORING PLAN

Dan, thank you for the information on the 100-D Air Monitoring Plan, we look forward to reviewing the revised version.

In order to support the startup of work at 132-D-1 waste site Ecology provides approval to add the 132-D-1 waste site to the 100-D Air Monitoring Plan.

Please document this agreement in the September UMM, as the revised AMP will likely not be reviewed and approved by that time.

Thank you,  
Mandy

---

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Thu 8/12/2010 10:15 AM  
**To:** Jones, Mandy (ECY)  
**Cc:** Varljen, Robin (ECY); Post, Thomas C; Wilkinson, Stephen G; Landon, Roger J  
**Subject:** REQUEST TO ADD 132-D-1 TO THE 100-D AIR MONITORING PLAN

Hi Mandy, I've got the revision to the 100-D air monitoring plan almost ready for DOE review and then it will be shared with Ecology. The project has requested that Ecology approve inclusion of the 132-D-1 into the existing air monitoring plan for 100-D via email and documented at the UMM while the revision to the entire document gets finalized. They need to start working at 132-D-1 by August 26, 2010 in order to meet the milestone for 100-D.

Attached is the TEDE calculation that was prepared for 132-D-1 (and other sites that are being included in the air monitoring plan revision). I'd like to request Ecology concurrence to add the 132-D-1 waste site to the 100-D air

8/17/2010

152852

monitoring plan now so that work can commence by August 26, 2010. I estimate the revised air monitoring plan for 100-D will be sent to Ecology for review by the end of August.

Thanks and give me a call if you have any questions.

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

<<100-D TEDE 7-20-10.pdf>>

# Attachment 9

**^WCH Document Control**

152951

---

**From:** Saueressig, Daniel G  
**Sent:** Wednesday, August 25, 2010 6:10 AM  
**To:** ^WCH Document Control  
**Subject:** FW: 100-D-13 Proposed Staging Area  
**Attachments:** 100-D-13 Proposed Staging Areas.PDF

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

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
**Sent:** Tuesday, August 24, 2010 8:13 AM  
**To:** Laurenz, Julian E; Post, Thomas C; Seiple, Jacqueline  
**Cc:** Martin, David W; Saueressig, Daniel G; Allenbaugh, William J  
**Subject:** RE: 100-D-13 Proposed Staging Area

Julian, thank you

Ecology approves of the location of the two proposed staging pile areas detailed on the map provided to us for review on August 23th.

Please ensure that these staging pile areas are managed as described in Section 4.5.2 of the 100 Area RDR/RAWP, DOE/RL-96-17, Rev. 6.

Additionally, when performing the close out sampling of the staging pile areas please ensure all COPCs from the 100-D-12 waste site are included in the close out sample design for the staging pile areas.

Please document this agreement in the September UMM minutes, with the associated drawing.

Thank you,  
Mandy

---

**From:** Laurenz, Julian E [mailto:jelauren@wch-rcc.com]  
**Sent:** Tue 8/24/2010 7:56 AM  
**To:** Jones, Mandy (ECY); Post, Thomas C; Seiple, Jacqueline (ECY)  
**Cc:** Martin, David W; Saueressig, Daniel G; Allenbaugh, William J  
**Subject:** RE: 100-D-13 Proposed Staging Area

Mandy,

8/25/2010

There are no waste sites under the two new proposed staging areas.

152951

Julian

---

**From:** Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]  
**Sent:** Tuesday, August 24, 2010 7:52 AM  
**To:** Laurenz, Julian E; Post, Thomas C; Seiple, Jacqueline  
**Cc:** Martin, David W; Saueressig, Daniel G; Allenbaugh, William J  
**Subject:** RE: 100-D-13 Proposed Staging Area

Julian, can you confirm that there are no waste sites located under the two new proposed staging areas.

Thank you,  
Mandy

---

**From:** Laurenz, Julian E [mailto:jelauren@wch-rcc.com]  
**Sent:** Mon 8/23/2010 2:49 PM  
**To:** Jones, Mandy (ECY); Post, Thomas C; Seiple, Jacqueline (ECY)  
**Cc:** Martin, David W; Saueressig, Daniel G; Allenbaugh, William J  
**Subject:** 100-D-13 Proposed Staging Area

Mandy/Tom/Jacqui,

If you remember, you guys approved an area south of the Imhoff Tank for our staging/stockpile area (see attached). We are now in the midst of remediating 100-D-13 and realize that additional staging/stockpile areas may be needed to support this effort.

Attached are the two additional areas I have in mind. They are both located south of Cell #2. If the additional staging areas are needed, we'll know by tomorrow. However, at that time, I'll need to provide direction to use the additional stockpiles.

I know this is short notice, but could you please give this a review today and if acceptable, provide concurrence by mid-day tomorrow, 8/24.

Thanks,  
Julian

---

<<100-D-13 Proposed Staging Areas.PDF>>

**From:** Laurenz, Julian E  
**Sent:** Saturday, May 22, 2010 1:48 PM  
**To:** Jones, Mandy; Post, Thomas C; Seiple, Jacqueline  
**Cc:** Martin, David W; Saueressig, Daniel G  
**Subject:** 100-D-13 Proposed Staging Area

Mandy/Tom/Jacqui,

This is a deja-vu moment. Didn't it just feel like last week I was asking for a new staging area. Anyways, I'm back again, this time for 100-D-13. As you'll see on the attached sketch, I've requested a staging area just south of 100-D-13.

If you remember, this septic tank has waste we need to treat. The original plan was to treat the waste in-situ,

8/25/2010

**152951**

without having to demolish the tank. However, because the tank is 24 feet deep and the sludge level is 18-24 feet below ground surface, we will not be able to reach the waste without first demolishing the upper portion of the tank. Our hope would be to direct load this material into an ERDF container; however, we may need to stage the material first. Therefore, the request for the staging area.

As with 1607-D5, our plan is to start remediating 100-D-13 by mid-June. Therefore, if you feel the area is acceptable, I would like to get approval by Thursday, June 3.

Thanks,  
Julian

<< File: 100-D-13 Proposed Staging Area.PDF >>



# Attachment 10

**^WCH Document Control**153179 *nd*  
9/13/10

**From:** Saueressig, Daniel G  
**Sent:** Monday, September 13, 2010 2:12 PM  
**To:** ^WCH Document Control  
**Subject:** FW: 100 N Staging/Stockpile Expansion  
**Attachments:** ENW01\_Library\_20100909120340.PDF; ENW01\_Library\_20100909120807.PDF

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

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Varljen, Robin (ECY) [mailto:RVAR461@ecy.wa.gov]  
**Sent:** Wednesday, August 25, 2010 9:13 AM  
**To:** Buckmaster, Mark A  
**Cc:** Chance, Joanne C; Saueressig, Daniel G; Menard, Nina; Boyd, Alicia (ECY)  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Mark,

Thank you for summing up the conversation. As I mentioned yesterday, with Ecology approval you can proceed with expansion of the staging and stockpile area for 100-N-6, -16 and 128-N-1. This is with the understanding that the original staging and stockpile area covered portions of 100-N-98 and the surface soil removed for the original staging area will be treated as waste and relocated to ERDF. The plan, as I understand it, is to remediate 100-N-98 with 100-N-6, -16 and 128-N-1. I look forward to receiving a remediation plan for this addition. I expect all four sites will be closed under one verification sampling plan as practicable. You may capture this amendment to the original agreement in the UMM meeting minutes and I would like the WIDS reports for all 4 sites to reference their co-located and co-remediated status.

I believe Joanne and I are meeting with the group responsible for planning and coordinating these waste sites, relative to location and scheduling, on Monday afternoon. I would welcome your perspective at that meeting if you are available.

I appreciate your pragmatic approach and I look forward to working out these initial "bumps in the road" so we can all get on with the task at hand.

Robin Varljen

Washington Department of Ecology  
Nuclear Waste Program - Cleanup Section  
(509) 372-7930

**From:** Buckmaster, Mark A [mailto:MABUCKMA@wch-rcc.com]  
**Sent:** Wednesday, August 25, 2010 7:17 AM

9/13/2010

**To:** Varljen, Robin (ECY)  
**Cc:** Chance, Joanne C; Saueressig, Daniel G  
**Subject:** RE: 100 N Staging/Stockpile Expansion

153179

Robin

Based on our mtg yesterday, WCH will proceed with expanding our burn pit stockpiles as originally proposed. In addition, we will develop a plan for remediation of 100-N-98 and develop a path forward to assure we don't overlap remediation activities on potential/known waste sites. I you have any questions, please call me.

mark

---

**From:** Varljen, Robin (ECY) [mailto:RVAR461@ecy.wa.gov]  
**Sent:** Thursday, August 19, 2010 4:40 PM  
**To:** Chance, Joanne C  
**Cc:** Boyd, Alicia (ECY); Menard, Nina; Buckmaster, Mark A; Walker, Jeffrey L; Wilkinson, Stephen G; Landon, Roger J; Proctor, Megan L; Boyd, Alicia (ECY); Menard, Nina; Saueressig, Daniel G  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Joanne,

After reviewing the attached map I feel there may be a problem with the way WCH field remediation is handling integration, coordination and general planning of the excavation of waste sites at N area. Based on this e-mail (see below) and the attached map I wonder if there is there some mechanism or process in which WCH is coordinating which waste sites they begin to excavate and their proximity to other waste sites or potential waste sites slated for confirmatory or verification sampling? It appears there is not and should be. Certainly I would not expect WCH Field Remediation to cover a confirmatory waste site, currently under Ecology review, in their staging/stockpile area without a discussion.

Please let me know if you will be available to meet me at N on Tuesday morning to discuss this issue further. I am sure we can resolve these issues to everyone's satisfaction. Please ask WCH not to proceed with further expansion of staging area or stockpile areas including grubbing, grading or soil movement in these areas until we can talk.

Thanks,  
Robin Varljen

Washington Department of Ecology  
Nuclear Waste Program - Cleanup Section  
(509) 372-7930

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Thursday, August 19, 2010 3:01 PM  
**To:** Varljen, Robin (ECY)  
**Cc:** Boyd, Alicia (ECY); Menard, Nina (ECY); Buckmaster, Mark A; Walker, Jeffrey L; Wilkinson, Stephen G; Landon, Roger J; Proctor, Megan L; Chance, Joanne  
**Subject:** RE: 100 N Staging/Stockpile Expansion

9/13/2010

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Robin, we've looked at the new staging pile just approved by you and it doesn't encroach on the 100-N-98. We have reviewed the WIDS location of 100-N-98 with respect to our original design drawing (0100N-DD-C0238) for 100-N-6, -16 and 128-N-1 that was approved by Ecology. The 100-N-98 waste site is within the AOC for 100-N-6, -16 and 128-N-1 and encroaches on a portion of the existing approved staging pile. I've attached a drawing that overlays 100-N-98 over the other waste sites. It sounds like we may need to address this. Perhaps we can discuss further when you come out to visit next Tuesday?

Thanks and give me a call if you have any questions or want to discuss further before Tuesday.

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Varljen, Robin (ECY) [mailto:RVAR461@ecy.wa.gov]  
**Sent:** Thursday, August 19, 2010 11:04 AM  
**To:** Saueressig, Daniel G; Chance, Joanne C; Buckmaster, Mark A  
**Cc:** Boyd, Alicia (ECY); Menard, Nina; Buckmaster, Mark A; Walker, Jeffrey L  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Thank you Dan. I understand location 2 of 100-N-98, as defined in WIDs, is within the boundary of 100-N-6, -16, and 128-N-1 excavation and will be closed out under the RSVP for those sites. The proposed sample locations for the confirmatory work instruction for 100-N-98 are irrelevant to this issue. If your staging area for 100-N-6, -16, and 128-N-1 encroaches on any of the 100-N-98 waste site, with the exception of location 2, we will need to address this further.

I am just looking for "yes, we did encroach" or "no we did not encroach and here's the map showing it". Both answers have easy paths forward from the Ecology perspective.

Robin Varljen

Washington Department of Ecology  
Nuclear Waste Program - Cleanup Section  
(509) 372-7930

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Thursday, August 19, 2010 10:17 AM  
**To:** Varljen, Robin (ECY); Chance, Joanne C; Buckmaster, Mark A  
**Cc:** Boyd, Alicia (ECY); Menard, Nina (ECY); Buckmaster, Mark A; Walker, Jeffrey L  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Robin, we have not used or even grubbed the expanded staging/stockpile area for 100-N-6, -16 and 128-N-1 and we won't until this issue gets resolved. We have begun using the staging/stockpile area for 100-N-34. We're currently pinpointing the 2 confirmatory sampling locations for 100-N-98 in comparison to our excavation designs, we'll let you know what we find out. As the confirmatory sampling work instructions note, sample location 2 is within the boundary of 100-N-6.

Thanks,

9/13/2010

153179

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Varljen, Robin (ECY) [mailto:RVAR461@ecy.wa.gov]  
**Sent:** Thursday, August 19, 2010 9:48 AM  
**To:** Saueressig, Daniel G; Chance, Joanne C; Buckmaster, Mark A  
**Cc:** Boyd, Alicia (ECY); Menard, Nina  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Thank you Dan.

I am looking at the map provided in the 100-N-98 Work Instruction for Confirmatory Sampling, the map provided by the 100 N Area, 100 N Waste Site Remediation Design Issued for Design Package, Rev B. and the map provided by Mark B with the staging pile expansion area. Admittedly these maps are different styles, sizes and scales but it looks close to me, so close in fact that one of the locations from 100-N-98 is included in your current excavation.

I will wait to hear from you but reiterate that no grading or grubbing or soil movement at all should be ongoing for the 100-N-6, -16, and 128-N-1 staging area until this issue is cleared up.

Robin Varljen

Washington Department of Ecology  
Nuclear Waste Program - Cleanup Section  
(509) 372-7930

Robin

---

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Thursday, August 19, 2010 9:05 AM  
**To:** Varljen, Robin (ECY); Chance, Joanne C; Buckmaster, Mark A  
**Cc:** Boyd, Alicia (ECY); Menard, Nina (ECY)  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Thanks Robin, when the staging/stockpile area was proposed, the area was walked down and 100-N-98 was specifically avoided, but I'm confirming this right now. I'll let you know what I find out.

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

9/13/2010

---

**From:** Varljen, Robin (ECY) [mailto:RVAR461@ecy.wa.gov]  
**Sent:** Thursday, August 19, 2010 8:42 AM  
**To:** Saueressig, Daniel G; Chance, Joanne C; Buckmaster, Mark A  
**Cc:** Boyd, Alicia (ECY); Menard, Nina  
**Subject:** RE: 100 N Staging/Stockpile Expansion  
**Importance:** High

All,

I am concerned 100-N-98 Stained Area #3 is in the footprint of your staging/stockpile expansion for 100-N-6, -16, and 128-N-1. Please consider my expansion approval "on hold" until we confirm there are no waste sites or potential waste sites of any kind in the expansion areas. I gave this information to Dan Saueressig via telephone as soon as I was aware of it. Please contact me with questions or resolutions.

Robin Varljen

Washington Department of Ecology  
Nuclear Waste Program - Cleanup Section  
(509) 372-7930

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Wednesday, August 18, 2010 1:07 PM  
**To:** Chance, Joanne C; Buckmaster, Mark A; Varljen, Robin (ECY)  
**Cc:** Boyd, Alicia (ECY)  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Thanks everyone. I'll get this into the system and we can document at the next UMM.

Thanks,

Dan Saueressig  
FR Environmental Projec: Lead  
Washington Closure Hanford  
521-5326

---

**From:** Chance, Joanne [mailto:Joanne.Chance@rl.doe.gov]  
**Sent:** Wednesday, August 18, 2010 12:50 PM  
**To:** Buckmaster, Mark A; Varljen, Robin  
**Cc:** Saueressig, Daniel G; Boyd, Alicia (ECY)  
**Subject:** RE: 100 N Staging/Stockpile Expansion

Mark/Robin,

After inspecting the site today with Mark Buckmaster and reviewing the e-mail documentation of your

9/13/2010

153179

concurrence, I concur with the locations for the 100 N staging/stockpile expansion locations.

Joanne C. Chance  
U.S. Department of Energy  
Office of Assistant Manager for the River Corridor  
825 Jadwin Ave / MSIN A3-04  
Richland, WA 99352  
(509) 376-0811

**From:** Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]  
**Sent:** Wednesday, August 18, 2010 11:14 AM  
**To:** Chance, Joanne  
**Subject:** FW: 100 N Staging/Stockpile Expansion

Hi Joanne, Mark said you have copies of these maps. Let Robin know if you concur with these piles and I'll get the email and attachment into the system and present it at the next UMM>

Thanks,

Dan Saueressig  
FR Environmental Project Lead  
Washington Closure Hanford  
521-5326

---

**From:** Varljen, Robin (ECY) [mailto:RVAR461@ecy.wa.gov]  
**Sent:** Wednesday, August 18, 2010 8:00 AM  
**To:** Saueressig, Daniel G; Buckmaster, Mark A  
**Cc:** Chance, Joanne C; Boyd, Alicia (ECY); Menard, Nina  
**Subject:** FW: 100 N Staging/Stockpile Expansion

Mark,

Ecology has reviewed the WCH proposal for additional staging pile locations for the 100-N-6, 100-N-16, AND 128-N-1 grouped waste sites and the 100-N-14, 100-N-17, AND 100-N-34 grouped waste sites. This review was based in part on verbal and e-mail agreements regarding prepping of the staging pile locations. Ecology understands WCH intends to conduct radiological surveys alone and defer additional survey/sampling for a later date. If DOE is in agreement, Ecology is prepared to approve your suggested staging pile locations as identified on the drawings provided August 17, 2010.

Please ensure these staging piles are operated in accordance with Section 4.4.2 in the Remedial Design Report/Remedial Action Work Plan for the 100 Area, DOE/RL-2005-93, current revision, and other sections as applicable. Additionally, please ensure that all contaminants of concern for grouped waste sites 100-N-6, 100-N-16, AND 128-N-1 and grouped waste sites 100-N-14, 100-N-17, AND 100-N-3 are carried forward into the cleanup verification sampling plan for each staging pile location.

Please have this agreement captured in the 100/300 Area UMM minutes along with the (2) updated

9/13/2010

civil drawings, which clearly identify the staging pile locations.

Let me know if you have any questions.

Thanks,

Robin Varljen

Washington Department of Ecology

Nuclear Waste Program - Cleanup Section

(509) 372-7930

---

**From:** Buckmaster, Mark A [<mailto:MABUCKMA@wch-rcc.com>]

**Sent:** Tuesday, August 17, 2010 9:48 AM

**To:** Buckmaster, Mark A; Varljen, Robin (ECY)

**Cc:** Chance, Joanne C; Saueressig, Daniel G

**Subject:** RE: 100 N Staging/Stockpile Expansion

Clarification..... the staging/stockpile area for the 100-N-34 area will not include the haul road. Drawing will be modified.

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**From:** Buckmaster, Mark A

**Sent:** Tuesday, August 17, 2010 9:26 AM

**To:** Varljen, Robin

**Cc:** Chance, Joanne C; Saueressig, Daniel G

**Subject:** RE: 100 N Staging/Stockpile Expansion

There are no known waste sites or groundwater wells within the area proposed for expansion of our staging stockpile areas. Surveys will be conducted once we receive your concurrence. The area will be cleared/grubbed followed by surveys. If we identify potentially contaminated areas during these surveys you will be notified. No waste will be staged on previously contaminated areas. We are currently utilizing previously approved stockpile areas. The proposed expansion near 100-N-34 stops at the haul road at the edge of the map. I will provide another copy.

If you have any questions, please call me.

mark

---

**From:** Varljen, Robin (ECY) [<mailto:RVAR461@ecy.wa.gov>]

**Sent:** Tuesday, August 17, 2010 8:12 AM

9/13/2010

To: Buckmaster, Mark A

Subject: RE: 100 N Staging/Stockpile Expansion

Mark,

Please confirm that there are no existing waste sites or injection/extraction or monitoring wells in the requested area.

Have you conducted a survey of the staging pile area to ensure that no cross media transfer or staging of waste on previous contaminated areas per the RDR/RAWP for the 100-N Area?

Do you intend to use the previously identified area also? It is unclear based on the map for 100-N-14,-17,-34 if you've only stopped the expansion because you ran out of map or if you intend to use the previously identified area, which is across the haul road. Please clearly identify all of the area that you will use as their staging pile.

Thanks,

Robin Varljen

Washington Department of Ecology

Nuclear Waste Program - Cleanup Section

(509) 372-7930

---

**From:** Buckmaster, Mark A [<mailto:MABUCKMA@wch-rcc.com>]

**Sent:** Tuesday, August 10, 2010 10:57 AM

**To:** Varljen, Robin (ECY); Boyd, Alicia (ECY)

**Cc:** Chance, Joanne C; Saueressig, Daniel G

**Subject:** 100 N Staging/Stockpile Expansion

Robin

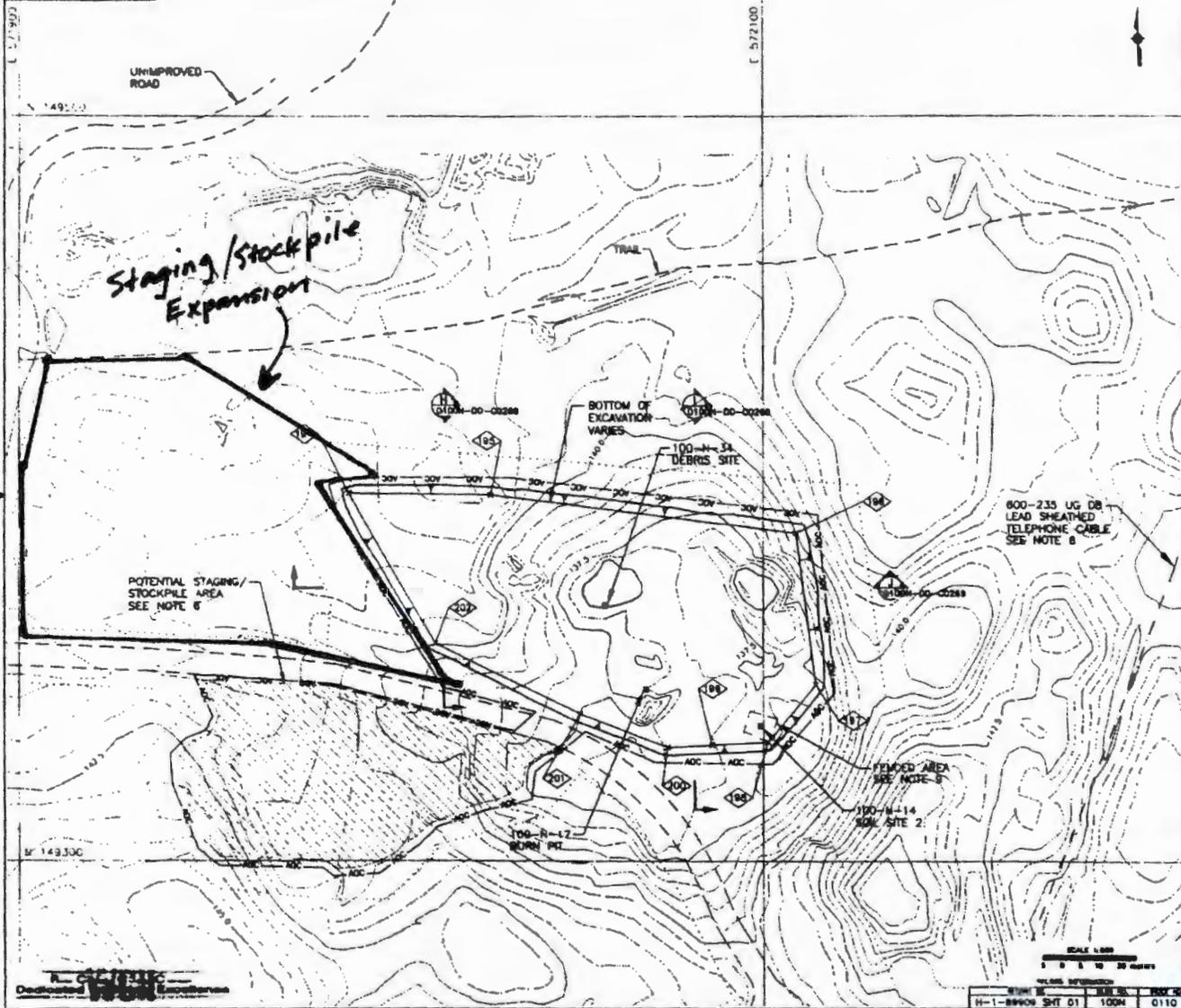
As we discuss last week, WCH will require additional staging/stockpile areas associated with the two 100 N burn pit areas. The additional area is required to facilitate remediation activities. Attached are two drawings showing the proposed expansion areas. Please let me know if you have any questions. We can discuss further during your next site visit.

mark

<< File: MO980.PDF >>

9/13/2010

0100N-DD-C0240 0



NOTES

1. SEE DRAWING 0100N-DD-C0023 FOR GENERAL ABBREVIATIONS AND SYMBOLS LIST.
2. LOCATION, GROUND SURFACE AND DIMENSIONS PROVIDED WERE TAKEN FROM HANFORD SITE RECORDS AND DRAWINGS: H-1-45007, SHEET 1 THROUGH 83, COMPOSITE UNDERGROUND LINES, ESSENTIAL DRAWING: GEOPHYSICAL SITE INVESTIGATIONS, 040579928, 040579929, 040580014, 040580015, 040580018, 040580017, 040580019, AND 040580104. ACTUAL LOCATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE SUBCONTRACTOR. AS-BUILT CONSTRUCTION MAY VARY FROM NEAT-LINES SHOWN ON DRAWINGS.
3. ALL ELEVATIONS AND DIMENSIONS ARE IN METERS EXCEPT AS SPECIFICALLY SHOWN.
4. LIMITS OF EXCAVATION ARE SHOWN ASSUMING A 1.5 H:1.0 V CUT SLOPE. ACTUAL EXCAVATION LIMITS SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR. EXCAVATIONS SHALL COMPLY WITH ALL REQUIREMENTS OF 0100N-SP-C0043 CIVIL SPECIFICATION.
5. CONTOUR INTERVAL IS 0.5 METERS.
6. STAGING OF MATERIAL SHALL OCCUR WITHIN THE AOC OR DESIGNATED STAGING AREAS UNLESS DIRECTED BY CONTRACTOR. STAGING OF MATERIAL OUTSIDE THE AOC/DESIGNATED STAGING AREAS SHALL HAVE PRIOR APPROVAL IN WRITING BY THE CONTRACTOR.
7. SEE DRAWING NO. 0100N-DD-C0305, 0100N-DD-C0304, 0100N-DD-C0307, OR 0100N-DD-C0308 FOR WASTE SITE SURVEY CONTROL DESIGN COORDINATE TABLE.
8. 600-235 IS A DEACTIVATED, BURIED, LEAD SHEATHED TELEPHONE CABLE. LOCATION IS APPROXIMATE AND DEPTH IS UNKNOWN. IF CABLE IS ENCOUNTERED DURING EXCAVATION, REMOVE TO EXTENT OF EXCAVATION TREAT AND DISPOSE PER APPLICABLE SPECIFICATION.
9. FENCED AREA POSTED "UNDERGROUND RADIOACTIVE MATERIAL."

REVISIONS

NO.	DATE	DESCRIPTION

U.S. DEPARTMENT OF ENERGY  
DOE RICHLAND OPERATIONS OFFICE  
RIVER CORRIDOR CLOSURE CONTRACT

WASHINGTON CLOSURE HANFORD LLC  
RICHLAND, WASHINGTON

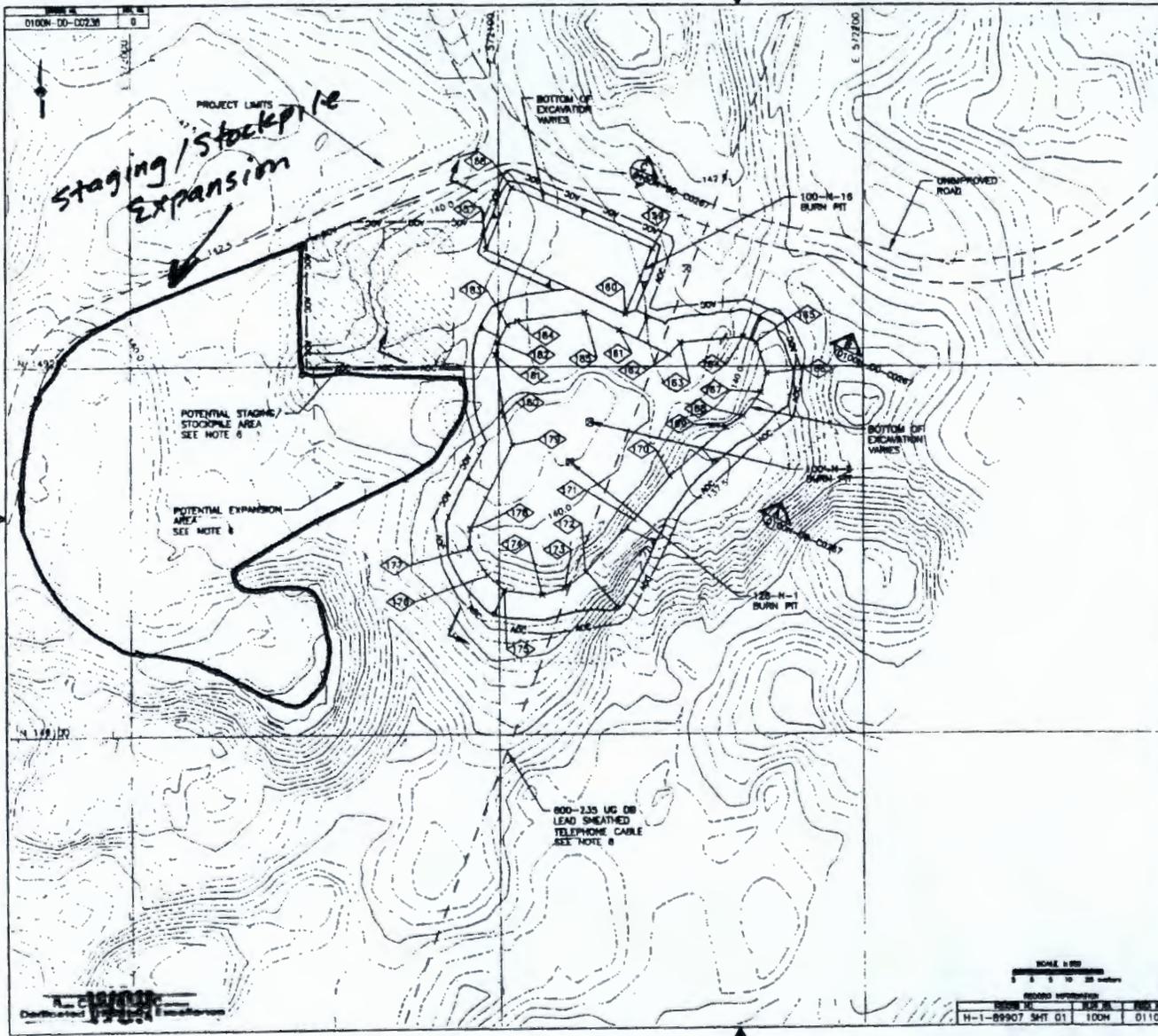
100 N AREA  
100 N WASTE SITE REMEDIATION DESIGN  
100-N-14, 100-N-17, AND 100-N-34 CIVIL PLOT PLAN

WHS JOB NO.	EST. CONTRACT NO.	CADD FILENAME
14855	DE-AC06-02RL-14855	100C0240.DWG
DATE	DRAWING NO.	REV. NO.
100 N	0100N-DD-C0240	0

CH2M HILL  
Geotechnical Engineering

SCALE 1:500  
1 0 5 10 20 METERS

PLANT INFORMATION  
SHEET NO. 01 OF 01  
JOB NO. 100N 0110



**NOTES**

1. SEE DRAWING 0100N-DD-C0238 FOR GENERAL ABBREVIATIONS AND SYMBOLS LIST.
2. LOCATION, GROUND SURFACE AND DIMENSIONS PROVIDED WERE TAKEN FROM HANFORD SITE RECORDS AND DRAWINGS, H-1-45007, SHEET 1 THROUGH B3, COMPOSITE UNDERGROUND LINES, ESSENTIAL DRAWING, GEOPHYSICAL SITE INVESTIGATIONS, G00578028, G00578028, G00580014, G00580015, G00580018, G00580017, G00580019, AND G00580104. ACTUAL LOCATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE SUBCONTRACTOR. AS-BUILT CONSTRUCTION MAY VARY FROM HEAT-LINES SHOWN ON DRAWINGS.
3. ALL ELEVATIONS AND DIMENSIONS ARE IN METERS EXCEPT AS SPECIFICALLY SHOWN.
4. LIMITS OF EXCAVATION ARE SHOWN ASSUMING A 1.5 H:1.0 V CUT SLOPE. ACTUAL EXCAVATION LIMITS SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR. EXCAVATIONS SHALL COMPLY WITH ALL REQUIREMENTS OF 0100N-SF-C0043 CIVIL SPECIFICATION.
5. CONTOUR INTERVAL IS 0.5 METERS.
6. STAGING OF MATERIAL SHALL OCCUR WITHIN THE AOC OR DESIGNATED STAGING AREAS UNLESS DIRECTED BY CONTRACTOR. STAGING OF MATERIAL OUTSIDE THE AOC/DESIGNATED STAGING AREAS SHALL HAVE PRIOR APPROVAL IN WRITING BY THE CONTRACTOR.
7. SEE DRAWING NO. 0100N-DD-C0305, 0100N-DD-C0308, 0100N-DD-C0307, OR 0100N-DD-C0308 FOR WASTE SITE SURVEY CONTROL DESIGN COORDINATE TABLE.
8. 800-235 IS A DEACTIVATED, BURIED, LEAD SHEATHED TELEPHONE CABLE. LOCATION IS APPROXIMATE AND DEPTH IS UNKNOWN. IF CABLE IS ENCOUNTERED DURING EXCAVATION, REMOVE TO EXTENT OF EXCAVATION, TREAT AND DISPOSE PER APPLICABLE SPECIFICATION.

BOUNDARY CONTROL As noted


**U.S. DEPARTMENT OF ENERGY**  
DOE RICHLAND OPERATIONS OFFICE  
RIVER CORRIDOR CLOSURE CONTRACT

WASHINGTON CLOSURE HANFORD LLC.  
RICHLAND, WASHINGTON

100 N AREA  
100 N WASTE SITE REMEDIATION DESIGN  
100-N-6, 100-N-16, AND 128-N-1 CIVIL PLOT PLAN

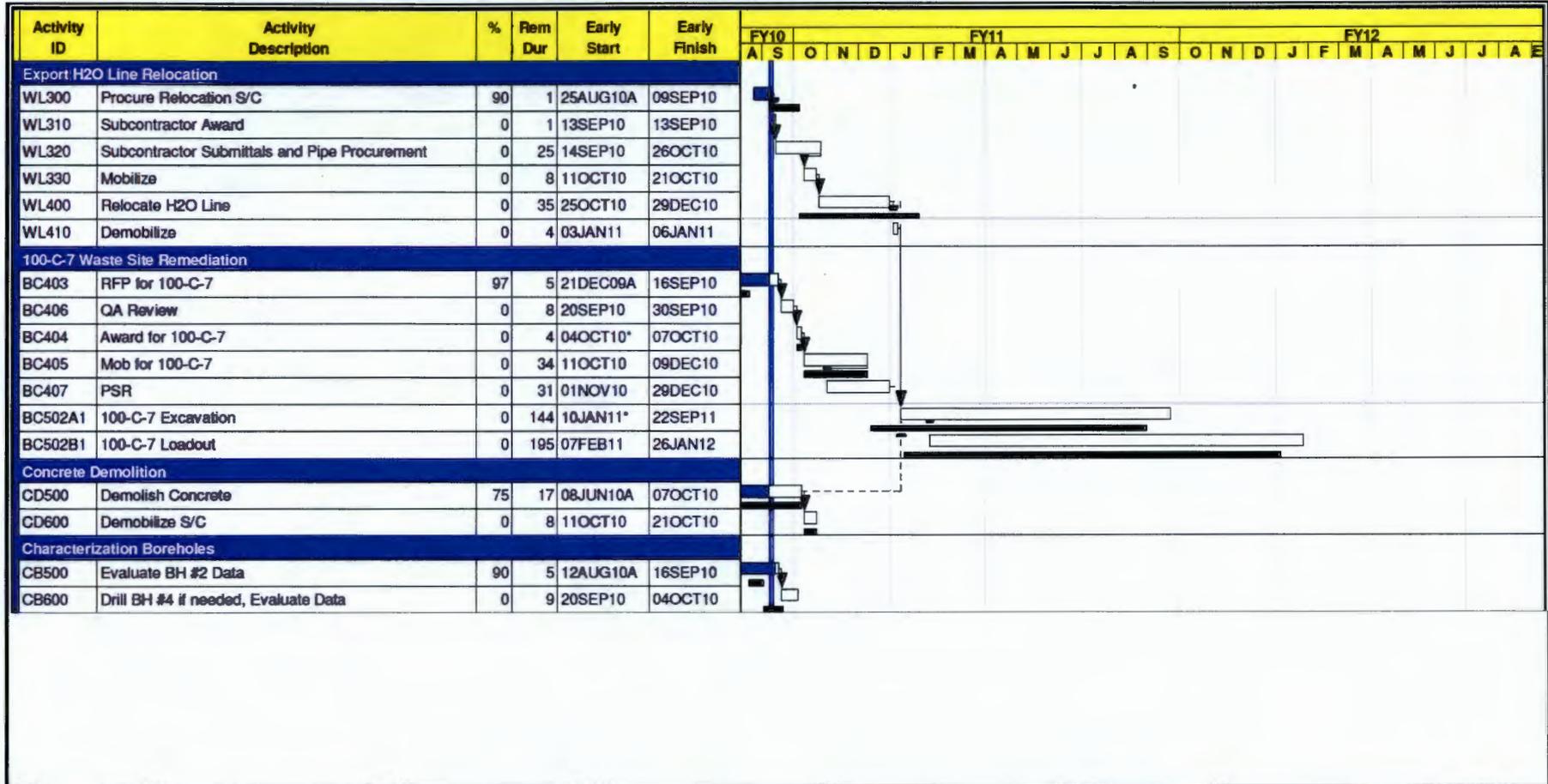
WCH JOB NO.	USE CONTRACT NO.	CHSD FILENAME
14853	DE-AC08-05RL-14856	1N002238.DWG
WORK	DRAWING NO.	REV. NO.
100 N	0100N-DD-C0238	0

RECORD INFORMATION  
 SHEET NO. 100 N 0110  
 H-1-89907 SMT 01 100N 0110

# Attachment 11



## Field Remediation 100-C-7

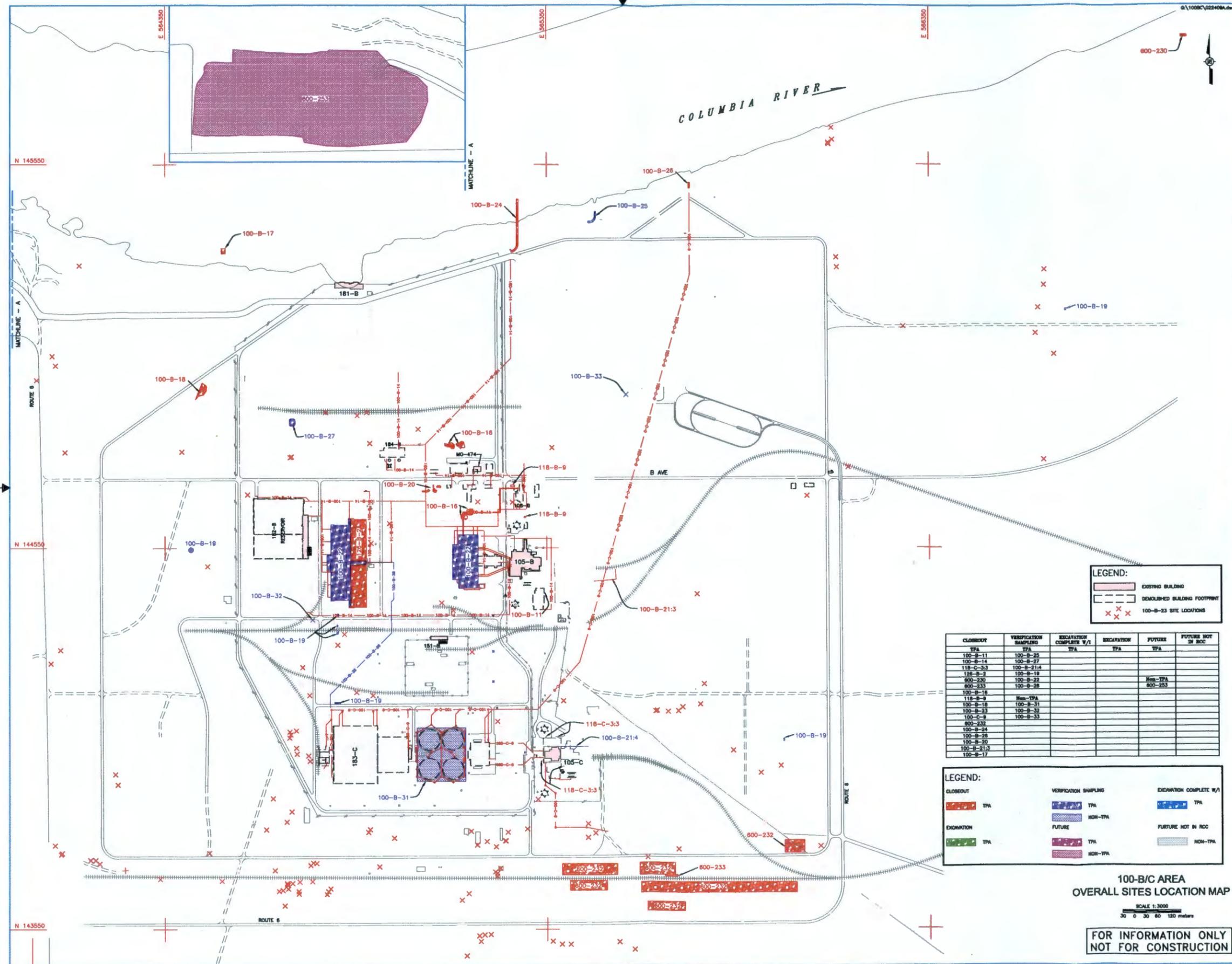


### ACTIVITIES / ACTIONS SUPPORTING SCHEDULE

- Based on discussion with MSA, the export water line re-location effort will be accelerated, Target = complete by January 2011.
- Both boreholes have been drilled, sampled, and decommissioned. Borehole #1 sample results conclude installation of borehole #3 is not required. Preliminary Data indicates that borehole #4 will not be required.

### ISSUE / CONCERNS

Milestones	Due Date	Status
PM - 31	6/30/2013	6/30/2013 F



**LEGEND:**  
 [Solid line] EXISTING BUILDING  
 [Dashed line] DEMOLISHED BUILDING FOOTPRINT  
 [Red 'x' symbol] 100-B-23 SITE LOCATIONS

CLOSEOUT	VERIFICATION SAMPLING	EXCAVATION COMPLETE W/1	EXCAVATION	FUTURE	FUTURE NOT IN BOC
TPA	TPA	TPA	TPA	TPA	
100-B-11	100-B-25				
100-B-14	100-B-27				
118-C-3.3	100-B-21.4				
128-B-2	100-B-19				
600-230	100-B-22			Non-TPA	
600-233	100-B-28			600-253	
100-B-18	Non-TPA				
118-B-9	100-B-31				
100-B-18	100-B-31				
100-B-23	100-B-32				
100-C-8	100-B-33				
600-232					
100-B-24					
100-B-25					
100-B-30					
100-B-21.3					
100-B-17					

**LEGEND:**

CLOSEOUT TPA	VERIFICATION SAMPLING TPA	EXCAVATION COMPLETE W/1 TPA
EXCAVATION TPA	FUTURE NON-TPA	FUTURE NOT IN BOC NON-TPA
	NON-TPA	

**100-B/C AREA  
 OVERALL SITES LOCATION MAP**  
 SCALE 1:3000  
 30 0 30 60 120 meters

**FOR INFORMATION ONLY  
 NOT FOR CONSTRUCTION**

# Attachment 12

300 Area D4 Status  
September 9, 2010  
100/300 Area Combined Unit Manager Meeting

### **Ongoing Activities**

- 324 – Completed shipments of B Cell dispersible source term to CWC (representing approximately 40,000 curies removed from the building).
- 327 – Shipped three hot cells to date, started above-grade demolition ~ 50% on the ground.
- 337 – Subcontractor finalizing drilling and structural weakening in preparation for explosive demolition on 10/9/10.
- 309 – Stack will fall with the 337 complex.

### **Upcoming/Completed Demolition**

- Completed demolition 315 Water Treatment Plant
- Nearly complete with below-grade demolition of 3718M Building.

### **Current Demolition Preparations & Activities**

- Planning restart of 308 glove box removal and shipments
- Continue 337 Complex explosive demolition preparations
- Continue 324 stabilization, initiate engineering and planning for under B Cell characterization.

### **60-Day Project Look Ahead**

- Resume shipment of 308 glove-boxes
- Complete shipment of 327 hot cells to ERDF, complete above grade demolition
- Continue 324 source term stabilization, engineering, and preparations for under B Cell characterization
- Receive the 340, 307, & 310 facilities from CHPRC

# Attachment 13

**Environmental Protection Mission Completion Project**  
September 9, 2010

**Orphan Sites Evaluations**

- The 100-F/IU-2/IU-6 Area - Segment 2 Orphan Sites Evaluation Report, Revision 0 was issued in early-September.
- Currently incorporating RL and EPA comments on the Draft A 300 Area Orphan Sites Evaluation Report Document will be issued in late-September.
- The Draft A 400 Area Orphan Sites Evaluation Report is currently in review with RL and EPA. Comments were requested by mid-October.
- Initiated the drafting of the 100-F/IU-2/IU-6 Area - Segment 3 Orphan Sites Evaluation Report.
- Continued the field investigation and historical review tasks for the 100-F/IU-2/IU-6 Area – Segment 4.

**Long-Term Stewardship**

- Continued working with MSA in regards to long-term stewardship.

**River Corridor Baseline Risk Assessment**

- Volumes 1 (ecological) and 2 (human health) of the risk assessment report are being developed to reflect RL pre-concurrence review comments.
- The anticipated submittal for the Draft B RCBRA report is October 2010.

**Remedial Investigation of Hanford Releases to Columbia River**

- The data summary reports are under development and anticipated to be issued in September 2010.
- Beginning to develop Human Health and Ecological risk assessments.

**Document Review Look-Ahead**

<b>Document</b>	<b>Regulator Review Start</b>	<b>Duration</b>
River Corridor Baseline Risk Assessment Report	October 2010	45 days
100-F/IU-2/IU-6 Area – Segment 3 Orphan Sites Evaluation Report	November 2010	45 days

# Attachment 14

CERCLA Five-Year Review Action Items

9/9/2010

Point of Contact	Action No.	Deliverables	Due Date	Status
<b>100 Area</b>				
WCH/RL	1-3	Reassess and resubmit to EPA the protectiveness determinations for operable units 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-HR-3, 100-IU-2, 100-IU-6, 100-KR-1, 100-KR-2, 100-KR-4, 100-NR-1, 300-FF-1 and 300-FR-2 using new information from the River Corridor Baseline Risk Assessment and submit to EPA an addendum with, as appropriated, updated Protectiveness Determinations, Issues, and Follow-Up Actions.	2/15/2008	This action was to be coordinated with the finalization of the Risk Assessment. A Draft B Risk Assessment is now projected to be submitted early 2010.
Bowles, Nathan	7-1	Perform additional data collection to support risk assessment, provide to Ecology previously collected data, and coordinate with River Corridor sampling efforts to collect additional pore water data from new and existing aquifer tubes along the 100-NR-2 shoreline in order to assess water quality impacts.	9/1/2008	(Partially completed August 2008) Samples were collected from aquifer tubes in FY07 and FY08. Section 2.4.1 of the Groundwater Annual report discusses significant results. PNNL placed additional aquifer tubes and collected samples to identify the dimensions of SR-90 and TPH contaminants along the shoreline at 100-NR-2 in 2007. The results are detailed in PNNL-16714. Additional tubes were installed in 2008. Previous sample results have been provided to Ecology. Ecology feels that the river pore data collections from seeps in the river described in the Remedial Investigation Work Plan for Hanford Site Releases to the Columbia River, DOE/RL-2008-11, Rev. 0 should be completed prior to closing out this action.
Biebesheimer, Fred (Note: this item was not part of the Executive Summary table in the CERCLA 5-year review but exists within the text in Section 1.4.6.4).	11-2	Expand groundwater pump-and-treat extraction within the 100-D Area by 378.5 liters (100 gallons) per minute to enhance remediation of the chromium plume.		On-going - Pump-and-treat extraction in the 100-D Area is being expanded by 600 gpm (DX Expansion project) . System construction will be completed in July 2010.
Biebesheimer, Fred	12-1	Perform additional characterization of the aquifer below the initial aquitard. [Note: this action is for H Area.]	9/30/2009	Additional characterization was conducted via an aquifer rebound test and pumping from the RUM unit to verify the conceptual site model in FY 2009. Data are being evaluated and a report is being prepared to support the RI/FS. Five wells will also be drilled into the RUM in support of the 100-D and H Area RI/FS in FY 2010.

# Attachment 15

# **2010 Annual Sitewide Institutional Controls (IC) Review**

**River Corridor Contractor (RCC)**

# 2010 RCC Annual IC Review

- **Basis**

- ***Sitewide Institutional Controls Plan for Hanford CERCLA Response Actions (DOE/RL-2001-41, Rev. 3)***
  - Requires annual IC effectiveness review
  - Results to be reported in September UMM

# 2010 RCC Annual IC Review

## Scope of Review

- This portion of review addressed only river corridor source waste sites, and included evaluation of:
  - **Trespass events during CY 2009**
  - **Access control/entry restrictions**
  - **Excavation control**
  - **Field inspection of ICs**
    - Required signage on entrances to active waste sites within 100-B/C, 100-K, 100-H, 100-D, 100-N, 100-IU-2 and 100-IU-6 Areas
    - Required signage on entrance to 300 Area North waste sites and 618-10
    - Shoreline signage at 100-B/C, 100-K, 100-N, 100-D, 100-F, 100-H, 300 Area

# 2010 RCC Annual IC Review

- Results

- No public trespass events on WCH managed projects during CY 2009
- Badging system (access controls) in place and active
- Approved Excavation Permits in place for all active remediation activities at 100-B/C, 100-K, 100-H, 100-D, 100-N, 100-IU-2, and 100-IU-6 Area waste sites
- Ample warning signage in place at roadway entrances to active waste sites at 100-B/C, 100-K, 100-H, 100-D, 100-N, 100-IU-2, 100-IU-6, 300 North, 618-10
  - Specific signage required by 100 Area RDR/RAWPs present at all roadway entrances except at northern and southern entrances to 100-IU-6 waste sites, subsequently fixed
- Shoreline signage in place at 100-B/C, 100-D, 100-H, 100-K, 100-N, 300 Area
  - English language sign at 100-F had blown over; subsequently fixed

# 2010 RCC Annual IC Review



Roadway Signage at 600-3 Waste Site (100-IU-6)

# 2010 RCC Annual IC Review



Roadway Signage at 100-D

# 2010 RCC Annual IC Review



**Shoreline Signage at 100-B/C**

# 2010 RCC Annual IC Review



Shoreline Signage at 100-F